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Afya Ziwani (HSDSA Cluster 1)

FISCAL YEAR 2018

QUARTER 4 PROGRESS REPORT

JULY 1–SEPTEMBER 30, 2018

AWARD/CONTRACT No: AID-615-C-17-00002

OCTOBER 2018
This publication was produced for review by the US Agency for International Development. It was prepared by staff of PATH's country program in Kenya.

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Abbreviations

ADT	ART dispensing tool
AGYW	adolescent girls and young women
AIDS	acquired immune deficiency syndrome
AMPATH	Academic Model Providing Access to Healthcare
ANC	antenatal care
APR	annual program review
ART	antiretroviral therapy
ARV	antiretroviral
CAPA	corrective and preventive actions
CARG	community ARV refill group
CASCO	County AIDS STI Coordinator
CCC	comprehensive care center
CD4	cluster of differentiation 4
CDC	Centers for Disease Control and Prevention
CHMT	county health management team
CHRIO	County Health Records Information Officer
CHV	community health volunteer
CME	continuing medical education
CMM	Community Mentor Mother
COP	country operational plan
CPSB	County Public Service Board
CQI	continuous quality improvement
CRH	county referral hospital
DAR	Daily Activity Register
DATIM	Design and Analysis Toolkit for Inventory and Monitoring
DHIS	District Health Information Software
DOT	Directly Observed Treatment
DQA	data quality assessment
DR	drug-resistant
DREAMS	Determined, Resilient, Empowered, AIDS-free, Mentored and Safe
DSD	direct service delivery
DTG	dolutegravir
EBI	evidence-based intervention

ECHO	Extension for Community Healthcare Outcomes
EID	early infant diagnosis
EMR	electronic medical record
EMTCT	elimination of mother-to-child transmission
FMP	Families Matter! Program
FP	family planning
FTE	full-time equivalent
HCA	HEI Cohort Analysis
HCBF	Healthy Choices for a Better Future
HCW	health care worker
HCWM	health care waste management
HEI	HIV-exposed infant
HIV	human immunodeficiency virus
HIVST	HIV self-testing
HMIS	health management information systems
HR	human resources
HRH	human resources for health
HRIO	health records and information officer
HRPI	HR performance improvement
HSDSA	HIV Service Delivery Support Activity
HTS	HIV testing services
iHRIS	integrated Human Resources Information System
IPC	infection prevention and control
IPT	isoniazid preventive therapy
IQR	interquartile range
KEMRI	Kenya Medical Research Institute
KEMSA	Kenya Medical Supplies Authority
KHQIF	Kenya HIV Quality Improvement Framework
LIP	local implementing partner
LOA	Letter of Agreement
LTFU	lost to follow-up
LVCT	Liverpool Voluntary Counselling and Testing
M&E	monitoring and evaluation
MCH	maternal and child health
MDR	multidrug-resistant
MER	monitoring, evaluation, and reporting
MFLR	Master Facility Linkage Register

MHMC	My Health My Choice
MLT	medical lab technologist
MM	Mentor Mother
MOH	ministry of health
MPR	monthly progress review
MSP	male sex partner
MTCT	mother-to-child transmission
NASCOP	National AIDS & STIs Control Programme
NHRL	National HIV Reference Laboratory
OCA	Organizational Capacity Assessment
ODK	Open Data Kit
OJT	on-the-job training
OTZ	Operation Triple Zero
OVC	orphans and vulnerable children
PBB	performance-based budgeting
PCR	polymerase chain reaction
PE	peer educator
PEPFAR	President's Emergency Plan for AIDS Relief
PHDP	Positive Health, Dignity, and Prevention
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission
PNS	partner notification services
POC	point of care
PrEP	pre-exposure prophylaxis
PRISM	Program Reporting Information System Management
PSK	Population Services Kenya
PSSG	psychosocial support group
PT	proficiency testing
Q	quarter
QA	quality assurance
QI	quality improvement
QIT	quality improvement team
RLSN	Rider Led Sample Network
RRI	rapid results initiative
RTK	rapid test kit
SCASCO	Subcounty AIDS STI Coordinator
SCH	subcounty hospital

SCHRIO	Subcounty Health Records Information Officer
SCHMT	subcounty health management team
SDP	service delivery point
SMS	short message service
SOP	standard operating procedure
STF	suspected treatment failure
STI	sexually transmitted infection
TAT	turnaround time
TB	tuberculosis
TWG	technical working group
UPS	uninterrupted power supply
USAID	United States Agency for International Development
VL	viral load
VMMC	voluntary medical male circumcision
WIT	work improvement team
Y	year

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Executive summary

The Afya Ziwani (HIV Service Delivery Support Activity (HSDSA) cluster 1) project is working in five counties of the Nyanza Region. Three of the counties are designated as scale-up to saturation counties—namely, Homa Bay, Kisumu, and Migori—with the other two, Kisii and Nyamira, as aggressive scale-up to saturation counties. The US Agency for International Development (USAID)–funded project is being implemented from October 2017 to September 2022 by PATH, working with small-business initiative partners and local implementing partners (LIPs).

In year 1 quarter 4 (Y1Q4), from July to September 2018 (the period under review), the project continued to align its activities with the US President's Emergency Plan for AIDS Relief (PEPFAR) county prioritization based on the HIV burden and continuum-of-care HIV/AIDS goals of 95-95-95—along with strengthening ministry of health (MOH) institutional capacity and accountability for the management of community, facility, and county HIV responses.

Through HIV prevention services implemented during the reporting period, a total of 14,193 clients accessed voluntary medical male circumcision (VMMC) services, bringing the total number reached in the annual program review (APR) 2018 period to September 2018 to 48,689, against a country operational plan 2017 (COP17) target of 38,605 (126 percent achievement). Behavioral interventions 12,947 fisherfolk in the reporting period for a total of 17,135 fisherfolk with evidence-based interventions (EBIs) during the period to September 2018, against a COP17 target of 27,979 (61 percent achievement).

The project restarted in earnest with DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored and Safe) implementation activities in the reporting period after conclusion of the contracting of the LIPs. This was carried out in 51 wards, 15 sub-counties in the three counties of Homa Bay, Kisumu, and Migori. The project, as at September 2018, had enrolled 95,430 adolescent girls and young women (AGYW), against a COP17 target of 91,893, a 104 percent achievement of the project target; all had been entered into the DREAMS database. During the reporting period, 87,487 AGYW had received at least one service in the past six months to September 2018 in the 194 safe spaces across the 51 wards, a 95 percent achievement against COP 17 target of 91,893

At the end of the reporting period, the project enrolled 573 new clients for oral pre-exposure prophylaxis (PrEP), including new AGYW in safe spaces and clients in the general population at facilities. The overall achievement in the APR 2018 period to September 2018 is 1,293 new clients on PrEP, an achievement of 68 percent against the COP17 target of 1,908. The project will continue to strengthen implementation of PrEP services to reach eligible population.

During the reporting quarter, the project supported HIV testing and counseling of 185,211 clients. This brings the total number of clients counseled and tested in the APR 2018 period (October 2017 through September 2018) to 757,014 against the COP17 target of 1,431,389 (53 percent achievement). The number of clients who tested HIV positive for the reporting period was 2,509, for a total number of HIV-positive clients in the APR 2018 period to September 2018 of 9,861, against a COP17 target of 29,711, a 33 percent achievement. Partner Notification Services (PNS) testing intervention contributed 27 percent (2,657 out of 9,861) of all new positives identified in COP 17 period.

During the reporting quarter, 2,078 clients were initiated on antiretroviral therapy (ART), bringing the total to 8,485 new ART clients within the APR 2018 period to September 2018, a 54 percent achievement against the COP17 target of 15,730. At the end of the reporting period, 50,501 clients were active on treatment, against the COP17 target of 62,594 (81 percent achievement).

The project has rolled out differentiated care service delivery to 55 percent (122 out of 222) of supported treatment sites, with 19,996 (out of 24,145 eligible stable clients of ART) clients enrolled an 81 percent achievement. For adolescent Operation Triple Zero (OTZ) intervention, 4,712 are enrolled out of total 9,430 adolescents on treatment, a 50 percent enrolment achievement. Of those enrolled in OTZ, 88 percent are virally suppressed.

During the reporting quarter, 8,306 pregnant women were counseled and tested for HIV, of whom 781 (9.4 percent) tested positive. Maternal prophylaxis was provided to 748 women (96 percent of those who tested positive), and 725 infants (93 percent) received prophylaxis. During the APR 2018 period to September 2018, 36,474 women accessed testing services for the prevention of mother-to-child transmission (PMTCT) of HIV, against a COP17 target of 49,814 (73 percent achievement). Among these, 3,140 women (8.6 percent) were diagnosed HIV positive, a 92 percent achievement against COP 17 target of 3,423. Maternal prophylaxis uptake for the APR 2018 period to September 2018 was 98 percent (3,078 against 3,140 target) and infant prophylaxis uptake was 96 percent (3,024 against 3,140 target). For the APR 2018 period to September 2018, maternal prophylaxis performance translates to a 90 percent achievement against the COP17 target of 3,423.

For Early Infant Diagnosis testing, 3,260 initial virologic tests were done for infants between 0 and 12 months old in the period to September 2018, translating to 95 percent of the 3,428 targets for COP17.

The project is continuing to carry out accelerated activities for priority populations to ensure they are provided with requisite services given the delayed start-up in the preceding period of COP17.

I. Key achievements (qualitative impact)

Priority population interventions

The Afya Ziwani project implements comprehensive package of services interventions with the aim of achieving primary prevention of HIV among the priority populations of adolescent girls and young women (AGYW) and fisherfolk. Working in 51 wards spread across 15 subcounties in Kisumu (5), Homa Bay (6) and Migori (4), the project sought to reach 91,894 vulnerable AGYW between 10 and 24 years old in the COP17 period. It provided age-appropriate interventions to this population, divided into 10 to 14, 15 to 19, and 20 to 24 years old. To achieve the objectives of primary HIV prevention for the vulnerable AGYW, the project delivered to each AGYW a package of behavioral, biomedical, and structural interventions as defined in the DREAMS (Determined, Resilient, Empowered, AIDS-Free, Mentored and Safe) layering table.

USAID Deputy Mission Director Heather Schildge visiting with older cohort AGYW during a SHUGA 2 session at Jiu Pachi Safe Space. Photo: PATH

The project also targeted 27,979 fisherfolk in COP17—that segment of population that engages in fish business (i.e., fishermen, fish brokers, fish traders)—and their dependents around Lake Victoria, specifically in 12 beaches within Kisumu County (Dunga, Kichinjio, Nyandiwa, Paga, Usare, Rota, Ngege, Usoma, Mawembe, Ogal, Nduru, and Nyamware). The project, through Beach Management Unit peer educators (PEs), delivered the behavioral services of Splash Inside Out and Shuga to the fisherfolk as appropriate. It also provided access to and supported uptake of biomedical interventions for fisherfolk, particularly HIV testing services (HTS), condoms, voluntary medical male circumcision (VMMC), sexually transmitted infection (STI) screening, and drug and alcohol abuse reduction and management services.

By the end of the reporting quarter, Afya Ziwani had reached 95,430 AGYW (103 percent of COP17 target) and 12,947 fisherfolk (46 percent of COP17 target). Afya Ziwani conducted a rapid results initiative (RRI) in the reporting period from August to September 2018 to bridge performance gaps occasioned by delayed start-up of priority-population interventions. For Fisher Folk interventions, the lower than expected performance was occasioned by late start-up of activities by the Local Implementing Partner Kenya Red Cross Society. Began implementation in late August 2018. This will be a focus area in the next quarter to ramp up Fisher folk interventions.

