



Timiza90

AN ELIZABETH GLASER PEDIATRIC AIDS FOUNDATION—KENYA PROJECT



**Elizabeth Glaser
Pediatric AIDS Foundation**
Fighting for an AIDS-free generation

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TIMIZA-90 AT A GLANCE

Timiza90 is a five-year (Oct. 2016–Sept. 2021) project funded by the U.S. Centers for Disease Control and Prevention (CDC).

OVERALL GOALS

1

Contribute to achievement of the 90-90-90 targets by identifying 90% of people living with HIV (PLHIV), provide antiretroviral therapy (ART) to 90% of those identified as HIV-positive, and ensure viral suppression among 90% of those on ART to ultimately reduce HIV incidence and AIDS-related mortality and to achieve elimination of mother-to-child HIV transmission

2

Bridge gaps in the national health care system, strengthen county leadership coordination to address prevention of mother-to-child transmission (PMTCT) and HIV program oversights, and manage human resources for health

3

Strengthen county health systems for sustainable HIV service delivery

RESULTS

Timiza90 Project Results Against 90-90-90 Targets

First 90

Through enhanced testing strategies including index case finding (including pediatric and adolescent contacts) and partner notification services, a total of 2,964,778 HIV tests were conducted between October 2016 and March 2021, and 45,584 new positives were identified.

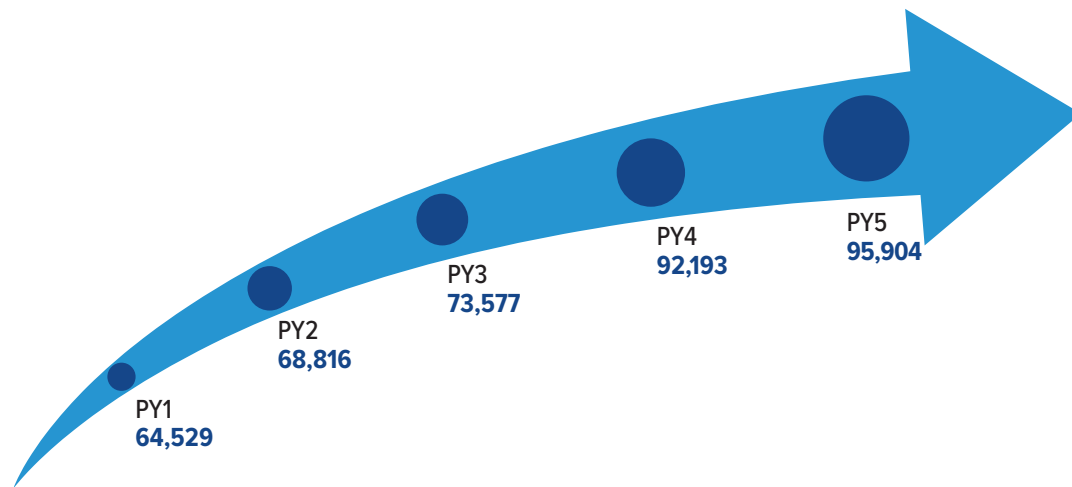
Through partner notification services, 90,020 index clients were screened, and 212,461 sexual contacts and 25,895 pediatric contacts were elicited. With a testing rate of 80% and 86% for eligible pediatric and sexual contacts, respectively, there were 470 pediatric and 17,668 adult cases identified through partner notification services. Index testing contributed 46% of the positives identified.

Second 90

By integrating services and adopting a one-stop shop (same-day ART initiation in maternal and child health units, comprehensive care clinics, TB clinics, and child wellness centers), Timiza90 initiated a total of 39,019 clients on ART, including 2,598 children younger than 15 between October 2016 and March 2021. As of March 2021, the project currently supports 95,904 clients for ART.

Through differentiated service delivery, Elizabeth Glaser Pediatric AIDS Foundation was able to get more individuals on optimized ART throughout the duration of the project.

PY = program year



Third 90

Various strategies including enhanced digital technology for better patient tracking, peer-to-peer support implementation, and better ART formulations enabled Timiza90 to ensure ART access to 95,904 children and adults. The project realized a growth of 34,988 clients on ART.

Lost to follow-up rates improved vastly, moving from 29% in May 2020 to less than 5% in November 2020.

Concentrated Efforts in PMTCT

Designation of PMTCT focal persons at sites, enhancement of early antenatal care (ANC) attendance, and community mapping of pregnant women contributed to the success in PMTCT. Due to these efforts, coupled with the implementation of quality improvement initiatives in PMTCT access to mother–infant pairs at highest risk of vertical transmission, **the absolute number of HIV-positive infants was reduced from 209 in 2016–2017 to 86 in 2019–2020.**

Further preventing HIV transmission, the project performed 47,550 voluntary medical male circumcisions (VMMCs) over the course of its five years.

Reaching the Unreachable: Unbiased, Informed, and Innovative Programing for Individuals Most at Risk of HIV Infection (Key Populations)

Working hand-in-hand with communities to identify ways to access men who have sex with men (MSM), people who inject drugs (PWID), migratory tradespersons including fishermen and fisherwomen, female sex workers (FSWs), and transgender persons, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) was able to reach these individuals with individualized and nondiscriminatory counseling, treatment, and adherence support.

As of March 2021, the project has enrolled 34,365 members of key populations (KPs), out of which 3,649 are HIV positive (10.6% positivity). Pre-exposure prophylaxis (PrEP) uptake is at 62% of the eligible, with a 91% retention rate at one month and an 87% rate at three months, observed across these populations. One seroconversion has been reported.

ACRONYMS AND ABBREVIATIONS

AE	adverse event
ANC	antenatal care
ART	antiretroviral therapy
CALHIV	children and adolescents living with HIV
CCC	comprehensive care clinic
CDC	U.S. Centers for Disease Control and Prevention
DICE	drop-in center
DSD	differentiated service delivery
DTG	dolutegravir
EAC	enhanced adherence counseling
EAC	enhanced adherence counselling
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EID	early infant diagnosis
FSW	female sex worker
HCW	health care worker
HTS	HIV testing services
KP	key population
LTFU	lost to follow-up
MCH	maternal and child health
MOH	Ministry of Health
MSM	men who have sex with men
NASCOP	National AIDS and STIs Control Program
OPD	outpatient departments
OTZ	Operation Triple Zero
OVC	orphans and vulnerable children
PACE	pediatric-focused accelerated case finding effort
PCR	polymerase chain reaction
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission
PNS	partner notification services
PREP	pre-exposure prophylaxis
PT	Proficiency Testing
PWID	people who inject drugs
PY	program year
SOP	standard operating procedure
VL	viral load
VMMC	voluntary medical male circumcision

EGPAF IN KENYA

EGPAF is a proven leader in the global fight to end HIV and AIDS in children and families and an advocate for children's health. Founded more than 30 years ago through a mother's determination, EGPAF is committed to a comprehensive HIV response. This is achieved through research, global advocacy, and skills building and strengthened capacity throughout the health system to best respond to this epidemic, coinfections, and emerging pandemics.

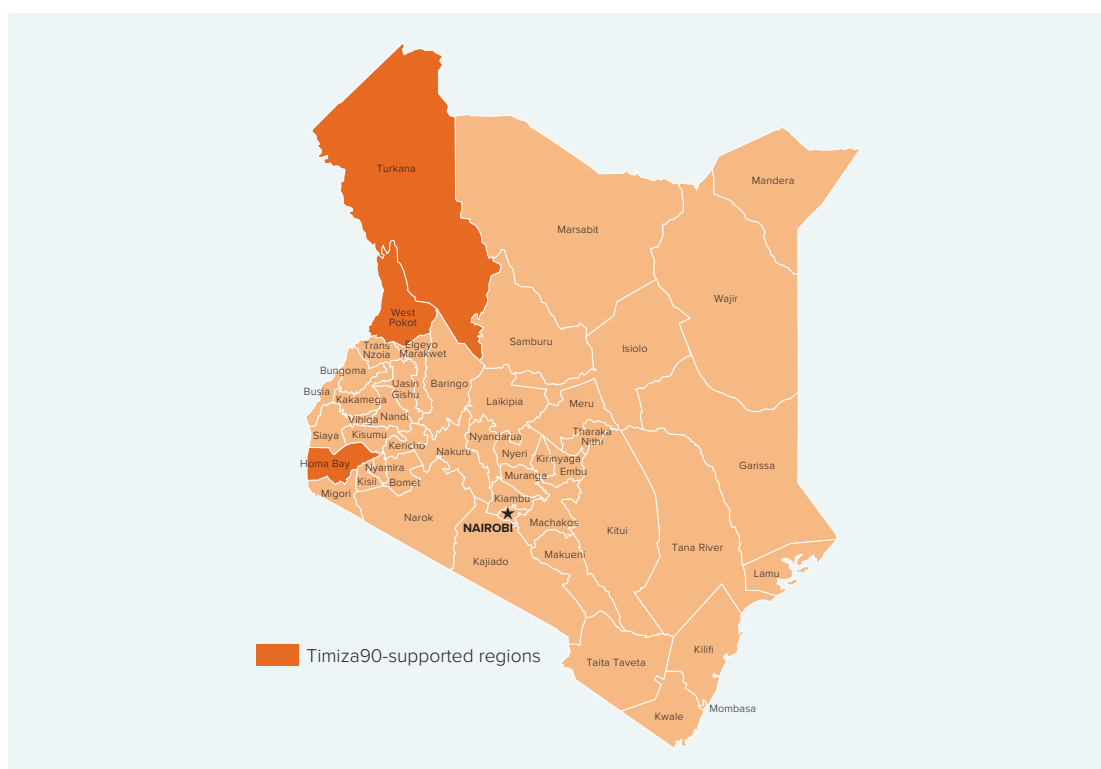
In 2000, EGPAF began HIV work in Kenya. The partnership started with a small, privately funded initiative for PMTCT. It has since grown into one of the largest HIV prevention, care, and treatment programs in the country. EGPAF–Kenya serves to implement sustainable programs that support the Kenyan government in its mission to provide quality health care for all people in general and for HIV-infected children and mothers in particular. To this end, the organization collaborates with multiple partners, including the Ministry of Health (MOH), at national and county levels. EGPAF–Kenya also provides essential technical and organizational capacity-building assistance to community-based organizations throughout its supported regions. Thanks in part to EGPAF's work, ART coverage for adults and children has increased by more than 40% since 2013, the mother-to-child transmission rate dropped from 14.3% to 10.8% in 2019, and mortality among adults and children living with HIV has dropped by 65% and 59% (include time period), respectively in Kenya.¹⁻³

ABOUT TIMIZA90

Timiza90 is a five-year (October 2016–September 2021) project funded by the CDC. The project aims to support the implementation and expansion of high-quality, sustainable, and comprehensive HIV prevention, care, and treatment programs. Named for a Kiswahili term meaning “reach 90,” it was inspired by the United Nations Program on HIV/AIDS’ 90-90-90 treatment targets to help end the AIDS epidemic. The Timiza90 project serves to accomplish the following:

- **Contribute to achievement of the 90-90-90 targets** by identifying 90% of all PLHIV, provide ART to 90% of those identified as HIV positive, and ensure viral suppression among 90% of those on ART to ultimately reduce HIV incidence and AIDS-related mortality and to achieve elimination of mother-to-child HIV transmission
- **Bridge gaps** in the national health care system, strengthen county leadership coordination to address HIV program oversights, and manage human resources for health
- **Strengthen county health systems** for sustainable HIV service delivery

EGPAF worked in partnership with the Homa Bay, Turkana, and West Pokot County governments. Other sub-grantees included SOS Children’s Villages (Homa Bay), Gethsemane Garden of Hope (Homa Bay), Mango Tree and Devlink (Homa Bay), Our Lady of Perpetual Support (Kisumu), the Diocese of Lodwar and the International Rescue Committee (Turkana), Kakuma Mission Hospital (Turkana), and the African Inland Church (Turkana). The project’s focal areas were HIV testing services (HTS); PMTCT; HIV care and treatment for children, adolescents, and adults; TB/HIV; laboratory system strengthening; VMMC; orphans and vulnerable children (OVC); and KPs.





ACHIEVING 90-90-90 TARGETS

THE FIRST 90

Timiza90 offered HTS to adults and children, including the KPs: FSWs, MSM, male sex workers, and PWID. Services also were extended to priority populations in 163 Homa Bay sites, including fisherfolk, adolescents, young people, and men. The main strategies employed were index case testing and testing optimization at all service delivery points. The latter included outpatient departments (OPD), inpatient departments, maternal and child health (MCH) units, child welfare clinics, TB clinics, and nutrition clinics. In addition, the project undertook targeted community testing, implemented a social network strategy for KPs, and distributed HIV self-testing kits. Notably, eligibility screening was incorporated into all these approaches to optimize testing efficiency.

Newly identified HIV-positive clients were linked to ART using same-day ART initiation for successful linkage. HIV-negative clients were linked to prevention services, which included PrEP, VMMC, risk-reduction counseling, condom services, and sexual and gender-based violence services.

For quality assurance, all HTS providers participated in the national proficiency testing program. Those with unsatisfactory results were guided through preventive and corrective actions such as observed practice sessions, group counselor support supervision sessions, mentorship, and on-the-job training. In addition, laboratory officers conducted batch-to-batch testing for new rapid test kits, while HTS providers were directly observed and supervised on a quarterly basis. All HTS providers received annual refresher trainings in HTS, assisted partner notification services (PNS), and sexual and gender-based violence counseling training as well as continuous mentorship and supportive supervision.



