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PROJECTS IN PROGRESS

Global/Multi-Country

Technical Assistance, Support and Capacity-Building for High-Burden Countries

(Johnson & Johnson: 2012-2013)

In December 2012, Johnson & Johnson awarded EGPAF a grant in support of a technical assistance project with three objectives: (1) providing technical assistance to high-burden countries for planning, designing, implementing, problem-solving and evaluating pediatric HIV elimination efforts; (2) promoting coordination of EGPAF's technical support for countries within the Interagency Technical Team, and maximizing impact by disseminating knowledge gained from these activities; and (3) building EGPAF's staff and institutional capacity for providing technical assistance.

Strengthening the Monitoring and Evaluation of Prevention of Mother-to-Child Transmission of HIV Programs

(UNICEF: 2011–2013)

With support from UNICEF, EGPAF is providing targeted technical assistance to improve systems for monitoring and evaluation (M&E) of prevention of mother-to-child transmission of HIV (PMTCT) programs in Cameroon, Lesotho, and Zambia.

A Secondary Analysis of Retention across the PMTCT Cascade in Selected Countries Implementing the Various Guidelines (Kenya: Option A; Swaziland: Option A; Rwanda: Option B; Malawi: Option B+)

(USAID/Population Council: 2011–2014)

This PEPFAR-funded HIVCORE study is a retrospective cohort analysis of mother-infant pair retention in prevention of mother-to-child transmission of HIV (PMTCT) services from antenatal clinic through 18 months postpartum in four selected EGPAF-supported country programs that are implementing Option A, Option B, or Option B+ for PMTCT. The study is being conducted in selected urban, semi-urban, and rural facilities in Malawi, Rwanda, Kenya, and Swaziland. The primary objectives of the study are to determine:

- What are the levels of retention 30 days after entry into the PMTCT program, at delivery, six weeks, two months (60 days), three months (90 days), six months, and 12 months post-delivery among women and infants on Option A and on Option B/B+?
- How do the levels of retention vary by facility characteristics such as type of facility, higher versus lower volume PMTCT facility, rural/urban facility, and presence and type of follow-up (active/passive) among women and infants on Option A and on Option B/B+?



- How do the levels of retention vary by demographic and clinical characteristics among women and infants on Option A and on Option B/B+?
- What are the most modifiable characteristics associated with retention in Option A and in Option B/B+ sites?

Expediting Access to Antiretroviral Treatment for more Infants and Young Children

(ViiV Healthcare: 2010 – 2013)

This project, launched in 11 countries, sought to expedite access to testing, care, and antiretroviral treatment (ART) for infants and young children. This partnership enabled EGPAF to fill critical gaps that limit access by focusing on three key objectives:

- Increase early detection and initiation of ART for HIV-positive infants and young children
- Strengthen government leadership
- Use strategic information to understand what works, and to apply this understanding to improve programs

By project end, there were significant improvements in key indicators, including more HIV-exposed infants tested within eight weeks of birth; more HIV-exposed infants that tested positive receiving their results within eight weeks of testing; and more HIV-exposed infants and young children (IYC) that tested positive being initiated on ART. In addition, linkages between health facilities and communities were strengthened via new partnerships with community-based organizations and the engagement of village health workers. Technical advocacy aimed at addressing barriers to testing and treating IYC was successful in a number of areas, including the ability for nurses to prescribe ART. Also, 40 HIV/AIDS Technical Leaders from 16 countries were provided critical training on how to implement the new WHO Guidelines on Pediatric ART.

Advancing Community-Level Action for Improving MCH/PMTCT (ACCLAIM) Program

(Canadian International Development Agency: 2012–2016)

The goal of this project is to increase community demand for, uptake of, and retention in maternal and child health (MCH)/prevention of mother-to-child transmission of HIV (PMTCT) services to improve country progress toward elimination of pediatric HIV/AIDS. This will be achieved through the following objectives:

- Improving key HIV, MCH, and gender-related health behaviors through the implementation of community-based interventions that target changes in community norms and attitudes, thereby increasing the number of pregnant women accessing and completing the sequence of PMTCT services
- Assessing the behavioral and operational outcomes of selected community-based interventions and determine their relative effectiveness through strategic evaluation and operations research

- Documenting and disseminating research results, tools developed, and lessons learned to facilitate widespread expansion of community engagement activities found to be effective

Cameroon

The HIV-Free Cameroon Project: Expanding Coverage and Improving the Quality of Facility and Community-Based Prevention of Mother-to-Child Transmission of HIV Programs in the North West and South West Regions of Cameroon under the U.S. President’s Emergency Plan for AIDS Relief

(CDC/CBCHS: 2011–2016)

Throughout this five-year CDC/PEPFAR-funded project, Cameroon Baptist Convention Health Services (CBCHS) will collaborate with the Cameroon Ministry of Public Health, EGPAF, the Clinton Health Access Initiative (CHAI), and community-based partners to expand prevention of mother-to-child transmission of HIV (PMTCT) services, increase the HIV-free survival of infants, and reduce HIV-related morbidity and mortality of families in all 17 districts of the South West Region and 18 districts of the North West Region. EGPAF will focus on the provision of targeted technical assistance to CBCHS in the areas of:

- PMTCT implementation
- Monitoring and evaluation
- Communications and documentation
- Training and technical assistance for project start-up
- Operations (including agreement management)
- Capacity building/sustainability/transition to the Ministry of Public Health

Strengthening the Monitoring and Evaluation of Prevention of Mother-to-Child Transmission of HIV Programs

(UNICEF: 2011–2013)

With support from UNICEF, EGPAF is providing targeted technical assistance to improve systems for monitoring and evaluation (M&E) of prevention of mother-to-child transmission of HIV (PMTCT) programs in Cameroon, Lesotho, and Zambia. In Cameroon, EGPAF will continue to support the Ministry of Health in implementing and training health care staff on the country's revised PMTCT guidelines, including finalizing data collection tools and registers as well as revising PMTCT and maternal, neonatal, and child health integrated program indicators. EGPAF also is playing a key role in providing technical support in the implementation of M&E-related components of Cameroon’s elimination of mother-to-child-transmission (eMTCT) plan.

Côte d'Ivoire

Strengthening Community-Based HIV/AIDS Prevention and Care Services in the Underserved Northern and Western Regions of the Republic of Côte d'Ivoire

(CDC/PEPFAR: 2010–2015)

Project Keneya is a community-based project, the primary goal of which is to strengthen HIV/AIDS prevention and care services. It was designed as a response to the needs of orphans and vulnerable children (OVC), families and caretakers of OVC, and people living with HIV in the Vallee de Bandama and Savanes Regions of Côte d'Ivoire. The project has four key areas:

- "Abstinence/be faithful" prevention messaging
- Care and support for people living with HIV
- OVC identification, assessment and support
- Voluntary counseling and testing (VCT)

HIV Care, Support & Treatment: Implementation of Program for the Care of HIV/AIDS

(CDC/PEPFAR: 2011–2016)

The primary goal of Project Djidja is to build a strong and sustainable response to the HIV/AIDS epidemic in selected regions of Côte d'Ivoire. Project Djidja's service delivery components are currently offered in five regions: Gbêkê, Hambol, Bélier, Sud-Comoé, and Abidjan 2. EGPAF is working with government and community partners to build their technical and organizational capacity to carry out and supervise HIV activities in preparation for the full transition of HIV prevention, care and treatment services to Ivorian institutions.

Democratic Republic of Congo

Providing a Comprehensive Continuum of Care and Treatment Services in the DRC – The Malamu Project

(CDC/PEPFAR: 2011–2016)

Project Malamu is taking a comprehensive approach to providing coverage and improving the continuum of care for HIV services in Kinshasa and Katanga Provinces over the span of five years. In year one, the project focused on providing prevention of mother-to-child transmission of HIV (PMTCT) services in Kinshasa and Lubumbashi, including syphilis testing, screening for sexual and gender-based violence, and male involvement activities. In year two, the project is incorporating tuberculosis (TB) co-infection services and adding support to pediatric care and treatment sites. Ultimately, Project Malamu will increase the quality and coverage of services in facility and community settings while focusing on local ownership and sustainable approaches. This will be accomplished through key strategies that will ensure that goals and objectives are achieved in an efficient, effective, and sustainable manner. Sustainability and local ownership

of activities to ensure lasting effects beyond the life of the project are at the core of the project's design, and have been strategically incorporated into project activities.

ProVIC Integrated HIV/AIDS Project in the Democratic Republic of Congo (Projet Intégré de VIH/SIDA au Congo)

(USAID/PATH: 2009–2014)

ProVIC's mission is to reduce the incidence and prevalence of HIV and to mitigate its impact on people living with HIV/AIDS and their families in the five provinces where the project operates (Bas Congo, Katanga, Kinshasa, Province Orientale, and Sud Kivu). By integrating comprehensive HIV/AIDS services into local health systems, ProVIC seeks to foster engaged, active "Champion Communities" that are ultimately responsible for their own futures.

ProVIC is led by PATH, and is made up of Chemonics International, the International HIV/AIDS Alliance, and EGPAF. EGPAF is responsible for the prevention of mother-to-child transmission of HIV (PMTCT) and early infant diagnosis components of ProVIC. In 2010, EGPAF established a network to provide early infant diagnosis services to HIV-exposed infants in catchment areas surrounding urban ProVIC. Since DNA/PCR testing became available in DRC in mid-2010, EGPAF has led the way in the collection, transportation, and return of infant testing results.

India

Healthy Mothers, Healthy Babies: Improving the Health of Pregnant Women, HIV-Positive Mothers, and Their Babies

(MAC AIDS: 2012–2013)

Under this project, EGPAF and our partner Solidarity and Action Against the HIV Infection in India (SAATHII) are expanding the public-private partnership model to other districts in Andhra Pradesh in order to provide 100% coverage at all prevention of mother-to-child transmission of HIV (PMTCT) sites. SAATHII is providing technical and implementation assistance to the Andhra Pradesh State AIDS Control Society (APSACS) to establish Integrated Counseling and Testing Centers in private hospitals. The program provides comprehensive and quality PMTCT services to HIV-positive pregnant women in line with national guidelines, and develops strategies to increase the follow-up of mother-baby pairs. SAATHII also works with various governmental entities, such as the National AIDS Control Organization and the State AIDS Control Societies, to elevate the elimination of pediatric HIV agenda.

Kenya

Technical Assistance and Capacity Building to Support Local and Indigenous Organizations Providing HIV Prevention, Care and Treatment (Tunaweza Project)

(CDC/PEPFAR: 2009–2014)

Funded by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), the Tunaweza Project supports HIV/AIDS prevention, care, and treatment activities of local organizations by providing organizational and systems strengthening through training and mentorship, expansion of technical capacity for evidenced-based HIV/AIDS programming, and performance-based contracting to deliver multiple prevention, care, and treatment services to target populations. Specifically, EGPAF is implementing activities aimed at strengthening the management, technical, and leadership capacity of 32 local organizations to accelerate service delivery coverage at the community level, and to improve quality and comprehensiveness of the package prevention, care, and treatment services offered.

Additionally, the project provides capacity building assistance to the Government of Kenya and HIV Prevention partners at the national level on the design and implementation roll-out of Prevention with Positives (PwP) activities and evidence-informed bio-behavioral interventions for the prevention of HIV. Tunaweza’s programmatic areas of focus include:

- Abstinence and being faithful
- Prevention of mother-to-child transmission of HIV (PMTCT)
- Counseling and testing
- Palliative care
- Antiretroviral therapy and HIV care for adults and pediatrics, orphans, and vulnerable children
- Tuberculosis and HIV
- Prevention with Positives
- Policy and health systems strengthening

Supporting the Implementation and Expansion of High Quality HIV Prevention, Care and Treatment (Pamoja Project)

(CDC/PEPFAR: 2010–2015)

The overall goal of the CDC-funded Pamoja Project is to increase use of high-quality, comprehensive HIV services in several counties in Nyanza Province, a region with the highest HIV burden in Kenya. The Pamoja Project’s strategic objectives are to:

- Increase availability of high quality, comprehensive HIV services

- Increase community capacity to support use of high-quality, comprehensive HIV services
- Increase capacity of district-level organizations to direct, manage, and implement high quality, comprehensive HIV services

To achieve these objectives, the project addresses seven critical areas of technical intervention: prevention of mother-to-child transmission (PMTCT), provider-initiated testing and counseling (PITC), adult and pediatric HIV basic care and support, adult and pediatric treatment, and TB/HIV, with Prevention with Positives (PwP) as a cross-cutting element.

APHIAplus: Western and Nyanza Province

(USAID/PATH: 2011–2015)

APHIAplus Western is a five-year, USAID/PEPFAR-funded project implemented by a consortium led by PATH and including the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), Jhpiego, World Vision, and BroadReach Healthcare. The project is designed to work within existing health management structures and build capacity at the county, sub-country, facility, and community levels to achieve fully integrated service delivery in counties located in Nyanza and Western Province. EGPAF's principal contribution to the project is in the provision of technical expertise in preventive care and treatment services for children and families, particularly prevention of mother-to-child transmission of HIV (PMTCT), pediatric HIV/AIDS, and antiretroviral therapy (ART) service delivery.

Mobile Phone Technology for Prevention of Mother-to-Child Transmission of HIV

(WHO: 2011–2014)

Effective implementation of prevention of mother-to-child transmission of HIV (PMTCT) strategies has resulted in the virtual elimination of pediatric HIV in resource-rich settings. Weak health systems and inadequate health infrastructures impede universal provision of PMTCT services in sub-Saharan Africa. Transportation challenges and costs further influence individuals' decisions to access static health facilities, and are often cited causes for suboptimal retention in HIV treatment programs. Mobile outreach clinical services bring medical services into the community, and are currently being implemented to improve uptake of basic (standard) maternal child health services.

This study intends to compare the impact of provision of standard mobile outreach clinical services to the provision of enhanced mobile outreach clinical services that includes point-of-care CD4 testing and use of short message system (SMS) mobile phone technology to improve turnaround times in infant HIV DNA PCR test results. The enhanced mobile outreach clinical service also will introduce the use of existing community health workers to create demand for outreach services; mobilize pregnant women to access antenatal clinic (ANC) services; and support referrals and linkages between mobile units and static facilities. Proposed measurements include the effect of the intervention on decreasing the gestational age at the first ANC visit; retention of mothers and infants in care; and uptake of critical health care

services including immunizations, laboratory testing, and antiretroviral (ARV) prophylaxis and treatment (ART). The study will determine whether the enhanced mobile outreach services result in increased administration of appropriate antiretrovirals to HIV-positive women, and whether more HIV-positive infants gain access to life-saving treatment. Costs associated with the standard and enhanced mobile outreach clinical services will be determined, and along with the measured differential effect on selected outcomes, will be useful in guiding policy regarding the optimal scope of mobile outreach clinical service delivery.

Provision of Technical Assistance, Financial Support, and Capacity Building for HIV Prevention, Care and Treatment for members of the Non-Military Uniformed Services of Kenya under PEPFAR

(CDC/PATH: 2009–2014)

With funding from the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), EGPAF partners with PATH to expand access to HIV/AIDS services for members of the non-military uniformed services (the Kenya Wildlife Services, the National Youth Service, the Administration Police, and the Kenya Police) and their families through the AIDS Response in Forces in Uniform (ARIFU) project. By providing technical assistance, capacity building, and financial and logistical support to non-military uniformed services staff, EGPAF is a key partner in supporting improved and expanded HIV prevention, care, and treatment services within the non-military uniformed services health facilities.

Nakinae Akiyar Project

(ViiV Healthcare: 2011–2014)

With funding from ViiV Healthcare’s The Positive Action for Children Fund, the Nakinae Akiyar project proposes to reduce loss to follow-up in prevention of mother-to-child transmission of HIV (PMTCT) for a mother/infant pair, and to increase uptake of early infant diagnosis (EID) by implementing appropriately designed, community-driven interventions that effectively engage people living with HIV/AIDS and existing community health structures, and generate evidence to address the specific challenges of Turkana Central, a traditionally underserved area populated by nomadic communities in northwestern Kenya. Key elements of this program include promoting health-seeking behaviors, continuous engagement with communities and other local stakeholders, and working within existing health structures.

Maisha Program Phase II

(UNICEF: 2011–2013)

The Government of Kenya, UNICEF, EGPAF, and other organizations have partnered to implement the Maisha MTCT-free Zone Initiative as part of Kenya’s National AIDS Strategic Plan III 2008 – 2013 to scale up prevention of mother-to-child transmission of HIV (PMTCT) services to 90% of all public sector facilities, reach 1,398,000 women with PMTCT services, and ensure that at least 80% of pregnant women testing positive for HIV receive antiretroviral medication

to prevent MTCT and/or for their own health. EGPAF plays a key role as a technical assistance provider to facilities in the Nyanza region.

Positive Action Children Fund: Technical Assistance to Community-Based Organizations

(ViiV Healthcare: 2011–2014)

This project, funded by ViiV Healthcare, is designed to improve community involvement in the delivery of sustainable community-level HIV prevention services. It focuses on building the technical and organizational capacities of several local organizations across the country. EGPAF is specifically focused on building capacity in the areas of:

- Sustainability
- Strategic planning
- Project management
- Effective communications
- Monitoring and evaluation
- Prevention of mother-to-child transmission of HIV (PMTCT)
- Establishment of referral networks

A Secondary Analysis of Retention across the PMTCT Cascade in Selected Countries

Implementing the Various Guidelines. Kenya: Option A; Swaziland: Option A; Rwanda: Option B; Malawi: Option B+

(USAID/Population Council: 2011–2014)

This PEPFAR-funded HIVCORE study is a retrospective cohort analysis of mother-infant pair retention in prevention of mother-to-child transmission of HIV (PMTCT) services from antenatal clinic through 18 months postpartum in four selected EGPAF-supported country programs that are implementing Option A, Option B, or Option B+ for PMTCT. The study is being conducted in selected urban, semi-urban, and rural facilities in Malawi, Rwanda, Kenya, and Swaziland. The primary objectives of the study are to determine:

- What are the levels of retention 30 days after entry into the PMTCT program, at delivery, six weeks, two months (60 days), three months (90 days), six months, and 12 months post-delivery among women and infants on Option A and on Option B/B+?
- How do the levels of retention vary by facility characteristics such as type of facility, higher versus lower volume PMTCT facility, rural/urban facility, and presence and type of follow-up (active/passive) among women and infants on Option A and on Option B/B+?
- How do the levels of retention vary by demographic and clinical characteristics among women and infants on Option A and on Option B/B+?
- What are the most modifiable characteristics associated with retention in Option A and in Option B/B+ sites?

Lesotho

Strengthening Clinical Services (SCS) Project

(USAID/PEPFAR: 2010–2015)

EGPAF is supporting and expanding prevention of mother-to-child transmission of HIV (PMTCT) and care and treatment services in Lesotho through the USAID-funded Strengthening Clinical Services (SCS) project. The five-year project has a goal to reach 100% PMTCT and HIV care services coverage nationwide by 2011, which is in line with the Ministry of Health's (MOH) goal, and to achieve 90% facility coverage for the initiation of HIV treatment of adults and children. The SCS project's specific objectives are:

- Sustained, high-quality, comprehensive, integrated, client-centered HIV/AIDS care and treatment services at health facilities
- Strengthened and increased roll-out of family-centered HIV/AIDS care and treatment services at all points of contact
- Universal access to PMTCT, including expanded delivery of services
- A strengthened national health system in accordance with MOH's plan
- MOH's policy, protocols and guidelines for care and treatment services reviewed and improved on a regular basis

Activities are being implemented by EGPAF and four key sub-grantee partners: Baylor Pediatric AIDS Initiative, mothers2mothers (M2M), the Apparel Lesotho Alliance to Fight AIDS (ALAFA), and the Lesotho Network of AIDS Service Organizations (LENASO). All activities are planned and implemented in concert with the MOH to ensure that efforts under this project fit within the national framework of priorities and enhance the leadership role of the government.