Adolescent girls and young women (AGYW)

1. Enrollment and social-asset building

During the reporting period, the project newly enrolled 27,092 AGYW, which included 9,098 orphans and vulnerable children (OVC) from the Mwendo projects and 619 AGYW inherited from the Peace Corps who had ended their engagement with AGYW programming in Kisumu. As at the end of the quarter, therefore, the project surpassed its target, enrolling 95,430 AGYW for the year against a COP17 target of 91,843. In the reporting quarter the project achieved 83,279 active AGYW (those who have received at least one service in the past six months), leading to a cumulative 87,487 active AGYW for the COP17 period. In the same period, 1,316 AGYW exited the program, while 27 AGYW died from various causes not related to AGYW interventions. Exits were generally due to relocation or self-exit due to feeling sufficiently empowered not to need engagement in the program. Below (table 1) is a tabular presentation of the enrollment achievement per county for the two quarters that the project implemented AGYW interventions.

Table 1. County AGYW reach.

County		Y1Q3	Y1Q4
Kisumu	Achieved	37,989	46,845
	Target	46,882	46,882
	% Achieved	**81**	**100**
Homa Bay	Achievement	30,349	37,182
	Target	31,975	31,975
	% Achieved	**95**	**116**
Migori	Achievement	-	11,403
	Target	13,036	13,036
	% Achieved	**0**	**87**
Project Total	Achievement	68,338	95,430
	Target	91,893	91,893
	% Achieved	**74**	**104**

Note: AGYW, adolescent girls and young women; Q, quarter; Y, year. The project began Migori interventions in the reporting quarter.

During the RRI period, the project specifically worked to adopt the new strategy of using the OVC program as the primary source of AGYW for the cohorts between 10 and 17 years old. Working with Mwendo, the project enrolled 9,098 OVC to be provided top-up DREAMS interventions.

By the end of the quarter, all the OVC had received at least one service and were at various stages of their age-appropriate evidence-based interventions (EBI), moving toward completing their waves so that they may be counted as complete.

Below (table 2) is the layering table for the enrolled OVC as at the end of September 2018.

Table 2. Layered services for 9,098 OVC enrolled for DREAMS top-up interventions.

Age group	1 service	2-3 services	4-5 services	6+ services	Total
9-14	3,163	1,325	675	83	**5,246**
15-17	1,798	1,076	827	151	**3,852**
Total	**4,961**	**2,401**	**1,502**	**234**	**9,098**

Note: DREAMS, Determined, Resilient, Empowered, AIDS-free, Mentored and Safe OVC, orphans and vulnerable children.

The speed of enrolling OVC was slow, as MWENDO OVC mechanism took longer than expected to prepare their community-based organizations to appreciate the new strategy. MWENDO OVC mechanism had a number of OVC (approximately 14,000) who were outside the Afya Ziwani's DREAMS catchment areas. Afya Ziwani and MWENDO OVC have now agreed on a joint technical working group (TWG) that will guide OVC enrollment and services provision.

Older cohort AGYW pose for a photo after attending a community function. Photo: PATH

By the end of the reporting period, the project had increased social-asset building (counted as the number of those who attended safe-space sessions) to reach all enrolled AGYW (87,847), up from 68,338 in the previous quarter.

2. PP_PREV

In the reporting quarter, the project continued to offer AGYW standardized EBIs to empower them in adopting prevention behaviors and building their confidence in, and uptake of, HIV-prevention services. The project implemented the Healthy Choices for a Better Future EBI for the 10- to 14-year-old cohort, My Health My Choice for the 15- to 17-year-old cohort, and Shuga 2 for the 18- to 24-year-old cohort. The project trained additional facilitators in Migori and used certified facilitators to provide accelerated EBIs for the AGYW. The project took advantage of the availability of the AGYW during holidays and weekends to conduct daily sessions for each group rather than do them on a weekly basis. All EBI sessions for the older cohorts were accompanied by access to biomedical services for the willing and ready AGYW, including HTS and condoms provision. The project also embedded pre-exposure prophylaxis (PrEP) education into the Shuga 2 sessions to help AGYW expand their options for prevention services. By the end of the reporting quarter, the project had reached 87,847 AGYW with EBIs, up from 68,338 in the previous quarter (95 percent of the 91,893 target).

OVC AGYW participate in a session of My Health My Choice during the holidays. Photo: PATH

3. HTS_TST and PrEP_NEW

The project continues to facilitate AGYW to know their HIV status and offers HTS as a primary individual intervention targeting 15- to 24-year-olds. As a strategy, the project has ensured that all safe spaces are twinned with a linked health facility from where the project supports HTS outreach. Working with the county health management teams (CHMTs), the project ensures that the facilities provide HTS commodities, HTS counselors, and HTS supervisors for quality purposes. To increase confidence in and uptake of HTS, the project schedules the service to coincide with other safe-space interventions, including EBI sessions. Additionally, the project provides HTS for all potential PrEP enrollees. In the reporting period, the project reached 65,176 AGYW with HTS services, up from 54,511 the previous quarter. The project acknowledges that the OVC enrolled in DREAMS come with reported knowledge of their status and will provide the 15- to 17-year-old OVC with opportunities to test after three months in the program.

AGYW takes a HIV test at Kondele Ward. Photo: PATH

During the quarter, the project faced a few challenges with HTS, the major one being that prioritization of testing commodities for new HIV positives made AGYW testing, a low HIV-positive-yield population, a secondary activity among the ministry of health (MOH) personnel. To mitigate this, the project worked with CHMTs to elevate understanding among providers of the need for HTS for HIV prevention among AGYW. The project ensured compliance with testing protocols to minimize repeat testing and ensure timely retesting for priority populations, including AGYW.

HIV self-testing (HIVST) was also supported during the reporting period. Through receiving general HIV-testing education at the safe spaces, as well as through the NASCOP supported public education and awareness campaign on mass media, , AGYW got to know about the HIVST kit. The project took advantage of this to build knowledge and facilitate discussion sessions between AGYW and health care workers (HCWs). However, in Nyalenda the project noted a case of forced testing of an AGYW by her boyfriend, who came home with the kits and forced her to test against her will. Another issue regarding self-testing was the fear by AGYW of how they would react if they tested in the privacy of their rooms and returned a HIV-positive result. Many AGYW seemed unsure whether they could withstand the shock. The project is mitigating these challenges by providing education and a conducive environment at the safe space for an AGYW to take the HIV self-test.

An AGYW guardian speaks during a DREAMS Open Day in Kuria to alleviate community misunderstanding. Photo:

During the reporting period, the project worked to follow up with those AGYW who were on PrEP previously to ascertain their active status and current PrEP needs. The project newly enrolled 314 AGYW on PrEP. This brought PrEP enrollment to 541 for the COP17 period. PrEP education was provided to 30,900 AGYW.

A number of challenges with PrEP provision contributed to the low enrollment numbers. These included short expiry commodities, stockouts of PrEP commodities, and attrition of trained PrEP providers. These factors led to a slowdown of new PrEP enrollments and, instead, a focus on maintaining those already on PrEP to ensure no missed opportunities for them. Afya Ziwani, as a member of the PrEP Implementing Partners TWG in the DREAMS areas, continues to work with MOH and other stakeholders to address the commodity situation with the Kenya Medical Supplies Authority (KEMSA) / National AIDS & STIs Control Programme (NASCOP).

Meanwhile, AGYW are encouraged to consider all other combination prevention methods. These include condom promotion and provision and contraceptive method mix education, which continued during the reporting period. The Condolympics intervention was extensively used to teach condom skills to AGYW. The project mainstreams these interventions with other safe-space opportunities to increase uptake.

4. Mentorship, stakeholder engagement, and partnerships

To ensure that AGYW get the most out of the available opportunities and to leverage resources in the community, the project worked in partnership with other stakeholders. Variously, the project worked with the county and national administrations to improve AGYW safety and also to secure community spaces for use by AGYW. In Kuria sub counties in Migori County, the project suffered communal violence when AGYW enrollment was mistaken for registration of Kuria AGYW into alternative rites of passage. As August holidays was a season of cultural clitoridectomy, some community members stormed a safe space, beat up the mentors and tore enrollment forms. Only after quick explanation was order restored. To mitigate this going forward, the project worked with the local community and administration to hold a public DREAMS open day that was well attended, and which served to quickly orient the communities to DREAMS and its objectives. The project also provided opportunities for AGYW to meet female achiever mentors at the safe spaces for mentorship sessions.

A grandmother shows an AGYW recipient the M-Pesa cash transfer message from Afya Ziwani. Photo: PATH

5. Cash transfer

The project processed cash transfer disbursements worth KSh 50,702,567 to benefit 7,501 eligible AGYW households during the reporting period. Working with the government's Single Registry, the project continued to identify recipients and ensure no households are receiving duplicated support. In the reporting period, the project had one fraud case where a mentor had enrolled her ineligible sister in DREAMS and manipulated the documentation to have her in the cash transfer list. After receiving three cash transfer disbursements, the fraud was reported via a letter to PATH by the sister's former boyfriend.

The project took necessary action, informing the United States Agency for International Development (USAID) of the breach and rectifying the situation.

The project also conducted several post disbursement household visits to recipient AGYW. The project sampled households, especially visiting ones where AGYW receive their cash via a nominated guardian, as well as AGYW heads-of-household and AGYW mothers. The project noted that the beneficiary AGYW and/or guardian use the unconditional cash transfer in different ways. Examples include using cash transfer to buy foodstuff for other siblings, pay house rent, start and boost microbusinesses with the seed money, enroll children in village ECD centers where lunch is included as a part of the package, contribute to a parent's purchase of medicines, support travel costs for interviews, save in merry-go-rounds, etc. In short, recipients appreciated the cash transfer.

Mentor conducting post disbursement household visit. Photo: PATH

It is apparent that cash transfers are considered a tangible benefit, and incidences of feeling discriminated against continue to come up among nonrecipients. The project is considering ways to equalize the cash transfer so that more recipients will receive the money.

6. Education support

The principal of Sinyolo Girls High School poses with AGYW beneficiaries at her school during a post disbursement monitoring by Afya Ziwani. Photo: PATH

During the reporting period, the project continued efforts to keep girls in school by paying their school fees and providing dignity packs. By the end of September 2018 and the opening of the new school term, the project had processed school fees worth KSh 72,296,910 to benefit 5,315 AGYW. Working with the ministry of education and the schools that AGYW are enrolled in, the project was able to verify school fee structures and receive proof of enrollment in the school and class/grade. During post disbursement visits to schools after the fee payments were made, the project was informed of the significance of the school fees to the AGYW and the payments' role in keeping them in school. In many instances, being in school also meant that the AGYW had access to one full, well-balanced meal, as they are mostly day scholars. The school is also a safer environment for most compared to their home environments that may be located in a security challenged informal setting and/or dysfunctional family units. At Joel Omino Mixed Secondary School in Kisumu County, for example, the principal allows the AGYW to come to the school even on the weekends to be in a safe environment in which to relax and do their homework etc. The core challenge with education support, however, is the limited money for fees.

The project also provided three-month dignity packs to 64,000 AGYW during the reporting period. AGYW received sanitary towels, soap, and ointment, and this boosted their self-esteem and contributed to their hygiene.

7. Economic strengthening

In order to mitigate the economic risks that increase the chances of AGYW getting infected with HIV, the project supports out-of-school AGYW in gaining economic access. Several interventions define the economic strengthening component. In the reporting quarter, the project provided financial capability training to 18,151 AGYW using the Kenya DREAMS Financial Capability Training Curriculum, while 1,496 underwent the Entrepreneurship Training. During the same period, the project facilitated 360 AGYW in gaining employment, 66 in attaining internships, and 315 AGYW in starting microenterprises, taking advantage of the cash transfer provided by the project. The project also deliberately trained and engaged older AGYW as facilitators, some of whom then used their facilitation fees to start businesses. AGYW mostly engaged in a variety of food-based businesses, such as selling ice-cream, doughnuts, chapatti, and lollipops, as well as selling household items, like doormats, soap, environmentally friendly charcoal, baskets, etc. The project, to support the AGYW, used its forums to provide AGYW with special tables on which they could sell their merchandise. These include corporate functions, international days of commemoration, and monitoring visits to safe-space sites. The project continues to engage other stakeholders to ensure that AGYW get opportunities to make money. Additionally, 832 AGYW received vocational-training support during this period and graduated. A number of older AGYW (23-plus years old) were taken up as mentors to serve the younger 10- to 14-year-old cohorts. This has ensured that the 23 years and above are retained them in the project.

