ACCESS **End of Project Report**

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Jhpiego in collaboration with
Save the Children,
Constella Futures,
Academy for Educational Development,
American College of Nurse-Midwives,
IMA World Health

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Acronyms

ACCESS	Access to Clinical and Community Maternal, Neonatal and Women's Health Services
AC	ACCESS Counselors
ACT	Artemisinin-based Combination Therapy
AMTSL	Active Management of the Third Stage of Labor
ANC	Antenatal Care
ANM	Auxiliary Nurse-Midwife
ANMTC	Auxiliary Nurse-Midwife Training Center
APHIA	AIDS, Population, Health Integrated Assistance Program
ART	Antiretroviral Treatment
BASICS	Basic Support for Institutionalizing Child Survival
BEmONC	Basic Emergency Obstetric and Newborn Care
BP/CR	Birth Preparedness/Complications Readiness
CAC	Community Action Cycle
CAG	Community Action Group
CBO	Community-Based Organization
CCG	Community Core Group
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CHEW	Community Health Extension Worker
CHW	Community Health Worker
CMT	Community Mobilization Teams
CRP	Community Resource Person
CSSC	Christian Social Services Commission
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DRH	Department of Reproductive Health
EARN	East Africa Roll Back Malaria Network
EMNC	Essential Maternal and Newborn Care
EmONC	Emergency Obstetric and Newborn Care
ENMA	Ethiopia Nurse Midwife Association
ESOG	Ethiopia Society of Obstetricians and Gynecologists
FANC	Focused Antenatal Care
FBO	Faith-Based Organization
FCHV	Female Community Health Volunteer
FHD	Family Health Division
FIGO	International Federation of Gynecologists and Obstetricians

FMOH	Federal Ministry of Health
FP	Family Planning
GoI	Government of India
GoN	Government of Nepal
HEP	Health Extension Program
HEV	Evangelical Hospital C.B.CO Vanga
HEW	Health Extension Worker
HHCC	Household-to-Hospital Continuum of Care
HIDN	Health, Infectious Diseases and Nutrition
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HO	Health Officer
HSA	Health Surveillance Assistants
HSDP	Health Sector Development Plan
HTC	HIV Testing and Counseling
ICM	International Confederation of Midwives
IEC	Information, Education and Communication
IPTp	Intermittent Preventive Treatment during Pregnancy
IMAI	Integrated Management of Adolescent and Adult Illness
IMCI	Integrated Management of Child Illness
INC	Indian Nursing Council
IPC	Infection Prevention and Control
ITN	Insecticide-Treated Nets
KMC	Kangaroo Mother Care
LAPM	Long-Acting and Permanent Methods
LBW	Low Birth Weight
LGA	Local Government Authority
LHV	Lady Health Visitor
MAISHA	Mothers and Infants, Safe, Healthy, Alive
MIP	Malaria in Pregnancy
MIPESA	Malaria in Pregnancy East and Southern Africa Coalition
MNCH-CM	Maternal, Newborn and Child Health-Community Mobilization
MNH	Maternal and Newborn Health
MOH	Ministry of Health
MOHFW	Ministry of Health and Family Welfare
MOHP	Ministry of Health and Population
MOHSW	Ministry of Health and Social Welfare
MTUHA	Tanzania's Health Management Information System

NASCOP	National AIDS and STI Control Program
NESOG	Nepal Society of Obstetricians and Gynecologists
NFHP	Nepal Family Health Program
NGO	Nongovernmental Organization
NHTC	National Health Training Centre
NMCM	Nurses and Midwives Council of Malawi
NMCP	National Malaria Control Program
PAC	Postabortion Care
PAHO	Pan American Health Organization
PE/P	Pre-Eclampsia/Eclampsia
PEPFAR	President's Emergency Plan for AIDS Relief
PGH	Provincial General Hospital
PHC	Primary Health Center
PLWHA	People Living With HIV/AIDS
PMI	President's Malaria Initiative
PMTCT	Prevention of Mother-to-Child Transmissions
POPPHI	Prevention of Postpartum Hemorrhage Initiative
PPH	Postpartum Hemorrhage
PPLAPM	Postpartum Long-Acting and Permanent Methods
PQI	Performance and Quality Improvement
PSI	Population Services International
PwP	Prevention with Positives
RAOPAG	West African Regional Coalition for Malaria in Pregnancy
RBM	Roll Back Malaria
RH	Reproductive Health
RHU	Reproductive Health Unit
SBA	Skilled Birth Attendant
SBM-R	Standards-Based Management and Recognition
SNL	Saving Newborn Lives
SP	Sulfadoxine-Pyrimethamine
SSMP	Support to Safe Motherhood Program
STI	Sexually Transmitted Infections
TB	Tuberculosis
TBA	Traditional Birth Attendant
USAID	United States Agency for International Development
VCHW	Voluntary Community Health Worker
VCT	Voluntary Counseling and Testing
WARN	West Africa Roll Back Malaria Network

WHO	World Health Organization
WHO/AFRO	World Health Organization Africa Regional Office
WHO/SEARO	World Health Organization South-East Asia Regional Office
WRA	White Ribbon Alliance
WRATZ	White Ribbon Alliance/Tanzania
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UPMB	Uganda Protestant Medical Bureau
USG	United States Government

Executive Summary

The Access to Clinical and Community Maternal, Neonatal and Women's Health Services (ACCESS) Program—a five-year, $75 million Leader with Associates Award—aimed to improve the health and survival of mothers and their newborns through expansion of coverage, access and use of maternal and newborn health (MNH) services, and through improving household health behaviors and practices. The Program was implemented by Jhpiego in collaboration with Save the Children, Futures Group, Academy for Educational Development, American College of Nurse-Midwives and IMA World Health.

This report presents Program achievements over the period of 1 October 2004 to 31 December 2009. During these five years, ACCESS worked in 26 countries, reaching millions of women, newborns and families. The Program's largest country programs were in Bangladesh, Ethiopia, Kenya, Malawi, Nigeria, Rwanda, South Africa and Tanzania. ACCESS also received five associate awards: ACCESS-FP, Afghanistan—Health Services Support Program (HSSP), Cambodia, Kenya—UZIMA, and Tanzania—MAISHA.

ACCESS produced wide-ranging, global results in international leadership, capacity building, demand generation and service delivery in MNH. Working with its partners, the Program also developed or updated documents of global significance[1]—including key international training materials recognized as the standard in maternal and newborn care—and disseminated these resources to stakeholders worldwide to advance knowledge of programming in MNH. In addition, nearly 8,000 people completed the seven ACCESS-developed United States Agency for International Development (USAID) Global Health eLearning courses.

Countries supported by the Program increased their coverage of evidence-based, high-impact interventions for women and newborns. Overall, ACCESS realized its vision of improved health for mothers and newborns by:

- Developing strategies and programs that integrated evidence-based maternal and newborn care with existing health delivery systems;
- Assisting in the development and implementation of policies that influenced the global agenda to improve MNH;

ACCESS addressed the serious challenges required in meeting MDGs 4 and 5 in regions that contribute the most to worldwide maternal and neonatal deaths.

Specifically, the Program:

- Reached over 30 million women of reproductive age in 26 countries with Program interventions
- Trained more than 20,000 health workers over the life of the project
- Introduced and/or expanded antenatal care services in 15 countries
- Increased the pool and improved the skills of birth attendants in 15 countries
- Scaled up PPH prevention efforts in 14 countries
- Worked in 16 countries to improve the health outcomes for newborns, including establishing or expanding KMC services in 5 key countries
- Strengthened the capacity to mobilize communities in 9 countries
- Disseminated key training and reference materials globally, and developed seven e-learning courses for the Global Health website (from which nearly 8,000 users have received certificates)

[1] These documents include: *Best Practices in Maternal and Newborn Care: A Learning Resource Package for Essential and Basic Emergency Obstetric and Newborn Care*; an online animated demonstration of active management of the third stage of labor; *Malaria in Pregnancy Resource Package*; *Christian and Islamic sermon guides; and Demystifying Community Mobilization: an Effective Strategy to Improve Maternal and Newborn Health*. For a full listing of ACCESS references, visit: www.accesstohealth.org.

- Bringing MNH services closer to households and communities; and
- Addressing operational barriers that prevent families from seeking care.

This report presents key Program results and activities over the life of the Program. Results are presented by the four results pathways of the USAID Office of Health, Infectious Diseases and Nutrition (HIDN): **skilled birth attendance, antenatal care (ANC), postpartum hemorrhage (PPH), and newborn care as well as by other technical and cross cutting topics** . Important lessons learned and results by country have also been included.

To be successful, ACCESS recognized that any approach to improve essential maternal and newborn care services must address the issues of the community and the health system together, systematically, and in close collaboration among all stakeholders. Therefore, a key Program approach was based on the **Household-to-Hospital Continuum of Care (HHCC) model,** which aims to improve health delivery by strengthening the facility, connecting the household to the facility, and mobilizing family and community members to make the links necessary to care for mothers and newborns. Projects in Asia and Africa expanded life-saving interventions along the HHCC to overcome the complex obstacles that prevent pregnant women and newborns from receiving appropriate and timely care—preferably as close to home as possible.

In northern Nigeria, for example, an environment of poor service utilization for maternal care, the HHCC approach allowed staff to work at the policy level to improve the service delivery environment to eventually increase the availability of skilled providers, while at the same time improving the quality of services by renovating dilapidated primary health centers and mobilizing communities to increase demand for and utilization of life saving services. Similarly in Malawi, ACCESS worked across the continuum, from strengthening midwifery pre-service education, to supporting the Ministry of Health to finalize national standards for EmONC and community MNH counseling, to improving the quality of services in hospitals and health centers, to mobilizing communities to better prepare for birth and access services. At the facility level, the HHCC strengthened the capacity of health service providers in peripheral health facilities and referral hospitals to improve the access to and quality of MNH care. At the community level—notably in Afghanistan, Bangladesh and Nepal—ACCESS promoted healthy pregnancy and birth practices, better self care, recognition of complications, and timely health service seeking.[2] While many countries and ministries of health have a vision to provide services across a continuum of care that reaches from the household to the hospital, it is a difficult vision to achieve. The HHCC model provided a useful framework for ACCESS to work with host country governments to assess gaps and provide strategic inputs so that their vision could become reality.

To further improve health outcomes for women and their babies, ACCESS helped to expand the pool and improve the skills of birth attendants in 15 countries[3]. As part of this effort, the Program strengthened clinical training sites and labs, revised midwifery curricula, and updated the knowledge and practices of midwives in basic emergency obstetric and newborn care (BEmONC). For instance, in Rwanda, ACCESS trained more than 150 health care providers and community health workers in BEmONC, leading to 100% of births in ACCESS-targeted facilities occurring with a skilled attendant using a partograph and active management of the third stage of labor (AMTSL). These efforts, coupled with work to improve the skills of midwifery tutors and preceptors in 126 pre-service education institutions (schools and training centers) in seven countries (Ethiopia, Ghana, Malawi, Tanzania, Nigeria, Afghanistan and India), helped to improve the quality of

[2] Otchere, S. and Ransom, E. 2006 Bringing Care Closer to Mothers and Newborns: Using the Gap Analysis Tool to Develop a Household to Hospital Continuum of Care. Save the Chidren. Washington, DC: 2006.
[3] Afghanistan, Cameroon, Ethiopia, Ghana, Guinea, Haiti, India, Malawi, Mauritania, Nepal, Niger, Nigeria, Rwanda, Tanzania and Togo

skilled attendance at birth, and will lead to more skilled midwives graduating in the future. In Nepal, ACCESS also strengthened the skilled birth attendant content of the national pre-service and in-service training curriculum.

In 15 countries[4], ACCESS introduced and/or expanded **antenatal care (ANC) services,** facilitated Road Map development and, where appropriate, used ANC as a platform to strengthen services to prevent malaria in pregnancy (MIP). More than 28,000 women at targeted facilities in Haiti were provided with prevention of mother-to-child transmission of HIV services and, in Burkina Faso alone, more than 3.8 million people were covered by focused ANC and MIP services. ACCESS was also a committed partner to the Roll Back Malaria (RBM) Initiative and promoted the World Health Organization's (WHO) three-pronged strategy to address MIP prevention and control in areas of stable transmission. Program support and active participation in regional coalitions in Africa contributed to improved coordination and implementation support in 29 countries. Through its membership in the MIP working group, ACCESS contributed to the development of the RBM Global Malaria Action Plan, which is considered the global road map for malaria control and elimination around which all stakeholders can coordinate their actions. The Program, in close collaboration with WHO, also revised and updated the *Malaria in Pregnancy Resource Package*, which outlines seven essential programming components necessary for putting MIP policy into practice at the health facility level, and draws on existing country experiences, best practices and lessons learned for practical implementation.

To combat the primary cause of maternal death, ACCESS introduced and/or expanded efforts in 14 countries[5] to **prevent and treat PPH**. The Program trained thousands of health care providers to correctly practice AMTSL to prevent PPH. These trained providers in turn employed this life-saving practice at tens of thousands of births. As a frontline intervention to prevent PPH, ACCESS piloted community-focused birth preparedness programs emphasizing obstetric care by a skilled birth attendant during and immediately after childbirth. Program experience showed that community-based education and distribution of misoprostol is a safe, acceptable, feasible and programmatically effective tool for preventing PPH in low-resource settings where access to skilled attendance is limited. As a result, in areas like Afghanistan, ACCESS achieved near-universal coverage of a method to prevent PPH in the intervention area, and the MOPH will expand the intervention to areas of the country where access to emergency obstetric care remains a challenge. And in Nepal, the proportion of deliveries protected by a uterotonic increased from 10.4% to 72.5% during the Program, with the largest increases being among the poor, illiterate and those living in remote areas.

ACCESS also worked in 16 countries[6] **to improve the health outcomes of newborns**. Essential newborn care practices (warming and drying of the infant, resuscitation if needed, early and exclusive breastfeeding and clean cord care) were promoted in all ACCESS SBA training and facility-based quality improvement efforts. Interventions also led to increased knowledge of essential newborn care—such as in Bangladesh and India where 100% of targeted workers are now equipped with such knowledge. The Program significantly expanded coverage of Kangaroo Mother Care (KMC), a life-saving, low-tech, low-cost intervention to protect vulnerable preterm/low birth weight newborns, especially from hypothermia. In Nigeria, Rwanda and Nepal, ACCESS established the foundation for future expansion of KMC services by establishing KMC learning centers and supporting the provision of KMC services in a number of hospitals. In Malawi and Ethiopia, the Program built on the foundation of already established programs to expand KMC services to additional hospitals.

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[4] Afghanistan, Burkina Faso, Cameroon, Ethiopia, Haiti, India, Kenya, Madagascar, Malawi, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zambia

[5] Afghanistan, Cameroon, DRC, Ghana, Haiti, India, Kenya, Malawi, Mauritania, Nepal, Niger, Nigeria, Tanzania and Togo

[6] Afghanistan, Bangladesh, Cambodia, Cameroon, Ethiopia, Ghana, India, Kenya, Malawi, Mauritania, Nepal, Niger, Nigeria, Rwanda (KMC), Tanzania and Togo

ACCESS recognized that partnerships among faith-based organizations (FBOs) and other stakeholders are critical in promoting and delivering improved MNH services, and the Program's collaboration with FBOs and their facilities enhanced opportunities for scale-up of MNH interventions. ACCESS led efforts to highlight the value of FBO contributions and partnerships on a global scale through presentations at key international meetings—the 2008 Women Deliver Conference; 2009 Global Health Council's Faith and Global Health Caucus Meeting; and Christian Connections for International Health conference—and established partnerships with the World Health Organization's Partnerships Office and the World Council of Churches. Staff also developed a technical brief, *Faith-Based Models for Improving Maternal and Newborn Health*, which was widely shared with audiences in the US, Africa and Asia.

And on a local level, ACCESS helped FBOs become connected to wider networks, for instance by helping The Protestant Church of Congo and the Uganda Protestant Medical Bureau gain visibility by sponsoring their participation in a panel presentation at the 2008 Women Deliver conference. To train religious leaders to successfully advocate for women's health, ACCESS worked with Christian and Islamic leaders in three countries and developed two sermon guides[7] to help them change attitudes and behavior toward maternal and newborn health among their constituents with appropriate Safe Motherhood messages.

In addition, ACCESS hosted a regional workshop in Tanzania on high-quality focused ANC for, among others, 40 faith-based healthcare service providers and FBOs from five East African countries. As a result, country teams developed action plans, some of which received ACCESS support, to train providers and community health workers in focused ANC and MIP. ACCESS' technical assistance also helped a number of FBOs improve their funding prospects by linking faith-based health service delivery networks in Africa with the United Nations Population Fund (UNFPA), WHO and other stakeholders.

ACCESS achieved lasting impact for women and children through its support of evidence-based program expansion, improved policies and tools, and strengthening of individual and institutional capacity within governments, in health training centers, facilities and communities. The processes and results described throughout this report are evidence of the important progress the Program made toward meeting the critical needs of women and newborns in developing countries for life-saving services and information. ACCESS staff have been proud to contribute to these achievements, working alongside thousands of dedicated public servants, policymakers, health professionals, community health workers, volunteers, women and their families.

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[7] *Muslim Khutbah Guide to Save the Lives of Mothers and Newborns: A Toolkit for Religious Leaders*; and *Christian Sermon Guide to Save the Lives of Mothers and Newborns: A Toolkit for Religious Leaders*

Project Achievements by HIDN Pathways

Over the past five years, ACCESS and its Associate Awards have worked globally, regionally and in 26 countries—often with difficult-to-reach populations—to expand services and increase awareness of maternal, newborn and women's health needs. The Program received $74,990,000 against a ceiling of $75,000,000. Five Associate Awards were granted under ACCESS, one for family planning (FP) at the global level and four at the country level: Afghanistan, Cambodia, Kenya and Tanzania. All Associate Awards, with the exception of Cambodia, will extend beyond the end date of ACCESS.

Afghanistan—Gaining International Recognition through Midwives Association

With ACCESS support, the Afghan Midwives Association (AMA) has celebrated significant progress since its establishment in 2005. In the short time since the association was formed, it has established itself as a credible professional association and gained international recognition as a member of the International Confederation of Midwives (ICM). It now boasts more than 1,000 members, a number that continues to grow as new midwives graduate and awareness of the association spreads.

To meet the enormous need for skilled birth attendants in Afghanistan, the AMA receives considerable technical assistance from the ACCESS Program and the ACCESS Associate Award Health Services Support Project (HSSP). The AMA has worked tirelessly with the Government of Afghanistan and its ministries to promote the use of midwives as the primary provider for pregnant women, and has facilitated the involvement of midwives in the policy development process. The association is now taking a role in providing continuing professional education courses for trained midwives.

Partograph teaching, Afghanistan

The results have been tangible: coverage of evidence-based, high-impact interventions has increased for women and newborns in countries where ACCESS has worked; national maternal and newborn health (MNH) policies have changed; and midwives and doctors across Africa are better prepared to deliver life-saving care. The Program has laid the groundwork for continued improvement in health for mothers and infants, and schooled thousands of providers and community health workers (CHWs) to care and advocate for them. This section of the report presents ACCESS Program achievements in global leadership and results over the life of the program, organized by the four results pathways of the United States Agency for International Development's (USAID) Office of Health, Infectious Diseases and Nutrition (HIDN): skilled birth attendance, antenatal care (ANC), postpartum hemorrhage (PPH) and newborn care. Additional results by country and additional technical areas are presented later in the report and in the annexes.

GLOBAL LEADERSHIP

Through its global and local alliances, ACCESS global leadership has increased international and national attention and commitment to improve MNH across the continuum of maternal and newborn care. Partners with which the Program has allied in these efforts include: the World Health Organization (WHO), including Roll Back Malaria's (RBM) Malaria in Pregnancy Working Group (MIP WG); the United Nations Children's Fund (UNICEF); the United Nations Population Fund (UNFPA); the Partnership for Maternal, Newborn and Child Health; the Healthy Newborn Partnership; the White Ribbon Alliance (WRA); the International Confederation of Midwives (ICM); the International Federation of Gynecologists and Obstetricians (FIGO); and local organizations, including many faith-based organizations (FBOs).

In 2006, ACCESS supported the U.S. launch of the *Lancet Maternal Survival Series*, and the seminar was webcast worldwide. ACCESS also supported the Partnership for Maternal, Newborn and Child Health by providing a technical advisor to help the Partnership implement their global activities, strategic planning and fundraising.

Through collaboration with partners such as Saving Newborn Lives (SNL), the Program improved access to knowledge of newborn health with the development and dissemination of tools and materials. It worked with global partners to launch the *Lancet Neonatal Survival Series* in Nepal and Indonesia, and the *Lancet Child Survival Series* in Washington, D.C. With partners, ACCESS staff co-authored several chapters in *Opportunities for Newborns in Africa*, a regional review of newborn health in Africa, and supported the dissemination of the report. The Program is also providing technical input to revise the resource manual *Managing Newborn Complications* in collaboration with WHO.

In 2008, ACCESS increased awareness of USAID's contributions to MNH through its presentations at a Congressional briefing on MNH accomplishments in Nigeria and Afghanistan. In addition, Global Health TV developed a five-minute, widely-broadcast film on the Program's community midwifery work in Afghanistan.

ACCESS facilitated Road Map development in 15 countries in Africa. Between 2005 and 2006, the Program collaborated with the World Health Organization Regional Office for Africa (WHO/AFRO) to assist the Africa Road Map Initiative by supporting Anglophone, Francophone and Lusophone regional workshops on development and use of the Road Map. ACCESS also translated the original WHO/AFRO Road Map guidelines from French to English, and revised the draft guidelines with WHO/AFRO and partners at a meeting in Addis Ababa, Ethiopia. During the same meeting, the Program—along with WHO/AFRO and other partners—also reviewed the framework for the integration of FP, MIP, nutrition and prevention of mother-to-child transmission of HIV (PMTCT) with MNH care.

In 2009, ACCESS co-organized and co-facilitated with WHO/AFRO and the key U.N. Road Map partners the Entebbe regional workshop for the operationalization of the Road Map. The country teams from Malawi, Zambia, Uganda, Kenya, Namibia and Ethiopia participated in the workshop and each team identified bottlenecks and developed responses. In addition, concrete guidance was provided for the operationalization of the Road Maps at district level.

The Program established itself as a global leader in the prevention and control of MIP throughout Africa. In its work with RBM, MIP WG—including as Secretariat for the WG from 2003 to 2006—ACCESS supported the development of a number of important consensus statements, including: sulfadoxine-pyrimethamine (SP) for intermittent preventive treatment in pregnancy (IPTp) in areas with SP resistance, interactions between HIV and malaria and implications for service delivery, insecticide-treated net (ITN) delivery though ANC, and a global monitoring and evaluation guidance document for MIP.

The Program collaborated with and supported WRA and ICM to influence policies and programs. In Year 3, it also helped support WRA's capacity-building workshop, which focused on skilled birth attendants (SBAs), in India for national secretariat representatives from 14 countries. During this conference, a "how to" guide entitled *Building, Maintaining, and Sustaining National White Ribbon Alliances* was developed. This guide documented approaches and lessons learned from existing alliances to provide guidance to new groups. Using the guide as a model, a new Alliance was formed in Yemen and in Pakistan.

After a regional WRA conference in Malawi, members of country-level WRAs from Tanzania, Zambia, Malawi and South Africa developed a plan for a concerted regional effort on the human resources crisis and its effect on MNH. In Tanzania, more than 10,000 people marched to raise awareness about the need for home-based, life-saving skills in the Morogoro District through WRA/Tanzania. ACCESS provided technical assistance to the Mali Midwives Association, an ICM affiliate, to work with SBAs at the community level to prevent PPH. ICM reported on their work in a panel presentation on PPH prevention with SBAs, and at the community level at the ICM conference in Scotland in 2008. Some of the results presented included: integration of active management of the third stage of labor (AMTSL) with Mali's national curriculum for obstetric nurses and midwives; national recognition for AMTSL after its inclusion in the National Day of the Midwife; and a joint statement between the Malian midwifery and obstetrics/gynecology associations for the prevention of PPH. The Program also participated in the 2005 ICM conference in Brisbane by presenting on AMTSL.

ACCESS helped to shape the Women Deliver Conference in London in 2007, and Program staff made presentations and facilitated panel discussions on PPH, SBA, postpartum family planning (PPFP), FBOs and MIP. ACCESS also sponsored more than 20 participants and panelists from several developing countries, and provided leadership for the MNH sessions at the "Scaling up High Impact FP/MNCH Best Practices in the ANE Region" conference in 2007 in Bangkok.

ANTENATAL CARE RESULTS PATHWAY

ACCESS introduced and/or expanded antenatal care services in 15 countries.[8]

The provision of high-quality, basic ANC—safe, simple, cost-effective interventions that all women should receive—helps maintain normal pregnancies, prevent complications, and facilitate early detection and treatment of complications. Focused antenatal care (FANC) services include:

- Health Promotion and Disease Prevention: Tetanus immunization, iron/folate supplementation and, where appropriate, malaria prevention, HIV prevention, presumptive treatment for hookworm, and protection against vitamin A and/or iodine deficiency.
- Early Detection and Treatment of Complications and Existing Diseases: As part of focused assessment, the skilled provider talks with and examines the woman for problems that may harm her health or that of her newborn.
- Birth Preparedness and Complication Readiness (BP/CR): Counseling on danger signs and key preparations for birth, including the importance of delivering with a skilled attendant, saving emergency funds, and identifying emergency transport.

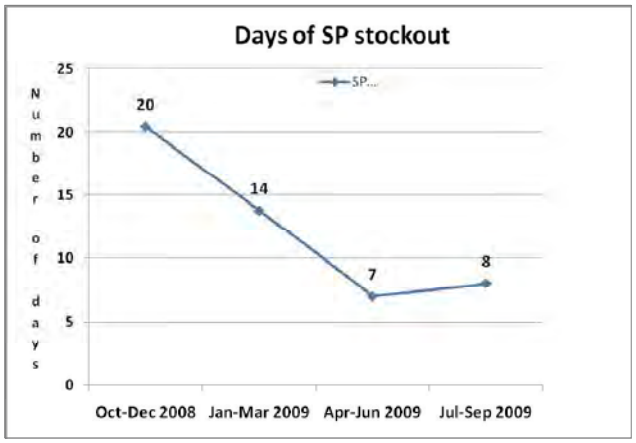
Because so many women, globally, visit an ANC provider at least once during their pregnancy, ACCESS worked to strengthen ANC as an opportunity to prevent and screen for pre-eclampsia, to increase testing and referrals for HIV, as a venue to screen and refer for TB, and as a platform for preventing malaria in pregnancy (MIP).

In Tanzania, ACCESS worked with the Ministry of Health and Social Welfare (MoHSW) to nationally scale up FANC as part of routine maternal and child health services. Through the program, 76% of ANC providers nationally (4,536) had their knowledge and skills updated in FANC, 880 in-service trainers were trained, and 2,633 facilities had at least one provider trained in FANC. In addition, pre-service curriculum

[8] Afghanistan, Burkina Faso, Cameroon, Ethiopia, Haiti, India, Kenya, Madagascar, Malawi, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zambia

were revised to reflect up-to-date FANC content and performance standards were created to ensure that facilities could monitor their own performance in providing high-quality FANC services. Through training, introduction of facility standards, and advocacy, ACCESS contributed to a reduction in stockouts of SP for the treatment of MIP. (See Figure 1.)

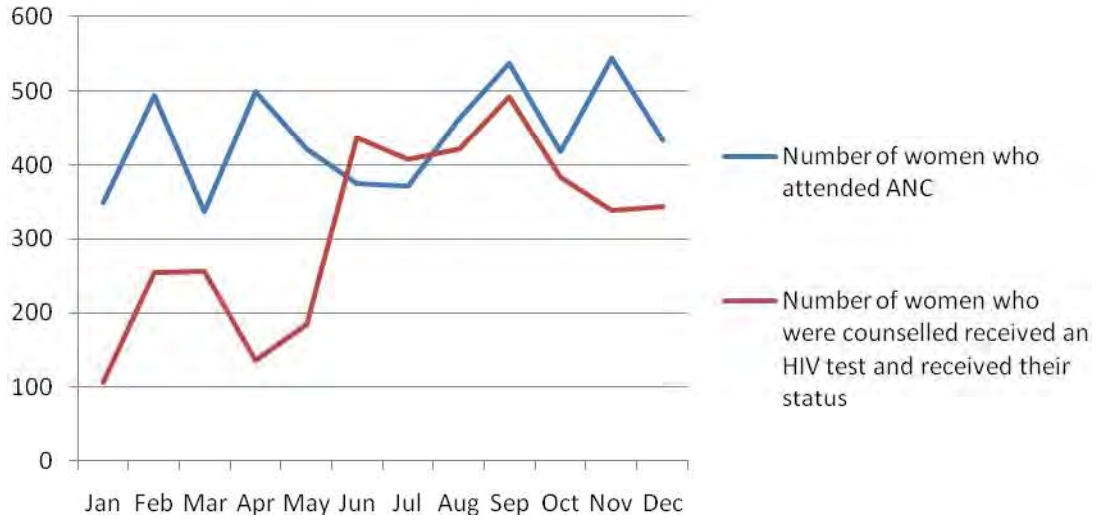
Figure 1: Days of Stock-outs of SP Per Quarter
(Data from 37 sentinel Surveillance sites in Tanzania)



In Malawi, ACCESS worked with the MoH's Reproductive Health and the HIV/AIDS units to strengthen the integration of mother to child transmission of HIV (PMTCT) into ANC. After finding that not all ANC providers had been trained in HIV testing and counseling (HTC)/PMTCT and that patient flow and high ANC volumes resulted in many clients not getting tested, ACCESS revised training packages and introduced facility performance standards to prevent these missed opportunities. ACCESS also revised community MNH training for health surveillance assistants (HSAs) to include more information on the importance of counseling and testing in order to prevent PMTCT.

Figure 2 shows data from Nkhotakota District Hospital from January 2008-February 2009. Beginning in June 2008, Nkhotakota had a surge in the number of ANC clients being both counseled and tested for HIV and receiving their results. The original community MNH package included some content on PMTCT with HSAs primarily referring pregnant women for HTC. Because the implementation of the original community MNH package occurred in early 2008 (at the start of ACCESS), it is possible that the surge in clients was a direct result of the increased community interventions implemented by the Program. Since that time, the majority of ANC clients in Nkhotakota have received HTC and their results. (See Figure 2.)

Figure 2: PMTCT services in ANC, Nkhotakota District, 2008-2009 *(Source: HMIS)*



In Kenya, in collaboration with the Department of Reproductive Health and the Division of Leprosy, TB and Lung Disease, ACCESS strengthened and integrated TB screening, referral, diagnosis and treatment for pregnant women with FANC. ACCESS developed an orientation package for FANC that includes MIP, PMTCT and TB, and trained 50 service providers and 30 supervisors from four pilot sties. During the intervention period, ACCESS saw an increase in TB screenings of new ANC clients increase from 0.4% to 91%.

The Program also focused on the antenatal period by providing community-based services to pregnant women. In Afghanistan and Nepal, ACCESS introduced community-based distribution of misoprostol to women in late pregnancy for the prevention of postpartum hemorrhage. In Nepal, ACCESS initiated the testing of community-based distribution of calcium for prevention of pre-eclampsia and eclampsia. (This work is continuing under MCHIP. See the PPH pathway section for more information on misoprostol in Afghanistan and Nepal.)

Most of the ACCESS work along the ANC pathway supported efforts to prevent and control MIP. Because more than 70% of pregnant women attend ANC at least once during pregnancy, ANC services provide an important platform to address MIP prevention and control. As part of its work in FANC, ACCESS was a committed partner to the RBM Initiative and promoted WHO's three-pronged strategy to address MIP prevention and control in areas of stable transmission. The Program also supported and actively participated in regional coalitions in Africa that contributed to improved coordination and implementation support in 29 countries.[9] At the country level, ACCESS supported the introduction or scale-up of FANC/MIP services in several countries, including Burkina Faso, Madagascar, Malawi, Nigeria, Rwanda, Tanzania and Uganda. These countries—with the exception of Rwanda, where IPTp is not provided—exhibited substantial increases in IPTp uptake. On a global level, ACCESS helped to develop and disseminate evidence-based materials, resources and tools.

POSTPARTUM HEMORRHAGE RESULTS PATHWAY

ACCESS introduced and/or expanded PPH prevention programs in 14 countries.[10]

Most cases of PPH—whether mothers give birth with a skilled provider at home or in a facility—can be prevented using safe, low-cost, evidence-based practices. Knowing how to prevent PPH, however, is not enough. The ACCESS Program worked to translate this knowledge into action when implementing essential maternal and newborn care (EMNC) and BEmONC interventions.

ACCESS established itself as a global resource and leader in the dissemination of evidence-based practices to prevent and treat PPH. These include well-known but underutilized procedures such as AMTSL (which is comprises injection of an uterotonic drug, controlled cord traction and uterine massage) as well as cutting-edge interventions such as use of misoprostol at the community level when an SBA is not available. Dissemination of this knowledge facilitates advocacy for commitment to improve maternal health at national levels, as well as to improve the capacity of the health systems and providers in facilities and communities to offer these programs and services at all levels. In several countries, the Program promoted prevention of PPH at scale by developing and rolling out national-level guidelines (Kenya) and performance-based standards

[9] MIPESA, RAOPAG, EARN and WARN countries are: Bénin, Burkina Faso, Burundi, Cape-Verde, Comoros, Côte d'Ivoire, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Malawi, Mali, Mauritania, Niger, Nigeria, Rwanda, Somalia, Sudan North, Sudan South, Sénégal, Sierra Leone, Tanzania, Togo, Uganda and Zambia.
[10] Afghanistan, Cameroon, DRC, Ghana, Haiti, India, Kenya, Malawi, Mauritania, Nepal, Niger, Nigeria, Tanzania and Togo

(Nigeria, Rwanda and Afghanistan). In India and Ghana, it implemented district-level programs to test program feasibility of selected interventions that will inform scale-up.

In collaboration with other partners such as ICM, FIGO, USAID, WHO and others, ACCESS set the global agenda for prevention and treatment of PPH. Building on the work of the MNH Program that resulted in the development of a CD-ROM on AMTSL for use as an advocacy and teaching tool, ACCESS collaborated with the Prevention of Postpartum Hemorrhage Initiative (POPPHI) Project to translate the CD-ROM into Spanish and French and distribute it globally, along with the PPH Toolkit, outlining the evidence base for use of AMTSL. It also provided support for community-based prevention of PPH using community-based delivery of misoprostol in Nepal and Afghanistan as part of its goal to introduce and scale up this successful approach in multiple countries. ACCESS chaired two of the POPPHI Project working groups—one on community-based PPH and another on training.

In October 2006, ACCESS participated in WHO's expert panel review to examine the evidence for the prevention of PPH. Moreover, it helped to bring these recommendations to the country level by influencing a number of African and Asian countries to revise their national policies. In Asia, ACCESS held technical discussions and advocacy workshops in Afghanistan, which resulted in the approval from the Ministry of Health and Population (MOHP) for a PPH demonstration project. In Nepal, it worked with the Nepal Family Health Program (NFHP) to prepare for scale-up of the use of misoprostol for prevention of PPH.

Along with UNICEF/SNL, ACCESS supported the development of a high-level Joint Statement on community-based care for the newborn. Program staff co-authored chapters in *Opportunities for Newborns in Africa*, a regional review of newborn health in Africa, and supported the publication and dissemination of the report. This review was launched at the African Health Ministers Meeting and at several other events to garner support for addressing neonatal mortality in Africa.

The ACCESS Program piloted community-focused birth preparedness programs as the frontline intervention to prevent PPH, emphasizing obstetric care by an SBA during and immediately after childbirth. In instances when women were unable to access skilled care, use of misoprostol immediately postpartum was advised. Experiences from these programs showed that, in low-resource settings with limited access to skilled attendance, community-based education and distribution of misoprostol is an appropriate strategy for preventing PPH at home births.

Preventing Postpartum Hemorrhage in Afghanistan and Nepal

ACCESS projects in Afghanistan and Nepal expanded life-saving interventions along the Household-to-Hospital Continuum of Care (HHCC), and assessed the safety, acceptability, feasibility and programmatic effectiveness of community-focused birth preparedness programs involving education and distribution of misoprostol to prevent PPH at home births. This included:

- Educating women and their families on BP/CR at the community level;
- Strengthening provider performance through performance improvement strategies to increase quality of care during childbirth at the facility level; and
- Increasing awareness on the urgency of addressing PPH and advocating for policy changes to support an enabling environment for MNH at the national level.

In Afghanistan and Nepal, a convergence of factors created a dismal environment for MNH, including high maternal mortality ratios (1,600 per 100,000 live births in Afghanistan and 281 per 100,000 live births in

Nepal),[11] evidence of hemorrhage as the most common cause of maternal mortality (30% of maternal deaths are related to PPH in Afghanistan[12] and 46% in Nepal[13]), and low rates of skilled attendance at birth (19% in Afghanistan[14] and 18.7% in Nepal). The MOHs in both countries are committed to reducing maternal mortality ratios by 2015 as part of the Millennium Development Goals and had begun interventions aimed to increase and strengthen institutional delivery services. In these scenarios, community-based birth preparedness education and distribution of misoprostol projects were implemented to prevent PPH at home births and complement larger, national efforts to reduce the burden of PPH.

The intervention was adapted to fit the context in both countries; however, there were several key features in each project:

- Educating pregnant women and their support persons through existing networks of CHWs:
  - In both intervention and comparison areas, trained CHWs provided education—with the assistance of culturally appropriate pictorial messages—to women and their support persons (such as husbands and mothers-in law) during home visits on:
    - BP/CR;
    - Recognition of danger signs, particularly PPH, during pregnancy, childbirth and the postpartum period;
    - The importance of a skilled provider at birth, where AMTSL can be offered to prevent PPH; and
    - What to do in case of a complication and where and from whom to seek care.

Women in the intervention area also received education on the purpose and correct timing and use of misoprostol to prevent PPH, the risks of taking misoprostol before birth of the baby and common side effects of misoprostol. Use of misoprostol was advised *only* if a skilled provider was not present at birth.

- Distributing misoprostol to women for use at home births when facility-based services and skilled attendance was unavailable.