OVERALL ACHIEVEMENTS

As seen in table 1, a total of 2,964,778 clients were tested over the project’s duration (October 2016–March 2021). Of these, 647,880 were children between 0-15 years of age, 2,479 of whom tested positive. Overall, a total of 45,584 clients tested positive, 39,024 (86%) of whom were enrolled and initiated on ART. Index testing contributed to 46% of the positive cases. Achievements are presented in more detail below.

Table 1. HTS Performance: October 2016–March 2021, Timiza90 project

Indicator	PY1	PY2	PY3	PY4	PY5 Quarters 1 and 2
Number tested for HIV	1,056,845	866,082	513,422	391,058	137,371
Number identified HIV positive	9,777 (0.9%)	9,529 (1.1%)	10,781 (2.1%)	9,771 (2.5%)	5,726 (4.2%)
Number linked to ART	8,839 (90%)	8,104 (85%)	8,406 (77%)	8,679 (88.8%)	4,996 (87.2%)

PY = program year

The project started when the existing HTS strategies were not effective in identifying new HIV-positive clients in the community. Therefore, the yield from HIV testing was at its lowest ever at 1%, as demonstrated in Figure 1 and Table 1. From mid-2017 to 2018, the project adopted assisted partner notification as the main strategy for identifying new HIV-positive clients. This proved to be a more effective strategy in identifying new PLHIV than more traditional testing strategies. This has led to an improvement in HTS yield.

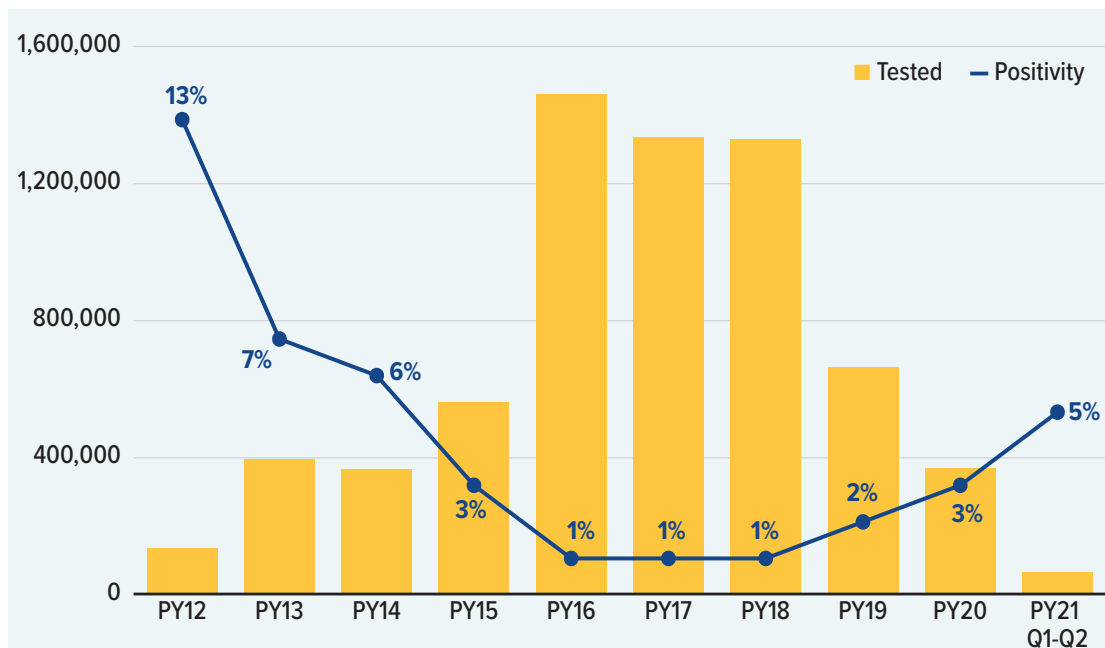


Figure 1. Improved testing efficiencies in Homa Bay County

IDENTIFIED PROMISING PRACTICES: INDEX CASE FINDING

PEDIATRIC-FOCUSED ACCELERATED CASE FINDING EFFORT

Due to its low yield, pediatric HIV testing had not been adequately prioritized widely across the country. Notably, HIV-infected children ages 5 to 9 and 10 to 14 were more likely to be missed than were younger children, having aged out of routine child welfare services at 5 years. Accordingly, the pediatric-focused accelerated case finding effort (PACE) was introduced in March 2020 and served to identify HIV-positive children, particularly those ages 5 to 14.

The initiative took a two-pronged approach. First, active index clients at HIV clinics were reviewed. This identified gaps in elicitation and/or testing of biological children and their siblings. Second, active elicitation and testing of child and youth contacts were prioritized. Additional counselors were recruited and trained to support existing ones.

Targeted index clients—women, adolescents, children, deceased, and widowers—were screened to elicit biological children or siblings. Pediatric contacts' testing eligibility was first assessed, and those found eligible were tested for HIV. As of March 30, 2021, there were 17,244 index cases found to have elicitation and testing gaps concerning biological children. More than half (53%) of these individuals were reached. Ultimately, 80% of the elicited contacts were eligible for testing, and 73% of those eligible were tested, as seen in figure 2.

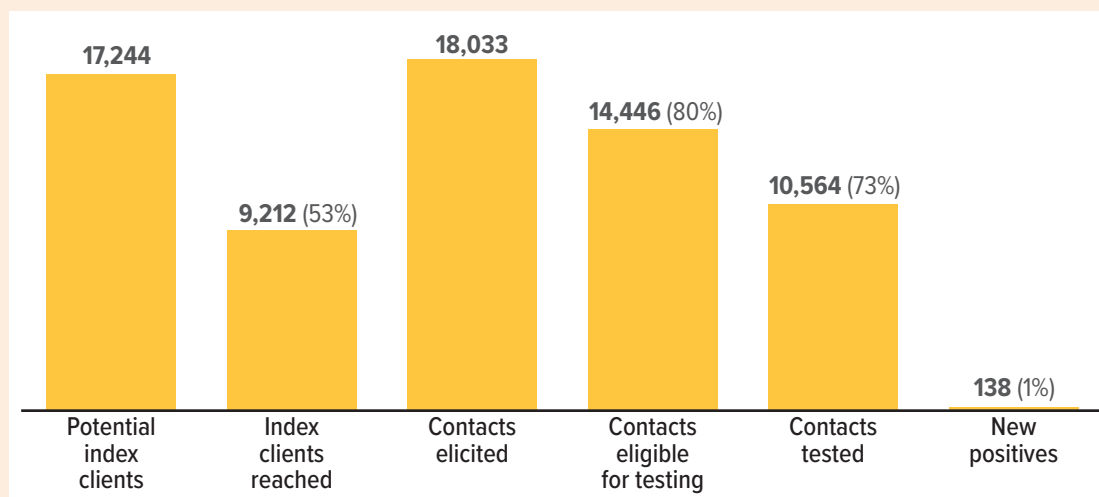


Figure 2: Index case finding and testing cascade (March 2020–March 2021)

Out of 138 new positive cases in the March 2020-2021 period, there were 16 (12%) pediatrics aged 0 to 4 years and 122 (88%) aged 5 to 14 years. PACE's implementation was severely affected by the COVID-19 pandemic. For instance, governmental restrictions hampered the physical tracking of elicited contacts, which affected testing uptake. Still, despite such constraints, the PACE initiative effectively identified children ages 5 to 14 years. While the yield may be low, this process demonstrates the complexities involved in pediatric case finding.

PNS

Index testing contributed 46% of all positive cases between October 2016 and March 2021. Since April 2020, however, index case testing activities have decreased due to COVID-19 containment measures, along with limited community elicitation, KP outreach, and facility testing in general. As demonstrated below, PNS proved an efficient strategy for identifying new HIV-positive individuals.

As Homa Bay County neared the first 90, traditional HIV testing strategies became ineffective at identifying new PLHIV. Through PNS, the partners and biological children of an HIV-positive individual (the “index patient”) are solicited and recruited for testing. The project developed a PNS implementation model that advised health care workers (HCWs) on methods they could use to introduce and sustain discussions aimed to elicit and test the sexual contacts and biological children of prioritized index clients. This included sexual partners and biological pediatric contacts of newly identified HIV-positive index clients, high-viral-load index clients, widows/widowers, adolescents, pregnant women, and priority populations, especially fisher-folk.

In the period under review (June 2017 to March 2021), 90,020 index clients were screened, and 212,461 sexual contacts and 25,895 pediatric contacts were elicited. With a testing rate of 80% and 86% for eligible pediatric and sexual contacts, respectively, there were 470 pediatric and 17,668 adult cases identified through PNS.

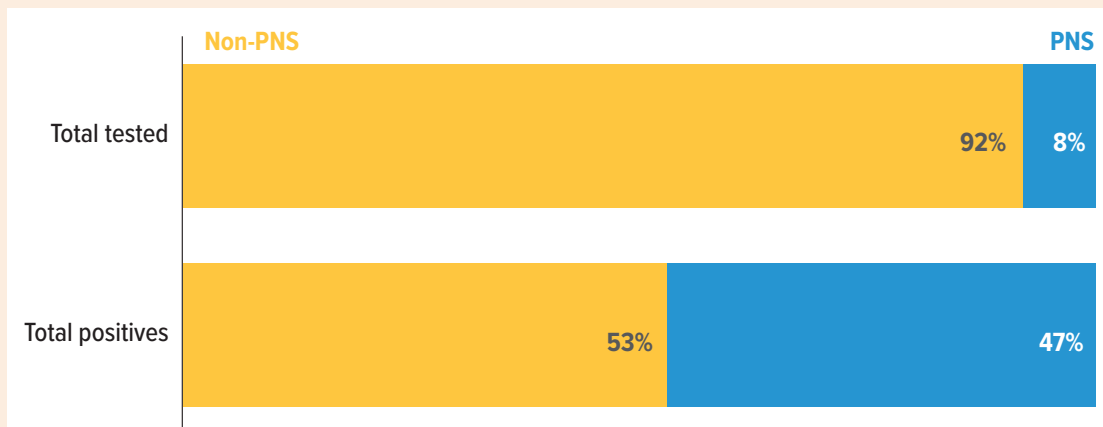


Figure 3. Testing efficacy through PNS testing (June 2017–March 2021)

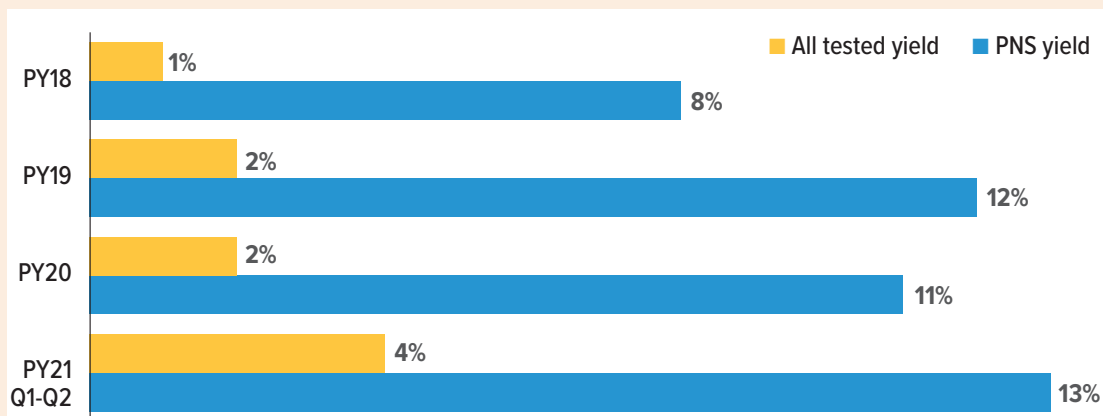


Figure 4. PNS testing and yield trends (June 2017–March 2021)

THE SECOND 90

Timiza90 provided HIV care and treatment services to adults, children, and adolescents in 164 Homa Bay sites. These services included integrated HIV care at the comprehensive care clinic (CCC; an outpatient initiative that cares for PLHIV); maternal, newborn, and child health / ANC clinics; and TB/ HIV clinics. These sites offered a comprehensive package of services, which included immediate/ same-day ART initiation for newly identified HIV-positive clients. To improve staff capacity, HCWs received training on all updated ART guidelines as well as strengthened mentorship and on-the-job training. The project also extended structured patient treatment preparation and adherence counseling to PLHIV; the latter included enrollment into treatment literacy classes to enhance adherence and retention. Other services for PLHIV included the Positive Health, Dignity, and Prevention approach; TB screening and treatment; post-exposure prophylaxis or PrEP for discordant couples; and screening for and treatment of opportunistic infections. Timiza90 helped implement the differentiated service delivery (DSD) model, which is responsive to clients' unique needs.

Linkage to ART has long posed a challenge in HIV programming. Root cause analyses, performed early in Timiza90 implementation, revealed and informed two main reasons for suboptimal linkage: (1) weak monitoring of the linkage process and (2) non-sustained follow-up of newly identified HIV-positive persons until successful ART enrollment. Through Timiza90, new strategies were introduced to improve ART coverage, including establishing linkages with committees in high-volume sites, pairing HTS providers and peer educators to improve patient navigation, and introducing new standard operating procedures (SOPs) for tracking clients until successful linkage. The new SOPs enabled intensive, two-week follow-up for clients newly identified via HTS providers. Clients who remained unlinked two weeks post-diagnosis should be referred to an experienced counselor (counselor supervisor) for further follow-up. Simultaneously, routine linkage strategies were optimized, including the same-day enrollment strategy. For clients who preferred to be linked to other facilities, individual weekly follow-up was undertaken to ensure successful linkage. The implementation of these strategies bolstered linkage to ART, which went from 77% in October 2019 to 95% in September 2020.

