PAMOJA

Supporting the Implementation and Expansion of High Quality HIV Prevention, Care, and Treatment Activities at Facility and Community Level in Kenya
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<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>ANC</td>
<td>Antenatal clinic</td>
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<td>ART</td>
<td>Antiretroviral therapy</td>
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<td>ARV</td>
<td>Antiretroviral medications</td>
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<td>CDC</td>
<td>U.S. Centers for Disease Control and Prevention</td>
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<td>EGPAF</td>
<td>Elizabeth Glaser Pediatric AIDS Foundation</td>
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<td>EID</td>
<td>Early infant HIV diagnosis</td>
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<td>EMR</td>
<td>Electronic medical records</td>
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<td>FSW</td>
<td>Female sex workers</td>
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<td>MNCH</td>
<td>Maternal, neonatal and child health</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>NASCOP</td>
<td>National AIDS Coordinating Program</td>
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<td>PEPFAR</td>
<td>U.S. President’s Emergency Fund for AIDS Relief</td>
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<td>PITC</td>
<td>Provider-initiated HIV testing and counseling</td>
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<td>PMTCT</td>
<td>Prevention of mother-to-child HIV transmission</td>
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<td>PSS</td>
<td>Psychosocial support</td>
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<td>MSM</td>
<td>Men who have sex with men</td>
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<td>OVC</td>
<td>Orphans and vulnerable children</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<td>USAID</td>
<td>U.S. Agency for International Development</td>
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<td>WHO</td>
<td>The World Health Organization</td>
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The U.S. Centers for Disease Control and Prevention (CDC)-funded Pamoja Project (2010–2016) strengthened management, oversight, and implementation of high-quality integrated, comprehensive, and sustainable HIV services in Kenya. Through Pamoja, the Elizabeth Glaser Pediatric AIDS Foundation in Kenya (EGPAF-Kenya) integrated the delivery of HIV prevention, care, and treatment services into maternal, neonatal, and child health (MNCH) settings, tuberculosis (TB) units, and general health service delivery sites to improve client access to and retention in HIV care and treatment.

Throughout EGPAF’s Pamoja Project, hundreds of health facilities and care providers were supported in five high-prevalence counties in Kenya. Pamoja’s objective to increase integration of HIV care and decentralized treatment services was rooted in a strong partnership with the Kenyan government and the Ministry of Health (MOH). Together, EGPAF and the MOH worked to strengthen a health system and expand its reach to provide a larger population of children, women, families, and high-risk groups with HIV services. The goal was to ensure that those with HIV—or at high risk for contracting it—lead a long and healthy life, while reducing stigma and discrimination.

Through Pamoja, a total of 1,374,134 individuals in supported regions accessed HIV testing services; 53,249 of these individuals tested positive for HIV and were linked to care and treatment services from 2010 to 2015. The Pamoja Project decreased the rate of mother-to-child HIV transmission across its supported areas, from 18% in 2011 to 7% at the end of the project in 2016. An estimated 4,760 children were able to avoid HIV transmission from their mothers due to Pamoja programming.

During the life of Pamoja, there was major advancement in the management of HIV globally and nationally. The criteria used to determine eligibility for antiretroviral therapy (ART) evolved from a CD4 count of below 250 (2010), to 350 (2013), to 500 (2014) and, finally, to Treatment for All in July 2016. Viral load monitoring is now a routine element of basic HIV care among all patients on ART. In addition, a third-line treatment regimen is now available for clients failing second- and first-line treatment. Further, children now have greater access to efficacious regimens to reduce mother-to-child HIV transmission while also ensuring maximal viral suppression for this special group of clients. EGPAF has contributed to these advancements through participation in national technical working groups and dissemination of policies throughout counties to ensure success of the HIV program in Kenya.

The Pamoja Project proved that effective partnerships, in-country management, and donor support can promote progress toward the control of an epidemic in a high-burden region. A variety of methods, from small community interventions to large, national-level approaches, have ushered in a wave of support for a population at high risk of HIV infection. Throughout this report, we highlight how these approaches were developed and received, how health outcomes improved among populations served, and how the health system was sustainably improved by the Pamoja Project.

We’d like to thank our donor, the CDC through the U.S. President’s Emergency Fund for AIDS Relief (PEPFAR), for support in these endeavors. We’d also like to thank the MOH and the county governments of Homabay, Kisumu, Turkana, Narok, and Kajiado for supporting and collaborating on this technical work.

Dr. Eliud Mwangi | Country Director | EGPAF-Kenya
HIV AND AIDS IN KENYA

Considerable progress has been made in the battle against HIV. Globally, however, the extent of the epidemic varies considerably, with sub-Saharan African countries bearing the greatest burden. In 2015, the Joint United Nations Programme on HIV and AIDS estimated that there were 1,500,000 people living with HIV in Kenya, 830,000 of whom were women over the age of 15. There are 98,000 children (ages 0–14) living with HIV in Kenya, where more than 660,000 children (aged 0–17) have been orphaned by AIDS-related causes. The adult HIV prevalence rate (ages 15–49) was 5.9% in 2015, a slight decrease from the 2011 rate of 6.2.

The national incidence of mother-to-child transmission of HIV infections has declined from almost 15,000 in 2009 to 6,600 in 2015 (a 55% reduction). This decrease resulted from Kenya’s proactive health programs and supportive political environment to prevent mother-to-child HIV transmission. National programs have helped to effectively integrate PMTCT with other MNCH services; other efforts include a scale-up of ART through the national implementation of current World Health Organization (WHO) guidelines. At national and county levels, Kenya’s MOH has led HIV prevention, care, and treatment programs, with assistance from such implementing partners as EGPAF.

EGPAF-KENYA

EGPAF began working in Kenya in 2000. The program started as a small, privately funded initiative to prevent mother-to-child transmission, and has since grown into one of the largest HIV prevention, care, and treatment programs in the country. Since its inception, the program has provided more than 1,850,000 women with PMTCT services, and over 380,000 individuals—including more than 39,500 children—began ART. EGPAF currently works in over 600 sites in 33 of the 47 counties in Turkana and Homabay.

EGPAF-Kenya aims to implement sustainable programs that support the country’s government in its mission to end pediatric AIDS. EGPAF’s program focuses on support to women; children; and key, high-risk populations, including men who have sex with men (MSM), female sex workers (FSW), migrant populations, and orphans and vulnerable children (OVCs).