After the educational session, women and their support persons were asked to describe the purpose and correct use of misoprostol, and the risks associated with use and misuse of the drug. Education was repeated until women could correctly describe the messages. The CHWs gave the women in the intervention area three 200-mcg tablets of misoprostol in their eighth month of pregnancy. CHWs visited all women postpartum to collect

Educating women, Nepal

[11] Ministry of Health and Population, NewERA and MACRO Inc. Nepal Demographic and Health Survey 2006. Kathmandu, Nepal. 2007.
[12] Bartlett L, Mawji S, Whitehead S, Crouse C, Dalil S, Ionete D, Salama P, and the Afghanistan Maternal Mortality Study Team. 2005. Where giving birth is a forecast of death: Maternal mortality in four districts of Afghanistan, 1999–2002. Lancet 365: 864–870.
[13] Pathak LR, Maternal Mortality and Morbidity Study, Family Health Division, DoHS, Ministry of Health and Population, Kathmandu: Government of Nepal. 1998.
[14] Ministry of Public Health, Afghanistan Health Survey, 2006.

information about exposure to and comprehension of messages, delivery information, reported PPH, experience with side effects, use and timing of misoprostol and other key information. Use of misoprostol was rigorously monitored through stock cards and records to ensure correct use and to prevent use outside the intervention area.

- Holding advocacy and sensitization meetings with stakeholders at various levels to mobilize groups on BP/CR and explain the intervention.

Woman just delivered, India

At the community level, meetings were held where the community health supervisors and CHWs shared information about the intervention. This included provision of education around the purpose of the intervention, mobilization around transport to facilities and how to support the CHW. At the national level, meetings were held with stakeholders to inform on project progress, guide decision making, and ensure that the intervention was complementary within national strategies and policies.

- Promoting institutional delivery and strengthening capacity of providers at the referral health facility.

In Afghanistan, a national government effort is under way to increase the number of skilled providers, and pre-service midwifery education employs use of standards to guide provider performance. ACCESS partnered with projects involved in increasing capacity of skilled providers in emergency obstetric services to ensure that providers were equipped to manage the occurrence of life-threatening complications, including PPH.

Afghanistan results[15]

- Achieved near-universal coverage of a method to prevent PPH: 96% of women in the intervention area received a uterotonic agent compared with 26% in the comparison area.
- Completed identification of pregnant women and the first education messages for 94% of the expected population by the end of the recruitment period. Distribution of misoprostol paralleled the recruitment of women, in that almost every woman identified as pregnant accepted misoprostol from the CHW (96%).
- 1,970 (96%) of the women who took misoprostol used the drug correctly. No women took the drug at the wrong time, or took the drug prior to the birth of the baby.
- Found trained, non-literate CHWs to be an acceptable source of educational messages and misoprostol distribution.
- Contrary to expectations, rates of all reported symptoms (e.g., shivering, nausea, cramping, transient fever) were higher in the comparison areas than the intervention areas: 60% of women in the intervention area who received misoprostol reported experiencing no unpleasant symptoms, compared with only 19% of women in the comparison area. In the comparison areas, women were more likely to use traditional remedies to stop bleeding.

After review of the promising results achieved under the pilot project, the MOPH has approved gradual expansion of the intervention to additional geographic areas of the country where access to emergency

[15] Prevention of Postpartum Hemorrhage at Home Birth in Afghanistan. Sanghvi H., Ansari N., Prata N., Gibson H., Ihsan A., Smith J. International Journal of Gynecology and Obstetrics. 2010; 108(3): 276–281.

obstetric care remains a challenge. This expansion will be implemented under the ACCESS Health Services Support Project (HSSP) in 2010 and 2011 and is projected to protect 20,000 women against PPH.

Nepal results

- Dispensed misoprostol to 18,761 pregnant women by the female community health volunteers with no significant adverse events or incorrect use.
- The proportion of deliveries protected by a uterotonic increased from 10.4% to 72.5%; the largest increases were among the disadvantaged: the poor, the illiterate and those living in remote areas.
- Institutional deliveries increased from 9.9% to 16.0%.
- Maternal mortality ratio among 13,969 misoprostol users was 72 per 100,000 live births, which was significantly lower than among non-users (304 per 100,000 live births) and the national level (281 per 100,000 live births).

Misoprostol can effectively be used without deterring women from seeking care by a skilled attendant at birth. A higher percentage of women in the intervention area received facility-based deliveries than women in the control area in Afghanistan (21.4% versus 18.1% respectively). In Nepal, the intervention area experienced an institutional delivery coverage increase from 11% pre-intervention to 20.4% post-intervention compared to a national increase of 11.3% to 15.3%. Use of AMTSL by a skilled provider remains the most effective method to prevent PPH, and the importance of its provision was emphasized throughout these projects. These results show that the intervention was, in fact, complementary toward efforts to increase rates of facility-based deliveries.

Small Grants to Reduce Postpartum Hemorrhage

In April 2006, ACCESS sponsored a regional PPH conference in Uganda where 22 countries from Africa were represented with more than 250 participants. From this conference, ACCESS awarded small grants to seven local organizations in six countries in Africa in support of their expansion of country-level PPH activities (Burkina Faso, the Democratic Republic of Congo, Ethiopia, Kenya, Madagascar and Mali).

Management of PPH course, Congo

In addition to training health workers, the ACCESS PPH small grant recipients conducted numerous activities, including: work with communities to increase PPH awareness and BP/CR; policy and managerial support for the prevention of PPH; promotion of networking among groups with AMTSL programs; work with pre-service programs to incorporate curricula on AMTSL with midwifery and nursing schools; provision of equipment and basic supplies to target centers for the prevention and management of PPH; and development of support and monitoring systems to track progress.

- For example, the Evangelical Hospital of the Baptist Community of Congo in Vanga, or HEV, is a missionary Baptist community organization in the Democratic Republic of Congo and serves as the referral hospital for the rural Vanga Health District. HEV is also a training and internship center for doctors and nurses in Bandundu Province. HEV developed a five-day training course on prevention and management of PPH, and a community-awareness program using communication channels such as radio, health care providers, community leaders, pastors and leaders of mothers' associations. They also purchased, stored and distributed equipment and supplies.

With an average grant of USD$12,000 to seven organizations,[16] recipients of ACCESS PPH small grants achieved significant successes. For instance, over the 11-month project period, HEV used Program funds to improve Safe Motherhood at both the health center and community level. Specific results include:

- Introduced AMTSL to 38 health centers and 50 maternities—the first facilities in the Democratic Republic of Congo to use the intervention—covering more than 50,000 women of reproductive age.
- Trained 50 health agents (100%) and 28 clinicians (85%) in target centers in AMTSL.
- A reported 4,318 (85%) births in these facilities included AMTSL during the project period.
- Educated community members to correctly identify signs of danger during pregnancy, labor and postpartum; several communities put an emergency plan or financing scheme in place for deliveries.

SKILLED BIRTH ATTENDANCE RESULTS PATHWAY

Most common maternal complications can be prevented, or appropriately managed, by an SBA conducting the delivery at a facility or at home. The ACCESS Program supported government policies in Africa and Asia to increase the availability of SBAs, provided training to improve the skills of SBAs, and mobilized communities to increase demand for delivering with an SBA in most of the countries in which it worked. ACCESS worked with pre-service institutions to update their curricula, to strengthen their tutors and clinical preceptors and to upgrade their training sites. The Program produced a new comprehensive learning resource package, *Best Practices in Essential and Basic Emergency Maternal and Newborn Care*, which provides updates on best practices needed to teach faculty and students the most current evidence-based care. The Program worked with in-service partners to train well over 1,000 providers in essential and basic emergency obstetric care and to improve the quality of obstetric services in hospitals and clinics. Hundreds of communities were mobilized to appreciate the need and prepare for delivery with an SBA.

ACCESS helped the Government of Ethiopia reach new targets for training health officers (HOs) on clinical skills in maternal and newborn care to improve maternal and newborn survival. In Nepal, ACCESS supported the government to roll out its National Skilled Birth Attendants Policy by developing pre- and in-service training materials and strengthening the quality of SBA training sites. In Bangladesh, families were counseled and communities mobilized to create birth plans to increase attendance with a skilled provider. In Malawi, the Program upgraded the skills

From Zulaihat Aminu, Mother of Twin Babies from Dawanau Community, Nigeria

"I am grateful to ACCESS for bringing this program to my village. Before, all women in my village including myself do not go to hospital either for antenatal care, delivery or postpartum visits. But as soon as ACCESS-trained female household counselors began to visit me in my house, telling me what to do when pregnant, I and other women in the village started going to hospital. I want to say that I really feel very happy with what the volunteer nurse-midwives are doing to save lives of women in my village. Another area that touched my life and that of my twin babies positively, is the Tallafin Mata Masu Dubara (TMMD) savings club initiated by ACCESS. When my babies were seriously sick, the TMMD in my village loaned me some money to take them to hospital to seek treatment. That single assistance has saved my children and they are now looking healthy."

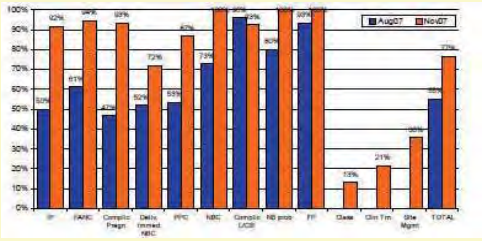
[16] Association du Personnel du Service de Gynécologie – Obstétrique Befelatanana (Madagascar); Midwife Association of Mali (Mali); Society of Obstetrics and Gynecology (Ethiopia); HEV (Democratic Republic of Congo); Organization for Health, Education and Research Services, and Community Capacity Building Initiative (Kenya); Regional Prevention of Maternal Mortality (Burkina Faso); Family Care International (Burkina Faso).

Nepal—Standards Help New Training Sites to Improve Performance

After their selection by the National Health Training Centre as an SBA training site, staff at Baglung District Hospital participated in an ACCESS-led quality improvement (QI) process. An initial assessment using the QI tools yielded a total score of 70% on nine clinical tools, after which staff participated in a workshop to develop action plans to address gaps.

Medical Superintendant Dr. Tarun found the QI tools useful in preparing him and his staff for SBA in-service training. In particular, he cited the verification criteria as helpful in identifying the exact cause of not meeting a standard and in developing action plans to eliminate or reduce the cause. He carried the prepared action plan in his pocket at work and reviewed it regularly with staff to assess progress.

A later assessment using the QI tools showed significant improvements, and the site had reached 91% on the nine clinical tools. In addition, staff had started working on the clinical training tools for a total score of 77%. Staff presented their accomplishments during the November progress sharing workshop, noting they had been able to implement the majority of their action plan.



of midwifery faculty in every pre-service school in the country, and in Nigeria, the Program developed nationally endorsed performance standards for emergency obstetric and newborn care (EmONC) for the hospital and primary health center levels. In Rwanda, ACCESS improved skilled birth attendance by training more than 150 health care providers and CHWs in EmONC. Results of this training demonstrated that 92% of hospital providers in the sample practice all three steps of AMSTL as opposed to 17% at baseline.

ACCESS introduced and/or expanded skilled birth attendance programs in 15 countries.[17]

Most ACCESS achievements along the SBA pathway are presented in the country briefs found later in this report. This section highlights a regional effort in Africa to improve pre-service education and a pilot project in India to demonstrate that delivery of life-saving skills by auxiliary nurse-midwives (ANMs)—combined with community mobilization—improves access to and use of key MNH services.

A Regional Approach to Strengthening Pre-service Education in Africa

Starting in 2006, ACCESS in collaboration with WHO/AFRO implemented a multi-country pre-service midwifery strengthening activity to support efforts to accelerate the reduction of maternal and neonatal mortality and morbidity. Over the lifetime of the project, tutors and preceptors from four countries (Ethiopia, Ghana, Malawi and Tanzania) participated in technical updates and clinical skills standardization courses in BEmONC to improve their knowledge and practices, and in Effective Teaching Skills courses to improve their clinical training skills. In addition, the Program strengthened clinical training sites and supported use of clinical training skills labs. Tutors also participated in curriculum design workshops so they could participate in reviewing and revising curricula in their own countries. Through these efforts, a pool of resources has been built within each country that will strengthen pre-service midwifery education leading to more prepared and qualified midwives graduating from each country's midwifery schools.

[17] Afghanistan, Cameroon, Ethiopia, Ghana, Guinea, Haiti, India, Malawi, Mauritania, Nepal, Niger, Nigeria,, Rwanda, Tanzania and Togo

Specific achievements include:

- 132 pre-service tutors/preceptors from four participating countries updated in BEmONC (22 in Malawi, 38 in Tanzania, 36 in Ethiopia and 36 in Ghana). Each received a follow-up visit to reinforce use of their newly acquired knowledge and skills.
- 34 tutors and preceptors trained in Effective Teaching Skills, approximately eight in each country.
- Five clinical training sites strengthened, one each in Tanzania, Malawi and Ethiopia, and two in Ghana. Strengthening includes supporting facility with basic supplies but also provision of supportive supervision visits and quality improvement using the Standards-Based Management and Recognition (SBM-R) approach.
- 209 hospital providers/staff received BEmONC updates as a part of site strengthening activities.

From Susan Wright, Senior Advisor, HPN, USAID/Ghana

"The midwives [in Ghana] were effusive about the importance of the training they had received, and I noted that they put as much attention on interpersonal communications as on clinical procedures. Infection prevention was also clearly a priority for them."

- A total of 14 stakeholder meetings were held in Ethiopia, Ghana, Malawi and Tanzania. These meetings brought together key midwifery stakeholders, including representatives from respective MOHs, Nurses and Midwives Councils, WHO, UNFPA and ICM.
- Midwifery curriculum revisions undertaken in all four countries.
- Dedication of field funds in Tanzania and Malawi to scale up the initiative in each country.
- Learning resource package, *Best Practices in Essential and Basic Emergency Maternal and Newborn Care*, completed and disseminated to country programs and at stakeholder meetings in Ethiopia, Ghana, Malawi and Tanzania. This package can be adapted for use in pre-service and in-service programs for skilled providers and addresses the continuum of care from ANC through postpartum and postnatal care, including PPFP, MIP and PMTCT.
- An evaluation of the regional approach identified challenges in reaching sufficient numbers of tutors/preceptors and in providing supportive supervision; however the following benefits were noted:
    - There was opportunity for sharing of experiences, so that participants could acquire information about approaches or strategies being implemented in countries other than their own.
    - A platform for cross-country collaboration was established, creating the potential for further cross-fertilization of educational and clinical ideas, and the development and mentorship of midwifery leaders.
    - Regional training activities focused on standardization of practice, which is intended to flow over into country-based approaches to clinical service delivery.

Increasing Skilled Birth Attendance in Underserved Communities in India

In Jaharkhand, India, where skilled attendance at birth is among the lowest in the country, ACCESS worked with the state government and its implementing partners to operationalize new Government of India (GoI) guidelines to expand the skills of ANMs and reposition them as community midwives. ACCESS developed and field-tested competency-based training materials for a 12-week course on the GoI-mandated skills set for ANMs. ANM training centers were strengthened and equipped along with two hospitals and three PHCs as clinical training sites. A total of 58 ANMs were trained in the 12-week curriculum. In parallel, 223 communities and 2,600 community members were mobilized to take action to increase access to skilled care at birth. An evaluation of this approach demonstrated the following results:

- The 12-week training course produced competent SBAs in the experimental group, specifically related to partograph use, AMTSL practice and newborn resuscitation.
- A significant improvement in knowledge and practice of BP/CR for pregnant women and recent mothers—including clean cord care, drying and wrapping, and delayed bathing.
- A significant increase in the proportion of births attended by ANMs from 5% to 13%.

As a result of ACCESS work, the Indian Nursing Council developed a national strategic plan to establish national- and state-level resource centers to support improved capacity of ANM training centers at the district level.

NEWBORN RESULTS PATHWAY

To address the nearly 40% of global child deaths that occur each year during the first month of life, the ACCESS Program worked to expand interventions that prevent and manage the major causes of newborn death: infection, pre-term birth and asphyxia.

Resources and Partnerships

ACCESS laid the groundwork for strengthening newborn health partnerships and future relations through its involvement with MotherNewBorNet and collaboration with the WHO South-East Asia Regional Office (WHO/SEARO). In 2005, the Program collaborated with WHO/SEARO to conduct a "Continuum of Care for Maternal and Newborn Health" workshop in Bangkok, Thailand. The workshop focused on country- and regional-level interventions for MNH, and gave particular attention to newborn health, skilled birth attendance, and the human resource issues and other constraints affecting MNH programming. In attendance were 50 participants from 11 countries, including Cambodia (from the Regional Office for the Western Pacific) and Afghanistan (from the Regional Office for the Eastern Mediterranean). Subsequently, in collaboration with WHO/SEARO and the WHO Regional Office in Bangladesh, ACCESS provided support to develop and help facilitate a five-day training course to strengthen the capacities of trainers so that they can replicate the training. Attendees developed follow-up action plans, including national-level training in Bangladesh and Nepal.

ACCESS introduced and/or expanded newborn care programs in 16 countries.[18]

Nepal—Kangaroo Mother Care Saves Low Birth Weight Twins

At a maternity home in Kathmandu, Mrs. Rai gave birth to low birth weight fraternal twins—the boy weighed just 1.68 kg and the girl 1.98 kg. At four days old, Mrs. Rai and her husband brought the twins to Kathmandu Medical College, where ACCESS-trained staff taught both parents KMC. After 17 days of this care, both babies had gained weight, the boy up to almost 2 kg and the girl to 2.2 kg. When the Rai family returned home, they continued to receive support and advice from hospital staff. Now, at six months old, the Rai boy has reached 7 kg and the girl 6.5 kg, and both are up-to-date on their immunizations (with the exception of the measles vaccination).

In 2005 and 2006, the Program participated in the Asia Region USAID MotherNewBorNet meeting in New Delhi, India. Participants learned about state-of-the-art interventions and research, and shared innovative

[18] Afghanistan, Bangladesh, Cambodia, Cameroon, Ethiopia, Ghana, India, Kenya, Malawi, Mauritania, Nepal, Niger, Nigeria, Rwanda (KMC), Tanzania and Togo

SAVING NEWBORN LIVES BY INCREASING USE OF SKILLED CARE IN RURAL INDIA

For women like 35-year-old Mercila Hembrom in rural Jharkhand state in India, the value of skilled midwifery care is evident—both she and her son are alive and well. For her previous five pregnancies, Mercila sought ANC from the local ANM named Sangita Kumari, but had the local Dai, or traditional birth attendant (TBA), deliver her at home. Sadly, she lost her last child soon after childbirth.

In this pregnancy, Mercila learned that Sangita had received a recent training on pregnancy, childbirth and newborn care. Sangita was one of the 37 ANMs trained by the ACCESS Program in Dumka on maternal and newborn care. During Mercila's sixth pregnancy, she met a community worker—Ms. Mary Mina Hembrom—who gave her friendly advice whenever they would meet. In this way, Mercila and her family learned about the importance of having a trained, skilled provider during birth, and the danger signs for mother and baby.

When Mercila went into labor, her husband called Sangita. Within an hour, she arrived with her equipment and drugs and assessed Mercila's progress. After a long delivery, a baby boy was born; however, he was blue and not breathing. Sangita quickly cleared the mucus from his mouth and nose, and dried and covered him. She then separated the baby by clamping and cutting the cord, and began resuscitating him with a bag and mask. After 20 minutes, the baby was breathing normally and stable. During this time, Sangita had also cared for Mercila, ensuring she took misoprostol and performing active management of the third stage of labor.

Sangita stayed with the mother and baby to provide immediate postpartum care, initiate breastfeeding, and explain the postnatal and newborn danger signs. During the next week, she came back to check on Mercila and her son three times. Mary Mina, the community worker, also visited the mother at home and counseled her on exclusive breastfeeding and family planning.

Today, Mercila is very happy with her seven-month-old son and is thankful for the services provided by Mary Mina and Sangita. Her story highlights ACCESS's work in Dumka and illuminates the numerous opportunities to save lives with SBAs and community mobilization. ANMs, once trained, have been able to provide community-based maternal and newborn care competently and increase access to and use of these services. Moreover, women, families and communities in Dumka have quickly learned about maternal and newborn care, and have been willing and able to seek services, plan for childbirth, and be prepared for complications.

approaches to MNH. Participants also discussed challenges for scaling up evidence-based interventions to address maternal and newborn deaths in the community, and identified gaps in Program work and ways to overcome them. Technical experts joined together to address the issue of prevention and management of low birth weight (LBW) babies in the community, including overviews on global and regional LBW issues, the role of KMC, and findings from a community-based research program in Bangladesh. To follow up on the meeting, ACCESS worked with USAID programs in Asia to accelerate uptake and scale-up of programs for PPH and community-based maternal and newborn care, particularly to address infections.

In Phnom Penh in 2005, the Cambodia MOH joined ACCESS and other partners (USAID, WHO, UNFPA, UNICEF, PATH, Reproductive and Child Health Alliance, Partners for Development, University Research Corporation, Reproductive Health Association of Cambodia, CARE, MEDiCAM and BASICS) to hold a national workshop on MNH for approximately 150 participants. The workshop served as a technical update in evidence-based MNH, and relevant experiences and programs from the region were also highlighted. Participants included policymakers, clinicians and administrators from throughout Cambodia, as well as representatives from the partners cited above. The Program contributed to the Latin America and the Caribbean Regional Strategy and Action Plan on Neonatal Health within the continuum of maternal, newborn and child care through its collaboration with the Pan American Health Organization (PAHO),

USAID, BASICS, the CORE Group and MOHs. ACCESS also served as a member of the Latin American and Caribbean Newborn Health Alliance, an interagency group that promotes newborn health within a reproductive, maternal and child health continuum, with a specific focus on the most vulnerable and marginalized population groups.

In 2007, ACCESS contributed an influential article to *MotherNewborNews* which described the state of the art in facility- and community-based KMC, and also reviewed common concerns and challenges. This widely disseminated article outlined a road map for scaling up a comprehensive KMC program.

The Program worked with host governments in selected developing countries to implement and scale up facility-based KMC in hospitals and health centers, with the overall goal of reducing neonatal mortality through improving care for LBW newborns using KMC. ACCESS either introduced and laid the foundation for expansion of KMC, or built upon existing pilot/demonstration sites to further expand KMC services. This section describes the KMC program approach, results and lessons learned from experience in five countries (Ethiopia, Malawi, Nepal, Nigeria and Rwanda).

KMC Program Approach

While there was some variation from country to country, the general approach, as well as a number of specific inputs, was common to all five programs, namely to:

- Create awareness and local ownership through dialogue with key stakeholders (MOH, professional associations and donors)
- Work in partnership with the MOH and other NGOs to develop an introduction or expansion strategy
- Establish a national KMC technical advisory or working group
- Identify a local pediatrician or neonatologist to serve as KMC champion
- Support development of a national KMC policy and/or service guidelines
- Support adaptation of ACCESS global KMC training manual and associated job aids for in-service training, either as a stand alone training or integrated with the existing national MNH manuals
- Support establishment of a core group of national KMC trainers
- Support establishment of KMC units at selected hospitals by training service providers and providing basic newborn care equipment such as beds, nasogastric tubes, caps and weighing scales

Muhima Hospital, Rwanda

KMC Results

Table 1 below summarizes the Program's key achievements in its effort to introduce and/or expand KMC services in the five target countries. Table 2 shows ACCESS scale-up across the HIDN results pathways.

Table 1: ACCESS Key Achievements

COUNTRY	RESULTS
Malawi[19]	❑ Expanded KMC from three to seven hospitals ❑ Introduced KMC services to five health centers ❑ 414 newborns received KMC ❑ Nearly all central, district and mission hospitals have initiated KMC
Nepal	❑ Incorporated KMC with MOH national LBW care guidelines ❑ Introduced KMC to five hospitals with direct ACCESS funding ❑ Introduced KMC to two central hospitals due to ACCESS awareness creation ❑ Certified seven national KMC trainers ❑ Trained 112 service providers
Nigeria	❑ Established KMC sites in four hospitals ❑ Developed 15 trainers ❑ Trained 62 service providers ❑ Currently, KMC expansion is continuing by other development actors using materials developed by ACCESS
Rwanda	❑ Introduced KMC services to eight hospitals ❑ Developed 15 trainers ❑ Trained 37 service providers ❑ 477 newborns received KMC services ❑ Average daily weight increased from nine to 28 grams ❑ Length of hospital stay decreased from 26 to 19 days
Ethiopia[20]	❑ KMC expanded from one to eight hospitals ❑ Developed 13 trainers ❑ Currently expanding KMC services to 22 health centers and two hospitals in 2010 through Save the Children's SNL Program

[19] KMC service guidelines and training materials were already developed in Malawi prior to the ACCESS Program.
[20] KMC was already a national policy in Ethiopia prior to the ACCESS Program.

Table 2: ACCESS Scale-up across HIDN Pathways

ACTIVITY TITLE	PY 1 & 2 FY05 AND FY06	PY 3 FY07 (FY06 $)	PY 4 & 5 FY08 AND FY09	TOTAL NUMBER OF COUNTRIES INVOLVED
Introduction and/or expansion of focused ANC within EMNC	6- Burkina Faso Cameroon Haiti Madagascar Rwanda Tanzania	8- Haiti India Kenya Madagascar Nigeria Tanzania Uganda Zambia	10- Afghanistan Ethiopia India Kenya Madagascar Malawi Nigeria RSA Rwanda Tanzania	15 Total: Afghanistan Burkina Faso Cameroon Ethiopia Haiti India Kenya Madagascar Malawi Nigeria Rwanda South Africa Tanzania Uganda Zambia
Introduction and/or expansion of PPH prevention programs into countries	3- Cameroon Haiti Nepal	10- Afghanistan Cameroon Democratic Republic of the Congo Mauritania Haiti India Nepal Niger Nigeria Togo	14- Afghanistan Cameroon DRC Ethiopia Ghana India Kenya Malawi Mauritania Niger Nigeria Rwanda Tanzania Togo	14 Total: Afghanistan Cameroon DRC Ghana Haiti India Kenya Malawi Mauritania Nepal Niger Nigeria Tanzania Togo

ACTIVITY TITLE	PY 1 & 2 FY05 AND FY06	PY 3 FY07 (FY06 $)	PY 4 & 5 FY08 AND FY09	TOTAL NUMBER OF COUNTRIES INVOLVED
Introduction and/or expansion of SBA programs into countries	2 Cameroon Haiti	12- Afghanistan Cameroon Ghana Haiti India Mauritania Malawi Nepal Niger Nigeria Togo Rwanda (Safe Birth Africa)	15- Afghanistan Cameroon Ethiopia Ghana Guinea Haiti India Malawi Mauritania Nepal Niger Nigeria Rwanda Tanzania Togo	15 Total: Afghanistan Cameroon Ethiopia Ghana Guinea Haiti India Malawi Mauritania Nepal Niger Nigeria Rwanda Tanzania Togo
Introduction and/or expansion of newborn care into countries	3 new countries with FY 05 core funds and Mission funds	11- Afghanistan Bangladesh Cameroon India Kenya21 Mauritania Nepal Niger Nigeria Rwanda (KMC) Togo	16- Afghanistan Bangladesh Cambodia Cameroon Ethiopia Ghana India Kenya Malawi Mauritania Nepal Niger Nigeria Rwanda Tanzania Togo	16 Total: Afghanistan Bangladesh Cambodia Cameroon Ethiopia Ghana India Kenya1 Malawi Mauritania Nepal Niger Nigeria Rwanda (KMC) Tanzania Togo

[21] Kenya was covered through work under the ACCESS-FP associate award.

Achievements in Other Technical and Crosscutting Areas

Beyond the results pathways, ACCESS activities led to improved care for women and newborns by preventing and treating **malaria in pregnancy**, **integrating PMTCT** within MNCH services, **engaging communities** at the community level, and **improving quality**.

Addressing Malaria in Pregnancy: A Comprehensive Approach to Maternal and Newborn Health Outcomes

Malaria is a major public health crisis, especially in sub-Saharan Africa, where 90% of all malaria-related deaths occur. The most vulnerable populations are pregnant women, their unborn babies, and children under five years of age. Approximately 25 million women become pregnant in high (stable) transmission areas of Africa each year and are at risk for malaria illness primarily through the Plasmodium falciparum parasite. This translates into an estimated 400,000 cases of severe maternal anemia, a potentially fatal condition, and from 75,000 to 200,000 infant deaths annually.[22] Women in stable transmission areas have the greatest risk of developing these complications during their first and second pregnancies.[23] The prevalence and intensity of malaria illness in pregnancy is higher among HIV-infected women and the risk to the woman and her newborn exists regardless of the number of times a woman has given birth.[24] HIV infection in pregnancy is also associated with reduced efficacy of malaria prophylaxis and treatment.

ACCESS APPROACH

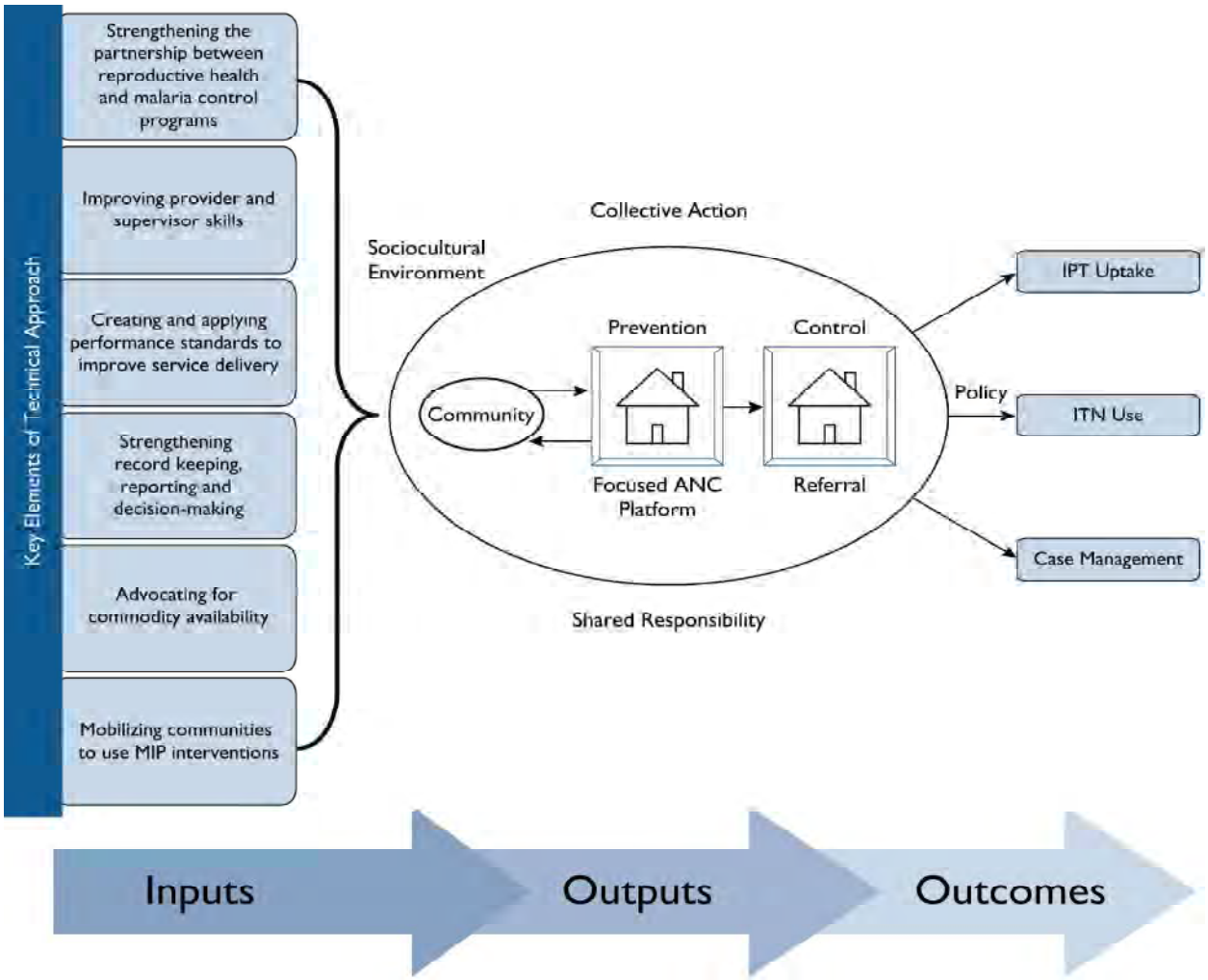
ACCESS was a committed partner to the Roll Back Malaria (RBM) Initiative and promoted the World Health Organization's (WHO) three-pronged strategy to address malaria in pregnancy (MIP) prevention and control in areas of stable transmission. The strategy addresses prevention of MIP through a platform of focused antenatal care (FANC) services. (*See text box*). To address MIP, FANC services include intermittent preventive treatment in pregnancy (IPTp) with an appropriate antimalarial (currently sulfadoxine-pyrimethamine, or SP), and insecticide treated bed-nets (ITNs). In addition, case management of MIP is addressed through prompt and effective treatment for pregnant women with a trained healthcare provider.

Malaria in Pregnancy: Continuum of Care

The ACCESS Program aimed to strengthen health systems across the continuum of care, reaching pregnant women at both the community and facility levels, and fostering the synergistic link between communities and facilities to improve health systems for women and their families. Since more than 70% of pregnant women attend ANC at least once during pregnancy, ANC services provide an important platform to address MIP prevention and control. (See **Figure 3**.)

[22] Steketee RW et al. 2001. The burden of malaria in pregnancy in malaria-endemic areas. *Am J Trop Med Hyg* 64 (Suppl 1-2):
28-35.
[23] Brabin 1983; Jelliffe 1968; McGregor, Wilson and Billewicz 1983; Steketee et al. 1988.
[24] Verhoeff F et al. 1999. Increased prevalence of malaria in HIV-infected pregnant women and its implications for malaria control. *Trop Med Int Health* 4(1): 5-12.

Figure 3: Focused Antenatal Care/Malaria in Pregnancy



Global Leader in Advocacy and Global Learning

ACCESS established itself as a global leader in the prevention and control of MIP throughout Africa. In its work with the RBM MIP Working Group (MIP WG)—including as Secretariat for the Working Group from 2003 to 2006—ACCESS supported the development of a number of important consensus statements, including: SP for IPTp in areas with SP resistance, interactions between HIV and malaria and implications for service delivery, ITN delivery through ANC, and a global monitoring and evaluation guidance document for MIP.

ACCESS helped to develop and disseminate global, evidence-based materials, resources and tools. These materials include Prevention and Control of Malaria in Pregnancy in the Africa Region: A Program Implementation Guide,[25] which outlines seven essential programming components that are needed to put MIP policy into practice at the health facility level and draws on existing country experiences, best practices and lessons learned for practical implementation. ACCESS also updated the

[25] Developed in collaboration with WHO, the Centers for Disease Control and Prevention (CDC) and Rational Pharmaceutical Management Plus, through the Malaria Action Coalition.

global Malaria in Pregnancy Resource Package, available on CD-ROM and on the Jhpiego website. This package is a compilation of tools and resources for countries to adapt to their context as they work toward the prevention and control of MIP, including: the WHO Strategic Framework for MIP, Jhpiego's MIP Learning Resource Package, an MIP Implementation Guide, job aids and MIP key articles.

ACCESS support to regional coalitions in Africa contributed to MIP activities in 29 countries.

ACCESS support and active participation in regional coalitions in Africa contributed to improved coordination and implementation support in 29 countries.[26] For instance, through the Malaria in Pregnancy East and Southern Africa Coalition (MIPESA) and the West African Regional Coalition for MIP (RAOPAG), ACCESS support led to improved regional capacity among national-level trainers, as well as the documentation and dissemination of best practices and lessons learned. ACCESS assisted MIPESA and RAOPAG in the development of regional global fund proposals, which yielded improved capacity i
n grant writing and regional planning among MIPESA and RAOPAG representatives. ACCESS also helped document MIPESA countries' experiences through the report, Assessment of MIPESA Country Experiences in the Adoption and Implementation of Malaria in Pregnancy Policies including Best Practices and Lessons Learned. The Program also provided continued support to the RBM East Africa Roll Back Malaria Network (EARN) and the West Africa Roll Back Malaria Network (WARN).

RESULTS

ACCESS contributed to the acceleration and scale-up of MIP prevention and control in a number of countries, including: Burkina Faso, Kenya, Madagascar, Tanzania, Uganda, Nigeria, Rwanda, Mali, Ghana and Malawi. Summarized below are the major results from the first five of these countries.

In Burkina Faso, more than 3.5 million people were covered by these services.

Burkina Faso (2002–2004): ACCESS supported the Ministry of Health (MOH) in Burkina Faso to expand implementation of FANC/MIP services by building on achievements of an MIP pilot study implemented through USAID's flagship Maternal and Neonatal Health (MNH) Program and the CDC. The pilot study in Koupéla District resulted in notable improvements in maternal and newborn health indicators and IPTp uptake, which increased dramatically to over 90% during the study intervention. Influenced by evidence from this study and two similar studies conducted in Mali and Benin, Burkina Faso adopted a new MIP policy in 2004 promoting the WHO three-pronged approach.

With the new policy in place, ACCESS went on to train 114 service providers from 49 facilities in five districts of one health region in FANC and MIP. An estimated population of 3,849,335 was covered by these services.

