IMPROVING ACCESS TO HIV CARE AND TREATMENT SERVICES THROUGH DECENTRALIZATION AND INTEGRATION IN HOMABAY, KENYA
The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) would like to acknowledge the leadership of the County government of Homabay led by the governor, His excellency Hon. Cyprian Awiti, the county executive committee member for health Dr. Lawrence Oteng and the County Health Management Team, the four Sub-County Health Management Teams of Ndhiwa, Homa Bay, Rachuonyo North and Rangwe. EGPAF would also like to acknowledge all the health care workers, clients and communities who contributed to the success of the project.

EGPAF would also like to thank its funding partner the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) in Kenya through the U.S. Centers for Disease Control and Prevention (CDC) Kenya and acknowledge the support of Children’s Investment Fund Foundation who leveraged resources to help EGPAF achieve the results discussed in this report.

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Introduction

In the 1980s, an HIV diagnosis was an imminent death sentence. In the absence of effective drugs and comprehensive programs, HIV-related mortality risk is high. To date, the world has suffered the loss of 35 million individuals to AIDS.13

The world is now talking of an AIDS-free generation, thanks to HIV-prevention and treatment programs that target at-risk communities and individuals and advanced HIV treatment regimens that can prevent transmission of the virus and keep people who are living with HIV alive and healthy. Antiretroviral therapy (ART) has been shown to be an effective prevention strategy for the general population, as well as for the prevention of mother-to-child HIV transmission of (PMTCT). Providing ART to an HIV-positive pregnant woman limits her child’s risk of contracting the infection in utero, during delivery, and through the breastfeeding period. As PMTCT interventions have become available to women, the number of children becoming infected with HIV every day has fallen from more than 1,000 in 20106 to 400 in 2015.3 Scaling up and decentralizing these programs has resulted in a decrease of HIV-related deaths, from 2.8 million in 19991 to 1.1 million in 2015.4

Across the world, the HIV/AIDS response is shifting from a disease-specific and single-service component portfolio to a comprehensive and integrated approach to health service delivery. There is now increasing realization that progress toward an AIDS-free generation depends on the ability of at-risk individuals and people living with HIV and AIDS to find and access quality health services, providers, and products.2 Building strong health systems is a crucial step in the path toward universal access to comprehensive HIV programs and a country-led, sustainable response to the epidemic.

Kenya has witnessed firsthand the benefits of a comprehensive approach to care among those exposed to or infected with HIV. Since 2009, the increase in the number of women accessing ART in pregnancy has led to a 55% decline in new HIV infections among children. Moreover, the overall number of people accessing ART increased from about 3,000 in 2000 to more than 900,000 in 2016.4
The Pamoja Project

The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) is an organization that implements sustainable programs to support the government of Kenya in its mission to end AIDS. In August 2010, EGPAF received a grant from the U.S. Centers for Disease Control and Prevention (CDC) to implement a project in Nyanza Province. The goal of the Pamoja (meaning together or integrated in Kiswahili) Project was to increase the availability of high-quality, comprehensive HIV services in Nyanza using approaches informed by successful models of integration and decentralization of health services.10, 11, 12

Coverage of the Project

Pamoja was established in different areas and at different times in Nyanza province before Kenya was divided into 47 counties. It was first rolled out in Nyanza’s 12† districts and in six of the eight sub-counties of Homabay between October 2010 and December 2012. To better align implementation of programs and improve their effectiveness, the United States Agency for International Development and the CDC made changes to rationalize service and geographic coverage while avoiding duplication of efforts. This meant that the implementing partners were allocated sites where they could support comprehensive HIV care and treatment services within a given facility and region. As a result, beginning in January 2013, geographic coverage of Pamoja changed: the project transited from 12 districts in Nyanza into four sub-counties of Homabay County, including Ndhiwa, Rangwe, Rachuonyo North, and Homabay township. Homabay County has the highest HIV prevalence rate in the country, at 25.7%.9 This brief focuses on EGPAF’s Pamoja Project in Homabay in the four sub-counties in which the project operated, during the period October 2010 to September 2016.