As the MOH's key implementing partner for HIV/AIDS clinical services in Lesotho, EGPAF also plays a key technical assistance role nationally. EGPAF participates in all relevant national technical working groups and technical advisory committees, and serves as co-lead of the PMTCT national technical working group. EGPAF supports the MOH by leading and participating in the drafting and revision of national guidelines, training materials, standard operating procedures, and policies.

In 2011, Lesotho achieved the first of its primary SCS goals: scaling up PMTCT services to all public and private facilities nationwide. Looking ahead, EGPAF is working to establish universal access to adult and pediatric HIV/AIDS care services, as well as 90% facility coverage for adult and pediatric ART services, by 2015. EGPAF has supported the MOH to successfully integrate HIV/AIDS services with maternal and child health services at every health facility across the country. This has increased uptake and availability of critical HIV/AIDS prevention, care, and treatment services for pregnant women, partners, and children from birth to two years of age.

EGPAF is also supporting the creation of a national cervical cancer screening program at the Senkatana Center at Botshabello Hospital in Maseru.

The Partnership for Management Development

(J&J and PEPFAR/USAID: 2012–2013)

The Partnership for Management Development (PMD) is a program designed by the University of Cape Town (UCT) Graduate Business School faculty for the Lesotho Ministry of Health (MOH) and implemented with the support of EGPAF. The program aims to address an identified gap in health services and accelerate the elimination of mother-to-child transmission (MTCT) of HIV by developing the management capacity of African healthcare leaders. The PMD program is funded through a public-private partnership between PEPFAR/USAID and Johnson & Johnson, and EGPAF/Lesotho is the implementing partner. Based on an initial gap analysis done, four major topic areas for improvement were identified:

- Improve team-based leadership
- Increase facility-based deliveries/births
- Reduce stock-outs of supplies and drugs
- Use data to support managerial approaches

Lesotho Together Against HIV and AIDS Partnership (LETLAMA)

(USAID/PEPFAR: 2011–2016)

This USAID/PEPFAR-funded project, led by Population Services International (PSI), seeks to reduce HIV incidence among youth and adults by increasing the adoption of protective behaviors and supporting healthy social norms. EGPAF serves as one of the project's lead implementers of HIV clinical services programming. EGPAF is working to:

- Build the capacity of Basotho institutions' HIV prevention services
- Engage communities to adapt social and cultural norms and attitudes that reduce vulnerability to HIV
- Motivate Basotho youth and adults to change their behavior through increased knowledge, risk perception, skills, and access to HIV prevention services
- Collaborate with the Ministry of Health to revitalize and scale up post-exposure prophylaxis (PEP) activities in all health facilities in Lesotho, while integrating HIV and sexually transmitted diseases in HIV clinics as a strategy for prevention with positives

Mother Baby Pack

(UNICEF: 2012–2013)

With support from UNICEF, EGPAF is conducting an evaluation of the Mother-Baby Pack (MBP) program in Lesotho to document the experience with the distribution and implementation of the packs to determine the feasibility, acceptability, and lessons learned through use of the

packs, and to identify barriers or potential harms associated with their use. Results from the MBP evaluation will have significant implications for the prevention of mother-to-child transmission of HIV (PMTCT) program in Lesotho as well as globally, as other countries consider implementation of this innovative approach for PMTCT drug distribution.

Scaling up Adolescent Health Services Through Family Health Days

(UNICEF: 2012–2013)

The goal of this project is to provide integrated health services and make them accessible to the community through the use of mobile clinics and a family-centered approach. With the support of UNICEF-Lesotho, EGPAF will conduct family health day (FHD) campaigns in two identified districts (Berea and Qacha's Nek), with a targeted and expanded focus on adolescents. Specific objectives of the UNICEF/EGPAF collaboration on FHD are to:

- Integrate adolescent reproductive health (ARH) into FHD
- Provide HIV testing and counseling (HTC) to adolescents
- Identify and support adolescents living with HIV
- Promote early screening for hypertension, diabetes, malnutrition, and TB
- Promote child survival through the provision of comprehensive and integrated family-centered services
- Promote early infant diagnosis (EID) and timely enrollment into care and treatment for HIV-positive children
- Test all eligible children who have not been tested via routine testing
- Provide HTC to adults and enroll those testing positive into HIV care and treatment services

Strengthen M&E of PMTCT

(UNICEF: 2011–2013)

With support from UNICEF, EGPAF is providing targeted technical assistance to improve systems for monitoring and evaluation (M&E) of prevention of mother-to-child transmission of HIV (PMTCT) programs in Cameroon, Lesotho, and Zambia. In Lesotho, EGPAF will continue to support the Ministry of Health (MOH) and other stakeholders by training health staff on the standard operating procedures for antenatal care and labor and delivery registers. In addition, the EGPAF/Lesotho team is working with the MOH to strengthen the timely and accurate transfer of PMTCT data from the districts to the central level (MOH) through the use of 3G internet technology.

Pilot Test of HIV and Infant Feeding Indicators

(WHO: 2011–2012)

Breastfeeding is a direct route of HIV transmission from HIV-infected mothers to infants. Yet currently, there is no standardized indicator on the infant feeding practices of HIV-exposed infants. While population-based surveys collect information on infant feeding practices, disaggregated data by HIV serostatus/exposure is only available in a small number of countries including Lesotho, where the 2009 Demographic and Health Survey (DHS) was not disaggregated by HIV serostatus.

In the absence of such routine information on the breastfeeding status of HIV-infected mothers, prevention of mother-to-child transmission (PMTCT) services may not be able to respond to all the needs of HIV-infected women, and HIV-infected women may not have access to interventions and support that facilitate infant feeding practices to promote the HIV-free survival of their infant.

The lack of regular data makes it difficult for local and national program managers to monitor the patterns of infant feeding among HIV-infected mothers in order to assess counseling approaches and project future needs. At present, no consistent indicator on infant feeding among HIV-infected mothers is collected on a global scale.

In order to obtain information on feeding practices of HIV-exposed infants, an indicator has been proposed, and EGPAF has received funding from the World Health Organization (WHO) to conduct a pilot evaluation of the following infant feeding indicators within the context of maternal and child health (MCH) postnatal services in select sites in Lesotho:

- Percentage of HIV-exposed infants who are exclusively breastfeeding at three months of age
- Percentage of HIV-exposed infants who are replacement feeding at three months of age
- Percentage of HIV-exposed infants who are mixed feeding at three months of age

The objective of the pilot evaluation is to determine whether the proposed indicators are feasible to collect routinely at primary health care facilities, and also whether they reflect the actual feeding practices of HIV-exposed infants. The newly revised under-five registers for use in Lesotho MCH clinics includes a line item identifying the method of infant feeding as exclusive breast feeding (EBF), exclusive formula feeding (EFF) or mixed feeding (MF) collected monthly in the first six months of life. These registers are in the process of being rolled out in all MCH clinics; therefore, this evaluation is timely for informing the Ministry of Health and Social Welfare (MOHSW) of the accuracy of this new infant feeding indicator, as well as providing information about the validity as a global indicator. The pilot test will compare the determination of infant feeding method captured during routine program activities and recorded on the under-five register by MCH staff with study-specific exit interviews that contain more direct questioning of the mother or caregiver to determine the accuracy of the infant

feeding practices indicator and provide information on the quality of services. In addition, data on the use of antiretroviral therapy during breastfeeding will also be collected.

System Development and Mentoring for Integration of Active Case-Finding for TB (ACF) and Isoniazid Preventive Therapy (IPT) with Prevention of Mother-to-Child Transmission of HIV Services (PMTCT) in Lesotho

(Johns Hopkins University: 2010–2013)

Tuberculosis (TB) is a leading cause of death among women worldwide. An estimated 342,900 women died from maternal causes in 2008, compared to an estimated 700,000 from TB in the same year. TB in women of reproductive age impacts their own health, their pregnancies, and the health of their children. TB may be vertically transmitted *in utero*, intrapartum, and postpartum – and even in the absence of transmission, may negatively affect fetal and neonatal health by causing premature birth, intrauterine growth retardation, low birth weight, and increased mortality. TB/HIV co-infection in pregnant women also has been shown to increase the transmission of HIV from mother to child.

Lesotho has drafted guidelines for active case-finding (ACF) of TB by clinical symptom screening and provision of isoniazid preventive therapy (IPT) that are based on the WHO guidelines. Implementation of the Lesotho Ministry of Health and Social Welfare's TB guidelines will consist of ACF for TB using a clinical screening tool to identify individuals at risk for active TB, and providing IPT to HIV-infected persons who do not have signs and/or symptoms of active TB. The Lesotho Ministry of Health and Social Welfare (MoHSW) began to implement these guidelines at hospital-based clinics serving HIV-infected persons. The focus of this systems development and mentoring project is to conduct operations research on ACF and IPT in the antenatal clinic context. This project will assess the progressive roll-out of ACF among HIV-positive and HIV-negative pregnant women, and measure the uptake of IPT among women in whom active TB has been excluded. Study findings and documentation of implementation challenges during the initial roll-out of the program will be used to guide the expansion of ACF and IPT in antenatal clinics throughout Lesotho, and will add to the evidence base in support of the global implementation of integrated TB/HIV service delivery.

The Community Initiative Program

(Gilead Foundation: 2012)

Through the generous support of the Gilead Foundation, EGPAF/Lesotho carried out three key activities, all of which supported EGPAF's goal of the virtual elimination of pediatric HIV in Lesotho by 2016. First, EGPAF worked to build the human resource capacity for community-clinic linkages by facilitating training with the Lesotho Network of AIDS Service Organizations (LENASO), an umbrella organization for all local groups implementing HIV/AIDS services at the community level nationwide. This integrated five-day training on PMTCT, HIV care and treatment, and community linkages was attended by all 10 LENASO District Community

Coordinators, and emphasized strategies to improve maternal health while concurrently providing maximum protection against HIV infection of infants.

The project also worked to improve the patient referral system through mobile technology. With funding from Gilead, EGPAF purchased BlackBerry Mobile phone devices, which are being used to strengthen client referral follow-up and tracking systems in each district. Finally, the project strengthened community-based client tracking systems through the distribution of community tracking tools, designed to immediately trace any HIV-exposed infant testing positive for HIV in order to facilitate them coming back to the facility and starting antiretroviral therapy (ART) within one week of the availability of test results.

Towards Getting More HIV-Positive Infants on Lifesaving Treatment: Measuring HIV Test Turnaround Times and Early Effectiveness of HIV Mother-to-Child Prevention Programs Using Early Infant Diagnosis Records

(Private: 2012)

Despite advances made in the field of prevention of mother-to-child transmission (PMTCT) of HIV, the average age of initiation of treatment for HIV-positive children is approximately five years. Only 23% of eligible children younger than 15 years (out of an estimated 2.02 million) are receiving antiretroviral therapy (ART). Though there are multiple reasons, poor access to infant HIV testing and diagnosis is one key barrier to initiating treatment. While early infant diagnosis (EID) access has improved – with some limited-resource countries reaching greater than 50% of exposed infants getting tested – globally only 15% of HIV-exposed infants receive an HIV test. Early diagnosis and treatment are critically important, because without them, one third of perinatally HIV-infected children will not see their first birthdays, and almost one half will die before two years of age. In Lesotho, 37,000 children are living with HIV, and only 38% of these are currently receiving lifesaving treatment. Historically, there have been gaps in coverage for EID/Early Infant Treatment (EIT) services in Lesotho, especially in rural areas, with long turn-around-times (TATs) identified as a significant challenge for the EGPAF program in-country.

The aim of this study is to describe the current EID process, early MTCT infection rates, and the PMTCT services received by HIV-positive mothers and their infants who had an HIV test at six to eight weeks in selected sites in Lesotho in order to determine necessary steps to improve early initiation of HIV-positive infants into antiretroviral (ARV) treatment programs. This will be accomplished with two main objectives:

- To identify delays in the EID process from the time the six-to-eight week HIV specimen is collected to the time when caregivers receive the results and HIV-infected infants are initiated on ART at study sites
- To measure the perinatal HIV infection rate among HIV-exposed infants who were tested for HIV at six to eight weeks of age, as well as PMTCT-related services received among these infants and their mothers at study sites within a one-year period

The study employed a retrospective cohort design in which existing facility records of women registered in the PMTCT program in 25 sites from 10 districts during 2011 were linked to data on HIV testing, and subsequent test results of their HIV-exposed infants contained in a central laboratory database. Primary study outcomes included time to ART initiation in infants identified as HIV-infected; MTCT HIV infection rate for infants around six weeks of age at the selected sites; and utilization of services among pairs of mothers and HIV-exposed infants. Data was collected in March and April of 2012, with data entry and cleaning in May and analysis ongoing in June and July. Preliminary findings from a total of 1,187 records extracted are that ~90% of EID records could be linked to the mother's antenatal record with 4.0% (47/1187) of infants tested HIV+ at six to eight weeks, and 37 initiated on ART (five did not, five unknown).

Findings from this study could ultimately lead to an increased number of eligible children receiving treatment by measuring TATs and identifying barriers from HIV testing through treatment initiation.

Expediting Access to Antiretroviral Treatment for more Infants and Young Children

(ViiV Healthcare: 2010 – 2013)

This project, launched in 11 countries including Lesotho, sought to expedite access to testing, care, and antiretroviral treatment (ART) for infants and young children. This partnership enabled EGPAF to fill critical gaps that limit access by focusing on three key objectives:

- Increase early detection and initiation of ART for HIV-positive infants and young children
- Strengthen government leadership
- Use strategic information to understand what works, and to apply this understanding to improve programs

By project end, there were significant improvements in key indicators, including more HIV-exposed infants tested within eight weeks of birth; more HIV-exposed infants that tested positive receiving their results within eight weeks of testing; and more HIV-exposed infants and young children (IYC) that tested positive being initiated on ART. In addition, linkages between health facilities and communities were strengthened via new partnerships with community-based organizations and the engagement of village health workers. Technical advocacy aimed at addressing barriers to testing and treating IYC was successful in a number of areas, including the ability for nurses to prescribe ART and the development of a new national pediatric counseling and testing curriculum in Swaziland. Also, 40 HIV/AIDS Technical Leaders from 16 countries were provided critical training on how to implement the new WHO Guidelines on Pediatric ART.

In Lesotho specifically, the first-ever training on psychosocial support counseling for HIV-positive children and caregivers was held – and proved very successful. The training focused on

frontline healthcare workers, and they are implementing the skills learned across the entire country. In addition, the proportion of HIV-exposed infants and young children tested and initiated on ART increased, and this project has enabled the Lesotho team to pilot and update the under-five register (which includes EID information and longitudinal follow-up of HIV-exposed children).

Malawi

District Service Delivery, Quality Improvement, and Health Systems Program

(CDC/PEPFAR: 2012–2017)

Funded by the U.S. Centers for Disease Control and Prevention (CDC) and U.S. Centers for Disease Control and Prevention (CDC) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), this five-year project seeks to strengthen district-level capacity and systems to ensure the provision of high quality service delivery through the following objectives:

- Improved district level planning financial management, implementation, and monitoring
- Improved review, analysis, and use of data
- Strengthened human resources for health
- Strengthened health systems activities infrastructure at district and facility levels
- Improved quality of Service Delivery
- Scale-up of comprehensive services through direct support

HIV prevention, care and treatment will be the focus, but the program also will strengthen services for sexually transmitted infections (STI), tuberculosis, malaria, and select elements of reproductive health/maternal and child health as part of the Malawian essential health package. The project will be implemented in seven districts in the central and northern zones of the country.

Expediting Access to Antiretroviral Treatment for More Infants and Young Children in Malawi

(ViiV Healthcare: 2010 – 2013)

With funding from ViiV Healthcare, this project is focused on improving and expediting access to testing, care, and antiretroviral treatment (ART) for infants and young children in Malawi. The project has the following two objectives:

- Objective 1: Improve access in five existing pilot sites in Dedza, Ntcheu, and Lilongwe districts with a focus on better understanding of key gaps and testing of potential solutions.

- Objective 2: Increase access to early infant diagnosis and treatment services through scale-up of pilot program in additional high volume sites in two new districts (Salima and Nkhotakota Districts).

The project has been critically important to EGPAF's efforts to pilot, monitor, and evaluate innovative approaches to improving access to early infant diagnosis and treatment (EIDT). These include initiating interventions to fill key gaps in testing, care, and treatment for infants and young children (IYC), as well as the identification and monitoring of key indicators at ViiV-supported pilot sites in order to ascertain improvements in HIV testing and treatment initiation among exposed IYC in light of our ViiV-supported activities.

In addition, the project has resulted in significant rate increases for patients testing for HIV and receiving their results, both key early infant diagnosis indicators for Malawi. A total of 32% of infants who tested HIV-positive using DNA-PCR received their results within eight weeks of testing (an important increase from our baseline of 8%). Facilities also saw a five-fold increase in HIV-positive infants under a year old who were initiated on ART (10% at baseline compared to 53% at the end of year one).

Community-Based Organization Technical Assistance Approach

(ViiV Healthcare: 2011–2012)

Through funding provided by ViiV's Positive Action for Children Fund (PACF), this project seeks to provide technical assistance capacity building to six community-based organizations in Malawi. Guided by the self-identified needs included in the small grant proposals provided by the community-based organizations (CBOs), EGPAF has developed a blended, pragmatic, and participatory approach that seeks to provide these CBOs with the tools and skills to better plan, manage, and implement their PACF-funded projects. This approach includes conducting baseline assessments to identify technical support needs, as well as group workshops to cover organizational development topics including workplan development, financial management, and monitoring and evaluation. The workshops will be followed by technical assistance outreach to the CBOs to enhance their ability to identify and address various implementation challenges, and to monitor progress using the developed work plans. Outreach visits include the completion of progress reports to monitor progress, identify continued challenges, and take corrective action. In 2013 EGPAF also will facilitate exchanges across the CBOs. This project is implemented in coordination and with input from EGPAF/Kenya, which has extensive experience working with CBOs. Of note, the CBOs are selected and funded directly by ViiV, with EGPAF in a support and advisory role.

Extending Quality Improvement for HIV/AIDS in Malawi

(USAID/Partners In Hope: 2010–2013)

EQUIP-Malawi is a PEPFAR-funded project with a goal of strengthening the capacity of health care systems in central Malawi to deliver HIV/AIDS care by improving the continuum of HIV

care, the quality and efficiency of care, and workforce training and development, and to evaluate the delivery of this care system to serve as a model for scale-up across Malawi. In partnership with Partners in Hope, the EQUIP-Malawi project capitalizes on the partners' existing networks, infrastructure, and acquired expertise, and has three complementary objectives:

- Strengthening the continuum of HIV care among various health services, facilities, and communities
- Developing training and mentoring programs to improve workforce capacity and quality of care
- Creating a consortium of sites for operational research to improve the quality of HIV care and training

The EQUIP project began as a support to Christian Health Association of Malawi (CHAM) facilities, and now includes public sector facilities in the central and northern regions of the country.