Kenya (2004–2010): The ACCESS Program in Kenya built upon previous work by Jhpiego and the MOH, which involved the introduction of FANC/ MIP services to 16 malaria endemic districts. ACCESS supported the MOH to expand these efforts further by:

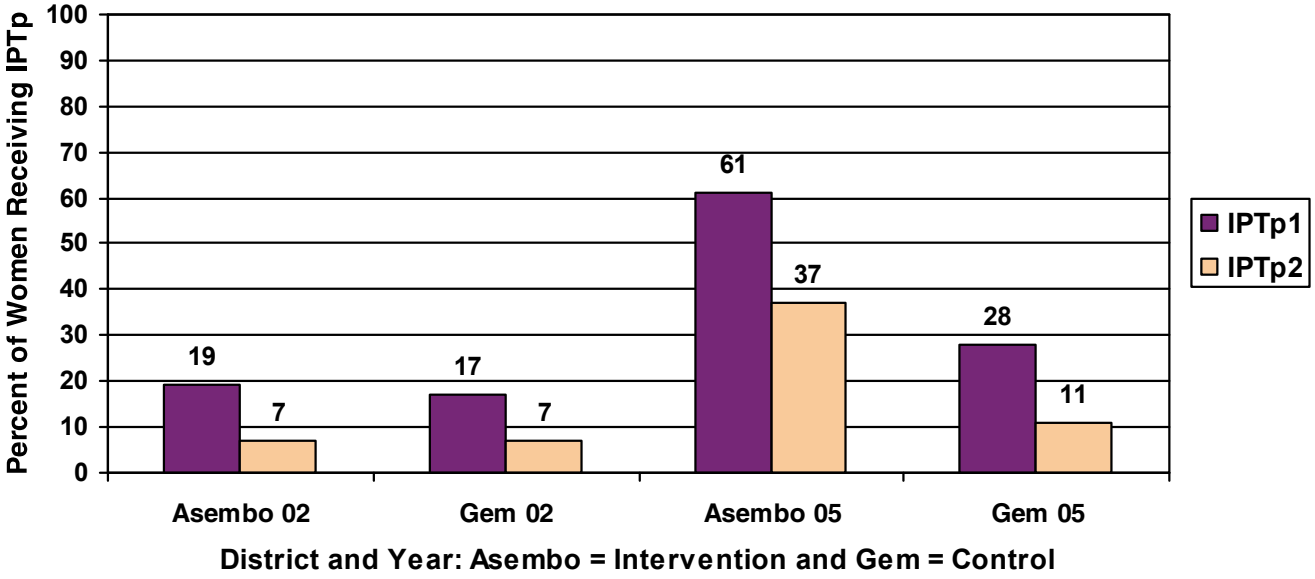
- Strengthening clinical services in an additional seven endemic districts, reaching approximately 3,000 healthcare providers through training and supervision;
- Disseminating comprehensive reproductive health messages, including MIP, to communities in three districts through community leaders; and

[26] MIPESA, RAOPAG, EARN and WARN countries are: Bénin, Burkina Faso, Burundi, Cape-Verde, Comoros, Côte d'Ivoire, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Malawi, Mali, Mauritania, Niger, Nigeria, Rwanda, Somalia, Sudan North, Sudan South, Sénégal, Sierra Leone, Tanzania, Togo, Uganda and Zambia.

- Supporting rollout in Coast Province of Kenya's new malaria treatment policy, including guidance for MIP.

In four of the original 16 districts, IPTp1 uptake increased to 77%, providers who reported they were giving SP increased to 93%, and colleagues updated on MIP increased from 27.5% to 52.5%.[27] In 2005, CDC conducted an evaluation for MIP based on the training of service providers and sensitization of communities by Jhpiego in Asembo, and the results showed increased use of SP in the intervention area.[28] In Coast Province, 9[28] healthcare providers were sensitized to the national treatment policy.

Figure 4: IPTp Coverage among Recent Mothers Who Attended ANC in Intervention and Control Districts in Kenya; Baseline (2002) and Follow-up (2005)



Data Source: Ouma et al, TMIH; 2007.

Photo credit: Rene Salgado/PMI Tanzania

Madagascar (2004–2010): Following Madagascar's adoption of an MIP policy in 2005, ACCESS worked with the MOH/Family Planning Unit to facilitate the development of the national policy and service delivery guidelines for MIP and all aspects of malaria. In addition, ACCESS identified five health sites—in a highly endemic province covering a population of 103,609 with 4,700 pregnant women—in which to initiate MIP prevention and control. ACCESS interventions included: developing learning materials, training health providers, and introducing a performance and quality improvement (PQI) process at five model sites.

The training, supervision and PQI approach used in the five model health facilities led to notable improvements in IPTp coverage. Second dose IPTp coverage increased from 0% to 65% in the five sites compared to 35% nationally.[29] Facilities improved their average performance score from 20% of standards achieved at baseline, to 65% at 6 months and 76% at 25 months follow-up.

[27] MOH, 2004.
[28] Ouma PO et al. 2007. The effect of health care worker training on the use of intermittent preventive treatment for malaria in pregnancy in rural Kenya. *Trop Med Int Health* 12(8): 1-9.
[29] National Malaria Control Program, 2006.

Tanzania (2004–2010): Building on efforts begun under the MNH Program, ACCESS supported the MOH to standardize FANC/MIP in-service training and is supporting comprehensive scale-up of this training FANC/MIP nationally. ACCESS also supported integration of FANC, MIP and screening and treatment of syphilis in pregnancy into the nursing/midwifery pre-service education schools, revising the ANC curricular component and training tutors and clinical preceptors from all certificate, diploma and higher-level nursing/midwifery schools in the country.[30] To ensure that learning is transferred to practice, ACCESS supported both pre-service and in-service health care providers to implement a standards-based quality improvement approach for ANC. Additionally, while improving the quality of ANC services at the facility, ACCESS also worked to create demand for such services within the target population through collaboration with local nongovernmental organizations (NGOs), advocacy with religious leaders, and the development of radio messages in collaboration with a local project called T-MARC.

The Tanzania approach led to improved MIP results: in the program's FANC/MIP sentinel surveillance sites where HMIS data were reported, IPTp2 doubled over baseline DHS IPT2 coverage in 2004, and the program has moved towards a model of scale-up quite rapidly. A total of 4,536 (76%) of ANC providers in Tanzania have had their knowledge and skills updated in FANC/MIP with ACCESS support. To date, 2,633 ANC facilities (or 55%) have at least one provider trained in FANC, and 880 in-service clinical trainers have been trained since the start of the program in 2004. Moreover, due to national-level advocacy efforts, stock-out days for SP at sentinel site surveillance facilities decreased by 50%.

Uganda (2006–2007): ACCESS supported the MOH in the implementation of a 10-month pilot project that targeted the faith-based sector, drew on best practices and lessons learned from the Kenya program approach, and built upon existing structures and systems. Despite the short duration of the intervention, significant improvements were made. The program brought together stakeholders from the MOH and the faith-based sector and other national partners (including WHO) to adapt training materials to the Ugandan context. With materials in place, providers were trained using national trainers. Following implementation, supportive supervision visits were incorporated, which offered reinforcement for the trained providers and assisted them in recognizing and correcting service delivery gaps. Orientation of community leaders empowered them to take key messages about FANC and MIP to the community.

Challenges and Lessons Learned

Implementation efforts across countries have demonstrated a number of challenges and yielded important lessons learned, summarized below, that should be considered as MIP programs move toward wide-scale implementation.

[30] This is a total of 53 schools, with more than 3,200 graduates updated/trained in FANC/MIP/SIP to date.

CHALLENGES	LESSONS LEARNED/RECOMMENDATIONS
No attendance or late attendance at ANC	Involve communities early to engage women and their families and mobilize demand for services.
The forgotten prongs: ITNs and case management	Address the three prongs comprehensively in MIP programs, including IPTp, ITNs and case management.
Lack of MOH policy and program coordination	Advocate for stronger MOH relationships, especially between reproductive health and malaria control programs, as well as HIV, Tuberculosis, diagnostics and lab.
Human resource shortages	Collaborate with Ministries to address the use of unskilled providers, including developing a plan for their training and supervision.
Stock-outs at ANC clinics	Advocate for continuation of SP supplies for prevention at the ANC facility, especially as countries transition to artemisinin combination therapies for treatment.
Weak monitoring and recordkeeping	Integrate monitoring and recordkeeping into programs as a routine component to explain program trends and inform the direction of the program.
Little support for pre-service education	Incorporate MIP programs into pre-service education for medical, nursing and midwifery schools for ultimate sustainability and cost-effectiveness.
Inconsistent involvement of the private sector	Target public and private sectors together throughout program implementation.

WAY FORWARD

Moving toward scale-up is a process that will lead to increasing the program's impact while maintaining its quality. Policy dissemination and program implementation need to move forward at the same time, complementing one another for wide-scale impact. A platform of ANC, coupled with community mobilization efforts, leads to improvements in MIP intervention coverage. However, to achieve national coverage, programs should consider additional proven approaches—such as quality improvement, pre-service education and engagement with the faith-based sector—to augment existing strategies.

Strengthening the Integration of PMTCT within MNCH Services

ACCESS APPROACH

While not planned as a major focus of the ACCESS Program, the prevention of mother-to-child transmission of HIV/AIDS (PMTCT) was addressed in several ACCESS countries using PEPFAR funding.

HIV is the leading cause of mortality among women of reproductive age worldwide and is a major contributor to maternal, infant and child morbidity and mortality (WHO 2009; UNAIDS 2009). Without treatment, one-third of children living with HIV will die before they reach their first birthday and more than 50% will die by their second year of life (Newell 2004). In 2008, an estimated 1.4 million pregnant women living with HIV in low- and middle-income countries gave birth, 91% of whom reside in sub-Saharan Africa (UNAIDS, 2009).

For pregnant women, access to comprehensive HIV care that is integrated with maternal health services leads to healthier outcomes for both mothers and newborns. However, despite the introduction and scale up of PMTCT services globally, the number of women accessing these services has not come close to the estimated need. Policies have been updated, space has been created and supplied with medicine, supplies and equipment, providers have been trained, and yet the number of women accessing high-quality PMTCT services remains low. To make services more accessible to women, both quality and convenience of services must improve.

Ideally and intuitively, any effort to prevent the transmission of HIV from mother to child should be based on a compressive and integrated four pronged approach which includes:

Prong 1	**Prong 2**	**Prong 3**	**Prong 4**
Prevention of HIV infection among women of childbearing age	Prevention of unintended pregnancies among women living with HIV	Prevention of transmission of HIV from mothers living with HIV to their infants	Treatment, care and support for mothers living with HIV and their children and families

For the individual woman, a comprehensive, coordinated, cascading continuum of services must be provided beginning with increased access to counseling, testing and primary prevention services, as well as reproductive health choices enabling either the prevention of unintended pregnancies or appropriate planning for intended future pregnancies. There must be no missed opportunities during ANC, delivery and postnatal care to provide appropriate PMTCT services. In areas where there is limited access to facility care, outreach services are needed to ensure that women and their infants receive the care they need. While many governments have policies supporting a comprehensive/integrated approach and guidelines identifying the multiple opportunities to integrate PMTCT into routine MNH services, different funding streams, divisions within ministries, resource constraints, and the involvement of multiple implementing partners all present challenges to making comprehensive PMTCT services a reality. And, as a result, women and infants drop out of services at multiple points along the continuum.

RESULTS

Ethiopia: Integrating PMTCT into the Care Provided by Community Health Workers

PMTCT Environment

Even though PMTCT services are offered at nearly 719 sites (includes health centers and hospitals[31]) in Ethiopia, service delivery statistics reveal poor utilization[32]. National PMTCT service delivery guidelines were released in 2007 by Ethiopia's HIV/AIDS Prevention and Control unit (HAPCO), which include an opt-out approach integrated into routine MCH services at all service points along the health care continuum, including the health post. Services are available and the enabling policy environment is strong. However, with only 28% of women accessing ANC services and less than 6%[33] of women delivering in a facility, many women simply never have the opportunity to benefit from these supportive services and policies. To help bring healthcare closer to the community and rural populations, a new cadre of community health worker was created called the Health Extension Worker (HEW), whose responsibilities include provision of community-based ANC and safe, clean deliveries.

Gap Identified

Despite government policies that promote an integrated approach to PMTCT, many women do not access the health system and therefore can not take advantage of the services available.

Approach to Integration

To bring PMTCT services closer to the household level, ACCESS proposed using the new cadre of HEWs to provide PMTCT services at the household level. ACCESS adapted existing national PMTCT and HIV counseling and testing training materials for health care providers to create a learning resource package for HEWs. A one-week, competency based training was conducted for 40 such workers on a pilot basis to explore if this cadre—which was already focusing on MNCH services—could help expand PMTCT services to women and their children. The project also utilizes the 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 the new PMTCT services and the importance of delivering with the HEW.

Key Achievements

Forty HEWs were trained in comprehensive PMTCT and use of rapid HIV test kits. These HEWs then counseled more than 875 pregnant women on PMTCT; tested 771 pregnant women for HIV; and identified 7 HIV positive pregnant women and referred them to health centers for continual care. Although the pilot is too small to draw conclusions about coverage, this experience demonstrates that HEWs performing ANC and deliveries at the community level represent a viable opportunity to expand the availability of—and thus increase the uptake of—PMTCT services. If these cadres are supported with training, follow-up supervision, and the necessary supplies and materials, they have the capacity to deliver community-based PMTCT

[31] National data as of June 2008
[32] www.etharc.org
[33] Ethiopia DHS 2005

services. Tentatively, the MOH in Ethiopia has indicated interest in scaling up this approach to rural areas of high HIV prevalence.

Kenya: Introducing an integrated supervision tool and standards-based quality improvement approach to improve the quality of integrated service

PMTCT Environment

Prior to 2004, PMTCT was not integrated into FANC services in Kenya. In 2004, PMTCT was integrated into ANC and scaled up to over half of Kenya's facilities by 2007. While widely available, the quality of services was never assessed. By 2007, integrated ANC-PMTCT services were available in more than 3,000 facilities, but the quality of these services was unknown and supervision continued to occur separately through distinct HIV and reproductive health (RH) teams.

Gap Identified

There is no integration of HIV/RH supervision and an absence of information about the quality of PMTCT services.

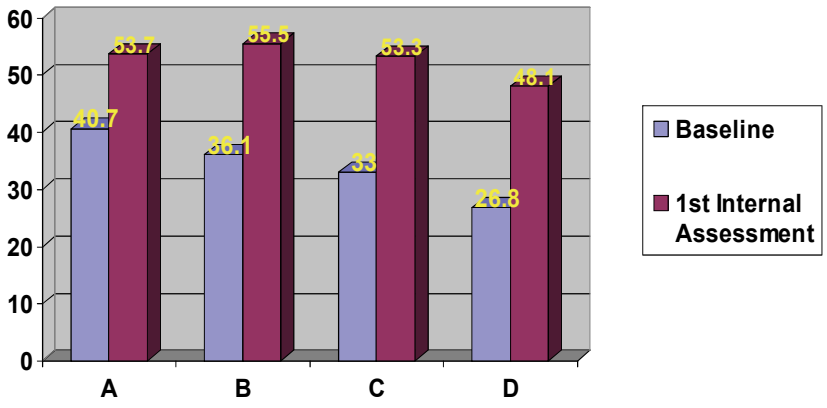
Approach to Integration

ACCESS worked with the MOH to develop an integrated supervision tool and fostered the use of this tool by both HIV and RH providers. With the Division of Reproductive Health (DRH) and the National AIDS Control Program (NASCOP), ACCESS developed the performance standards and an assessment tool for PMTCT in 2008. The standards were pretested, piloted and implemented in the 8 provincial hospitals. In 2009, the standards and quality improvement process were scaled up to19 district hospitals in three provinces, 1 sub-district hospital, 9 mission hospitals, and 3 mission health centers.

Key Achievements

The integrated supervision tool has been adopted nationally by the MOH and is now being used throughout the country to support integrated care. Baseline assessments in four provincial hospitals revealed fairly low levels of adherence to high-quality PMTCT standards, demonstrating that the availability of services does not mean that they are standards based. A follow up survey (see Figure 5) showed steady increases in quality, but still significant gaps between actual and desired performance. Managers at the facilities where the quality improvement process was introduced were able to use the standards to identify gaps in performance and mobilize resources both from within the facilities and the partners on the ground to make improvements.

Figure 5. Kenya PMTCT National Standards Performance of Selected PGHs



Malawi: Integrating PMTCT across the MNCH Continuum of Care

Toward the end of FY 2008, USAID engaged the ACCESS Program in testing a model for PMTCT integration with MNCH services. In the FY 08 HOP, $300,000 was provided to ACCESS to field test an integrated approach that expanded care through community-based approaches and strengthened and standardized referral linkages between the community and health facilities. USAID also provided limited

funding to BASICS and requested that the two programs combine efforts to reach the target population of pregnant and postpartum women, newborns and children under five years of age. It was determined that Malawi—where both ACCESS and BASICS were already working—would be the country for field testing to strengthen MNCH.

PMTCT Environment

Malawi's PMTCT

The full PMTCT package as presented in Malawi's 2007 draft national PMTCT guidelines, includes the following services:

- Provider initiated testing and counseling (PITC) in ANC and labor and delivery;
- Antiretroviral (ARV) prophylaxis or antiretroviral therapy (ART) according to guidelines;
- Cotrimoxazole preventive treatment (CPT) prophylaxis to HIV pregnant women following delivery given to HIV exposed infants and young children according to guidelines;
- Infant feeding counseling and support, and
- Counseling and follow-up.

The MOH intent is to integrate PMTCT-specific services with existing services of trained counselors, nurse/midwives and clinicians at MCH clinics.

Gaps Identified

Program observations of PMTCT sites concluded that each PMTCT site operates differently due to the lack of formalized national PMTCT guidelines. As a result, some sites used the most recent information for provision of multi-regimen ART, while other sites continued to use only the single regimen of Nevirapine. Another major area of concern observed in all PMTCT sites included the lack of follow up for the few mothers and infants that access the services (mother-infant pair follow-up). Part of the challenge is that postnatal check-ups are recommended within 2 weeks following delivery; however, most mothers who deliver in a facility will only return for a postnatal check up at 6 weeks to enroll their infant in the immunization program (EPI). For those who do return for postnatal care in the MCH clinic, there is no cohort register that is able to track patients and enable follow-up.

Other major gaps observed include:

- Not all ANC providers have been trained in HIV testing and counseling
- (HTC)/PMTCT; therefore, MNCH and PMTCT services are not truly integrated. Some providers are only trained as counselors and therefore they refer clients to another provider for testing. The inefficiency in patient flow and the high volume of clients in ANC results in many clients not getting tested.
- Where PMTCT has not been integrated into ANC, clients who test positive on the rapid test require two lab visits, contributing to clients not receiving the full set of services.
- No standardized register exists to document HIV tests done in the maternity ward. New registers for ANC and maternity that will have PMTCT-specific data were disseminated countrywide in December 2009, approximately one year behind schedule, after receiving funding from BASICS. Similarly, no standard PNC register exists to capture visits at one to two weeks follow-up.
- No standard system is in place for mother-infant pair follow-up. Evidence from a study in the Central Region suggests high lost-to-follow up rates nationally.
- Most infants are determined to be HIV exposed or positive only once they present at a hospital due to sickness. There is a missed opportunity for early diagnosis through PMTCT.

- There is an inadequate mechanism to link clinical assessment, treatment and care of mother-infant pair to specific PMTCT services for HIV exposed infants at various entry points in the system.
- There is very weak follow-up of HIV infected mothers and linkages to FP.
- The availability of ARV prophylaxis is perceived to provide total PMTCT protection through breastfeeding, which results in poor monitoring of breastfeeding practices and timely introduction of complementary feeding methods.

Approach to Integration

Based on the situational analysis, ACCESS/Malawi—in collaboration with BASICS, PSI, and the MoH's Reproductive Health and HIV/AIDS units—designed an approach to integrate PMTCT content into existing MNCH packages across the antenatal to postpartum continuum of care. The first step was to integrate PMTCT content into current MNCH training and service delivery packages before piloting them in two districts (Nkhotakota and Phalombe). As the approach was implemented, the following significant actions were taken:

- Facility-based performance and quality improvement (PQI) standards were updated to include specific PMTCT standards;
- Malawi's national BEmONC training package for Maternal and Newborn Care was updated to include PMTCT;
- National community MNCH training materials were revised to include more PMTCT content;
- Facility providers and community health workers (HSAs) were trained in the content of the new integrated training packages;
- Facilities were oriented to the new performance standards and monitored through supportive supervision; and
- Through PSI, hygiene kits refills (of soap, oral rehydration salts and Zinc)were given during ANC visits, at delivery, and in the postpartum period for HIV positive mothers (up to 4 visits) as an incentive to accessing care.

Key Achievements

When the project began in January 2009, there were indications that new maternity registers intended to capture PMTCT-specific data would be in use at health facilities in early to mid 2009, but national level delays resulted in the registers not being in use at health facilities until January 2010. Consequently, ACCESS struggled to collect PMTCT-related data over the course of implementation as PMTCT documentation was not standardized across health facilities. With the introduction of the new ANC and maternity registers in December 2009, PMTCT data collection by health facilities is expected to be stronger and analysis of the data will be more robust, reliable and valid. ACCESS and BASICS made concerted efforts in January and February 2010 to collect available HMIS indicators on coverage of HIV testing among pregnant women since 2008 for inclusion in this report, but the data should be interpreted with caution as the registers have only been in use for two months.

Figure 6 shows 2008 data for mothers who were counseled and tested for HIV and given their result, and the percentage who were given Nevirapine, CPT and/or ART (if needed). Nkhotakota District is well behind the national average in terms of percentage of HIV-positive mothers provided with Nevirapine and CPT, while Phalombe District seems consistent with the national average. This suggests further support is needed in Nkhotakota.

Figure 6: Pregnant Mothers Receiving PMTCT Services, 2008 Data *(Source: HMIS)*

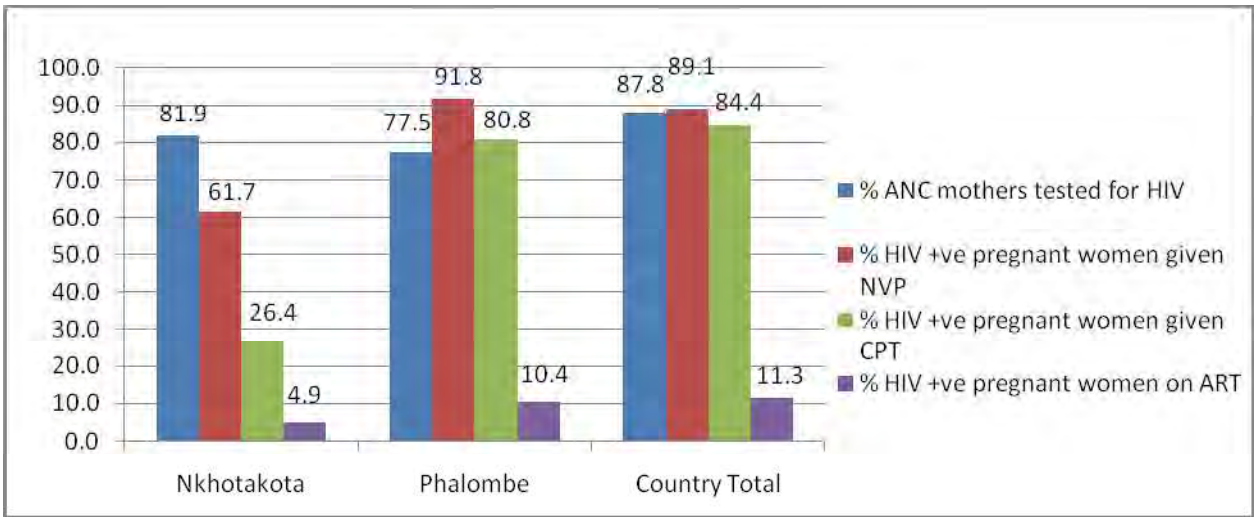
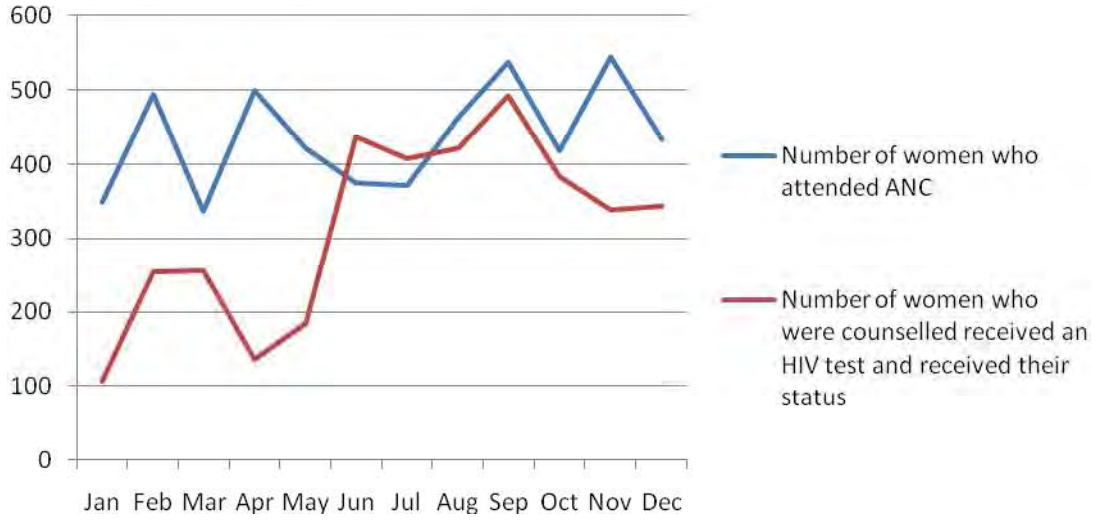


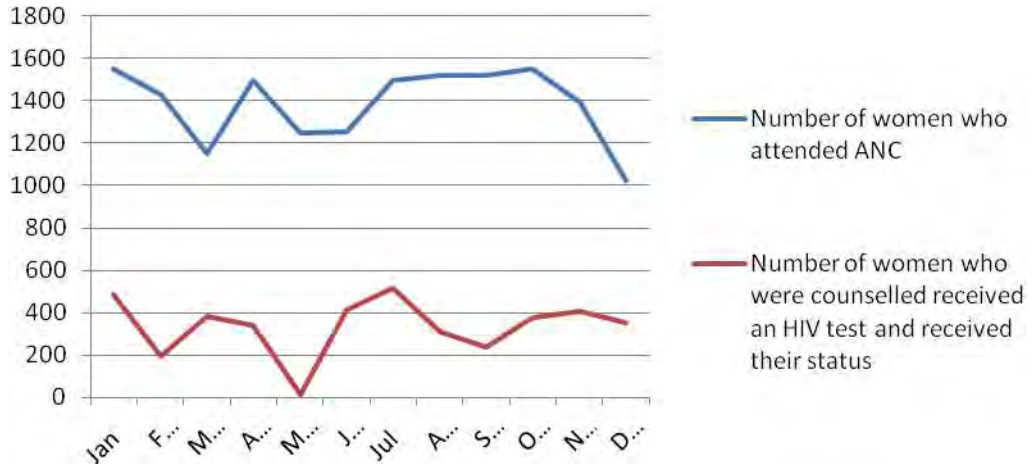
Figure 7 shows the data from Nkhotakota District Hospital from January 2008-February 2009. Beginning June 2008, Nkhotakota had a surge in the number of ANC clients being both counseled and tested for HIV and receiving their results. The original community MNH package included some content on PMTCT, with HSAs primarily referring pregnant women for HTC. Since the implementation of the original community MNH package occurred in early 2008 (at the start of ACCESS), it is possible that the surge in clients was a direct result of the increased community interventions implemented by the Program. Since that time, the majority of ANC clients in Nkhotakota have received HTC and their results.

Figure 7: PMTCT Services in ANC, Nkhotakota District, 2008-2009 *(Source: HMIS)*



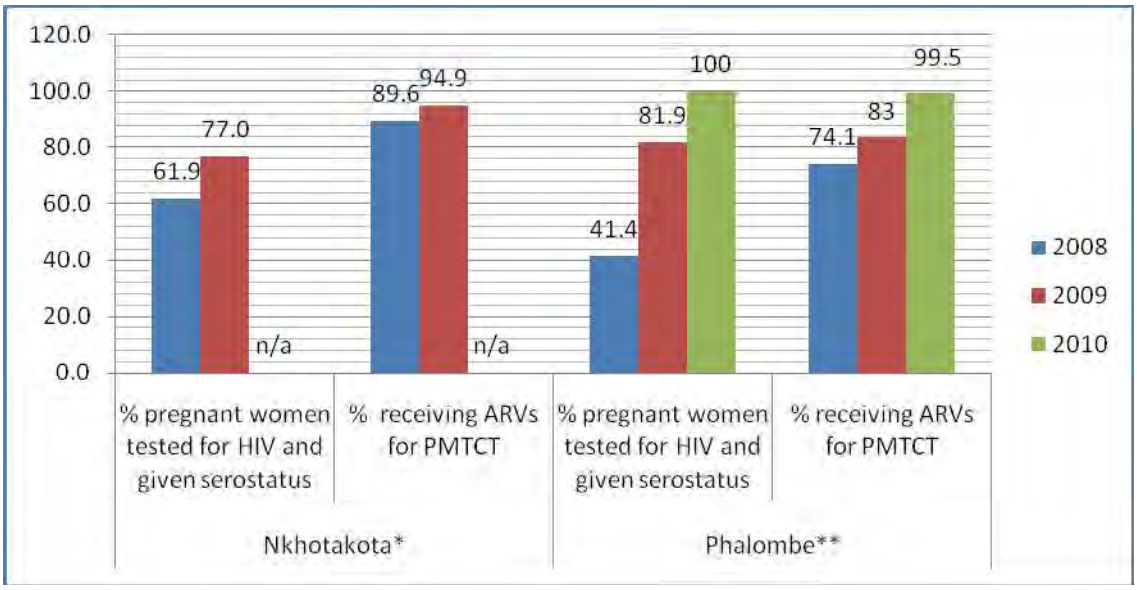
Unlike Nkhotakota District, the data for Phalombe (see **Figure 8**) indicates there is a significant gap between the number of ANC clients and those who receive HTC. One reason may be the lack of HIV test kits considering the high volume of ANC visits. It was noted that in May 2008 there was a stock out of test kits. However, 100% of clients who receive HTC also receive their results.

Figure 8: PMTCT Services in ANC, Phalombe District, 2008-2009 *(Source: HMIS)*



An analysis of two indicators show improvements in coverage from 2008 (pre-intervention) to March 2010 (post-intervention) in the target sites in both districts. While the validity of the data may be interpreted with caution, **Figure 9** clearly indicates significant coverage improvement in HIV testing among pregnant women at the target sites as well as provision of antiretrovirals to reduce mother-to-child transmission. Prior to 2009, these facilities were primarily using single dose Nevirapine as the chosen prophylactic drug. In 2009, facilities were introduced in a phased manner to a combination prophylactic regimen using two antiretroviral drugs.

Figure 9: Improvement in PMTCT Coverage, 2008-2010 *(Source: HMIS)*



* Facilities include: Benga, Malowa (2009 only) and Ntosa
** Facilities include: Mpasa and Holy Family Mission Hospital

Another important result is the improvement in administering antiretrovirals as a prophylactic according to current guidelines. The guidelines no longer recommend sdNVP as a first option. Prior to the full roll-out of the draft guidelines in 2008, all pregnant women received sdNVP. As of March 2010, the registers allow facilities to track patients according to regimen. In Phalombe, 68.9% of pregnant women now receive the recommended combination ARVs (see **Table 3** below).

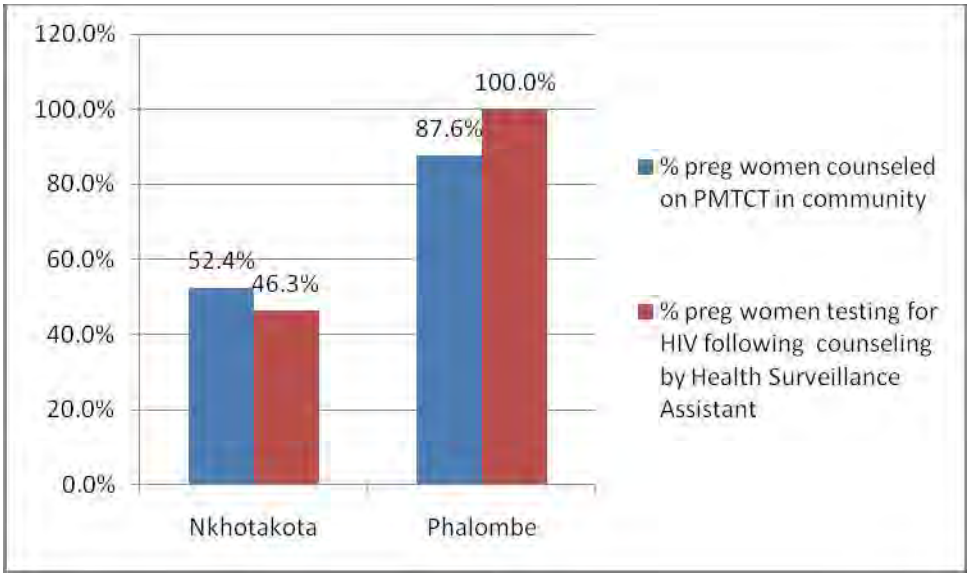
Table 3: PMTCT coverage 2008 vs. 2010 in Phalombe (Source: HMIS)

Percent pregnant women receiving antiretrovirals to reduce MTCT by prophylactic regimen		
	2008	2010 (Jan-Mar)
2 ARVs	0%	68.9% (n=84)
HAART	0%	0%
SD NVP only	100% (n=545)	31.1% (n=38)
Percent of pregnant women newly counseled and tested for HIV and received results in Maternity	0%	35.1% (n=26)

Community Intervention Results and Coverage

Emerging data also supports improvements in PMTCT counseling through HSAs during antenatal home visits. In Phalombe, after the introduction of an integrated PMTCT-community MNH package, 87.6% identified pregnant women in the catchment areas of the target health facilities received PMTCT counseling. HSAs visited pregnant women at home to deliver counseling on the importance of testing for HIV, couples counseling, and counseling on skilled delivery and safe infant feeding. One hundred percent of the women to receive PMTCT counseling by HSAs in Phalombe were tested and received results at a health facility. Nkhotakota's coverage and follow-up rates were lower.

Figure 10: Community-level PMTCT Coverage (counseling and referral) Post Intervention (Source: Community MNH Register)



Importantly, the integration activity served as a catalytic strategy by motivating partners to understand the benefits of integration and employ similar approaches, for example:

- The Clinton HIV/AIDS Initiative incorporated the use of the hygiene kits as incentives to increase ANC attendance, male involvement, skilled birth attendance and mother-infant followup in their focus district Machinga;
- Two districts (Balaka and Chiradzulu) receiving funding from the Partnership of Maternal, Newborn, and Child Health (PMNCH) introduced the integrated community MNH package in selected health center catchment areas;
- BASICS is introducing a mother-infant pair followup register in Chikwawa district;

- MCHIP is scaling up integrated PQI standards to 12 hospitals and 12 health centers, integrated BEmONC training to 60 tutors, and integrated community MNH to 8 health center catchment areas; and
- Save the Children is scaling up the integrated community MNH package in 3 districts (Chitipa, Dowa, Thyolo), saturating the entire district.

WAY FORWARD

The examples presented here demonstrate various approaches used to address different gaps along the ideal continuum of PMTCT services. Most countries support integrated PMTCT services along an integrated continuum of care, but are unable to provide such services seamlessly for many different reasons. Lessons learned and recommendations drawn from the examples presented here include:

- More examples of PMTCT-HIV integration are needed to address Prong 2: prevention of unintended pregnancies amongst women living with HIV. Under the ACQUIRE project, an interesting effort was undertaken by the Ugandan Organization, TASO to integrate FP into ART clinics.[34] This project had promising results and at the same time revealed some biases amongst ART providers about FP use by people living with HIV/AIDS. This suggests that much remains to be done to ensure that women living with HIV have access to a broad range of FP methods to prevent unintended pregnancies. A project currently underway by ACCESS-FP to integrate PMTCT and FP in Tanzania, focusing on the postpartum period, should provide additional contributions for addressing this often neglected prong.
- To achieve an integrated, comprehensive PMTCT program funding should be provided for an integrated comprehensive program. Aligning vertical programs that are already underway is cumbersome and time consuming. In Malawi, multiple partners were involved, each with separate funding streams. The time it takes to coordinate among partners with different mandates and different operating structures reduces the time and resources available for program implementation.
- Malawi expended significant effort on developing an appropriate set of monitoring tools. To some extent, tools are specific to the country context; however, a standardized set of tools to monitor and evaluate the impact of integration activities that could be adapted to the country context would be helpful to move programs forward.
- Any intervention to strengthen the PMTCT continuum of care should be based on a careful analysis of prevailing gaps in existing services. Programs should strengthen the weakest link in the continuum and optimize resources based on where the greatest coverage could be achieved. In countries where only 10% of women deliver in a facility, using community health workers or other peer-to-peer approaches become essential.

[34] The Acquire Project, Research International – Kenya/Uganda. Evaluation of a Family Planning and Antiretroviral Therapy Integration Pilot in Mbale, Uganda E & R Study #13, September 2008

Community Mobilization: An Effective Strategy to Improve MNH

ACCESS APPROACH

The HHCC approach formed the foundation of ACCESS efforts to reduce maternal and newborn deaths that result annually from pregnancy and childbirth complications. At the facility level, the HHCC strengthens the capacity of health service providers in peripheral health facilities and referral hospitals to improve the access to and quality of MNH care. At the household and community level—where women, their families and community members are the focus—the HHCC approach promotes healthy pregnancy and birth practices, better self care, recognition of complications, and timely health service seeking.[35] Because communities play a critical role in the process of achieving an effective continuum of care, ACCESS sought to systematically engage communities to improve MNH outcomes through the tested and documented approach of community mobilization.

ACCESS advocated for community engagement as an important complementary strategy within comprehensive MNH programs, and developed two important resources to guide community mobilization programs. The first, *Demystifying Community Mobilization: An Effective Strategy to Improve Maternal and Newborn Health*, presents evidence of the effect of community mobilization in reducing newborn mortality. A complementary manual, *How to Mobilize Communities for Improved Maternal and Newborn Health*, provides the organizing framework and guidance for implementing MNH-focused community mobilization initiatives. In addition to these global contributions to advance community mobilization, the Program supported three large, multi-year country programs in Bangladesh, Malawi and Nigeria that included significant community mobilization components.

WHAT IS COMMUNITY MOBILIZATION?

ACCESS adopted the following definition of community mobilization in its programs: "a capacity-building process through which community members, groups or organizations plan, carry out and evaluate activities on a participatory and sustained basis, either on their own initiative or stimulated by others."