Figure 1. EGPAF-supported regions in Kenya
THE PAMOJA PROJECT

The Pamoja (meaning “together” or “integrated” in Kiswahili) project (2010–2016), funded by the CDC, sought to strengthen management, oversight, and implementation of high-quality integrated, comprehensive, and sustainable HIV services in Kenya. Through Pamoja, EGPAF-Kenya worked to integrate the delivery of HIV prevention, care, and treatment services into MNCH settings; TB units; and general health service delivery sites to improve client access to and retention in HIV care and treatment. The project supported the scale-up of HIV testing, care and treatment; TB/HIV identification and co-management; early infant diagnosis of HIV (EID); and social protection initiatives for vulnerable populations. Through capacity-building interventions geared to local health authorities, the Pamoja Project ensured sustainability of high-quality, comprehensive HIV services.

The project rolled out in October 2010 in Nyanza Province—one of the hardest hit regions in Kenya and home to an HIV prevalence rate of almost double the national average (13% in 2011). Nyanza has a particularly high HIV prevalence rate among the general population, and specifically, among pregnant women (18%). Early age of sexual debut, low literacy levels, high teenage pregnancy rates, and low rate of male circumcision make women and girls particularly vulnerable to HIV in the region. The area is home to a large migratory fishing community, enabling greater sexual transmission of the disease, which adds to the challenges in tracking patients through a continuum of care. Further, many community members in Nyanza engage in unhealthy cultural practices such as wife inheritance, wherein a woman whose husband has died is forced to marry her belated husband’s next of kin. This practice has been associated with the spread of HIV.

One area of focus under Pamoja was integration of ART into MNCH clinic services, enabling HIV services to be provided as a package of services within MNCH clinics to HIV-positive pregnant women; another focus was decentralization of ART so treatment could be available in all facilities in the region. Integration and decentralization allowed for an accessible “one-stop-shop” of health and HIV services for mother-baby pairs, and encouraged women and children to be retained in easy-to-access health facilities throughout the mother-to-child transmission risk period (early pregnancy though the cessation of breastfeeding).

In January 2013, the Pamoja Project transitioned to providing services in four of the eight sub-counties of Homabay County: Homabay, Rangwe, Ndhiwa, and Rachuonyo North. This shift occurred as a result of U.S. government funders’ “rationalization program” designed to better align implementing partners in Kenya to reduce duplication and improve program effectiveness. Implementing partners were allocated specific sites where they would provide comprehensive coverage of HIV care and treatment services, instead of each partner providing a specific type of service at one site. EGPAF began supporting implementation of a comprehensive HIV prevention, care, and treatment package in 89 health facilities in Homabay County and two in Kisumu County. In 2015, the project supported an additional 23 health facilities in Turkana County, seven in Narok County, and one each in Kisumu and Kajiado counties, respectively (see Table 1).

Table 1. Years, location, and number of sites receiving Pamoja support

<table>
<thead>
<tr>
<th>YEAR</th>
<th>REGION</th>
<th>NUMBER OF SITES</th>
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<tbody>
<tr>
<td>2010/2011</td>
<td>Nyanza (Kisii &amp; Homabay)</td>
<td>156</td>
</tr>
<tr>
<td>2012</td>
<td>Nyanza (Kisii &amp; Homabay)</td>
<td>156</td>
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<tr>
<td>2013</td>
<td>Homabay</td>
<td>90</td>
</tr>
<tr>
<td>2014</td>
<td>Homabay</td>
<td>90</td>
</tr>
<tr>
<td>2015</td>
<td>Homabay, Turkana &amp; Kisumu</td>
<td>123</td>
</tr>
<tr>
<td>2016</td>
<td>Homabay, Turkana &amp; Kisumu</td>
<td>123</td>
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By 2015, EGPAF’s Pamoja Project was providing direct support to 123 sites in five high-prevalence counties: Homabay, Turkana, Kisumu, Kajiado, and Narok. Pamoja’s approach to increased integration of HIV care and decentralized treatment services is rooted in strengthening health systems—partnering with local health management teams and leaders in local country government to ensure implementation of high-quality and accessible HIV prevention, care, and treatment services. Pamoja also promoted care for key and special, high-risk populations such as FSWs, MSM, women who engage in sexual relationships with fishermen (collectively known as fisher folk), OVC. In 2015, the Pamoja Project expanded health care access to FSWs, MSMs, and fisher folk by creating drop-in centers within supported sites. Pursuant to this expansion of its scope, the project developed five drop-in centers in Homabay, and also integrated support for key populations in 12 health facilities that serve 29 beach communities in Homabay County. Under Pamoja, EGPAF also promoted care of OVC through support to eight community-based organizations in Homabay (3), Kisumu (1), Nairobi (1), Machakos (1), Narok (1), and Kajiado (1).

The project enabled a total of 1,374,134 individuals in supported regions to access HIV testing services (more than 1,020,000 adults and over 350,000 children); 53,285 (47,273 adults and 6,012 children) of these individuals tested positive for HIV, and over 90% were linked to care and treatment services from 2010 to 2015. The number of HIV-positive women accessing PMTCT services annually grew steadily during each year of the project, from 1,067 in the 2010–2011 reporting period to over 3,500 in the 2014–2015 period. This was mainly due to the changing geographic scope and increased decentralization efforts that resulted in greater access to HIV services. Cumulatively, the project reached more than 14,400 women, supplying them with antiretroviral medications (ARVs) to prevent vertical HIV transmission to their infants. The number of individuals who received care and treatment grew steadily, as well: 4,211 adults and children were enrolled in HIV care in 2011, and 54,443 by 2015. At the project’s inception, just over 2,000 individuals received ART; this number grew to 48,759, including 4,438 children in 2015. An overall reduction in the mother-to-child HIV transmission rate was noted in Pamoja-supported sites, from 18% in 2011, to 7% at the project’s end in 2016.1 Viral load monitoring throughout these regions indicated that 83% of those who accessed treatment were experiencing viral suppression by 2015.

To achieve and sustain program accomplishments, EGPAF focused on several health systems challenges hampering access and retention to HIV services. These included: (1) poor staffing levels, especially in lower-level sites; (2) deficient skills among health care workers; (3) inadequate structures for safe and secure storage of ARV; (4) insufficient safety and storage of patient records; (5) limited knowledge of HIV care and treatment among health workers; and (6) poor commodity management. To address these bottlenecks, EGPAF recruited more than 500 health workers and an equal number of peer volunteers. Through training and mentorship, EGPAF enhanced the effectiveness of a workforce straining to serve those living with HIV in supported regions. EGPAF also worked with sites to secure better infrastructure, and made innovative changes to the national reporting system to improve national-level monitoring and evaluation. How EGPAF overcame systems challenges to encourage wide access to HIV prevention, care and treatment services in a high-prevalence setting is described herewith.