Safeguard the Family Project (Lilongwe Medical Fund Trust Relief)

(USAID/LMRFT: 2011–2014)

The USAID/PEPFAR-funded Lilongwe Relief Fund Trust of Malawi (LMRFT), in collaboration with several other partners including EGPAF, is implementing the Safeguard the Family Project, which is aimed at decreasing mother-to-child transmission of HIV and reducing maternal and infant mortality. Situated in the central region of Malawi, which currently includes 99 clinics and about one-quarter of the country's population, or 3.8 million people, the project incorporates testing for HIV and syphilis, a prevention, treatment and referral program for mothers who test HIV-positive, partner involvement and support group programs, recruitment of traditional birth attendants, and distribution of water purification packets, insecticide-treated bed nets, and infant food supplements. The objectives of the project include:

- Building the capacity of district health offices and service providers in PMTCT/ART and early infant diagnosis (EID) service delivery
- Increase uptake and quality of integrated prevention of mother-to-child transmission of HIV (PMTCT) and EID service delivery in supported sites
- Strengthen monitoring and evaluation system in supported sites

During the project, EGPAF is providing training, mentorship, and supportive supervision at government health facilities to support the scale-up of PMTCT services. We also are providing technical assistance to LMRFT, helping to build their capacity to manage U.S. Government funding and to increase their accountability for program activities and targets.

A Secondary Analysis of Retention Across the PMTCT Cascade in Selected Countries Implementing the Various Guidelines. Kenya: Option A; Swaziland: Option A; Rwanda: Option B; Malawi: Option B+

(USAID/Population Council: 2011–2014)

This PEPFAR-funded HIVCORE study is a retrospective cohort analysis of mother-infant pair retention in prevention of mother-to-child transmission of HIV (PMTCT) services from antenatal clinic through 18 months postpartum in four selected EGPAF-supported country programs that are implementing Option A, Option B, or Option B+ for PMTCT. The study is being conducted in selected urban, semi-urban, and rural facilities in Malawi, Rwanda, Kenya, and Swaziland. The primary objectives of the study are to determine:

- What are the levels of retention 30 days after entry into the PMTCT program, at delivery, six weeks, two months (60 days), three months (90 days), six months, and 12 months post-delivery among women and infants on Option A and on Option B/B+?
- How do the levels of retention vary by facility characteristics such as type of facility, higher versus lower volume PMTCT facility, rural/urban facility, and presence and type of follow-up (active/passive) among women and infants on Option A and on Option B/B+?
- How do the levels of retention vary by demographic and clinical characteristics among women and infants on Option A and on Option B/B+?
- What are the most modifiable characteristics associated with retention in Option A and in Option B/B+ sites?

In Malawi, the study will include 500 mother-infant pairs from 10 sites in Lilongwe, Dedza, and Ntcheu districts.

Mozambique

Fortalecer Project: Technical Assistance to the Ministry of Health for HIV Services and Program Transition

(CDC/PEPFAR: 2011–2016)

Through the Fortalecer Project, EGPAF continues to support the Ministry of Health (MOH) to strengthen the implementation of prevention of mother-to-child transmission of HIV (PMTCT) and care and treatment services at more than 250 PMTCT and 67 antiretroviral therapy (ART) sites in four regions of Mozambique: Maputo, Gaza, Cabo Delgado, and Nampula. The project has the following objectives:

- Increase access to and delivery of high-quality, cost-effective HIV prevention, care, and treatment services



- Build capacity of the health system at all levels to provide client-focused health services
- Strengthen data analysis and use to improve quality of service delivery and health management
- Ensure sustainable HIV prevention, care, and treatment service delivery through MOH and local partners; in 2012, two provinces were transitioned to EGPAFs local affiliate (Fundação Ariel Glaser)

Strengthening the Basics: Provincial Health Systems Strengthening to Support High Quality HIV/AIDS Prevention, Care and Treatment Programs

(CDC/PEPFAR: 2010–2015)

The goal of this project is to build organizational and management capacity (including human resources management, planning, and financial management) in order to provide comprehensive HIV prevention, care, and treatment services within a strengthened health system in four provinces: Maputo, Gaza, Cabo Delgado, and Nampula. Specific activities include:

- Support of a working group with members from the Ministry of Health (MOH) Departments of Planning, Administration and Finance and EUROSIS (a private sector organization development firm)
- Developing a capacity assessment tool for Provincial Health Directorates (DPS)
- Conducting a preliminary capacity assessment of the DPS's planning, financial, and administrative management capacities based on data, procedures, common practices, and expectations of the MOH/DPS

Rwanda

Rwanda Family Health Program

(USAID/Chemonics: 2012–2016)

The Rwanda Family Health Project works closely with local partners to improve and expand community-based family health services. Family health services include an integrated package of services related to family planning and reproductive health, HIV/AIDS, maternal, neonatal and child health, malaria prevention and treatment, nutrition, safe water and hygiene, and tuberculosis treatment. As a sub-grantee to Chemonics, EGPAF leads technical assistance efforts around:

- Adult and pediatric HIV/AIDS prevention, care, and treatment
- Tuberculosis
- Maternal and child health
- Nutrition
- Quality assurance

Kigali Antiretroviral and Breastfeeding Assessment for the Elimination of HIV (Kabeho Study) *(USAID/PEPFAR: 2012–2015)*

In 2010, the World Health Organization (WHO) released a series of guidelines for the prevention of mother-to-child transmission of HIV (PMTCT) with a focus on infant feeding guidance and on the use of antiretrovirals (ARVs) to make extended breastfeeding a safe option for HIV-positive women and children to optimize HIV-free survival. The Government of Rwanda (GoR) rapidly implemented a policy to initiate all HIV-positive women, regardless of CD4 count, on triple antiretroviral drugs for treatment/prophylaxis during pregnancy and through 18 months of breastfeeding followed by discontinuation for those not eligible for treatment (Option B). However, in June 2012 the country transitioned to a modified version where all HIV-positive women would be initiated on lifelong antiretroviral treatment (ART) (known as Option B+). In addition, the GoR provides an innovative infant feeding counseling and support program for HIV-positive women in the PMTCT programs. Determining the effectiveness of the Rwanda program, and the challenges and successes in its implementation, will provide critical information to the GoR as well as to the PMTCT field, particularly as there is no data on the use of Option B+ for PMTCT.

The Kabeho Study will take advantage of this unique research opportunity to determine 18-month HIV-free survival in a cohort of children born to HIV-positive pregnant women receiving universal lifelong ART (PMTCT Option B+), coupled with comprehensive infant feeding counseling and support, in selected high-volume antenatal clinic sites in Kigali, Rwanda. Also, individual and facility-level factors associated with optimal infant nutritional outcomes and with adherence to the universal ARV regimen among pregnant and postpartum women (Option B+) and their HIV-exposed children in the first 18 months postpartum will be determined. The study will utilize a prospective observational cohort design, and obtain individual and facility data through a mixed-methods approach with both quantitative and qualitative data. In addition, interviews with healthcare providers and PMTCT program leaders will be conducted to assess implementation successes and challenges and gather recommendations. The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) will lead implementation of the study in collaboration with our study partners and collaborating institutions including the National University of Rwanda, School of Public Health (NURSPH), the Rwanda Ministry of Health (MOH), the Rwanda Biomedical Center/Institute for HIV, Diseases and Control (RBC/IHDPC) and George Washington University School of Public Health and Health Services.

Food and Nutrition Interventions for People Living with HIV/AIDS -The USAID Ibyiringiro Project

(USAID/CRS: 2008–2013)

The Ibyiringiro project's goal is to provide food, livelihood and nutrition interventions for people living with HIV/AIDS. The project will address impediments to improving the livelihood security and resiliency of households impacted by HIV and AIDS. These include:



- Lack of available resources to expand the quantity and quality of services to people living with HIV and orphans and vulnerable children (OVC) households already receiving food rations
- Lack of strong community-based organizations to consistently support people living with HIV and OVC
- Insufficient economic opportunities for people living with HIV and OVC households
- Insufficient weaning food and targeted nutrition education to HIV-positive mothers to prevent the transmission of HIV to their infants after six months of exclusive breastfeeding

Funded by USAID and PEPFAR and led by Catholic Relief Services (CRS), EGPAF's role is to improve the nutritional status of infants and mothers enrolled in prevention of mother-to-child transmission of HIV (PMTCT) programs through improved access to fortified weaning foods. As the lead PMTCT partner, EGPAF has:

- Developed/adapted behavior change communication and technical support tools on maternal nutrition and infant and young child feeding (IYCF) in the context of HIV
- Conducted trainings for and supportive supervision of health care providers and community health workers
- Extended IYCF counseling and support to community-based health services and people living with HIV/AIDS groups.

A Secondary Analysis of Retention Across the PMTCT Cascade in Selected Countries Implementing the Various Guidelines. Kenya: Option A; Swaziland: Option A; Rwanda: Option B; Malawi: Option B+

(USAID/Population Council: 2011–2014)

This PEPFAR-funded HIVCORE study is a retrospective cohort analysis of mother-infant pair retention in prevention of mother-to-child transmission of HIV (PMTCT) services from antenatal clinic through 18 months postpartum in four selected EGPAF-supported country programs that are implementing Option A, Option B, or Option B+ for PMTCT. The study is being conducted in selected urban, semi-urban, and rural facilities in Malawi, Rwanda, Kenya, and Swaziland. The primary objectives of the study are to determine:

- What are the levels of retention 30 days after entry into the PMTCT program, at delivery, six weeks, two months (60 days), three months (90 days), six months, and 12 months post-delivery among women and infants on Option A and on Option B/B+?
- How do the levels of retention vary by facility characteristics such as type of facility, higher versus lower volume PMTCT facility, rural/urban facility, and presence and type



of follow-up (active/passive) among women and infants on Option A and on Option B/B+?

- How do the levels of retention vary by demographic and clinical characteristics among women and infants on Option A and on Option B/B+?
- What are the most modifiable characteristics associated with retention in Option A and in Option B/B+ sites?

Swaziland

Eliminating Pediatric AIDS in Swaziland (EPAS) Program

(USAID/PEPFAR: 2010–2015)

The goal of this five-year USAID/PEPFAR-funded project is to assist the Government of the Kingdom of Swaziland in its efforts to eliminate pediatric HIV. This project will expand the availability of comprehensive services for the prevention of mother-to-child transmission (PMTCT) of HIV, reduce missed opportunities for delivery of services, and better address cultural norms that keep some women from obtaining these services. The EPAS program will make the most effective PMTCT services available to mothers in 100 percent of public facilities and selected high-volume private facilities. In addition, missed opportunities to provide services will be reduced through increased primary prevention, family planning, HIV re-testing during pregnancy, and mobilization of pregnant women for early antenatal care and delivery in health facilities.

In addition, the project focuses on sustained quality, comprehensive, and integrated PMTCT services at Ministry of Health-supported facilities. Quality will be improved through clinical mentoring, training, and supervision, and by facility-based, quality improvement techniques that are already in use. To ensure a comprehensive service package, the EGPAF team will accelerate support around HIV counseling and testing for children and couples, referrals and linkages to neonatal male circumcision, and up-to-date HIV care and support.

The project also targets health sector strengthening, a critical component of the Ministry of Health's national plan, including PMTCT. Through the capacity building aspects of this program, five key areas will be addressed:

- Human resources
- Strategic information
- Logistics management
- Site support supervision
- Program and financial management

Advancing Community-Level Action for Improving MCH/PMTCT (ACCLAIM) Program

(Canadian International Development Agency: 2012–2016)

The goal of this project is to increase community demand for, uptake of, and retention in maternal and child health (MCH)/prevention of mother-to-child transmission of HIV (PMTCT) services to improve country progress toward elimination of pediatric HIV/AIDS. This will be achieved through the following objectives:

- Improving key HIV, MCH, and gender-related health behaviors through the implementation of community-based interventions that target changes in community norms and attitudes, thereby increasing the number of pregnant women accessing and completing the sequence of PMTCT services
- Assessing the behavioral and operational outcomes of selected community-based interventions and determine their relative effectiveness through strategic evaluation and operations research
- Documenting and disseminating research results, tools developed, and lessons learned to facilitate widespread expansion of community engagement activities found to be effective

Community-based interventions designed to complement facility-based services hold tremendous promise for improving PMTCT program outcomes by addressing entrance, adherence, and retention to the range of PMTCT services along the cascade. The three main interventions for implementation and evaluation in this proposal, which address communities on three different levels, include:

- **Engagement of Community Leaders:** Through training and capacity building for community leaders, this project will begin by facilitating the development of Community Action Plans (CAP) in order to generate increased demand for MCH and PMTCT services.
- **Community Days:** Semi-annual Community Days will bring entire communities together for a day of communication, information, and activities to improve awareness among key target populations of important MCH and PMTCT services.
- **Community Peer Groups:** Working at the individual level, MCH classes and men's groups will provide comprehensive MCH/PMTCT information and skills development to crucial community sub-groups focused on increasing and improving MCH and PMTCT health behaviors.

EGPAF has chosen three countries for these interventions – Uganda, Swaziland, and Zimbabwe – countries that, in collaboration with their respective Ministries of Health (MOH), are all making great strides in expanding facility-based services and strengthening health systems, but that have recognized barriers and gaps in demand and follow-up. This project provides a community-based approach that will influence harmful gender norms, attitudes, and behaviors

through engagement at the grassroots level to enhance the potential impact. The addition of complementary community-based services will help move these countries towards the elimination of pediatric HIV/AIDS, and the demonstration of the effect of these interventions will provide other countries with evidence to inform replication and scale-up.

Building upon EGPAF's successfully supported PMTCT programs, this project focuses on breaking down community-level barriers to uptake of and retention in PMTCT services. The activities are designed to be locally relevant, addressing multiple gaps simultaneously across a variety of settings. The proposed project is being conducted over four years in 45 community clusters across the three selected countries in a stepped approach that will allow for comparison of the effectiveness of single and combination interventions. All clusters will benefit from the "Leadership Engagement" component of the intervention package. In 15 community clusters, "Community Days" will be added on; and in the final 15 of the community clusters, the full combination intervention package comprising "Leadership Engagement," "Community Days," and "Community Peer Groups" will be implemented. Through routine monitoring and evaluation and focused operations research, EGPAF will be able to provide in-depth analysis of the implementation and outcomes of the interventions and the added value of each intervention. A comprehensive dissemination plan will allow for adaptation and use of these innovations in additional settings, which will contribute to the overall learning from the experience gained through implementation.

The strategic design of this project will provide the evidence base needed for communities and program managers to make an informed choice of community activities to support. The experience and evidence gained through the proposed interventions will be important not only for the three countries in which they will occur, but also across EGPAF's other country programs and the broader global health community.

Strengthening Facility Based HIV Testing and Counseling (HTC) Service in Swaziland (CDC/PEPFAR: 2011–2016)

The goal of this CDC/PEPFAR-funded project is to assist the Government of the Kingdom of Swaziland to achieve its goal of increasing the percentage of the population undergoing HIV testing each year to 50% of women and 40% of men by 2013. EGPAF's project objectives are as follows:

- Support the Ministry of Health (MOH) to create an enabling environment to achieve universal access to HTC services in all health facilities in the country
- Support implementation of routine HTC services at all points of care within health facilities
- Strengthen linkages to ongoing prevention, treatment, care and support services
- Build capacity and strengthen health systems

Combination Prevention Program in Swaziland

(USAID/PSI: 2010–2014)

This USAID/PEPFAR-funded project, led by PSI, seeks to implement effective and tested approaches to support a national, coordinated approach to combination prevention programs through three pillars of interventions: structural, behavioral, and biomedical. EGPAF is focusing on the biomedical pillar in order to strengthen the male circumcision (MC) program through the integration of MC messages into existing community activities including community days, male dialogues, male support groups, and community outreach. In addition, EGPAF will work with PSI to develop and finalize neonatal MC training curriculum for nurses, counselors, and outreach workers, and will work with public and NGO partners to ensure linkages between behavior change communications activities and MC service delivery activities.

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(USAID/Population Council: 2011–2014)

This PEPFAR-funded HIVCORE study is a retrospective cohort analysis of mother-infant pair retention in prevention of mother-to-child transmission of HIV (PMTCT) services from antenatal clinic through 18 months postpartum in four selected EGPAF-supported country programs that are implementing Option A, Option B, or Option B+ for PMTCT. The study is being conducted in selected urban, semi-urban, and rural facilities in Malawi, Rwanda, Kenya, and Swaziland. The primary objectives of the study are to determine:

- What are the levels of retention 30 days after entry into the PMTCT program, at delivery, six weeks, two months (60 days), three months (90 days), six months, and 12 months post-delivery among women and infants on Option A and on Option B/B+?
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- How do the levels of retention vary by demographic and clinical characteristics among women and infants on Option A and on Option B/B+?
- What are the most modifiable characteristics associated with retention in Option A and in Option B/B+ sites?

An Exploratory Study of the Behaviors and Practices That May Increase HIV Risk among Pregnant and Lactating Women in Communities in Swaziland

(2012–2013)

This is an exploratory study to better understand the sexual practices of pregnant women that may affect HIV seroconversion during pregnancy. This is a follow-up study to the Gates study,

which identified an increased rate of seroconversion during pregnancy. There are four study aims:

- To describe beliefs, communication, and behaviors regarding sex and sexuality in Swaziland
- To understand how sexual practices change during pregnancy and lactation
- To examine knowledge and perceived risk of HIV acquisition during pregnancy and lactation among women and men
- To explore HIV prevention practices during pregnancy and lactation

The study uses a qualitative exploratory study design. This study will interview three study populations: pregnant women, sexually active men, and health care workers. Data will be collected from the three study populations through focus group discussions and in-depth interviews. Focus group discussions will be used to gather more general information about cultural and traditional sexual norms and practices. Individual interviews will provide an opportunity to explore participants' sexual experiences during pregnancy and lactation. Focus group discuss will be conducted with health care workers to gather an additional perspective and triangulate findings between the study populations. Given the minimal amount of information available regarding this topic, this small exploratory study may encourage additional research.

Swaziland is comprised of rural, urban, and semi-rural areas. In order to ensure that the study is representative of these three types of areas, the study will include one urban, one rural, and one semi-urban site. Currently, the study is in the process of translating the data collection tools and plans to launch data collection in September 2012.