Key Components of Effective Community Mobilization Initiatives

Community mobilization can raise awareness of MNH issues and motivate people to participate in activities that have been prioritized and planned from within the community. It is an empowering strategy that includes the following activities:

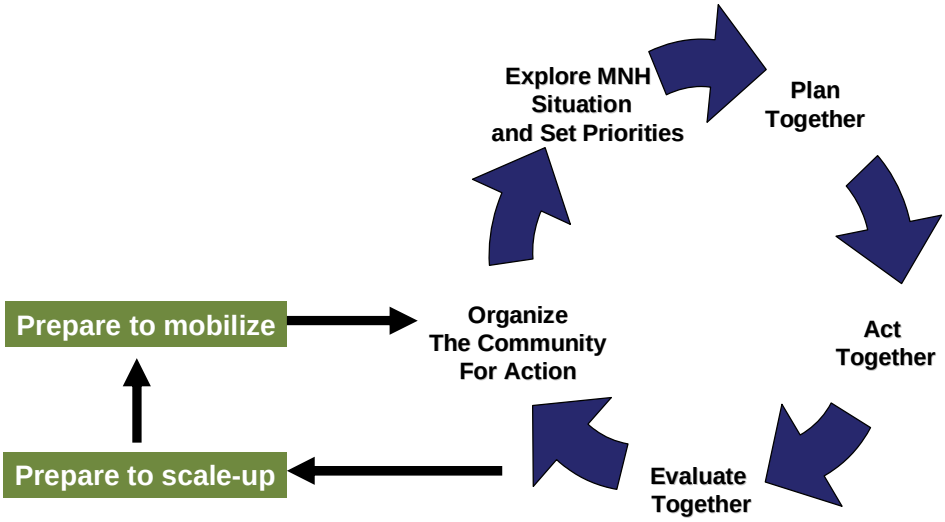
- Carrying out careful, formative research in order to design a locally-appropriate, context specific community mobilization strategy;
- Selecting and training individuals who will facilitate the community mobilization process within communities;
- Raising community awareness about the local MNH situation;

[35] Otchere, S. and Ransom, E. 2006 Bringing Care Closer to Mothers and Newborns: Using the Gap Analysis Tool to Develop a Household to Hospital Continuum of Care. Save the Chidren. Washington, DC: 2006.

- Working with community leaders and others to invite and organize participation of those most affected by and interested in MNH;
- Exploring with community members the local practices, beliefs and attitudes that affect MNH;
- Supporting communities to set local priorities for action;
- Helping community members develop and implement their own community action plans; and
- Working with communities to build their capacity to independently monitor and evaluate their progress towards achieving improved health outcomes for mothers and newborns.

These activities are summarized in the phases of what is known as the Community Action Cycle (CAC) (see Figure 11). The CAC is the common framework that ACCESS used in all programming contexts.

Figure 11: Community Action Cycle



The Program's primary role in supporting community mobilization for MNH included:

- Facilitating the integration of community mobilization into the broader national, regional or district health plan;
- Supporting implementing organizations (MOHs, local government or NGOs) to develop community mobilization technical skills and expertise through training, targeted technical assistance and joint development of guidelines, manuals and supportive communication materials; and
- Monitoring progress of community mobilization efforts to refine strategies, energize stakeholders and contribute to community mobilization expansion/scale-up planning.

From Dr. Sani Musa, Kano State, Nigeria

"Since the commencement of the ACCESS community mobilization program in my village a year and a half ago, particularly with the introduction of the Community Core Groups, no single woman has died of pregnancy related problems. We have also experienced a significant reduction in neonatal deaths over the same period. The program has raised community awareness about maternal and newborn health, and gained participatory involvement of religious and traditional leaders in the roll out of the community mobilization process."

RESULTS

The tables below highlight community mobilization interventions ACCESS implemented in Bangladesh, Malawi and Nigeria, respectively. Each intervention was uniquely designed to respond to the specific context in which the MNH program operated. As such, the Bangladesh program represents an NGO-led model, the Malawi program an MOH-led program, and the Nigeria program a model led jointly by MOH and civil society.

The CAC framework was common to each intervention—whether facilitated by MOH staff (as in the case of Malawi) or by NGO staff (as in case of Bangladesh)—and the development of skilled community mobilization facilitators was essential in all three programs. None of the programs provided monetary incentives to community members to organize, analyze and address the local barriers to MNH in their communities. Those community members with heightened awareness of the problems faced by families acted collectively out of a desire to make a difference.

Table 4: Bangladesh: NGO-led Model

CONTEXT	INPUTS	RESULTS
• Population covered by the intervention: approximately 795,000 • Most CHWs inactive and many vacant posts • Severely limited access to public, facility-based MNH services • No funding to strengthen public service delivery • Active NGO environment • Neonatal mortality rate: 37/1,000 • Skilled attendance at birth: 11% • Total fertility rate: 3.7 • Modern contraceptive prevalence rate: 32%	• Community mobilization training manual, tools and communication materials developed • 125 NGO staff trained and supported to facilitate community mobilization • Over 2,500 local leaders instructed on how to lead community mobilization efforts • 1,904 Community Action Groups (CAGs) received monthly facilitation support. CAGs were composed of 21,875 men and women who participated to track pregnancies in their communities, and create and implement plans to encourage healthy home practices and remove barriers to use of services • 56% of CAGs included MOH health and FP staff	• 61% of CAGs generated **community emergency funds** (to date used by 619 families for transportation or doctors fees, drug purchase or food). • 83% of CAGs organized **emergency transport systems** (to date used by 436 mothers and 247 newborns) for cases of obstructed labor, retained placenta, convulsions and (in the newborn) pneumonia, convulsions and jaundice, among others. • CAGs re-opened 69 inactive clinics and **Expanded Program on Immunization** Centers, and opened 12 new satellite clinics and 2 **Expanded Program on Immunization** Centers, working closely with local government and NGO representatives.

Table 5: Malawi: MOH-led Model

CONTEXT	INPUTS	RESULTS
• Population covered by the intervention: 178,000 in communities linked to nine targeted health centers in three focus districts • Program support to strengthen public health services along the full HHCC • Health Surveillance Assistants (HSAs) have a mandate to engage community members in addressing local health challenges • Neonatal mortality rate: 33/1,000 • Infant mortality rate: 72/1,000 • Skilled attendance at birth: 54% • Contraceptive prevalence rate: 41%	• Facilitated national stakeholder review of community mobilization experiences to agree on a common framework and process • National Community Mobilization Training Manual and tools developed in partnership with MOH/Reproductive Health Unit (RHU) • 10 MOH staff trained as national (master) trainers • 30 district MOH staff trained as trainers • 120 HSAs and 18 Supervisors trained • HSAs are supporting 675 villages to develop MNH CAGs that are linked with existing village development committees	• MOH/RHU owns community mobilization guidelines and training materials and plans to use them in training HSAs to facilitate community mobilization. • Levels of community participation are high, especially among men. • Deliveries by a skilled birth attendant increased to 71.7%, based on data collected by HSAs during their home visits between January and September 2009. • USAID will continue catalytic support to MOH for expansion of community mobilization coverage under MCHIP.

Community Meeting

Table 6: Nigeria: Jointly Led MOH and Civil Society Model

CONTEXT	INPUTS	RESULTS
• Community mobilization inputs provided in 17 Local Government Authorities (LGAs) in Kano, Katsina and Zamfara states in North West Zone • HHCC framework; inputs at all levels • National recognition of community engagement's importance (policies and structures in place, but not operational) • Many civil society actors at all levels, including NGOs, associations, CBOs and unions) • Neonatal mortality rate: 55/1,000 • Modern contraceptive prevalence rate: 3.3%	• 17 Community Mobilization Teams (CMTs) at the LGA level formed and trained • 37 CMTs at the Primary Health Centers (PHC) level formed and trained • PHC CMTs supported formation and training of community core groups composed of 338 volunteer representatives from existing civil society groups in PHC catchment areas	• Transportation agreements negotiated with transport unions in all 17 LGAs to allow emergency transport to health facilities at a fixed low cost (to date, 6,500 women have used the transport system). • Advocacy efforts resulted in new resources, such as an ambulance purchased to transport patients from PHC to hospital; ANC drugs and long-lasting insecticide-impregnated nets; a doctor and midwife posted to facility and paid shift-duty allowances so the facility is now open 24 hours a day, seven days a week. • Increased ANC visits and facility deliveries based on program monitoring data.[36]

WAY FORWARD

Challenge 1: MOH staff who are closest to the community (i.e., the CHWs) are already overworked.

Lessons Learned:

- Simplify and shorten community mobilization training curricula and processes as much as possible.
- Examine whether CHWs should lead or only support community mobilization efforts. There may be other options for community mobilization facilitation—such as existing community leaders, volunteers or members of civil society organizations, who can engage and feed input from communities to the health system.

Community meeting, India

Challenge 2: Community mobilization competes with many other priorities (clinical training, infrastructure development) within a resource limited environment.

Lessons Learned:

- Technical experts need to make every effort to integrate community mobilization into broader national health strategies, especially when existing MOH policy calls for strong community engagement.
- When communities, CHWs and program managers experience results, the relative value of community mobilization is compelling and support is more likely.

[36] Improvements in service utilization are likely due to a combination of community mobilization inputs, as well as improved quality of care at the facility and volunteer female counselors in the community.

Challenge 3: Ensuring stakeholder ownership of community mobilization is a time-consuming process.

Lessons Learned:

- Recognize this reality and plan accordingly. Stakeholder engagement cannot be over-emphasized.
- Develop solid partnerships with existing organizations at all levels. Community mobilization efforts have limited potential to expand and receive continued support without MOH buy-in.
- Seek greater flexibility in donor timelines.

Men's group, Afghanistan

Challenge 4: Community mobilization takes time.

Lessons Learned:

- Simplify the processes as much as possible before you start, and refine further as you rollout.
- As staff becomes more confident and skilled, community mobilization processes speed up. Good training is essential.
- Community mobilization successes build momentum and can lead to organic expansion.
- Communities and groups with prior experience organizing to solve problems can move more quickly.

Challenge 5: There is generally inadequate supportive supervision and mentoring available for community groups.

Lessons Learned:

- Factor supervision needs into human resource planning and program timelines. More supervision is needed in the beginning.
- Link communities so they learn from each other.
- Develop and provide communities with easy-to-use tools and learning materials.
- Consider working with existing groups in the community that are interested in supporting MNH, such as women's groups or agriculture groups. Existing groups need less support than newly-formed groups because they already have experience working together.

Recommendations for Future Community Mobilization Programming

1. Advocate with donors and program managers to include a community mobilization component in all comprehensive MNH programs. Community mobilization is an essential component of the HHCC approach, and is effective in increasing demand for and use of services.
2. Analyze the programming context carefully to identify existing systems, resources, policies, community structures and cultural factors. A community mobilization initiative that fits with and builds on local resources is more likely to be sustained and scaled up.
3. Continue to simplify community mobilization processes and tools—without losing the empowering, capacity building foundation.
4. Disseminate guidance on community mobilization indicators and monitoring systems so that program managers will be confident in tracking and reporting community mobilization outputs.

5. Budget sufficient resources to document and share community mobilization results—especially in peer review journals, because these are powerful advocacy tools.
6. Conduct cost-effectiveness studies to quantify the added-value of community mobilization.
7. Test variations of the community mobilization model for peri-urban and urban contexts.

Quality Improvement of Maternal and Newborn Health Services: Introducing Standards and Recognizing Achievements

THE APPROACH

The ACCESS Program used a quality improvement approach in 11 countries (see Table 5) to improve maternal, newborn and reproductive health services. The process—Jhpiego's Standards-Based Management and Recognition Approach (SBM-R)—was used in a fairly consistent manner across all countries. SBM-R, which focuses on standardization around clearly defined service delivery processes or a specific content area, is an internal quality improvement process that involves providers, health workers and managers, and emphasizes internal learning and continuous improvement.

Through recognition, improvements achieved are formally or informally recognized, providing motivation to maintain progress and institutionalizing a culture of quality at the facility. The approach is less focused on problem analysis and more aimed at generating solutions to close gaps between *expected* (standardized) and *actual* performance. The SBM-R process strengthens health systems by linking national clinical standards, preservice education, in-service training and supervision to the service delivery point. It puts standards into the hands of providers and facility-based quality improvement teams, providing a concrete set of expectations for performance.

The SBM-R process is based on the model presented below. In the first step, standards are set by a broad group of national-level stakeholders, drawing from national and international guidelines. Based on the level of facility targeted (hospital or health center) and the clinical areas covered, the standards vary in complexity and scope. In the second step, the standards are introduced to service delivery points by training facility-based quality improvement teams (QIT), which typically include service providers, administrators and support staff. As this stage, the QIT conducts a baseline assessment to determine how the facility measures against the standards and prepares an action plan to make improvements. In the third step, progress is periodically measured against the baseline, usually by the internal QIT. At this stage it is important to involve district-level stakeholders in the process as some gaps are beyond the control of the facility to address and external support may be needed (i.e., in resolving stockouts or human resource shortages). Finally, when a predetermined threshold is reached and verified by an external assessment team, achievements are rewarded or recognized. This recognition can range from informal mechanisms such as community celebrations to formal recognition involving certification through governmental or professional bodies.

ACHIEVEMENTS

The application of SBM-R varied in technical and geographic scope across the 11 ACCESS countries. (See **Table 7** below.) While most standards covered a broad range of services, in some settings the quality improvement process was more focused. In Kenya, the SBM-R process was used to strengthen PMTCT, for instance, and in Tanzania the process focused on ANC and malaria in pregnancy. In all cases, standards were set through a collaborative process at the national level and were endorsed by ministries of health and/or professional associations.

Table 7. Where and How SBM-R was Applied by the ACCESS Program

ACCESS APPLICATION OF SBM-R			
Country	**Technical Area**	**Purpose**	**Scope of Intervention**
Afghanistan	1) Pre-service education 2) Comprehensive maternal/ newborn/ reproductive health services	1) To strengthen community and hospital midwifery schools 2) To strengthen service delivery	1) All midwifery programs in the country use the SBM-R process as basis for accreditation[37] 2) 319 facilities – hospitals, basic and comprehensive health centers and health posts (expansion continues)
Ethiopia	Comprehensive maternal/ newborn/reproductive health services	To assess and strengthen clinical training sites for Health Officer Training Program	4 hospitals
Ghana	Comprehensive maternal/newborn/ reproductive health services	To strengthen service delivery	11 facilities in Birim North District including 2 district hospitals
Haiti	Postabortion care	To strengthen service delivery	6 hospitals
Kenya	PMTCT	To strengthen service delivery	8 provincial and general hospitals
Madagascar	Malaria in pregnancy	To strengthen service delivery	5 model facilities
Malawi	Comprehensive maternal/newborn/ reproductive health services	To strengthen service delivery	16 district hospitals All 4 central hospitals 12 health centers (expansion continues)
Nepal	Comprehensive maternal/newborn/ reproductive health services and training standards	To assess and strengthen SBA clinical training sites	10 hospitals/clinical training sites (expanded to 25 after ACCESS assistance ended)
Nigeria	EmONC and FP	To strengthen service delivery	15 hospitals 15 primary health care centers (expansion continues)
Rwanda	BEmONC	To strengthen service delivery	Six hospitals
Tanzania	1) Pre-service education 2) ANC	1) To strengthen preservice education 2) To strengthen service delivery	1) 24 Nurse Midwifery schools 2) 2,633[38] facilities (55% of all facilities)

[37] At the time of writing there are 34 hospital and/or Community Midwifery education programs in Afghanistan; the number continues to grow.

[38] Tanzania was able to reach so many facilities through a modified abbreviated SBM-R approach that provided an "orientation" to SBM-R combined with provider ANC raining.

In all cases, ACCESS saw increases in achievement of standards, regardless of the technical area or level of facility. In many cases, the baseline assessment provided facility-based staff with their first opportunity to actually see what they were supposed to be doing and how close or how far they were from performing to standard. In some cases, notably Northern Nigeria, the baseline performance was shockingly low with no facility achieving greater than 20% of EmONC standards. However, even in those cases, improvements were seen over time. (See **Figures 12** and **13** below.)

Figure 12. Baseline and Follow-up Scores for EmONC Performance Standards at 13 ACCESS-supported Hospitals in Kano and Zamfara States

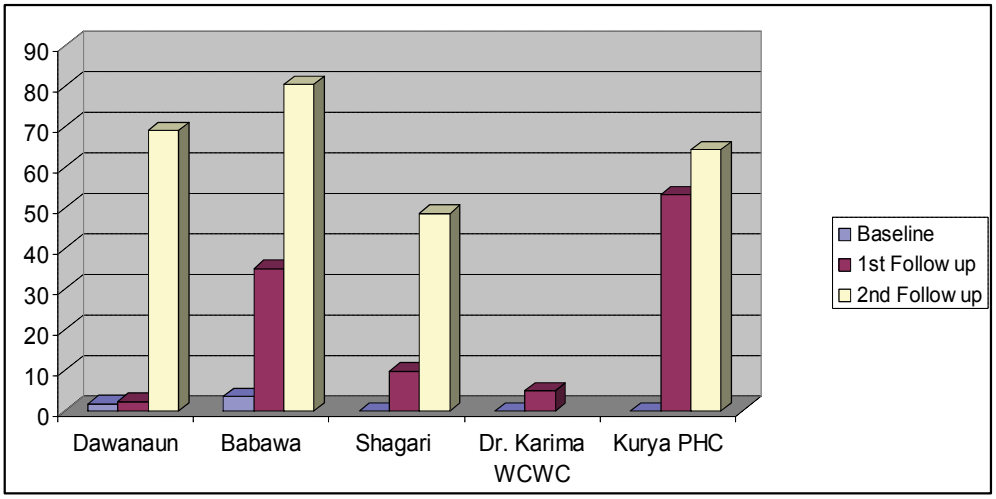
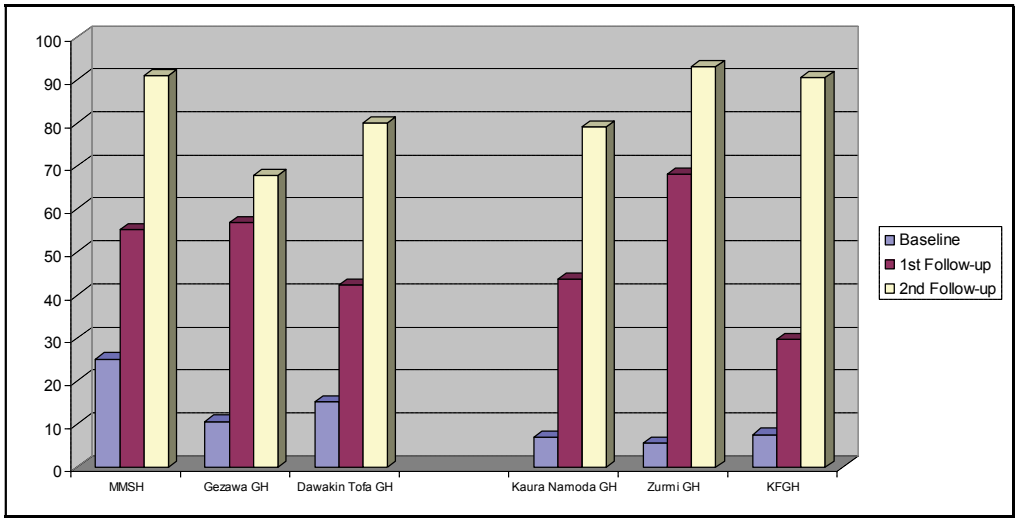


Figure 13. Baseline and Follow-up Scores for EmONC Performance Standards at 13 ACCESS-supported PHCs in Kano and Zamfara States

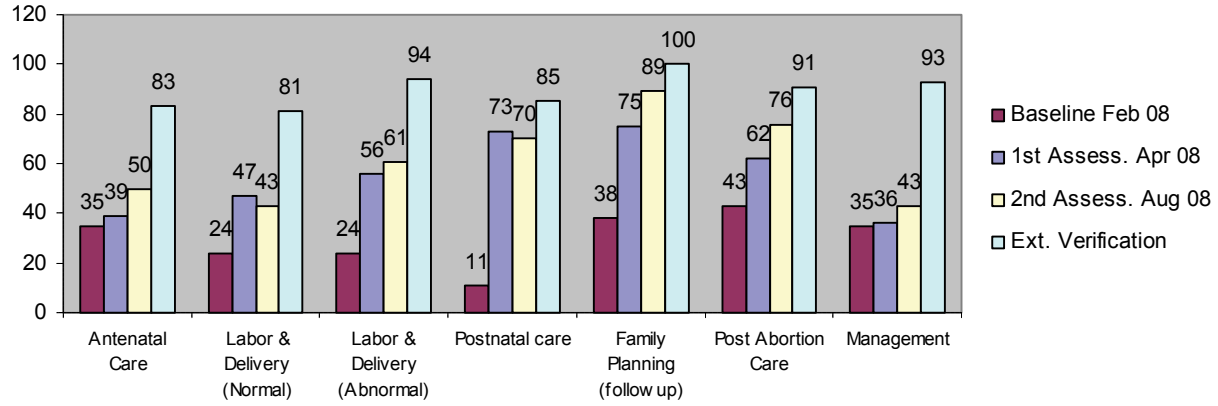


In most countries, SBM-R standards were adopted by the central ministries of health (or other central bodies) for application beyond the ACCESS intervention areas. In Nigeria, although ACCESS worked in a limited number of Local Government Authorities (LGAs) in three states, ***the first stage of setting the standards resulted in the Federal Ministry of Health directing that the performance standards be institutionalized in all tertiary health facilities in the country***.

In Nepal, ACCESS supported the National Health Training Center (NHTC) to develop training site quality improvement tools for the training of skilled birth attendants. ACCESS introduced the process to 10 sites; however, ***it continued beyond the project period and was institutionalized within the NHTC, which continued to expand the process to a total of 25 sites without ACCESS assistance***.

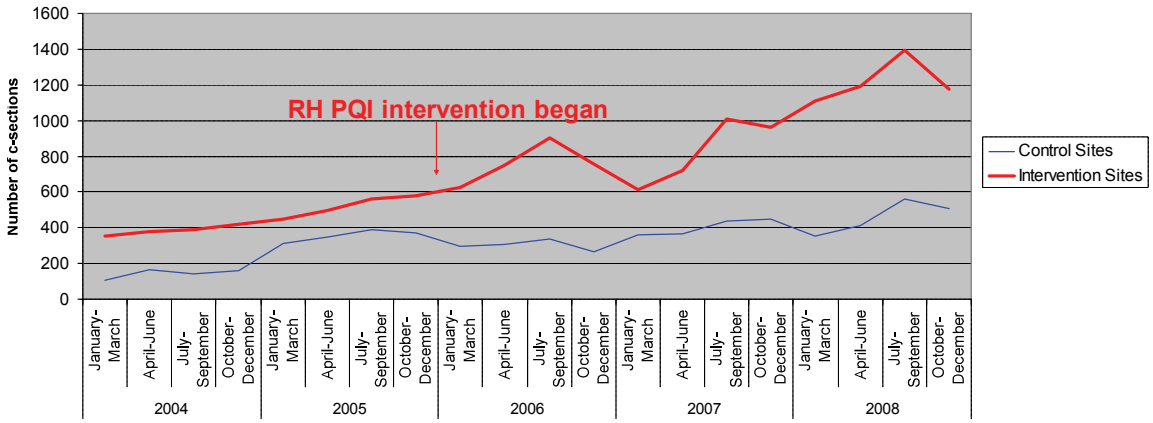
Similarly, in Malawi, the SBM-R process had a national scope. Prior to ACCESS, Jhpiego had worked with the Reproductive Health Unit (RHU) in Malawi's Ministry of Health to introduce performance standards for infection prevention in all hospitals in the country. Based on a positive experience, ***the RHU requested that PQI (as SBM-R is called in Malawi) for a broad range of maternal, newborn and reproductive health services (PQI-RH) be part of the ACCESS program design***. **Figure 14** below shows the broad range of services covered by this national quality improvement program and the steady improvements made over time in one of the district hospitals.

Figure 14. Percentage of selected RH areas achieved by Mchinji District Hospital Pre- and Post-PQI



Malawi is also looking to document how achievement of standards affects health outcomes. The effect of SBM-R on improved maternal and newborn health outcomes is beginning to emerge based on routine service statistics gathered at the facility level. Preliminary analysis from a 2009 evaluation of PQI showed a dramatic difference in the rate of cesarean sections at RH sites compared to the control, with cesarean sections increasing rapidly after the introduction of PQI RH across all intervention facilities. (See **Figure 15**). The increasing trend indicates that providers are able to readily identify emergency obstetric complications, refer, and conduct timely cesarean sections to avoid obstetric complications.

Figure 15. Service Statistics from Malawi SBM-R Evaluation: Cesarean Sections Increased More in Intervention Group



Note: The country briefs presented later in this report provide additional information on SBM-R achievements in other countries.

Lessons Learned

- **SBM-R strengthens the health system by serving as a bridge from pre-service education and in-service training to the service delivery point.** Putting performance standards into the hands of service providers allows for continuous learning at the service delivery point. One aspect that service providers like most about SBM-R is that the standards can be used as "job aids" to help remind them of how to do their job correctly. In Nepal, the MNH standards were actually made into a "pocket guide" so that providers could keep them with them for easy reference.
- **SBM-R strengthens the health system by making supervision more relevant and focused**. In many countries, supervision is cursory, unfocused and ad hoc. In countries where SBM-R has been linked to the supervision system (Kenya and Malawi) it has provided supervisors with a meaningful tool to assess performance.
- **SBM-R can successfully be applied in the pre-service setting.** Pre-service education lends itself to standardization. ACCESS supported the application of SBM-R to the pre-service system in Afghanistan and Tanzania. ***The process now forms the foundation for Afghanistan's National Midwifery Education Accreditation Board and is used to accredit all midwifery schools across the country***.
- **By starting at the national level, SBM-R can be sustained over time**. Setting standards with national-level stakeholders allows quality improvements to be expanded beyond a project intervention area because there is ownership at the country level. In Afghanistan, for example, all donors working in midwifery education use the same educational standards because they are now institutionalized in the National Midwifery Education Accreditation Board.

Recommendations for Future Programming

- **Linking facility improvements to community mobilization will likely increase the impact.** In some ACCESS countries—such as Nigeria, Malawi and Rwanda—the quality improvement process was loosely linked to community mobilization work. Given that communities have a stake in facility performance and have the power to mobilize resources, closer ties between these approaches should be promoted as they are expanded within MCHIP and elsewhere.
- **Selected outcome indicators should be tracked alongside of improvement in standards.** Although most standards promoted through SBM-R are evidence based, it is important to demonstrate that achievement of standards is directly linked to improved practices and health outcomes. The work started by Malawi to track health outcomes should be expanded and replicated in other countries.
- **Build on what is in place: promote quality improvement principles, not a branded approach**. ACCESS did not insist on calling the quality improvement process "SBM-R" if a country already had a quality strategy in place. The term "SBM-R" is not used at all in Tanzania or Malawi, for instance. And, in Afghanistan, the ACCESS Associate Award and the HCI project are collaborating on improving quality of health services with the MoPH, and the term used for the process is "quality assurance."
- **Ensure involvement of district level stakeholders to avoid "plateau-ing".** A typical pattern for achieving standards is quick initial gains followed by a slowing down and possible stalling when some of the barriers are out of the control of hospital management (e.g., supply chain issues). The SBM-R process is designed to tackle the "quickw wins" first and then engage a broader group of stakeholders to tackle the more systemic problems. Broad and representative stakeholder involvement from the beginning can help facilities resolve the more difficult problems.

- **Recognition is a critical component of the process, and linking incentives with quality improvements should be vigorously pursued.** Recognition increases motivation; it can promote healthy competition and help increase utilization of services. While formal accreditation based on provision of quality services is the ultimate goal of this process, incremental and informal recognition can motivate providers and "advertise" high-quality services to surrounding communities. Linking quality improvements to tangible incentives should be expanded where governments are seeking to base financing on performance.

Recommendations for Future Programming

In almost all cases, work begun under ACCESS continues to be supported and expanded by host country governments, other in-country partners, USAID and/or other donors. This section presents a number of important lessons learned in targeted areas that should be considered as work initiated by ACCESS is expanded upon by other partners and programs.

ANTENATAL CARE AND MALARIA IN PREGNANCY

To adequately address MIP, policy dissemination and program implementation need to move forward at the same time, complementing one another for wide-scale impact. A platform of ANC, coupled with community mobilization efforts, leads to improvements in MIP intervention coverage. However, to achieve national coverage, programs should consider additional proven approaches—such as quality improvement, pre-service education and engagement with the faith-based sector—to augment existing strategies.

Specific suggestions for moving forward with FANC/MIP include:

- The ANC platform should promote all three prongs for preventing and treating malaria in pregnancy: IPTp, use of ITNs and case management.
- Advocacy for stronger relationships within MOHs—especially between RH and malaria control programs, as well as HIV, tuberculosis (TB), diagnostics and lab—can increase program effectiveness.
- Advocacy for continuation of SP supplies for prevention at the ANC facility, especially as countries transition to artemisinin combination therapies for treatment, is essential to avoid stock-outs at ANC clinics.
- Incorporating MIP into pre-service education for medical, nursing and midwifery schools will ultimately support sustainability and cost-effectiveness.
- Integrating monitoring and recordkeeping into programs as a routine component will explain program trends and inform the direction of the program.
- Involving communities early on and engaging women and their families to mobilize demand for services can increase timely attendance at ANC clinics.

PREVENTING POSTPARTUM HEMORRHAGE IN HOME BIRTHS

Every woman, regardless of location, should have the basic right to a healthy and safe delivery. However, many women die from largely preventable causes because they do not have access to simple, life-saving interventions. The ACCESS experience showed that community-based education and distribution of misoprostol is a safe, acceptable, feasible and programmatically effective tool for preventing PPH in low-resource settings where access to skilled attendance is limited. Other innovative technologies have also become available, including oxytocin in Uniject for prevention of PPH and the uterine tamponade and the anti-shock garment for treatment of PPH. As complementary components of a comprehensive strategy to address PPH, these innovative interventions show promise for the many women in the world who live in remote settings, without access to facility-based skilled care, to prevent unnecessary maternal deaths that occur from PPH.

Specific suggestions for moving forward to prevent PPH at home births include:

- Distribution of misoprostol is not a stand-alone, single approach to address the burden of PPH. Education and distribution of misoprostol are appropriate in settings where there are a large proportion of home births and an existing cadre of CHWs who can reach pregnant women in the community. The intervention should be a component of a comprehensive PPH prevention package, including efforts to

increase the availability and accessibility of skilled attendance at birth and facility-based emergency obstetric services.

- The intervention can be integrated within the existing government health service delivery framework. In Afghanistan and Nepal, existing CHWs were widespread, accepted in the communities, and supervision and logistics systems were in place to oversee performance and provide supplies. Both projects delivered interventions as part of a basic package of care. Moreover, skilled attendants were present in facilities to manage referred cases of PPH and other complications.
- The community should be an active partner in any strategy to improve maternal health. The community used innovative and non-monetary methods for motivating and supporting CHWs. In Afghanistan, many CHWs stated that community recognition was a primary impetus that motivated them to fulfill their responsibilities related to the project. Community support is important and leads to increased knowledge about MNH, danger signs, the need for skilled attendance at birth and transport to emergency care.
- Delivering a PPH prevention measure directly into the hands of women makes good sense. Sadly, there are many women in the world that give birth alone. This intervention provides a protective method to the one person who will unequivocally be present at the moment of birth: the woman. Trained and supervised CHWs were successful sources of education to women on the risks of PPH and the safe and correct use of misoprostol.

INCREASING THE SUPPLY AND ACCESS TO SKILLED BIRTH ATTENDANTS

ACCESS worked in 14 countries to increase the availability and competence of SBAs. Efforts included support to roll out government SBA policies, development of training materials and training packages tailored to the needs of the country, support for in-service training, strengthening of pre-service institutions and mobilizing communities to increase demand for delivery with a skilled provider. Ultimately, a strong, standardized, competency-based, pre-service education system will have the most far-reaching impact on expanding the cadre of SBAs.

Below are specific suggestions for future investments in pre-service education as an upstream method for increasing the supply and competence of skilled providers:

- BEmONC skills are basic skills that need to be in the repertoire of midwives at the time they enter the workforce and need to be incorporated into midwifery pre-service curriculum of studies.
- MOHs and the respective regulatory authorities for both medicine and nursing/midwifery must be engaged in the planning of programs that will enhance or expand the scope of practice of midwives, so that these skills can be acknowledged, valued, supported and facilitated at both policy and practice levels.
- Recruitment and admissions policies for midwifery students should encourage enrollment of the more qualified and better educated candidates, preferably at post-secondary level, and with the option of a direct-entry pathway to midwifery.
- Regional training can be effective for content that can be transported across country borders without the need for “translation” (e.g., adult learning principles, teaching skills); however, country-based training is preferable for teaching of clinical skills that must be tailored to the country context.
- Teaching and learning BEmONC skills require the investment of substantial time for acquisition of the fundamental anatomic and physiological principles and the “hands-on” skills of the various maneuvers. A standardized, competency-based, teaching/learning package cannot be “short-cut” without compromise to quality.
- Investments in the clinical training environment must be made if BEmONC training is to have any impact. The enabling environment includes basic equipment and supplies, and, as importantly, requires

that peer practitioners, supervisor and other medical practitioners are also updated in these evidence-based practices.

USING KANGAROO MOTHER CARE TO SAVE NEWBORN LIVES

In Nigeria, Rwanda and Nepal, ACCESS established the foundation for future expansion of KMC services by establishing KMC learning centers and supporting the provision of KMC services in a number of hospitals. In Malawi and Ethiopia, ACCESS built on the foundation of an already-established program to expand KMC services to additional hospitals. The Program experience introducing and expanding KMC services highlights the importance of engaging appropriate stakeholders—the MOH in particular—and professional bodies to ensure local acceptance and ownership of KMC for preterm babies. Engagement of these stakeholders facilitated the development and acceptance of national KMC guidelines and associated training materials. The establishment of learning centers served as an advocacy "tool" in facilitating the adoption of the method by other in-country development programs, thus assisting in the expansion of KMC services. To further expand KMC services, programs need to assist nursing and medical institutions to incorporate this method into their pre-service curricula.

Specific suggestions for moving forward with KMC include:

- Scale-up of KMC services requires the technical and financial collaboration of multiple partners—including the MOHs and national professional associations—and cannot be supported by one organization alone.
- Introduction and expansion of KMC services requires local ownership from program start-up.
- Having national KMC policies, guidelines and a training manual with associated job aids facilitates introduction and expansion.
- Following up with mothers after discharge from the KMC unit is the single biggest challenge and will require extending KMC training/services beyond the facility level.
- KMC training should be integrated into ongoing MNH training. A two- to three-day training in KMC is sufficient when integrated into other MNH in-service training. However, a stand-alone KMC training program for persons not competent in identification of danger signs and newborn feeding techniques (including breastfeeding and cup feeding) requires four to five days of training to ensure appropriate skills are acquired.
- KMC training should include a hands-on practicum to ensure trainees acquire the necessary competencies.
- A general orientation of all facility staff on KMC, not just the immediate care providers of LBW babies, has proven beneficial.
- A system for ensuring training or mentoring for new staff posted to KMC units is essential to guarantee the continuation of service whenever trained staff is reassigned out of the unit.

INTEGRATING HIV AND MATERNAL AND NEWBORN HEALTH SERVICES TO INCREASE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION COVERAGE

Although there are ample opportunities to integrate PMTCT into routine MNH services, different funding streams, divisions within ministries, and the involvement of multiple implementing partners all present challenges. However, with persistence and a commitment to consider all possible opportunities, ACCESS strengthened integrated PMTCT-MNH service delivery in Ethiopia, Kenya, Malawi and South Africa, thereby increasing the numbers of women and children receiving critical, life-saving services.

Specific suggestions for moving forward with MNH-HIV integration for expanding PMTCT coverage include:

- Experience from Ethiopia demonstrated that community-based Health Extension Workers (HEWs) represent a viable opportunity to expand the availability of—and thus increase the uptake of—PMTCT services. In order to sustain their effectiveness, they need training, follow-up supervision and the necessary supplies and materials.
- Experience from Kenya showed that use of an integrated (RH and HIV) supervision tool, along with introduction of a facility-based quality improvement process, helps supervisors and motivates providers to improve the quality of care.
- Integration activities must be flexible to accommodate all contingencies. An example from Malawi showed that community-based collection of specimens was more effective than sending community members for HIV antigen testing.
- It is critical to have appropriate tools for monitoring services and progress—ensuring these are in place can take time. Integrated services include integrated registers, which need to be tackled from the outset if results are to be accurately captured. Ideally, instead of developing project-specific registers, MOH registers will be enhanced.
- Linking Mother Infant Pair follow-up to household counseling and or community MNH mobilization efforts is an excellent way to ensure that HIV exposed infants return for follow-up care until a definitive diagnosis is reached.

MOBILIZING COMMUNITIES TO IMPROVE MATERNAL AND NEWBORN HEALTH

ACCESS's work in community mobilization identified several challenges and lessons learned. The Program found that CHWs are often overworked and community mobilization work competes with many other priorities. Although ensuring stakeholder ownership is critical, it takes time—as does the community mobilization process. Ensuring supportive supervision and mentoring for community groups can be challenging.

Specific suggestions to overcome these challenges and move forward with community mobilization for MNH include:

- Advocate with donors and program managers to include a community mobilization component in all comprehensive MNH programs. Community mobilization is an essential component of the HHCC approach, and is effective in increasing demand for and use of services.
- Analyze the programming context carefully to identify existing systems, resources, policies, community structures and cultural factors. A community mobilization initiative that fits with and builds on local resources is more likely to be sustained and scaled up.
- Continue to simplify community mobilization processes and tools—without losing the empowering, capacity building foundation.
- Disseminate guidance on community mobilization indicators and monitoring systems so that program managers will be confident in tracking and reporting community mobilization outputs.
- Budget sufficient resources to document and share community mobilization results—especially in peer review journals, because these are powerful advocacy tools.
- Conduct cost-effectiveness studies to quantify the added-value of community mobilization.
- Test variations of the community mobilization model for peri-urban and urban contexts.

INTRODUCING STANDARDS AND RECOGNIZING ACHIEVEMENTS

The ACCESS Program used a quality improvement approach in 11 countries to improve maternal, newborn and reproductive health services. Jhpiego's SBM-R approach was used in a fairly consistent manner across all countries. The approach, which focuses on standardization around clearly defined service delivery processes or a specific content area, is an internal quality improvement process that involves providers, health workers and managers, and emphasizes internal learning and continuous improvement.