AGYW group sells handmade bags to delegates at a corporate function. Photo: PATH

An AGYW who used her cash transfer to start a small food business at her village. Photo: PATH

8. Reducing risk in male sex partners (MSPs)

In the reporting period, the project conducted several outreaches to those identified as typical MSPs of AGYW aged 15 to 24 years old. The MSP outreaches are intended to provide males with access to highly effective HIV-prevention services, including condoms, HTS, linkage to care and treatment, and VMMC. The project works with linked health facilities to support HTS outreach and with organized male associations to mobilize men and schedule outreaches. In other cases, the project visits men at workplaces. Whereas men have been generally receptive of the outreaches, they have also constantly voiced concerns that their interventions are not at par with what AGYW are provided and that a lot of effort is placed on empowering women at the expense of men. In several stakeholder meetings, increasing concern has been voiced for the welfare of boys and men with calls for equal programming for them.

During the outreaches in the reporting quarter, the project reached 6,582 males through 109 outreaches. Services referred for and completed include, 3,193 males tested for HIV. Of those, 6 were found to have HIV, of which 5 were immediately linked to care and treatment, with 1 individual absconding and currently being traced. Males took up condoms readily during the sessions. The project also continues to provide additional interventions to MSPs, namely the Start, Awareness, Support, Action violence-prevention EBI. The project uses this as a way of helping to create male champions who can work to reduce instances of violence against AGYW.

Young men participate in a DREAMS MSP outreach. The cooperation of men has been outstanding during these forums. Photo: PATH

9. The Families Matter! Program (FMP) 1

In the reporting period, 3,882 guardians of AGYW completed FMP 1 sessions. The project did not implement the FMP 2 intervention as it is still in the early stages of training and certifying facilitators. Implementation of FMP 2 will start in the next quarter.

10. Layering of services

Afya Ziwani works to ensure optimal layering of services as appropriate for each individual AGYW. As at the end of the reporting period, a significant number of AGYW had already received more than six services. Going forward, the project will use the layering table results to graduate AGYW into a maintenance mode as we enroll new/additional AGYW in DREAMS. Figure 1 shows the layering table as at the end of the reporting period.

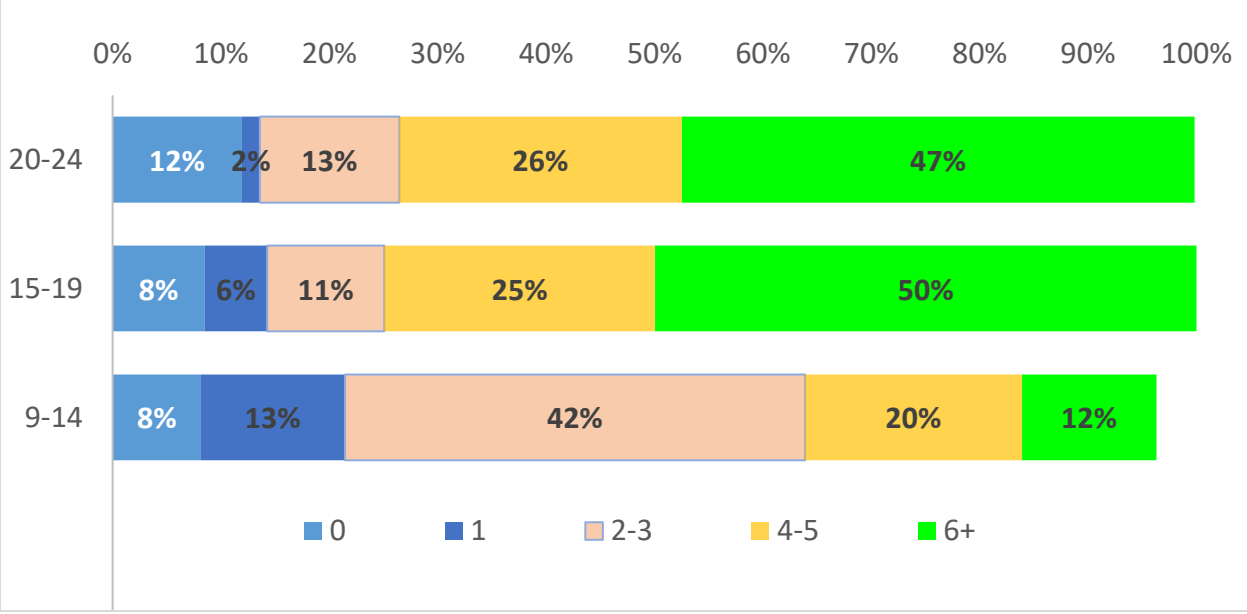


Figure 1. Services layering table for the reporting period, by AGYW age cohort.

Fisherfolk

In the reporting quarter, the project reached 12,947 fisherfolk (7,436 M, 5,511 F) in 12 beaches of Kisumu County, a significant improvement from the 4,188 reached in the previous quarter. The project total reached so far is 17,135 (61 percent) fisherfolk out of a target of 27,979. To facilitate the outreach, the project supported Beach Management Unit–based PE training and sessions conducted at the beaches. Due to the diversity of the fisherfolk population, the project introduced Shuga 2 to reach the fisherfolk aged 18 to 24 years old, in addition to the Splash Inside Out intervention targeting all Fisherfolk populations. The project provided access via referrals to HTS for the fisherfolk and referrals for VMMC. In the reporting period, 9,372 fisherfolk got to know their HIV status, of whom 10 (3 males and 7 females) were new positive and linked to treatment and 253 known positives on treatment were enrolled in Positive Health, Dignity, and Prevention (PHDP) sessions. The quantum of fisherfolk interventions have been hampered by fishermen migration due to dwindling fish stocks and hyacinth menace in some of the beaches. In the low-harvest seasons, fisherfolk engage in other businesses too (e.g., hawking, *boda-boda*, construction-site day jobs etc.), and this takes them away from the implementation beaches.

A fisherfolk peer educator makes a presentation during a training session. Photo: PATH

Voluntary medical male circumcision

During the period from July to September 2018, the project continued to provide direct service delivery (DSD) support to all 62 project-supported VMMC sites through the provision of consumables, equipment, reporting tools, supportive supervision, and mentorship on VMMC service provision. All 62 VMMC sites are in the scale-up to saturation counties of Homa Bay, Migori, and Kisumu. The sites that reported in this quarter were 57 with 5 sites not reporting due to facility closures among other reasons.

A total of 14,193 clients accessed VMMC services during the reporting period, bringing the total number of clients accessing VMMC services to 48,689, against a COP17 target of 38,605 (126 percent achievement). All the circumcisions were done using the dorsal slit method. Sixty-seven percent (9,439 out of the 14,193 circumcised) were tested for HIV as part of the VMMC minimum package of service. This is a drop in the testing rate from 74 percent in the last quarter, occasioned by a directive from NASCOP that prescribed targeted testing for clients aged 10 to 14 years old. Out of those tested, 6 tested positive, all of whom were linked into care and treatment at the respective facilities. Of the clients circumcised, 57 percent (8,074 of 14,193) were aged 15 years or older. This is a lower percentage than last quarter, when 70 percent (10,140 of 14,530) fell into that age range, a result of the surge of clients aged 10 to 14 years old seeking services in the month of August 2018 during the school holidays. The proportion of clients coming back for follow-up within 14 days of circumcision was at 73 percent (10,399 of 14,193 clients circumcised), a slight drop compared to last quarter's 75 percent (10,959 of 14,530 clients circumcised). The project however, continues to put measures in place to ensure more than 80 percent of circumcised clients come back for postoperative follow-up within 14 days of circumcision. There was no adverse event reported during the period under review.

The number of men circumcised as part of VMMC for HIV prevention in Migori County was 14,162, against a COP17 target of 9,609 (147 percent), while in Homa Bay County there were 32,717, against a COP17 target of 25,829 (127 percent achievement). This performance is attributed to successful VMMC outreaches in Migori and Homa Bay Counties, as well as an RRI in the month of August 2018. In Kisumu County 1,810 men were circumcised, against a COP17 target of 3,167 (57 percent achievement). Kisumu County's performance was greatly affected by the closure of the two sugar companies in Muhoroni Subcounty, where the two project-supported sites are situated. The closure of these sugar companies, coupled with intermittent HCW strikes, acts as a barrier to implementation of VMMC services. The project will put in place measures to mitigate against such a barrier by opening up satellite sites, as well as engaging temporary providers in times of HCW strikes. The project's achievements in each county is summarized in table 3.

Table 3. VMMC targets versus achievement by county.

County	Target	Q1	Q2	Q3	Q4	Total	% Achievement
Homa Bay	**25,829**	12,259	419	10,343	9,696	32,717	127
Kisumu	**3,167**	1,029	21	288	472	1,810	57
Migori	**9,609**	6,089	149	3,899	4,025	14,162	147
Total	**38,605**	**19,377**	**589**	**14,530**	**14193**	**48,689**	**126**

To increase demand for VMMC services, the project continued to engage with community structures for social mobilization during VMMC RRIs and outreaches targeting males 10 to 29 years old in the community and in educational institutions. Door-to-door community mobilization by community health volunteers (CHVs) also ensured that there was a steady stream of clients at the facility level. The project also continued to sensitize women on the benefits of VMMC, enabling them to make referrals, accompany partners for VMMC, and offer support during the healing period. In addition, the project continued to strengthen intrafacility referral by referring, for VMMC services, eligible men who test HIV negative from the different facility testing points. The project supported and participated in the national, county, and subcounty VMMC taskforce activities for the purposes of coordinating VMMC services in the region.

During this period, the project continued to provide internal quality assurance (QA) through the project's own VMMC QA team and external QA through the subcounty health management team (SCHMT). In addition, the project participated in the national data quality assessment (DQA) that focused on data concordance between the source documents and reporting tools, as well as on the Design and Analysis Toolkit for Inventory and Monitoring (DATIM). The project and MOH teams continued to ensure that all clients received the service using the recommended dorsal slit technique and ensured compliance with World Health Organization guidelines on tetanus immunization prior to circumcision using the male circumcision devices Shang ring and Prepex.

The project continued with the process of computerizing management of VMMC data, which enables the project to generate VMMC data electronically, as well as generate specific VMMC data disaggregation for reporting and decision-making.

HIV counseling and testing services

During the reporting period, the project continued to provide DSD support to the 243 project-supported sites through deployment of HTS providers, capacity-building, provision of data collection tools, supportive supervision, and mentorship. A total of 166 HTS nonclinical service providers were deployed across 123 sites (out of 243 supported sites), covering all high- and medium-volume facilities and some strategic low-volume facilities as a task-shifting strategy to enhance facility optimization interventions, including provider-initiated testing and counseling and partner notification services (PNS) within these supported sites. The high-volume facilities were allocated more than one HTS service provider to cover the different testing points: the wards, outpatient departments (including special clinics), laboratories, maternal and child health (MCH) clinics, nutrition clinics, and the comprehensive care centers (CCCs) within the facilities. Sites not covered by project-supported HTS nonclinical service providers are providing HTS through clinical service providers and HTS volunteers under supervision of the project and MOH technical teams. To increase the uptake of PNS services, the project expanded the base of providers capable of providing PNS services by supporting the sensitization training of 232 HCWs (74 nurses, 44 clinicians, 22 adherence-support counselors, 61 volunteer HTS providers, 14 lab officers, and 17 supervisors) on PNS. In addition, the project supported the sensitization training on HIVST and dual HIV/syphilis testing to 279 and 327 HCWs respectively, with an aim of enhancing their understanding of the tests' target population, approaches, benefits, limitations, reporting mechanisms and their role in reaching the national targets.