ACHIEVEMENTS

Timiza90 initiated a total of 39,019 clients on ART, including 2,598 children younger than 15 between October 2016 and March 2021. As of March 2021, the project supported 95,904 clients on ART. Figure 5 demonstrates ART initiation achieved across the years.



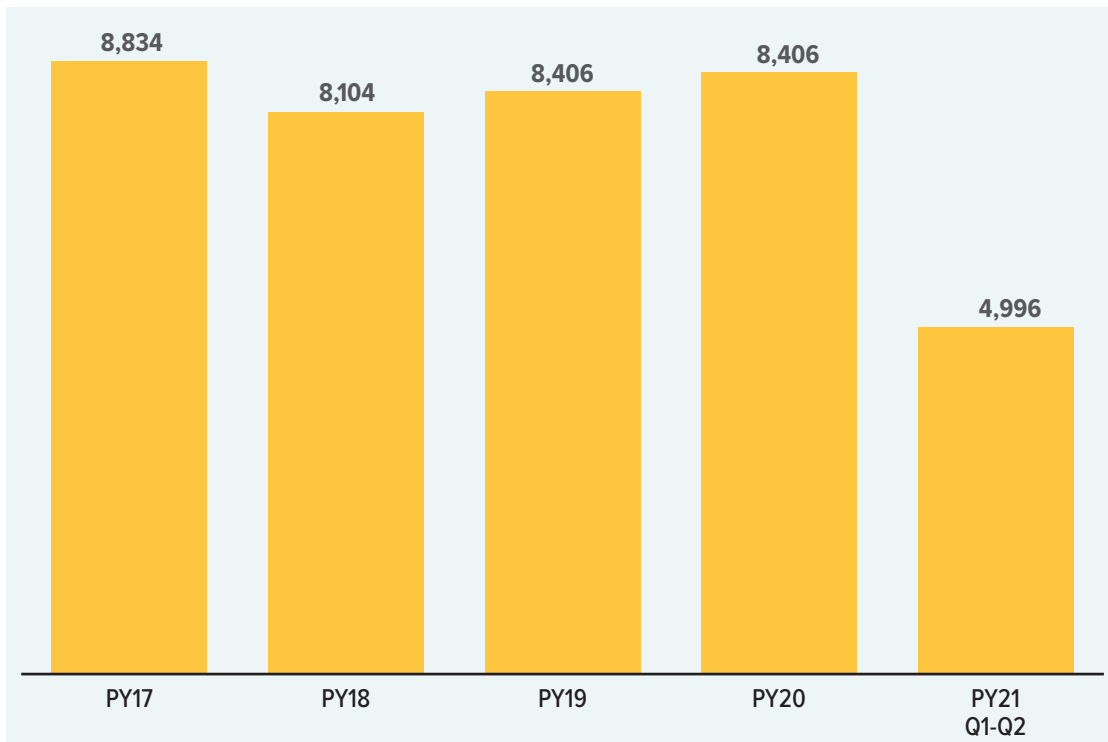


Figure 5. Newly initiated on ART, Timiza90 project (October 2016–September 2021)

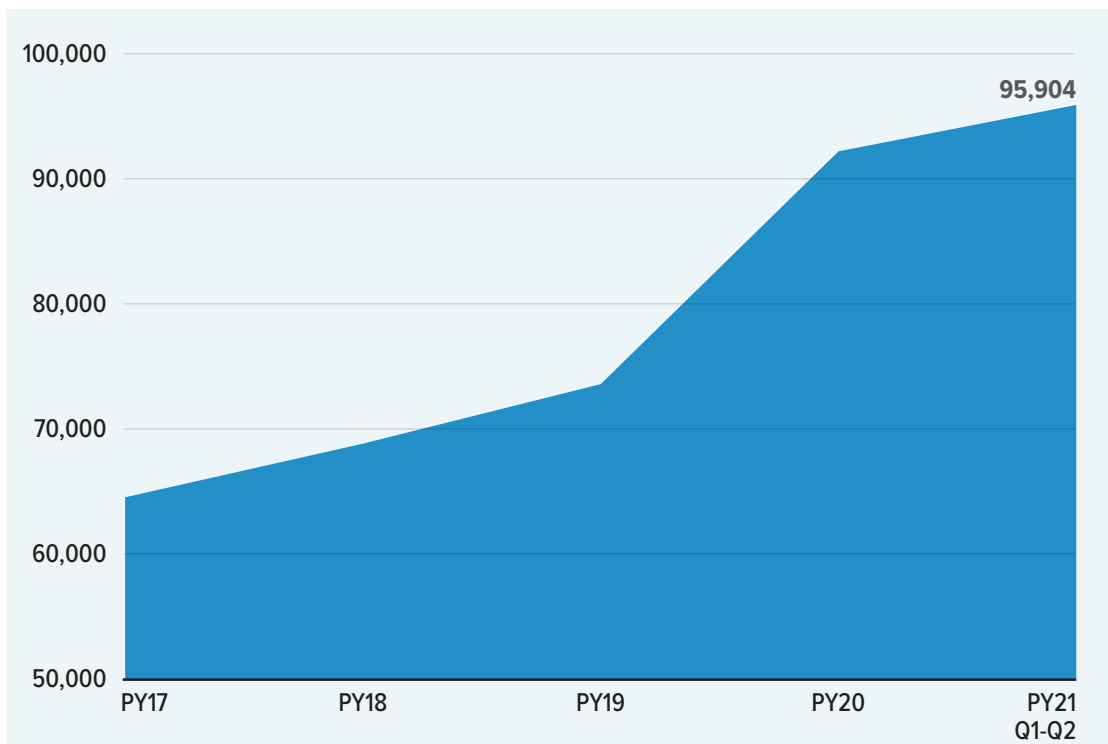


Figure 6. Total number of clients on ART, Timiza90 project (October 2016–September 2021)

PROMISING PRACTICES: OPTIMIZED ART AND DSD

Timiza90 implemented ART treatment optimization, focused retention strategies for the newly initiated, continuous quality improvement for cases lost to follow-up (LTFU), tracking for transfer-out, and DSD to retain stable clients but provide more specialized support to those unable to adhere to treatment.

ART optimization refers to the harmonization of global efforts to accelerate access to simpler, safer, effective, and more affordable HIV treatment. The 2018 MOH ART guidelines recommended a dolutegravir (DTG)-based first-line regimen for PLHIV ages 15 and older. Further guidance, which recommended active transition to the DTG-based regimen for both males and females, was issued in August 2020. This circular also permitted DTG use among women of reproductive age, including pregnant women. Timiza90 sensitized and mentored HCWs in 165 supported sites, giving them direction regarding these guidelines. All clients were counseled about the new regimen before appropriate substitution.

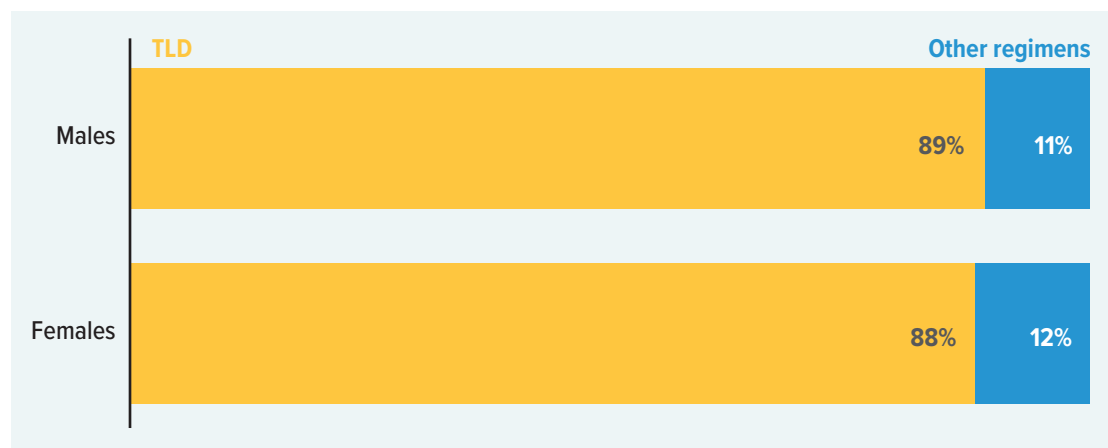


Figure 7. Adults on DTG-based regimens (August 2018–March 2021)

All PLHIV were successfully transitioned to the appropriate regimen between August 2018 and December 2020, with the majority initiated on the DTG-based regimen (89% of males and 88% of females). This success was attributed to extensive collaboration with MOH, timely HCW orientation, and monthly performance reviews at the facility level. In the initial transition phase, tenofovir, lamivudine, and DTG uptake was slow among women of reproductive age. This was because HCWs feared neonatal abnormalities. However, this issue improved after the MOH circular was issued in August 2020. Through optimization, most clients adhered to prescribed regimens because of their simplicity (once per day) and potency, which ultimately helped increase adult viral suppression from 91% in 2018 to 95% in March 2021.

In MOH, the project implemented ART optimization among pediatrics. In May 2020, MOH issued a circular recommending the use of DTG as a preferred first-line weight-based treatment regimen for children and adolescents (0–14 years). This guidance was informed by the fact that non-nucleoside reverse transcriptase inhibitors have a lower genetic barrier to mutations than do protease inhibitors and integrase inhibitors. Accordingly, Timiza90 used continuous medical education and on-site mentorship to sensitize HCWs to the new molecules. HCWs then developed line-lists of eligible children and adolescents living with HIV (CALHIV) and proactively invited them to switch regimens. All clients were offered counseling sessions before the transition. CALHIV with failing first-line protease inhibitors-based regimens had their samples taken for viral load (VL) testing and were offered enhanced adherence counseling (EAC). Those with high VLs post EAC had

RED CARPET
VIP EXPRESS

ROLES PLAYED IN LINKAGE

* We are involved in identification by screening AYPs at the triage desk.
We offer peer to peer counseling during the enrolment process
We escort new positives to CCC for ART linkage.

ROLES PLAYED

⇒ We do mapping in the community with CHV

ABC
3TC
LPVr

TDF
3TC
ATVr



I am a
Champion

samples taken for drug sensitivity testing to assess for mutations and inform appropriate regimen changes. The project conducted joint supportive supervision to foster treatment optimization. Figure 5 demonstrates the project’s performance in CALHIV treatment optimization for the period from June 2020 to March 2021.

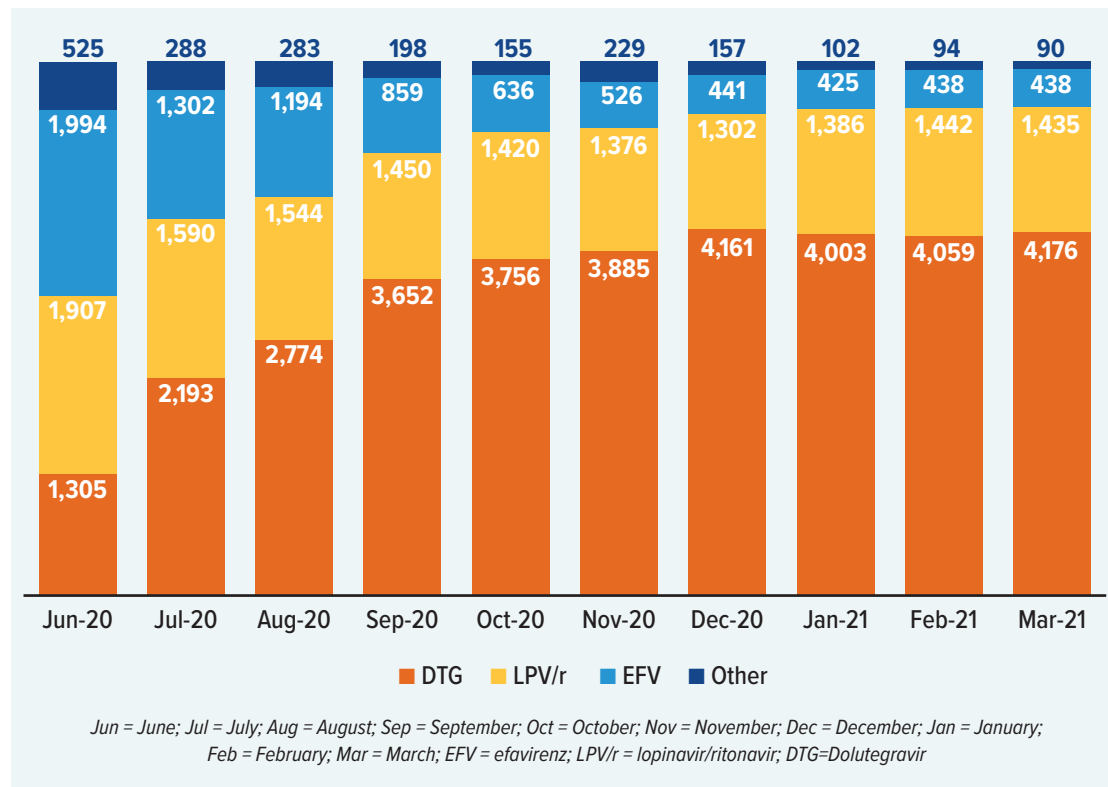


Figure 8. ART optimization among CALHIV, Timiza90 (June 2020–March 2021)

Children and adolescents previously on efavirenz-based (ABC/3TC/EFV) or lopinavir /ritonavir-based (ABC / 3TC / LPV/r) were moved to more efficacious and optimized DTG-based regimens. No child was on nevirapine during the reporting period. Significantly, DTG has benefited CALHIV: It is better tolerated, has higher antiretroviral potency, has a high genetic barrier for resistance, and achieves faster viral suppression. Through this effort, the project realized improved VL suppression among CALHIV (0–14 years), going from 79% to 84%.