Specific suggestions for moving forward with quality improvement approaches include:

- Linking facility improvements to community mobilization will likely increase the impact. In some ACCESS countries—such as Nigeria, Malawi and Rwanda—the quality improvement process was loosely linked to community mobilization work. Given that communities have a stake in facility performance and have the power to mobilize resources, closer ties between these approaches should be promoted as they are expanded within MCHIP and elsewhere.
- Selected outcome indicators should be tracked alongside of improvement in standards. Although most standards promoted through SBM-R are evidence based, it is important to demonstrate that achievement of standards is directly linked to improved practices and health outcomes. The work started by Malawi to track health outcomes should be expanded and replicated in other countries.
- Build on what is in place: promote quality improvement principles, not a branded approach. ACCESS did not insist on calling the quality improvement process "SBM-R" if a country already had a quality strategy in place. The term "SBM-R" is not used at all in Tanzania or Malawi, for instance. And, in Afghanistan, the ACCESS Associate Award and the HCI project are collaborating on improving quality of health services with the MoPH, and the term used for the process is "quality assurance."
- Ensure involvement of district level stakeholders to avoid "plateau-ing". A typical pattern for achieving standards is quick initial gains followed by a slowing down and possible stalling when some of the barriers are out of the control of hospital management (e.g., supply chain issues). The SBM-R process is designed to tackle the "quickw wins" first and then engage a broader group of stakeholders to tackle the more systemic problems. Broad and representative stakeholder involvement from the beginning can help facilities resolve the more difficult problems.
- Recognition is a critical component of the process, and linking incentives with quality improvements should be vigorously pursued. Recognition increases motivation; it can promote healthy competition and help increase utilization of services. While formal accreditation based on provision of quality services is the ultimate goal of this process, incremental and informal recognition can motivate providers and "advertise" high-quality services to surrounding communities. Linking quality improvements to tangible incentives should be expanded where governments are seeking to base financing on performance.

USING SMALL GRANTS TO SCALE UP EVIDENCE-BASED MNH INTERVENTIONS

With less than USD$200,000, ACCESS helped to build the capacity of 14 FBO, community-based organization (CBO) and professional organizations throughout sub-Saharan Africa. Due to their presence in the community and intent to stay—regardless of the funding or political atmosphere—investment in these types of grassroots organizations has an enormous ability to make sustainable changes to MNH. These organizations are familiar with the local culture and therefore adept at transmitting messages and influencing behavior change, and have a significant outreach capacity as well as the trust of the communities in which they work. Moreover, professional associations have the capacity to set the standards for their respective professions.

However, in program planning, the need to build in adequate time and resources cannot be overemphasized. Recipients of small grants often lack either the financial, technical or managerial skills to implement larger programs. It is therefore imperative to concentrate on improving these skills of small grantees, especially since these grants are small investments for often large returns.

Specific suggestions for future MNH investments through small grants include:

- Build in adequate monitoring and evaluation and financial management technical assistance for small grant funding. Link the monitoring and evaluation plan to the results required for the sponsor.
- Issue fewer grants and set aside more resources for technical assistance for the entire process from proposal writing, baseline data collection, implementation, endline assessment, report-writing and supervision activities.
- The time frame to use the funds must be realistic. The capacity to use money efficiently and in a short period of time can be overwhelming for small organization.

Country Briefs

BANGLADESH

Strengthened Maternal and Newborn Care Services

INTRODUCTION

Almost two-thirds of infant and child deaths in Bangladesh occur in the neonatal period, and more than 90% of all births occur at home, generally attended by a traditional birth attendant.[36] With 36% of newborns estimated to be low birth weight (LBW), Bangladesh has some of the most elevated LBW levels in the world.

At the request of USAID Bangladesh, ACCESS and its partners[37] successfully implemented a program based on community mobilization and household counseling to improve MNH practices. ACCESS modeled its program in Bangladesh on Projahnmo I,[38] which demonstrated that early postnatal care can significantly lower neonatal mortality and that home-based management of newborn sepsis is feasible and effective. Working in seven *upazillas* of Sylhet District, ACCESS demonstrated—like Projahnmo I—that a phased implementation of home- or community-based management can offer an effective alternative to facility-based care in settings where the health system is weak and care-seeking is low.[39] Sylhet District, with administrative areas covering a population of 1.5 million, was chosen due to its particularly high maternal mortality ratio, estimated at 320 to 400 per 100,000 live births, as well as its high neonatal mortality rate.

KEY INDICATORS

Neonatal mortality rate (per 1,000): 37

Skilled attendance at birth: 11% (Sylhet), 18% (National)

Modern contraceptive prevalence rate: 32% (Sylhet), 56% (National)

Unmet need for family planning: 26% (Sylhet), 18% (National)

Total fertility rate: 3.7 (Sylhet), 2.7 (National)

Antenatal care attendance with trained provider: 47% (Sylhet), 52% (National)

DHS 2007

PROGRAM STRATEGIES AND INTERVENTIONS

Strengthening Home Practices, Counseling and Utilization of Services

More than 280 local women, called ACCESS counselors (ACs), visited the home of each pregnant woman identified in the program area four times—twice during

[36] Bangladesh Demographic and Health Survey 2007. Calverton, Maryland; National Institute for Population Research and Training (NIPORT) and Measure DHS Macro International, Inc.

[37] The intervention was implemented by two national NGOs: Friends in Village Development, Bangladesh (FIVDB) and Shimantik. International Centre for Diarrhoeal Diseases Research Bangladesh (ICDDR,B) provided technical support in monitoring and evaluation. ACCESS also worked with the government at the national and district levels to promote improvement of referral services.

[38] Funded by USAID and Save the Children's Saving Newborn Lives Initiative, the Projahnmo I Program was implemented by Johns Hopkins University through national partners ICDDR,B and Shimantik from October 2003 to January 2006.

[39] Baqui AH, Arifeen SE, Darmstadt GL et al. for the Projahnmo Study Group. Impact of a package of community-based newborn care interventions implemented through two service delivery strategies in Sylhet district, Bangladesh: a cluster-randomised controlled trial. Lancet 2008; 371 (9628):1936–44.

pregnancy, once within 24 hours after delivery, and once from five to seven days post-delivery—to counsel her, the newborn care person (usually a family member) and the birth attendant on newborn health and hygiene. The majority of these women were young and resided in the area, serving approximately 800–1,200 households and covering a population of 5,000–7,000. Some of the ACs worked in remote areas with limited access to roads and transportation, and thus could cover a smaller population. ACs received a 10-day training course on basic MNH, including essential newborn care, clean delivery practices, basic counseling and negotiation skills, and recordkeeping/reporting.

ACCESS also introduced community-based kangaroo mother care (KMC), the practice of constant skin-to-skin contact between a caretaker and newborn, to Sylhet to ensure thermal care for LBW babies. Before this intervention, most LBW babies were referred to the only tertiary level health facility in Sylhet District, MAG Osmani Medical College, where they were managed using incubators. ACs coached mothers and other members of the household who care for newborns to use the KMC method, frequently breastfeed and refer any baby with a danger sign to the nearest health facility.

Mobilizing Communities

A community mobilization initiative further supported and facilitated the work of the ACs by working with women's and men's groups and locally identified formal and informal leaders (referred to as Community Resource Persons or CRPs) to identify and address specific barriers to improved MNH in their communities. Typically, after analyzing and prioritizing the key barriers influencing MNH household and care-seeking practices, community groups developed plans that encouraged appropriate care-seeking. This included preparing birth and newborn care plans, establishing emergency transport, securing financial resources for treatment or transportation and facilitating reactivation of MNH services. This approach, called the Community Action Cycle (CAC), aimed to develop sustainable, community-led solutions to improve the health of mothers and babies, and to strengthen the capacity of community members to act collectively to address future community needs that may arise.

Engaging Traditional Birth Attendants and Village Doctors

Basic emergency obstetric and newborn care (BEmONC) remains out of reach for the majority of women and their families in Sylhet. ACCESS worked with traditional birth attendants (TBAs) and village doctors to improve home birth practices by providing focused training to reduce harmful practices, ensure clean delivery, better identify maternal and newborn danger signs, and provide timely and appropriate referrals to facilities to obtain EmONC.

ACCESS counselor, Bangladesh

Strengthening Linkages with Health Services

ACCESS worked with district health centers to improve knowledge and skills on essential obstetric and newborn care and BEmONC. The program also provided clinical updates on safe birth services and newborn care to medical doctors, nurses and paramedics of the Upazilla Health Complex. Using a variety of data sources to monitor and evaluate program work, a population-based survey was conducted at the start of the program, and the preliminary results were disseminated. Qualitative data, including mapping of community health resources, was used to assess the current capacity of community groups, service provision and utilization. Routine monitoring data were used to inform program progress.

RESULTS

Routine program data shows that ACCESS succeeded in reaching thousands of women with antenatal care, delivery care, postpartum care and family planning services. (See Table 8 below, organized by selected USAID Operational Plan Indicators.)

Table 8: Results for Selected USAID Operational Plan Indicators in Maternal and Newborn Health

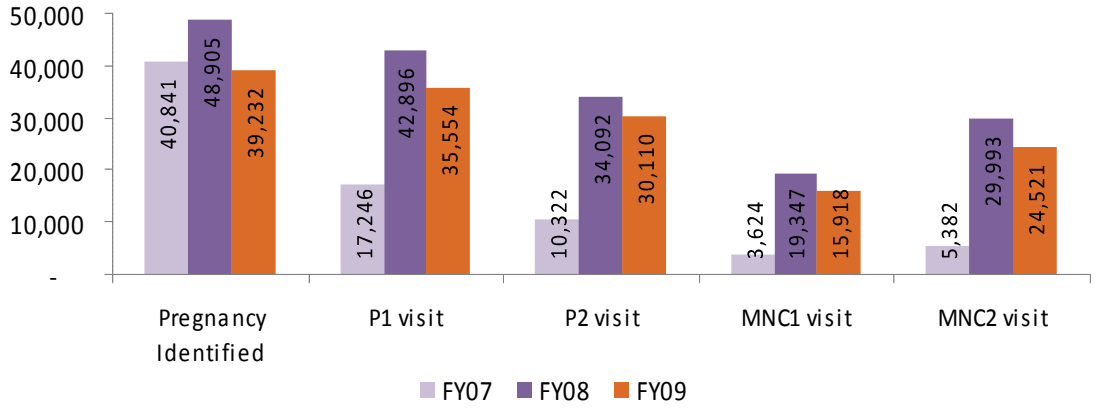
INDICATOR	FY07		FY08		FY09	
	TARGET	ACHIEVE-MENT	TARGET	ACHIEVE-MENT	TARGET	ACHIEVE-MENT**
Newborns receiving essential newborn care through USG-supported programs	n/a*	2,098	11,695	21,391	26,804	22,834
Postpartum/newborn visits within three days of birth in USG-assisted programs	5,845	4,120	25,989	26,294	31,579	31,597
Counseling visits for FP/RH as a result of USG assistance	11,500	7,099	25,989	29,993	29,381	32,431
People who have seen or heard a specific USG-supported FP/RH message	11,500	7,099	31,095	32,711	35,119	36,211
People trained in maternal/newborn health through USG-supported programs	826	1,849	3,767	4,022	7,778	2,456
Number of women	769	1,790	2,776	3,927	6,248	2,343
Number of men	57	59	991	95	1,530	113
People trained in FP/RH with USG funds	426	1,849	3,767	4,022	7,078	2,456
Number of women	369	1,790	2,776	3,927	5,748	1,330
Number of men	57	59	991	95	2,343	113
Institutions with improved management information systems, as a result of USG assistance	3	3	3	3	3	3

* No baseline available for this indicator.

** Results represent partial year achievements due to transition to MCHIP Program.

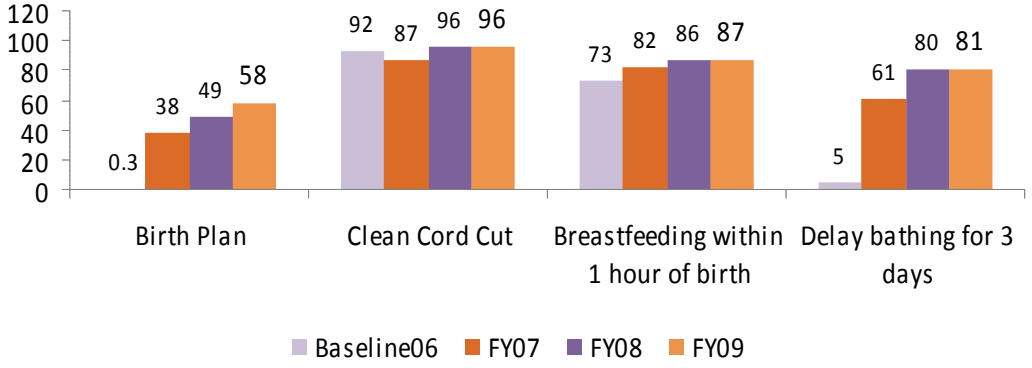
During the life of the project, 128,978 pregnant women were identified and registered, 95,696 pregnant women received a counseling visit at three to five months of pregnancy, 93,653 pregnant women received a counseling visit at seven to eight months of pregnancy, and 73,704 births were notified. Moreover, ACs reached 38,500 (52%) of these births within 24 hours and 59,205 (80%) within five to seven days. (See Figure 16.)

Figure 16: Counseling Coverage



Of the 59,596 women who gave birth and received postnatal visits during the project, routine data revealed increasing trends in healthy maternal and neonatal behaviors. (See Figure 17.)

Figure 17: Levels of Selected Maternal and Newborn Health Behavior



ACCESS established 1,174 CAGs in 614 villages through 73 trained community supervisor mobilizers and 40 community mobilizers who helped promote health practices and care-seeking behavior.

MAJOR PROJECT OUTPUTS

- Trained 286 ACs to identify pregnant women and conduct home counseling visits.
- Used ACCESS-established pregnancy surveillance system to register 245,982 married women of reproductive age and 128,978 pregnant women as of May 2009.
- Trained 73 community supervisor mobilizers and 40 community mobilizers, who are working with 1,904 CAC committees in 614 villages. Over half of the villages in the ACCESS intervention area have a functional CAG.
- Completed village mapping in 1,789 villages and seven upazillas in Sylhet.
- Conducted 237,446 home counseling visits and distributed 79,953 clean delivery kits.
- Developed training manual on community-based KMC, and conducted training of trainers.
- Trained 691 TBAs and oriented an additional 3,000 TBAs and 2,000 CRPs.
- Trained 32 village doctors and conducted training of trainers for paramedics.

LESSONS LEARNED AND SUSTAINABILITY

Community Mobilization Impacts Behavior Change

Health service facilities in some communities were often either very limited or entirely absent, creating frustration in the community. To address this situation, CAGs used their local capacity to advocate for health services. Some of these groups succeeded in reactivating community-based satellite clinics and immunization centers.

One example of this is Majanpur, a disadvantaged village in the Deokalash Union of the Bishwanath Upazilla where there were no satellite health or immunization centers for pregnant women and babies seeking antenatal care and immunizations. To remedy this situation, the CAG contacted local representatives and government health officials to formally apply to the Ministry of Health and Family Welfare (MOHFW), which has the authority to set up satellite centers. In February 2008, the MOHFW's local representative established an immunization center in Majanpur. The local newspaper reported on the establishment of the center and concluded, "If people in disadvantaged communities take initiative, most problems can be easily solved by community members and will remain a part of the community forever."

Working with All Members of the Household Influences Family Decision-Making

ACs worked to change perceptions of family decision-makers despite initial resistance. Nazma Begum delivered her baby at home with assistance from an untrained family birth attendant. Her husband, Masuk Mia, informed the 20-year-old AC, Hafsa, after the birth took place. Hafsa visited the mother and newborn immediately and discovered that the mother was continuing to bleed heavily postpartum.

Woman, her husband and their baby, Bangladesh

The AC, who had discussed danger signs with Nazma and her husband during the pregnancy preparedness visit, stressed to Masuk Mia that his wife needed emergency care. He was initially reluctant to take her to the health center because he believed that bleeding is a common birth phenomenon. However, the AC succeeded in persuading Masuk Mia to take his wife to the nearest health center, where she received emergency care for postpartum hemorrhage. Nazma's husband and the attending service provider at the facility both recognized the timeliness of the AC's referral.

WAY FORWARD: FROM ACCESS TO MAMONI

Based on ACCESS results and learning, USAID has funded a follow-on project, MaMoni, which will continue until early 2013. With an estimated 26% unmet need in FP, FP was added as a major component of MaMoni. Similarly, the follow-on project added sick newborn management and newborn infection prevention through handwashing, as these interventions are critical to ensuring the survival of newborns. The use of project-paid ACs, although successful, will be discontinued and instead the existing government infrastructure will be mobilized and strengthened in the expansion district, Habiganj.

ETHIOPIA

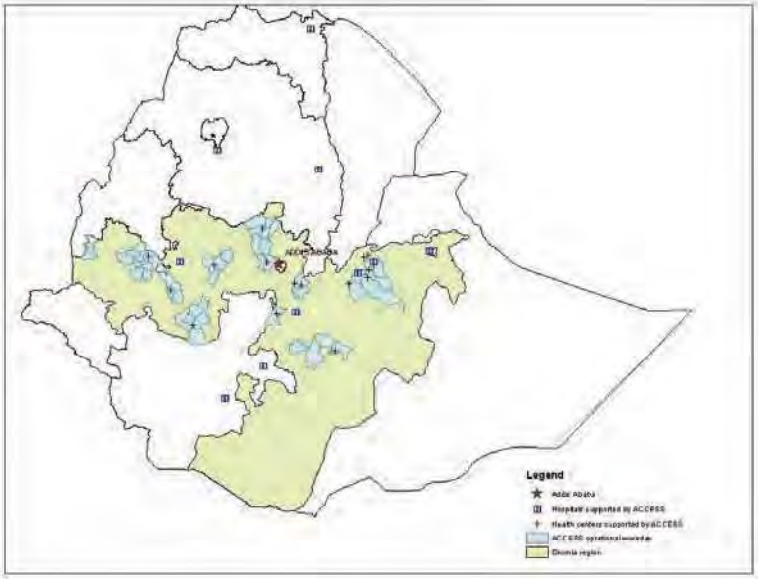
Improved Capacity of Training Institutions for Health Workers

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:

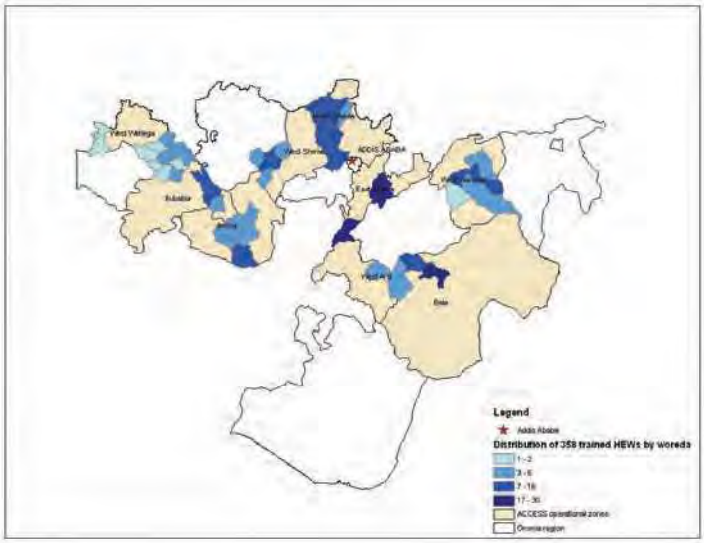
Training of HEWs

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.

INDIA

Program Years 2006 to 2009

Increased Skilled Birth Attendance in Underserved Rural Communities in Jharkhand State

INTRODUCTION

With a high maternal mortality ratio and a population of more than one billion people, India leads the world in the number of women dying in pregnancy and childbirth every year. When ACCESS began working in India in 2006, only 29.1% of births were attended by skilled providers in Jharkhand state;[49] the majority of women also give birth at home. This lack of skilled birth attendants (SBAs) meant no life-saving emergency obstetric services for the many women who experience life-threatening complications, putting them and their newborns at great risk.

In 2005, the Government of India (GoI) addressed the need for SBAs by expanding the range of skills for auxiliary nurse-midwives (ANMs) and lady health visitors (LHVs) to enable them to provide life-saving skilled care at birth. With USAID support, ACCESS worked with the Government of Jharkhand, CEDPA and implementing partners[50] to operationalize these guidelines and improve health outcomes for mothers and newborns.

ACCESS designed a pilot project and evaluation to demonstrate that increasing the availability of skilled delivery care offered by ANMs—combined with community mobilization activities—improves access to and use of key MNC services, ultimately contributing to improved health outcomes and reducing maternal and newborn morbidity and mortality. ACCESS implemented this project in Jharkhand, where skilled attendance at birth, ANC attendance and the contraceptive prevalence rate are among the lowest in the country (see text box above right). Dumka District was

KEY INDICATORS FOR JHARKHAND

Total fertility rate: 3.3

Contraceptive prevalence: 31.1% (modern methods)

Births with skilled attendant: 29.1%

Antenatal attendance (3+ visits): 36.1%

Source: National Family Health Survey-3, 2005–06
WHO Statistical Information System

Women's group, India

[49] National Family Health Survey-3, 2005–2006.

[50] GoI, Government of Jharkhand, Government of Dumka, Mohulpahari Christian Hospital, Sadar Hospital Dumka and ANM Training Center, Chetna Vikas, CEDPA, Jhpiego (ACCESS), Save the Children (ACCESS), Social and Rural Research Institute/IMRB International.

selected due to its challenging MNH situation, and the project was implemented in three of Dumka's ten blocks: Jarmundi, Shikaripara and Saraiyahat.

PROGRAM STRATEGIES AND INTERVENTIONS

The project's formative assessment in June 2006 found that the majority of women and their families in Jharkhand seek care from traditional birth attendants (TBAs) and that basic emergency obstetric and newborn care (EmONC) remained out of reach for most women. Within the formal health care system, ANMs are intended to provide midwifery care, but they infrequently attended deliveries.

To make skilled care by ANMs available in communities in Jharkhand, ACCESS focused on three areas: 1. creating demand in the communities for skilled care; 2. training ANMs to ensure that they are competent SBAs; and 3. supporting ANMs to provide care in the communities, either at home or from peripheral health care centers (sub-centers and primary health care centers). ACCESS and its partners worked at the national, state and district levels to achieve the program objectives.

ACCESS conducted a number of key, coordinated activities that were essential to the project's success, including:

- Trained ANMs as community-based midwives for 12 weeks using competency-based training materials in Hindi.
- Strengthened clinical training sites and built/strengthened capacity of faculty, clinical providers and supervisors.
- Deployed and supervised ANMs in communities and developed ongoing support systems within the government health care system.
- Introduced community mobilization activities and materials to increase awareness of birth preparedness/complications readiness (BP/CR).
- Established/strengthened *mahila mandals* in communities to generate support for BP/CR and ANMs placed in communities.

ACCESS monitored and evaluated its model to inform the ongoing national discussion of strategies to increase skilled birth attendance. The project conducted a pre/post quasi-experimental evaluation that included a household survey of pregnant women and recently delivered mothers, and interviews with ANMs in intervention and comparison areas. ACCESS also strengthened systems for collecting service statistics from ANMs and project-supported CHWs. In early 2009, ACCESS shared findings with stakeholders at the state and national levels and then continued to work with national policymakers—such as the Indian Nursing Council (INC)—to integrate key findings with ongoing programs.

RESULTS

Increased ANM Training Capacity

- Strengthened the ANM training centers (including a teaching skills laboratory) and training skills for ANM tutors and improved the teaching quality. These sites offer in-service and pre-service ANM education.
- Strengthened two hospitals and three primary health centers, improving evidence-based practices consistent with GoI guidelines. The hospitals were used as clinical practice sites for ANMs during training.
- Developed and tested a 12-week competency-based training course on GoI guidelines.
- Trained 58 ANMs to competency as SBAs in evidence-based care in ANC, normal delivery, postnatal/postpartum care and management of complications.

MAJOR PROJECT RESULTS

- Demonstrated that the 12-week ANM training course produced competent and skilled SBAs in the intervention group who practiced the life-saving skills they were taught, such as partograph use, AMTSL practice and newborn resuscitation.
- Significantly improved the practice of BP/CR for pregnant women and recent mothers and the practice of essential newborn care among recent mothers—including clean cord care, drying and wrapping, and delayed bathing.
- Significantly increased the proportion of births attended by ANMs in the intervention group of recent mothers—from 5% to 13%.
- With the INC, developed a national strategic plan to scale up project findings aimed at supporting improved capacity of ANM training centers (ANMTCs) at the district level.

Increased Access to Skilled Maternal and Newborn Care

- Supported two groups of ANMs (37 total) for a year of training as they worked in communities to provide MNC at home and/or in facilities. Local project staff provided regular monitoring, supervision and data collection.
- Introduced and supported the trained ANMs as skilled providers to communities and linked community workers, communities and trained ANMs to create awareness and accountability.

Increased Knowledge and Action on Maternal and Newborn Care—Community Mobilization and Outreach

- Mobilized 223 communities in 180 locations of three blocks.
- Trained more than 2,600 community members, including 434 safe motherhood volunteers, 231 safe motherhood advocates and over 1,400 *mahila mandal* members.
- Mobilized more than 220 villages to take action to increase access to skilled care, resulting in 100% of villages having a functional emergency transport system.
- Significantly increased knowledge of postpartum/postnatal care, including essential newborn care, among pregnant women and recent mothers in the intervention group.

Increased Use of Maternal and Newborn Care Services and Home-based Practices

- Significantly increased (from 5% to 13%) the proportion of births attended by an ANM among recent mothers in the intervention group.
- Increased the average number of deliveries per ANM based on service statistics they reported, conducting a mean of 4.6 deliveries per month over the last eight months of the project. At baseline, most ANMs in the study area did not conduct any deliveries.
- Increased numbers of institutional deliveries by encouraging ACCESS-trained ANMs to conduct deliveries at health subcenters so mothers could access *Mukhya Mantri Janani Sishu Swasthya Aviyan*[51] benefits.
- Significantly improved the practice of BP/CR during pregnancy, and the practice of essential newborn care among pregnant women and recent mothers:
    - Fewer pregnant women decided to deliver at home (94% to 76% at endline) and significantly more had set aside funds for delivery (17% to 32% at endline) among the intervention group. No significant changes were seen in the comparison group for BP/CR practices.

[51] This is a state-sponsored National Rural Health Mission maternity incentive scheme similar to the national *Janani Suraksha Yojana* that pays women who deliver in facilities.

- Statistically significant difference in the practice of clean cord care (such as using a new razor blade or blade in the delivery kit, and not applying anything to the stump) among the intervention (69%) and comparison (31%) groups of recent mothers surveyed. (See Figure 18.)
- Statistically significant difference in the proportion of the recent mothers in the intervention group (77%) who reported that the newborn was dried and wrapped but not bathed compared with the comparison group (50%). (See Figure 19.) From project monitoring data, 99% of newborns delivered by ANMs in the experimental group received the three key newborn care components (i.e., immediate drying and wrapping, clean cord care, breastfeeding within one hour).

Figure 18: Births with Clean Cord Care

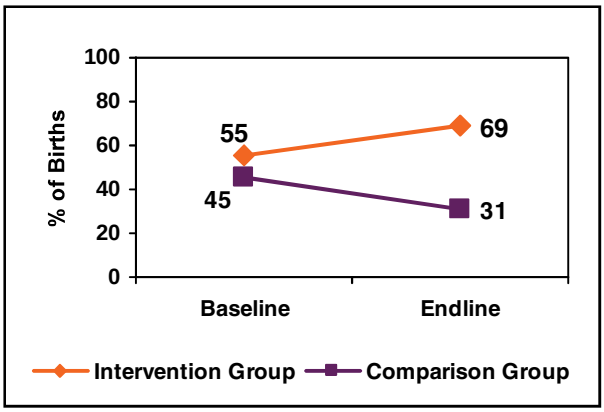
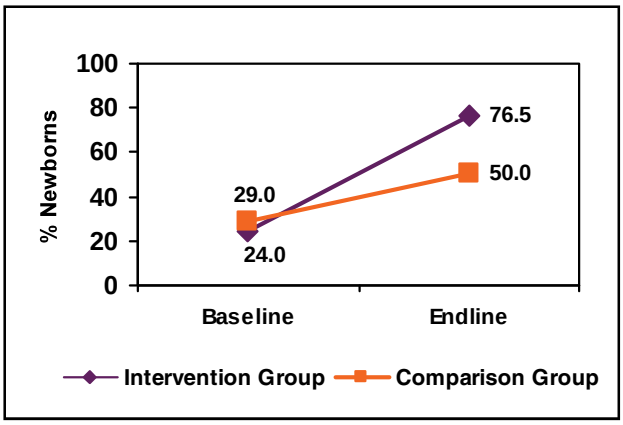


Figure 19: Newborns Who Were Dried and Wrapped But not Bathed after Birth



Increased Quality of Maternal and Newborn Care Services

- Introduced and increased partograph use by ANMs in the intervention group over three-quarters (in a nine-month period) up to 25%.
- Increased AMTSL practice among ANMs in the intervention group. (See Figure 20.) Service statistics showed that AMTSL was provided by these ANMs for 97% of deliveries they attended in the same nine-month period (July 2007 through March 2008). Prior to training, AMTSL was not practiced by ANMs in the study area.
- Significantly higher reported practice of newborn resuscitation among ANMs in the intervention group as opposed to the comparison group. (See Figure 21.)

Woman and baby, India

Figure 20: AMTSL and Partograph Use among Women who Gave Birth and Were Attended by Trained ANMs

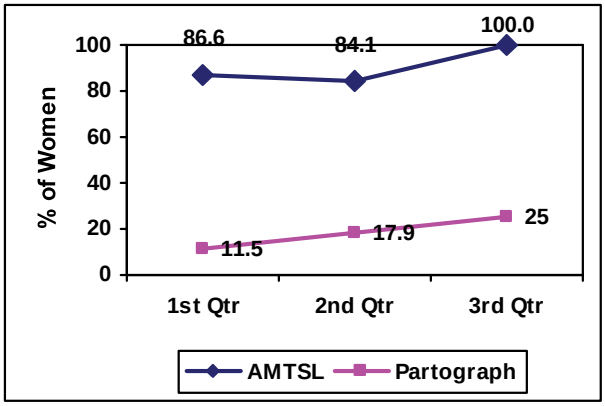
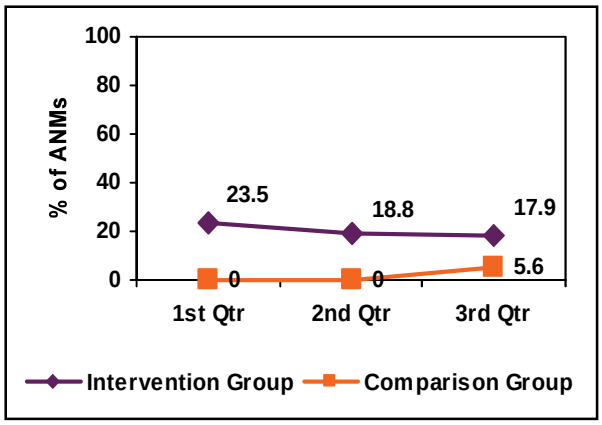


Figure 21: Reported Practice of Newborn Resuscitation



Increased Capacity of the Indian Nursing Council and National Auxiliary Nurse-Midwives Educational System to Produce SBAs

- Expanded perspective on the role of INC and selected nodal centers of education to lead a process of reform of the ANM education system.
- Developed a strategic plan with INC to establish national- and state-level resource centers to support improved capacity of ANM training centers at the district level.
- Supported INC to develop a network of nursing/midwifery education institutions across India.

LESSONS LEARNED AND SUSTAINABILITY

There were important lessons learned that are relevant to national SBA policies and programs:

- Because ANMs are generally not positioned as midwives and are not very skilled in delivery care, they required substantial refresher training to develop all the necessary skills to provide normal MNC—including recognition, management and referral of complications. All project-trained ANMs achieved competency, but the full 12 weeks was required to master all skills.
- The overall health care system needs to be strengthened to ensure that providers have the infrastructure, equipment, supplies and supervision they need to provide high-quality MNC services—particularly referral to comprehensive EmONC services.
- The project demonstrated that ANMs can provide community midwifery care with proper training, support, a well-equipped environment and connections to the communities they serve.
- Informed and mobilized communities seek and use MNC services. Community mobilization activities were essential to help women, families and communities understand the importance of skilled care and know where to seek services. Villages mobilized to organize emergency transport systems, save funds for emergencies through the *mahila mandals*, and sought MNC from trained ANMs and/or facilities. Once communities were aware and wanted MNC services, accessibility to skilled care was important.
- Communities need MNC advocates to connect them to available services. ACCESS supported those who worked closely with the communities, trained ANMs and health facilities. With training, *sahiyaas* and *anganwadi* workers could play this role.

ACCESS, in its work with the INC, planned for long-term sustainability and impact on ANM education through the development of a pre-service education regulatory and quality improvement system. Built on the experiences and lessons learned from Dumka, this system incorporated the resources and the long-term goals of the INC, and has the potential to be catalytic in producing fundamental change in the approach to nursing

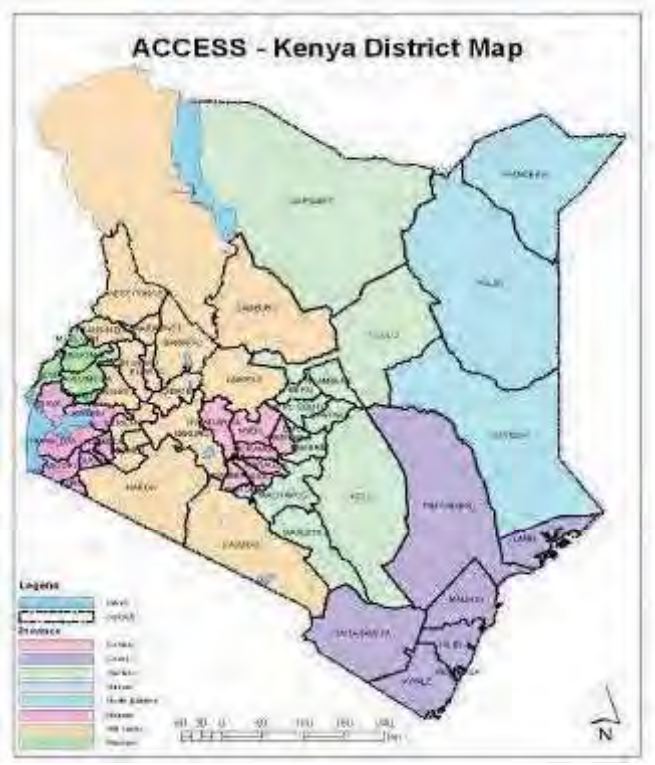
and midwifery education across the country. It is anticipated that the resources from USAID—used strategically to guide INC—will leverage INC and other donor funds and create a new pathway for excellence in pre-service education.

KENYA

Improved Maternal, Newborn and Women's Health through Increased Access to Evidence-based Interventions

INTRODUCTION

Although Kenya is seen as an example among African countries of rapid progress in health, increases in total fertility and maternal and infant mortality—as well as the HIV/AIDS burden and weak health systems—are complicating the situation. At the request of USAID, ACCESS worked with the Kenyan Ministry of Health (MOH) to adopt and adapt cutting edge technical innovations to address health promotion and disease prevention and treatment. In addition, the Program prepared state-of-the-art, standardized learning materials; developed national- and provincial-level resource persons; and provided technical assistance to implement these innovations through the AIDS, Population, Health Integrated Assistance Program[52] (APHIA II) structure.



PROGRAM OBJECTIVES

In 2005, ACCESS began targeting several priority technical areas in Kenya with the following objectives:

1. **HIV/AIDS**:
   a. Provide technical support to the National AIDS and STI Control Program (NASCOP) at the central level, and technical assistance for HIV testing and counseling (HTC) for 30 district hospitals across all eight provinces.
   b. Strengthen the Department of Reproductive Health (DRH)'s leadership, supervision, coordination and oversight role for the Kenya PMTCT program.

KEY INDICATORS

- **Maternal mortality:** 414
- **Infant mortality:** 77
- **Contraceptive prevalence rate:** 33%
- **Antenatal care attendance:** 88%

KEY HIV INDICATORS (KAIS 2008):

- **Number of people (15–64 years) living with HIV:** 1.4 million
- **Adult HIV prevalence:** 7%
- **Women (≥15 years) living with HIV:** 8% compared to Men 5%
- **Deaths due to AIDS (per year):** 150,000

Source:DHS 2003

[52] APHIA II—a five-year program funded by USAID with support of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and Population funds—helps communities in Kenya's Eastern Province address health concerns by strengthening linkages between health care providers and community groups.

c. Help equip antiretroviral therapy (ART) service providers with knowledge and skills on family planning (FP), sexually transmitted infections (STIs) and prevention with positives (PwP).

d. Introduce prevention of mother-to-child transmission of HIV-plus (PMTCT-plus) in selected hospitals.

2. Injection Safety:

a. Strengthen and improve safe injection and medical waste disposal practices through training and dissemination of national injection safety and management guidelines to health workers in Nyanza and Rift Valley Provinces.

3. Maternal and Newborn Health:

a. Improve knowledge and skills of service providers to prevent and manage postpartum hemorrhage (PPH).

b. Improve capacity of service providers to address postpartum needs of women and their babies with an emphasis on FP.

c. Integrate tuberculosis (TB) screening during antenatal care (ANC).

4. Malaria:

a. Support the DRH to integrate prevention of malaria in pregnancy (MIP) services with focused antenatal care (ANC) services at two facilities and, as part of outreach efforts by community health workers (CHWs), in three malaria-endemic districts.

INTERVENTIONS AND RESULTS

In addition to supporting APHIA II (mandated to improve health care by scaling up evidence-based interventions at the district and community levels), ACCESS worked with the MOH to strengthen central and provincial capacity to roll out priority interventions in HIV/AIDS, reproductive health (RH), and maternal and newborn health (MNH). Key interventions and results are described below.

MAJOR RESULTS

- Developed national guidelines for: HTC, HIV clinical mentorship, prevention of PPH, reproductive tract cancers and PMTCT standards.
- Trained 3,057 service providers in integrated management of adult illnesses (IMAI), PMTCT, HTC, postpartum FP and injection safety.
- Developed 595 trainers in clinical training skills.
- Trained 1,102 CHWs in infection prevention and focused ANC/MIP.
- Implemented PMTCT standards in eight provincial general hospitals for improved quality of PMTCT services.
- Developed and disseminated an FP/STI/HIV integration package.

Increased Access to HTC

Kenya introduced HTC services in 2001 to provide Kenyans with access to confidential services. To date, more than 900 HTC sites have been established nationwide. Since 2005, the Program provided critical support to NASCOP to introduce high-quality HTC to meet the Government of Kenya's priority of expanding access to these services through the health system.

Results include:

- Developed 95 HTC core trainers at national and provincial levels to roll out training through APHIA II.
- Trained 627 providers from 73 health facilities on provider-initiated HTC who have cascaded their skills to 679 providers and oriented 409 providers.
- Initiated 63 new HTC sites in 15 districts.
- Enabled 73% of trained providers to offer HTC in nine national referral and teaching hospitals, with more than 100,000 patients tested in these facilities.
- Worked with NASCOP to implement activities for HTC Campaign Week, including: workplace testing, door-to-door campaigns, testing at the health facilities, "Moonlight HTC" (which takes place at night to reach high-risk populations such as commercial sex workers) and other outreach initiatives.
- Developed HTC learning resource package and a simplified and comprehensive job aid.
- Developed national guidelines for HTC.