The project focused on strengthening team approach in scaling up PNS and embraced integration, networking, partnership, and community engagement in implementing PNS while providing appropriate services for sero-concordant/discordant couples, including counselor-supported disclosure and referral for

PrEP provision as appropriate. In addition, the project focused on probing for change in relationship status for continuing clients as they attended HIV care, treatment, and support services. In this period, PNS was supported in 170 HTS sites, up from 147 sites the previous quarter.

During the reporting quarter of July to September 2018, 185,211 clients were counseled and tested for HIV. This brings the total number of clients counseled and tested as at the annual program review (APR) 2018 to 757,014 clients, against a COP17 target of 1,431,389, translating to 53 percent achievement. There was significant improvement for the individuals counseled and tested in the previous two quarters, from 192,951 in January to March up to 221,339 in April to June 2018, but it then dropped to 185,211 in this reporting quarter. The drop was attributed to lower-than-expected performance in Nyamira County, occasioned by the prolonged HCW strike that went on for most of the reporting quarter, affecting all 90 supported HTS sites.

Table 4 shows HIV testing targets and achievement per county and by quarter.

Table 4. HTS counseling and testing targets versus achievement, COP17.

County	Target	Q1	Q2	Q3	Q4	Total	% Achieved
Homa Bay	**522,707**	30,863	38,817	44,300	49,840	**163,820**	31
Kisii	**22,770**	9,571	9,304	10,329	9,994	**39,198**	172
Kisumu	**135,321**	21,159	21,300	24,957	31,172	**98,588**	73
Migori	**144,720**	41,911	43,994	49,949	45,179	**181,033**	125
Nyamira	**605,871**	53,191	79,536	92,622	49,026	**274,375**	45
Total	**1,431,389**	**156,695**	**192,951**	**222,157**	**185,211**	**757,014**	**53**

The project is on track for HIV counseling and testing COP17 targets in Kisii at 172 percent (39,198 against a target of 22,770) and Migori at 125 percent (180,033 against a target of 144,720). However, Homa Bay, Kisumu, and Nyamira—at 31 percent (163,820 against a target of 522,707), 73 percent (98,588 against a target of 135,321) and 45 percent (274,375 against a target of 605,871), respectively—did not achieve HIV counseling and testing COP17 targets as at APR 2018. This lower-than-expected performance in the three counties is attributed to an almost fourfold increase in COP17 targets for Homa Bay (142,026 in COP16 to 526,533 in COP17); threefold increase for Nyamira (216,652 in COP16 to 605,871 in COP17); and a two-and-a-half-fold increase for Kisumu (63,004 in COP16 to 155,282 in COP17). The COP17 HIV counseling and testing targets were significantly steep and not in tandem with population estimates and/or past performance. This has contributed to the low performance against COP17 targets for the three counties.

The number of pediatric clients counseled and tested in the reporting period were 40,232, bringing the total number to 157,607 against a COP17 target of 215,714 as at APR 2018, a 73 percent achievement, as shown in table 5.

Table 5. Pediatric testing targets versus achievement, COP17.

County	Target	Q1	Q2	Q3	Q4	Total	% Achieved
Homa Bay	**102,429**	5,298	8,828	9,644	10,990	**34,760**	34
Kisii	**4,210**	2,189	2,134	2,351	2,258	**8,932**	212
Kisumu	**27,004**	3,228	4,529	5,299	6,753	**19,809**	73
Migori	**31,494**	5,468	9,260	10,385	9,403	**34,516**	110
Nyamira	**50,577**	10,587	17,479	20,696	10,828	**59,590**	118
Total	**215,714**	**26,770**	**42,230**	**48,375**	**40,232**	**157,607**	**73**

The project was on track with pediatric counseling and testing targets in Kisii (212 percent), Nyamira (118 percent), and Migori (110 percent). For Kisumu this was at 73 percent, and for Homa Bay, 34 percent. The age-disaggregated COP17 pediatric targets were derived using the COP16 HIV-positive achievements prorated for pediatric contribution.

During the reporting quarter of July to September 2018, 2,509 (1.4 percent) were identified as HIV positive. This brings the total number of clients identified as HIV positive to 9,861, against a COP17 target of 29,711, translating to 33 percent achievement. Table 6 shows HIV-positive targets and achievement per county and by quarter.

Table 6. HTS_TST_POS targets versus achievements by county.

County	Target	Q1	Q2	Q3	Q4	Total	% Achieved
Homa Bay	**8,269**	479	538	464	493	**1,974**	24
Kisii	**348**	96	80	95	102	**373**	107
Kisumu	**6,968**	497	486	531	541	**2,055**	29
Migori	**6,028**	639	718	874	889	**3,120**	52
Nyamira	**8,098**	546	674	635	484	**2,339**	29
Total	**29,711**	**2,257**	**2,496**	**2,599**	**2,509**	**9,861**	**33**

On the identification of the HIV positives, only Kisii among the five counties met the expected targets, achieving 107 percent of the COP17 target (373 against a target of 348). Migori and Homa Bay achieved 51 percent (3,120 against 6,028) and 24 percent (1,974 against 8,269), respectively, while Kisumu and Nyamira counties both achieved 29 percent (2,055 against 6,968 and 2,339 against 8,098, respectively). The COP17 HIV-positive target for Homa Bay County was increased by 51 percent (5,572 in COP16 to 8,410 in COP17), even though in the preceding year Homa Bay only achieved 32 percent (1,770) of the COP16 target. Similarly, the HIV-positive target for Nyamira County was increased by 52 percent (5,337 in COP16 to 8,098 in COP17), even though Nyamira County had achieved only 37 percent (1,975) of the COP16 target. During this COP17 period, Migori, Nyamira, and Homa Bay Counties reported

improvements in the absolute number of newly identified HIV-positive individuals compared to the COP16 period. Migori reported a 19 percent improvement (3,090 from 2,594), Nyamira 15 percent improvement (2,326 from 2,018), and Homa Bay 12 percent improvement (1,974 from 1,770).

The number of pediatric clients testing HIV positive in the reporting period were 131, bringing the total number of HIV-positive pediatric clients to 564, against a COP17 target of 2,468, a 23 percent achievement. Table 7 summarizes these findings.

Table 7. Pediatric positive targets versus achievements by county.

County	Target	Q1	Q2	Q3	Q4	Total	% Achieved
Homa Bay	**819**	33	58	26	21	**138**	17
Kisii	**27**	6	4	5	5	**20**	74
Kisumu	**430**	16	11	26	29	**82**	19
Migori	**594**	53	46	55	54	**208**	35
Nyamira	**598**	25	27	42	22	**116**	19
Total	**2,468**	**133**	**146**	**154**	**131**	**564**	**23**

For HIV-positive clients identified, none of the counties achieved the pediatric COP17 targets, with Kisii at 74 percent, Migori at 35 percent, Nyamira and Kisumu both at 19 percent, and Homa Bay at 17 percent. The project aggressively utilized the PNS strategy to reach out to pediatric clients elicited by the newly identified positive clients, and those that had not tested among the existing clients, to reach all eligible HIV positive pediatric clients.

PNS

To enhance HIV testing uptake and yield, the project intensified PNS to the partners of all HIV-positive index clients identified as part of a comprehensive approach to improving HTS coverage. During the reporting period, a total of 6,663 index client were offered PNS. From these index clients, 17,567 contacts were elicited, 2,593 (15 percent) of whom were identified as known positives. Out of the eligible 14,889 contacts, 11,940 were tested, translating into a testing uptake of 79 percent, up from 75 percent in the previous quarter. Of the individuals tested, a total of 1,400 were HIV positive (up from 715 the previous quarter), a positivity rate of 12 percent (from 9 percent in the previous quarter), with a linkage of 93 percent. Ninety-five percent (1,328 of 1,400) of the identified positives were adults, with a proportionate yield of 18 percent (52 of 2,980) among adult males and 28 percent (806 of 2,870) among adult females.

The project continues to track PNS by various subpopulations. This includes prevention of mother-to-child transmission (PMTCT), which contributed 9 percent (127 HIV positive of a total of 1,400) with a proportionate yield of 6 percent (127 HIV positive of 2,110 tested), and suspected treatment failures (STFs) contributing 13 percent (182 HIV positive of 1,400) with a proportionate yield of 14 percent (182 HIV positive of 1,304 tested) in the reporting period. The linkage to care for all newly identified HIV-positive adult men was 93 percent (487 of 522) and 95 percent (762 of 806) for adult females in the reporting quarter. All clients who were not linked are actively being traced to ensure 100 percent linkage to care.

The contribution of PNS to the project's newly identified positives in this reporting quarter, July to September 2018, was 55 percent (1,400 of 2,509), up from 28 percent (715 of 2,583) the previous quarter.

In the COP17 period, PNS contributed 27 percent (2,657 of 9,861) of total HIV-positive clients identified, while in the March-September 2018 period contributed 42 percent (2,115/5,092). The proportionate yield/positivity is higher with PNS interventions, averaging 12.0 percent, as compared to all HTS interventions at 1.3 percent this reporting quarter. Overall, for the COP17 period, PNS proportionate yield was 10.5 percent (2,657 of 25,342) compared to all HTS interventions at 1.3 percent (9,815 of 757,444). The PNS cascade by county is shown in table 8.

Table 8. PNS cascade by county, July to September 2018.

	Homa Bay	Kisii	Kisumu	Migori	Nyamira	Totals
Index clients screened	1,963	726	679	871	2,429	6,663
Contacts identified	6,834	1,327	1,965	2,010	5,431	17,562
Known positives	1,364	169	225	285	550	2,593
Eligible	5,395	1,157	1,745	1,726	4,866	14,889
Tested	4,390	894	1,171	1,564	3,921	11,940
Positive	223	47	167	613	350	1,400
Linked	216	47	154	554	344	1,315
Uptake of testing (%)	**81**	**77**	**67**	**91**	**81**	**80**
Positivity rate (%)	**5**	**5**	**14**	**39**	**9**	**12**
Linkage to care (%)	**97**	**100**	**92**	**90**	**98**	**94**
KP in contacts reached (%)	**20**	**13**	**11**	**14**	**10**	**15**

Note: KP, known positive; PNS, partner notification services.

The aggregate PNS positivity yield in Migori and Kisumu Counties were above the project's aggregate PNS average yield of 12 percent and were at 39 percent and 14 percent respectively in this reporting period. The aggregate PNS positivity rate for Homa Bay County was at 5 percent, Kisii at 5 percent, and Nyamira at 9 percent, all below the project aggregate. Homa Bay County has consistently recorded the highest proportion of known positives among the elicited contacts at 20 percent this reporting quarter, up from 19 percent the previous quarter. This contributes to the lower yield of new positives from PNS interventions. The other counties reported a range of 10 percent to 14 percent of known positives among the contacts elicited, which is below the project average of 15 percent known positives.

The project supported PNS mapped community outreaches in an effort to improve the uptake of HTS among the partners of HIV-positive individuals in the reporting period. Those identified as HIV positive were 161 out of 10,521 (1.5 percent positivity with this modality), of whom 75 (47.0 percent) were adult males. The overall linkage of newly identified positives from outreaches was 84.0 percent (135 of 161). Migori County reported an overall positive yield of 2.6 percent from these outreaches, and Homa Bay, 0.5 percent, while Kisumu was at 0.9 percent yield.