† The 12 districts of Kisii in the former Nyanza province where EGPAF first began implementing Pamoja included Rachuonyo North, Rachuonyo South, Homabay, Ndhiwa, Borabu, Masaba South, Masaba North, Gucha South, Sameta, Kenyenya, Nyamache, and Munya.
Implementing HIV Prevention Care and Treatment to Promote Quality Services and Improve Health Outcomes for People Living with HIV

HIV treatment services are provided free of charge in Kenya. However, in Homa Bay County in 2010, only a dozen facilities provided HIV care and treatment services. Since the facilities were far away (up to 30 km) from homes, transportation was a hidden cost to patients. Coupled with stigma, this often hindered HIV-positive individuals from getting tested and accessing treatment. In 2010, only 15 of the 89 facilities in the county were providing ART services; other facilities that provided HIV testing referred HIV-positive patients to sites where ART was available. As a result, only about 2,500 people living with HIV accessed lifesaving HIV care and treatment services. A critical goal of the Pamoja Project was to improve the ability of HIV-positive pregnant women to access, enroll in, and adhere to ART.

To overcome this challenge, the initiative scaled-up HIV counseling and testing, as well as the provision of antiretroviral medication (ART) prophylaxis and ART from 15 sites in 2010 to 89 sites in 2016. This expansion included the establishment of HIV prevention, care and treatment in antenatal care clinics in major hospitals and primary health care sites, in line with the guidelines of the WHO and the government of Kenya. The project did this by decentralizing HIV treatment services from higher-level facilities to all primary health care facilities, and by integrating HIV and maternal, newborn, and child health (MNCH) and TB clinics at high-volume sites. This was accomplished by task-shifting HIV testing services to lay counselors, HIV care and treatment services to nurses and retention and adherence services to peer educators, drawing on promising practices from decentralization in other settings.

Decentralization, Integration, and Task-Shifting Efforts Under Pamoja

To fully decentralize comprehensive HIV services countywide, and to scale up HIV care and treatment in MNCH clinics and lower-level facilities, under Pamoja, EGPAF-Kenya formulated a variety of objectives, including those discussed below.

Expanding and Improving Health Spaces

Clinic spaces were improved to ensure the effective flow of patients through HIV counseling, testing, and treatment services. In some facilities, additional rooms were created from existing space. In addition, outdoor tents were erected near clinic structures to cater to 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 privacy and confidentiality during HIV testing and counseling as well as during discussions on living with HIV. Infrastructure support also included improving maternity blocks, creating separate waiting bays for TB patients to control infection, expanding laboratory space to improve services, and reorganizing client flow.

Reinforcing the Health Workforce

The greater influx of patients tested, counseled, and supported in locations not previously providing HIV-related services needed to be accommodated, without overburdening the existing health system. Pamoja strengthened the workforce by hiring and training 211 clinical, 440 nonclinical, and 266 community health workers. While EGPAF paid their salaries, they were considered government employees with the mandate to strengthen
direct service delivery and provide ongoing technical assistance to the Ministry of Health (MOH) and the project’s implementing partners. Lay counselors were trained and certified by the National AIDS and STI Control Programme.

Health care workers in sites newly providing ART were trained in HIV management and mentored on site through a “roaming-clinicians model.” This approach allows experienced clinicians to move from one lower-level facility to another to deal with complicated cases and ensure quality of care. Continuous medical education was provided by EGPAF and the MOH in line with the national guidelines.

Pamoja also instituted task-shifting, to allow for less-specialized health cadres to help heavily burdened and specialized health cadres reach more clients with HIV services. Pamoja recruited, trained, and deployed 190 lay counselors and 81 triage nurses in high-volume sites in Homabay. These individuals offered counseling and testing to patients as they waited for their clinical consultation. Another new cadre of staff comprised cough monitors, who were deployed in high-volume facilities to help identify TB cases in waiting rooms.

**Improving Diagnostic Technology and Infrastructure Services**

A lab test measuring the number of CD4 cells (an indicator of how well the immune system of an HIV-infected person is working, and a predictor of HIV progression) was required to enroll in treatment, under the guidelines set out in 2013 by the WHO. In 2010, CD4 testing was available in only one hospital in Homabay. CD4 testing and initiation of treatment could take more than two months, resulting in loss to follow-up and severe disease progression. Pamoja helped to establish the first laboratory network for CD4 and viral load testing in Homabay. This ensured the availability of essential diagnostic services and immediate enrollment in ART among all those eligible. Rapid diagnostic technology was implemented in large health facilities throughout the region. CD4 and TB samples collected from lower-level sites were sent to established referral labs and those hospitals equipped to provide services. Pamoja used quality assurance and quality control measures on a regular basis to maintain standards for blood sample collection, transport, diagnosis, and client counseling. Today, turnaround time has decreased from an average of more than 60 days to just two weeks for early-infant diagnosis, and from 30 days to one week for CD4 and TB diagnosis.