Expanded High-quality PMTCT Services

The Program supported the DRH to strengthen its leadership, supervisory, coordination and oversight role for the Kenya PMTCT program. In particular, ACCESS supported the development of supervisors' assessment tools and training packages, which include all components of maternal and child health with an emphasis on PMTCT and introduction to the quality improvement process for strengthened PMTCT services.

Mother and child health booklets distributed through Jhpiego's PMTCT program

Results include:

- Developed 284 PMTCT trainers.
- Trained 624 service providers in PMTCT at the provincial level.
- Trained 29 national- and provincial-based PMTCT managers in supportive supervision.
- Developed national integrated RH and HIV supportive supervision tool.
- Supported DRH to conduct quarterly supportive supervision visits to the provinces.
- Developed and implemented national PMTCT service standards in eight provincial general hospitals using the Standards-Based Management and Recognition (SBM-R) approach to quality improvement.
- Printed and distributed 150,000 mother and child health booklets[53] to the APHIA II programs.

Improved Antiretroviral Therapy Skills

In 2006, ACCESS supported the Kenyan MOH to roll out WHO's IMAI training approach to build the capacity of nurses and clinical officers to provide HIV prevention, care and treatment in first-level health facilities. During these training courses, people living with HIV/AIDS (PLWHA) are trained and used as expert patient trainers. The Program also assisted the MOH in creating training materials and developed trainers at the national and provincial levels. In

Group session during IMAI training, Eldoret, Kenya

[53] The mother and child health booklet is a tool developed by the MOH to track key health data during pregnancy and childhood.

collaboration with the APHIA II projects, these trainers have trained providers at the district level. In addition, ACCESS strived to ensure high-quality implementation and supervision of ART services, prevention with positives (PwP), and FP and STI/HIV integration, among other services.

Results include:

- Developed and disseminated pediatric ART orientation package.
- Developed HIV clinical mentorship guidelines and an orientation package.
- Developed national FP/STI/HIV integration training package.
- Developing (in process) community PwP orientation package.
- Conducted ART training of service providers in 64 districts (38% of all districts in the country), covering a total population of 32,084,400 of which 8,609,171 are women of reproductive age (15–49).
- Trained 1,338 service providers in IMAI (347 trainers and 991 providers).
- Developed 123 PLWHAs as expert patient trainers.
- Developed 26 providers as HIV mentors.
- Trained 56 HIV managers in supportive supervision.
- Trained 200 providers in FP/STI/HIV integration and 570 providers in PwP.
- Initiated ART services at 162 sites, 70 of which included pediatric ART services.

Strengthened Infection Prevention Practices in Rift Valley and Nyanza Provinces

The Injection Safety/Infection Prevention Program strengthened and improved safe injection and medical waste disposal practices in 12 health facilities in Rift Valley and Nyanza Provinces, and oriented community health workers (CHWs) on infection prevention. All 12 target hospitals saw improvements in waste management, with New Nyanza Provincial General Hospital in particular demonstrating exceptional results. Some facilities bought protective gear for their waste handlers, trained them on care of accidental injuries, and fenced off the waste disposal areas. Notable in these health facility units was the formation of functional Infection Prevention Control Committees, and the availability of infection prevention IEC materials, national guidelines and injection safety procedures. The CHWs continued educating their communities on infection prevention, some positively influencing those communities without tapped water to improvise with running handwashing buckets that hang from trees. In Baringo District, communities were mobilized to construct toilets.

Increased Capacity of the Department of Reproductive Health

The Program supported the DRH to strengthen its in-house capacity and address the MOH's priority RH issues. Key areas of support included: 1) improved FP through the Implementing Best Practices program; 2) expanded knowledge base through RH technical updates; 3) improved quality of RH services through the development of trainers and supervisors; 4) strengthened capacity to deliver high-quality services targeting reproductive tract cancers; and 5) improved capacity to provide post-rape care services.

Results include:

- Developed national reproductive tract cancer (including breast and prostate cancers) guidelines and training materials.
- Developed training package for community-based distribution of Depo-Provera.
- Procured and disseminated three cryotherapy machines to selected referral hospitals.
- Procured 25 sets of anatomic models to strengthen RH training capacity for selected national training sites.

- Oriented 19 DRH staff and provincial RH coordinators on care and use of anatomical models.
- Oriented 19 DRH managers and officers to the concepts of post-rape trauma counseling.
- Provided three technical updates on MIP, PMTCT and prevention of postpartum hemorrhage (PPH).
- Trained 62 providers in cervical cancer screening and pre-eclampsia.
- Trained 37 providers on comprehensive management for survivors of sexual violence.
- Supported DRH meetings for technical working groups in RH, FP and adolescent RH.

Strengthened Prevention of PPH Skills

Prevention of PPH efforts aimed to institutionalize active management of the third stage of labor (AMTSL) throughout the country.

Mother and baby, Kenya

Results include:

- Developed 16 national trainers in AMTSL.
- Oriented 41 providers from APHIA II Eastern and Western districts on AMTSL.
- Strengthened AMTSL skills of 14 providers.
- Developed reference manual for prevention of PPH.
- Established Kenyatta National Hospital as a center of excellence for AMTSL.

Integrated Tuberculosis Screening During Antenatal Care

In collaboration with the DRH and the Division of Leprosy TB and Lung Disease, the ACCESS strengthened and integrated TB screening, referral, diagnosis and treatment for pregnant women with focused ANC (FANC) services—the only ACCESS country to do so. Building on prior DRH efforts to scale up FANC service delivery, this project aimed to: 1) improve service delivery for ANC clients; 2) improve service provider knowledge and skills to effectively screen, refer, diagnose and treat TB and ANC patients; and 3) strengthen linkages between the national TB Division and the DRH.

Results include:

- Developed an orientation package for FANC, including MIP, PMTCT and TB.
- Trained 50 service providers and 30 supervisors from four pilot sites.
- Increased screening of new ANC attended from 0.4% to 91% during the intervention period.

Improved Prevention and Control of Malaria in Pregnancy

ACCESS supported the DRH in integrating the prevention of MIP with FANC services and provision of outreach services by CHWs in three malaria-endemic districts. CHWs promoted community awareness on MIP and the link with comprehensive RH services.

Results include:

- Developed RH community orientation package for service providers and CHWs.
- Trained 497 CHWs and 135 service providers in three malaria-endemic districts.
- Based on the service providers trained and communities sensitized by ACCESS in Asembo, the CDC conducted an evaluation of MIP. Results showed increased uptake of intermittent preventive treatment

during pregnancy (IPTp) in the intervention district (Asembo) compared with the control district (Gem).[54]

In 2004, Kenya changed its case management policy from sulfadoxine-pyrimethamine (SP) to the current first-line treatment with artemisinin-based combination therapy (ACT). ACCESS worked with the MOH Division of Malaria Control to roll out the policy change in Coast Province.

Results include:

- Developed orientation package for service providers on ACT and received MOH endorsement.
- Oriented 965 providers and supervisors from Coast Province on ACT, quinine, laboratory diagnosis and MIP/IPTp.

Strengthened Postnatal Care and Family Planning Services

ACCESS took advantage of the skills and resources available through the global ACCESS-FP program to improve postpartum FP services. Working with the DRH, the Program strengthened existing postnatal programs by increasing the number, timing and context of the postnatal consultations that women and their newborns receive.

Results include:

- Purchased and distributed postpartum intrauterine contraceptive device (IUCD) instruments to one provincial hospital, one sub-district hospital and six health centers.
- Trained 106 providers in postpartum FP and postpartum IUCD use.
- Inserted 402 postpartum IUCDs in target facilities in a one-year period.
- Printed 300 copies of the training manual and 100 copies of MOH postnatal care register.
- Distributed FP handbook and charts to 20 sites in Embu District in Eastern Province.
- Developed postnatal care learning resource packages (trainer, participant and reference manual) and a brochure.
- Conducted needs assessment of postpartum, long-acting and permanent methods (PPLAPM) at Embu Provincial General Hospital.
- Held advocacy meeting on PPLAPM with 18 members of the Embu Provincial General Hospital Management Team to establish a PPLAPM Center of Excellence at the facility.
- Formed a RH team at Embu Provincial General Hospital to address RH issues.
- Pre-tested postpartum IUCD standards.

Mother and baby, Kenya

LESSONS LEARNED AND SUSTAINABILITY

Through advocacy, development of guidelines and training materials, and provision of financial and technical support, ACCESS demonstrated that working at the central level is vital for the introduction and scale-up of high-impact interventions at the peripheral levels. Policies, standards and guidelines were essential for coverage and standardization, as was MOH approval. These factors—and its advocacy efforts—enabled

[54] Ouma et al. TMIH 2007.

ACCESS to successfully support MOH efforts to create a strong human resources base and develop tools to support expansion of high-quality health care services. The development of a critical pool of trainers, supervisors and champions at national and provincial levels supports continued scale-up of high-quality implementation of key interventions for RH/HIV services throughout the country.

MALAWI

Increased Access to High-quality Maternal and Newborn Health Care Services in Facilities and Communities

INTRODUCTION

With funding from USAID Malawi, ACCESS improved the availability of and access to MNH services by supporting MOH and USAID efforts to increase utilization of these services and the practice of healthy behaviors. Working in collaboration with its partners[55] at the community level and with facilities in all 28 districts, the Program worked on a national scale to improve the quality of RH services including infection prevention and control (IPC) practices, basic emergency obstetric and newborn care (BEmONC) and malaria in pregnancy (MIP) services. ACCESS also worked in three focus districts—Machinga, Nkhotakota and Rumphi—to increase the utilization and quality of MNH services by:

- Implementing services along the household-to-hospital continuum of care (HHCC);
- Introducing KMC at referral hospitals and selected health centers;
- Supporting quality improvement at the hospital and health center level;
- Championing community-based MNH services;
- Facilitating community mobilization; and
- Raising demand for high-quality, facility-based MNH services.

Coverage of ACCESS programs in Malawi

MIP, PQI/IP was implemented in all districts

PROGRAM STRATEGIES AND INTERVENTIONS

Creating Enabling Environment

In collaboration with the Reproductive Health Unit (RHU) of the MOH, ACCESS supported the development of national standards integrating IPC and RH, including PMTCT, for application at both hospital and health center levels. With the RHU and the Nurses and Midwives Council of Malawi (NMCM), the Program improved the national capacity to train skilled providers in

KEY INDICATORS

Maternal mortality ratio: 807/100,000 live births

Infant mortality rate: 72/1,000 live births

Neonatal mortality rate: 33/1,000 live births

Contraceptive prevalence rate: 41%

Delivery with skilled attendant: 54%

Tested for HIV during ANC visit: 27%

Source: MICS 2006

[55] The MOH's Reproductive Health Unit and National Malaria Control Program, the Nursing Directorate of the MOH, the Nurses and Midwives Council of Malawi, and all 13 of Malawi's nurse-midwife technician training institutions.

BEmONC by revising the midwifery syllabus and core curriculum, updating tutors and preceptors in BEmONC and clinical training skills, and strengthening clinical training sites. The Program collaborated with UNICEF and Saving Newborn Lives to develop the national community MNH package and community mobilization training manual. Working with the NMCM and PMI, the Program revised and printed gestational wheels and other job aids to support prevention of MIP. At the district level, ACCESS liaised with district health management teams (DHMTs) to advocate for the support of essential MNH, both through regular supervision of MNH activities and inclusion in the District Implementation Plan. Finally, through its work with the White Ribbon Alliance (WRA), the Program continued advocating for improved MNH services at the national level.

Infection prevention recognition ceremony, Malawi

Improving Quality of MNH Services Using PQI

ACCESS worked with health facilities in all 28 districts in Malawi to increase the availability and quality of MNH services. In collaboration with the RHU, the National Quality Assurance Technical Working Group and health facility staff, the Program provided support to 16 of 28 district hospitals and all four central hospitals in implementing quality improvement for RH. Additionally, the Program provided support to 25 of 28 district hospitals, all four central hospitals and seven Christian Health Association of Malawi hospitals in supporting a previously introduced quality improvement for IPC initiative. Moreover, the Program has worked with all 28 district hospitals to improve uptake of IPTp to prevent MIP.

At the request of the MOH, ACCESS targeted a total of 12 health centers in the three focus districts—approximately 33% of the MOH health centers in each district—to implement a quality improvement process that integrates RH with IP. To increase the evidence-based services available to pregnant women and newborns, the Program also trained providers in the targeted facilities in BEmONC, and introduced KMC to 10 targeted health facilities including each of the referral hospitals in the three districts.

Mobilizing Community to Improve MNH

ACCESS trained all health surveillance assistants (HSAs) linked to the nine target health centers in three focus districts. They were trained in the complete Maternal, Newborn and Child Health-Community Mobilization (MNCH-CM) model to deliver essential MNH messages and enhance preventive care before, during and after childbirth, and to promote the use of health care when necessary. The same HSAs also received community mobilization training to enable them to better engage community members in defining and addressing local MNH challenges in partnership with the health system. The Program's community interventions brought basic MNH services closer to families and raised awareness and demand for high-quality, facility-based MNH services.

Integrated PMTCT-MNCH Pilot

Based on the initial success of the HHCC model in the three focus districts, ACCESS in collaboration with BASICS and PSI, designed a pilot initiative to strengthen and integrate PMTCT services within a specific package of activities. This integrated package—which included PQI, IPC/RH, BEmONC and MNCH—was introduced in Phalombe in 2008, targeting three additional health facilities. As the PQI intervention was

introduced, ACCESS updated providers from those facilities on BEmONC to ensure that staff had the necessary skills to meet the PQI standards. Building on the PMTCT component, partners were able to show the importance of identifying and linking HIV-positive pregnant women to care and treatment during ANC and managing them throughout their pregnancy, delivery and postpartum care in order to successfully link the mother and newborn to care and treatment.

RESULTS

Pre-service Training

In addition to the Program's major results (see box above), ACCESS trained 31 midwifery tutors and 27 preceptors in BEmONC, representing all 13 midwifery training schools. Twenty tutors and two preceptors subsequently attended a clinical training skills course to improve their capacity to transfer knowledge and

MAJOR RESULTS

National

- PQI process adopted by the MOH with a functioning recognition system and performance standards for use at hospital and health centers.
- Implementation of the PQI/RH process at 100% of the central hospitals and 61% of the district hospitals.
- Community MNH and community mobilization guidelines and training materials adopted by the MOH/RHU to use in training HSAs to deliver basic MNH services in the community and to facilitate community mobilization.
- MOH/RHU adopted ACCESS's three-week, competency-based BEmONC and postabortion care (PAC) training model as Malawi's pre-service and in-service training approach.
- NMCM-revised syllabus for BEmONC pre-service and in-service training used to inform a standard core curriculum for BEmONC training courses and also being used by 100% of Malawi's midwifery training schools.
- PAC training materials adapted, printed and used by MOH for ongoing PAC training courses.
- Gestational wheels and other MIP prevention job aids were adapted, printed and disseminated to all 28 districts.

Three Focus Districts

Functioning HHCC established that includes:

- PQI/RH and IPC in the district hospital and 33% of MOH health centers in each district that provide services to 81,000 women of reproductive age in those districts.
- KMC services established in 33% of MOH health facilities in each district.
- Service providers in target facilities trained in BEmONC and the provision of high-quality services.
- HSAs delivering community-based MNH services.
- One Focus District: PMTCT-MNCH Integration Pilot.
- Integration of PMTCT along HHCC in Phalombe in collaboration with BASICS and PSI

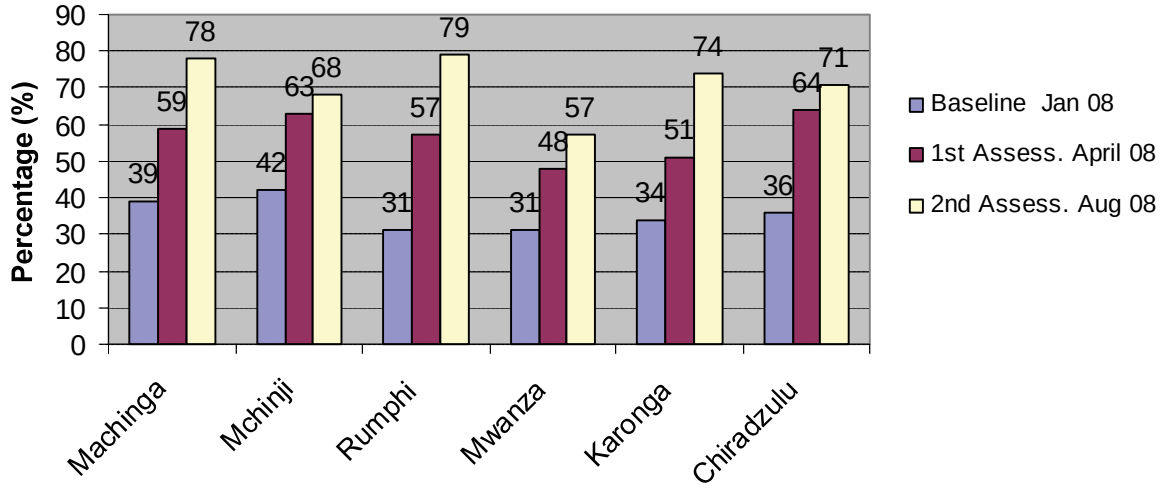
practice. The MOH/RHU recognized ACCESS' continued leadership in BEmONC training by requesting ACCESS to facilitate two non-USAID-funded BEmONC training courses that included an additional 20 tutors and 19 preceptors. At the facility level, ACCESS supported BEmONC training courses for the 12 target health centers and hospitals in the focus districts, training 76 service providers, representing 96% of providers in the target facilities.

Malaria in Pregnancy

Supported by PMI, ACCESS collaborated with NMCP to strengthen MIP prevention services in health facilities providing ANC services in all 28 districts. Working through the DHMTs, the Program trained 680 service providers in FANC and MIP, provided necessary supplies for facilities to implement directly observed therapy for taking IPTp, and developed job aids to improve IPTp uptake. Through collaboration with key stakeholders, the Program revised gestational wheels for use in ANC to include key MNH messages for pregnant women, and printed and disseminated the gestational wheels to all health facilities countrywide.

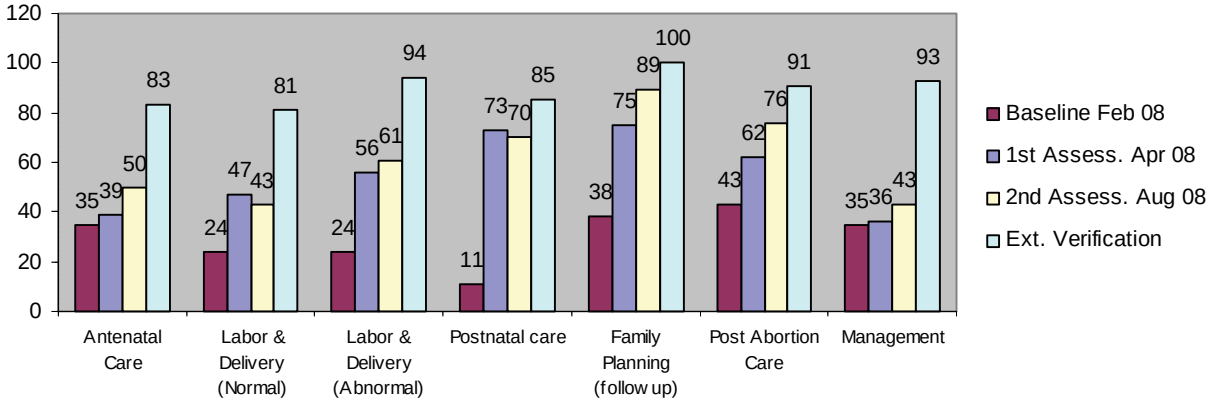
Performance and Quality Improvement

Figure 22: Percentage of RH Standards Achieved by Facilities Pre- and Post-PQI Interventions



ACCESS supported 16 of 28 district hospitals and all four central hospitals in implementing PQI in RH. Six facilities were introduced to the process in January 2008 and have made marked improvements, with three hospitals achieving nearly 80% of performance standards in August 2008. In July 2009, following the third internal assessment that showed significant improvements, Mchinji District Hospital was the first hospital to receive recognition in RH by scoring 89% on the external verification assessment.

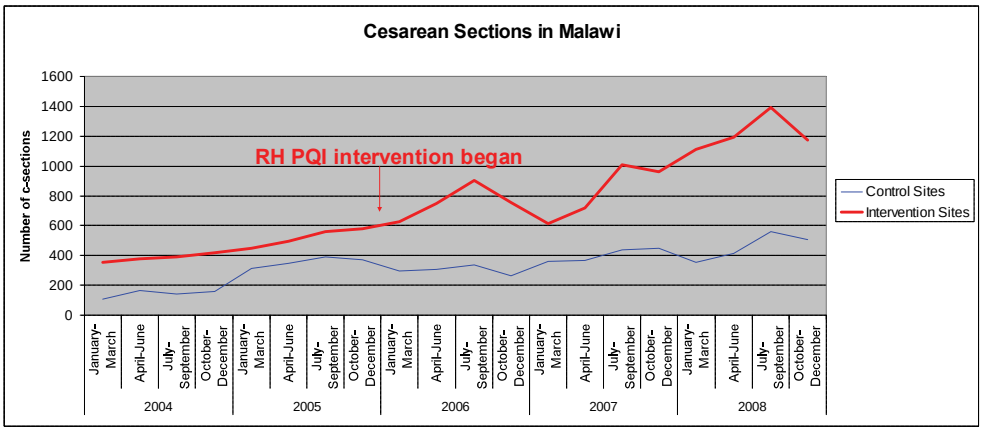
Figure 23: Percentage of selected RH areas achieved by Mchinji District Hospital Pre- and Post-PQI



Impact on RH service provision and outcomes on improved MNH are beginning to emerge based on routine service statistics gathered at the facility level. Preliminary analysis from a 2009 evaluation on PQI showed a dramatic difference in the rate of cesarean sections at RH sites compared to the control, with cesarean sections increasing rapidly since the introduction of PQI RH across all intervention facilities (Figure 24). The

increasing trend indicates that providers are able to readily identify emergency obstetric complications, refer, and conduct timely the cesarean sections to avoid obstetric complications.

Figure 24: Service Statistics from Malawi SBM-R Evaluation: Cesarean Sections Increased More in Intervention Group



Kangaroo Mother Care

The MOH adopted the Ambulatory and Community KMC protocols for Malawi for national use. ACCESS also established KMC services at 33% of the MOH facilities in three focus districts, and trained 47 providers in KMC to date.

Additional Results

- ACCESS trained 161 HSAs and 25 HSA supervisors from three focus districts in community MNH, and 121 HSAs and 17 supervisors in community mobilization.
- These HSAs are delivering home-based services to approximately 81,000 women of reproductive age in their coverage area of approximately 221,308 women of reproductive age, and have mobilized 60 community groups consisting of men and women to address local MNH issues.
- Based on cumulative data from the Program (2008–2009), approximately 65% of pregnant women were identified in the HSA catchment area and, of the home visits conducted, 6.9% were conducted during the first trimester, and 42.1% and 19.1% during the second and third trimester, respectively.
- During their pregnancies, 63% of women were counseled on FP, and 76.7% prepared a birth plan. Postnatally, 71.7% delivered with a SBA and 77.1% of mothers and newborns were visited within 72 hours of delivery (regardless of place of delivery).
- During these visits, the HSAs screened for danger signs using job aids; provided health education to the mother, spouse and significant others; encouraged the mother to attend health facility services; and referred to a health facility if any danger signs were identified.
- Identified danger signs for mothers included body pain (32.0%), fever (9.2%), stomach pains (4.8%), dizziness (3.9%) and vaginal bleeding (3.5%).
- Approximately 9.5% newborns had danger signs, including 2.9% with LBW. All babies with danger signs were referred.
- During the postpartum visits, 85.6% of women were counseled on FP.

LESSONS LEARNED

Host country government ownership of PQI promotes sustained improvements in quality of services. The MOH/RHU and National Quality Assurance Technical Working Group showed

incredible support for the PQI process and continue to advocate for quality improvement at facilities. To realize meaningful change at the facility level, district health officers and nursing officers must support the PQI initiative in their facilities. Ownership and support of the process, demonstrated by functional, district-level recognition systems, is vital to achieving and sustaining quality improvements.

Co-workers' attitudes can impede providers from applying newly acquired skills. ACCESS-trained providers in a few facilities reported that peers who had not yet received training had negative attitudes toward them, which impeded their full implementation of newly gained concepts and skills. The Program will continue dialogue with the DHMTs to facilitate support to these providers.

Facility efforts to achieve RH/IPC standards can be hampered by high turnover and inadequate supervision. Many facilities had not been recognized as achieving excellence in IPC and RH standards through the PQI initiative. A common challenge these facilities faced is frequent turnover of district health officers, who create the enabling environment for the PQI process to take hold. Without consistent DHMT support and supervision, members of the Quality Improvement Support Teams cannot ensure adherence to the performance standards in daily work, and facilities must spend valuable time training new staff, instead of working to implement standards. To address this challenge, ACCESS made frequent visits to district hospitals to ensure that the process has not been adversely affected by changes in senior management. Inadequate supplies and lack of essential RH drugs at Central Medical Stores also negatively affect adherence to RH standards.

The next generation of health professionals, Malawi

Involving husbands and fathers in MNH produces positive results. Pregnancy and childbirth are often considered "women's issues" in communities. However, recent experience involving men in problem-solving related to these issues showed that they can make a positive difference quickly. HSAs reported that men who had been involved in MNH-focused community groups and/or household counseling were very supportive, welcoming the opportunity to learn how to help their wives.

MNH-trained HSAs are highly valued in the community. HSAs received a 10-day training to prepare them to make home visits to pregnant women during the antenatal period and during the first week postpartum. Families appreciated the HSAs home counseling efforts, and HSAs welcomed the new skills and knowledge as it makes a visible difference in MNH service use and outcomes.

WAY FORWARD

The Maternal and Child Health Integration Program (MCHIP) started in Malawi in October 2009 and continues to support these interventions. MCHIP will use the lessons learned under ACCESS to improve and streamline the HHCC interventions and make them appropriate to scale up at a national level. MCHIP is actively engaged with other MNCH stakeholders in Malawi to bring these important interventions to scale.

NEPAL

Improving Maternal and Newborn Health in Partnership with the Government of Nepal

INTRODUCTION

Nepal is making considerable progress toward achieving its Millennium Development Goals (MDGs) for child and maternal health. Between 1996 and 2006, the maternal mortality ratio dropped from 539 to 281 deaths per 100,000 live births, the infant mortality rate declined from 64 to 48 deaths per 1,000 live births, and neonatal mortality decreased from 39 to 33 per 1,000 live births.[56] To further improve MNH, Nepal is now focused on increasing skilled attendance at birth. With 80% of Nepal's population living in rural areas amid challenging topography, most women still deliver at home and without the care of a skilled health care provider. When the ACCESS Program began, just 10.9% of women in Nepal had been delivered with a health professional (doctor or nurse-midwife) and only 9% in a health facility.[57] And while remarkable reductions in child mortality rates have occurred in the country over the last decade, an estimated 32,000 children still die each year during their first month of life—with more than two-thirds not surviving their first week.

PROGRAM STRATEGIES AND INTERVENTIONS

At the request of USAID, ACCESS worked in partnership with the Government of Nepal (GoN) to contribute to MNH initiatives that focused on:

- Increasing skilled attendance at birth;
- Identifying and piloting new interventions to address leading causes of mortality with simple, low-cost approaches aimed at public health impact; and
- Exploring key programmatic and policy issues to inform national MNH strategies.

The Program rolled out planned interventions in collaboration with the Family Health Division (FHD), Child Health Division (CHD), the National Health Training Center (NHTC), the Nepal Family Health Program II (NFHP II), Support to Safe Motherhood Program (SSMP), Plan International, Nepal Society of Obstetricians and Gynecologists (NESOG) and other stakeholders.

KEY INDICATORS

Maternal mortality ratio: 281/100,000 live births

Infant mortality rate: 48/1,000 live births

Under-five mortality rate: 61/1,000

Births with skilled provider: <20%

ANC: 44% receive ANC from SBA

Total fertility rate: 3.1

Contraceptive prevalence: 44% (modern methods), 48% (all methods

Source: DHS 2007

[56] Demographic and Health Surveys from 1996 and 2006.
[57] Nepal Demographic and Health Survey 2001.

RESULTS

Increasing Skilled Attendance at Birth

Increased Provider Capacity to Provide Skilled Attendance at Birth

In support of the *National Skilled Birth Attendants Policy* (2006), ACCESS in collaboration with FHD developed the *Maternal and Newborn Care (MNC) Learning Resource Package (LRP)* with active participation from clinical trainers and key stakeholders. After field-testing and endorsement by the GoN in 2007, the MNC LRP became the national standard for all SBA training. NHTC received 400 copies from ACCESS in 2007 and reproduced hundreds more with other donor funding. To date, more than 1,000 health care providers have been trained in skilled birth attendance using the MNC LRP.

Assessed, Improved and Maintained the Quality of SBA In-service Training Sites

To assess, strengthen and monitor the quality of training sites, ACCESS, with participation from a variety of stakeholders, supported the NHTC to develop SBA in-service training site quality improvement tools. These tools include 201 standards and cover nine clinical areas and three training-related areas. After an orientation to the tools and process, participants at 10 sites assessed their performance, identified gaps and worked to make improvements. NHTC continues to use the quality improvement tools—which are now available in Nepal—in 15 sites. As of September 2009, 12 sites had achieved 80% (or more) of standards.

Identifying and Piloting New Interventions to Address Leading Causes of Mortality with Simple, Low-cost Approaches Aimed at Public Health Impact

Developed and Tested a Community Strategy to Prevent PPH Using Misoprostol

Because postpartum hemorrhage (PPH) is the leading cause of maternal mortality, ACCESS, FHD, NFHP II and development partners piloted a community-based intervention to prevent PPH among women who do not seek skilled birth attendance during delivery. Female community health volunteers (FCHVs) provided women with misoprostol to be taken immediately after delivery as well as the necessary counseling and instructions on appropriate use and potential side effects. The pilot demonstrated that pregnant women can safely and effectively take misoprostol and be protected from PPH (see Table 10). In total, 73% of women who received misoprostol took it, and an additional 21% did not take it but received protection from PPH through other means.[58] Moreover, neonatal mortality was significantly reduced, and the evidence suggested that maternal mortality also decreased. In 2009–2010, FHD is planning to scale up PPH prevention using misoprostol as part of its remote areas strategy, targeting women who still have limited access to skilled care.

Table 10: Women's Use of Misoprostol and Their Protection Status from PPH, among Misoprostol Recipients

	NOT PROTECTED FROM PPH	PROTECTED FROM PPH	TOTAL
Received misoprostol and took it	0 (0%)	447(73%)	447(73%)
Received misoprostol and did not take it	36 (6%)	132 (21%)	168(27%)
Total	**36 (6%)**	**579 (94%)**	**615 (100%)**

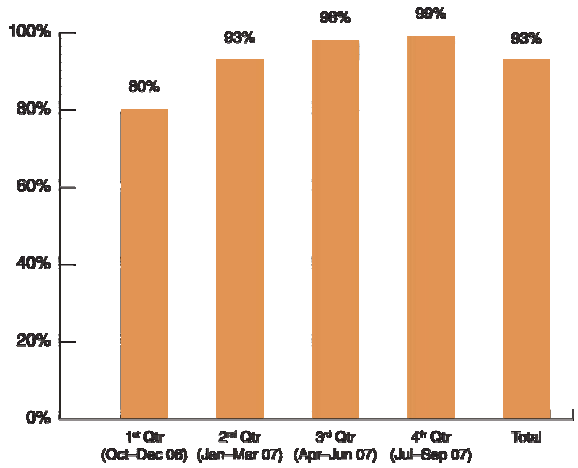
[58] In this project, a woman was considered to be protected from PPH if she meet one or more of the following criteria: 1) took misoprostol correctly; 2) delivered in the presence of a SBA; 3) received an injection in the thigh or buttocks immediately after delivery (presumed to be oxytocin); and/or 4) delivered in a health facility (hospital, primary health care center or health post).

Demonstrated the Feasibility of Community-based Management of Low Birth Weight (LBW) Infants

ACCESS—with FHD, NFHP II and the District Public Health Office—trained 220 female community health volunteers (FCHVs) to identify LBW babies using weighing scales, manage their care and educate their mothers on how to practice KMC at home in Kanchanpur District. Key findings from the pilot include:

- FCHVs are capable of identifying LBW and very LBW infants, and providing home-based counseling about exclusive breastfeeding, prevention from infection and KMC. They identified 980 infants as LBW or very LBW (17% of 5,865 live births registered in the FCHV registers).
- FCHVs provided early postnatal care (PNC) to mothers and their infants, reaching 80–100% of mothers and newborns each quarter with an average of more than four PNC visits.
- More than 70% of mothers with LBW newborns practiced KMC by the end of the project period.
- FCHVs were able to identify danger signs among LBW infants: 14% of the 980 LBW neonates were identified as experiencing a danger sign and referred to a health facility.
- FCHVs were effective in performing the five essential newborn care skills: counseling, weighing, temperature taking, recordkeeping and KMC. By the project's end, FCHVs correctly performed each of the five skills at the desired competency level of 85%.

Figure 25. Percentage of LBW Neonates Who Received PNC Visits from FBW/FCHVs by Quarter



Based upon the findings of this community intervention, ACCESS provided technical assistance to the CHD to develop *National LBW Neonate Management and Implementation Guidelines* in line with the *National Neonatal Health Strategy* of 2004.

Improved Management of LBW Newborns at Facilities Using KMC

To support LBW referrals, ACCESS introduced facility-based KMC services at two zonal hospitals and three primary health care centers,[59] and supported the integration of KMC with newborn care services. As a result, 53 LBW newborns (including several sets of twins) among 610 deliveries were managed with KMC from June to November 2007 at Mahakali Zonal Hospital. At Seti Zonal Hospital, 56 LBW newborns (including twins) received KMC from a total of 1,173 deliveries from July to November 2007. And at the three primary health care centers, KMC services were provided for six of seven LBW newborns from a total of 114 deliveries in two months.

Father doing Kangaroo Mother Care, Nepal

[59] The health facilities included Seti Zonal Hospital Kailali, Mahakali Zonal Hospital Kanchanpur, and three primary health care centers in Kanchanpur District.

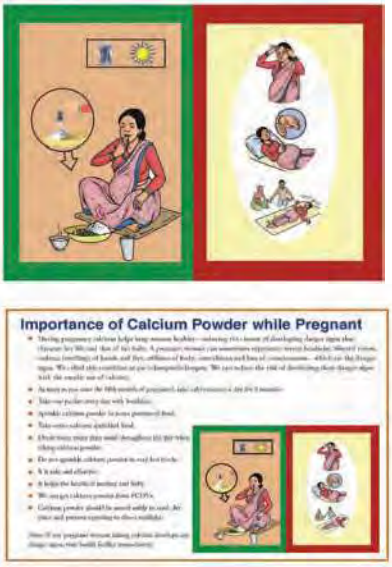
Designed and Initiated a Community-level Intervention to Prevent Pre-eclampsia/Eclampsia (PE/E)

Based on the WHO recommendation that calcium intake during pregnancy reduces the risk of PE/E by 67%,[60] ACCESS worked in collaboration with FHD and NFHP II to develop a PE/E prevention pilot of calcium supplementation to pregnant women. FCHVs distribute a three-month supply of calcium and educate pregnant women and their families (see Figure 14) about the dangers of PE/E, a leading cause of maternal mortality. A small-scale acceptability study comparing tablet and powder forms of calcium was started and will be continued under MCHIP. Plan International donated calcium tablets, and Jhpiego provided calcium powder in sachets. The study findings will inform a larger, district-wide pilot to assess the feasibility, acceptability and programmatic effort required to achieve high-level coverage with calcium supplementation during pregnancy.

Improved Management of PE/E at the Facility Level

ACCESS with the Nepal Society of Obstetricians and Gynecologists (NESOG) promoted and strengthened the use of magnesium sulphate and institutionalized this best practice in 22 health facilities. ACCESS worked with a NESOG team to develop standards, an in-service orientation package and job aids. The NESOG team then provided on-site orientations, support and coaching to service providers during several visits to each facility. Results showed that facilities can manage PE/E appropriately with support with average scores increasing from 26% at baseline to 60%. By the end, 11 of the 22 facilities (50%) were performing at 80% or higher.

Figure 26: Information for Women and their Families on the Importance of Calcium during Pregnancy



Exploring Key Programmatic and Policy Issues to Inform National MNH strategies

Reviewed and Recommended Options for Increasing Skilled Attendance at the Community Level

At USAID's request in 2005, ACCESS reviewed how best to operationalize the National Policy on Skilled Birth Attendants to increase skilled birth attendance at the community level in Nepal. ACCESS primarily recommended strengthening auxiliary nurse-midwife (ANM) training and adding a supplementary training package to ensure that graduate ANMs assigned to community posts have the requisite skills. Only those ANMs who were prepared to work at the community level could enter this "post-graduate" training to obtain the SBA skills that are not included in the ANM curriculum. The report was shared with GoN and development partners to help inform national nursing training and education discussions.

Identified Key Factors that Support Use of Skilled Birth Attendance in Nepal

ACCESS and FHD conducted a study identifying the key factors that contribute to successful utilization of SBA services. The study found that most women preferred and planned a home delivery, and sought care at the facility only for complications. Facilities associated with a high volume of delivery services include: "24/7" services and availability of BEmONC; easy geographic access; three or more trained staff available in primary health care centers; a referral system and/or ambulance on site; dynamic leadership of the facility; energetic community collaboration; and employment of local personnel. GoN shared "availability of maternal and

[60] Hofmeyr GJ, Atallah AN, Duley L. Calcium supplementation during pregnancy for preventing hypertensive disorders and related problems (Cochrane Review). In: The Cochrane Library, Issue 4, 2006. Chichester, UK: John Wiley & Sons, Ltd.

neonatal '24/7' services" from this study at the Scaling-up FP/MNCH Best Practices in Asia and the Near East Technical Meeting in 2007.