The project successfully optimized testing among the elicited eligible contacts and ensured all newly identified HIV-positive clients were offered PNS given the high positivity rate realized from this strategy through the following interventions:

- Progressive increase of PNS sites to 170 from the initial 125 sites implementing PNS (36 percent increase). This translates to a 70 percent PNS site coverage (170 of 243) by the end of this reporting quarter.
- Continued scale-up of PNS interventions through the use of PNS Training of Trainers under the Liverpool Voluntary Counselling and Testing (LVCT) Health / Academic Model Providing Access to Healthcare (AMPATH) collaboration to support capacity-building on PNS for HTS providers at all service delivery points (SDPs) and enable clinical providers at CCCs and PMTCT / maternal, newborn, and child health clinics to offer PNS.
- Utilization of the facility-based and roving HTS PNS champions to mentor HTS providers on PNS.
- Continuation of work with index clients to provide information on the appropriate time to notify and reach out to the elicited contacts with testing services.
- Tracking of PNS by various subpopulations, including PMTCT, which contributed 9 percent of total HIV-positive results with a proportionate yield of 6 percent, with STFs contributing 13 percent of the total HIV-positive clients with a proportionate yield of 14 percent. The project, in addition, rolled out the tracking of PNS interventions by further subpopulation disaggregation—namely, newly enrolled HIV-positive clients and existing CCC patients currently on antiretroviral therapy (ART), client populations which will be reported in COP18.
- Active support for escorted referral for all identified HIV-positive clients and active follow-up interventions for those not linked in the month to ensure 100 percent accountability for all identified HIV-positive clients.
- Expanded PNS sensitization to other service providers, such as clinicians, adherence-support counselors, Pes, and Mentor Mothers (MMs) in exploring/probing for change in sexual partners among CCC, PMTCT, and STF clients already receiving care and treatment services.
- Weekly monitoring of PNS outcomes among newly identified positives and existing clients, particularly PMTCT and STF clients, tracking and documenting PNS outcomes by facility and community approaches. The data informed approaches to optimize PNS interventions.
- Use of Open Data Kit (ODK) tools to capture weekly PNS performance and facilitate tracking of elicited adults over time and capture the outcomes, as well as tracking and documenting of clients refusing PNS and reasons for refusal.
- Continued support for airtime, lunch, and transport for providers to facilitate PNS tracking and tracing activities.

Among the challenges that continuously affected PNS optimization were:

- Follow-up of elicited sexual contacts of index clients out of facility and project catchment area. This needs some form of national referral directory to track and account for the outcomes of these individuals since this is currently not available nationally.
- Inadequate counseling skills for contacts elicitation among some HTS providers with no medical background. Additional capacity-building was supported through engagement of the MOH clinical and project technical teams and on-the-job training (OJT) mentorship by PNS champions.
- Reporting of elicited contacts reached months later not provided for in the PNS reporting tools. The project introduced, and will scale up, an ODK application to capture and track clients tested after the reporting period and account for tracking and testing outcomes of these individuals.
- Small number of contacts elicited with declining PNS. The project is following up to understand and document the reasons for this.

Weekend testing

The project continued to support weekend testing in 23 high-volume sites during the reporting quarter of July to September 2018. The total number of clients tested were 4,531, down from 6,806 in the previous reporting quarter, of whom 2,129 (47 percent) were males. Given the reduction in project-supported HTS providers to 166 in COP17 from 240 in COP16, the project engaged available certified HTS volunteers to relieve the deployed HTS providers to avoid provider burnout and increase coverage from alternate weekends to every weekend. Table 9 shows the weekend testing results.

Table 9. Results from weekend testing, July to September 2018.

County	Counseled and tested				Positives				Linked				% PR	% Linkage
	M		F		M		F		M		F			
	<15	≥15	<15	≥15	<15	≥15	<15	≥15	<15	≥15	<15	≥15		
Homa Bay	67	489	81	513	1	4	0	1	1	4	0	1	1	100
Kisii	70	227	76	382	0	0	0	0	0	0	0	0	0	0
Kisumu	16	91	16	114	0	1	0	1	0	0	0	1	1	50
Migori	95	498	103	488	0	10	0	9	0	10	0	7	2	90
Nyamira	89	487	111	518	0	0	0	1	0	0	0	1	0	100
Total	**337**	**1,792**	**387**	**2015**	**1**	**15**	**0**	**12**	**1**	**14**	**0**	**10**	**1**	**89**

Note: PR: Positivity Rate.

In the reporting quarter of July to September 2018, 28 weekend-testing clients were newly identified positives, of whom 16 (57 percent) were men. The proportionate yield remained constant at 0.6 percent this reporting quarter in spite of the reduction in number tested. The linkage was at 89 percent.

Extended-hours testing

The extended-hours services were limited to high-volume sites with a high rate of patient flow. Lower-volume sites were not cost effective, neither was there sufficient yield to justify continued support at these sites for this service. A total of 1,346 individuals were tested from 18 sites, of whom 705 (52 percent) were males. This strategy was affected by human resources for health (HRH) challenges, with insufficient

HTS providers that significantly reduced the contact hours during extended testing services. This will be reviewed in the next implementing period to help supply an adequate number of providers to support this service. Table 10 depicts results from extended-hours testing.

Table 10. Results from extended-hours testing, July to September 2018.

County	Counseled and tested				Positives				Linked				% PR	% Linkage
	M		F		M		F		M		F			
	<15	≥15	<15	≥15	<15	≥15	<15	≥15	<15	≥15	<15	≥15		
H/ bay	26	339	45	304	0	3	0	3	0	3	0	3	1	100
Kisii	4	77	6	84	0	0	0	1	0	0	0	1	1	100
Kisumu	2	86	6	54	0	1	0	2	0	1	0	2	2	100
Migori	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nyamira	21	150	17	125	0	0	0	0	0	0	0	0	0	0
Total	**53**	**652**	**74**	**567**	**0**	**4**	**0**	**6**	**0**	**4**	**0**	**6**	**1**	**100**

Note: PR, Positivity Rate.

A total of 10 out of 1,346 individuals counseled and tested in extended-hours testing were newly identified positives (4 M, 6 F), translating to a positive yield of 0.7 percent with a linkage of 100 percent.

Male-targeted HIV testing

Homa Bay and Kisumu Counties continued to conduct male-targeted HIV testing activities in collaboration with the Healthy Heart Africa project. Mapping of outreach sites / hot spots was conducted, including locating priority areas that had a high concentration of men; young, idle, and vulnerable populations due to socioeconomic factors; vulnerable individuals with known high-risk behaviors; key populations; and individuals sharing a hot spot or sharing clients. The counties also used data from previous outreaches to provide guidance regarding areas that recorded significant proportionate yield.

The activities conducted included demand creation for HIV testing and linkage for identified HIV-positive individuals, alongside hypertension screening services largely targeting men. During the reporting quarter, in Kisumu County 3,787 eligible individuals (2,462 M, 1,325 F) were offered HTS, a 52 percent uptake of HTS among 7,353 clients who were mobilized and screened for hypertension. The males contributed 65 percent of all clients tested for HIV through this modality in Kisumu. In Homa Bay County 13,803 clients (8,131 M, 5,672 F) were mobilized and offered hypertension screening and 8,177 (5,236 M, 2,941 F) were tested for HIV, a 59 percent testing uptake for those eligible among the total screened. Males contributed 64 percent of all clients receiving HIV testing through this modality in Homa Bay.

In Kisumu County, 38 clients (25 M, 13 F) had HIV-positive results, which translates to a positivity rate of 1 percent (38 of 3,787 tested). The positivity rate among males and females was 1 percent (25 of 2,462 and 13 of 1,325, respectively). Out of the newly identified positives, 21 were linked to care and treatment. In Homa Bay County, 19 (10 M, 9 F) out of 8,177 clients tested had a positive HIV test result, a positivity rate of 0.2 percent. The positivity rates among males and females was 0.2 percent (10 of 5236) and 0.3 percent (19 of 8,177), respectively. Thirteen out of the 19 positives were immediately linked to care and treatment services. All the unlinked clients in Homa Bay and Kisumu are being traced to ensure enrollment in care.

The yield from HHA is generally low at <1 percent, however their ratio of males to total is 61%, so this are an effective mechanism for reaching men. For the clients declining testing, the reasons elicited

included a feeling that there was absolutely no risk of contracting HIV and, therefore, no need for testing; fear of establishing a positive status given the known exposures to risk in the recent past; and the stigma associated with an HIV diagnosis.

The strategies used to ramp up male-targeted approaches include:

- Offering a one-stop-shop service where the HTS providers would record blood pressure by use of digital machines as well as offer HIV testing, as opposed to using CHVs for high blood pressure screening only with use of referrals for HTS. This was to improve on the HIV-testing uptake and screening for HTS eligibility for those accessing high blood pressure screening.
- Use of male HTS providers to offer services during male-targeted outreaches as informed by focus group discussions. A total of 24 male HTS providers (14 for Homa Bay and 10 for Kisumu) have been trained on how to use digital blood pressure machines and how to interpret results and associated documentation using the appropriate tools while ensuring appropriate referrals.
- Deliberate mobilization of more male clients by targeting locations where males are likely to be.

HIVST

The project supported the sensitization training on HIVST for HCWs in the reporting period, with an aim of enhancing their understanding of the test's target population, approaches, benefits, limitations, reporting mechanisms, and role in reaching the national targets.

Following sensitization of 279 HCWs on HIVST and the availability of this commodity in five pilot sites, in September 2018 the project teams distributed 576 HIVST kits across the five sites in Homa Bay (255) and Kisumu (321).

The project team incorporated HIVST in the ongoing integrated Healthy Heart Africa / HTS activities in Homa Bay and Kisumu Counties to improve testing uptake among men by reducing missed opportunities in HTS. In the month of September 2018, Kisumu County had a total of 467 out of the 493 clients who screened for hypertension who also got tested for HIV, a 95 percent testing uptake, 414 (89 percent) of whom were men. Four male clients tested HIV positive, a positivity rate of 1 percent and a linkage rate of 75 percent. A total of 96 HIVST kits were distributed during these outreaches, 85 percent (82 of 96) to male clients, of which 18 were used at the site with negative results, 4 were issued for self-testing at home, and 74 were issued (to 64 M, 11 F) for secondary distribution and use among sexual partners. In Homa Bay County 954 clients (844 M, 110 F) of the 1,005 screened for hypertension were found to be eligible for HIV testing, 894 of which were tested, a testing uptake of 94 percent. Out of those tested, 788 were male (88 percent). Six clients tested positive (5 M, 1 F), a positive yield of 0.7 percent, and were all linked into care and treatment. A total of 114 HIVST were distributed, of which 33 were used to offer directly assisted HIVST at the site with 100 percent negative results, 2 were issued to male clients for their own use at home, and 79 were issued for secondary distribution among partners with 80 percent of them (63 of 79) specifically issued to men. This targeted approach with the use of HIVST improved the testing uptake among the male clients screened from less than 60 percent to over 80 percent and improved the percentage of men accessing HTS services when compared to the general integrated, targeted male outreaches.

For HIVST during these integrated outreaches, information was given during mobilization of and distribution to the clients in the following ways:

- Clients who are offered HTS but opt out are given the alternative of HIVST at the site or at home.
- During demand creation ahead of integrated male outreaches, clients can walk in and request HIVST kits and walk away without having to pass through an HTS provider, allowing them to test at their own convenience.
- Clients tested (and/or who picked HIVST) at the outreach can opt to have their partners tested at home.
- All clients testing positive who also were assessed for intimate partner violence and found to be at low risk can pick secondary distribution to their sexual partners.
- Follow-up calls are made to all clients who consented during HIVST distribution to enable feedback within 24 hours.