Tanzania

The LIFE Program

(USAID/PEPFAR: 2012–2016)

The overall vision of the LIFE Program (Linking Initiatives for the Elimination of Pediatric HIV) is the virtual elimination of pediatric HIV infection in the program's focus regions: Shinyanga, Mtwara, Tabora, Arusha, Kilimanjaro, Tabora, Mwanza, Coast (Pwani), and Zanzibar. The program's goal is to increase the quality, efficiency, and cost-effectiveness of comprehensive HIV and AIDS services, and to ensure a sustainable and locally-owned response. This goal will be achieved through three strategic objectives:

- Increase access to integrated, quality, and comprehensive prevention of mother-to-child transmission, reproductive health, and community-based HIV and AIDS services

- Strengthen linkages and referral networks across service delivery points, and facility and community-based services to improve services and ensure a continuum of care
- Ensure sustainability through a strengthened health system and through the transfer of capacity, management, and oversight of activities to the local government and other local institutions

Implementation of Programs for the Prevention, Care, and Treatment of HIV/AIDS

(CDC/PEPFAR: 2011–2016)

The goal of this project is to reduce the morbidity and mortality of adults and children living with HIV, and to improve the lives of children and their families affected by HIV. To do so, the project has the following strategic objectives:

- Increase access of HIV-infected individuals to a comprehensive package of community-based basic care and support services in focus regions
- Increase the number of HIV-infected or affected children receiving palliative care and basic supportive services in focus regions
- Expand access to HIV/AIDS care and treatment and quality laboratory services in Lindi and Shinyanga regions; and strengthen the quality and accessibility of pediatric HIV/AIDS care service
- Increase the capacity of districts and care and treatment clinics to utilize data for program management, quality assurance and improvement, strategic decision making, and dissemination of program performance to district leaders and policy makers in focus regions
- Strengthen the capacity of local organizations and district authorities in the provision and coordination of HIV care in focus regions

Uganda

Strengthening the TB and HIV/AIDS Response in the South-Western Region of Uganda (STAR-SW) Project

(USAID/PEPFAR: 2010–2015)

The STAR-SW project works to increase utilization of, access to, and coverage of quality comprehensive HIV/AIDS and tuberculosis (TB) services in 184 health facilities in the 13 districts in South Western Uganda. EGPAF aims to integrate cost-effective, family-based HIV/AIDS care and treatment services and prevention of mother-to-child transmission of HIV (PMTCT) programs into health care facilities through a multidisciplinary program of training, infrastructure development, and technical support. To enhance the sustainability of services, EGPAF promotes local district ownership of all activities; all work planning and roll-out of new

services are led by the District Ministry of Health, and mentoring and supervising includes the District Health Team as the provider of support. STAR-SW objectives are as follows:

- Increase the uptake of comprehensive HIV/TB services within supported districts
- Strengthen the decentralized service delivery systems for improved uptake of quality HIV/TB services, including the institutionalization of Lot Quality Assurance Sampling (LQAS) surveys at the district level
- Improve the quality of HIV/TB services in all supported health facilities and community organizations/activities
- Establish or strengthen networks, linkages, and referral systems within and between health facilities and communities
- Increase demand for comprehensive HIV/AIDS, TB prevention, care, and treatment services

Advancing Community-Level Action for Improving MCH/PMTCT (ACCLAIM) Program

(Canadian International Development Agency: 2012–2016)

The goal of this project is to increase community demand for, uptake of, and retention in maternal and child health (MCH)/prevention of mother-to-child transmission of HIV (PMTCT) services to improve country progress toward elimination of pediatric HIV/AIDS. This will be achieved through the following objectives:

- Improving key HIV, MCH, and gender-related health behaviors through the implementation of community-based interventions that target changes in community norms and attitudes, thereby increasing the number of pregnant women accessing and completing the sequence of PMTCT services
- Assessing the behavioral and operational outcomes of selected community-based interventions and determine their relative effectiveness through strategic evaluation and operations research
- Documenting and disseminating research results, tools developed, and lessons learned to facilitate expansion of widespread expansion of community engagement activities found to be effective

Community-based interventions designed to complement facility-based services hold tremendous promise for improving PMTCT program outcomes by addressing entrance, adherence, and retention to the range of PMTCT services along the cascade. The three main interventions for implementation and evaluation in this proposal, which address communities on three different levels, include:



- Engagement of Community Leaders: Through training and capacity building for community leaders, this project will begin by facilitating the development of Community Action Plans (CAP) in order to generate increased demand for MCH and PMTCT services.
- Community Days: Semi-annual Community Days will bring entire communities together for a day of communication, information, and activities to improve awareness among key target populations of important MCH and PMTCT services.
- Community Peer Groups: Working at the individual level, MCH classes and men's groups will provide comprehensive MCH/PMTCT information and skills development to crucial community sub-groups focused on increasing and improving MCH and PMTCT health behaviors.

EGPAF has chosen three countries for these interventions – Uganda, Swaziland, and Zimbabwe – that, in collaboration with their respective Ministries of Health (MOH), are all making great strides in expanding facility-based services and strengthening health systems, but that have recognized barriers and gaps in demand and follow-up. This project provides a community-based approach that will influence harmful gender norms, attitudes, and behaviors through engagement at the grassroots level to enhance the potential impact. The addition of complementary community-based services will help move these countries towards elimination of pediatric HIV/AIDS, and the demonstration of the effect of these interventions will provide other countries with evidence to inform replication and scale-up.

Building upon EGPAF's successfully supported PMTCT programs, this project focuses on breaking down community-level barriers to uptake of and retention in PMTCT services. The activities are designed to be locally relevant, addressing multiple gaps simultaneously, across a variety of settings. The proposed project is being conducted over four years in 45 community clusters across the three selected countries in a stepped approach that will allow for comparison of the effectiveness of single and combination interventions. All clusters will benefit from the "Leadership Engagement" component of the intervention package. In 15 community clusters, "Community Days" will be added on; and in the final 15 of the community clusters, the full combination intervention package comprising "Leadership Engagement," "Community Days," and "Community Peer Groups" will be implemented. Through routine monitoring and evaluation and focused operations research, EGPAF will be able to provide an in-depth analysis of the implementation and outcomes of the interventions, as well as the added value of each intervention. A comprehensive dissemination plan will allow for adaptation and use of these innovations in additional settings, which will contribute to the overall learning from the experience gained through implementation.

The strategic design of this project will provide the evidence base needed for communities and program managers to make an informed choice about community activities to support. The experience and evidence gained through the proposed interventions will be important not only

for the three countries in which they will occur, but also across EGPAF's other country programs and the broader global health community.

Promoting Constructive Male Engagement to Increase Use of Prevention of Mother-to-Child Transmission of HIV Services in Kabale District, Uganda

(USAID/FHI360: 2012–2014)

In collaboration with FHI360, EGPAF is conducting an operations research study to test an intervention package comprising facility- and community-based components designed to support constructive male engagement in the full spectrum of prevention of mother-to-child transmission (PMTCT) services, including family planning (FP). The interventions include Care and Treatment (C&T) provider training; addition of couples FP counseling within C&T services; recruitment and training of model men known as “Emanzi,” and Emanzi-led workshops shaped after Engender Health’s Men as Partners curriculum.

The primary objective of the study is to assess the effectiveness of the overall intervention aimed at constructively engaging men in the use of PMTCT services and FP decision making, measured in terms of dual method use (condoms along with another contraceptive) by C&T clients. The study is incorporated into EGPAF’s existing program, STAR-SW (Strengthening TB and HIV/AIDS Response in the South Western Region of Uganda).

The study design is a cluster randomized controlled design, with four health centers serving as intervention sites and four health centers as comparisons in Kabale District, Uganda, a rural district where C&T services are offered in eight public sector health facilities. Pre- and post-intervention cross-sectional interviews will be conducted with 1,545 C&T clients per round to assess intervention effectiveness. Changes between pre- and post-intervention PMTCT service statistics will be compared between intervention and control sites. A survey will be conducted with 1,500 men before and after their participation in a study-sponsored workshop. In-depth interviews will be conducted with 25 male and 25 female C&T clients to explore reported condom use behaviors. Process and cost data on intervention implementation will be compiled from monthly activity reports and administrative records.

Zambia

The LiveFree Project

(CDC/PEPFAR: 2011–2016)

Under the five-year CDC/PEPFAR-funded LiveFree project, EGPAF/Zambia’s goal is to support and complement the Government of Zambia’s efforts to provide comprehensive, quality HIV services in Lusaka, Southern, Western and Eastern Provinces, with a focus on the national electronic health records system (SmartCare) and a corresponding data use initiative. Under

this project, EGPAF/Zambia provides strategic and programmatic input, financial management and information technology support and staff, and procurement of computer equipment, software, and hardware for SmartCare in order to set higher standards for continuum of patient care, patient tracking, and data collection. Key project components are detailed below:

- SmartCare: EGPAF is instrumental in the nationwide deployment of SmartCare, with over 500,000 clients already enrolled into the system. In 2012, the roll-out of an updated version of SmartCare with a prevention of mother-to-child transmission of HIV (PMTCT) platform reflecting the change in national guidelines was initiated.
- Data use: EGPAF supports the Ministry of Health (MOH) to sustain and expand SmartCare as a vehicle for improving SI&E in Zambia, including data use initiatives for strengthening health systems and improving quality of comprehensive HIV/AIDS prevention, care, and treatment services. Special emphasis is placed on identifying and addressing gaps in elimination of MTCT.
- Saving Mothers, Giving Life (SMGL): Working as part of a consortium, EGPAF has been intensively scaling up SmartCare in four districts with the goal of improving maternal child health outcomes.
- Integration of rapid syphilis testing: EGPAF is working with the MOH to ensure the integration of rapid syphilis screening into routine antenatal and HIV prevention services for pregnant women, beginning in the four SMGL districts. Pregnant women who are co-infected with HIV and syphilis are twice as likely to transmit HIV *in utero* compared to those infected with HIV alone.
- Pediatric care and treatment and palliative care: EGPAF provides technical and financial support to organizations specializing in pediatric HIV clinical care and pediatric palliative care. EGPAF leads efforts to introduce new pediatric and palliative care initiatives to better support children with life-limiting and life-threatening conditions.
- Counseling: EGPAF is providing skills-building training to counselors and peer mentors working with children and adolescents infected with or affected by HIV/AIDS.
- Policy and advocacy: EGPAF uses its expertise to provide TA and to support programmatic capacity building to the Zambian government on the national and provincial levels, as well as advocate for appropriate policies and programming to eliminate pediatric AIDS nationwide.

Strengthening Early Childhood Development in Zambia

(The Conrad N. Hilton Foundation: 2012–2015)

Under this project, EGPAF seeks to expand access to comprehensive early childhood development (ECD) services for vulnerable children infected with or affected by HIV/AIDS in Lusaka, Zambia so they may better realize their cognitive, social, emotional, and physical development. Through the development of two ECD Survive and Thrive assessment and promotion rooms at Lusaka clinics, and in collaboration with community-based organizations

onsite in two high-prevalence areas in Lusaka, the project works with parents and caregivers to enhance their knowledge, supports community-based services, and expands clinical services to ensure that young children reach key developmental milestones.

Provision of Technical Assistance, Scientific and Applied Expertise Towards an Integrated Multi-Disciplinary Approach for HIV Care, Treatment and Prevention in the Choma District of Zambia

(CDC/Macha Research Trust: 2009–2014)

Since 2009, EGPAF has collaborated with the Macha Research Trust on a CDC/PEPFAR-funded project which has the following goal: “Provision of technical assistance, scientific and applied expertise towards an integrated multi-disciplinary approach for HIV care, treatment and prevention in the Choma District of Zambia.” Over the course of the Macha project, EGPAF has supported the Macha Research Trust with training and materials on prevention of mother-to-child transmission of HIV (PMTCT), care and treatment, early infant diagnosis, pediatric counseling and testing, HIV prevention, pediatric HIV care and support, and the integrated management of infant and young child feeding (IYCF). In project year four, EGPAF will conduct the following:

- Palliative care training, using a mix of adult and pediatric cases
- PMTCT training for lay counselors
- A general follow-up assessment on IYCF practices

Local Collaboration to Strengthen National PMTCT programs for Elimination of Pediatric HIV in Zambia

(UNICEF: 2011–2012)

Through this project, EGPAF is supporting the Ministry of Health (MOH) and collaborating with UNICEF to strengthen national prevention of mother-to-child transmission of HIV (PMTCT) activities and support the roll-out of Option A in the Choma, Katete, and Chipata Districts. In the second year of the project, EGPAF intends to focus on the implementation and monitoring of Option B+ in these districts, with a strong focus on community involvement.

Monitoring and Evaluation Support

(UNICEF: 2011–2012)

EGPAF currently provides targeted technical assistance to improve systems for monitoring and evaluation (M&E) of prevention of mother-to-child transmission of HIV (PMTCT) programs in Cameroon, Lesotho, and Zambia. In Zambia, EGPAF has worked with the Zambia Ministry of Health to adopt and implement Option A of the 2010 WHO recommendations for PMTCT, including development and revision of national data collection tools. In addition, EGPAF is supporting development of a PMTCT data use strategy; a national PMTCT monitoring, evaluation, and research framework; and a monitoring and evaluation quality assurance/quality improvement tool.

An exploratory study of Zambian pregnant women’s perceptions of the use of extended infant nevirapine to prevent HIV transmission during breastfeeding

(2012)

The latest guidelines on prevention of mother-to-child transmission (PMTCT) and infant feeding from the World Health Organization (WHO) show promise towards eliminating confusion about infant feeding and move us closer to possible elimination of pediatric HIV infection. Zambia has adopted Option A, which outlines the use of extended infant nevirapine through the duration of breastfeeding. Through the use of extended infant nevirapine, these revised guidelines preserve breastfeeding as the safest method of infant feeding in resource-constrained settings.

The new WHO guidelines require women and caregivers to deliver infant nevirapine daily through the duration of breastfeeding (which, in sub-Saharan Africa where HIV is most prevalent, typically extends into the second year of life). While the extended use of nevirapine through the duration of breastfeeding is recommended, little is known about how mothers respond to this advice given issues of treatment fatigue, stigma, and disclosure issues. This study will improve understanding of how beneficiaries view the changes and their ability to carry out these revised guidelines over an extended period outside the support and guidance of a large clinical trial.

The study aims to improve our understanding of unforeseen challenges and possible solutions to implementing Option A of the WHO PMTCT guidelines. It will provide insight into possible solutions to overcome such challenges from the perspective of HIV-positive pregnant and lactating women. The exploratory, qualitative study will include focus groups and in-depth interviews with pregnant and lactating women in urban and rural sites, as well as interviews with health care workers in the selected sites.

Identifying and Understanding Effective Interventions for OVCs affected by HIV

(JHU: 2011–2013)

EGPAF is working with Johns Hopkins University (JHU) on an NIH-funded Orphan and Vulnerable Children (OVC) study to evaluate the effectiveness of a cognitive-behavioral intervention compared to an existing intervention in improving a wide range of OVC outcomes including reduction in HIV risk behaviors, improved well-being, mental health, functioning, education, and caregiver health and support.

Zimbabwe

Virtual Elimination of HIV Infection in Infants and Young Children in Zimbabwe and Beyond

(The Children’s Investment Fund Foundation: 2010–2015)

In December 2010, EGPAF received an award from the London-based Children’s Investment Fund Foundation (CIFF) to significantly scale up EGPAF programs and dramatically accelerate the elimination of pediatric HIV/AIDS in Zimbabwe. Using the new 2010 WHO guidelines as a catalyst to improve access to critical and proven HIV prevention methods in Zimbabwe, the partnership is expanding access to more comprehensive prevention of mother-to-child transmission of HIV (PMTCT) services nationwide, and optimizing the quality and impact of PMTCT programs to ensure more children are born free of HIV and that HIV-positive mothers are kept alive. The project focuses on strengthening the capacity and commitment of all levels of the existing health system to ensure an integrated, sustainable, and cost-effective approach. The partnership also aims to ensure that the lessons learned from Zimbabwe will be used to implement similar programs in other high-burden countries, and to strengthen efforts to eliminate pediatric HIV/AIDS globally.

Over the five-year project period, EGPAF and its sub-grantee partners will implement the following approaches and strategies to maximize HIV-free survival at 24 months:

- Increase support to existing districts and expand to new districts to achieve national geographic coverage of comprehensive PMTCT services
- Ensure eligible pregnant women receive antiretroviral therapy (ART)
- Ensure that non-eligible women and HIV-exposed infants received appropriate antiretroviral (ARV) prophylaxis and support for appropriate infant feeding
- Improve follow-up of mother-baby pairs
- Increase awareness and demand for PMTCT services
- Ensure care and treatment for HIV-exposed and HIV-infected infants
- Strengthen M&E systems and human resources for health
- Document program results and best practice for dissemination to other high-burden countries in the region

Family and Communities for Elimination of Pediatric HIV (FACE-Pediatric HIV)

(OPHID: 2013–2017)

As a sub-grantee to the Organization for Public Health Interventions and Development (OPHID), EGPAF will build on the achievements from the Family AIDS Initiative (FAI) to expand access to high-quality prevention of mother-to-child transmission of HIV (PMTCT) services that are closely linked to HIV/AIDS treatment, care, and support for families, including children living with HIV. Under this project, EGPAF will:

- Continue to provide technical guidance to the national PMTCT program and strengthen human resource capacity
- Coordinate among other donor-funded PMTCT and maternal and child health programs



- Provide capacity building support to partners and stakeholders in technical, monitoring and evaluation, and financial systems

Advancing Community-Level Action for Improving Maternal and Child Health/Prevention of Mother-to-Child Transmission of HIV (ACCLAIM) Program

(Canadian International Development Agency: 2012–2016)

The goal of this project is to increase community demand for, uptake of, and retention in maternal and child health (MCH)/prevention of mother-to-child transmission of HIV (PMTCT) services to improve country progress toward elimination of pediatric HIV/AIDS. This will be achieved through the following objectives:

- Improving key HIV, MCH, and gender-related health behaviors through the implementation of community-based interventions that target changes in community norms and attitudes, thereby increasing the number of pregnant women accessing and completing the sequence of PMTCT services
- Assessing the behavioral and operational outcomes of selected community-based interventions and determine their relative effectiveness through strategic evaluation and operations research
- Documenting and disseminating research results, tools developed, and lessons learned to facilitate expansion of widespread expansion of community engagement activities found to be effective

Community-based interventions designed to complement facility-based services hold tremendous promise for improving PMTCT program outcomes by addressing entrance, adherence, and retention to the range of PMTCT services along the cascade. The three main interventions for implementation and evaluation in this proposal, which address communities on three different levels, include:

- **Engagement of Community Leaders:** Through training and capacity building for community leaders, this project will begin by facilitating the development of Community Action Plans (CAP) in order to generate increased demand for MCH and PMTCT services.
- **Community Days:** Semi-annual Community Days will bring entire communities together for a day of communication, information, and activities to improve awareness among key target populations of important MCH and PMTCT services.
- **Community Peer Groups:** Working at the individual level, MCH classes and men's groups will provide comprehensive MCH/PMTCT information and skills development to crucial community sub-groups focused on increasing and improving MCH and PMTCT health behaviors.

EGPAF has chosen three countries for these interventions – Uganda, Swaziland, and Zimbabwe – countries that, in collaboration with their respective Ministries of Health (MOH), are all making great strides in expanding facility-based services and strengthening health systems, but that have recognized barriers and gaps in demand and follow-up. This project provides a community-based approach that will influence harmful gender norms, attitudes, and behaviors through engagement at the grassroots level to enhance the potential impact. The addition of complementary community-based services will help move these countries towards elimination of pediatric HIV/AIDS, and the demonstration of the effect of these interventions will provide other countries with evidence to inform replication and scale-up.

Building upon EGPAF’s successfully supported PMTCT programs, this project will focus on breaking down community-level barriers to uptake of and retention in PMTCT services. The activities are designed to be locally relevant, addressing multiple gaps simultaneously across a variety of settings. The proposed project will be conducted over four years in 45 community clusters across the three selected countries in a stepped approach that will allow for comparison of the effectiveness of single and combination interventions. All clusters will benefit from the “Leadership Engagement” component of the intervention package. In 15 community clusters, “Community Days” will be added on; and in the final 15 of the community clusters, the full combination intervention package comprising “Leadership Engagement,” “Community Days,” and “Community Peer Groups” will be implemented. Through routine monitoring and evaluation and focused operations research, EGPAF will be able to provide an in-depth analysis of the implementation and outcomes of the interventions, as well as the added value of each intervention. A comprehensive dissemination plan will allow for adaptation and use of these innovations in additional settings, which will contribute to the overall learning from the experience gained through implementation.