Identified Reasons for Maternal Mortality and Morbidity Reduction

In 2008–2009, USAID and SSMP supported FHD to design and conduct a Maternal Mortality and Morbidity Study in eight districts to prioritize interventions and approaches to address the leading causes of maternal mortality with a strong focus on community deaths. ACCESS supported the Technical Advisory Group and a number of implementation activities for the study. The study found a decreasing trend in MMR that is on track to meet the MDGs, as well as a decrease in death due to maternal causes among women of reproductive age. While the percentage of maternal deaths caused by eclampsia, abortion-related complications, gastroenteritis and anemia have increased, maternal deaths from obstructed labor and puerperal sepsis have more than halved since a similar study was conducted in 1998.

LESSONS LEARNED AND SUSTAINABILITY

ACCESS in its work with GoN found the partnership effective in identifying and conducting a number of pilot interventions and studies that contributed directly to national policies, programs and guidelines. For example, based upon the LBW and KMC project results, GoN developed and approved the *Implementation Guidelines for the Low Birth Weight Neonate Care*. GoN leadership fostered and demonstrated innovation—such as piloting misoprostol for PPH prevention for home deliveries. High levels of government commitment also led to scaling up of proven interventions, as illustrated by LBW neonate care and management now being provided by FCHVs in 10 districts. Based on a number of these successful community-based pilots, GoN has the opportunity to combine them into an integrated community-based maternal and neonatal care package.

ACCESS also found its technical assistance was most effective when collaboration with GoN and external development partners worked well to support a national strategy or priority. For example, the MNC LRP and quality improvement tools developed through a participatory process with government and stakeholders have been institutionalized by government systems that will continue to train thousands of health care providers as SBAs. As a result of ACCESS-supported activities, quality improvement in MNH services was measurable and evident at SBA training sites and other health facilities.

NIGERIA

Increased Use of High-quality Emergency Obstetric, Newborn and Family Planning Services

INTRODUCTION

In the northwest zone of Nigeria—an area with alarmingly high maternal mortality and very low levels of skilled attendance at birth, antenatal care (ANC) attendance and contraceptive prevalence—ACCESS worked with USAID funding to address some of the most dire health indicators in the country. ACCESS implemented a three-year program to increase the use and quality of emergency obstetric and newborn care (EmONC) and family planning (FP) services. To achieve these aims, ACCESS collaborated with all levels of government, initially focusing its interventions in four Local Government Authorities (LGAs) in Kano and Zamfara States. Literacy levels are low in both states, especially among women, and the region is predominantly rural and poor.

KEY INDICATORS

Neonatal mortality rate (10-year period): 55 (NW), 53 (all)

Skilled attendance at birth: 12.3% (NW), 35.2% (all)

Modern contraceptive prevalence rate: 3.3% (NW), 8.2% (all)

Total fertility rate: 6.7 (NW), 5.7 (all)

The program in Nigeria was designed to help reduce the high burden of maternal and neonatal mortality in Kano and Zamfara States, contributing to USAID Nigeria's Strategic Objective 17: Increased Use of Child Survival and Reproductive Health Services. In 2007–2008, ACCESS expanded its program to Katsina State, also in the northwest zone. At the end of the program, ACCESS was working in 22 LGAs across the three states, covering an estimated population of 4,979,149 people.

PROGRAM STRATEGIES AND INTERVENTIONS

The Program implemented both community- and facility-based interventions focused on ANC, safe delivery care, EmONC, postpartum care and FP including healthy timing and spacing of pregnancies. This approach, which also involved working at the policy level to improve the service delivery environment, is called the household-to-hospital continuum of care (HHCC) approach, and encourages communities and health care providers to work together and use simple, cost-effective interventions. These interventions were intended to increase the availability of skilled providers, and improve the quality, availability and demand for services.

KEY PROGRAM INTERVENTIONS

- Develop national policies, guidelines and operational performance standards.
- Strengthen health systems to deliver improved services:
  - Conduct in-service training of health care providers in EmONC, ANC and FP.
  - Advocate for improved deployment of medical and paramedical staff to increase availability of skilled providers.
  - Orient facility-based providers to a quality improvement approach, and apply the approach to program facilities.
  - Rehabilitate facilities by supporting improvements in their infrastructure, supplies and equipment.
- Strengthen pre-service education for EmONC at two midwifery schools.
- Train community volunteers and community health extension workers (CHEWs) to provide counseling services during home visits to promote behavior change.

RESULTS

MAJOR RESULTS

- Developed national performance standards for EmONC for the hospital and primary health center levels and received government endorsement.
- Upgraded 48 health facilities in Kano and Zamfara States to provide EmONC and FP, and renovated 17 facilities.
- Trained/oriented more than 497 providers in EmONC and FP.
- Skilled providers at ACCESS-supported facilities provided antenatal services to pregnant women during 367,308 clinic visits.
- Skilled birth attendants/ANC providers delivered 76,576 women, 95.6% of whom received active management of the third stage of labor (AMTSL).
- Established two functioning kangaroo mother care (KMC) centers to address low birth weight babies in Kano and Zamfara States.

ACCESS succeeded in reaching thousands of women in northern Nigeria with improved ANC, delivery care, postpartum care and FP services, with increasing numbers over time, as demonstrated in Table 11 on the following page. Recordkeeping to capture this information was also improved.

Group discussion session with older women, Nigeriaw

Table 11: Results for Selected USAID Operational Plan Indicators from 28 Hospitals in 22 LGAs

SERVICE/ PRACTICE OUTCOME INDICATOR	FY07				FY08				FY09			
	Q1 (Base-line)	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Number of ANC visits by skilled providers in USG-assisted facilities	4,887	6,598	9,278	12,570	14,283	28,675	34,198	38,552	39,710	72,604	52,410	53,543
Number of deliveries with a skilled birth attendant in USG-assisted programs	564	635	2,517	3,969	3,590	5,746	6,498	6,258	7,873	10,590	14,039	14,297
Number of women receiving AMTSL through USG-supported programs	N/A	37	2,240	3,950	3,590	5,268	6,137	6,258	7,305	7,474	7,478	8,210
Couple years of protection in USG-supported programs		783	1,713	2,516	2,199	2,468	3,213	3,635	3,901	4,472	3,763	3,839

It has been estimated that about 2% of expected births in the supported LGAs was by cesarean section, while 43% of labors where monitored by the use of a partograph. The ongoing endline survey will provide more information about the proportion of PE/E cases managed according to set standards.

More detailed achievements are presented below by major expected program results.

Improved Enabling Environment for Scale-up of EmONC Best Practices

ACCESS supported the Federal Ministry of Health (FMOH) to develop national operational performance standards for EmONC in hospitals and primary health care centers and, at project end, was applying the standards in all program-supported facilities. The FMOH has directed that the performance standards be institutionalized in all tertiary health facilities in the country. The Program also developed a KMC training manual, and collaborated with the FMOH to produce the *Situation Analysis and Action Plan for Newborn Health in Nigeria*. Save the Children-UK (SCUK) in Nigeria is currently using the KMC training manual in its programs.

Increased Availability and Capacity of EmONC and FP Health Care Workers

ACCESS strengthened two EmONC facilities in Kano and Zamfara States to serve as in-service training sites. In addition to training or orienting 1,317 health care workers on EmONC and 1,250 on FP,[61] the Program also upgraded 17 facilities and developed, printed and distributed a variety of related job aids. In addition, to

[61] These numbers exclude volunteers trained. See Table 14 for information on community volunteers.

meet the UN standards for EmONC services,[62] ACCESS consistently advocated for rational deployment of trained skilled birth attendants to program-supported facilities in order to ensure 24-hour coverage, seven days a week. Service statistics from the ACCESS-supported sites show significant increases in the number of women receiving ANC and delivery services from skilled birth attendants.

"What impressed me in delivering in the hospital is the neatness and even the way they handle the baby's cord…you just go home, enter your room with your baby without concerning yourself with the cleaning of all the mess that comes with delivery."
—Patient at ACCESS-supported facility

ACCESS strengthened providers' capacity in EmONC, KMC and postpartum FP. Table 12 provides an overview of all training conducted.

Table 12: Health Care Providers Trained to Date

TRAINEES	TRAINING TOPIC	TOTAL # TRAINED
In-service training of physicians, nurse-midwives and CHEWs	Clinical training in EmONC and orientation to SBM-R	115
Physicians and nurse/midwives	Training of trainers and step-down training in KMC	77
Nigeria Youth Service Corps, medical and paramedical staff and sociology graduates in Kano and Zamfara States	Orientation to EmONC	377
Nurse-midwives and CHEWs	Postpartum FP training	140
Nurse-midwives	IUD and Jadelle®	37
Health care providers at ACCESS-supported facilities	Recordkeeping/Health Management Information System (HMIS)	144
Community volunteers: Community Core Group (CCG) members, community mobilization team members, household counselors and male motivators	Maternal and newborn health and FP	524
TOTAL		**1,414**

Improved Quality of EmONC Services

ACCESS introduced the Standards-Based Management and Recognition (SBM-R) approach for quality improvement in EmONC at 30 facilities, training providers at 15 hospitals and 15 primary health centers in its use. Follow-up assessments using the SBM-R operational standards assessment tool at 26 of these facilities revealed impressive improvements in achievement of the EmONC standards—from 20% or lower at baseline to 70–90% at the second follow-up assessment (see Figures 27 and 28 below). The Program worked with facility quality improvement teams to find solutions to identified gaps in performance.

[62] For a population of 500,000 inhabitants, UN standards require providers be available at a minimum of four facilities to provide 24-hour/seven-day coverage of basic EmONC services, and one facility for comprehensive EmONC.

Figure 27: Baseline and Follow-up Scores for EmONC Performance Standards at 13 ACCESS-supported Hospitals in Kano and Zamfara States

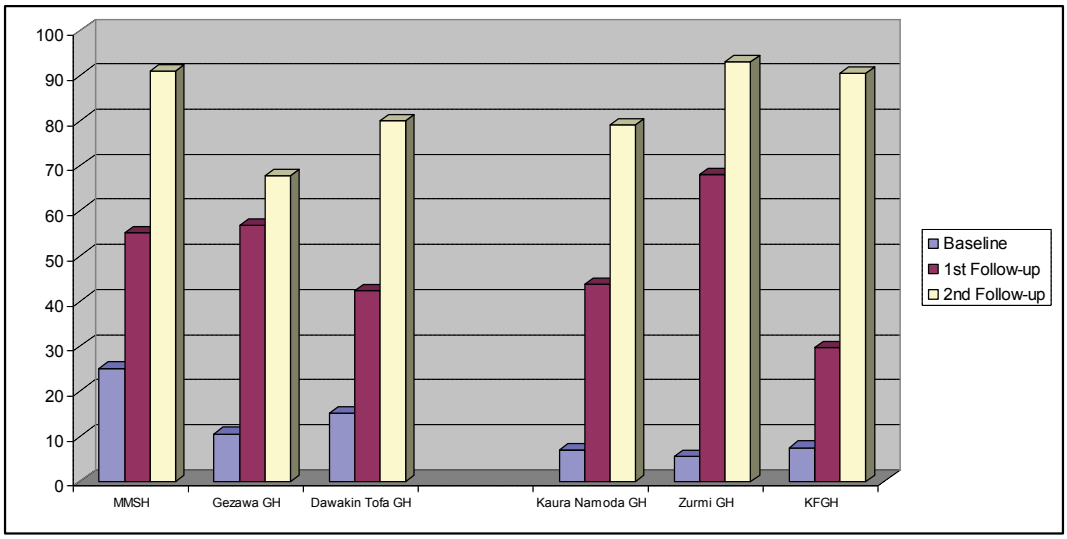
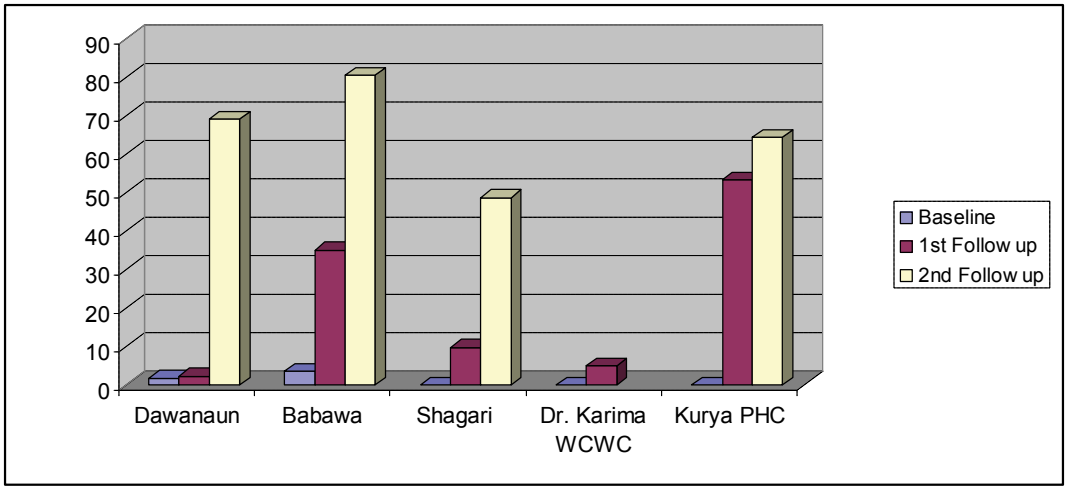


Figure 28: Baseline and Follow-up Scores for EmONC Performance Standards at 13 ACCESS-supported PHCs in Kano and Zamfara States



Increased Demand for Maternal and Newborn Services

ACCESS implemented community counseling and community mobilization activities for FP and maternal and newborn health. In the initial four program LGAs, the Program trained 38 community mobilizers as trainers in the Community Action Cycle (CAC) process. Community mobilization supervisory teams—which consist of members of community development associations and religious groups, and community core groups (community volunteers)—were trained by ACCESS and implemented maternal and newborn health action plans tailored to their communities' needs. The activities of these teams and core groups led to the donation of ITNs, ANC drugs, water tanks, benches, mini-pharmacy shelves, bore holes and generators—among other items—to the facilities around which they operate. The CCG around a particular PHC identified that the issue of lack of skilled birth attendants at the PHC was the root cause of high delivery rates at home. They mobilized the services of three nurse-midwives as volunteers from within and outside the community to assist in conducting deliveries at the PHC and deliveries have been conducted there ever since.

ACCESS increased the capacity of 85 women as household counselor trainers, and created and pre-tested (with women of reproductive age, husbands, older women and religious leaders) materials for use in home-based counseling. These 85 women comprise junior CHEWs and volunteers and part of their work is to refer to the KMC centers when they identify low birth weight babies in the community. The Program also initiated the Mothers Savings and Loans Clubs, which were very successful in providing alternative channels for paying for transport and health services for labor or during emergencies.

"In the past we refused to allow our wives to go to health facility for delivery, but this phenomenon has changed with the coming of ACCESS CCGs."
– Mallam Umaru Isah, Kano

Improved Management of Maternal and Newborn Services

ACCESS introduced KMC for care of low birth weight babies in Nigeria to great enthusiasm and interest, especially among health care workers and clients due to it being natural and practical for home use. Two KMC demonstration centers were established in Kano and Gusau, and local and national media repeatedly aired a documentary featuring the training of trainers workshop held by the Program. Results from Murtala Mohammed Specialist Hospital revealed that 157 low birth weight babies were admitted and seven died, representing a 95.5% survival and 4.5% case fatality rate.

Community mobilization officer, Nigeria

ACCESS further improved recordkeeping at target facilities, revising the national HMIS to track key quality indicators, including the new USAID operational plan indicators. The Program revised and distributed registers and maternity and newborn charts, and gave job aids to those providers trained in their usage.

LESSONS LEARNED AND SUSTAINABILITY

Stakeholder Involvement Helps Promote Scale-Up and Dissemination of Tools and Standards. ACCESS materials and approaches—including the national performance standards for EmONC and a training manual for KMC—were developed with multiple stakeholders and received approval at the national level. These products now have the potential for expansion beyond the Program areas. In fact, the FMOH has committed to disseminating the EmONC performance standards to all tertiary facilities in Nigeria. Similarly, through the National Primary Health Care Development Agency, the FMOH adopted most ACCESS training materials and job aids for its new Midwives Service Scheme.

Political will and commitment at multiple levels is necessary in a decentralized environment. Nigeria has a strongly decentralized political structure. Within this context, the Program worked with multiple stakeholders (including community and traditional leaders) at the national, state and LGA levels to create buy-in and promote the success and sustainability of program interventions. This was a challenging effort and required a strong staff presence in the target states. ACCESS was more successful gaining political commitment at the national and state levels than at the LGA level. Many primary heath centers, which are managed by LGAs, are still not open 24 hours a day, seven days a week due to staff shortages and lack of resources to pay incentives (such as shift duty allowances to CHEWs and midwives). Community mobilization, where implemented, greatly supported primary health center-level advocacy efforts to find local resources.

Using a Systems Approach Increases ACCESS to Care. ACCESS applied the household-to-hospital continuum of care (HHCC) approach in full in Nigeria, recognizing the importance of systematically addressing maternal and newborn issues of the community and facility together using evidence-based interventions. In an environment of poor service utilization for maternal care, this approach allowed the Program to address all three delays known to affect the provision and utilization of skilled care to prevent maternal deaths: delay in deciding to seek care if a complication occurs, delay in reaching care and delay in receiving care.

Behavior change communication and community engagement are crucial in increasing awareness of problems and finding local solutions. The community mobilization and behavior change communication (BCC) strategy included frequent group discussions led by trained volunteers, education by household counselors and male FP motivators, and the development and distribution of information, education and communication (IEC) materials in the local Hausa language. These combined efforts—and the introduction of the innovative Mothers Savings and Loans Clubs—led to increased utilization of health services for antenatal and delivery care, and helped to empower women and improve their health-seeking behaviors.

WAY FORWARD

By making these services free, the State Ministries of Health (SMOH) have shown some commitment to maternal and newborn health. The SMOH also currently orders key emergency obstetric care drugs (such as oxytocin, misoprostol and magnesium sulphate) for use in its facilities. ACCESS-supported states have a core team of trained EmONC and FP service providers who are able to provide services wherever they are posted; and the nationally approved EmONC performance standards are now regarded as the benchmark for EmONC in the country. In total, 30 health facilities were introduced to the SBM-R process as a quality improvement approach, and SMOH staff were trained to take ownership of this process. Moreover, the fact that demand for contraceptives in the country has outstripped supply, leading to stock-outs in the FMOH Central Medical Stores, is an indication of increased use of the commodities nationwide. The 2008 Nigeria Demographic and Health Survey showed marginal increases in the use of contraceptives, fueling the hope that these efforts may be sustained beyond the tipping point for an accelerated uptake.

ACCESS staff speaking at a CCG meeting, Nigeria

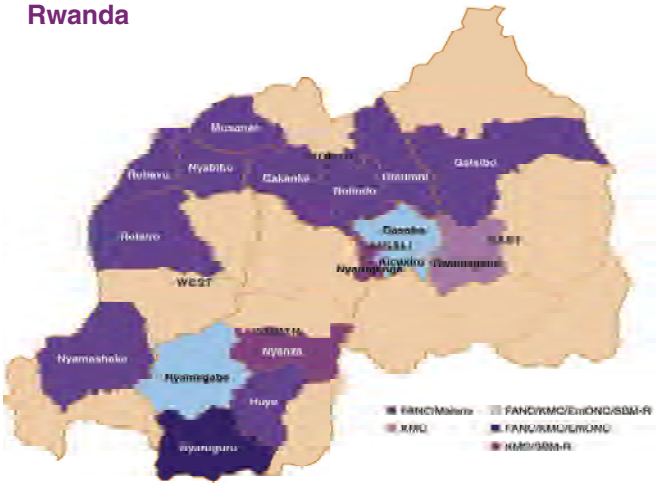
RWANDA

Improving Maternal and Newborn Health Outcomes

INTRODUCTION

Rwanda has some of the highest levels of maternal and newborn mortality in Africa, and a high level of fertility among households of limited resources. According to the most recent DHS (2008), the fertility of Rwandan women remains high; each woman giving birth on average to 5.5 children by the end of her reproductive life. The level of fertility is much higher among rural women (5.7) than among those in urban areas (4.7), regardless of the age group. Unmet need for FP is also high at 58%.[i] According to the DHS (2008), 49% of the births in the five years preceding the survey took place at home and 45% gave birth at a health facility, mainly a public sector facility. The incidence of home births was found to be highest among women who received no ANC (88%) and among women in households in the three lowest-wealth (poorest) quintiles (more than 52%).[63]

ACCESS Geographic and Technical Areas in Rwanda



At the request of USAID Rwanda, ACCESS introduced targeted interventions designed to bring drastic improvements within a short time frame. In 2004, ACCESS began working with Rwanda's MOH and its implementing partners to promote the adoption of best practices in FANC (including MIP) and EmONC. ACCESS initially focused its efforts in four districts, but ultimately expanded its FANC/MIP interventions to 10 additional districts.[64] In 2006, USAID requested that ACCESS carry out the Safe Birth Africa Initiative (SBAI) in Rwanda in collaboration with the major maternal and newborn health bilateral Twubekane, led by IntraHealth. The purpose of the SBAI was to achieve rapid improvement in maternal and newborn health by targeting the time when the majority of deaths occur: labor, birth and the immediate postpartum/postnatal period.

KEY INDICATORS

Maternal mortality: 750/100,000 live births

Infant mortality: 62 deaths per 1,000 live births

ANC attendance: 96% (at least one visit)

Skilled attendance at birth: 52%

Total fertility rate: 5.5 children per woman

Proportion of households with at least one ITN: 57%

Proportion of children under five years old who slept under an ITN the previous night: 58%

Proportion of pregnant women who slept under an ITN the previous night: 62%

PROGRAM STRATEGIES AND INTERVENTIONS

ACCESS supported the scale-up of FANC/MIP and EmONC programs in Rwanda at the national/policy level

[63] Rwanda Interim DHS 2007–2008.
[64] MIP activities were field-funded; all other activities were supported by core funds.

and through implementation of both facility- and community-based activities. The Program's efforts included:

- Increasing collaboration among key stakeholders, especially the multiple divisions of Rwanda's MOH.[65]
- Strengthening the clinical skills of health care providers by developing clinical training materials and providing knowledge and skills updates.
- Improving knowledge in communities through the development of CHW training materials and tools and provision of training.
- Improving the quality of MNH services by instituting supportive supervision and quality improvement systems in health care facilities.

ACCESS provided technical assistance to the MOH to ensure that evidence-based information and approaches were incorporated with national policies. In close collaboration with multiple divisions of Rwanda's MOH, ACCESS provided technical assistance, both nationally and at the district level, to assist the MOH to roll out key MNH interventions. ACCESS assisted Rwanda's MOH to improve and expand the use of the partograph and AMTSL—with the aim of achieving significantly increased coverage of skilled birth attendance and postpartum/postnatal care. ACCESS introduced KMC to Rwanda, provided technical and material assistance to establish a KMC Center of Excellence in Kigali, and expanded KMC to an additional five hospitals throughout the country.

Photos: John Healey/jhph.com

Woman practicing KMC, Rwanda

At the community level, ACCESS developed a BCC strategy that targeted providers, CHWs and community members. An ACCESS-developed training package for CHWs was also being used to improve their capacity to counsel women to give birth at the health facility and to practice essential household behaviors (e.g., identification of danger signs, clean cord care, immediate and exclusive breastfeeding, and thermal care/warming and drying). Work with religious leaders helped to further spread Safe Motherhood messages into the community through use of the *Sermon Guide for Religious Leaders*, developed with ACCESS support.

ACCESS also improved demand for and quality of FANC/MIP services with PMI funding. ACCESS collaborated with the MOH's National Program to Fight against Malaria and the MOH's Maternal Health Desk to formulate clinical ANC/MIP training materials adapted to Rwanda's revised MIP policy. The new policy discontinues the use of IPTp using SP and places increased emphasis on: four ANC visits, beginning in the first trimester of pregnancy; use of ITNs; distribution of iron, folate and mebendazole; and prompt case management of malaria. FANC/MIP messages have also been incorporated with the tools and materials for CHWs to address the importance of using ITNs throughout pregnancy and attending ANC early in pregnancy, in accordance with the new policy.

[65] This includes the Maternal Health Desk, National Program to Fight against Malaria, Community Health Desk, Child Health Desk, Communication Center for Health, and Quality Improvement Division.

RESULTS

Improved Enabling Environment for Scale-up of FANC/MIP and EmONC Best Practices

KEY RESULTS

- 92% of hospital providers observed (n=12), practice all three steps of AMTSL as opposed to 17% at baseline (n=6).
- 80% of health center providers observed (n=10), correctly practiced AMTSL, compared with 21% at baseline (n=19).
- Providers were given 12 questions to reflect their knowledge about newborn resuscitation; at baseline, the mean score among 7 providers was 55% and at endline, the mean score among 12 providers was 89%.
- 100% of all providers observed (n=22) practiced clean cord care, compared with 68% at baseline (n=25).
- In the baseline survey, four out of six hospital providers observed used the WHO-revised partograph or other partograph and slightly over half of health center staff did as well. In the endline survey, all hospital providers and 90% of health center staff observed used a partograph to monitor labor.

Through the provision of key technical support to Rwanda's MOH to update its national policy for MIP, ACCESS set the stage for large-scale MIP programming in Rwanda. With the MIP policy in place, ACCESS assisted with the adaptation of global FANC/MIP clinical training materials and used these adapted materials to train supervisors and trainers from 25 of Rwanda's 30 districts. These trainers are now training providers at the district level in accordance with Rwanda's MIP action plan.

ACCESS was a major contributor to the revision of *National Maternal Newborn Health Guidelines*, and supported the MOH to develop a national-level EmONC scale-up strategy, adding 20 national-level EmONC trainers to the national training pool. (There were 15 such trainers previously.) ACCESS supported the adaptation of the EmONC training package for use in health centers, and supported the integration of FANC/MIP, EmONC and KMC with one learning resource package for use throughout the country.

Community Health Worker training, Rwanda

Increased Demand for Maternal and Newborn Services

At the community level, ACCESS conducted formative research to identify key characteristics that contribute to successful utilization of services. ACCESS used this study to develop, with key stakeholders, nationally approved BCC messages in ANC and EmONC, as well as CHW training materials and tools. With these materials, ACCESS trained CHWs and service providers to help improve pregnancy outcomes by encouraging pregnant women to access services. ACCESS mobilized religious leaders to advocate for Safe Motherhood, by including faith-based organizations that are involved in community-level activities to foster behavior change among religious congregations.

Improved Management of MNH Services

Currently, KMC is being practiced in eight sites around Rwanda. ACCESS led the establishment of a KMC Center of Excellence at Muhima Hospital, trained a core group of 25 national-level trainers for KMC, and equipped five district hospitals with materials for supporting the KMC units. (ACCESS also trained the providers at three UNICEF- and Twubakane-supported health facilities.) In addition, ACCESS provided these facilities with all of the materials necessary to begin providing KMC services.

Fostered Enabling Environment for Maternal and Newborn Services

ACCESS collaborated with IMA World Health to ship $175,000 in donated medical supplies and equipment, including several hundred kits to assist with safe delivery, to health facilities in Rwanda.

Improved Quality of FANC/MIP and EmONC Services

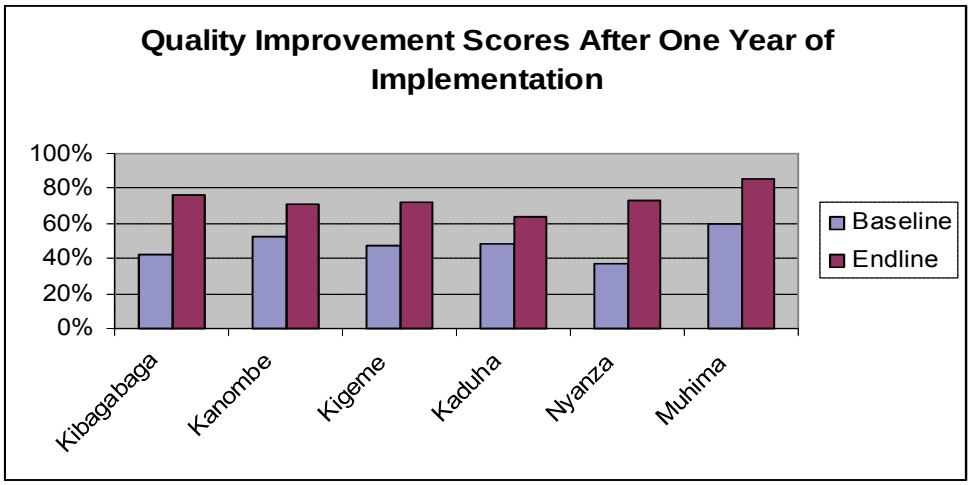
ACCESS increased the capacity of clinicians and health workers to provide MNH services through the application of the SBM-R approach to service quality improvement. Using SBM-R, ACCESS strengthened providers' capacity in EmONC, KMC and FANC/MIP. (See Table 13 below for an overview of all training conducted.)

Table 13: ACCESS Rwanda Program Health Care Providers Trained, 2008 to Date

TRAINING	FANC/ MIP	EmONC/ MNH	KMC	SBM-R	NUMBER TRAINED
Training of trainers from the national level as well as 14 districts	X				244
Clinical training in EmONC for providers in the four focus districts		X			101
Training of trainers for providers from four focus districts and Muhima Hospital in Kigali			X		40
SBM-R training for providers from four focus districts				X	93
CHW national training of trainers for providers and district supervisors from four focus districts	X	X			51
Training religious leaders in Safe Motherhood	X	X			61
TOTAL					590

To reinforce training, ACCESS introduced the SBM-R approach for quality improvement in FANC, EmONC and KMC, and trained providers at six district hospitals. These providers have now begun implementing the necessary changes within their respective facilities to provide high-quality services. Only one year after introduction, general performance improvement scores changed impressively, from 10% to more than 60%. (See Figure 29 on the following page.)

Figure 29: Quality Improvement Scores at Six ACCESS-supported District Hospitals for SBM-R



LESSONS LEARNED AND SUSTAINABILITY

In a decentralized system, involvement of the DHMT from the start is critical to a program's success. Rwanda's MOH requires partners to participate in a joint work planning process that is vetted at all levels. Advocating for activities at the district level and building consensus among district-level stakeholders is key to gaining program support. And partnering with organizations that champion the same goals and approaches to achieve them can lead to scale-up and sustainability.

Piloting new services and demonstrating their success can lead to policy change. For example, ACCESS developed a KMC Center of Excellence and then piloted KMC in select sites, which gained visibility and approval of stakeholders. ACCESS was then involved in drafting the first national KMC policy to promote national scale-up of this life-saving practice.

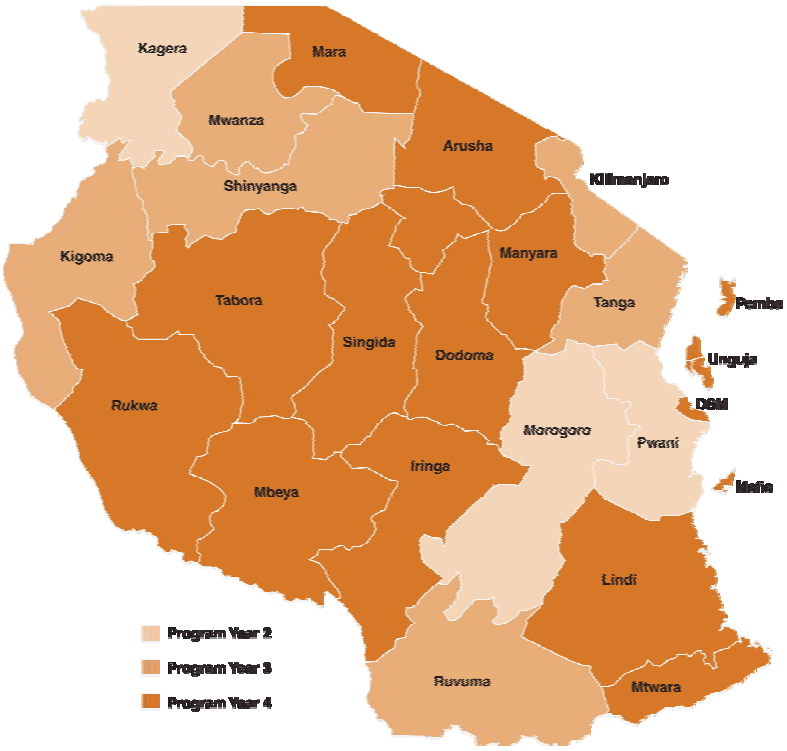
Linking facilities with the communities they serve increases utilization of services. The Program's activities emphasized reaching women and their families through CHWs to increase knowledge of and demand for services, while continuing to support the training of providers and supervisors in high-quality services consistent with Rwanda's policies.

Collaborating with the MOH and building on their strategies is crucial to program success and scalability.

TANZANIA

Strengthened Services and Institutions to Expand Focused Antenatal Care and Address Maternal and Newborn Health and HIV/AIDS

INTRODUCTION



With funding from USAID, ACCESS led efforts to develop and expand focused antenatal care (FANC) as a platform for maternal and child health interventions in Tanzania. Using clinical training, community interventions and advocacy, the Program worked to build the capacity of health providers and facilities, expand community knowledge and use of health services, and increase support at all levels for improving the quality and availability of care for mothers and newborns. ACCESS worked with the Ministry of Health and Social Welfare (MOHSW) to nationally scale up FANC as part of routine maternal and child health services, strengthening pre-service education of health care professionals, as well as in-service training and quality improvement interventions. The Program also worked with the White Ribbon Alliance to advocate for change at a policy level, and supported the Alliance in efforts to bring national awareness to issues such as MIP. ACCESS continues to support the MOHSW by strengthening FANC services, pre-service training institutions, infection prevention practices, and basic EmONC throughout Tanzania under its associate award, the MAISHA Project.

KEY INDICATORS

Infant mortality rate: 58/1,000 (NBS 2007)

Maternal mortality ratio: 578/100,000 (DHS 2005)

Malaria cases annually: >14–18 million (Tanzania PMI MOP 2008)

Percentage who received any SP during an ANC visit: 60% (THMIS 2007–2008)

Percentage who received 2+ doses of SP, at least one during ANC visit: 21.7% (DHS 2005)

Percentage of pregnant women who make at least one visit to an ANC provider during pregnancy: 96.6%

DHS 2005

Because many women visit an ANC provider at least once during their pregnancy, the antenatal period is an ideal time to promote key MNH interventions in a platform of complete, integrated services, including:

- MIP prevention and treatment
- Infection prevention
- Provision of tetanus toxoid (TT)
- Iron/folate supplementation and de-worming with mebendazole to reduce maternal anemia

- Urine testing and taking of blood pressure to identify pre-eclampsia
- Screening and treatment of STIs such as syphilis and HIV

ACCESS also uses these visits to link pregnant women who test positive for HIV with PMTCT services, including referrals for care and treatment.

PROGRAM STRATEGIES AND INTERVENTIONS

ACCESS worked to increase uptake of intermittent preventive treatment (IPTp) with sulfadoxine-pyrimethamine (SP) by improving the quality of ANC services in more than 4,800 government-owned and faith-based health facilities throughout Mainland Tanzania and Zanzibar. Specifically, the Program:

- Strengthened the technical content and overall quality of pre-service nurse-midwifery education by integrating FANC with the curriculum, implementing a quality improvement approach in pre-service institutions and providing state-of-the-art teaching tools.
- Developed training systems for in-service training.
- Improved performance of facility-based ANC providers by introducing an ANC quality improvement approach and strengthening skills of supervisors.
- Increased awareness of and demand for MNH services through advocacy campaigns.
- Strengthened the technical content and overall quality of pre-service medical education in HIV/AIDS.

MAJOR RESULTS

- Contributed to a 50% reduction in stock-out days at sentinel facilities due to national level advocacy efforts.
- Incorporated FANC into the curriculum of all 53 nursing and midwifery training institutions.
- Provided assistance to the MOHSW to develop, produce and disseminate national infection prevention and control guidelines, standards, and an orientation guide to quality improvement of infection prevention and control.
- Introduced a quality improvement process for pre-service education at 24 nurse-midwifery schools.
- Trained 880 in-service clinical trainers in FANC, who are now training other clinicians at their own facilities.
- Trained 4,536 ANC providers (76% nationally) in FANC and quality improvement at 2,633 (55%) facilities.
- Improved capacity of all nursing educational institutions through distribution of and training on teaching tools such as projectors and laptop computers.

RESULTS

Increased Capacity to Provide Prevention and Referral for Care of Malaria during Pregnancy Using the FANC Platform

Through the Program, a total of 4,536 (76%)[66] ANC providers had their knowledge and skills updated in FANC through training. In total, 880 in-service clinical trainers were trained,[67] and 2,633 ANC facilities now have at least one provider trained in FANC. ACCESS held advocacy meetings with high-level district and regional health officials in each region to encourage stakeholder and policymaker support for FANC interventions, and to ensure that funds for ANC interventions are allocated. The Program found that a total of 37 districts (out of 133 nationwide) conducted FANC training with outside sources of funds[68]—primarily by including the training as part of their Comprehensive Council Health Plans. As a result, an additional 845 providers from 559 facilities

[66] Out of an estimated 6,000 reproductive and child health care providers in Tanzania.
[67] 776 are providers from health facilities in all 21 regions plus Zanzibar; 104 are zonal and regional reproductive and child health coordinators from all eight zones in Tanzania.
[68] Donors included UNICEF, UNDP and the Christian Social Services Commission.

received FANC training. In combination with those trained by ACCESS, more than 5,300 providers from 2,942 facilities received FANC updates, representing 61% coverage of all health facilities in Tanzania.

Antenatal care counseling poster.

Increased Coverage of FANC Interventions Nationally

Through training health providers in FANC service provision, ACCESS reached thousands of women with improved malaria prevention interventions. The Program collected data on key FANC indicators on a quarterly basis at 37 health facilities[69] serving as sentinel surveillance sites between January 2007 and October 2009. Regarding MIP, the Program tracked uptake of IPTp1 and IPTp2. Because of the need for repeated visits to achieve IPTp, coverage is best reviewed over a period of time.

Over two years, trends in IPTp uptake at the sentinel facilities have increased to an average of 59% for IPTp1 but decreased to an average of 38% for IPTp2 at the end of the reporting period. ACCESS conducted additional data analysis and a root cause analysis to identify reasons for this decline. (See Lessons Learned section for more information.) Providers trained in FANC also provide a number of other interventions to antenatal clients.