The main challenges experienced with HIVST were:

- Lack of standardized documentation tools for the distributed HIVST. To address this the project developed an ODK app that captures this information as a backup to the improvised tools such as provider black books.
- No guaranteed feedback mechanism for HIVST distributed for use at home or those that are meant for secondary distribution and use. The project devised and incorporated sections in the ODK app that captures the biographical details of the clients issued with HIVST, as well as the telephone numbers and link facilities for individuals picking the HIVST with an assumption that they can be reached for feedback. Only 44 percent (69 of 159) of the clients who picked HIVST provided feedback upon phone follow-up, of which 1 client reported a positive result, 1 an invalid report, and 42 reported negative HIVST results.
- No verification that the HIVST distributed to men for use away from the facility were actually used to establish status among males. The HIVST was meant to trigger testing among men and, subsequently, improve the male testing uptake.
- Insufficient follow-through mechanisms. One male client who reported a reactive result following unassisted HIVST at home has declined test confirmation at the facility. He is being followed up to confirm his HIV result and ensure subsequent enrollment in care if indeed HIV positive.

QA for HTS

During the reporting quarter, the project continued to support CHMTs and SCHMTs for QA in HTS through supportive supervision and capacity-building interventions, including mentorship and individual, observed sessions for HTS providers. The project also provided on-site mentorships, focusing more on high-volume and high-yield sites so as to ensure that HCWs upheld quality standards at all levels of service provision.

For accuracy of HIV testing, the project implemented a variety of QA activities, including use of standardized registers, use of standard operating procedures (SOPs), implementation of external Quality Assessment (QA) schemes through participation in proficiency testing (PT), extraction and analysis of data, and implementation of corrective and preventive actions (CAPA).

The project supported the online enrollment of HTS providers in round 18 of the proficiency test panels and accomplished sensitization sessions for HCWs on external QA around the new web-based PT system before participation in round 18.

From the preliminary results received for PT round 18, a total of 936 results were submitted to the National HIV Reference Laboratory (NHRL), of which 69 percent (648 of 936) were successfully submitted online, with the rest (288 of 936) submitted as hard copies. A total of 867 of the 936 results (93 percent) received satisfactory responses, with 69 (7 percent) receiving unsatisfactory responses. The project will follow up with the NHRL regarding the comprehensive Excel spreadsheet that has the detailed results for all those who participated in /received round 18 PT, including the response rate and the reasons for the unsatisfactory results for each of the unsatisfactory responses. This will support CAPA activity planning for all the affected providers. The results summary by county for round 18 of the PT submissions to the NHRL are presented in table 11.

Table 11. Round 18 of PT submission results.

County	# PT R18 Results Submitted Online	# PT R18 Results Submitted, Hard Copy	Total # PT R18 Submitted to NHRL	# PT with Satisfactory Responses	# PT with Unsatisfactory Responses
Homa Bay	102	34	136	130 (96%)	6
Kisii	47	23	70	56 (80%)	14
Kisumu	84	22	106	99 (93%)	7
Migori	161	58	219	210 (96%)	9
Nyamira	254	151	405	372 (92%)	33
Total	**648**	**288**	**936**	**867 (93%)**	**69**

Note: NHRL, National HIV Reference Laboratory; PT, proficiency testing; R, round.

Linkage of HIV-positive clients to care and treatment

The project continued using effective strategies to link newly diagnosed individuals who test HIV positive into care by addressing barriers at all levels. Immediate follow-up of clients not enrolled in care within 48 hours of HIV-positive diagnosis was instituted, with more intensive follow-up, including home visits, if not engaged in care within two weeks of a new HIV diagnosis.

The project adopted the use of the Master Facility Linkage Register (MFLR) in reporting linkages in all counties, using an electronic database that captures the elements in the MFLR. Other approaches that further improved linkages included:

- Escorted referrals from testing point to CCC for enrollment by peer navigators and/or clinical providers.
- Team approach to linkage, including monthly site linkage meetings to address nonlinked, newly identified positives in terms of who they are, and tracing efforts made to date.
- Support of specific subpopulations (e.g., adolescents and men, who often provide incomplete data during the linkage process or fail to attend clinical appointments due to stigma and other related barriers).
- Strengthening of interventions with favorable outcomes, like adequate peer support, and introducing newly identified clients to psychosocial support through the psychosocial support groups (PSSGs).
- Use of standby riders as part of the outreach teams who accompany the newly identified HIV-positive clients from outreaches, act as navigators at the facilities, and return them home. This ensures effective escorted referrals from community to facility settings.

The total number of HIV-positive clients from HTS entry points linked to care and treatment services was 8,485 (86 percent) of the total 9,815 positive clients identified during the reporting period.

HIV care and treatment

New treatment

The project supported treatment services in 222 sites in the reporting period. The number of clients newly initiated on treatment in the reporting quarter from July to September 2018 was 2,078, bringing the total number initiated as at the end of APR 2018 to 8,485 clients, against a COP17 target of 15,730, a 54 percent achievement. This was a linkage rate of 84 percent (2,078 of 2,463) in the reporting quarter and 86 percent (8,485 of 9,861) for the COP17 period. The new-on-treatment results are shown in table 12.

Table 12. The results of clients newly on ART, by county.

County	Target COP17	New Clients on ART Overall					
		Y1Q1	Y1Q2	Y1Q3	Y1Q4	Total by APR	% Achieved
Homa Bay	5,281	385	474	411	409	1,679	32%
Kisii	230	93	77	89	102	361	157%
Kisumu	979	409	401	446	433	1,689	173%
Migori	2,515	569	615	725	690	2,599	103%
Nyamira	6,725	535	590	588	444	2,157	32%
AFYA Ziwani	15,730	1,991	2,157	2,259	2,078	8,485	54%

Note: APR, annual program review; ART, antiretroviral therapy; COP, country operational plan; Q, quarter; Y, year.

The project achieved 55 percent (7,960 of 14,411) of the adult and 39 percent (525 of 1,336) of the pediatric COP17 targets. Across the counties, performance against COP17 targets as at September 2018 had Kisii at 157 percent, Kisumu at 173 percent, Homa Bay at 32 percent, Migori at 103 percent, and Nyamira at 32 percent. Factors affecting the Homa Bay and Nyamira performances include lower identification of new HIV positives with low positivity/yield of 1.0 percent and 0.6 percent, respectively. In Kisumu, the new HIV-positive identification target of 8,029 and new treatment initiation target of 994 are not in tandem, and this may contribute to the performance noted. Further, in Kisumu in the reporting quarter, six ART sites in Kisumu West transitioned to Afya Ziwani support from AMPATHPlus, and these additional sites contributed to an increase in overall performance this reporting quarter. The linkage of HIV positives to care are shown in table 13.

Table 13. Linkage of HIV-positive clients to care, by county.

County	HTS Positive	New on ART	% Linkage
Homa Bay	1,974	1,679	85
Kisii	373	361	97
Kisumu	2,055	1,689	82
Migori	3,120	2,599	83
Nyamira	2,339	2,157	92
AFYA Ziwani	9,861	8,485	86

Source: Ministry of Health (MOH) 731. Note: ART, antiretroviral therapy.

The project initiated 8,485 of the 9,861 clients who tested positive, translating to an aggregate linkage of 86 percent. Looking across the quarters, aggregate linkage was static, with Y1Q1 at 88 percent, Y1Q2 at 86 percent, Y1Q3 at 86 percent, and Y1Q4 at 86 percent. The aggregate linkage using MOH 731 reports is lower than the linkage reported using the MFLR, which shows very little missed opportunities in linkage, as shown in table 14 below.

Table 14. MFLR linkages data.

County	Declined		Died Before Enrollment		Known Positive in Care		Linked to an Afya Ziwani Facility		Linked to Other Facilities		Still on Follow-up for Linkage		**Total**
	#	%	#	%	#	%	#	%	#	%	#	%	
Homa Bay	2	0.1	3	0.2	10	0.7	1300	85.8	114	7.5	86	5.7	**1515**
Kisii	0	0.0	0	0.0	0	0.0	122	100.0	0	0.0	0	0.0	**122**
Kisumu	0	0.0	1	0.1	0	0.0	883	92.4	27	2.8	45	4.7	**956**
Migori	1	0.1	0	0.0	2	0.1	1305	86.7	39	2.6	158	10.5	**1505**
Nyamira	3	0.4	0	0.0	0	0.0	682	94.3	8	1.1	30	4.1	**723**
Total	**6**	**0.1**	**4**	**0.1**	**12**	**0.2**	**4292**	**89.0**	**188**	**3.9**	**319**	**6.6**	**4821**

Source: Facility records. Note: MFLR, Master Facility Linkage Register.

The linkage rate to project-supported sites is 89.0 percent and to other, non-project-supported sites is 3.9 percent, for an overall successful linkage rate of 92.9 percent using the MFLR. All counties reported over 90 percent linkage rates using the MFLR.

The project followed up with all the clients not yet linked, using peers as care navigators. The lower-than-expected linkage performance in Homa Bay, Kisumu, and Migori was due to attritions experienced in the more urban, high-volume facilities. The project has put in place mitigating measures, including daily monitoring of facility-level linkage and immediate follow-up of missed opportunities. This will be reviewed on a weekly basis at the program level.

The project will continue to implement accelerated activities to improve identification and subsequent initiation on ART in the following quarter. These include PNS in all testing points, with a focus of the Patient Support Center (PSC), tuberculosis (TB), and MCH clinics on engaging nonclinical HTS counselors in active screening of clients eligible for testing at all SDPs, leveraging HIVST to improve testing and strengthen test and treat implementation. The project will ensure continuous updating of the family information tab in all client green cards in patient files and linking those who turn positive.

The pediatric performance against COP17 targets had Kisii and Kisumu Counties on track, with 129 percent (22 of 17) and 143 percent (87 of 61) achievement, respectively. The other counties' achievements were below expected achievement, with Nyamira at 23 percent (113 of 497), Homa Bay at 24 percent (125of 515), and Migori at 72 percent (178 of 246). This could be due to effective PMTCT interventions in supported counties. The project will ensure all eligible children are tested through index client testing and testing optimization in pediatric SDPs. The pediatric new-on-treatment performance is shown in table 15.

Table 15. The results of pediatric clients newly on ART, by county.

New Pediatric Clients on ART							
County	**Target COP17**	**Y1Q1**	**Y1Q2**	**Y1Q3**	**Y1Q4**	**Total APR**	**% Achieved**
Homa Bay	515	25	51	27	22	125	24
Kisii	17	5	5	7	5	22	129
Kisumu	61	16	17	29	25	87	143
Migori	246	39	52	55	32	178	72
Nyamira	497	26	25	41	21	113	23
AFYA Ziwani	1336	111	150	159	105	525	39

Note: APR, annual program review; ART, antiretroviral therapy; COP, country operational plan; Q, quarter.

Treatment Data Quality Audits

In the reporting quarter, a national DQA was done comprising NASCOP and HIV care-and-treatment mechanisms—USAID, the US Centers for Disease Control and Prevention (CDC), and the (Department of Defence (DOD). The DQA was conducted in 14 Afya Ziwani care-and-treatment sites—4 in Migori, 1 in Homa Bay, 1 in Kisumu, 1 in Kisii, and 7 in Nyamira. The objectives of the DQA were to assess the quality of reported data for selected indicators, including newly enrolled clients on ART (TX_NEW) and current clients on ART (TX_CURR). Findings from the DQA were used to inform program area–specific support supervision and follow-up; data documentation reviews and reporting.