The strategic design of this project will provide the evidence base needed for communities and program managers to make an informed choice about community activities to support. The experience and evidence gained through the proposed interventions will be important not only for the three countries in which they will occur, but also across EGPAF’s other country programs and the broader global health community.

Integrating Comprehensive Pediatric Care and Treatment into Maternal, Newborn, and Child Health (MNCH) for Elimination of Pediatric HIV in Zimbabwe

(DfID: 2012–2015)

Building on past and current program efforts to expand the delivery of comprehensive and integrated services for prevention of mother-to-child transmission of HIV (PMTCT), this project is focused on strengthening support to pediatric care and treatment services for infants and young children within the HIV continuum of care in Zimbabwe. Key objectives for the project include:



- To strengthen the capacity of the Ministry of Health and Child Welfare (MOHCW) to scale up and provide pediatric care and treatment services in Zimbabwe
- To strengthen the delivery of pediatric care and treatment services in Zimbabwe
- To strengthen the national health information system in support of pediatric care and treatment services

Working within this framework, EGPAF will support the integration of pediatric HIV diagnosis and treatment within maternal and child health (MCH) sites while strengthening human resources for health, including training, supportive supervision, and mentorship at the national, district, and site level for the pediatric HIV elimination agenda. Through the project, EGPAF will also strengthen management, coordination, leadership, and accountability for pediatric HIV care and treatment services at the national level towards achieving an AIDS-free generation in Zimbabwe.

COMPLETED PROJECTS

Global/Multi-Country

Helping Expand Antiretroviral Treatment for Families and Children (Project HEART)

(CDC/PEPFAR: 2004–2012)

Project HEART was launched in 2004 in Côte d'Ivoire, South Africa, Tanzania, and Zambia, and in 2006 in Mozambique. This eight-year project, funded through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Centers for Disease Control and Prevention (CDC), saw dramatic results. In 2010, one out of every 10 PEPFAR-supported ART patients in sub-Saharan Africa received their treatment through Project HEART. By early 2012, more than one million men, women, and children received HIV care and support; more than 2.5 million pregnant women received HIV counseling and testing; more than 66,500 pediatric HIV infections were prevented; and more than half a million people started lifesaving antiretroviral therapy (ART). Working with a network of more than 215 international and local partners, Project HEART dramatically improved delivery of HIV/AIDS services and ultimately strengthened national health systems by:

- Supporting HIV prevention, care, and treatment services at more than 510 ART sites and 1,053 prevention of mother-to-child transmission of HIV (PMTCT) sites throughout five countries
- Building the clinical, managerial, financial, and administrative capacity of local health providers and partners to more effectively provide HIV services
- Strengthening program and data quality
- Improving the technological and physical infrastructure of health facilities
- Providing sub-awards to local partners and Ministries of Health at the district and provincial/regional levels, in coordination with capacity building

Project HEART's innovative practices – most notably using a decentralized district approach, scaling up performance-based financing, and piloting new, easy-to-use technology – have served as best practices that have been authorized and disseminated by Ministries of Health and other implementing partners.

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year global Call to Action (CTA) project in 12 countries. This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT)

services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services.

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(The Bill and Melinda Gates Foundation: 2006–2011)

The Bill and Melinda Gates Foundation funded this project that was designed to expand access to prevention of mother-to-child transmission of HIV (PMTCT) services in 10 countries, allowing EGPAF to fill critical gaps, ensuring continued service delivery in resource-limited countries, and leveraging other donor resources to increase access to PMTCT services. Under this project, EGPAF:

- Provided support and technical assistance to host country governments to strengthen commitment to scale up PMTCT services
- Trained thousands of government personnel at the site, district, and provincial levels to build health care worker capacity to provide HIV services
- Strengthened integration with other essential services
- Improved linkages to care and treatment

Prevention of Mother-To-Child Transmission of HIV (PMTCT) Partnership

(Johnson & Johnson: 2008–2012)

The EGPAF-Johnson & Johnson (J&J) partnership was designed to expand coverage and improve the quality of prevention of mother-to-child transmission of PMTCT services, as well as demonstrate global leadership in PMTCT by replicating and documenting best practices in 11 country programs, with additional support for clinical service programs in Cameroon, India, and Malawi. By project end, EGPAF had reached more than 2.6 million women with access to PMTCT services, and succeeded in integrating PMTCT into routine maternal and child health (MCH) services by training health personnel and developing tools and job aides.

Introduction of Rapid Syphilis Testing within Prevention of Mother-to-Child Transmission of HIV Programs in Uganda and Zambia: A field acceptability and feasibility study

(WHO: 2008–2011)

Given that integration of syphilis testing into prevention of mother-to-child transmission of HIV (PMTCT) programs can prevent adverse pregnancy outcomes, this study assessed feasibility and acceptability of introducing rapid syphilis testing (RST) into PMTCT programs in Zambia and Uganda. Using a pre-post intervention design, HIV and syphilis testing and treatment rates during the RST intervention were compared with baseline.

Maternal Events and Pregnancy Outcomes in a Cohort of HIV-Infected Women Receiving Antiretroviral Therapy in Sub-Saharan Africa (MEP)

(CDC/PEPFAR: 2010–2012)

This multi-country study was one of the first in sub-Saharan Africa to evaluate maternal and infant outcomes in women receiving antiretroviral treatment (ART) at time of conception and during pregnancy as part of routine HIV service delivery. The primary study objectives were to describe both the frequency of severe adverse events including major congenital defects, adverse pregnancy outcomes, and death among infants or fetuses born to mothers exposed to ART during conception and pregnancy and these events within a section of the general population, regardless of maternal or infantile HIV-1 infectivity status. A secondary objective of the study was to describe the distribution of major congenital defects, adverse pregnancy outcomes, and infant death by various ART regimens being used in resource-limited countries.

The study involved the observational surveillance of a cohort of HIV-positive pregnant women that were taking combination ART before becoming pregnant in South Africa and Zambia. In each country, 300 mothers were enrolled in the cohort. Infants born to these women were examined for major congenital defects at birth or as soon as possible thereafter, and until one year of age. Data on prevalence of major congenital defects and adverse pregnancy outcomes within the general population were abstracted from facility records during the same time period as data from the cohort was collected. Data collection is ongoing, and the study is anticipated to finish in early 2013 once all children in the cohort have been followed to one year of age.

With the expansion of the use of ART in pregnancy both for treatment and infant prophylaxis, it is critical that the safety of these drugs in women and their infants be evaluated in the African context. Outcomes of how ART protects infants from HIV infection in the actual ART program setting also will be determined. Data from this initial pilot will provide the building blocks for further work in this area, and will help in the scale-up of pharmacovigilance activities in sub-Saharan Africa.

Cameroon

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year global Call to Action (CTA) project in 12 countries, including Cameroon (from 2006 through 2007). This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical

leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services.

In Cameroon, the project achieved impressive HIV counseling and testing results. The program offered opt-out testing, and in the more than 200 EGPAF-supported facilities, 100% of women accepted counseling, with 92% of those requesting testing. EGPAF also partnered with local organization Cameroon Baptist Convention Health Services (CBCHS) to provide community-level family planning through more than 90 HIV/AIDS family support groups. Condoms were provided at no charge to those who were sexually active, and family planning lectures were given to women attending antenatal care (ANC) and infant welfare clinics.

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(The Bill and Melinda Gates Foundation: 2006–2011)

The Bill and Melinda Gates Foundation funded this project that was designed to expand access to prevention of mother-to-child transmission of HIV (PMTCT) services in 10 countries including Cameroon, allowing EGPAF to fill critical gaps, ensuring continued service delivery in resource-limited countries, and leveraging other donor resources to increase access to PMTCT services. Under this project, EGPAF:

- Provided support and technical assistance to host country governments to strengthen commitment to scale up PMTCT services
- Trained thousands of government personnel at the site, district, and provincial levels to build health care worker capacity to provide HIV services
- Strengthened integration with other essential services
- Improved linkages to care and treatment

In Cameroon, EGPAF conducted a two-year study (the CORE study), which sought to find the most successful method for scaling up the provision of antiretroviral (ARV) regimens for PMTCT and establish a continuum of care system that efficiently enrolls HIV-positive PMTCT clients and HIV-exposed infants into care and treatment. The study compared two referral systems and found that when linkage nurses drew blood from HIV-positive women on the day of diagnosis and transported it to the nearest care and treatment center for CD4 testing, the overall mother-to-child transmission (MTCT) rate was 3.1%, half the program's previous rate. The lessons learned from the CORE study were used in the overall PMTCT program to improve the referral of HIV-positive pregnant women from PMTCT to care and treatment.

Prevention of Mother-To-Child Transmission of HIV (PMTCT) Partnership

(Johnson & Johnson: 2008–2012)

The EGPAF-Johnson & Johnson (J&J) partnership was designed to expand coverage and improve the quality of prevention of mother-to-child transmission of PMTCT services, as well as demonstrate global leadership in PMTCT by replicating and documenting best practices in 11 country programs, with additional support for clinical service programs in Cameroon, India, and Malawi. By project end, EGPAF had reached more than 2.6 million women – including nearly 54,000 in Cameroon – with access to PMTCT services, and succeeded in integrating PMTCT into routine maternal and child health (MCH) services by training health personnel and developing tools and job aides. In Cameroon, EGPAF worked with local partner organization Cameroon Baptist Convention Health Services (CBCHS) to offer comprehensive and holistic wrap-around services to PMTCT clients and their families to ensure their medical, nutritional, educational, and psychosocial needs were met. To ensure program sustainability in the final years of the project, EGPAF focused its efforts on building staff capacity surrounding documentation, advocacy, and resource mobilization.

Côte d’Ivoire

Helping Expand Antiretroviral Treatment for Families and Children (Project HEART)

(CDC/PEPFAR: 2004–2012)

Project HEART was launched in 2004 in Côte d’Ivoire, South Africa, Tanzania, and Zambia, and in 2006 in Mozambique. This eight-year project, funded through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Centers for Disease Control and Prevention (CDC), saw dramatic results. In 2010, one out of every 10 PEPFAR-supported ART patients in sub-Saharan Africa received their treatment through Project HEART. By early 2012, more than one million men, women, and children received HIV care and support; more than 2.5 million pregnant women received HIV counseling and testing; more than 66,500 pediatric HIV infections were prevented; and more than half a million people started lifesaving antiretroviral therapy (ART). Working with a network of more than 215 international and local partners, Project HEART dramatically improved delivery of HIV/AIDS services and ultimately strengthened national health systems by:

- Supporting HIV prevention, care, and treatment services at more than 510 ART sites and 1,053 prevention of mother-to-child transmission of HIV (PMTCT) sites throughout five countries
- Building the clinical, managerial, financial, and administrative capacity of local health providers and partners to more effectively provide HIV services
- Strengthening program and data quality
- Improving the technological and physical infrastructure of health facilities
- Providing sub-awards to local partners and Ministries of Health at the district and provincial/regional levels, in coordination with capacity building

Project HEART's innovative practices – most notably using a decentralized district approach, scaling up performance-based financing, and piloting new, easy-to-use technology – have served as best practices that have been authorized and disseminated by Ministries of Health and other implementing partners.

In Côte d'Ivoire, EGPAF coordinated with the Ministry of Health to expand PMTCT services and integrate those services with access to ART for pregnant mothers, partner and family testing, and screening for tuberculosis. In its role as an innovator and national leader in PMTCT services, EGPAF began the first opt-out voluntary counseling and testing program. The subsequent introduction of provided-initiated counseling and testing to reflect changes in international guidelines has increased HIV testing uptake. EGPAF supported TB/HIV integration and infection prevention activities at 56 EGPAF-supported TB sites and at 70 ART sites, and expanded TB/HIV services to 18 additional TB centers.

EGPAF/Côte d'Ivoire supported 412 PMTCT and care and treatment sites over the life of the project, and achieved the following:

- Provided over 790,000 women with access to services to prevent transmission of HIV to their babies
- More than 180,000 individuals, including more than 12,600 children, have been enrolled into our care and support programs
- 671,213 pregnant women have been tested for HIV through EGPAF-supported programs
- Supported services at 476 ART sites and 2,231 PMTCT sites

Care and Treatment and PMTCT at former Global Fund sites in Côte d'Ivoire

(CARE: 2007–2008)

The goal of this Global Fund-funded program was to reduce the prevalence, sickness, and death caused by HIV and AIDS in Côte d'Ivoire by strengthening the capabilities related to prevention, HIV care and treatment, and community mobilization and awareness. The program worked to strengthen site-level capacity for prevention of mother-to-child transmission of HIV (PMTCT) and the prevention and treatment of sexually transmitted infections, and also provided medical and psychosocial support for people living with HIV and AIDS. As a sub-grantee to CARE, EGPAF provided PMTCT and monitoring and evaluation support.

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year Call to Action (CTA) project in 12 countries, including Côte d'Ivoire (from 2005 through 2007).

This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services.

CTA's work was conducted in accordance with national health policies and within national AIDS response frameworks. EGPAF-supported programs:

- Integrated HIV counseling and testing and antiretroviral (ARV) prophylaxis regimens into existing maternal and child health (MCH) services
- Improved patient flow, HIV counseling techniques, testing algorithms, drug distribution, and other aspects of program delivery
- Supported basic clinic improvements and worked to ensure provision essential commodities
- Engaged in community mobilization activities
- Trained health care workers and educated mothers about infant feeding
- Provided technical assistance for program implementation, monitoring and evaluation, and psychosocial support

Democratic Republic of Congo

Kinshasa School of Public Health (KSPH) PMTCT Program

(Bill and Melinda Gates Foundation: 2007–2012)

For the last decade, EGPAF has been providing financial and programmatic support to the Kinshasa School of Public Health's prevention of mother-to-child transmission of HIV (PMTCT) program. By 2012, the program served clients through 55 sites in Kinshasa and rural areas of DRC in Equateur, Orientale, Kasai Oriental, Bandundu, and Bas Congo.

Support to the Ministry of Health

(Private: 2001–2011)

EGPAF is credited with introducing prevention of mother-to-child transmission of HIV (PMTCT) to DRC in 2001. Since then, EGPAF has supported the Ministry of Health with its national PMTCT efforts and has:

- Provided targeted technical assistance to the National AIDS Control Program
- Sponsored a 2007 trip to Rwanda, which led the Ministry of Health to introduce HIV counseling and testing into labor and delivery wards
- Conducted a national meeting on the transition to combination regimens for PMTCT
- Led the national process that resulted in the adoption of revised guidelines for PMTCT

Support to University of North Carolina (UNC)

(Private: 2001–2011)

From 2001 to 2011, EGPAF supported sub-grants to the University of North Carolina (UNC) for both prevention of mother-to-child transmission of HIV (PMTCT) and HIV and AIDS care and treatment programs. From 2007 to 2009, EGPAF supported UNC care and antiretroviral treatment (ART) services for children and families living with HIV and AIDS.

India

Prevention of Mother-to-Child Transmission of HIV (PMTCT) Partnership

(Johnson & Johnson: 2008–2012)

The EGPAF-Johnson & Johnson (J&J) partnership was designed to expand coverage and improve the quality of prevention of mother-to-child transmission of HIV (PMTCT) services as well as demonstrate global leadership in PMTCT by replicating and documenting best practices in 11 country programs, with additional support for clinical service programs in Cameroon, India, and Malawi. By project end, EGPAF had reached more than 2.6 million women, including over 130,000 in India, with access to PMTCT services, and succeeded in integrating PMTCT into routine maternal and child health (MCH) services by training health personnel and developing tools and job aides.

In India, EGPAF worked with our local partner SAATHII in four high-prevalence states (Andhra Pradesh, Karnataka, Maharashtra, and Manipur) to provide quality and comprehensive PMTCT services at 360 sites in 58 districts. EGPAF's work in India focuses on delivering private-sector testing and counseling in collaboration with the government through a public-private partnership (PPP). To strengthen health systems of the private health sector, EGPAF has:

- Built the capacity of health care providers to improve supply chain management, strengthen laboratory capacity, and ensure linkages with government services
- Expanded community-based testing efforts in Manipur
- Supported the adoption of the revised WHO Guidelines for PMTCT at the national level

Kenya

Monitoring and Evaluation Support for Phase I of the MTCT Free Zones in Rift Valley and Nyanza Provinces

(UNICEF: 2011–2012)

This UNICEF-funded project was designed to strengthen the capacity for monitoring and evaluation nationally with emphasis on the Rift Valley and Nyanza Provinces by addressing issues of data quality and its use in programming to improve quality of prevention of mother-to-child transmission of HIV (PMTCT) and pediatric care and treatment programs.

APHIA II Western and Eastern Provinces

(USAID/PEPFAR: 2006–2010)

As a sub-grantee to Jhpiego in the Eastern Province of Kenya, and a sub-grantee to PATH in Western Province, these USAID/PEPFAR-funded projects built the capacity of the health system to implement the Government of Kenya's national health policies and the outcomes of HIV and HIV-related health programs in Kenya. EGPAF was responsible for the HIV/AIDS prevention, treatment, and service delivery aspects of the project.

In Eastern Province, by the end of the project:

- 53 HIV care and treatment sites in the central and northern parts of Eastern Province were set up.
- Through these sites, a total of 26,562 clients enrolled in HIV care, including 3,076 children. Of these 11,797 were stated on antiretroviral therapy (ART) with 9,277 being reported as active as of September 2010.
- For PMTCT, the project helped establish 432 sites in the province which offered integrated HIV care at the maternal and child health clinics.
- 218,381 women were counseled and tested for HIV.
- 8,518 HIV-positive women were identified and offered prophylaxis.
- Follow-up and testing of the HIV-exposed infants at six weeks was done successfully with a mother-to-child transmission rate of 6.5%.

In Western Province, by the end of the project:

- Approximately 48,000 people were enrolled into HIV care, about 19,000 of whom received ART, including 2,100 children.
- More than 15,000 HIV-positive pregnant women received ART prophylaxis.
- Over 450,000 HIV-positive pregnant mothers received counseling and testing services.

Provision of Services and Care for HIV-Exposed Infants: a Comparison of the Maternal and Child Health Clinic and the Comprehensive Care Clinic Models

(Bill and Melinda Gates Foundation: 2007–2011)

The objective of this Bill and Melinda Gates Foundation-funded research was to compare the effectiveness of the maternal and child health (MCH) and comprehensive care clinic (CCC) models of care in providing services to HIV-exposed infants. The results of this study helped shape the current care model used by the Ministry of Health. Study results were published in the September 2012 issue of the *Journal of Acquired Immune Deficiency Syndrome (JAIDS)*.

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID), the U.S. Centers for Disease Control and Prevention (CDC), and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year Call to Action (CTA) project in 12 countries, including Kenya (from 2004 through 2007). This service-based program was aimed at scaling up prevention of mother-to-child transmission of HIV (PMTCT) services, and preventing pediatric HIV infection through research, advocacy, and prevention and treatment programs. Kenya-specific highlights include:

- **Building Sustainability:** In Kenya, the program developed a tool to track supplies and reorders to maintain buffer stock, also strengthening district stores, capacity to forecast and order kits and supplies to distribute them to the facilities.
- **District Approach:** Offering PMTCT services that engage district health management leadership in the planning, implementing, and evaluating of PMTCT services through providing capacity building support and technical assistance. The benefits of a district approach include the decentralization of services to the rural areas to increase access to PMTCT services.
- **Improved Service Delivery:** The need for additional physical space in which to confidentially counsel pregnant women has strained existing antenatal care services. In Kenya, EGPAF-supported sites have introduced partitions (within existing facilities) and trucking containers to create additional counseling rooms.