Reduction of Stock-outs

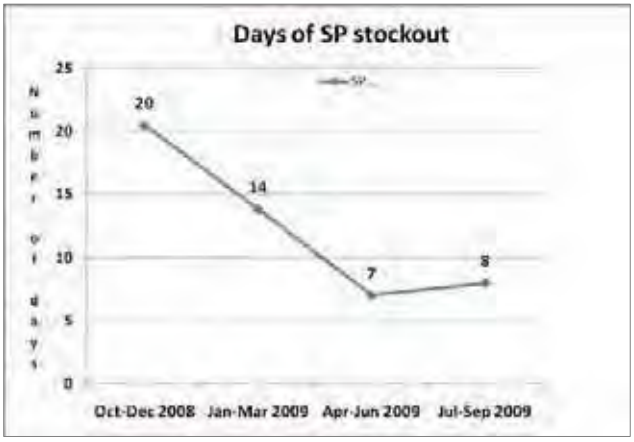
Working closely with the National Malaria Control Program (NMCP) and other partners, ACCESS helped to minimize SP stock-outs in ANC clinics by reporting them and following up with the Medical Stores Department and other stakeholders to address availability. In 2009, 32% of ACCESS sentinel sites experienced stock-outs. ACCESS advocated from the national to the district level for timely ordering of SP as well as for the continuing need for SP for IPTp in light of the switch from SP tow artemisinin-based combination therapies (ACTs) for treatment. As a result, the average number of stock-out days per quarter that a facility experienced decreased by 60% between October through December 2008 and July through September 2009. (See Figure 30 below.)

Although the MOHSW enacted some positive changes, such as the provision of SP free of charge to facilities, challenges still remain in the system. At the start of the program period, facilities were required to purchase SP from Central and Zonal Medical Stores, while facilities can now order SP supplies at no charge. Nevertheless, 26% of ACCESS sentinel site facilities noted that there was at least one occasion during the last year in which they received less SP than they had ordered. Reduction of stock-outs results in increased IPTp uptake as noted in the graphs below.

Despite the positive trends displayed below, poor recording and client overload continue to compromise accurate reporting of IPTp uptake. In a survey at the sentinel site facilities, 16% of ANC providers said they "only sometimes" record IPTp2 and 3% said that they "rarely or never" record IPTp2. When disaggregating by client load, ACCESS found that sites serving fewer clients had much higher rates of IPTp uptake. For example, in facilities serving less than 100 clients per month, overall uptake was 85%, but in facilities serving 2,000 or more clients per month, the uptake was 37%.

[69] ACCESS sentinel sites began with 30 sites in January 2007; an additional seven sites were added in October 2008.

Figure 30: Trend of SP Stock-out during the Period of October 2008 – September 2009: Number of days of stock-outs of SP per Quarter, Data from 37 Sentinel Surveillance Sites



Increased National Awareness of FANC

Through its collaboration with T-MARC Company Ltd., ACCESS integrated FANC messages with the Mama Ushauri radio serial drama, reaching 12 million people annually with accurate FANC information through the storylines. The Program also supported the development of a number of information, education, communication (IEC) materials including fliers for pregnant woman and the community about the importance of ANC and timing of visits, the need for syphilis testing, prevention of malaria and anemia in pregnancy, birth preparedness planning, and promotion of facility delivery. (Currently, 5,000 copies of each flier are being disseminated through the MAISHA Project.) Posters were also developed to promote facility delivery, and ACCESS supported Zanzibar in creating an ANC job aid. In addition, ACCESS supported 26 meetings to sensitize 677 religious leaders on the importance of preventing and treating MIP and on practices that help make motherhood safer.

Celebrating at the 2008 WRATZ White Ribbon Day ceremony, Tanzania

Improved Enabling Environment to Address Safe Motherhood Issues

ACCESS worked with the White Ribbon Alliance Tanzania (WRATZ) to advocate for change at a policy level and to bring national awareness to issues such as MIP. With Program support, WRATZ established a successful annual White Ribbon Day that has been attended by more than 1,000 people each year—including the President of the Republic of Tanzania in March 2008. WRATZ prepared an advocacy package with key, theme-related messages for policymakers, service providers and the community, and disseminated the package to several districts throughout Tanzania. One such package focused on increasing human resources for health at the district level. As a result of this advocacy, during a one-year period from 2006 to 2007, seven dispensaries in Monduli District and 17 dispensaries in Sumbawanga District experienced a 33% increase in health workers. There was also a 50% increase in facility deliveries at these 24 dispensaries.

Working in close collaboration with the MOHSW, ACCESS developed or supported a number of national guidelines, performance standards and learning resource packages, including: the national training package and performance standards; the national infection prevention and control guidelines and accompanying

pocket guide; an orientation guide for quality improvement of infection prevention and control; the *One Plan for Maternal, Newborn and Child Health*; and the *National Road Map Strategic Plan to Accelerate the Reduction of Maternal and Newborn Deaths in Tanzania Mainland and Zanzibar*. ACCESS and the MOHSW also established the Safe Motherhood Working Group to address policy and operational aspects of MNH.

Strengthened Pre-service Nurse-Midwifery and Medical Institutions

The Program assisted the MOHSW to revise the two-year certificate and three-year diploma program in nursing and midwifery, and integrated FANC with the curricula. Additionally, ACCESS supported the training of two tutors and two preceptors at each of the country's 53 pre-service nurse-midwifery schools—representing 100% coverage—from which approximately 6,000 students have graduated since 2006. ACCESS also developed and introduced a quality improvement tool for pre-service education to assess the quality of teaching in nurse-midwifery schools. At baseline, 24 schools reported reaching an average of 58.9% of standards for quality teaching.

The Program worked with Tanzania's five medical schools to strengthen technical content, teaching methods and clinical practice related to HIV/AIDS. Fourteen faculty members representing all five schools were updated on HIV/AIDS and core competencies for HIV/AIDS education. At both the nursing and medical schools, ACCESS supported the procurement and placement of state-of-the-art teaching tools. All schools received projectors and laptop computers following training of a representative from each school on their use. The Program purchased equipment including anatomical models, reference manuals and medical supplies for demonstration skills labs to be set up at 15 nursing schools and five medical schools.

LESSONS LEARNED AND SUSTAINABILITY

In one year, seven dispensaries in Monduli District and 17 dispensaries in Sumbawanga District experienced a 33% increase in health workers, and 24 dispensaries had a 50% increase in facility deliveries.

Support to the MOH and creation of sentinel surveillance sites can help ensure accurate data reporting. The Tanzania Health Management Information System (known as MTUHA) is significantly outdated and does not adequately meet current data needs in areas of FANC, such as IPTp. To address this issue, ACCESS selected 37 sentinel surveillance sites from across the country for quarterly collection of key FANC service statistics. In addition to data collection, ACCESS provided feedback on analysis of data for use in decision-making. At the national level, the Program provided input to the MOHSW in the revision of the MTUHA registers for ANC, as well as labor and delivery and postnatal care. These registers are currently being pre-tested in Dodoma Region for eventual national distribution.

Supportive supervision can help boost low motivation of overburdened health providers. The shortage of health providers in Tanzania remains a barrier to the implementation of high-quality ANC services. In many locations where ACCESS conducted training, there were limited numbers of health workers available to provide FANC services. For health workers trained to remain motivated and continue practicing, it is essential that the Program continue to work with facilities to assess and ensure that supportive supervisory structures are in place.

Use of data and sustained advocacy can help reduce stock-outs. Stock-outs of SP continue to present an obstacle in reaching IPTp targets and improving FANC service provision. ACCESS conducted an analysis of possible underlying causes of such stock-outs and compiled its findings into a report brought to the attention of policymakers and donors. Highlights include:

- **Inaccurate SP forecasts:** The national Medical Stores Division had not accurately forecasted SP needs given the switch to ACTswsww for malaria treatment. This correction was made and additional supplies of SP for the nation were procured. Furthermore, SP was integrated with the essential drug list and a policy was established to allow facilities to receive SP free of charge. Finally, ACCESS integrated aspects of the Integrated Logistics System for ordering essential drugs with its FANC training to ensure that facilities are ordering SP accurately and in a timely manner.
- **Poor recording:** In a separate survey at the sentinel site facilities, 16% of ANC providers said they "only sometimes" record IPTp2 and 3% said that they "rarely or never" record IPTp2. Providers cited the following barriers to good recording: client overload/shortage of staff, no specified space in MTUHA, 6 registers for IPTp, forgetfulness/carelessness, and the burden of having to find return client's name in a separate register.
- **Client overload:** When disaggregating by client load, ACCESS found that sites serving fewer clients had much higher rates of IPTp uptake, skewing results.

Under the MAISHA Project, ACCESS will support facilities to overcome identified challenges and improve provision of IPTp.

Annex D: Table of In-Country Materials and Presentations

All materials for a global audience are available on the ACCESS website, and country materials are available through info@accesstohealth.org.

BANGLADESH

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
MNH Reference Manual for ACs	training	ACCESS counselors/front line behavior change agents	2006
MNH Facilitators Guide	training/counseling	ACCESS core staff	2006
CM Manual	training/supervision	community mobilizers	2006
CKMC Manual	training/supervision	ACCESS counselors and all supervisory staff	2008
TBA Manual	training	traditional birth attendants	2007
Village Doctor's Orientation Guide	training	village doctors	2008
Paramedic Training Manual	training	Paramedics	2008
Flip chart	training/resource tool	pregnant mothers and family members	2007
Pictorial on dangers signs	job aid	pregnant mothers	2007
Birth and Newborn Care Preparedness card	job aid	pregnant mothers and family members	2007
Pictorial on KMC	job aid	pregnant mothers and family members	2008
Pictorial on dangers signs	job aid	traditional Birth attendants	2008
Demonstration doll	training/resource tool	pregnant mothers and family members	2007

ETHIOPIA

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Adapted community action cycle manual	training material	health extension workers	2008
Assessment of community capacity in 12 districts and linkage with health system	survey report	donor and partners including Oromia regional health bureau	2008
Birth preparedness and complication readiness tool	job aids	health extension workers, volunteers and community	2009
Maternal and newborn care tool	job aids	health extension workers, volunteers and community	2009
Misoprostol BCC tool	job aids	health extension workers, volunteers and community	2009
M&E activity report	activity report	donor, Oromia Regional/zonal/ woreda health offices and partners	2009
ACCESS community mobilization report	activity report	donor, Oromia regional/zonal/ woreda health offices and partners	2009
Program brief	activity report	donor, Oromia regional/zonal/ woreda health offices and partners	2009

HSSP

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Quality Assurance Nutrition Standards (English)	standards	healthcare providers	2009
Quality Assurance Mental Health Standards (English/draft)	standards	healthcare providers	2009
PPG newsletter	newsletter	PPG NGOs, MoPH, Partners, and MoWA	2008 – 2009
AMA quarterly newsletter	newsletter	all AMA members, BPHS Implementers, and Midwifery Education Programs	2009
Basic & Advanced Newborn Care LRP	LRP	midwifes, doctors and nurses who are providing care for newborn baby and program people	2008
Condom Use Pictorial Job Aid	job aid	healthcare providers	2009
Family Planning Myths Realities Correction Factsheet (draft)	factsheet	healthcare providers	2009
National Health & Nutrition Communication Strategy (English, Dari)	national strategy	program managers, MoPH, and NGOs	2008
Neonatal Resuscitation	job aid	health workers at BPHS levels and program people	2009
Immediate Care of Newborn after Birth	job aid	health workers at BPHS levels and program people	2009
Tuberculoses (English, Dari)	job aid	health care providers	2009
Action plan for HSSP activities to address gender	action plan	HSSP employees	2008
Gender Training Curriculum (English, Dari, Pashto)	LRP	healthcare providers, NGOs, and health Shuras	2008 – 2009

KENYA

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
PPH and DRH Support Program Documents			
PPH Reference Manual	reference manual	service providers	2008
National RT Cancer Guidelines	guideline	policy makers, managers, and service providers	2009
RT Cancer Prevention and Management Orientation Package	orientation package	policy makers and managers	2009
RT Cancer Prevention and Management Learning Resource Package	learning resource package	service providers	2009
ART Program Documents			
Mentorship (clinical, pharmacy, laboratory and M&E) tools	tools	clinicians, pharmacists, lab technicians etc	2008
HIV mentorship	orientation package	service providers (doctors, clinical officers, nurses, lab techs, pharmacist, M&E) already doing mentorship at their levels	2008
National HIV mentorship guidelines	guidelines	HIV service providers	2008
STI- CCC Integration	orientation package	HIV service providers working at the CCC	2008
FP-CCC Integration	orientation package	HIV service providers working at the CCC	2008
PMTCT Program Documents			
Draft PMTCT National Standards	tool	service providers and supervisors	2008
FANC/MIP Program documents			
Focused Antenatal Care/Malaria in Pregnancy	orientation package	service providers	2007

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
HIV Counseling and Testing (CT) Program Documents			
National Guidelines for HIV Testing and Counseling in Kenya, National AIDS & STI Control Programme	guidelines	healthcare workers	2008
Postnatal Care Family Planning Program Documents			
PPIUCD Learning Resource (trainers, participants and reference manual) Package	learning resource package	service providers	2009
PPIUCD Brochure	IEC	service providers	2009
PPIUCD Job Aid	IEC	service provider	2009
Injection Safety			
Community Infection Prevention Package	orientation package	community health workers and community health education workers	2008
Standards and Guidelines for Injection Safety and Medical Waste Management Orientation Package	orientation package	health workers	2008
WHO/Jhpiego IP Standards Universal Precaution Job Aid	job aid	health workers	2008

MALAWI

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
PQI RH Standards for Health Facilities	training material	Government, RH stakeholders, Service providers	2006
PAC Training Package **1. Teaching Notes** **2. Participants Handbook** **3. Facilitators Handbook**	training material	Service providers	2009
Community Mobilization Manual	training material	HSAs and service providers	2008
KMC Module of Integration RH Training Manual (MOH)	training material	Service Providers	2008
BEmONC Curriculum/Syllabus	curriculum/syllabus	Midwifery tutors, preceptors and students	2009
CMNH IEC materials: **1. Care of the newborn** **2. Nutrition** **3. FANC** **4. Dangers of traditional herbs**	IEC materials	General population	2009
Gestational wheels and MIP job aides	job aids	ANC providers	2009
Ambulatory KMC training material	training material	HSAs and service providers	2009

NEPAL

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Nepal Maternal Mortality and Morbidity study	strategy document	national and international stakeholder	2009
IEC materials for Calcium supplementation for the prevention of PE/E at the community level	packing material, sticker, BPP page, orientation leaflet	pregnant women	2009
		pregnant women	
		Healthcare workers	
		FCHVs	
Job Aids for MgSO4 intervention	flyer A4 Size	healthcare providers	2009
	Flex		
	Diary		
Maternal and Newborn Learning Resource Package (MNC LRP)	trainer notebook, user's guide, participant handbook, CD-ROM (Nepali, English), clinical experience logbook	skilled birth attendants trainers, teachers and students, participants	2007
Maternal and Newborn Care Quality Improvement Tools for Service Delivery and SBA In- service training (English, Nepali, and CD format)	twelve individual tools consistent with MNC LRP, nine tools related to MNC services, three tools related to competency based-SBA training	healthcare providers, skilled birth Attendants	2007
SBA In-service Training Course outline for Staff Nurses (for BEOC-trained participants)	training course outline	BEOC trained nurses	2007
SBA In-service Training Course for ANMs and staff nurses (for MRT-trained participants)	training course outline	MRT trained nurses	2007
SBA In-service Training Course Outline for ANMs and Staff Nurses	training course outline	staff nurses and ANMs	2007

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Utilization of Rural Maternity Delivery Services in Six Districts: A Qualitative Study	qualitative Study	Policy makers, healthcare professional associations, healthcare providers, donors	2007
Introduction of Kangaroo Mother Care (KMC) Services in Nepal	program brief	program managers, donors, healthcare providers	2007
Creating a Maternal and Newborn Care Learning Resource package in Nepal	program brief	program managers, donors	2008
Improving Skilled attendance at the community level in Nepal	program brief	program managers, stakeholders	2007
Strengthening In-service training sites for Skilled Birth Attendants Using Standards in Nepal	program brief	program managers, stakeholders	2007
Providing Care For Low Birth Weight Infants: A community Level Approach in Kanchanpur District, Nepal	program brief	program managers, technical personnel, healthcare providers, donors	2007
National Implementation Guidelines for the Low Birth Weight Neonate Care and Management	guidelines	policy makers	2007
Kangaroo Mother Care (KMC) for Low Birth Weight Babies (LBW)	training guide	healthcare workers	2007
Care of LBW infants	training manual	female community health volunteers	2007

NIGERIA

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Factors enabling and constraining the use of maternal and newborn health services in northern Nigeria: Formative research findings and implications	presentation	American Public Health Association (APHA)	2007
Setting performance standards for emergency obstetric and newborn care in Nigeria	presentation	Society of Gynaecologists and Obstetricians of Nigeria (SOGON)	2007
Strengthening emergency obstetric and newborn care in Nigeria: results from a baseline survey	presentation	Society of Gynaecologists and Obstetricians of Nigeria (SOGON)	2007
Competency-based training for the prevention and management of postpartum haemorrhage	presentation	Society of Gynaecologists and Obstetricians of Nigeria (SOGON)	2007
Prevention of PPH: role of uterotonics	presentation	Society of Gynaecologists and Obstetricians of Nigeria (SOGON)	2007
Criteria based audit for the management of PPH	presentation	Society of Gynaecologists and Obstetricians of Nigeria (SOGON)	2007
Malaria in pregnancy	presentation	Society of Gynaecologists and Obstetricians of Nigeria (SOGON)	2007
Community mobilization for emergency obstetric and newborn care in Northern Nigeria: Successes and challenges	presentation	Public Health Physicians of Nigeria	2008
Using the Standards based management and Recognition Approach to improve the quality of emergency obstetric and newborn care in Nigeria	presentation	Public Health Physicians of Nigeria	2008

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Strengthening monitoring and evaluation systems for emergency obstetric and newborn care in Nigeria	presentation	Public Health Physicians of Nigeria	2008
Strengthening Emergency Obstetric and Newborn Care in Northern Nigeria Through the Household-Hospital Continuum of Care	presentation	US Congress	June-07
Healthcare standards in Nigeria	presentation	Society for Quality in Healthcare in Nigeria	2009
Training community-based providers in maternal and newborn health	presentation	Mini-university: Jhpiego Country Directors'retreat	2009
Kangaroo Mother Care: ACCESS Nigeria Experience	presentation	Paediatric Association of Nigeria (PAN) Conference	2009
Community Empowerment for improved Maternal and Newborn Health Care in Northern Nigeria	presentation	International Conference on Urban Health	2009
Pre-eclampsia and eclampsia	presentation	Mini-university: Jhpiego Country Directors'retreat	2009
Skilled birth attendance: the Nigerian reality	presentation	Nigerian Academy of Science	2009
Mobilizing for Community-Based Maternal and Newborn Care in Nigeria	presentation	Nigerian Society for Neonatal Medicine	2009
The role of coordination for effective collaboration in promoting reproductive health	presentation	MacArthur sub-grantees in Nigeria	2008
Evolution of reproductive health programs in Jhpiego	presentation	GHC 2009	2009

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Mobilizing Communities for Maternal and Newborn Health: A Training Guide for Community Mobilization Teams	training material	community trainers	2007
Mother and Newborn Health Reference Manual for Household Counsellors	training material	household counselors	2007
Training Curriculum for Household Counsellors - Trainer's Guide	training material	community trainers	2007
Birth Spacing through Male Motivators: A participant's Manual	training material	male healthcare providers	2008
Kangaroo Mother Care Training Manual	training materials	clinical trainers	2008
Emergency Obstetric and New Born Care Counseling Flip Chart	job aid	healthcare providers	2008
Counselling Flip Chart for Post Partum Family Planning	job aid	healthcare providers	2009
ACCESS 2 Health Poster	job aid	healthcare providers	?
Postpartum Family Planning	job aid	healthcare providers	2007
Active Management of the Third Stage of Labor	job aid	healthcare providers	?
The ABCCCD of Eclampsia Management	job aid	healthcare providers	2007
Job Aid for Management of Eclampsia	job aid	healthcare providers	2007
Focused Antenatal Care Guide	training materials	healthcare providers	2008
Prevention and management of postpartum haemorrhage	training materials	healthcare providers	2008
Prevention and management of eclampsia	training materials	healthcare providers	2008

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Skills Checklist Antenatal History, Physical Examination and Basic Care	training materials/job aids	healthcare providers	2008
Lactational Amenorrhea Method (LAM): A Family Planning Method for Breastfeeding Women	training materials/job aids	healthcare providers, clients	2009
Malaria During Pregnancy Poster	job aid	healthcare providers	2008
Algorithm for Management of Post-Partum Haemorrhage	job aid	healthcare providers	2007
Required Skills for Management of Post-Partum Haemorrhage	training materials	healthcare providers	2007
Are you pregnant? Promotion of Antenatal Care Poster	behavior change	clients	2009
Help Yourself to Survive Pregnancy and Childbirth Poster	training materials	clients	2009
Performance Standards for Emergency Obstetric and Newborn Care in Nigerian Hospitals	guidelines	policy makers, healthcare providers	2007
Performance Standards for Emergency Obstetric and Newborn Care in Nigerian Primary Health Care Centers	guidelines	policy makers, healthcare providers	2007
Hand hygiene	job aid	healthcare providers	2008
Birth plan card	behavior change	clients	2007
Reducing maternal and Newborn Mirtality in Nigeria: A Quick Reference Guide for Frontline Health Workers	training materials	healthcare providers	2009

RWANDA

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Behave model	document	policy makers, program managers, healthcare providers	2008 - 2009
Adaptation of EmOnC manual	manual	policy makers, program managers, healthcare providers	2008
Adaptation of FANC manual	manual	policy makers, program managers, healthcare providers	2008-2009
Adaptation of KMC training manual	manual	policy makers, program managers, healthcare providers	2008
Rwanda national KMC guidelines	guidelines	policy makers, program managers, healthcare providers	2009
Postpartum counseling cards	cards	community health workers	2009
CHWs training manual	manual	community health workers	2009
CHWs register	register	community health workers	2009
Follow up card for pregnant women	cards	community health workers	2009
Referral sheet for pregnant women	sheet	community Health Workers	2009
Referral sheet for newborns	sheet	community health workers	2009
Christian and Muslim Sermon Guide to Promote Maternal and Infant Health	manual	religious leaders	2009
FANC job aid for providers	poster	healthcare providers	2009

SOUTH AFRICA

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Training Information Monitoring System (TIMS) – A tool for bridging training GAPS	workshop presentation	KZN HIV AIDS Comprehensive Care, Management & Treatment summit	2009
TB Screening	monthly staff presentation	Jhpiego Program managers, Jhpiego staff members	2009
VIA / Cryotherapy in N W Province, South Africa	training presentation	Dr. Kenneth Kaunda district policy makers and facility/sub-district/district health managers	2009
Cervical cancer screening using the Single Visit Approach through Visual Inspection with Acetic Acid (VIA) and treatment with Cryotherapy in the North West Province	workshop briefing presentation	US embassy staff, MCHIM affiliates and other PEPFAR funded organizations	2009
Jhpiego COP Indicators FY 2008 M & E Reportable indicators dashboard	monthly internal reporting tool	Jhpiego program managers, Jhpiego staff members	2009
Biomedical prevention of HIV: Male circumcision in South Africa	workshop briefing presentation	US embassy staff, MCHIM affiliates and other PEPFAR funded organizations	2009
MCHIP Programmes	briefer	Jhpiego staff and Jhpiego-SA Program managers	2009
Reducing maternal and child mortality through strengthening the PMTCT programme	workshop briefing presentation	US embassy staff, MCHIM affiliates and other PEPFAR funded organizations	2009

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Prevention of Mother-to-Child Transmission (PMTCT) Situational Analysis in Ventersdorp and Maquassi Hills Sub-districts	training workshop	District management TEAM of Kenneth Kaunda district (policy implementers and program managers)	2009
Jhpiego-Siyazi HIV counselling and Testing Project	poster presentation	US embassy staff, MCHIM affiliates and other PEPFAR funded organizations	2009
Improved Program Design, Implementation & Reporting Tools: Logical Framework Analysis - LFA	briefer	Jhpiego Program managers, Jhpiego staff members	2009
TIMS	briefer	Jhpiego program managers, Jhpiego staff members	2009

TANZANIA

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Anaemia Supplement	report	policy makers	2009
Assessment of MIPESA Country Experiences in the Adoption and Implementation of Malaria in Pregnancy Policies	report	stakeholders	2006
Core Competencies for Medical Officers for Comprehensive HIV/AIDS services in Tanzania	guide	medical Schools, stakeholders	2009
Delivering Malaria in Pregnancy Services in Tanzanian Communities	presentation	GHC Annual Conference	2008
Facilitator's Guide for Training Focused Antenatal Care Malaria and Syphilis in Pregnancy	training guide	trainers	2008
Focused antenatal care Malaria and Syphilis in Pregnancy National Advocacy Guide	policy document	policy makers, program managers, healthcare providers	2007
Focused Antenatal Care Malaria and Syphilis in Pregnancy: Antenatal Care Quality Improvement Tool	tool	HCWs	2008
Focused Antenatal Care: Malaria and Syphilis in Pregnancy- Learner's Guide for ANC Service Providers and Supervisors	training guide	service providers, supervisors	2007
For Good Health - Test For Syphilis	brochure	clients	2008
From Policy to Practice: A Quality Improvement Approach Improves Antenatal Care Services in Tanzania	presentation	APHA conference	2007
Improving quality of ANC services at health facilities in Tanzania	presentation	Arusha conference	2007
Increasing Uptake of IPTp Through Scaling Up FANC	brief	website visitors	2007
National Infection Prevent Control Guidelines	printed guidelines	healthcare providers	2007
National Infection Prevention and Control Guidelines for Healthcare Services in Tanzania: Pocket Guide For Health Care Workers	reference guide	healthcare providers	2007
National Road Map Strategic Plan to Accelerate the Reduction of Maternal and Newborn Deaths in Tanzania Mainland and Zanzibar	policy document	policy makers	2008

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Nutritional counseling for Pregnant Women in Tanzania	presentation	providers	2008
Pre Service Education Quality Improvement tool for Nursing and Midwifery Programmes in Tanzania	tool	nursing school administrators	2007
Pre Service Learning Resource Package for FANC	training guide	nursing and medical school administrators and students	2008
PSE Medical School Needs Assessment Report	report	medical schools	2009
Results of applying an antenatal care quality improvement approach to IPT in Tanzania from 2004 through 2006	presentation	AMANET Conference	2007
Save Lives: Go for ANC Services as soon as you recognize you are pregnant	brochure	clients	2008
Save Lives: Prevent Anaemia in Pregnancy	brochure	clients	2008
Save Lives: Prevent Malaria in Pregnancy	brochure	clients	2008
Scaling Up IPTp Using the Platform of Focused ANC: ACCESS Program in Tanzania: June 2004 to May 2007	presentation	malaria and IMCI conference	2007
Status of Tanzania Mainland Malaria in Pregnancy Program	presentation	MIPESA conference	2008
Stockouts of SP for IPTp in Tanzania: Results from Mini-Audit	report	policy makers, MCP	2008
Supporting the Tanzania MoHSW to Scale Up Focused Antenatal Care Nationwide	presentation	press club	2008
Tanzania ACCESS Country Brief	brief	general	2009
The One Plan for Maternal, Newborn and Child Health	policy document	policy makers	2008
Training Module on Nutritional Counseling for Pregnant Women in Tanzania	training guide	providers	2008
Training Needs Assessment in Nutrition and Care During Pregnancy for Antenatal Care Providers	report	policy makers	2007
Using Sentinel Site Surveillance to Monitor Prevention of Malaria in Pregnancy Services in Tanzania	presentation	GHC Annual Conference	2009

DOCUMENT TITLE	TYPE OF RESOURCE	TARGET AUDIENCE	YEAR
Where did they go? Following nursing and midwifery graduates in Tanzania	presentation	World Bank HRH Conference	2008
Whole-site Infection Prevention and Control Orientation Guide	training guide	healthcare providers	2009

Annex F: Associate Awards[78]

ACCESS/CAMBODIA

ACCESS/Cambodia is a $1.8 million project (December 15, 2006 - December 30, 2009) that aims to improve the availability of and access to high-quality, sustainable maternal and newborn health services. ACCESS/Cambodia works with the Cambodia Ministry of Health, USAID and their local partners, and key stakeholders to: strengthen maternal and newborn health policies and programs to reduce maternal and neonatal mortality; improve the capacity of the Cambodian government to increase access to skilled providers; and expand essential maternal and newborn care interventions through existing health services. The project is primarily focused at the national level; however, through strong collaboration with seven local partners, the integrated postpartum/postnatal care package pilot was field tested in 80 health facilities in 12 operational districts in seven provinces.

Major results include:

- Conducted a national survey to determine how AMTSL and management of eclampsia are practiced in Cambodia and identify key areas for improvement. In the 30 health facilities selected, 141 vaginal deliveries were observed and structured interviews were conducted with facility staff and new mothers. Results indicated the nationally representative percentage for AMTSL use among public facilities with 400 or more annual deliveries is 17.1%. No facility adhered to correct eclampsia practice according to international standards. Results led to an agreement by the MOH to revise the national safe motherhood polices for prevention of PPH and management of eclampsia to align with WHO recommendations and international standards.
- Led a coalition of seven partners to develop, field test, and finalize a national integrated postpartum/postanatal care in-service training package. Through this pilot, 335 midwives and 23 trainers were trained, including members from the NRHP training unit and provincial level trainers. Results from the field test indicated an overall trend toward improvement in PNC visits for mothers and babies, particularly within the first 24 hours of delivery. Target behaviors by pregnant women, mothers and newborns increased, such as coverage of Vitamin A (58% to 77%) and iron (57% to 75%) for mothers and immunizations (38% to 59% for Hepatitis B vaccination) and skin-to-skin care (32% to 42%) for babies. Contents of the package have been reflected in the recently revised national safe motherhood protocols.
- Reviewed all current midwifery in-service training packages in Cambodia and provided the MOH with a detailed assessment and an evidence-based plan to develop a single, cohesive, modular package that adheres to the national safe motherhood protocols.

ACCESS-FP

Initiated September 25, 2005, ACCESS-FP is an associate to the ACCESS Leader Program. It is a five year award with a total of $17,217,000 obligated—$8,252,000 core and $8,965,000 field for eight countries—as of September 2009. The goal of ACCESS-FP is to reduce unmet need for family planning (FP) among postpartum women by strengthening FP in maternal, neonatal, and child health service delivery programs. Specifically, the program aims to:

1. Test alternative service delivery approaches to expand contraceptive options and increase the use of modern FP methods among postpartum women;
2. Improve use of the lactational amenorrhea method (LAM) and the transition to longer-term modern contraceptive methods;

[78] ACCESS activities continued through Associate Awards and MCHIP.

3. Promote healthy timing and spacing of pregnancy; and
4. Identify targets of opportunity to strengthen FP in maternal, neonatal, and child health programs.

Major Results Include:

- Created the term "PPFP" and crafted a working definition and strategy for addressing this significant gap at country level.
- Innovated application of DHS data for women in first year postpartum. Developed PPFP profiles for 17 countries (including 13 PRH priority countries) as well as synthesis of findings.
- Operationalized and tested integrated models of PPFP including postnatal care and FP in Kenya and community-based newborn care and FP in Bangladesh with research partners.
- Revitalized LAM with an emphasis on transition; pushed the field forward in thinking about transition from LAM to other methods through barrier analysis in three countries; harmonized integration strategies by promoting exclusive breastfeeding linked to LAM promotion. Complementary training package for LAM transition developed and disseminated.
- Revitalized PPIUCDs, leading integration with delivery care including AMSTL and midwives role in providing services; created country-level champions in India and Kenya in PPIUCD; In Kenya, 355 postpartum women received PPIUCD since October 2008 and ACCESS-FP is currently carrying out a follow-up survey of 49 providers and client satisfaction among 120 PPIUCD clients post-insertion and at six months.
- Established and led on-line PPFP community of practice through the IBP website. The PPFP community of practice has over 700 members and on line discussions with experts from a variety of organizations and projects are hosted three-times a year.
- Led and hosted three global PPFP technical meetings to facilitate learning and exchange in PPFP advocacy and programming. The last meeting in May 2009 convened 76 experts and learners in FP and MNCH from 22 organizations.
- Prepared global tools for PPFP including provider learning resource package, PPFP message guide, and community health worker learning training package for low literacy workers. Developed e-learning course for PPFP and PPFP toolkit website.
- Led and evaluated an application of systematic screening for breastfeeding and amenorrheic women in two hospital sites in Northern Nigeria.
- Introduced PPFP concepts and operationalized programs in ten countries, Afghanistan, Albania, Bangladesh, Burkina Faso, Guinea, Haiti, India, Kenya, Nigeria and Tanzania.
- Introduced PPFP concepts in Rwanda, Ghana and Mali for program application by other partners.
- Trained 1,116 service providers in Albania, Bangladesh, Burkina Faso, Guinea, Haiti Kenya and Uganda in areas of LAM, PPFP, PNC, EmONC/FP, PAFP or PPIUCD. In addition, 51 service providers were trained in Nigeria (also reported under ACCESS).
- Trained 937 community health workers Bangladesh, Burkina Faso, Guinea, Haiti Kenya and Uganda in PPFP; and 384 in Nigeria (also reported under ACCESS).
- Counseled 199,262 clients attending essential MNCH services for integrated family planning services in Albania, Bangladesh, Kenya and Nigeria.

HSSP INFO FOR ACCESS REPORT

The Health Services Support Project (HSSP)—which runs July 2006 to November 2011—is a $57 million project that focuses on improving the delivery of high-quality health care services in health facilities across 13 (soon to be 17) provinces in Afghanistan. The HSSP strategic framework aims to develop stronger health systems, increase access to high-quality services at the primary and secondary health facility levels, increase capacity of the MoPH to design and implement effective and research-based behavior change communication programs, and increase community involvement in the protection and promotion of health. The cornerstone of HSSP is strong partnerships with the MoPH and NGOs implementing the BPHS. Gender is a key area that cuts across all activities, such as quality improvement, behavior change, and capacity building. HSSP has achieved significant results to date. Specifically, HSSP has

- Developed national quality assurance standards for 14 priority areas of the BPHS to improve health service delivery.
- Awarded 11 midwifery education grants to support the training of midwives. To date, 462 midwives have graduated from HSSP-supported hospital midwifery and community midwifery education programs.
- Supported the National Midwifery Education Accreditation Board to accredit 21 of the 27 midwifery education programs. This represents 78% of the total number of midwifery programs in the country.
- Trained 5,267 participants from NGOs, health facilities and the MoPH on subjects including basic emergency obstetric care, rational use of drugs, effective teaching skills, and behavior change and communication. Trainings target specific needs identified by the MoPH and the NGOs.

TANZANIA-MAISHA

The MAISHA (Mothers and Infants Safe, Healthy and Alive) program, which runs from October 2008 until September 2013, is a $40 million project focusing delivering critical, evidence-based health interventions on a national scale to reduce maternal and newborn morbidity and mortality. As such, the MAISHA program is building local and national human and material capacity to address the following objectives:

- Reduction of maternal mortality due to major direct causes of mortality;
- Reduction of newborn mortality due to infection, hypothermia and asphyxia through immediate newborn care;
- Reduction of low birth weight, stillbirth and newborn mortality due to malaria and congenital syphilis; and
- Reduction of transmission of HIV infection from mother to child and increase of HIV free survival.

MAISHA has Achieved the Following Results to Date:

- Trained 1,425 additional providers in FANC/MIP/SIP on mainland and 123 on Zanzibar—equaling, on mainland, a cumulative total of 4,536 providers trained out of an estimated 6,000 reproductive health providers in FANC/MIP/SIP, and 123 on Zanzibar. In addition, through advocacy under ACCESS and MAISHA, an additional 845 providers were trained on mainland with district support between July 2008 and June 2009, for a cumulative total of 5,381 providers trained on mainland.
- Covered an additional 1,102 FANC facilities with a trained provider, equaling a cumulative total of 2,633 FANC facilities (54% coverage of all FANC facilities). In addition, 845 providers trained with district support represent an additional 309 facilities, for a total of 2,942 facilities with a FANC trained provider (60% coverage). On Zanzibar, 83 facilities have been covered to date through MAISHA-supported FANC training.
- Trained 30 service providers in BEmONC.

- Prepared 15 national KMC trainers to conduct KMC training.
- Trained 20 providers in KMC through transfer training.
- Established KMC services at regional hospital in Mtwara.
- Trained 19 regional RCH coordinators in facilitative supervision and use of FANC performance standards.
- Provided 15 facilities with initial supplies for strengthening BEmONC service delivery.
- Noted decreases in stockouts of SP, mebendazole and oxytocin.

KENYA-UZIMA

ACCESS-Uzima, a $9,000,000 associate cooperative agreement of the ACCESS Program, ran from March 2009 to March 08, 2012. The program coverage is national and provincial mandated to improve maternal, newborn, reproductive health and HIV outcomes. The program aimed to: provide direct support to the ministries of health at central level, mainly the Division of Reproductive Health and NASCOP; strengthen central and provincial MOH capacity to rollout priority interventions; introduce key technical areas to enhance existing programs that directly impact services throughout the country; and collaborate with APHIA II partners and other stakeholders to enhance and expand implementation efforts.

Major Results Include:

- Trained 1,224 participants (service providers and supervisors) from the Ministry of Health and others, such as Community Health Workers (CHWs), to scale up high-impact interventions and increase utilization of family planning, reproductive health and HIV services in various program areas: PMTCT (74); ART and Clinical PwP (1,012); PITC (60); and PNC-FP/PPIUCD (78).
- Printed several documents: The RCO curriculum (20); FANC/MIP training packages (3,000); FP/HIV Orientation Packages (700); STI/HIV Orientation Packages (700); clinical mentorship guidelines (200); and the PPIUCD Learning Resource Package (300). The PNC-FP Orientation Package was also updated and printed. ACCESS-Uzima supported the revision of the Clinical Officers pre-service curriculum to strengthen Prevention and Treatment of Malaria in Pregnancy and the Performance Standards and Assessment Tool for PMTCT in Kenya.
- Supported the Division of Reproductive Health to conduct quarterly supportive supervision visits to all provinces. ACCESS-Uzima also supported four provincial general hospitals to provide HIV treatment to eligible pregnant women at the MCH clinic and to improve the quality of PMTCT care at eight provincial general hospitals through implementation of service standards using the SBM-R approach. ACCESS-Uzima supported several stakeholder, advocacy and mobilization meetings in all program areas in order to build consensus and get stakeholders buy-in.