### EGPAF-Kenya | Key Results

<table>
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<th>1,374,134 individuals tested for HIV</th>
<th>Overall reduction in mother-to-child HIV transmission rate seen from 18% in 2011 to 7% in 2016</th>
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<td>83% viral suppression among supported population by 2016</td>
<td>14,400 women reached with ARV to prevent mother-to-child HIV transmission</td>
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1 This was measured through the HIV-exposed infants cohort analysis, collected and monitored by the National AIDS and STI Control Program (NASCOP).
The overall goal of the Pamoja Project was to increase the use of high-quality, comprehensive, integrated HIV services in several high-prevalence areas of Kenya. Along with national partners, EGPAF developed a strategy to reach this goal, which involved three central objectives:

1. Increase the availability of high-quality, comprehensive HIV services
2. Increase community capacity to support use of high-quality, comprehensive HIV services
3. Increase the capacity of district-level organizations to direct, manage, and implement high-quality, comprehensive HIV services
PAMOJA PROJECT ACCOMPLISHMENTS

Increase Services to Prevent Mother-to-Child Transmission

From its inception in October 2010, the Pamoja Project worked to scale-up HIV counseling and testing and provision of ARV prophylaxis and ART in antenatal care (ANC) clinics, per national guidelines. In its first year alone (between September 2010 and October 2011), Pamoja integrated HIV services into 154 MNCH sites and 115 TB sites that previously offered no HIV-related services. As of October 2010, only 55 sites were delivering HIV care and reporting on these services to the national information system; 35 of these were offering services and reporting on ART. The number of sites offering women quality ANC services, including HIV testing and counseling services, expanded to 123 by 2015.

Pamoja staff worked with each of these supported sites to ensure implementation of national guidelines; train health workers on HIV counseling, testing, treatment, and adherence protocols; and ensure sites were equipped with tools (job aids, test kits, registers, and so forth) and effective infrastructure (clinic space, access to laboratory networks, supply chain management), as well as ongoing technical assistance (mentorship and supportive supervision), to offer such services. Pamoja, together with Kenya’s First Lady, assisted in rolling out the Beyond Zero Mobile Clinic in Turkana and Homabay counties. This mobile clinic was used to scale up access to and uptake of PMTCT services in hard-to-reach areas within the counties, and to improve skilled labor and delivery in remote areas. A total of 140,711 pregnant women were provided with ANC services and HIV screening through mobile clinics and static clinics between 2011 and June 2016. This outreach, coupled with a greater number of clinics accredited to offer HIV services to women and children, expanded access to PMTCT to a wide population in supported counties.

Throughout the course of the project, Pamoja also focused on community-level HIV service demand generation to ensure communities were utilizing strengthened and expanded services. In addition, between 2010 and 2015, the program supported the implementation of the national Community Health Strategy, which involved working with 35 community units (CUs) across all four supported sub-counties in Nyanza. CUs are low-level, primary, nonspecialized health care sites that focus mainly on preventive health services. They are utilized in many smaller communities within supported regions located far from large health facilities. CUs had access to a large population in their catchment areas and were able to play a key role in sensitizing and educating the community, as well as providing testing and linkage to care. This precipitated a demand for services in program areas such as ANC attendance, skilled deliveries, child immunization, PMTCT services uptake, TB screening and treatment, and general HIV care and support. Pamoja also utilized a cadre of community health workers who engaged with supported sites and CUs. These health workers focused on reaching community members through home visits and community dialogues. They highlighted the importance of the use of ANC throughout pregnancy and during labor and delivery, tested clients and referred those infected into HIV care and treatment, and carried out defaulter tracing to ensure those being treated were not lost to follow-up.

Through decentralization, integration, mobile health activities, and community demand generation, Pamoja achieved greater access to ANC and PMTCT services among the target population. In the 2010–2011 reporting period, 9,959 women accessed any ANC services throughout their pregnancy, and only 3,353 completed all four WHO-recommended ANC visits throughout their pregnancies (see Figure 2). In the 2014–2015 reporting period, 34,380 women accessed ANC services and over 18,000 completed four ANC checkups throughout pregnancy. The percentage of women delivering their children in a health facility with trained obstetric staff on hand increased from 40% in 2011 to 60% by 2016 (see Figure 2).
Throughout the course of Pamoja, the number of pregnant women identified as HIV-positive in supported ANC sites grew from 990 in 2010–2011 to 3,719 in 2015.ii A total of 14,990 pregnant women were identified as HIV-positive throughout the five years of Pamoja implementation, and all of these women were referred to care, prophylaxis and/or treatment. In Pamoja-supported sites, the number of women and infants receiving ARV prophylaxis to avert vertical transmission of HIV on an annual basis increased from 1,067 in 2010–2011 to 3,561 in 2015 (see Figure 3).

This growth in access to ARV prophylaxis was due to implementation of changing treatment policies which allowed for greater eligibility to prophylaxis and treatment and also to direct delivery of services to primary health facilities and large-volume sites. This delivery was bolstered by increased human resources for health (nurses and clinical officers) deployed in settings MNCH services. In addition, several lay counselors, such as peer educators

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ii The number of expected pregnancies was 234,645 and a positivity target of 10% was used to estimate the number of HIV-positive pregnant women.
Expansion of HIV Care and Treatment

Overall, the number of new clients enrolled in both care and treatment has increased since the project’s inception (Figure 4). EGPAF’s use of several approaches, including increased access to provider-initiated testing and counseling (PITC) and the expansion of ART accreditation for sites throughout the region, ensured the expansion of care and treatment to reach new individuals.

![Expansión de atención y tratamiento del VIH](image)

**Figure 4: Individuals, including pregnant women, women, men, and children newly initiated in care and treatment through Pamoja-supported sites, 2010–2015**

**PROVIDER-INITIATED TESTING AND COUNSELING**

PITC was implemented in all 123 supported sites by the end of the Pamoja project. The number of patients tested annually for HIV in supported regions increased from 82,003 in 2010 to 490,265 in 2016. The total number of HIV tests administered throughout the Pamoja sites was 1,374,134. Over 54,000 HIV infections were identified among adults and children. Out of the 53,285 (47,273 adults and 6,012 children), 54,383 were enrolled into care (47,536 adults and 6,847 children) and 48,759 individuals were initiated on ART (42,506 adults and 6,253 children). The move to expand PITC to all supported sites, in line with national guidelines, enabled this increase in testing yield.

Scaling up of PITC could only have been accomplished with a strengthened workforce and increased space accommodations in existing clinics. Task sharing of HIV testing and counseling, allowing lay providers to offer counseling and testing services, enabled a higher yield of HIV testing in supported sites. EGPAF recruited and trained 333 (198 in Homabay and 135 in Turkana) lay counselors and placed them in high-volume facilities to improve HIV testing of adults, adolescents, and children. In several supported settings, site managers noted a limit in space to accommodate all visiting clients to be tested. In these instances, EGPAF worked with sites to reconfigure flow and add tents outdoors to provide a confidential area for routine HIV testing. In certain high-prevalence areas, community health workers went door-to-door to provide mobile HIV testing and counseling to households.