To ensure complete reporting and quality data during the reporting period, the project supported site-level DQAs to check consistency of data in the registers and new MOH 731 and quarterly data-review meetings at the subcounty level to discuss site- and subcounty-level performance. All these interventions—

augmented by targeted on-site mentorship, continuing medical education (CME), and OJT for HCWs in the facilities—contributed to improved HCW understanding on use of the HIV reporting tools and understanding of indicators. The project also supported the high-volume sites with health records and information officers (HRIOs) to assist in facility data management and with county-based data clerks to support nonroutine data management, such as test and treat and differentiated care components.

Currently on treatment

In the period from July to September 2018, the project reported the number of clients currently on ART at 50,501, against a COP17 target of 62,594, representing an achievement of 81 percent. The project achieved 81 percent (46,538 of 57,259) of adult COP17 targets and 73 percent (3,963 of 5,417) of pediatric COP17 targets. In the same reporting period, the project started from a baseline of 51,515 (current ART in June 2018) and reported 2,078 new ART enrollments, giving an expected current ART of 53,593. Against this, a current ART of 50,501 was achieved in September 2018, indicating a crude retention rate of 94 percent (50,501 of 53,593). Table 16 shows the current ART achievement.

Table 16. Current ART achievements, by county.

Current ART Achievement						
County	**Target COP17**	**Q1**	**Q2**	**Q3**	**Q4**	**% Achieved**
Homa Bay	19,734	13,691	13,819	14,027	14,224	72
Kisii	2,319	2,021	2,030	2,080	2,121	91
Kisumu	4,125	6,974	7,320	7,983	7,905	192
Migori	15,730	13,226	13,491	13,888	13,232	84
Nyamira	20,686	13,207	13,264	13,667	13,019	63
Afya Ziwani	62,594	49,119	49,924	51,645	50,501	81

Note: ART, antiretroviral therapy; COP, country operational plan; Q, quarter.

The county-specific performance for the reporting period had Homa Bay at 72 percent, Kisii at 91 percent, Kisumu at 192 percent, Migori at 84 percent, and Nyamira at 63 percent against expected COP17 targets. Kisumu had over 100 percent achievement, and this was because the COP17 target of 4,189 was relatively low at 40 percent, less than the COP16 target. The project, during the reporting period in Kisumu, received an additional six treatment sites in Kisumu West Subcounty, transitioned from AMPATHPlus support, and this contributed an additional current ART of 521. This in turn led to the overachievement on this indicator for Kisumu vis-à-vis the COP17 target.

Homa Bay and Nyamira Counties had the lowest achievement at 72 percent and 63 percent, respectively, of expected COP17 targets for current ART. This was attributed to the low yield in HIV positives in both counties, and in Nyamira, the prolonged HCW industrial action over most of the reporting period also contributed.

Homa Bay had a deficit of 5,510 to meet the overall COP17 target of 19,734. The county was allocated a new COP17 treatment target of 5,281, with an expected new treatment enrollment of 1,320 every quarter. In this reporting period, the new-to-treatment achievement was 409 (31 percent of the expected quarterly enrollment), a reflection of the low number of newly identified HIV positives, evident from the low positivity of about 1 percent. The overall COP17 target set for Homa Bay was not in tandem with the new treatment enrollment target and was further complicated by the low yield of newly identified HIV-positive individuals.

In this reporting period, the pediatric performance was 73 percent (3,963), against the COP17 target of 5,417. The current ART performance by county for pediatric clients had Kisii at 99 percent and Kisumu at more than 100 percent, while Homa Bay was at 62 percent (1,200 of 1,923), Migori at 70 percent (1,084 of 1,541), and Nyamira at 64 percent (979 of 1,527) against COP17 pediatric targets. The overachievement in Kisii and Kisumu could be attributed to the modest COP17 targets. Table 17 shows a breakdown of these achievements.

Table 17. Achievement of pediatric clients currently on ART.

Current ART Achievement of Pediatric Clients						
County	**Target COP17**	**Y1Q1**	**Y1 Q2**	**Y1 Q3**	**Y1 Q4**	**% Achieved**
Homa Bay	1,923	1,199	1,235	1,225	1,200	62
Kisumu	170	188	170	177	169	99
Migori	256	502	506	445	531	207
Kisii	1,541	1,277	1,138	1,167	1,084	70
Nyamira	1,527	1,192	1,148	1,179	979	64%
AFYA Ziwani	5,417	4,358	4,197	4,193	3,963	73%

Note: ART, antiretroviral therapy; COP, country operational plan; Q, quarter; Y, year.

Retention

The APR 2018 reporting period—beginning with a baseline of 49,245 as at September 2017, plus a total of 8,485 new ART clients who were initiated on ART in the last 12 months and 1,387 who transferred in for the period—gives an expected current ART of 59,117. The actual current ART reported is 50,501. The overall net loss for the APR 2018 period is 8,616. This translates to a net gain of 13 percent (with absolute gain of 1,256). In characterization of the losses, 31 percent was due to data reconstruction over the COP17 period, 24 percent to defaulters, 19 percent to those lost to follow-up (LTFU), 18 percent to those who transferred out, and 7 percent to mortalities, as highlighted in table 18.

Table 18. Accounting of net losses, October 2017 to September 2018.

Transferred Out	**LTFU**	**Death**	**Defaulters**	**Data Reconstruction**	**Total Accounted-for Losses**
1562	1,647	612	2,078	2,608	8,507
18%	19%	7%	24%	31%	99%

Note: LTFU, lost to follow-up.

Data reconstruction and defaulters accounted for 55 percent of the losses. Moving forward the project does not expect significant changes due to data reconstruction. This is because of better understanding of the indicator definitions, how to properly collect and record the data in the Daily Activity Register (DAR) by all sites. In addition, more sites are using electronic medical records (EMRs) for patient management and reporting, which is more accurate. The net gain on current ART by counties is shown in table 19.

Table 19. Current ART net gain by county.

County	FY17Q4 Current On ART	Total New ART	Transfer Ins	Expected Gain	Expected Current on ART Sept 2018	Actual Current ART Sept 2018	Actual Gain Sept 2018	Loss Sept 2018
Homa Bay	13665	1679	412	2091	15756	14224	559	–1532
Kisii	1981	361	20	381	2362	2121	140	–241
Kisumu	7545	1689	382	2071	9616	7905	360	–1711
Migori	12999	2599	390	2989	15988	13232	233	–2756
Nyamira	13055	2157	183	2340	15395	13019	-36	–2376
TOTALS	**49245**	**8485**	**1387**	9872	**59117**	**50501**	1256	–**8616**

Note: ART, antiretroviral therapy; FY, fiscal year; Q, quarter.

Across the counties, performance on the net number of those newly on treatment had Kisii at 39 percent (140 of 381), Kisumu at 22 percent (360 of 2,071), Homa Bay at 33 percent (559 of 2,091), Migori at 9 percent (233 of 2,989) and Nyamira at –2 percent (–36 of 2,340). For the project overall, the net number for those new to treatment for the COP17 period was 13 percent (1,256 of 9,872).

In Nyamira County, health facilities were closed for up to two months (July and August 2018) in the reporting period, during the HCW strike. This adversely affected upwards of 60 percent of the project sites which do not have project-supported HRH, who were able to provide refills at affected facilities during the MOH HCW strike. The strike led to an increase in missed clinical appointments and defaulters in the facilities, as well as poor documentation of registers. To ensure continuity of services, clients were referred to nearby supported sites to receive their antiretroviral (ARV) refills. The County Public Service Board (CPSB) recruited new clinical staff in Nyamira in September 2018, with most of the already-engaged experienced staff being replaced, leading to additional service interruption, especially in the high-volume sites. To ensure the project continues to offer high-quality HIV services, a seamless transition plan for the staff has been put in place and is being implemented to ensure overall improvement in service delivery.

For the ART 12-month cohort retention during the reporting period, the project reported a 12-month retention of 88 percent. Of the net ART cohort of 7,170, 6,296 were still active as at APR 2018. Across the counties, performance against COP17 targets as at September 2018 had Kisii at 88 percent (362 of 412), Kisumu at 80 percent (1,258 of 1,573), Homa Bay at 85 percent (1,321 of 1,556), Migori at 95 percent (1,879 of 1,973), and Nyamira at 89 percent (1,476 of 1,656), as shown in table 20.

Table 20. 12-month retention.

County	Alive and Active on ART Sept 2018	Net ART Cohort	% Retention
Homa Bay	1,321	1,556	85
Kisii	362	412	88
Kisumu	1,258	1,573	80
Migori	1,879	1,973	95
Nyamira	1,476	1,656	89
Total	**6,296**	**7,170**	88

Source: Ministry of Health (MOH) 731. Note: ART, antiretroviral therapy.

The lower-than-expected performance for Kisumu can be attributed to the urban setting of most of the supported health facilities, including the largest-volume project-supported facility, Migosi Health Centre. Different strategies have been put in place, among them greater use of CHVs to trace defaulters and the use of short message service (SMS) appointment reminders, in addition to the retention strategies highlighted earlier.

The project has focused on implementing a structured system to maintain retention along the HIV care cascade. This system includes structured patient education/preparation for lifelong chronic care and self-management; counseling and adherence support for clients at different time points and for different circumstances; a patient tracking system that incorporates missed appointment management; and patient case management provided to priority patients at risk of attrition. Patients at high risk of loss to care include the very ill, newly diagnosed individuals, children, adolescents, pregnant and breastfeeding women, young men, and key populations.

To enhance outcomes, the project has defined and put in place structured processes that help improve patient tracking, monitoring, and follow-up. These include appointment diaries, defaulter-tracing registers, contact tracing forms, SMS and call logs, and home visit forms. The project has hired 54 adherence counselors to support counseling service provision in the HIV clinics and 337 PEs who are HIV-positive expert patients similar to CHVs who follow up with clients at the community level. Together these form the pool of program case managers, and they receive continuous support and mentorship from Afya Ziwani technical personnel. Further, support group meetings are held in facilities for various patient populations to strengthen adherence strategy and reduce attrition. The project will continue to explore more innovative approaches to ensure 100 percent of patients in care and receiving ART stay engaged.

Interventions implemented by the project to improve retention include:

- Strengthening the documentation across all sites and ensuring complete documentation and concordance in the DAR, appointment diary, and EMRs.
- Developing an EMR system (Program Reporting Information Management System [PRISM]) that assists the technical team in monitoring program outcomes and retention. This will complement the rollout of the KenyaEMR paperless operations at high-volume sites to improve on documentation and overall retention.
- Using the ART dispensing tool (ADT) as another important tool in monitoring appointment compliance and retention.
- Hiring additional adherence counselors to beef up and support counseling service provision in the HIV clinics, plus building capacity for adherence counselors and peer mentors through continuous mentorship, quarterly meetings, and training.
- Reviewing continually the adherence processes with the aim of improving patient preparation and routine adherence. This includes shorter appointment periods for clients with adherence problems and change in the client flow to prioritize new and sick clients for case management.
- Strengthening mentorship and support supervision of facility- and community-based adherence-support counselors and standardizing adherence support across the supported sites.
- Continuing mentorship on adherence support for viremia clients (in both CCC and PMTCT/MCH clinics), pediatric clients, and adolescents.
- Increasing the availability of more male clinics and men-only support groups.
- Using patient characterization data to better identify future clients most at risk of defaulting and developing a more aggressive follow-up system through individualized care, including a case management approach, phone and SMS reminders, and enhanced adherence.
- Initiating flexible clinic appointment days during weekend and pediatric/adolescent/male clinics, family appointment days, SMS reminders for appointment keeping and medication adherence, support group meetings, Directly Observed Treatment (DOT) for clients with identified adherence challenges, and a treatment supporter ("buddy") system.
- Incorporating quality improvement (QI) activities in facilities with suboptimal linkage rates, retention, and viral suppression.
- Implementing a case management model for all newly enrolled clients and transfer-ins to improve linkage and retention.
- Implementing a more robust data-review system on sites, with monthly cohort review of retention and more aggressive follow-up of defaulters.
- Continuing to follow up with all LTFU patients for the past 12 months and documenting tracing outcomes, including characterization of LTFU patients. The documentation and data generated will inform interventions for improved quality-of-service provision and retention.
- Developing and rolling out site-level exit interviews that will inform facility-level service delivery improvement.
- Dedicating the last few days of the month for intensive defaulter tracing and updating DAR for accurate reporting of retention.
- Providing a comprehensive package of care for all enrolled clients.