DSD

During its run, Timiza90 implemented the DSD model in all supported facilities. The World Health Organization defines DSD as “a client-centered approach that simplifies and adapts HIV services across the cascade, in ways that both serve the needs of PLHIV better and reduce unnecessary burdens on the health system⁴.” The project developed HCW capacity in the area of DSD interventions. This was done through cross-/exchange learning, exchange visits to Siaya County, continuous mentorship, continuous medical education, and trainings.

Trained HCWs line listed clients under the categories of stable and unstable. Stable clients were enrolled in their preferred DSD models (see box and Figure 9 and 10).

BOX 1. DSD MODELS

Facility based: multi-month scripting, fast-track models, viremia clinics, a family model of care known as PAMA (papa-mama care, an initiative targeting children and parents)

Community based: Community ART groups, adolescent-focused initiative, for example, flexi-hours, weekend clinics, and fun days

PAMA = papa-mama; OTZ = Operation Triple Zero; continuous quality improvement (CQI)

2017

- Trained HCWs in line with MOH guideline.
- HCWs conducted exchange visit to Siaya County for cross-learning.
- Reproduced and Distributed DSD tools.

2018

- Sensitized HCW's on 2018 guidelines, which strengthened DSD.
- Introduced specific DSD model for PMTCT, pediatrics, and adolescents, e.g., PAMA, OTZ.

2019

- Scaled up of DSD models across facilities through CQI approaches.
- Onboarded community-based ART delivery

2020

- Scaled up of DSD models across facilities through CQI approaches.
- Onboarded community-based ART delivery

2021

- Sustained implantation of DSD services.

Figure 9. Process of implementing DSD



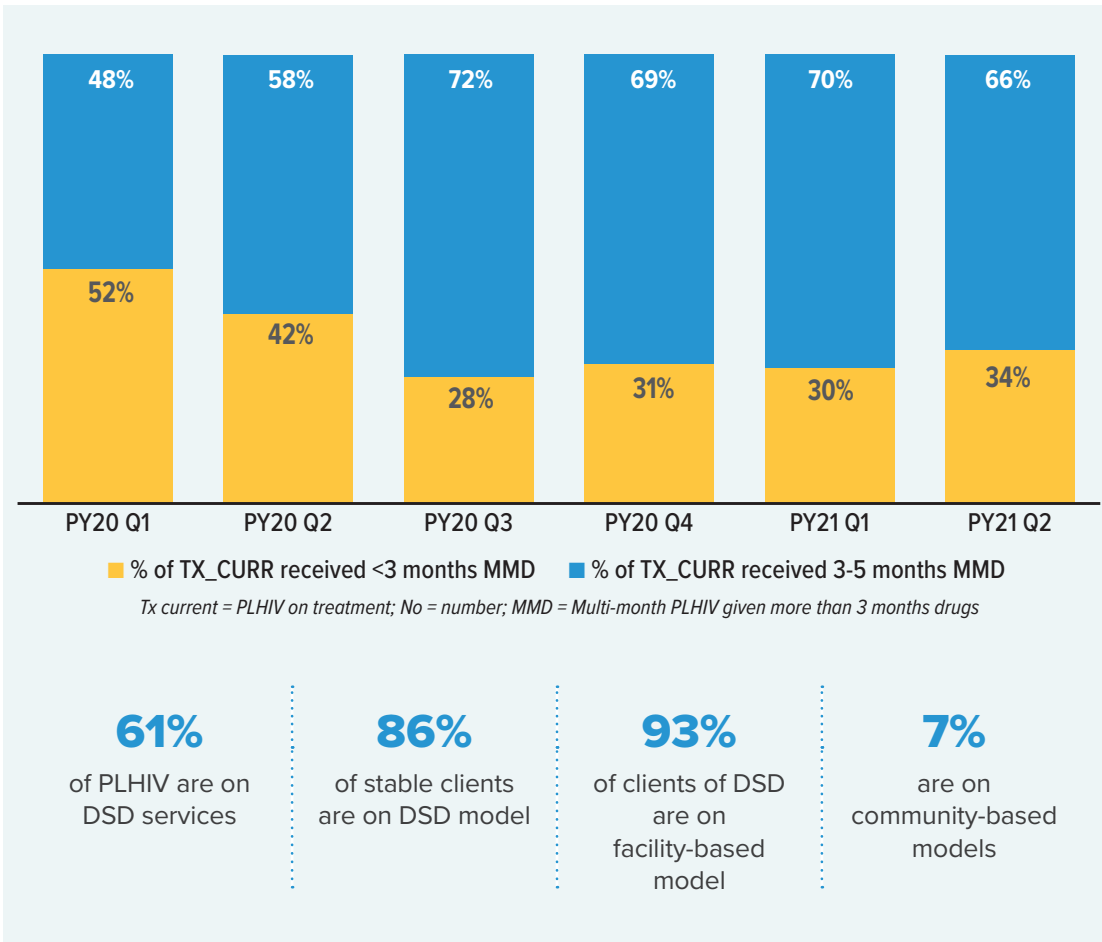


Figure 10. PLHIV on multi-month drugs



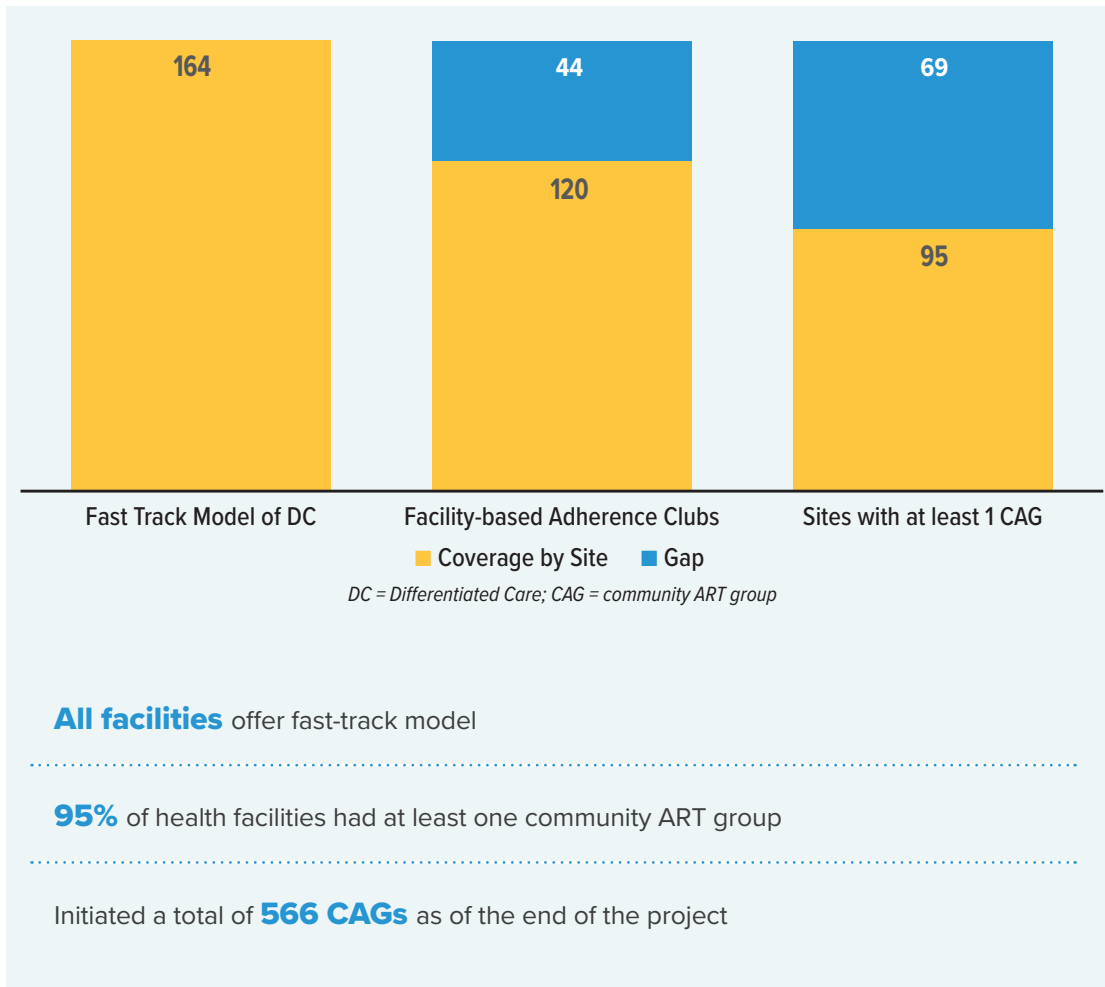


Figure 11. Uptake of DSD models, Timiza90 project as of March 2021

DSD has helped to decongest clinics, thereby freeing time for HCWs to provide quality services to unstable clients, such as those with high VLs and those with advanced HIV disease. For instance, before DSD was introduced in 2017, the Homa Bay County and referral hospital saw more than 240 clients per day. In the aftermath of DSD (since March 2021), the facility sees an average of 150 clients. DSD helped Timiza90 achieve an overall retention to care rate of 91% by program year (PY)5.



Kevin Ouma, 2021

THE THIRD 90

Timiza90 sought to achieve long-lasting viral suppression among PLHIV on treatment in Homa Bay County, reduce morbidity and mortality, and achieve epidemic control. The project used a system improvement approach to address major bottlenecks. This involved empowering PLHIV to make informed choices about their treatment, optimizing access to efficacious regimens, and mitigating the burden borne by clients. Moreover, this required a courteous and respectful approach that is cognizant of the therapeutic partnership between client and provider, which is critical for success.

The project engaged HCWs and peer educators, who delivered a combination of interventions across its 164 supported facilities. Treatment optimization of the fixed-dose tenofovir, lamivudine, and DTG combination was fully scaled up to all eligible PLHIV, including women of childbearing age. DSD models were scaled up to various populations; this process was tailored to the needs of the population, which was largely composed of fisher-folk—an approach that fostered retention. The DSD model of multi-month dispensing ensured that stable clients were offered six months of ART refills, and a fast-track refill model (expedited clinical services during clinical visits every six months with drug refills every three months) was adopted. New monitoring, evaluation, and reporting indicators were adopted, including Tx_ML (treatment mortality and LTFU) and Tx_RTT (patients with no clinical contact or antiretroviral pickup for more than 28 days since their last expected contact who restarted antiretrovirals within the reporting period). These indicators helped to effectively report patient attritions and gains. As of March 2021, Timiza90 had 95,904 pediatrics and adults on ART, up from 60,916 at baseline in October 2016 (Figure 12) The project realized a growth of 34,988 clients on ART.

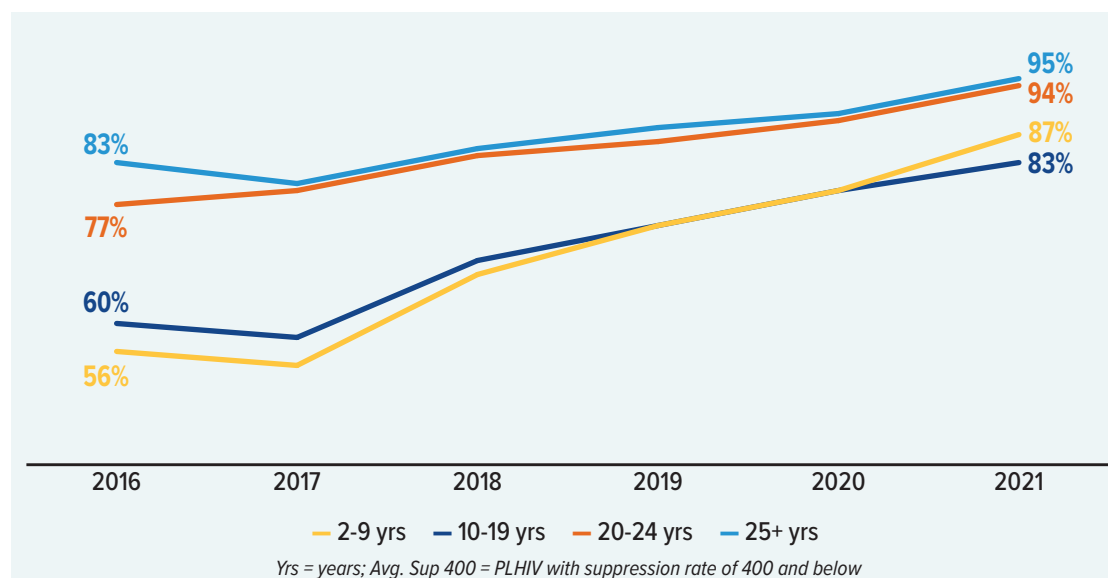


Figure 12. VL suppression over the years

To achieve cohort growth, the project implemented patient-centered strategies, including the roving adherence counselor model wherein experienced counselors are assigned to and oversee several sites to ensure optimum adherence and VL suppression. This model ensured access to high-quality counseling services, as well as individualized case management, for CALHIV and adults with complex adherence support needs. In addition, the project applied new technology by scaling up mHealth's Ushauri platform at all supported sites: to track patient appointments, manage LTFU, and monitor return-to-care package implementation for those experiencing interrupted treatment (defaulters).