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**A number of factors could explain the intense growth in the number of people newly initiated into treatment:**

- the realignment/rationalization when Pamoja took over the Turkana region sites;
- rollout of the new ART initiation guidelines in 2015 to CD4 <500, increasing eligibility; and
- an increase in HIV testing services uptake leading to a greater identification of positives.
Success Story

INDEX TESTING IN A MANYATTA

It’s 107 degrees Fahrenheit at midday in a village outside of Lodwar, Kenya. Two women, Esther Kapoko and Anna Akeru, wear long white coats and kick up sandy dust as they stride through the village. Esther and Anna stop at the manyatta of Joyce Ewoton, who greets them at the entrance along with three of her children, Evaline, 16; Bartholomew, 8; and Benjamin, 5.

Esther, an HIV testing counselor, and Anna, a linkage officer, are colleagues at the Lodwar County Referral Hospital, where Joyce receives HIV care and treatment. A widow living with HIV, Joyce has been identified as an “index client,” meaning that her household has been targeted for testing and counseling to ensure that any family member living with HIV is linked to treatment. Joyce learned her own status two years ago when her husband died of an AIDS-related illness and she decided to be tested.

During Joyce’s last visit to the hospital to pick up her antiretroviral medicine, Esther and Anna made an appointment to test the children. None showed signs of illness, but Joyce immediately agreed to the visit. The hospital is 10 kilometers away, so walking to and from the facility is a hardship, especially for young Benjamin.

With Bartholomew and Benjamin looking on excitedly, Esther and Anna enter the manyatta. Esther takes out her test kit and spreads it on the sand floor. She places her rapid-testing apparatus on a plastic surface, along with a pictograph book that explains the process step-by-step. Speaking to Joyce in the Turkana language, Esther explains that she will be pricking the finger of each child to take a blood sample. Then she will apply the blood to a tester. If the tester shows two lines, it will indicate that the child is positive for HIV, and Anna will then link the child to the hospital for a confirmation test and treatment. One by one, the children come forward and face the sharp prick to their fingers. Benjamin’s eyes well with tears in surprise, but his older brother and sister put on tough faces.

While they wait for the test results, Esther gives a short lesson on HIV, explaining how it can be transmitted as well as the effectiveness of treatment. Esther then reviews the rapid-test results with Joyce and her children. Joyce gives a relieved chuckle when she sees that all the children are HIV-free. “I was not worried,” Joyce says, “but I am happy to see the results. I feel good.”

Opportunities like this are personal for Esther. Her sister and brother-in-law died from AIDS-related illnesses several years ago, and she is now raising their three children along with three of her own. Her sister’s youngest child is living with HIV, and Esther is the one who tested her and linked her to HIV care and treatment.

The salaries of Esther and Anna are covered through EGPAF’s Pamoja Project. Working with their colleagues at the hospital, with technical assistance from EGPAF, Esther and Anna regularly participate in data reviews to track their progress.
Expansion of Care and Treatment to HIV-positive Persons

At the inception of Pamoja, only 55 of 156 sites in the supported sub-counties of Nyanza provided ART. By 2012, that number rose to 154. After the partner rationalization and the restructuring of site support and geographic coverage by the PEPFAR, Pamoja was providing comprehensive support in HIV care and treatment delivery to 89 facilities in Homabay County. All new sites supported under Pamoja were accredited to directly provide ART at the national level through assistance from EGPAF. This assistance consisted of (1) expanding physical infrastructure through renovation of existing clinic spaces; (2) enhancing staff capacity and hiring additional staff to cope with increased workloads; (3) establishing a laboratory infrastructure to ensure access to high-quality diagnostic services for managing HIV; (4) developing commodity management systems to ensure sites did not run out of stock; (3) improving services and processes through the analysis of program data; and (5) creating a robust community-based approach to HIV and AIDS in each facility.

The number of adults accessing ART increased from 1,828 in 2010–2011 to 44,321 in 2015 across Pamoja-supported sites. An estimated 74,607 individuals in these areas were living with HIV, according to 2015 national data; Pamoja reached nearly 65% of those in need of ART with necessary treatment. Overall improvements in the number of adults and children currently receiving ART may be attributed to two factors. The first is the growing yield of HIV testing achieved through enhanced PITC efforts and the increased number of identified HIV infections previously noted. The second factor is the progressive rollout of care and treatment guidelines recommended by the WHO (including Option B+), which allowed wider criteria for treatment eligibility and earlier initiation of treatment. As with PMTCT guidelines, adaptation and implementation of globally recommended treatment guidelines have been supported by Pamoja staff and scaled up to Pamoja-supported sites through guideline dissemination, training, and clinical mentorship.

Without treatment, half of all HIV-infected children will die before their second birthday. Identification of HIV-infected infants and their quick enrollment in ART is absolutely necessary to ensure their survival. EID was a priority area for scale-up in the Pamoja Project. MNCH clinics, child wellness centers; TB clinics; and nutrition assessment sites report the highest volume of sick children. These were priority locations for scale-up of EID. EGPAF trained service providers in all supported sites to provide dried blood spot testing to infants to ensure rapid result availability and linkage to care and treatment, if diagnostics returned a positive result. EID testing increased from 85% (of 2,388 HIV-exposed infants) in 2014 to 95% (of 1,208 HIV-exposed infants) in 2016 (as of June) in supported sites. As Pamoja has increased support to special populations, including OVC, it has also been able to increase the testing yield among these children and their access to HIV care and treatment.

To ensure that a greater number of young, school-aged children were also accessing routine testing, care, and treatment, Pamoja supported the efforts of clinics to offer HIV testing, counseling, and care and treatment on weekends and school holidays. These special “pediatric-friendly” days allowed children to receive HIV care while maintaining their school attendance. Young children and adolescents, however, continue to prove difficult to track and maintain on treatment. Two areas that Pamoja has focused on in order to link children to treatment and retain them on ART include disclosure counseling and support-group implementation:

- **Disclosure:** There has been and continues to be an active effort to support disclosure of HIV status to children and adolescents, as this has been shown to increase children’s retention in care and treatment. The project trained both professional and community health workers to build their capacity to provide caregiver/child disclosure support. The Pamoja Project team developed disclosure job aids for these health workers. In total, by 2015, 265 counselors had been trained in how to support disclosure with children and adolescents.

- **Support Groups:** Pediatric-specific psychosocial support (PSS) groups were started to help address the emerging issues faced by children living with HIV. These groups offer adolescents receiving treatment an opportunity to
support one another and counteract the effects of stigma and bullying of the young HIV-infected population. Pamoja has developed 69 support groups for children and 74 for adolescents; together they have reached 3,750 children and 1,370 adolescents.

The number of children enrolled in ART annually in Pamoja-supported sites increased from 346 in 2010–2011 to 880 in 2015. A total of 4,438 HIV-positive children (0 to 14 years of age) were able to access ART through the Pamoja Project over the last five years.