**Ensuring a Continuous and Secure Supply of Quality Drugs and Laboratory Commodities**

At the inception of the Pamoja Project, only one central store existed to supply ARV treatment in the Homabay County referral hospital; stock-outs of drug commodities in all other ART sites were frequent. To ensure uninterrupted supplies of ART to all peripheral sites, EGPAF designated four sites (three sub-county hospitals and a health center) as central stores to supply drugs and other commodities. Expanding this designation to additional sites entailed working closely with the sub-county, county, and national drugs supply chain to ensure satellite sites allowed for due process and followed the criteria set out by the national drugs supply agency. The filing system of all sites was enhanced to strengthen the security of patient information. Renovations were undertaken to create space for the storage of drugs and other commodities, and 10 additional staff were deployed to focus on commodity management (including forecasting, quantifying, procurement, and distribution). Further, a commodity management register was implemented and computers were procured, as was software to dispense drugs and monitor reorder levels at all peripheral sites.
Expanding Community Involvement

To ensure treatment access and retention, Pamoja employed peer-led support activities, including groups that operated out of supported facilities. These groups were led by expert patients (people living with HIV and active on treatment who provided support to patients living with HIV). The group helped members to understand the importance of receiving ART on a timely basis to stay healthy, and created a supportive environment to counteract stigma. Currently, there are groups that target pregnant and lactating mothers, the general population, discordant couples, and adolescents and children living with or affected by HIV. Over 200 expert patients have been recruited to lead support groups in 88 supported facilities.

Strategic Information/Using Data to Improve Service Delivery

Working with Kenya’s national reporting system, EGPAF assisted Homabay County in tracking the performance of supported sites. They sought to not only define care and treatment targets and translate them to lower-level supported health facilities, but also to review, analyze, and use routine data to meet patient and program needs. To help the county provide effective oversight of facilities, Pamoja supported the hiring and training of an additional 24 county health-records information officers and 30 data-entry clerks, and decentralized data entry to the facility level. This helped to improve the timeliness and accuracy of the data collected. Staff were trained to use registers and tools to ensure that reports submitted to the MOH were complete and correct. Working with the county, sub-county, and facility staff, Pamoja initiated monthly meetings where patient data were analyzed and reviewed to ensure continuous improvement of services. Bi-annual data-quality audits were conducted in line with national guidelines to ensure the integrity of data.

Data generated from the facilities are now used to inform annual work planning, as well as target and priority setting. Supportive supervision visits are based on issues identified through data quality audits, and data is now a key ingredient in decision-making. These practices have helped to strengthen county health management structures designed to plan, implement, and carry out oversight functions effectively.
Impact of Pamoja

The Pamoja 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. Cumulatively, the project supplied 14,400 women with ARV medications to prevent vertical HIV transmission to their infants. 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 contracting HIV from their mothers as a result of Pamoja programming.

The number of individuals who received care and treatment grew steadily: 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 and included 4,438 children in 2015. Viral load monitoring throughout these regions indicated that 83% of those who accessed treatment were experiencing viral suppression by 2015.

Lessons Learned

- To achieve results in the expansion and availability of HIV services, it is important that the primary health care system is strengthened holistically
- Holistic improvements of primary health systems require a large investment, including increasing staff, training staff and utilizing newer technology and technical assistance models
- Task-shifting, including nurse-led provision of ART services and lay worker-initiated HIV testing and counseling, is an effective strategy to increase access to HIV services
- To sustain the gains made, county governments need to invest in human resources, infrastructure, and other health-system-related components; this can be done by allocating a specific budget for HIV initiatives
- Quality of care and viral suppression and retention can be improved by decentralizing and integrating HIV services; these efforts should be coupled with community strategies, such as assigning peer educators to each site to “support” and meet the psychosocial needs of newly diagnosed patients
Figure 1. HIV testing services uptake in Pamoja-supported sites, 2010-2015

Figure 2. Number of HIV-positive individuals linked to care, 2010-2015
Figure 3. Maternal ARV prophylaxis uptake

Figure 4. Viral load suppression in measured in Pamoja-supported sites, 2015

Figure 5. MTCT rates
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