IDENTIFIED PROMISING PRACTICES IN RETENTION: CASE MANAGEMENT OF CALHIV, LEVERAGING TECHNOLOGY, OPERATION TRIPLE ZERO, PAMA

CASE MANAGEMENT STRATEGY TO IMPROVE VIRAL SUPPRESSION AMONG CALHIV

Viral suppression among children, adolescents, and adults living with HIV has improved over time—from a baseline of 58%, 78%, and 80% in 2017 to the current 87%, 89%, and 95%, respectively. This is, by and large, a direct result of case management optimization implementation, which allowed for specific, individual follow-up and, particularly among children with suspected treatment failures, provided structure to the case management process. Through mentorship, county supervisors supported facility staff in implementing the case management approach at the facilities. The focus on CALHIV prompted a training session on in-depth psychological and psychosocial assessments and therapies tailored to CALHIV. A case management structure was then established at the facilities.

Twelve hundred files for CALHIV with suspected treatment failure were selected and discussed by multidisciplinary teams. All these patients were categorized for case management purposes, then assigned to case managers (a mix of HCWs, adherence counselors, peer educators, neighbors, and family members). A case management reporting log was developed, and the HCWs used it to document services provided on a routine basis. The multidisciplinary teams held weekly facility meetings to review progress. Cases are closed after six months of successful follow-up

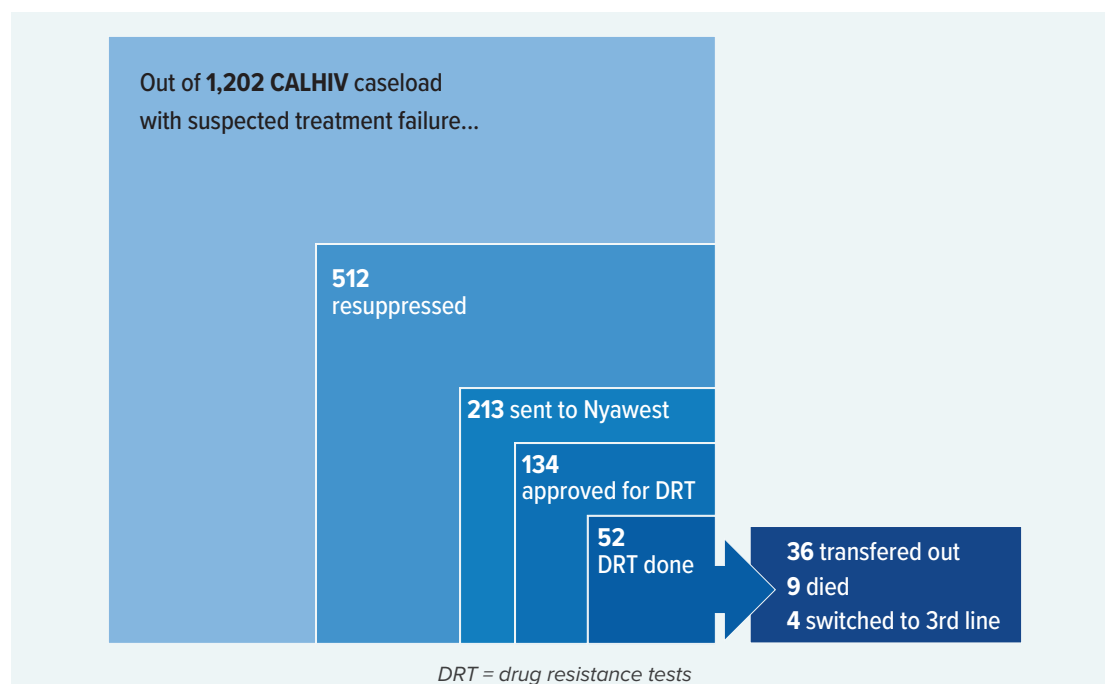


Figure 13. Case management outcomes for CALHIV with suspected treatment failure (April 2019–September 2020)

One of the challenges faced in this approach is that unstable and absent caregivers contributed to delayed service provision, which undermined adherence to specific action plans. Because some cases were challenging, stakeholders beyond the health sector such as religious leaders, OVC providers, neighbors, and satisfied clients were involved in holistically addressing all barriers facing CALHIV.



LEVERAGING TECHNOLOGY

Historically, sites in Homa Bay took a manual approach to monitoring continuity in treatment and treatment interruption: hand writing in registers and diaries to track all clients receiving HIV care and treatment. This took an exorbitant amount of staff time, and appointment-keeping rates before the initiation of Ushauri ranged from 85% to 95%, depending on staff documentation accuracy. The web-based Ushauri platform was introduced to help staff manage appointments and monitor treatment comprehensively. Ushauri is an electronic appointment diary with a defaulter tracing module to help service providers manage clients' appointments at the facility level.

In July 2020, 86 mid- and high-volume sites across Homa Bay's eight subcounties began using Ushauri to manage appointments and treatment interruptions, bringing the use of manual registers to an end. The software targets all clients receiving HIV care and treatment at the selected facilities, which allows appointment bookings to be tracked through the platform itself. Clients were asked to provide written consent before peer educators added them to the system. The system provides daily updates, and tracked appointments are universally monitored through the web dashboard.

Appointment outcomes are tracked both day to day and month to month and are promptly acted on. Those experiencing treatment interruption are flagged and added to the defaulter tracing module, which peer educators use to track them down via phone calls or home visits. Peer educators then update the reengagement status in the module. All clients not reengaged after 30 days LTFU receive further follow-up through home visits, and all attempts are documented in the application.

Trends in monthly appointment keeping and LTFU rates before and after Ushauri were monitored. LTFU rates improved vastly, from 29% in May 2020 to less than 5% in November 2020.

Ushauri enabled accurate and prompt documentation, thus making appointment and treatment interruption management more efficient. Real-time data used to make decisions at the facility and program levels have been enhanced. Notably, platform optimization was slow in some facilities whose staff lacked the technical skills to operate the Ushauri tablets. As the Internet is required to transfer data into the platform, unstable network coverage affects the importation process, delaying documentation availability on the dashboard.

OPERATION TRIPLE ZERO

EGPAF implemented the facility-based, adolescent-centered Operation Triple Zero (OTZ) model in Homa Bay. The intervention is a club model that empowers adolescents to take charge of their treatment and commit to the "triple zero outcomes": zero missed appointments, zero missed drugs, and zero VL. OTZ club members who achieve these outcomes are dubbed "heroes." During the quarterly OTZ fun days, the heroes use creative activities, like song and dance, to inspire other youths to commit to managing their health and achieving improved outcomes. Timiza90 implements OTZ in 158 facilities (out of 164). The initiative had 96% coverage by March 2021. Currently, 88% (5,579 / 6,362) of adolescents are enrolled in OTZ, with a remarkable VL suppression of 87%, which compares well with the 2016 baseline of 70%.

PAMA

Timiza90 implemented the PAMA (a portmanteau for papa-mama: Kiswahili for father and mother) care model among pediatrics. This involved assigning children and guardians/parents shared clinical appointment dates, making it easier to monitor treatment in an entire family. As of December

2020, Timiza90 had initiated a total of 2,330 pairs (HIV-positive child and caregiver), and 83% of pairs had joint VL suppression. Of the pairs, 12% had only one member suppressed, while 5% of the pairs had treatment failure. This compares well with the 2018 baseline of n = 234 pairs, joint VL suppression of 83%, one member suppressed in 7%, and 6% with treatment failure.

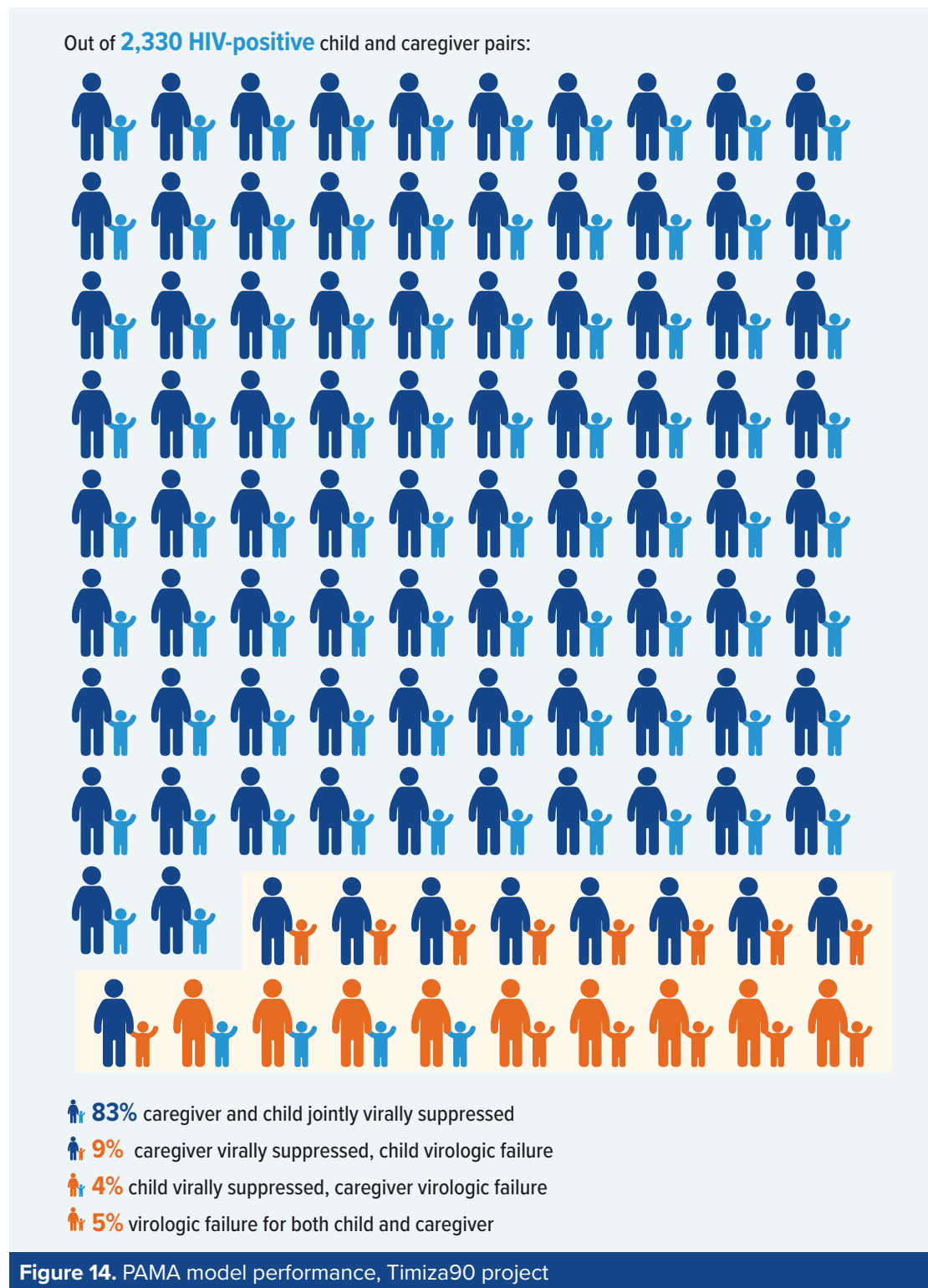


Figure 14. PAMA model performance, Timiza90 project

HEALTH SYSTEMS STRENGTHENING

LABORATORY NETWORK MODEL

Timiza90 provided direct service delivery and technical assistance to 58 labs in Homa Bay County. This support aimed to ensure access to accurate and timely HIV- and TB-related lab tests for appropriate management of PLHIV cases. The support served to integrate quality assurance and biosafety into these processes. The lab tests include HIV rapid tests, CD4 testing, serum cryptococcal antigen, sputum microscopy, and GeneXpert, which go through a network of 18 project-supported laboratories in the county. The more specialized tests—HIV viral load, polymerase chain reaction (PCR) for early infant diagnosis (EID), and drug resistance tests—are linked to the regional VL/EID testing laboratory in Kisumu.

To ensure that clients from all 164 supported sites accessed these tests, the project supported an integrated sample referral network. This was made possible by contracting 24 motorcyclists who made daily trips to assigned sites to pick up samples and relay results. VL, EID, and drug resistance test samples taken in the regional lab were shipped three times per week. The project also provided regular refresher trainings and review meetings for the riders. Beyond this, the project strengthened lab service delivery by hiring 24 medical lab officers in Homa Bay County through the county human resources for health sub-grant.

Due to the robust lab network, the number of lab tests used to monitor PLHIV rose from PY1 to PY4. Annual VL samples went from 60,041 to 92,849 by PY3, while EID samples went from 9,187 in PY1 to 10,000 in PY4. Moreover, CD4 samples and GeneXpert samples went from 5,290 in PY1 to 9,568 in PY4, respectively, as seen below.

Table 4. Trends Among Key ART Monitoring Lab Tests from PY1 to PY5 Quarter 1, Timiza90 Project

Test	PY1	PY2	PY3	PY4	PY5 Quarters 1 and 2
VL	60,041	75,532	92,849	69,391	48,116
EID	9,189	11,940	10,962	10,000	2,129
CD4	5,290	2,818	7,344	9,568	3,667
GeneXpert	9,168	13,370	14,362	18,300	9,080

Reagents and other sample collection accessories under the national supply chain mechanism are occasionally out of stock, thus interrupting sample collection. Measures taken to mitigate COVID-19 restricted routine VL testing for certain subpopulations over a period of months, further affecting performance in PY4. Still, the integrated sample networking system was successful in optimizing access to ART monitoring tests. Aided by the integration of remote hub logins, the sample and results management process was greatly improved.