As observed globally, Kenya has had challenges accessing adolescents, encouraging their use of HIV prevention care and treatment services, retaining them in HIV care, and monitoring their viral load. At the beginning of the project, adolescent-specific data were not routinely collected, and it was difficult to show progress in HIV care and treatment for this group. However, by 2015, the data were being collected and reported regularly; in total 1,158 adolescents were currently on ART, while 471 adolescents were newly initiated into ART in that year alone.

Orphans and Vulnerable Children

Pamoja's OVC program, which began in 2014–2015, supports eight community-based organizations: three in Homabay County, one in Kisumu County, two in Nairobi, one in Kajiado, and one in Machakos. Pamoja supports these partners in their efforts to implement high-quality and expanded OVC programs through technical capacity improvement and grants provision, while enhancing local and national ownership. Pamoja partners support over 10,000 OVC per year. Their assistance is focused on provision of services in health, nutrition, education, shelter, legal aid, protection from abuse and disinheretance, and training on income-generating activities for sustainability. To date, EGPAF-Kenya has helped more than 10,600 OVCs to obtain HIV prevention, counseling, testing, and treatment services (Figure 5).

Retention in HIV Care and Treatment

Under Pamoja, EGPAF expanded community involvement and engagement regarding HIV/AIDS to not only improve access to care and treatment, but also to improve adherence to ART. The project has supported health facilities working to ensure treatment retention by implementing the following approaches:

- **Peer educators:** Also known as expert patients, peer educators are people living with HIV who provide support to patients with HIV. They understand the importance of receiving ART on a timely basis to stay healthy. They help combat stigma by facilitating a PSS network for people with HIV within their facility's community catchment area.
This network allows those living with HIV to share experiences and support one another to overcome challenges on a regular basis. Throughout 123 sites, 318 peer educators were selected and trained to provide PSS and encourage/ promote ART retention. In 2011 and 2012, approximately 60% of clients would attend/keep their scheduled appointments. By 2015, this percentage had increased to an average of 85%. Every quarter, via phone or in person, peer educators follow up on approximately 11,470 missed appointments out of roughly 63,000 scheduled visits, and up to 90% of these clients who were lost to follow-up were successfully traced back within the month of the attempt.

- **PSS group formation:** PSS groups have been shown in other programs, and in other EGPAF-supported countries, to encourage patient stability in treatment and to strengthen child health behaviors. These groups were implemented in Nyanza by the Pamoja Project to improve health outcomes among discordant couples, adolescents, and children. PSS groups provide an outlet for HIV-positive persons to discuss treatment, counteract stigma, and support one another to remain healthy and in treatment. By 2015, over 500 PSS groups had been formed under Pamoja.

- **Buddy model approach:** Using this model, clients who share a social network form their own groups of about three to 10 people. Each group has its own group leader. The group offers a platform for its members to receive PSS, and its leaders follow up with members who miss a clinic appointment. By 2015, 370 buddy groups were active in Pamoja-supported sites.

- **Disclosure to children and adolescents:** As mentioned, there has been and continues to be an active effort to support disclosure of HIV status to children and adolescents. Supporting disclosure has been shown to increase children’s retention in care and treatment. The project trained professional and community health workers to build their capacity to provide caregiver/child disclosure support. In total, 265 lay counselors have been trained in increasing disclosure.

By 2012, one-year retention for adults and children averaged 87% (1,682 of 1,926 patients were actively still on ART one year after initiation). In 2015, the one-year retention rate increased to 98%, with 7,436 of 7,587 enrollees active in ART.

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**TB and HIV Care and Treatment Integration**

Among persons living with HIV in Kenya, TB is the leading cause of death. More than 35% of those with TB also have HIV. This co-infection substantially burdens Kenya’s health system. The rate is higher in the Nyanza Region, at almost double the national average. Given the effect of TB on the population of Kenya living with HIV, it was imperative that the Pamoja Project assist the country in the scaling-up of identifying TB/HIV co-infected patients and enrolling them into HIV care and treatment. With the understanding that HIV-infected patients are at a higher risk of contracting TB as compared to patients without HIV, Pamoja intensified case-finding activities of those with TB among persons living with HIV at all 123 project-supported facilities in 2012–2013. The project worked closely with Ministry of Health staff at health facilities to identify patients with an increased risk of acquiring TB in hospital and community settings. Staff in supported clinics were trained in the provision of regular TB screening at all clinic visits by all people living with HIV. Screening was done using a clinical symptom-based algorithm consisting of current cough, fever, weight loss, and night sweats at the time of initial presentation for HIV care and at every visit to both comprehensive care and PMTCT clinics. Children living with HIV who exhibited signs of poor weight gain, fever, or current cough and who had a history of contact with active TB cases were routinely evaluated for the disease. Patients with a positive clinical symptom screen are now routinely screened in accordance with the national guidelines for identifying active TB.4

The improvement in TB screening, the rollout of the presumptive TB registers and the implementation of a Gene Xpert TB rapid diagnosis technology at several sites helped to identify more HIV/TB co-infected patients. The number of HIV-positive patients currently in care who were screened for TB increased from 25,000 in 2012–2013 to 51,559 in 2015. In 2010–2011, about 69% of HIV-positive patients received TB screening; this proportion had grown to 97% by 2015. Initiation of ART among TB/HIV co-infected patients has improved greatly throughout the project, from only 4% in 2010 to 98% at the end of 2015. Rates of TB treatment completion were at 91% in the 2013–2016 period—up from about 50% in 2011—in both the Turkana and Homabay regions.
Key populations (or most-at-risk populations) are small groups that have a significant impact on the transmission of HIV/AIDS. They are disproportionately infected with HIV compared to the general population. According to Kenya’s 2009 Mode of Transmission report, these populations represent less than 2% of the general population, but contribute to a third of all new HIV infections. Because key population members are stigmatized, discriminated against, and often victimized due to their HIV status and/or their lifestyle choices, they have found it difficult to access health services in Kenya.

Through Pamoja, EGPAF helped to establish integrated, safe, and friendly centers for stigmatized groups, referred to as key populations, including: FSWs and MSM and, in Homabay, fisher folk. The Pamoja Project currently supports five drop-in-centers in Homabay, and has also integrated support for key populations in 12 health facilities that serve 29 beach communities in Homabay County. These sites, the first to offer services to key populations, provide HIV care and treatment, screening and treatment for sexually transmitted diseases, cervical cancer screening, drug and alcohol abuse assessment and counseling, and voluntary medical male circumcision. While other centers providing services to key-population members are exclusive, isolated drop-in centers, this new model of care provides integrated services within an existing public health facility.