ZINGATIA MAISHA

(AMREF: 2005–2009)

As a sub-grantee to AMREF on this GlaxoSmith Kline-funded project, EGPAF sought to improve the quality of life of people living with HIV/AIDS in Kenya through treatment adherence, support, and promotion of continuum of care by:

- Developing the capacity of antiretroviral therapy (ART) providers to enhance treatment access and adherence
- Building capacity of community PLWHA groups to enhance treatment access, adherence, and psychosocial support
- Creating a functional referral system linking health facilities and communities

Through the project, community-based support groups partnered with health facilities to develop referral tools, deliver HIV treatment literacy, and provide adherence counseling and support. 38 health facilities in several counties across Kenya were supported to establish the project’s unique Health Facility/Community Linkage Committees (HCLCs). The HCLCs provided a

forum for clinicians and other health workers to interact with their clients to improve on the quality of care.

The project also ensured that all sites attained an appropriate level of infrastructure and technical capacity, funding minor but significant improvements to buildings and equipment and training in areas such as ART adherence support, stigma reduction, stress management, and trauma awareness. Community support groups were developed in the fields of adherence and psychosocial support, treatment literacy, referrals, and defaulter tracing.

Lesotho

Call to Action

(USAID/PEPFAR: 2004–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year global Call to Action (CTA) project in 12 countries, including Lesotho (from 2004 through March 2010). Through the CTA project in Lesotho, EGPAF has significantly contributed to national prevention of mother-to-child transmission of HIV (PMTCT) achievements. EGPAF's work in Lesotho has been based around four areas:

- Expanding coverage of HIV/AIDS services
- Ensuring high-quality services
- Building community support for program sustainability
- Providing support at the national level

Over the course of more than five years, EGPAF assisted the MOH in establishing and enhancing PMTCT service provision at 103 health facilities in six districts (Berea, Butha-Buthe, Leribe, Maseru, Mokhotlong, and Thaba-Tseka). In the five districts where EGPAF was the only PEPFAR clinical services partner, coverage was successfully increased to 100% for PMTCT, providing more than 55,000 pregnant women with HIV testing and counseling (HTC) services since 2006. Approximately 17,000 women were provided prophylaxis for PMTCT, including 4,000 who were initiated on Highly Active Antiretroviral Therapy (HAART), and nearly 15,000 infants received drugs to help keep them free of HIV. More than 6,000 HIV-exposed infants received cotrimoxazole (CTX) prophylaxis, and almost 8,000 were tested for HIV using deoxyribonucleic acid/polymerase chain reaction (DNA/PCR) testing.

Promoting Good Health for Mothers and Babies

(UNICEF: 2010–2011)



With support from UNICEF, this project sought to support the Ministry of Health (MOH) to improve quality of services offered to pregnant women at maternal and child health (MCH) clinics, including nutrition support, by integrating prevention of mother-to-child transmission of HIV (PMTCT) into MCH services and also scaling up pediatric HIV care and treatment. Project successes include:

- More than 1,110 infants initiated on cotrimoxazole prophylaxis during the project period
- 57 nurses trained on comprehensive pediatric care and treatment, and 17 nurses trained on the new WHO PMTCT guidelines
- On-site mentoring provided, with health care workers focusing on monitoring and evaluation, presumptive diagnosis of severe HIV disease in young children less than 18 months, and infant and young child feeding (IYCF)
- 375 health care workers trained on IYCF counseling and support as well as Plumpy'nut usage and distribution
- "Child Health Days" introduced in 10 districts nationwide that offered HIV testing and counseling services, including early infant diagnosis, TB screening, nutrition assessments, and distribution of vitamin A; these campaigns reached more than 11,559 children
- Psychosocial support through monthly family support group meetings; as of 2011, there were 81 active family support groups

Prevention of Mother-to-Child Transmission of HIV Partnership

(Johnson & Johnson: 2008–2011)

The EGPAF-J&J partnership was designed to expand coverage and improve the quality of prevention of mother-to-child transmission of HIV (PMTCT) services, as well as demonstrate global leadership in PMTCT by replicating and documenting best practices in six country programs including Lesotho. By project end, EGPAF succeeded in:

- Integrating PMTCT into routine maternal and child health (MCH) services by training health personnel and developing tools and job aides
- Assisting sites to provide additional services for HIV-positive women, including early infant diagnosis, TB screening and treatment, infant cotrimoxazole and maternal antiretroviral (ARV) prophylaxis for PMTCT, and infant feeding education
- Strengthening linkages between health centers and communities by selecting and training lay counselors and expert patients to serve as site-level community and counseling Focal Persons who organized monthly meetings of CHWs and volunteers, collected reports of activities, gave supportive peer counseling, and participated in the performance assessment of CHWs and volunteers

- Providing technical leadership and support to the Ministry of Health (MOH) to support national monitoring and evaluation (M&E) data quality and accuracy
- Serving on the national PMTCT and Pediatric Technical Working Group, which helped make and inform policy decisions

The Impact of HIV Test Results on Subsequent Antenatal Care Attendance by Women in Rural Hospitals in Lesotho

(2010–2011)

Regular antenatal care (ANC) visits beginning early in pregnancy promote safe motherhood, particularly for HIV-positive women. While many factors affecting ANC attendance have been documented, the aim of this study was to explore the impact of a positive or negative HIV test result at a woman's first ANC visit on her subsequent ANC attendance, for which existing research was limited. The study utilized a retrospective cohort design. Women's ANC records in three rural hospitals in Lesotho in December 2009-May 2010 were reviewed. Information collected from the registers included the number of ANC visits, gestational age at first visit, HIV status, maternal age, gravidity, parity, and CD4 count and the receipt of ARV prophylaxis or ART for HIV-positive women. The distribution of gestational age (GA) and number of visits between HIV status and knowledge of HIV status subgroups was analyzed using statistical tests.

Neither number of subsequent visits nor GA at first visit differed for women receiving a positive or negative HIV test result. However, women who knew their status before their first visit had significantly more subsequent visits than women of unknown status (2.1 vs. 1.6 visits, $P=0.014$) and attended ANC earlier (19.6 vs. 22.9 weeks, $P<0.001$). Of those with known status, HIV-positive women attended ANC nearly six weeks earlier than HIV-negative women, though results were not statistically significant.

Results describe the similarities and differences in ANC attendance among women with positive and negative HIV test results, as well as among women who knew and did not know their HIV status. Findings from this study were accepted for a poster presentation by the International AIDS Conference, which took place in Washington, D.C. in July 2012. A manuscript to be submitted to a peer-reviewed journal also is being prepared. With a limited amount of funding, the study team was able to use existing data routinely collected at facilities to answer a research question that informs the PMTCT program in Lesotho. Moreover, this research will contribute to the growing evidence in maternal and child health on factors that facilitate or hinder access to ANC services for women and the completion of what is commonly referred to as the PMTCT "cascade": HIV counseling, testing, receipt of test results, and if positive, ARV prophylaxis (or ART) for the mother and infant.

Malawi

Call to Action

(USAID/PEPFAR: 2002–2010)

EGPAF has been working in Malawi under the USAID/PEPFAR-funded Call to Action Project since 2002. EGPAF, in collaboration with local partners, initiated one of Malawi's first programs to provide prevention of mother-to-child transmission (PMTCT) services. By 2010, EGPAF had assisted the Malawi Ministry of Health (MOH) in establishing PMTCT service provision at 42 antenatal care (ANC) sites and expand to provide direct technical support to 91 PMTCT sites in three districts, providing more than 203,000 pregnant women with counseling and testing services and approaching 100% antiretroviral (ARV) uptake among HIV-positive pregnant women. Efforts to scale up infant ARV provision have reached 71% of HIV-exposed infants at supported sites over the life of the project. The project also supported a number of innovative programs to reduce stigma and provide psychosocial support to people living with HIV. These include:

- Training mother mentors and peer educators to encourage women to deliver at facilities and to bring their infants to health facilities to receive ARV prophylaxis
- Establishing peer-led support groups for HIV-positive mothers for lactation and psychosocial support
- Facilitating a pilot program to provide clean water kits and supplemental food to weaned HIV-exposed infants attending well-child clinics
- Targeting male partners of pregnant women for counseling and testing through the "Male Championship" program at ANC sites; the "Male Championship" model resulted in improved rates of male partner testing by almost 10 times, from 1,284 men in 2008 to 11,106 men in 2009

A hallmark of EGPAF/Malawi's program has been in building MOH capacity to deliver PMTCT services in several maternal and neonatal child health (MNCH) sectors. EGPAF and its partners have made a significant impact in this area, having trained over 2,100 nurses, coordinators, midwives, and Health Surveillance Assistants in PMTCT service delivery since the program's inception.

The Prevention of Mother-to-Child Transmission of HIV (PMTCT) Partnership

(Johnson & Johnson: 2009–2012)

EGPAF, in partnership with Johnson and Johnson (J&J), worked in Malawi, Cameroon, and India to improve coverage and quality of prevention of mother-to-child transmission of HIV (PMTCT) services. The partnership also supported global health leadership in the PMTCT field by replicating and documenting best practices, and by supporting national governments to adapt and implement the revised World Health Organization (WHO) recommendations for PMTCT and

infant feeding, which will optimize PMTCT programming. In 2009, EGPAF/Malawi began providing district-level technical support to the neighboring Dedza and Ntcheu districts in close collaboration with District Health Officers, while continuing to support Lilongwe district through the EGPAF-LMRFT partnership. Over the course of the project, EGPAF has worked to:

- Expand support to 95 sites in three districts, assess those districts' overall PMTCT delivery capacity, and work with district MOH leadership to address key issues identified in the assessments
- Strengthen capacity, as well as directly advise the Ministry of Health on PMTCT policy
- Share expertise as a member of the National PMTCT Working Group
- Provide supportive supervision and technical support to partners and service providing sites
- Support an innovative zonal mentorship program

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(Bill and Melinda Gates Foundation: 2006–2011)

The Bill and Melinda Gates Foundation funded this project that was designed to expand access to prevention of mother-to-child transmission of HIV (PMTCT) services in 10 countries, including Malawi, allowing EGPAF to fill critical gaps, ensuring continued service delivery in resource-limited countries, and leveraging other donor resources to increase access to PMTCT services. Notably, EGPAF reached 1,008,268 pregnant women with HIV testing during the original grant period – far exceeding the goal of 300,000 pregnant women. Under this project, EGPAF:

- Provided support and technical assistance to host country governments to strengthen commitment to scale up PMTCT service
- Trained thousands of government personnel at the site, district, and provincial levels to build health care worker capacity to provide HIV services
- Strengthened integration with other essential services
- Improved linkages to care and treatment

In Malawi, the project:

- Developed, pre-tested and revised a PMTCT capacity assessment tool, collecting data from 50 PMTCT sites in Dedza and Ntcheu districts in close collaboration with the Ministry of Health (MOH), district health officers and coordinators
- Increased uptake of PMTCT in EGPAF-supported sites
- Increased women receiving combination ARV regimens
- Supported the efforts of the Lilongwe District Health Office to provide quality PMTCT services at all 42 antenatal care (ANC) facilities



- Built the capacity of district and zonal level PMTCT coordinators to plan, monitor, and manage PMTCT quality improvement and scale-up through coordination and implementation of the zonal mentorship program
- Conducted refresher training for PMTCT providers on combination regimens, early infant diagnosis (EID), adherence support, and monitoring and evaluation (M&E)
- Worked in collaboration with the MOH to develop national PMTCT M&E tools such as the mother's health passport and ANC and Maternity registers

Mozambique

Helping Expand Antiretroviral Treatment for Families and Children (Project HEART)

(CDC/PEPFAR: 2004–2012)

Project HEART was launched in 2004 in Côte d'Ivoire, South Africa, Tanzania, and Zambia, and in 2006 in Mozambique. This eight-year project, funded through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Centers for Disease Control and Prevention (CDC) saw dramatic results. In 2010, one out of every 10 PEPFAR-supported ART patients in sub-Saharan Africa received their treatment through Project HEART. By early 2012, more than one million men, women, and children received HIV care and support; more than 2.5 million pregnant women received HIV counseling and testing; more than 66,500 pediatric HIV infections were prevented; and more than half a million people started lifesaving antiretroviral therapy (ART). Working with a network of more than 215 international and local partners, Project HEART dramatically improved delivery of HIV/AIDS services and ultimately strengthened national health systems by:

- Supporting HIV prevention, care, and treatment services at more than 510 ART sites and 1,053 PMTCT sites throughout five countries
- Building the clinical, managerial, financial, and administrative capacity of local health providers and partners to more effectively provide HIV services
- Strengthening program and data quality
- Improving the technological and physical infrastructure of health facilities
- Providing sub-awards to local partners and Ministries of Health at the district and provincial/regional levels, in coordination with capacity building

Project HEART's innovative practices – most notably using a decentralized district approach, scaling up performance-based financing, and piloting new, easy-to-use technology – have served as best practices that have been authorized and disseminated by Ministries of Health and other implementing partners.

Project HEART expanded EGPAF/Mozambique’s prevention of mother-to-child transmission of HIV (PMTCT) and care and treatment activities to include services in labor and delivery wards, postnatal care, child welfare clinics, inpatient pediatric wards, and support for the care and treatment of both adults and children. Approximately one-third of all PEPFAR-supported ART patients in Mozambique received their treatment through Project HEART. In fact, EGPAF/Mozambique exceeded initial project targets for patient enrollment in care and ART initiation by 27 percent.

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year Call to Action (CTA) project in 12 countries, including Mozambique (from 2004 through 2009). This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services.

Through the CTA PMTCT project in Mozambique, EGPAF initiated activities in Mozambique’s Nampula and Gaza provinces, supporting nine health centers and serving as an incremental partner to the Ministry of Health’s (MOH) national PMTCT roll-out program. By the end of 2009, with USAID’s support, EGPAF had expanded to support PMTCT services in the four provinces of Cabo Delgado, Nampula, Gaza, and Maputo to a total of 164 health facilities. With the closeout of the CTA project in 2009, EGPAF-supported PMTCT activities were transferred and expanded through the CDC Track 1.0-funded Project HEART, a multi-country EGPAF initiative funded through a cooperative agreement with CDC/PEPFAR.

Increasing Access to HIV Care and Treatment for Children and their Families

(UNICEF: 2006–2009)

Under this agreement, UNICEF provided funding to expand HIV services to four additional districts in Cabo Delgado, and while these districts were eventually included in EGPAF’s flagship Project HEART program, UNICEF continued to provide integrated technical support tailored to the needs of the province. Activities implemented with UNICEF funds focused on building capacity within the Provincial Health Directorate (DPS) to both manage and scale up clinical services, with particular emphasis on prevention of mother-to-child transmission of HIV (PMTCT) and pediatric care and treatment services.

EGPAF strengthened nutritional and psychosocial support for HIV-infected children and their caregivers through technical support and training at the site and district levels. Once HIV services in Cabo Delgado also were funded by PEPFAR, UNICEF continued to fund certain distinct activities with the following specific objectives:

- Improving follow-up of HIV-exposed and HIV-infected infants and young children
- Improving access to quality HIV care and treatment services for HIV-infected infants and children
- Improving access to psychosocial support for children in care and treatment and their caregivers

By project end, the results of supported services in Cabo Delgado included:

- The cumulative number of patients enrolled in care since the beginning of the program is 20,507, of which 1,274 were children (6.2%).
- A total of 7,907 persons initiated antiretroviral therapy (ART), of which 460 (5.8%) were children.
- In the 11 health facilities where EGPAF supported PMTCT services, a total of 337,176 pregnant women were counseled in antenatal care and of those 261,181 (77.5%) were tested.

Exploring Facilitators and Barriers to Participation of HIV-Exposed and HIV-Infected Children in Care and Treatment Services in two Provinces in Mozambique

(2011–2012)

Despite improvements in HIV pediatric care and treatment programs in Mozambique, engagement and retention of HIV-exposed and HIV-infected children in these services remain challenging. To explore the reasons behind these challenges, EGPAF conducted a qualitative study in August 2011 – January 2012 to identify barriers to HIV testing, enrollment into care, and follow-up services for HIV-exposed children in Mozambique.

Four participant groups—parents/caregivers with an HIV-exposed or infected child, grandmothers, healthcare professionals providing pediatric HIV services, and community leaders—were recruited from seven health facilities and surrounding communities in Maputo City, Maputo Province, and Cabo Delgado Province to participate in this qualitative study. Interviews and focus group discussions were conducted with these groups, and a resource inventory of pediatric services at these facilities was undertaken. Transcripts were transcribed and translated into Portuguese (for interviews conducted in local languages), and qualitative data was coded and analyzed.

Some of the most frequently reported barriers to engaging children in HIV services were alternative care-seeking due to perceptions of traditional or spiritual causes of disease, disbelief in positive test results, fear of death, and a general lack of willingness to attend facilities. In contrast, the facilitating factors most often cited by participant groups include children displaying visible illness, having hope for children’s future, perceptions that the facility was the

appropriate place for HIV care and treatment, relationships with healthcare professionals, and institutional factors such as free services and medications and service integration. Further analysis will enhance our understanding of these factors, including the similarities and differences among participant groups and regions and any gaps or weaknesses in the provision of pediatric services at study facilities. Findings will result in recommendations for improving the engagement of children in HIV programs in Mozambique. Prior to this research, barriers and facilitators specific to engaging and maintaining Mozambican children in HIV care had not been systematically evaluated.

The abstract for this study was accepted to the 4th International Workshop on HIV Pediatrics in Washington, D.C. in July 2012. A manuscript to be submitted to a peer-reviewed journal is also being prepared.

Field Evaluation of Point of Care Technologies in Maternal and Child Health (MCH) Services and in the Prevention of Mother-to-Child Transmission of HIV (PMTCT) Program Project Period

(2011–2012)

Provision of optimal maternal child health services requires the availability of laboratory diagnostic capacity to identify maternal conditions that may negatively impact health without intervention. In Mozambique, most pregnant women will visit the antenatal clinics at least once, but many do not return for further visits. It is thus imperative to provide as many of the necessary laboratory services as possible during that initial visit. The development of point-of-care (POC) technologies for various laboratory tests provides the opportunity to conduct testing during the time of the visit, permitting implementation of necessary interventions during the patient's visit.

Three POC laboratory tests that may significantly impact maternal child health include tests that screen for maternal anemia, syphilis, and CD4+ T-lymphocyte enumeration. Implementation of interventions based on abnormalities identified using these three tests can dramatically improve the health of the pregnant woman, as well as decrease the risk of morbidity and mortality to the infant, including the prevention of vertical transmission of HIV from mother to infant.

This study evaluated the feasibility and acceptability of introduction of three POC technologies for diagnosis of syphilis, hemoglobin, and CD4+ T-lymphocyte enumeration within the mother-to-child services. In addition, the study will assess the impact of the availability of test results on implementation of appropriate clinical responses to abnormal results, such as provision of supportive treatments for women identified with anemia, appropriate administration of antibiotics for syphilis infection, and initiation of antiretroviral therapy among HIV-positive pregnant women identified as eligible for treatment. Study findings will be used to guide

optimal placement and usage of POC instruments to support maternal child health and PMTCT service delivery.