PROFICIENCY TESTING FOR HIV

Ensuring that clients receive the correct results is a central component of HTS provision. Accordingly, the National AIDS and STIs Control Programme (NAS COP) implements individual proficiency testing through External Quality Assessment. This is an evaluation program that determines the competence of a service provider. Approximately two to three times a year, blinded panels of well-characterized test samples are sent to all enrolled individuals (service providers). The following variables are assessed in each round: result correctness, result completeness, observation of test kit expiration date, and adherence to the recommended national testing algorithm. Other variables include kit data completeness and adherence to recommended procedures.

During each round, the project supports service provider enrollment, proficiency testing panel distribution, and results relay (to the reference lab) and provides corrective action—preventive action support to those with unsatisfactory results. In addition, the project supports the annual refresher training for HTS providers. Between PY1 and PY4, six rounds of PT were completed. Provider enrollment has steadily improved, from 395 in round 16 (done in PY1) to 851 in round 22 (PY5). Performance across all rounds has remained above 90%. Corrective actions are taken after every round for those with unsatisfactory results.

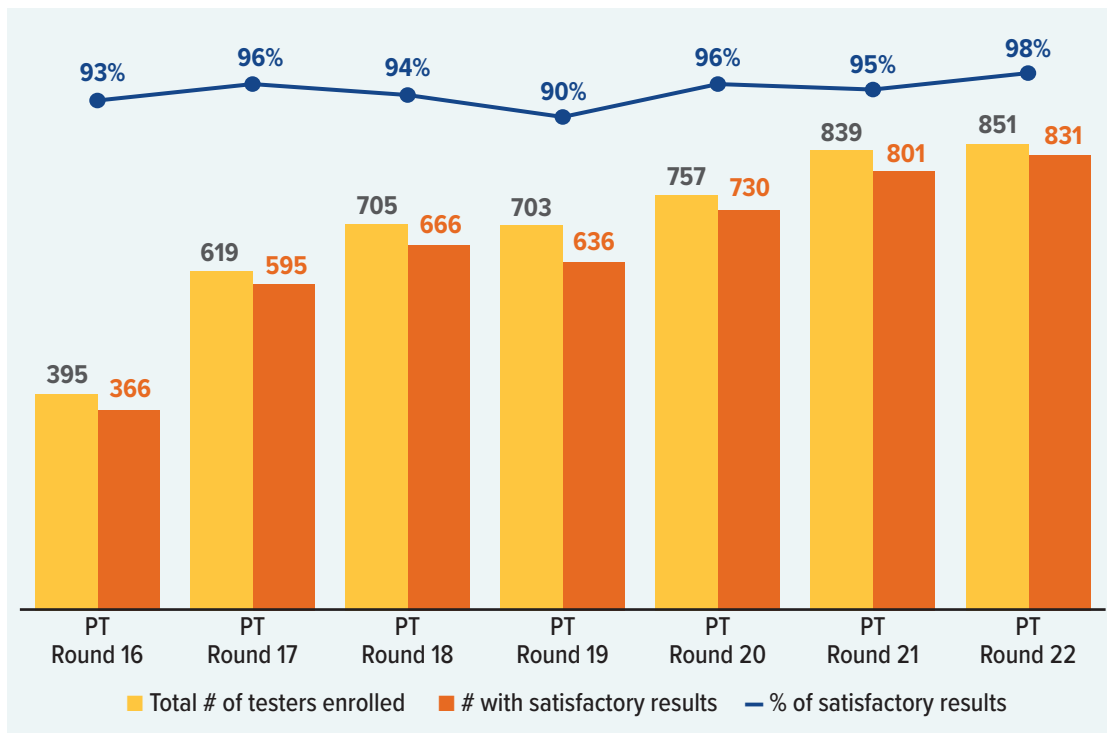


Figure 15. Trends in PT for HIV: Enrollment and performance

Crucially, the proficiency testing program provides a platform for providers and facilities to not only monitor and document the quality of their HTS but identify gaps in performance and take corrective action.



COMPREHENSIVE AND SUSTAINABLE HEALTH SERVICE DELIVERY

PMTCT OF HIV

Timiza90 supported 163 Homa Bay health facilities in their implementation of PMTCT. The primary goals were to reduce HIV transmission from mother to child; to improve ANC coverage; and to ensure 100% access to HIV testing and counseling services, HIV-prevention services, and the PMTCT package of care. The project sought to retain clients on care, ensure viral suppression, and ensure HIV-negative testing outcomes for infants at 24 months. To achieve this, various activities to improve ANC coverage were implemented, including community pregnancy mapping and referral, outpatient pregnancy screening and linkage to ANC services, peer-to-peer mobilization, and pregnancy intention assessment at the CCC. The clients were categorized as high risk (high VL, adolescent girls and young women (AGYW), new positives, with previous positive infants, in discordant relationships, with comorbidities, decliners, and defaulters), HIV negative, or HIV positive—depending on test results and risk assessment findings. Case management for high-risk clients was fortified to reduce new pediatric infections from mother to child.

Table 5. PMTCT Performance in EGPAF-supported Homa Bay Sites

Indicator	PY1	PY2	PY3	PY4	PY5, Quarters 1 and 2
PMTCT_STAT	22,683	25,944	26,297	33,231	15,198
PMTCT_Pos	4,251	4,579	4,576	5,112	2,204
PMTCT EID	5,728	4,635	3,652	4,655	2,131
EID Pos	202	121	76	86	34
EID positivity (%)	3.5	1.3	1.8	1.8	1.6
Retention (%)	89	95	96	97	98
VL suppression (%)	93	94	96	98	96

PMTCT_STAT = Pregnant women with a known HIV status, whether positive or negative

PMTCT_Pos = Pregnant women with known HIV status and new HIV status

PMTCT EID = Infants who had a first virologic HIV test by 12 months of age

EID Pos = HIV-infected infants identified

ENHANCED PMTCT BEST PRACTICES: OUTPATIENT PREGNANCY SCREENING, PEER-TO-PEER SUPPORT, AND QUALITY IMPROVEMENT

This model uses a standard questionnaire to conduct pregnancy screenings for all women of reproductive age who access OPD services. Those who screen positive are referred for pregnancy tests. Clients who test positive for pregnancy are offered OPD services, then escorted to the MCH unit for ANC services. This model was implemented across the Homa Bay County sites. To facilitate the initiative's success, the county and sub-county health management teams, OPD clinicians, and lab technicians were sensitized to the strategy and to the pregnancy screening and monitoring tools provided.

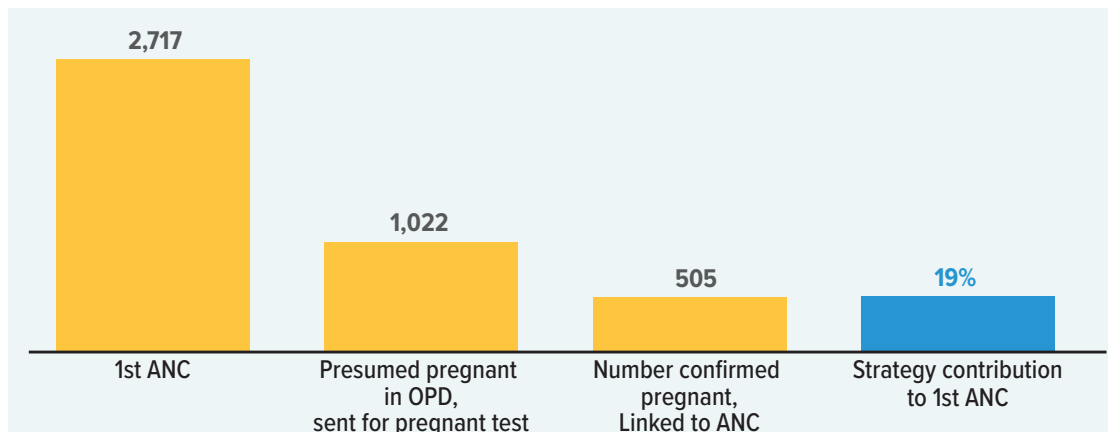


Figure 16. Results from OPD Pregnancy Screening Pilot Facilities

These cases could have been missed without the pregnancy screening during OPD services and the subsequent linkage of pregnant women to ANC. After the inception of OPD pregnancy screening at pilot sites, first ANC screening steadily increased from PY1 to PY4. This strategy has been scaled up to other health facilities in PY5.

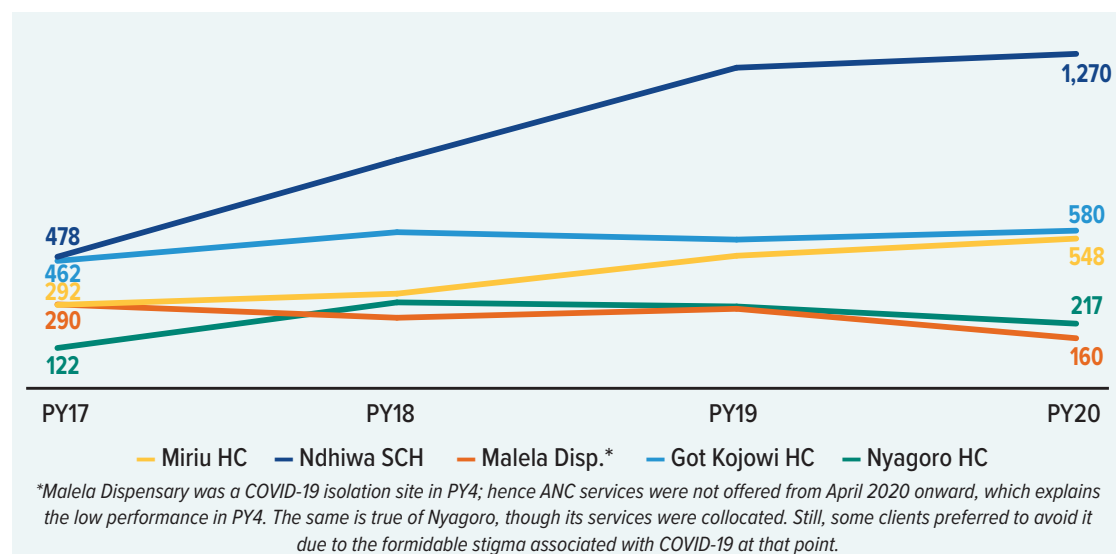


Figure 17. Results from OPD Pregnancy Screening Pilot Facilities

QUALITY IMPROVEMENT FOR PMTCT

Homa Bay County has the highest HIV prevalence in Kenya; at 20.7%, the prevalence is more than four times the national prevalence (4.8%). Still, the county has made tremendous progress in mother-to-child transmission reduction: going from a rate of 16.8% in 2015 to 9.1% in 2019. The improvement realized was made possible through various strategies, including initiating a quality improvement initiative established to reduce the absolute number of HIV-exposed infants becoming HIV positive. A PMTCT focal person was appointed to spearhead the quality improvement initiative, and a baseline was determined using the PCR-positive audit report. A root-cause analysis was undertaken to determine the possible causes of HIV transmission, and an SOP for high-risk categorization was

developed for PMTCT clients. The categorization process was informed by lessons learned from the PCR-positive audit report. For instance, women who are highly likely to transmit the virus to their infants were categorized as high risk. High-risk clients were prioritized during multidisciplinary team meetings at facilities, assigned case managers and enrolled in treatment literacy classes. The quality improvement -informed, high-risk package of care was delivered in those sessions. In addition, PCR-positive audit data were shared and emphasized throughout the CCC and the MCH unit. These efforts helped reduce the absolute number of positive infants, from 209 in PY1 (2016–2017) to 86 in PY4 (2019–2020).

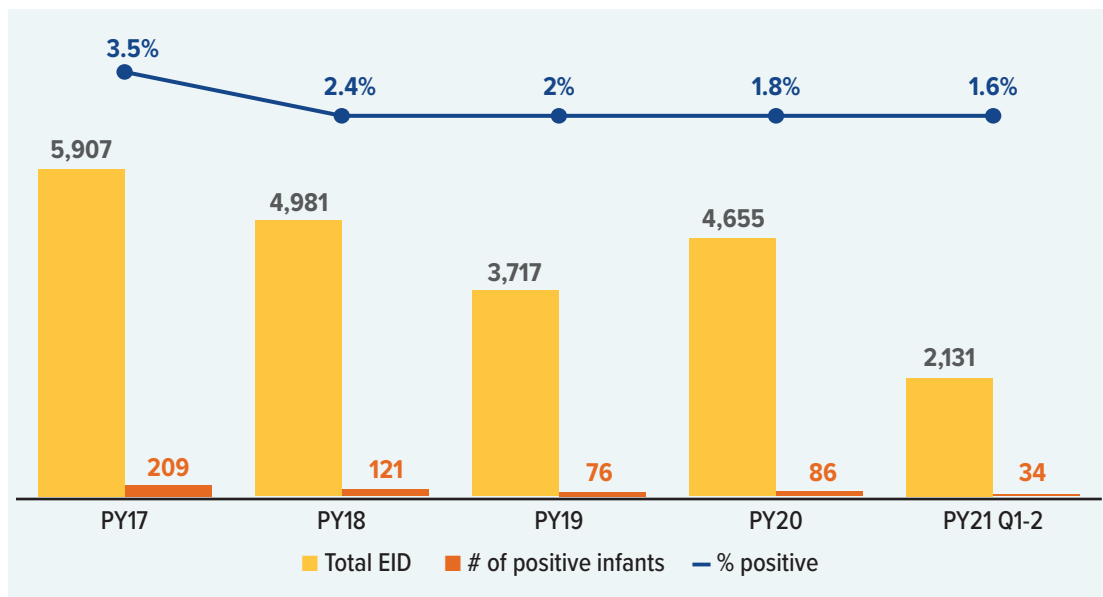


Figure 18. PCR-positive trend

VMMC

Male circumcision involves the surgical removal of the foreskin. It is a simple, one-time intervention that benefits the circumcised individual and has a high impact on the HIV epidemic at the population level. The latter is because the procedure reduces heterosexual HIV transmission by 60%. Timiza90 began supporting VMMC in Homa Bay County in October 2016. By March 2021, there were more than 80,000 successful cases. The client review rate during this period is greater than 90%, and the overall rate of adverse events (AEs) is 0.05% for both moderate and severe cases. The overall uptake for HTS is greater than 98% for all eligible clients.