The process of reaching key populations began through targeted mobilization of peer leaders from each high-risk group, as well as mapping of the respective hot spots for each key population. By 2016, 729 FSWs, 50 MSMs, and 4,511 fisher folk had enrolled at the various key populations-focused health facilities. Of those enrolled, nearly 47% of FSWs, 18% of MSMs, and almost 3% of fisher folk were identified as HIV-positive and were subsequently linked to programs providing antiretroviral medications. The project also screened FSWs for cervical cancer and supported those in need to access cryotherapy.

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**Improved Health Outcomes for High-risk Populations**

A surgery in which dysplasia, or cancer-forming cells are removed from the cervix.
Success Story

PSYCHOSOCIAL AND MATERIAL SUPPORT FOR ORPHANS AND VULNERABLE CHILDREN

Mercy Nounge is a 17-year-old who is attending a vocational boarding school in Machakos County, Kenya, a subsistence farming community about one hour outside of Nairobi. She is studying to be a hairdresser and looks forward to owning a business one day—while raising two children with her future husband. This vision contrasts starkly with the thoughts she had five years ago.

Orphaned by AIDS at the age of 5, Mercy grew up under the care of her grandmother and her aunt. Despite frequent illnesses and stunted physical development, she was not tested for HIV. In 2008, when Mercy was 9, she was recruited for a new project by the Africa Brotherhood Church, whose mission is to support children who have lost one or both parents to AIDS-related illnesses. The church's OVC project ensures that children are linked to appropriate care, HIV treatment, and education. EGPAF is a primary partner of this project, providing financial support and technical assistance. In all, the OVC project supports 1,642 children in Machakos.

Lucy Mwangangi, one of the project officers, reports, “When we went on a home visit, we found that Mercy was not in school. Mercy was sick on and off; she was coughing. We had to create awareness so that her grandmother would take her for HIV testing. Then Mercy tested positive, and her grandmother did not know what to do.” Lucy continues, “There was the issue of stigma. So we had a support group meeting with Mercy's grandmother and aunt. The other issue was adherence …”

This is how Mercy ended up in the hospital at the age of 12. “No one told me why I was taking the medicine,” says Mercy. “So I just stopped. In the hospital, my aunt finally told me that I am HIV-positive. She told me that both of my parents died from HIV. I felt like killing myself.”

“We had to engage the caregivers to help Mercy accept that she is HIV-positive and move on with her life,” says Lucy. At that time, Lucy linked Mercy to a PSS group through which she could meet other adolescents living with HIV and gain strength from hearing about their experiences. “Sometimes we bring a peer who is in university to talk to the children,” says Lucy. “They have graduated from the OVC project and can tell the younger ones, ‘You are not dying; you can live long.’”

An important aspect of the OVC project is ensuring that the children stay in school. When Mercy earned low marks, she was unable to continue her regular studies, so Lucy helped her enroll in a vocational training program. This year, Mercy will learn in the classroom, and next year she will apprentice with a working hairdresser.

“Lucy is my friend; I like her so much,” says Mercy. “I've known this girl since she was very young. I have seen her when she was very sick. And I have seen her take good care of herself. This is a girl with potential.”
In Pamoja’s efforts to increase the number of people in the high-prevalence settings of Nyanza being tested for HIV and linked to treatment and support services, the need to strengthen health systems was instrumental. This involved efforts at the national level, including participation in oversight health committees to ensure adaptation and implementation of globally recommended prevention and treatment guidelines. At the regional level, Pamoja worked with local partners and provided supportive supervision. At the site level, the project scaled-up health staff numbers and increased the capacity of health workers to manage a large influx of patients in need of testing and linkage to treatment. Pamoja also worked with site staff to establish an integrated laboratory network, better manage commodities and supplies, improve health management information systems and renovate HIV clinics to improve working environment and accommodate a growing number of patients eligible for treatment. These efforts are further elaborated below:

**National Support**

Key staff from the Pamoja Project participated in national-level technical working groups in the areas of PMTCT, adult and pediatric HIV care and treatment, laboratory services, and monitoring and evaluating and TB/HIV co-management. These staff have also been a part of the development of various policies and guidelines, including those concerning HIV care and treatment, PMTCT, key population support, and guidelines and strategies for TB/HIV co-management. The team also participated in the development of training curricula and ensured rapid dissemination and rollout of guidelines when treatment guidelines were changed per WHO recommendations. The Pamoja team also led revision of data collection tools (and piloted use of the tools in supported sites to inform further refinement) to scale up and improve national monitoring and evaluation of HIV prevention, care, and treatment activities.

**Health Workforce Reinforcement and Capacity Building**

Reinforcement: To accommodate a greater influx of patients tested, treated, counseled, and supported in locations not previously accustomed to providing HIV-related services, without overburdening the existing health system, Pamoja had to ensure a greater number of health workers were available to provide such services. Pamoja strengthened the workforce in 123 health facilities by adding a number of trained health staff to support various areas of care. By the end of September 2015, a total of 500 clinical, 632 nonclinical, and five administrative staff had been hired to strengthen direct service delivery and provide ongoing technical assistance to the MOH and the project’s implementing partners. EGPAF employed these workers (and paid salaries), but all were classified as government employees. EGPAF provided continuous mentorship to all health workers in supported sites throughout the project.

Training: By September 2015, over 700 of the government health care workforce in Homabay and 354 in Turkana were supported by EGPAF through the Pamoja Project. The health staff that were supported included clinical officers, pharmacists, nurses, HIV testing and counseling providers, health records and information officers, and laboratory technologists. By September 2015, the project was supporting 360 community health workers, 318 peer educators, and 265 lay counselors. Project staff provided these cadres with clinical and on-site training in HIV services; MNCH services; and TB services in line with national guidelines. These trainings contributed to implementation of the revised WHO-recommended HIV prevention and treatment guidelines at all supported sites, improvement in TB screening (from 69% of HIV-positive patients to 97%), and completeness and timelines of data reports to MOH from 55% in 2012 to 100% in 2015.

Lay health worker staff support and task shifting: When the Pamoja Project shifted its focus to four sub-counties in Homabay County at the beginning of 2013, PITC uptake was below 9% at MOH-supported clinics partly due to few staff numbers and high workload. To scale-up PITC, Pamoja introduced task-shifting, which allows for less-specialized health cadres to help heavily burdened and specialized health cadres reach more clients to provide HIV testing. In April 2013, Pamoja recruited, trained, and deployed 68 lay counselors to 43 high-volume sites in Nyanza to offer counseling and testing before their client clinical consultation. The lay counselors were trained and certified by the National AIDS

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**Health Systems Strengthening**

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Coordinating Programme. Marked improvement in access to HIV testing services was recorded. Results comparing pre-implementation (October 2012 to March 2013) and post-implementation (April 2013 to September 2013) services demonstrated: increased counseling and testing coverage (from 8.8% to 37.0% of the general population), boosted identification of client infection (from 1,838 to 6,523, for a total increase of 254.9%), and improved linkage to care (from 1,268 to 2,883 clients, for a total increase of 127.4%). To cope with the increase in numbers of HIV-positive clients being linked to HIV care, additional peer counselors were recruited to assist sites with overseeing the scheduling of patient appointments, managing clinic attendance, and actively following up of patients who missed appointments.