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(The Bill and Melinda Gates Foundation: 2006–2011)

The Bill and Melinda Gates Foundation funded this project, which was designed to expand access to prevention of mother-to-child transmission of HIV (PMTCT) services in 10 countries including Mozambique to allow EGPAF to fill critical gaps, ensure continued service delivery in resource-limited countries, and leverage other donor resources to increase access to PMTCT services. As part of these efforts, EGPAF/Mozambique implemented a research study to determine maternal seroconversion of HIV during the pregnancy and breastfeeding period, and to describe associated risk factors. Results of this study will contribute to designing prevention programs targeted for this population. The research was implemented from 2008 to 2011. Final analysis is ongoing, and final results are estimated to be available in early 2013.

Rwanda

HIV Clinical Services Program

(USAID/PEPFAR: 2007–2012)

As one of the five PEPFAR HIV/AIDS clinical services partners in Rwanda, EGPAF was the lead provider of valuable HIV/AIDS support in the Eastern Rwandan province under this program, and extended support to a number of facilities in the city of Kigali. The project sought to strengthen management at the district, hospital, and health center levels with training, accountability, and partnership. EGPAF provided direct assistance to more than 45 districts and health facilities to support integrated HIV/primary health care networks through performance-based sub-grantee agreements. The project also sought to strengthen the network of care, integrate HIV and related health services and link HIV services to community programs and resources to contribute towards universal access to HIV clinical services. Furthermore, this program provided technical assistance on a national level for family planning/HIV, infant nutrition, pediatric care and treatment, prevention of mother-to-child transmission of HIV (PMTCT), and continued quality improvement. To accomplish the project's goals, the Clinical Services Program:

- Diminished barriers to access by maximally decentralizing HIV care services
- Assisted health facilities and districts to closely monitor and evaluate their health services to improve their performance
- Strengthened referrals within and outside of the health system

- Built highly performing partnerships and teams with all stakeholders to maximally support district health networks, appreciating the need for trust, collaboration, full information, and mutual responsibility across organizations and governments

Call to Action

(USAID/PEPFAR: 2002–2010)

Through funding from the United States Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year global Call to Action (CTA) project in 12 countries, including Rwanda (from 2004 through 2007). This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services.

In Rwanda, the CTA project supported healthcare facilities and non-governmental and community-based organizations in planning, implementing and/or expanding PMTCT programs. The CTA project also provided funding for community mobilization, training of health care workers, HIV counseling and testing, antiretroviral prevention regimens, and infant feeding education. Implemented within existing maternal child health settings, CTA helped enhance the general care of women and children in Rwanda and incorporated simple yet effective HIV preventative interventions into existing health care settings.

At the end of December 2007, EGPAF was supporting 35 health facilities. Among these facilities were six district hospitals, five maternity centers offering PMTCT services, 23 health centers offering PMTCT services, 28 facilities offering voluntary counseling and testing (VCT), and 19 facilities offering antiretroviral therapy (ART) services.

The successes of the CTA Project in Rwanda are notable: By project end, over 67,898 pregnant women were tested. Notably, nearly 100% returned for results. Through collaboration with local partners, EGPAF consistently promoted the use of the “Carte de Liaison” (a prenatal card), which notes whether the mother is eligible for prophylaxis. A majority of mothers presented with their cards during supervisory visits; consequently, the exposed infants were more easily identified and followed up for testing. Within the services of PMTCT, all HIV-positive women were referred for family planning services (except in the faith-based sites, which refer for family planning). EGPAF also led an HIV-family planning (FP) integration work group, which defined a model of HIV-FP integration that was used to train all facility nurses, including those in PMTCT, ART, VCT and infant follow-up services, to refill oral and injectable contraceptives during other visits.

Health seeking behaviors of pregnant women in Rwanda: Contributing factors towards high drop out of pregnant women between 1st and 4th ANC visit

(USAID: 2012)

Current guidance from the World Health Organization (WHO) recommends that pregnant women have a minimum of four focused antenatal care (FANC) visits during the time of their pregnancy, beginning in the first trimester. While 98 percent of pregnant women in Rwanda attend at least one ANC visit, less than 35 percent attend all four recommended visits, and only 38 percent come for their first visit during their first trimester. In addition, we see that 55 percent of HIV-positive women coming to EGPAF-supported sites for ANC were aware of their HIV-positive status at the time of their first ANC visit. Through interviews with women bringing their infants to vaccination clinics or coming to the health facility for antiretroviral (ART) services, this exploratory study aims to understand the reasons why women come late to ANC, why they come for less than four visits, and whether the pregnancies of known HIV-positive women are planned.

Integration of HIV Services into Maternal and Child Health: A Post Implementation Evaluation of “One-Stop Model” in Rwanda

(USAID: 2012)

EGPAF, in partnership with the Maternal and Child Health (MCH) department in the Ministry of Health (MOH), the HIV Division of the RBC/IHDPC, district hospitals, and selected health centers, developed a “one-stop model” to support the integration of MCH and HIV services. Prior to the one-stop model, clients received different services on different days from different providers. Under the integrated model, the woman-infant pair could receive all of these services on the same day, at the same appointment, from the same provider.

In 2010, an assessment was conducted in five selected health centers in three districts in the Eastern Province to determine the level of service integration that existed. The findings of the assessment were discussed at the district level and were used to inform the design of the model, the aim of which is to provide mother-child pairs with a comprehensive and integrated package of MCH-HIV services. The model has now been piloted for at least a year in each of the five health centers, and the evaluation being conducted by EGPAF is intended to assess how the implementation of the model was carried out, to determine the perceptions of the different stakeholders, and to make recommendations for possible scale-up of the model throughout Rwanda.

Swaziland

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year Call to Action (CTA) project in 12 countries, including Swaziland (from 2004 through 2010). This service-based program aimed at scaling up prevention of mother-to-child transmission of HIV (PMTCT) services, and preventing pediatric HIV infection through research, advocacy, and prevention and treatment programs.

CTA’s work was conducted in accordance with national health policies and within national AIDS response frameworks. EGPAF-supported programs integrate HIV counseling and testing and antiretroviral (ARV) prophylaxis regimens into existing maternal and child health (MCH) services. Patient flow, HIV counseling techniques, testing algorithms, drug distribution, and other aspects of program delivery differ among countries. CTA funds have supported basic clinic improvements, essential commodities, community mobilization, training of health care workers, education to mothers on infant feeding, technical assistance for program implementation, evaluation and monitoring, and psychosocial support.

Since its inception in 2004, EGPAF’s strategy in Swaziland has been to support the PMTCT program of the Swaziland Ministry of Health (MOH) through design, development, management, monitoring, and technical support activities. Under CTA, EGPAF supported the Swaziland national PMTCT program to prevent HIV infection among infants and utilized the PMTCT program as a point of identification of HIV-positive individuals to provide care and support and access to HIV treatment services. EGPAF directly supported facilities to provide HIV testing and counseling (HTC), ARV prophylaxis for PMTCT, early infant diagnosis and treatment, psychosocial support, training of service providers, adequate counselor and laboratory technician staff, confidential counseling spaces, monitoring and evaluation systems, and strengthened MCH/family planning services. Swaziland-specific highlights include:

- Increased coverage of comprehensive PMTCT, HIV care and treatment services: By the end of project, EGPAF support reached over 80% of pregnant women who gave birth in all facilities, and reached 100% coverage in MOH facilities.
- Improved Early Infant Diagnosis: Early infant diagnosis in Swaziland has resulted in 83% of HIV-exposed infants receiving CTX prophylaxis at six weeks at the 47 EGPAF-supported sites.
- HIV testing of pregnant women increased from 15% to 67%, and maternal and infant uptake of prophylaxis increased from 87% to 90%.

Swaziland Implementation Plan for Prevention of Mother-to-Child Transmission of HIV (SWIPP)

(Johnson & Johnson: 2010–2012)

In September 2010, the EGPAF partnered with Swaziland’s Ministry of Health, Johnson & Johnson (J&J), the University of California, Los Angeles Anderson School of Management, and the African Medical and Research Foundation (AMREF) to strengthen the management skills of government and civil society leaders responsible for scaling up high-quality prevention of mother-to-child transmission of HIV (PMTCT) services in accordance with new 2010 World Health Organization guidelines. EGPAF worked with J&J to host the Management Development Institute, which resulted in the creation of regional and national teams that developed plans for PMTCT implementation (SWIPP). The J&J-supported training and SWIPP team mentorship filled a key gap in Swaziland, enabling those responsible for designing, managing, and monitoring health programs to build and strengthen critical management skills, develop action plans, and to be accountable for plan results.

Increasing Access to Pediatric Care and Treatment Services

(ViiV Healthcare: 2010–2012)

In June 2010, ViiV Healthcare and EGPAF joined together to improve early detection of HIV and treatment access for HIV-positive infants and young children (IYC) in three countries. The EGPAF-ViiV partnership focused on expediting access to testing, care and antiretroviral treatment for IYC, and enabled EGPAF to fill critical gaps that limit access by focusing on three key objectives:

- Increasing early detection and initiation of antiretroviral therapy for HIV-positive infants and young children
- Strengthening government leadership
- Using strategic information to understand what works, and to apply this understanding to improve programs

By project end, there were significant improvements in key indicators, including more HIV-exposed infants tested within eight weeks of birth; more HIV-exposed infants who tested positive receiving their results within eight weeks of testing; and more HIV-exposed IYC who tested positive initiated on antiretroviral therapy (ART). In addition, linkages between health facilities and communities were strengthened via new partnerships with community-based organizations and the engagement of village health workers, technical advocacy aimed at addressing barriers to testing and treating IYC was successful in a number of areas, including the ability for nurses to prescribe ART and the development of a new national pediatric counseling and testing curriculum in Swaziland, and 40 HIV/AIDS Technical Leaders from 16 countries were provided critical training on how to implement the new WHO Guidelines on Pediatric ART.

Tanzania

Helping Expand Antiretroviral Treatment for Families and Children (Project HEART)

(CDC/PEPFAR: 2004–2012)

Project HEART was launched in 2004 in Cote d'Ivoire, South Africa, Tanzania, and Zambia, and in 2006 in Mozambique. This eight-year project, funded through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Centers for Disease Control and Prevention (CDC), saw dramatic results. In 2010, one out of every 10 PEPFAR-supported ART patients in sub-Saharan Africa received their treatment through Project HEART. By early 2012, more than one million men, women, and children received HIV care and support; more than 2.5 million pregnant women received HIV counseling and testing; more than 66,500 pediatric HIV infections were prevented; and more than half a million people started lifesaving antiretroviral therapy (ART). Working with a network of more than 215 international and local partners, Project HEART dramatically improved delivery of HIV/AIDS services and ultimately strengthened national health systems by:

- Supporting HIV prevention, care, and treatment services at more than 510 ART sites and 1,053 PMTCT sites throughout five countries
- Building the clinical, managerial, financial, and administrative capacity of local health providers and partners to more effectively provide HIV services
- Strengthening program and data quality
- Improving the technological and physical infrastructure of health facilities
- Providing sub-awards to local partners and the Ministries of Health (MOHs) at the district and provincial/regional levels, in coordination with capacity building

Project HEART's innovative practices – most notably using a decentralized district approach, scaling up performance-based financing, and piloting new, easy-to-use technology – have served as best practices that have been authorized and disseminated by MOHs and other implementing partners.

In Tanzania, Project HEART established a close working relationship with the MOHSW by providing ongoing financial and technical support to build and strengthen the capacity of District Council Health Management Teams (CHMTs) and health service providers at all levels to plan, manage, and implement quality HIV/AIDS-related health care systems. EGPAF also supported the Child-Centered Family HIV Care Clinic at Kilimanjaro Christian Medical Center, which optimizes care for HIV-infected children and their families. EGPAF's additional initiatives targeting children included the early infant diagnosis (EID) program, which operated in 90 sites and enrolled over 1,500 HIV-exposed infants into follow-up care and treatment, and the provider-initiated testing and counseling program, which was implemented in entry points of all 165 EGPAF-supported care and treatment sites.

Enhancing Family Planning Counseling and Provision of Services through Integration into HIV Care and Treatment Services in the Shinyanga Region of Tanzania

(UNFPA: 2011–2012)

The United Nations Population Fund is supporting the Elizabeth Glaser Pediatric AIDS Foundation to implement and evaluate a family planning (FP)/HIV integration model in Shinyanga Region in Tanzania. The FP/HIV integration model is defined as the co-location of FP and HIV care and treatment services at care and treatment centers (CTCs). This model involves the provision of family planning screening, counseling, and commodities to CTC clients. Strategies to support this integration include healthcare provider training on counseling, provision, and documentation of FP services to CTC clients; support to district leadership to ensure overall coordination of implementation, including site supervision and supply management and distribution; and orientation of community-level workers on availability of FP at CTC. The overall study aim is to assess changes resulting from the integration of FP services into HIV services and to assess the acceptability of the integrated model among district health managers, healthcare providers, and clients.

Prior to implementation of the integration model, a baseline assessment evaluated FP needs and services provided to HIV-positive adult CTC clients. The results of the baseline assessment indicated that a majority of respondents wanted to delay or prevent pregnancy and may benefit from availability of FP counseling and commodities in CTCs. Follow-up surveys will be administered nearly one year following the implementation of the model to assess changes in family planning practices.

This research builds on national-level momentum, and is aligned with national policy changes in Tanzania to integration FP and HIV services. Current evidence is limited on the FP/HIV integration model's acceptability and impact on uptake of family planning services. The results from this study will provide valuable feedback to the Ministry of Health & Social Welfare, implementing partners, and other stakeholders and guide implementation and scale-up of this intervention throughout the country.

Providing Technical Assistance for Prevention of Mother-to-Child Transmission of HIV Services in the Republic of Tanzania

(USAID/PEPFAR: 2003–2011)

The objective of the bilateral agreement with USAID/Tanzania was to expand access to PMTCT services and strengthen linkages for pregnant women and their HIV-exposed infants to care and treatment within the public setting. EGPAF focused on integrating PMTCT services into routine maternal-child health services. Since the start of its PMTCT program in 2003, EGPAF has significantly contributed to the goal of the Tanzanian Ministry of Health and Social Welfare (MOHSW) and the United States Government to expand and improve PMTCT services in Tanzania. This program sought to:



- Increase access to quality PMTCT services, including linkages to care and treatment for women, children, and their families in Tanzania
- Support the MOHSW in rolling out the national PMTCT program using national guidelines and training curricula
- Increase the number of women and families enrolled in care and treatment programs by strengthening linkages between PMTCT and care and treatment
- Increase uptake of ARV prophylaxis in HIV-positive pregnant women and HIV-exposed infants
- Scale up the use of combination regimens in PMTCT
- Strengthen the integration of PMTCT and maternal and neonatal health services to contribute to the improvement of maternal and neonatal health

By the end of the project, EGPAF's program contributed to approximately 27% of the national PMTCT coverage of pregnant women tested, and supported 25% of health facilities nationwide (1,065) providing PMTCT. EGPAF supported services in the regions of Arusha, Kilimanjaro, Mtwara, Shinyanga, and Tabora through 37 sub-grants, primarily with district councils. In these five regions, the geographic coverage of PMTCT services was greater than 80%, and the program tested more than 1,556,260 pregnant women since project inception.

Call to Action

(USAID/PEPFAR: 2002–2010)

Through funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year global Call to Action (CTA) project in 12 countries, including Tanzania (from 2002 through 2007). This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services. In Tanzania, EGPAF supported 428 health facilities and provided counseling and testing services to nearly 450,000 women.

Between 2003 and 2007, the CTA project, with the Tanzania Ministry of Health & Social Welfare (MOHSW), used a district approach to support the rapid scale-up of PMTCT services in five regions of the country to address the need for increased access to PMTCT in Tanzania. This district approach was consistent with the government's national decentralization policy to enhance the speed and quality of the scale-up process, as well as to promote the long-term sustainability of services through the integration of PMTCT activities into existing structures and systems. With this approach, the government was able to dramatically scale up both the number of sites offering PMTCT services and the number of pregnant women being served. Key elements of this approach included building technical capacity to ensure rapid service

expansion and continuity at the district level; ensuring financial sustainability of program activities; and creating mechanisms for ongoing supportive supervision and monitoring. The district approach was documented in a publication that was widely shared across EGPAF country programs.

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(The Bill and Melinda Gates Foundation: 2006–2011)

The Bill and Melinda Gates Foundation funded this project, which was designed to expand access to prevention of mother-to-child transmission of HIV (PMTCT) services in 10 countries including Tanzania, which allowed EGPAF to fill critical gaps, ensure continued service delivery in resource-limited countries, and leverage other donor resources to increase access to PMTCT services. Through this project, EGPAF:

- Provided support and technical assistance to host country governments to strengthen commitment to scale up PMTCT services
- Trained thousands of government personnel at the site, district, and provincial levels to build health care worker capacity to provide HIV services
- Strengthened integration with other essential services
- Improved linkages to care and treatment

Engaging People Living with HIV as Lay Counselors in HIV Care and Treatment Services

(Abbott Fund: 2007–2009)

This two-year pilot project was designed to evaluate the effectiveness of training people living with HIV to work as lay counselors at health facilities in their communities in the Moshi and Rombo districts of Tanzania. The 68 lay counselors trained over the two-year period increased the accessibility and acceptability of HIV services and improved the quality of HIV/AIDS care. Their contributions were met with widespread acceptance and enthusiasm not just by beneficiaries, but by health workers as well. Lay counselors have been shown to be capable of linking the community to the care and treatment centers, and to provider-initiative testing and counseling in particular. They also have been effective in helping to trace and follow up with HIV-exposed and HIV-infected children, and are thus instrumental in overcoming hurdles in the provision of a comprehensive continuum of care for HIV-positive women, their children, and their families. Moreover, the lay counselors were empowered by this program in terms of their own HIV awareness, personal development, and economic stability.

Pediatric Palliative Care Training

(Diana Princess of Wales Memorial Fund: 2012)

The goal of this project was to provide comprehensive care to children, including the relief of suffering, to improve the quality of life of children with chronic conditions including HIV. The project sought to:

- Prepare health facility staff to provide pediatric palliative care
- Capacitate families and communities in identifying and managing conditions that need palliative care for children

The DPWMF-funded training successfully motivated participants to improve the care provided to children in their current work environments. Participants acquired knowledge and skills in pediatric palliative care, including pain relief management and how to care for a child with life-threatening conditions.

Uganda

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year Call to Action (CTA) project in 12 countries, including Uganda (from 2002 through 2010). This project sought to improve access and expand care and support for quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care (ANC) services. In Uganda, by project end, 71% of women in country receiving antiretrovirals did so at an EGPAF-supported site.

In Uganda, the CTA project introduced a peer educator program to strengthen follow-up patient care by allowing peer educators to take over certain tasks for health care workers and provide patients with social support. 152 peer educators were trained and successfully integrated into existing patient-care services at health centers. The duties of this new cadre of support workers were streamlined into ANC clinics, well-child clinics, and antiretroviral therapy (ART) clinics. At ANCs, newly diagnosed pregnant women were assigned to peer educators with an aim of establishing bonds to enhance follow-up of these pregnant mothers, thus providing the program with direct access to newborn infants. Important to both PMTCT and ART programs, the peer educators help identify HIV-exposed infants presenting to the well-child clinics and guide the mothers/parents of these children to additional counseling and patient education for mother and baby.