To achieve its targets, Timiza90 used a hybrid model of service delivery that ensured full involvement of the MOH at the county and sub-county levels. The project created demand for VMMC services through different approaches, such as HTS optimization—inter-/intra-facility referral of HIV-negative males, peer mobilizers approach, mentor-teacher strategy, advocacy through public address system, community model—community health volunteers (CHVs), motorcyclists, beach management unit involvement, and the callback/snowball strategy. The project also supported flexi-services, allowing certain clients to receive VMMC services on weekends upon request.

Timiza90 also supported various initiatives to ensure service quality across the region, including internal quality assessment exercises (e.g., regular support supervision, joint support supervision

with MOH) and quality assessment activities through NASCOP and the CDC. To ensure that all teams adhered to guidelines, the project provided continuous support, made all SOPs available, and provided continuous sensitization and training. Client reviews took place both in person and via telephone. This greatly improved client feedback mechanisms and service delivery; it also helped inform incidences of AEs, urgent counseling, and home-based visiting to ensure the health and safety of all clients undergoing VMMC.

Of all clients who underwent circumcisions (47,550) during the period in question, 5% (2,377) were sampled for telephone interviews. Of the clients interviewed, 2% (48) reported experiencing AEs. Home visits were conducted with all 48 clients. In addition, 2% (46) of clients who reported being well also received home visits for comparison.

Of the 94 clients visited at home, 4% (4) were identified as having moderate AEs at the time of physical examination, 3% (3) had mild AEs, and 97% (87) had no AEs. No severe AE cases were identified. Of those who reported doing well, no active AE cases were identified. Of the 4 moderate AE cases, 50% (2) had sought intervention from the parent facility where they were circumcised, and 50% (2) had not received intervention.

BOX 2. VMMC

Total circumcisions	47,550
Sampled for telephone interviews	2,377
Reported having AEs through phone interviews	48
Doing well but sampled for home visit	46
Received home visit	94
Total AE's	7
Mild AE's	3
Moderate AE's	4
Moderate AE's; Intervention	2
Moderate AE's; No Intervention	2



Kevin Ouma, 2021



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WHO ARE KEY POPULATIONS?

- MSM
- FSW
- PWID
- Transgender individuals
- Fisher-folk (members of the fishing community who live migratory lifestyles)

COMPREHENSIVE SERVICES FOR KPs

Although KPs constitute a small portion of the overall population, they have a significant impact on HIV transmission, having a disproportionately greater rate of infection than the general population. In Kenya HIV Prevention Response and Modes of Transmission Analysis,⁵ the National AIDS Control Council reports that 33% of new infections are attributable to KPs. Because these groups are subject to stigmatization, discrimination, and other forms of hostility on the basis of their HIV status or lifestyles, they have historically found it difficult to access health services.

PROMISING PRACTICES: DROP-IN CENTERS, MSM PEER SUPPORT, AND HOT-SPOT CLUSTERING

Since 2015, EGPAF has helped Homa Bay County to provide fully integrated, safe, and friendly access to HIV care and treatment; sexually transmitted infection screening and treatment; cervical cancer screening; risk-reduction counseling; drug and alcohol abuse assessment and counseling; and VMMC. The KP program fortified HIV-prevention interventions by increasing coverage, improving quality, and enhancing program efficacy to the five integrated KPs (see Box 2). In drop-in centers (DiCEs), all HCWs are trained to provide the minimum comprehensive package of services as clients come through the OPD, thereby ensuring that nondiscriminatory and non-stigmatizing services are available to KPs. The project implemented a standardized and comprehensive combination HIV-prevention package for KPs, as stipulated in the national guidelines on service provision. The process of establishing the integrated models involved four phases: (1) social mobilization, (2) mapping of hot spots, (3) training, and (4) intervention. In the first two phases, the program team held consultative meetings with the county and sub-county health management teams to facilitate their buy-in and assist in identifying hot spots. Training encompassed KP sensitivity, stigma, and discrimination as well as peer education, violence response, and service provision. This package included peer education and risk-reduction counseling; HTS provision; sexually transmitted infection screening and treatment; condom and lubricant promotion and distribution; HIV care and treatment; sexual and gender-based violence mitigation; PrEP and post-exposure prophylaxis provision; TB screening and treatment; substance abuse counseling; needle and syringe provision; and provision of, and advocacy for, dual protection family planning services for female KPs and fisher-folk during the implementing period.

From October 2016 to March 2021, a total of 467 FSW hot spots and 41 MSM hot spots were mapped, along with 12 for PWID, 28 for transgender individuals, and 48 at fish landing sites. DiCEs operate out of five public health sites. This initiative reached 5,381 FSWs, 1,470 MSM, 86 PWID, 7 transgender persons, and 27,421 fisher-folk, as shown in Table 7.

Table 7. KPs Reached in DiCEs

Type	Hot Spots Mapped	Estimated Population	Ever Enrolled	Active	KP Living with HIV	Valid VL	Suppressed
FSWs	467	3,823	5,381	5,292 (98%)	1,327	1,163	1,078
MSM/MSW	62	780	1,470	1,404 (96%)	112	102	100
PWID	8	91	86	84 (98%)	6	3	2
Transgender persons	28	87	7	5 (71%)	2	2	2
Fisher-folk	48	21,562	27,421	26,303 (96%)	2,201	1,845	1,733

MSW = male sex workers

As of March 2021, out of 3,648 KPs (2,201 fisher-folk and 1,447 other KPs) currently on ART, 3,198 were eligible for VL testing. Of these, 3,115 (97%) accessed VL testing, with 94% (93% for FSWs, 98% for MSM, 67% for PWID, 100% for transgender persons, and 94% for fisher-folk) being virally suppressed. Other preventive services were offered to the KPs. Clients who tested negative were screened and provided with PrEP to reduce the risk of new HIV infections. Currently, a total of 2,390 (1,340 fisher-folk and 1,050 other KPs) are taking PrEP, with a 91% retention rate at one month and an 87% rate at three months. No seroconversions have been reported.

PEER INVOLVEMENT IN MSM IDENTIFICATION

HIV prevalence among MSM is, on average, five times greater than in the general population. One reason for this may be that HIV transmission through anal intercourse without a condom is easier than through vaginal intercourse without a condom. Discriminatory legislation, stigmatization (including by HCWs), and homophobic violence also pose major barriers to HIV service provision and limit this demographic's use of available services. To increase coverage of MSM, the project engaged this demographic through a peer-led intervention model. A consultative meeting was held in 2017 with MSM already enrolled to gain insight about how to enhance the program's design and implementation. Peer educators were then identified and trained using NASCOP's MSM peer educator curriculum.

RECRUITMENT

The project built peer educators' capacity in the area of MSM networking (through MSM trees and social networks). In addition, MSM-led civil service organizations were involved in the process, and a formal agreement was reached about how to ensure MSM are mobilized and brought into the program. Activities include MSM engagement, direct (doorstep) service provision, parties or reaching MSM where it is convenient for them, age-specific peer educator recruitment (to reach out to more MSM from different age groups), building health care providers' capacity to supply MSM-friendly services, and engaging peer educator buddy supporters (to ensure they properly account for the peers within their cohorts).

The MSM peer educator–specific work included mobilization for HIV testing, linkage of those identified as HIV positive to ART, one-on-one and tele-adherence support, and tracking and tracing clients LTFU / who missed appointments. Moreover, ART provision at the home or facility was undertaken to increase access among MSM.

MSM enrollment increased from 58 in 2016 to 1,470 by March 2021. Of the clients, 96% (1,404) were retained in the program and continued to receive its comprehensive package of services. Out of the 112 MSM identified as HIV positive, 96% have been retained on ART, with 98% VL suppression.

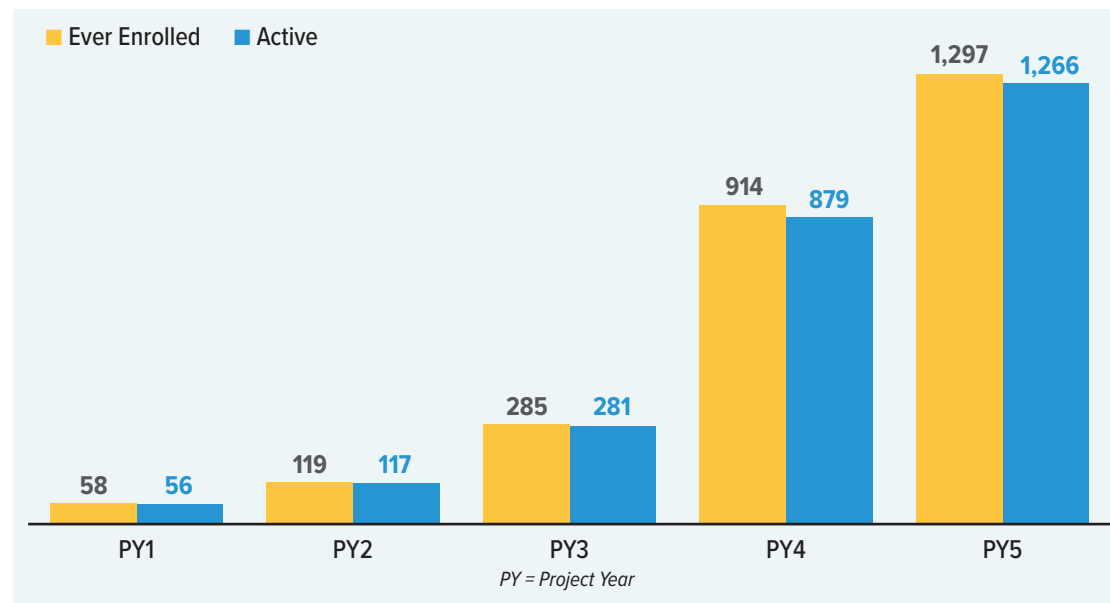


Figure 19. MSM service uptake trends, October 2016–February 2021, Timiza90

USING HOT SPOT CLUSTERING TO IMPROVE KP PREVENTION AND TREATMENT CASCADES DURING COVID-19

IMPLEMENTING THE OVC PROGRAM

To mitigate the impact of HIV and AIDS on children and families, Timiza90 worked with five implementing partners to support 7,324 OVC in 2016, peaking at 19,043 children in 2018. In the current financial year 5, the program is supporting 14,590 children, out of whom 1,974 are HIV positive and on HIV care, with an 84% viral suppression rate, as shown in Table 8.

Table 8. OVC HIV testing and treatment performance

Indicator	Number of OVC	Number of Caregivers
Total enrolled	14,590	5,535
Total HIV positive	1,974 (13%)	3,548 (64%)
Total on treatment	1,974 (100%)	3,548 (100%)
Number suppressed	1,553 (84%)	2,751 (95%)

The program adopted a case management approach to ensure supported children are healthy, safe, stable, and schooled. Each family was assisted in developing a case plan, and the details were entered into the Child Protection Information Management system, where progress was monitored on a monthly basis. Graduation out of the OVC program was pegged on meeting the case plan objectives determined after assessing a given child's and family's needs and strengths. The number of graduating children increased with the understanding, ownership, and successful implementation of the plan with the respective families.

A key component of the integrated case management approach was economic strengthening intervention, which sought to empower caregivers to improve their own health and the well-being of the children in their care. Interventions ranging from savings and loan groups, financial and business skills training, and individually operated micro and small enterprises received start-up or booster capital, while others were linked to microfinance institutions or programs. Business plans were developed out of case plans, from which the program provided the necessary support and facilitation.

Overall, the OVC program not only helped to improve the well-being of the OVC and their caregivers but also empowered them to engage in activities to improve household incomes and livelihoods on their own.

STRATEGIC INFORMATION AND EVALUATION: THE ROLE OF TECHNOLOGY IN IMPROVING HEALTH SYSTEMS

Globally, HIV programs working toward prevention and epidemic control face changing data requirements in the process. The nature of programming is changing, and the indicators and data platforms used to measure progress keep evolving. This calls for health programmers to make substantial human resources and time investments: transcribing the data in different platforms to remain responsive to data needs. Thus, various reports/indicators are aggregated at the facility level and submitted for entry into the EGPAF electronic key management system database. They are then manually keyed into the database for review and utilization. Manual data entry comes with transcription errors, given the workload and time constraints. One of the key interventions that EGPAF launched to counteract this challenge was the bot system, which automated data entry to different systems.

The bot system was developed between July and August 2018 and piloted in September of that year. A few challenges were noted, and amendments took place from October to December 2018. It has undergone continuous improvement, expanded to cater to different reporting needs, and is actively in use. The bot system was built using Java, and it imitates the human data-entry process in that one is able to see the data that are being keyed in from one variable/cell to the next on the data-entry screen, unlike in other applications that post data to the back end. Moreover, it was customized so that the user may select a preferred typing speed, indicators, time periods, and other specificities.