**EXPANDING HEALTH SPACES**

Clinic spaces were enhanced to ensure effective flow of patients through HIV counseling, testing, and treatment services. In some locations, additional rooms were built or external tents erected in or near existing clinic structures to cater to the needs of new HIV clients in sites that did not previously provide ART. High-volume sites, where HIV services were integrated with MNCH and TB services, were prioritized to ensure the availability of private testing and counseling settings at these locations. Infrastructure support also included improved maternity blocks, separate waiting bays for TB patients to aid infection control, expanded laboratory space to improve services and reduce infections, and reorganized client flow.

A total of 35 facilities were renovated. Twelve were completed in 2013, and an additional 27 clinics were renovated in 2014 (23 in Homabay and 4 in Turkana). In 2015, 74 tents were erected outside of sites to create additional space to optimize HIV testing, care, and treatment programs.

**SUPPLY CHAIN MANAGEMENT**

To ensure uninterrupted supplies of ART to all supported sites, EGPAF strengthened existing commodity management, including forecasting, quantifying, procurement, and distribution. This was done by training health care workers in commodity management, using a commodity management register, procuring computers, and recruiting pharmaceutical technologists to staff pharmacies within the facilities and manage the inventory of test kits and drugs, alerting procurement officials when supplies ran low. Running out of stock less frequently resulted in better quantification, more timely reporting of consumption, and maintenance of correct reorder levels.

**DIAGNOSTIC TECHNOLOGY IMPROVEMENTS**

Pamoja established the first laboratory network in supported counties to ensure diagnostic services were more readily accessible to people in rural, hard-to-reach communities. Samples for CD4 testing, cryptococcal meningitis diagnosis, TB, and DBS of EID collected from clients in lower-level health facilities and sent to established referral labs for analysis were processed more efficiently through this revised system. To ensure quicker access to these results, the samples were sent through a Pamoja-established courier service that involved recruitment and training of couriers and the use of bus systems throughout Nyanza. Couriers were provided with protective personal equipment and trained specifically on how to handle diagnostic materials, minimizing risk to themselves and to samples. Standard operating procedures for biohazard sample collection were provided, as was regular quality management, through training to supported health sites. The development of a lab network for sample processing reduced turnaround time of samples from more than 60 days to 14 days for EID, from 90 days to 30 days for CD4, and from 30 days to 4 days for TB across all supported sites.
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Pamoja supported many activities in a large area with a heavy HIV disease burden. Because of this, it was very important that the project collect information related to all activities and analyze data to ensure high project performance.

**National-level Support**

EGPAF assisted the MOH in tracking the performance of supported sites and worked with Kenya’s national reporting system (known as DHIS) to define care and treatment targets, translate those targets to a lower level, support health facilities, and improve the timeliness and accuracy of data collected. EGPAF assisted the MOH in the rollout of an electronic medical records (EMR) system in 2014 to enhance patient management. This system allows health care workers to manage patients in high-volume facilities, and also improves the quality of patient-level indicators collected to strengthen analysis and inform improvements to the national HIV program. Pamoja rolled out the EMR system in 29 high-volume sites in Homabay. The project also supported the purchase of eight computers for DHIS, as well as ten modems and data bundles for data entry and review on a monthly basis to improve the quality of data being uploaded into the national reporting database.

Pamoja supported the hiring and deployment of 77 health records information officers to support DHIS, along with other data needs at the facilities. The project also supported data-quality audits for the DHIS database to compare data in the electronic system and data captured in the registers. These audits resulted in a strong concordance (85% to 90%) between DHIS data on health facilities and MOH source documents.

Under Pamoja, EGPAF-Kenya also made improvements in the national reporting system by pioneering the use of WhatsApp, wherein monthly data reports from hard-to-reach locations in Turkana County are submitted instantly to the MOH. This innovative resource has reduced the reporting cycle from one month to one day, allowing health program managers to address data or health service delivery issues more effectively.

Due to a lack of tools to track HIV-exposed infants at the start of the project, Pamoja also supported the MOH to introduce and roll out use of an HIV-exposed infant register at all supported sites in 2013. This register enabled the recording of testing, results, and prophylaxis/treatment at 6 weeks, 9 months, and 18 months of age. It also helped determine mother-to-child HIV transmission rates at 6 weeks, 9 months, and 18 months, allowing timely course corrections and improvements in programming. The registers provided program implementers with a better understanding of rates of postnatal mother-to-child HIV transmission.

**Regional-level Support**

EGPAF organized zonal data-review meetings, wherein facilities within a certain geographical proximity were brought together on a quarterly basis to review their reports against national goals. The number of facilities per zone meeting ranged from three to six, depending on client volume. These zonal data-review meetings significantly contributed to improving the quality of captured and reported data, as well as enhanced performance in the participating facilities. It also allowed sharing of best practices between sites of similar demographic representation.

**Country- and Site-level Support**

Through Pamoja, EGPAF provided monthly data and performance reviews at site-level supportive supervision visits. These reviews greatly improved indicator understanding at the facility level, as well as data quality.
Success Story

ELECTRONIC MEDICAL RECORDS: LIFESAVING TECHNOLOGY

Scaling up HIV care and treatment cannot be effective without easy access to patient data—information about health status, HIV testing and treatment, treatment outcomes, and adherence to medication. Until recently, that data has been bound within unwieldy paper ledgers.

The limitations of such a system are apparent. Patients of the Kandiege Subdistrict Hospital, for instance, used to be tracked via handwritten entries in as many as six different large ledgers. These ledgers, or registers, were subject to human errors or poor follow-up by health workers of patients who had begun treatment, according to Doreen Agina, the clinician in charge of HIV patient support at Kandiege. Agina says that she had to physically count the number of patients on the pages and cross-reference the registers to generate a report.

Tracking patients became a lot easier for Agina in July 2013, when EGPAF helped introduce an electronic medical records system at the Kandiege hospital, which treats more than 1,500 patients with antiretroviral medications. “We enter HIV patients’ data into a profile created on the computer and update the information every time the patient makes a visit,” says Agina.

In the past, whenever patients lost their appointment card, staff could not provide them with complete health services because they did not know the patients’ medical history. “With the EMR, using just the patient’s number, everything you need to know on that patient is displayed,” Angina says. Whenever there is a problem with a patient’s file “the system will alert you by flashing a message on the screen indicating the specific issue that needs to be addressed.” In addition, the EMR system provides key health indicators such as weight loss, when a CD4 test is due, and even whether a patient has missed any appointments, according to Davies Kimanga, EGPAF’s director of strategic information in Kenya.