Introduction of Rapid Syphilis Testing within Prevention of Mother-to-Child Transmission of HIV Programs in Uganda and Zambia: A field acceptability and feasibility study

(WHO: 2008–2011)

Given that integration of syphilis testing into prevention of mother-to-child transmission of HIV (PMTCT) programs can prevent adverse pregnancy outcomes, this study assessed feasibility and acceptability of introducing rapid syphilis testing (RST) into PMTCT programs in Zambia and Uganda. Using a pre-post intervention design, HIV and syphilis testing and treatment rates during the RST intervention were compared with baseline.

In Uganda, 13,131/14,540 (90.3%) women were tested for syphilis during intervention, with 690/13,131 (5.3%) positive and 715/690 (103.6%) treated for syphilis. Syphilis baseline data was collected but not included in the analysis, as ANC syphilis testing before the study was not consistently practiced. Comparing baseline and intervention, 6,479/6,776 (95.6%) and 11,192/11,610 (96.4%) of ANC attendees were tested for HIV ($p=.0009$) and 570/726 (78.5%) and 964/1153 (83.6%) received combination or single-dose prophylaxis ($p=.007$). About 14% (99/690) of syphilis-positive pregnant women were HIV-positive. Overall, this study found that integrating RST in PMTCT programs increases screening and treatment for syphilis among HIV-positive pregnant women, and does not compromise HIV services.

Leveraging PMTCT Services to Provide Comprehensive Care and Treatment Services in Ugandan Health Centers

(Abbott Fund: 2007–2011)

In 2007, EGPAF and the Abbott Fund joined together to strengthen an existing Government of Uganda-funded HIV and AIDS care and treatment program to ensure that greater numbers of infants and young children were tested and, when appropriate, enrolled in care and treatment services. Aimed at filling key gaps in services at lower-level health units, the Uganda program initiated an innovative comprehensive care and treatment demonstration project within five health centers in Masaka, Kabale, Mayuge, Mukono, and Jinja districts. In early 2009, a sixth health center in Bushenyi district was added to the partnership. This initiative has created increased access to comprehensive HIV and AIDS services for many rural Ugandan children and their families, and has demonstrated that it is possible to provide quality comprehensive care and treatment services at the health center level.

With support from Abbott Fund, the program expanded participation of peer educators at the facility and community level, thus expanding each site's reach and ability to provide quality care and retain patients in services. These peer educators, who are HIV-positive parents, were trained and assigned roles alongside professional health workers at care and treatment sites to help ensure that HIV-positive individuals receive supportive counseling and mentoring to help facilitate return for follow-up care.

The project also engaged in ongoing sensitization and community mobilization efforts that resulted in increases in:

- Home visits to follow-up with newly identified HIV-positive mothers
- Identification of HIV-positive children through provider-initiated HIV testing and counseling (PITC)
- Number of referrals of HIV-positive children to HIV care and treatment facilities

In addition, adults attending the HIV clinic whose children were not yet tested and enrolled in care were targeted for additional counseling.

Zambia

Helping Expand Antiretroviral Treatment for Families and Children (Project HEART) *(CDC/PEPFAR: 2004–2012)*

Under Project HEART with support from PEPFAR, EGPAF/Zambia provided HIV care and treatment services since 2004 in Lusaka, Southern, Eastern, and Western provinces, and prevention of mother-to-child transmission (PMTCT) services since 2002 in Lusaka, Eastern, and Western provinces. EGPAF's main implementing partner was the Centre for Infectious Disease Research in Zambia (CIDRZ), a research, training, and service provision organization originally affiliated with the University of Alabama at Birmingham (UAB). EGPAF/Zambia provided HIV care and treatment activities in 476 sites across Lusaka, Southern, Eastern, and Western provinces. Of all the patients supported across the five countries where Project HEART worked, Project HEART/Zambia accounted for the highest number of patients, with a total of 297,843 cumulatively enrolled in care and 196,122 patients cumulatively initiated on treatment, accounting for half the children enrolled in the country.

Project HEART also sought to invest in the training and mentoring of health staff in order to contribute to improvements in pediatric care and treatment. In Zambia, the project enhanced provider capacity through a pediatric mentorship program and targeted training of nurses in counseling and psychosocial support for children and caregivers, which increased the confidence and self-efficacy of health staff to treat children and their families. The program also trained more than 7,700 physicians, nurses, and other health care workers on proper antiretroviral therapy, in line with national guidelines.

EGPAF built in-country capacity through support of the national electronic patient records system (SmartCare) by providing financial management and information technology (IT) staff, and procuring computer equipment and hardware. As of March 2011, SmartCare was deployed

in more than 570 facilities throughout Zambia, and has been adopted by the MOH as their patient records system.

Call to Action Project

(USAID/PEPFAR: 2002–2010)

Through funding from the United States Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year global Call to Action (CTA) project in 12 countries around the world, including Zambia (from 2003 through 2007). This project sought to improve access and expand care and support for quality PMTCT services, while enhancing technical leadership and documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care services. In Zambia, EGPAF helped expand PMTCT services to sites in rural provinces, and together with our partners supported nearly 300 PMTCT sites in Western, Eastern, and Lusaka Provinces.

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(The Bill and Melinda Gates Foundation: 2006–2011)

The Bill and Melinda Gates Foundation funded this project, which was designed to expand access to PMTCT services in 10 countries including Zambia, which allowed EGPAF to fill critical gaps, ensure continued service delivery in resource-limited countries, and leverage other donor resources to increase access to PMTCT services. Under this project, EGPAF:

- Provided support and technical assistance to host country governments to strengthen commitment to scale up PMTCT service
- Trained thousands of government personnel at the site, district, and provincial levels to build health care worker capacity to provide HIV services
- Strengthened integration with other essential services
- Improved linkages to care and treatment

In terms of operational research, several studies were conducted in Zambia, including a multi-country evaluation of PMTCT effectiveness. For the overall study, cord blood samples were analyzed from 27,893 mother-infant pairs treated at 43 separate clinics. HIV seropositive cord blood samples were then analyzed for the presence of nevirapine for 3,196 mother-infant pairs, with the major finding that 51 percent of HIV-exposed infants received the minimal regimen of nevirapine to protect them. The study also found that many HIV-positive women who were prescribed nevirapine before giving birth had no sign of the drug in samples of their umbilical cord blood. Reasons associated with these results include fewer antenatal visits and younger maternal age, although there was significant variation between sites and country programs.

These results have mobilized EGPAF and other partners to develop strategies to improve and monitor adherence to ARV prophylaxis and the entire PMTCT cascade for mothers and infants.

Introduction of Rapid Syphilis Testing within Prevention of Mother-to-Child Transmission of HIV Programs in Uganda and Zambia: A Field Acceptability and Feasibility Study

(WHO: 2008–2011)

Given that integration of syphilis testing into prevention of mother-to-child transmission of HIV (PMTCT) programs can prevent adverse pregnancy outcomes, this study assessed the feasibility and acceptability of introducing rapid syphilis testing (RST) into PMTCT programs in Zambia and Uganda. Using a pre-post intervention design, HIV and syphilis testing and treatment rates during the RST intervention were compared with baseline.

Maternal Events and Pregnancy Outcomes in a Cohort of HIV-Infected Women Receiving Antiretroviral Therapy in Sub-Saharan Africa (MEP)

(CDC/PEPFAR: 2010–2012)

This multi-country study was one of the first in sub-Saharan Africa to evaluate maternal and infant outcomes in women receiving antiretroviral treatment (ART) at time of conception and during pregnancy as part of routine HIV service delivery. The primary study objectives were to describe both the frequency of severe adverse events including major congenital defects, adverse pregnancy outcomes, and death among infants or fetuses born to mothers exposed to ART during conception and pregnancy and these events within a section of the general population, regardless of maternal or infantile HIV-1 infectivity status. A secondary objective of the study was to describe the distribution of major congenital defects, adverse pregnancy outcomes, and infant death by various ART regimens being used in resource-limited countries.

The study involved the observational surveillance of a cohort of HIV-positive pregnant women that were taking combination ART before becoming pregnant in South Africa and Zambia. In each country, 300 mothers were enrolled in the cohort. Infants born to these women were examined for major congenital defects at birth or as soon as possible thereafter, and until one year of age. Data on prevalence of major congenital defects and adverse pregnancy outcomes within the general population were abstracted from facility records during the same time period as data from the cohort was collected. Data collection is ongoing, and the study is anticipated to finish in early 2013 once all children in the cohort have been followed to one year of age.

With the expansion of the use of ART in pregnancy both for treatment and infant prophylaxis, it is critical that the safety of these drugs in women and their infants be evaluated in the African context. Outcomes of how ART protects infants from HIV infection in the actual ART program setting also will be determined. Data from this initial pilot will provide the building blocks for further work in this area, and will help in the scale-up of pharmacovigilance activities in sub-Saharan Africa.

Zimbabwe

Zimbabwe Family AIDS Initiative (FAI)

(USAID/PEPFAR: 2007–2012)

Through this project, EGPAF has been the primary partner in providing technical support to Zimbabwe's Ministry of Health and Child Welfare (MOHCW) to increase access to comprehensive, high-quality prevention of mother-to-child transmission of HIV (PMTCT) services that are closely linked to HIV/AIDS treatment, care, and support for families, including children living with HIV. Over the five-year period, the program expanded its partnership with the MOHCW by supporting a package of district-level activities to strengthen district-level PMTCT and pediatric services nationwide towards achieving full-scale elimination of pediatric HIV and AIDS in Zimbabwe.

EGPAF, along with our three implementing partners – the J.F. Kapnek Charitable Trust, the Organisation of Public Health Interventions and Development (OPHID), and the Zimbabwe AIDS Prevention Project - University of Zimbabwe (ZAPP-UZ) – provided direct technical and resource support at the national and district levels to strengthen, implement, and expand the national PMTCT program as guided by the national PMTCT and Pediatric HIV Strategic Plan. At the national level, EGPAF accomplished the following:

- Provided technical assistance through direct secondments to the MOHCW in an effort to create an enabling environment for adoption and adaptation of the WHO 2010 guidelines, as well as to support the rapid expansion of PMTCT services nationally
- Supported the MOHCW in the development of the National Advocacy, Communications, and Community Mobilization strategy to generate awareness and greater demand for PMTCT services by local communities throughout the country
- Revised the national PMTCT training materials based on the Integrated Management of Adolescent and Adult Illness, Integrated Management of Pregnancy and Childbirth (IMAI/IMPAC) toolkit in line with the WHO 2010 guidelines
- Strengthened national monitoring and evaluation through the revision of reporting tools in support of the rollout of the WHO 2010 guidelines
- Supported the MOHCW in the development of policy briefs focused on reducing the usage of user fees and implementation of the 2010 guidelines towards ensuring that women and children living with HIV access testing and treatment services
- Supported MOHCW with the integration and decentralization of ART services participating in the national technical working group within the PMTCT Partnership Forum to spearhead ART/MCH integration, and provided technical lead support to the national ART in MCH pilot to strengthen the capacity and confidence of healthcare workers to initiate eligible pregnant women on ART



- Supported operational research on PMTCT that has informed important policy changes including the evaluation and revision of the Child Health Card to accommodate the 2010 WHO PMTCT and Infant and Young Feeding guidelines, and a study on the cost-effectiveness of PMTCT to support planned implementation of the Option A regimen of the WHO 2010 guidelines towards the substantial reduction of HIV transmission to newborn and breastfeeding infants in Zimbabwe

At the district and site level, EGPAF and our partners had accomplished the following:

- By the end of 2012, EGPAF's FAI program had expanded into 60 districts, including three major cities, and is now supporting more than 1,366 sites, accounting for approximately 88% coverage of all PMTCT sites.
- Strengthened district and site-level support for the national PMTCT program through the introduction of a cadre of 34 District Focal Points, who function as a critical member of the District Health Management Teams (DHMTs), helping coordinate all PMTCT activities in the districts.
- Increased access to CD4 testing through the deployment of CD4 point-of-care technology to improve CD4 testing rates and strengthen the capacity for integration of ART into MCH.
- Contributed to improved male involvement in the program through targeted community mobilization campaigns.
- Supported the revitalization of the Village Health Worker program to strengthen mother-baby follow-up in the PMTCT program.
- Strengthened linkages between healthcare facilities and local communities through the establishment of play centers offering psychosocial support services for both adults and children.
- Implemented an electronic database pilot project to improve tracking of mother-infant pairs across 34 district sites. The EDB also has provided very important program data on the mean gestational age of HIV-positive pregnant women at the time of their first booking to monitor compliance for early bookings in line with the 2010 guidelines (MER 14 weeks), as well as retention and adherence to ARVs for mothers and infants.

Call to Action

(USAID/PEPFAR: 2002–2010)

With funding from the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), EGPAF implemented the eight-year Call to Action (CTA) project in 12 countries, including Zimbabwe (from 2004 through 2007). This project sought to improve access to, and expand care and support for, quality prevention of mother-to-child transmission of HIV (PMTCT) services, while enhancing technical leadership and

documenting successful program models. By project end, EGPAF had provided nearly four million women with access to PMTCT and antenatal care (ANC) services.

To increase community involvement and support for PMTCT, the Zimbabwe CTA program prepared mothers for counseling and testing in ANC by holding community-level information meetings and developing education materials for multiple community target populations. They also worked with the Ministry of Health of Social Welfare (MOHSW) to redesign the child health card to serve as an effective tool for the delivery of integrated health services. The former card was unable to identify and track HIV-exposed infants, and no documentation of services offered to HIV-exposed infants, such as CTX and early infant diagnosis, was included. The new card rectified that and added additional messages such as updated infant feeding information. The participatory process through which the card was designed ensured that the new card received wide acceptance and use.

Broadening the Scope of PMTCT and Enhancing the Continuum of Care for HIV-infected Families in Zimbabwe

(DfID: 2007–2012)

The United Kingdom's Department for International Development (DfID) has generously supported EGPAF's Family AIDS Initiative program in Zimbabwe since 2007, strengthening the country's national prevention of mother-to-child transmission of HIV (PMTCT) program. This initiative was designed to:

- Provide supplemental funding to improve access to PMTCT services and interventions
- Improve follow-up mechanisms for HIV-positive pregnant mothers and HIV-exposed infants
- Improve the referral mechanism for PMTCT clients to ART services
- Strengthen PMTCT monitoring and evaluation systems and improve integration of these within the national health reporting system

Reaching Women and Newborn Babies with Life Saving Emergency Obstetric and Neonatal Care Services in Institutions

(UNFPA: 2009–2010)

The objectives of this project were to:

- Improve access to lifesaving comprehensive emergency obstetric and neonatal care (EmOC) including prevention of mother-to-child transmission of HIV (PMTCT) for 50,000 pregnant women and their newborn babies in two provinces of Zimbabwe, Manicaland, and Mashonaland East, with a focus on provincial and district hospitals.
- Improve availability of lifesaving vital and essential supplies including PMTCT in six other provincial hospitals.

EGPAF worked to build the capacity of healthcare workers by facilitating a refresher training that integrated both EmOC and prevention of mother-to-child transmission of HIV (PMTCT) training modules, and also held three additional training workshops for other healthcare workers. In addition, EGPAF worked with facility staff to hold regular review meetings, collect and assess routine data, and ensure quality of care.

Supporting a Continuum of Care for Children living with HIV & AIDS

(UNICEF: 2009–2010)

The goal of this 15-month project was to coordinate the delivery of comprehensive psychosocial support services (PSS) to orphans and vulnerable children (OVC), including children under the age of five living with HIV. Working in collaboration with the Family AIDS Initiative (FAI), the Organization for Public Health Interventions and Development (OPHID), and the Zimbabwe AIDS Prevention Project (ZAPP), EGPAF implemented this program in Chitungwiza city and four nearby districts: Murewa, Marondera, Mutare, and Buhera. The project supported the establishment of play centers for OVC and provided training on PSS, HIV follow-up, and adherence counseling to community mobilizers, parents, caregivers, and people living with HIV. The project also encouraged community health workers to identify and strengthen linkages and referral networks for the treatment, care, and support for HIV-exposed and HIV-infected children as well as children from vulnerable families. During the project period, the following was accomplished:

- 25 play centers were established and they enrolled a total of 1,434 children into PSS, far surpassing the original target of 1,080.
- 275 community-based resource people (25 group facilitators, 125 child caretakers, and 125 community health workers) were recruited and trained on PSS, play therapy, PMTCT follow-up protocols, and group facilitation.
- Play center facilitators worked closely with health professionals to coordinate HIV community awareness campaigns and to link children with HIV treatment, care, and support services.
- 1,462 HIV-exposed and HIV-infected children received follow-up services.
- The project reached 47% of HIV-exposed and potentially eligible children in the targeted districts—children who were not previously receiving HIV care and treatment.

Prevention of Mother-to-Child Transmission of HIV Partnership

(Johnson & Johnson: 2008–2011)

The EGPAF-Johnson & Johnson (J&J) partnership was designed to expand coverage and improve the quality of prevention of mother-to-child transmission of HIV (PMTCT) services as well as demonstrate global leadership in PMTCT by replicating and documenting best practices in six country programs, including Zimbabwe. To strengthen linkages between health centers and

communities, EGPAF selected and trained lay counselors and expert patients to serve as site level community and counseling Focal Persons, who organized monthly meetings of community health workers (CHWs) and volunteers, collected reports of activities, gave supportive peer counseling, and participated in the performance assessment of CHWs and volunteers. By project end, EGPAF:

- Integrated PMTCT into routine maternal and child health (MCH) services by training health personnel and developing tools and job aides
- Assisted sites to provide additional services for HIV-positive women including early infant diagnosis, TB screening and treatment, infant cotrimoxazole and maternal antiretroviral prophylaxis for PMTCT, and infant feeding education
- Provided technical leadership and support to the Ministry of Health and Social Welfare (MOHSW) and partners to support national M&E data quality and accuracy as well as advance research efforts
- Collaborated with Harvard University, the Institute of Public Health Epidemiology and Development (ISPED), and the Organization for Public Health Interventions and Development (OPHID) on an evaluation of the cost-effectiveness of different PMTCT strategies, and collected data to determine the barriers and facilitators to providing counseling and testing during labor and delivery services.

Reaching More in Need: PMTCT Enhancement through Expanded Implementation and Operations Research

(The Bill and Melinda Gates Foundation: 2006–2011)

This Bill and Melinda Gates Foundation-funded project was designed to expand access to prevention of mother-to-child transmission of HIV (PMTCT) services in 10 countries including Zimbabwe, allowing EGPAF to fill critical gaps, ensure continued service delivery in resource-limited countries, and leverage other donor resources to increase access to PMTCT services. EGPAF provided support and technical assistance to host country governments to strengthen their commitment to scale up PMTCT service; trained thousands of government personnel at the site, district, and provincial levels to build health care worker capacity to provide HIV services; strengthened integration with other essential services; and improved linkages to care and treatment.

In terms of operational research, several studies were conducted in Zimbabwe, including an examination of alternative regimens for PMTCT in resource-poor settings. This pilot project, conducted in two districts in Zimbabwe, explored the feasibility of using an alternative treatment regimen of AZT and sdNVP to the mother and infant with a post-partum Combivir tail to the mother. It examined whether, when, and how a change of regimen should be applied at the national level.