Routinely, the data are first collected, keyed in by strategic information and evaluation officers, and cleaned within one system (i.e., the program database or Excel), and then, using the bot application, they are automated to other databases / data sets that contain similar indicators. The application works best with a strong Internet connection, the lack of which causes typing



interruptions. Facility data (both qualitative and quantitative) are collated and input into Excel, cleaned, and then transcribed to different EGPAF and donor data systems using the app. The input data are then verified, with any errors flagged for reentry using the bot system, and finally disseminated for use.

The bot system has significantly reduced the time taken to complete reporting. This allows more time to review and utilize the data. For instance, the average number of reporting days is now 4, compared the 11-day average of manual data entry. Furthermore, data accuracy has greatly improved. EGPAF has seen human resources costs reduced since it no longer requires data-entry personnel to transcribe repetitive indicators, nor does it need to make printouts to aid data entry.

Finally, being automated, the bot system is more reliable and efficient. Indeed, one can dictate the speed of data entry given the time required to complete the task. The system's chief limitation is its Internet dependency, which is another factor that makes it distinct from hired individuals. Second, it does not detect obvious errors, like a human would, as he or she keys in the data. Thus, it lacks some benefits that come with genuine human labor.

Ultimately, to avoid the duplication of efforts and limit unnecessary resource use, automated transcription has been found to be a reliable option when multiple systems require similar data transcriptions. The bot can be used to transcribe both qualitative and quantitative data; thus, it has proven to be a reliable alternative to data-entry workers.

PROGRAM EVALUATIONS

Program evaluations have been conducted under three protocols on enhanced adherence counselling (EAC), mother–infant pair follow-up, and various topics under the patient and program outcomes protocol.

The first protocol sought to evaluate EAC as a strategy to optimize adherence, retention, and viral suppression among children and adolescents (0–19 years of age) with suspected treatment failure in Homa Bay and Turkana Counties. The study used a mixed-methods pre/post intervention design to assess treatment outcomes among children and adolescents receiving the standardized EAC package between February 2019 and September 2020. The time to EAC uptake following high VL was reduced by a median of 8 days, from 49 days pre-standardization to 41 days with standardization. Time to completion of at least three sessions was reduced by a median of 12 days, from 59 to 47 days. Similarly, a significantly greater percentage of patients completed the recommended minimum three EAC sessions: 91.1% as compared with 81.1% pre-standardization. Standardization increased viral suppression after three EAC sessions from 39.6% to 55%.

Participants generally expressed satisfaction with quality of care received and stated that they were supported in understanding their condition and monitoring their progress. Regarding clinic safety and privacy, the majority of adolescents cited stigma as a barrier to clinic attendance and were concerned with being seen in clinic waiting areas or even on their way into the HIV clinic. Providers linked late disclosure or nondisclosure with poor adherence among adolescents. There were requests from caregivers to receive facility support for disclosure either through individual or group counselling. With regard to retention, a challenge to appointment keeping was school-related conflicts. Some students did not want to explain their absences, and for some students, appointments conflicted with classes or examinations.

An anonymous survey was conducted among HCWs and patients receiving services in a sample of health facilities under the Timiza90 project. The anonymous survey was conducted to assess perceptions of service delivery and understand how services are provided to patients by HCWs, which can have an impact on the clinical outcomes of HIV-infected patients. Findings from the anonymous survey showed overall satisfaction with services provided, communication with HCWs, quality of care, and time spent at the clinic. However, there were areas of concern among patients, including some health care providers who came across as harsh, a lack of privacy in some consultation areas, ensuring patients are treated on a first-come-first-served basis, and improvement of general hygiene conditions.

The mother–infant pair protocol aimed to track HIV-related health outcomes for the mother and child through 24 months of age (or until a final outcome is obtained) and to determine the relationships between demographic, clinical, and program factors and these health outcomes in Homa Bay County. Data analysis is currently ongoing.

Under the patient and program outcomes protocol, various evaluations are at different stages of implementation and analysis. The evaluations have focused on better understanding advanced HIV disease, treatment failure, transition to DTG-based treatment, and identifying gaps in the pediatric index testing cascade.



Kevin Ouma, 2021

OPERATIONS AND FINANCIAL OVERVIEW

The overall operations and financial functions have been essential components of and have contributed to the achievement of the Timiza90 project.

PROCUREMENT

To achieve optimal and seamless service delivery through contracting for the provision of goods and services, we automated the procure to pay processes in the grants and procurement system. This ensured all the procurement needs and priorities were defined in a purchasing plan assisting in aggregating demand and tracking contracting status. Similarly, our plan review of actual versus budgeted expenditure supported expenditure analysis and informed decision making. In compliance with cost principles and prudence, we centralized procurement, aggregating the program needs for bulk procurement to save on shipping costs and gain economies of scale.

Accordingly, we identified reliable suppliers, built supplier relationships, and reduced the procurement process by developing a coordinated procurement process to provide clear guidance on policies, specification standards, and donor compliance. By incorporating performance metrics to track key performance indicators such as turnaround period, we achieved continuous improvement. We adopted agile procurement frame agreements such as basic ordering contracts, blanket purchase orders, and indefinite quantity contracts to increase the efficiency and speed of the procurement cycle. Furthermore, to eliminate idle time and interrupted logistic support, the 19 motor vehicles are insured and serviced regularly, and the project drivers are insured regularly.

Finance and accounting streamlined the payment process and ensured efficient financial support to all programs. The unit digitized the workflows and provided the program team with summarized status reports to support budget monitoring and management.

GRANTS

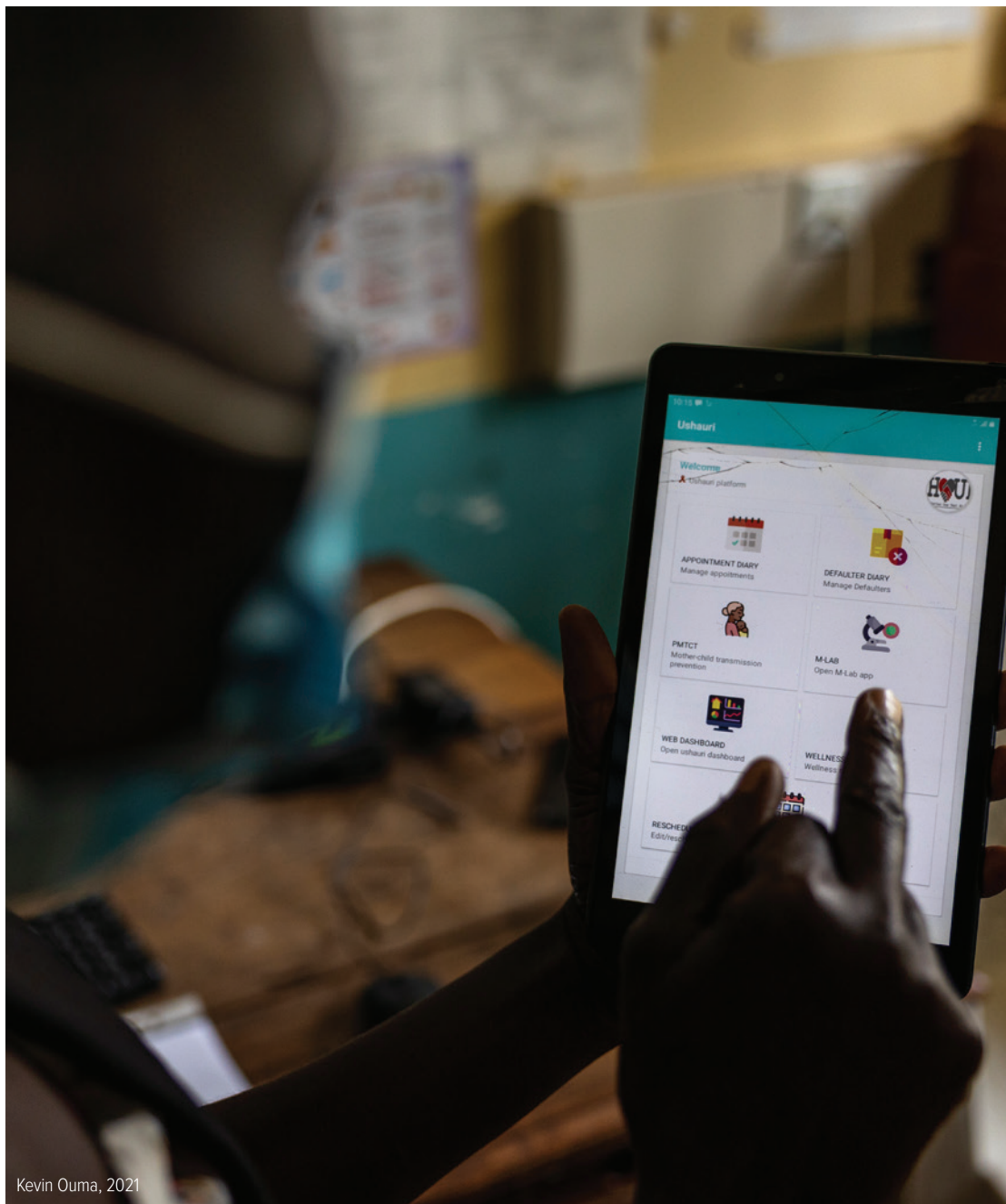
To regulate sub-grantee activities, we developed a guideline document about the management of high-risk activities, such as school fees processing, income generating activity support, food rations, and shelter renovation at the EGPAF and sub-grantee levels. This enhanced the capacity of the sub-grantees in managing activities and mitigated the project's exposure to risks. Monthly pipeline reviews to track reported versus projected expenditures was introduced to enforce compliance and prudent funds utilization by the sub-grantees. Continuous capacity building and on-site support have seen the timely achievement of program targets and 100% alignment of budgets with the work plan.

TRANSPORT AND FLEET MANAGEMENT

Robust scheduling of the fleet ensured weekly travel plans and route optimization across the board, reduced costs and liability while increasing safety and efficiency, and adequate support of the program team. To avert litigation and noncompliance, we ensured compliance with the country regulatory agency's National Transport and Safety Authority Act regulations and EGPAF–Kenya's fleet management policy including observing the no drug use while driving policy to minimize the possibility of accidents. Furthermore, trip controls such as a movement log and fleet management system to monitor fuel, real-time vehicle location, and vehicle speed were used to strengthen control over EGPAF's fleet.

INVENTORY AND ASSET MANAGEMENT

The automation of inventory and asset management increased efficiency and effectiveness by providing real-time reports on stock levels and inventory tracking. Monitoring stock reorder levels to inform the program team about quantities has eliminated wastage and dead stock. Monthly stock monitoring was implemented to ensure the accuracy of reports, ensure improved stock management, and avoid discrepancies, which is verified through reconciliations. Supplies requisition and issuance from stores is coordinated, ensuring timely receipt of supplies at sites and lack of service interruption. The systematic inventory controls have enabled accountability and transparency of supplies management and served as a good fraud control measure.



Kevin Ouma, 2021

LESSONS LEARNED



Index case finding of child and youth contacts and sexual partners of HIV-positive patients is an incredibly helpful approach in reaching more individuals for testing and linkage to treatment.



ART optimization, preceded by communication about the ease of use and better outcomes around DTG, was a game changer in ART coverage.



ART adherence can be strengthened largely through the use of innovative digital technology and increased adherence counseling through DSD mechanisms.



KPs can be offered services in a nondiscriminatory and healthy way using existing health facilities and health facility capacity. However, mobile characteristics of these populations can limit outcomes, and misconceptions about PrEP are continuing to hurt populations at higher risk: Greater early sensitization and global communications about the ease and use of PrEP are desperately needed.



MSM are a hidden population: harder to locate with very individualized needs. We need to do a better job of dismantling discrimination.



The case management approach is useful in resource-limited settings, but literacy and capacity of some case workers resulted in major issues. Comprehensive skills building among this lay cadre is very much needed when rolling out similar interventions.



Recent phone check-ins proved a good method for eliminating or intervening early on rare AEs of VMMC.



While the savings and internal lending communities program suffered a sharp downward spiral due to COVID-19, it nevertheless proved a best practice for improving the lives of children and caregivers, as it helped OVC access funds for essential services as well as boost household incomes pre-COVID.

NEXT STEPS

Homa Bay County applied for and won a CDC cooperative agreement grant in 2021 to offer comprehensive HIV services in six facilities in one ward. EGPAF has continued to provide technical assistance and mentorship of the county program staff in activity implementation in preparation for taking even more sites or geographical coverage. EGPAF also is coordinating county transition activities, which is a CDC-led strategy to gradually transition implementation and financing of HIV services to counties and national governments. In this regard, a county transition team has been formed and is taking the lead in transition activities. Meanwhile, the CDC released a notice of funding opportunity for follow-on projects to start in October 2021. EGPAF will support seamless transition to the county and the new mechanisms as appropriate.

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ACKNOWLEDGMENTS

Timiza90 Project was made possible through financial support provided by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Centers for Disease Control and Prevention (CDC) Kenya Cooperative Agreement 6NU2GGH001948-05-05. We would like to acknowledge the valuable and strong leadership of Kenya's Ministry of Health (MOH), Homa Bay County government, Turkana County government and the collaboration of our Timiza90 project implementing partners; SOS Children's Villages, Gethsemane Garden of Hope, Mango Tree and Development Knowledge Link-Africa (DEVLINK) in Homa Bay and Our Lady of Perpetual Support (OLPS) in Kisumu, Diocese of Lodwar, International Rescue Committee in Kakuma, Kakuma Mission Hospital, and African Inland Church Lokichoggio. The contents of this report are the sole responsibility of the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) and do not necessarily reflect the views of Ministry of Health, PEPFAR or CDC. Unless otherwise stated, it is not implied or to be inferred that any individuals appearing in this publication are living with HIV.

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