The EMR has given high-volume hospitals such as Kandiege an opportunity to more accurately address their patient needs, giving way to a more patient-focused level of care.
LESSONS LEARNED

Through implementation of the Pamoja Project, several promising lessons emerged, including:

• Multipronged approaches and strategies that involve communities and facility-level staff to improve services and strengthen partnerships between facilities and the county governments have proven successful in scaling up HIV service. Working hand-in-hand with government and nongovernment stakeholders is an essential ingredient in any successful HIV care and treatment expansion program.

• Placing particular emphasis on addressing psychosocial needs is an effective tool to limit stigma and ensure better retention in care and treatment. Retention rates improved with a variety of peer support techniques (peer counselors, support groups, buddy approaches) in place.

• It is feasible to reach and integrate key populations into routine public health services. Through use of peer support and hot-spotting activities, Pamoja was able to access these populations and usher them into care in

CHALLENGES

The Pamoja Project produced many promising results. Through our work to create greater opportunities to access HIV prevention, care and treatment and other health services, we noted some challenges, described below.

• Male involvement remained low throughout the course of our project. In response, health facilities have recently begun to create a package of services to attract male partners. In some districts, an innovative way to involve men in PMTCT has been developed jointly with the community. Dubbed “BOMA”—baba ongoza, mama au fate (translated as: let the father lead and the mother will follow). Pamoja-supported sites indicated that in 2012, less than 10% of male partners visiting ANC with their partners would themselves undergo HIV testing. By 2015–2016 (post-BOMA), that percentage had increased to 61%.

• Supplies of rapid HIV test kits and CD4 reagents ran out fairly frequently. This reduced the number of people who could have been reached through PITC, as well as the number of people being assessed for ART eligibility using CD4 testing. Although supply chain management was a focus for improvement under Pamoja, stock did run out—a direct result of a supply chain management problem. Improving supply chain management requires a facility-focused approach. Work with individual sites to improve commodity management remained a priority throughout the Pamoja Project.

• Food insecurity is a considerable issue among the clients served by Pamoja-supported sites in Turkana and Narok counties. The issue of nutrition and food security is broader than EGPAF’s reach and needs a multi-sectoral approach. In Turkana and Narok counties, Pamoja partnered with food security programs to strengthen access to household feeding programs. Nutritional assessment and reporting and linkages to the Food by Prescription program has helped to improve client retention and viral suppression. Noticing these broader challenges in Turkana County, EGPAF worked with partners focused in these areas to support their efforts and to improve health outcomes of the populations it aimed to serve.

• High rates of staff turnover were reported in health facilities in Turkana, Narok, and Kajiado counties. To address this challenge, EGPAF partnered with county governments to ensure retention of a trained health workforce in HIV clinics, and also developed an orientation package to be given to new staff before they undergo formal training.
nearby preexisting facilities, giving a sidelined and high-risk group of community members the support and care they need and deserve.

- Courier services can go a long way in improving the diagnostic functions of rural locations. The improved laboratory network built by Pamoja has improved access to TB, EID, and CD4, and, increasingly, viral load test results and provided a more efficient linkage to care.

- The rollout of EMRs was helpful to Pamoja and the MOH, as it ensured high data quality, access, and use. EMRs allowed supported sites to better understand the outcomes of their health programs and to better align their programs to reach national targets.

- Working with the primary health care system is an important strategy to improve access to HIV care and treatment services. Many more resources are needed to strengthen these lower-level facilities. However these sites are instrumental in the response to the HIV epidemic, maternal and child health needs, and care and treatment of opportunistic infections. Training, mentorship, human resource expansion, site flow improvements, and supply chain and data management should be heavily invested in and strengthened at this level of every health system to properly address the HIV epidemic. Addressing HIV at a primary care-level site improves access to and follow-up of patients living with HIV. This approach enabled Pamoja to extend HIV identification, prevention, care, and treatment services to a much broader population.

**FUTURE DIRECTIONS**

A new CDC award, launching in 2016 by EGPAF, TIMIZA90 (Kiswahili word for Reach90) presents a great opportunity to continue attainment of the UNAIDS 90-90-90 goal, as well as goals set by Kenya in its *AIDS Strategic Framework*. EGPAF’s future directions, in line with gains made under Pamoja, will be guided by various national policy guidelines and global priorities, as outlined below.

- An important goal is to strengthen health systems of Homabay and Turkana to ensure the County Health Management Teams have the requisite skills and knowledge to oversee and supervise integrated TB/HIV programs. This will be achieved through a structured capacity-building framework grounded in a mentored approach.

- EGPAF’s mission of eliminating pediatric HIV will be a top priority of this award. Timiza90 will ensure we achieve a mother-to-child HIV transmission rate of <2%. Timiza90 will coordinate with a UNITAID-funded project to roll-out point-of-care technology to enhance early infant testing and early infant diagnosis and viral load monitoring, which will enable earlier HIV diagnosis and immediate treatment initiation among children.

- A major area of work under the Timiza90 project, will be to set up a longitudinal patient level cohort monitoring system to generate robust data to better monitor and evaluate program interventions and guide implementation efforts.

- At 25.7%, Homabay has the highest prevalence of HIV in Kenya, with about 15,000 new infections occurring every year. Turkana County is also among the high-burden counties, with a HIV prevalence of 7.6%. To reverse this trend, EGPAF will partner with the governments of Homabay and Turkana Counties to meet 90-90-90 goals and to achieve control of the HIV epidemic in the two counties by 2019.

- As the Kiswahili saying “Umoja ni Nguvu” (Unity is Strengthen) says, EGPAF will forge partnerships with county governments, partners supporting HIV programming in these counties, and host communities to ensure we achieve synergy and maximize efficiency and realize maximum impact on every dollar. We believe together we shall achieve control of the epidemic in these two counties during the life of the Timiza90 Project.
CONCLUSION

With CDC support, Pamoja showcased that it is possible to make gains toward the control of an epidemic in a high-burden area. A variety of approaches have proven successful. At the local level, these included small community interventions, for example, support to lay counselors; use of existing friendships to build HIV support networks; and encouragement of small primary health facilities to extend HIV prevention, care, and treatment to their communities. Wide-scale approaches included advocating on a national level to support implementation of globally-recommended guidelines, and reinforcing a large health care workforce and training the entire staff in up-to-date prevention and treatment guidelines. Whether large or small, these efforts have ushered in a wave of support needed in a high-risk, high-prevalence setting.

Working closely with county government officials and health partners was a foundation of our investment in creating greater access to quality HIV services in these areas. These relations will ensure sustainability of gains made under Pamoja.

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