Longitudinal follow-up of clients in chronic care, such as those with HIV, in urban settings is challenging. This is due to the frequent movement of clients from one area to another in search of employment and the multiplicity of HIV clinics, all within close proximity to clients, making it easy for them to transfer to other clinics without informing their current provider/facility. This is compounded by the lack of a unique identifier system to establish self-transferred patients. Poorly defined community structures and support systems make it harder to effect follow-up. In some instances, inaccurate locator information, as provided by the newly enrolled clients on treatment, makes it difficult to conduct physical tracing. Together with the MOH, the project is working toward a retention strategy specific to facilities in the urban setting to mitigate some of the challenges specific to urban areas.

Adherence support

Adherence support is key to improving retention. The project has engaged 54 counselors who assist in the adherence and monitoring of clients on treatment. The program will hire additional adherence counselors to beef up and support counseling service provision in the HIV clinics. The counselors provide ART literacy sessions for newly enrolled clients, health education, age-specific adherence counseling for all clients, and adherence messages for clients who have been in care for longer periods. They also monitor adherence using tools such as Morisky 4 and 8 and perform mental health assessments through the Patient Health Questionnaire-9. In addition, they provide enhanced adherence sessions for STF patients. Finally, they act as treatment supports to clients with disclosure problems and case managers to new clients.

The project supported 337 PEs who deployed at the facility and community levels. They are allocated several roles/tasks, including strengthening defaulter management and engaging in priority home visits. Ongoing support for community meetings and support group sessions was provided during this period to discuss community linkage and support.

Care for HIV-infected children and adolescents

Children and adolescents engage suboptimally in care, which impacts their overall treatment outcomes. There are several reasons for this, including individual challenges around accepting their HIV status; lifestyle changes, including sexuality awareness; living conditions, such as boarding schools; dependency on caregivers (for children); and general, unstructured care transition from pediatric to adult care with no attention to adolescents' unique needs. Patients diagnosed with HIV in adolescence appear to have worse outcomes than children transitioning through PMTCT to HIV care/ART. As children and adolescents age, disclosure remains a challenge, with associated fear and concerns on the part of parents and guardians and limited capacity in counseling skills among HCWs. There continues to be a great need to better characterize the challenges of these patient groups and respond better to their peculiar situations.

To meet the needs of this group, the project supports and strengthens pediatric and adolescent services through a variety of interventions. These include training, mentoring, and on-the-job coaching for clinicians, adherence counselors, and peer mentors / case managers on how to address adolescents' unique needs; streamlining peer mentorship / case management support; and promoting use of data to identify critical gaps in adolescent care continuum.

All project-supported HIV clinics have dedicated pediatric and adolescent clinic days, as well as PSSGs for children, adolescents, and their caregivers. Roles and responsibilities of each multidisciplinary team member providing services to children and adolescents are clearly defined and are understood. Additional services offered to adolescents include TB screening and treatment of latent TB infection / isoniazid preventive therapy (IPT), screening and treatment of opportunistic infections, adherence counseling,

psychosocial support, reproductive health, including family planning (FP) advice, PHDP for sexually active adolescents, and nutritional assessment and counseling. Mental health assessments using the Patient Health Questionnaire-9 form and alcohol/drug abuse assessment using the CRAFFT tool are integrated into services offered on adolescent clinic days. The Operation Triple Zero (OTZ) intervention has been rolled out at 78 sites. It focuses on adolescents and youth 10 to 25 years old and emphasizes commitment to zero missed appointments, zero missed drugs, and zero (undetectable) viral load (VL), which translates to optimal clinical outcomes. Currently there are 4,712 adolescents enrolled in OTZ (50 percent enrollment), with 3,019 accessing a recent VL and 88 percent (2,659) suppressed, as shown in table 21 below.

Table 21. Operation Triple Zero (OTZ) outcomes.

	10–14 Years		15–19 Years		20–24 Years		
	Male	Female	Male	Female	Male	Female	Total
Adolescents Currently on ART	1616	1839	935	1523	784	2733	9430
Enrolled in OTZ	1070	1294	693	1066	171	418	4712
Number Viral Load Done	662	827	502	708	104	216	3019
Number Suppressed	562	739	434	612	97	215	2659
Suppression (%)	85	89	86	86	93	100	88

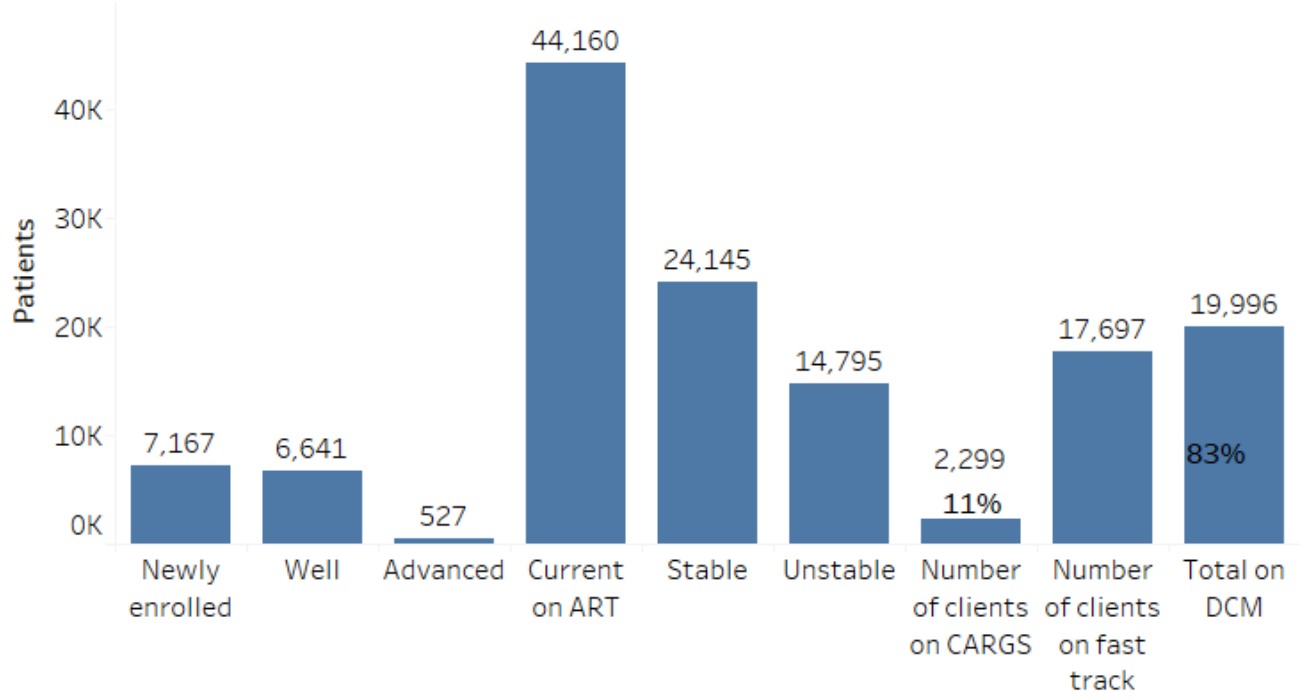
Source: Facility records uploaded into PRISM. Note: ART, antiretroviral therapy.

The project continues to focus on pediatric and adolescent adherence support through a peer-to-peer buddy support system, targeted adolescent literacy session on HIV self-management, and DOTs for adolescents with identified adherence challenges. In addition, it supports a case management approach for pediatric clients and adolescents with adherence issues and follow-up of adolescents in boarding schools through support of teacher champions. The project worked with facility teams on appointment management harmonization to accommodate school calendars and minimize missed appointments.

Differentiated models of care

The project supported implementation of differentiated care for eligible clients on ART for both facility fast track and community ARV refill groups (CARGs). Based on program data analyzed, out of the 222 supported sites, 122 (55 percent) are implementing differentiated care with planned scale-up to 80 percent of the sites in the next quarter. The project supported 122 sites in the five counties with an eligible 44,160 current ART. Of these, 24,145 (55 percent) were stable and thus eligible for differentiated care, in which 19,996 of them (81 percent) are enrolled. A total of 17,264 (88 percent) are enrolled in facility fast track and 2,299 (12 percent) in community ART refill groups. The project will continue to strengthen uptake, with a focus on CARGs uptake, and monitor outcomes of differentiated care. Figure 2 shows the results breakdown of differentiated care.

Figure 2. Differentiated care cascade.



Source: Facility records, including Daily Activity Register.
Note: ART, antiretroviral therapy; CARG, community ARV refill group; DCM, differentiated care model.

Positive Health Dignity and Prevention (PHDP) interventions

During the reporting period, the facilities continued to form and/or strengthen PSSGs at both community and facility levels. Key to note is that the program also encouraged the formation of men-only support groups at 154 sites. The HCWs and PEs use the PSSGs as vehicles for disseminating key PHDP messages, which were aimed at enhancing the members' adherence to appointments and ART and helping them to cope with the HIV infection. The project supported HCWs, PEs' transport logistics, airtime, and stipends during their engagement with PSSGs and provided refreshments for PSSG members during meetings.

The enrollment of people living with HIV (PLHIV) in the PSSGs as at September 2018 is shown in table 22 below.

Table 22. PLHIV Enrollment in PSSGs as at September 2018.

Support group	# Clients attending treatment-literacy classes	# PLHIV enrolled in PSSGS	# Eligible for viral load	# Suppressed	% Suppression
Men-only support groups	208	478	478	455	95
PMTCT support groups	1005	2289	2289	2289	100
STF support groups	933	1783	1783	546	31
Posttest clubs	1934	3383	3383	3533	96
Pediatrics support groups	595	1372	1372	1150	84
Adolescents support groups	3686	4712	3019	2659	88
Discordant couples	217	431	405	405	94
Total	8578	14448	12729	11037	87

Source: Facility records, including peer educators' logs.
Note: PLHIV, people living with HIV; PMTCT, prevention of mother-to-child transmission; PSSG, psychosocial support group; STF, suspected treatment failure.

The viral suppression among clients attending PSSGs is 87 percent. Considering that the focus of the facility support groups is on clients considered to be at high risk, the suppression is good; however, with more intense support, especially among the STFs, this will improve even more.

The overall enrollment into PSSGs is low (29 percent of current ART cohort). The project will employ the following strategies to improve on this:

- Engage PEs to act as champions in enrolling clients into PSSGs.
- Capacity build PEs to ensure they understand the benefits of PLHIV enrollment into PSSGs.
- Encourage facilities to take up enrollment of clients in PSSGs as a QI project with specific targets and timelines.
- Facilitate all new clients attending treatment-literacy classes on discharge to be attached to a relevant support group.
- Advertise PSSGs in the facility (visible contact numbers of various support group organizers, the meeting time, duration, and venues).
- Include in health talks the benefits of attending support groups.
- Use a multidisciplinary team (MDT) approach in referring clients for PSSGs, p
- Provide clients with a brief insight into what peer support means and how it might be of benefit.
- Disseminate information about the groups to key community organizations.
- Create a referral directory for community support and services.
- Link PSSGs to Income Generating Activities (IGAs) organizations, such as civil society organizations, for meaningful involvement and to encourage enrollment.

All these will be implemented with a target of achieving 50 percent enrollment in PSSGs by the semiannual program review for 2019. Community PSSGs have improved retention and defaulter tracing and have eased the formation and running of CARGs.

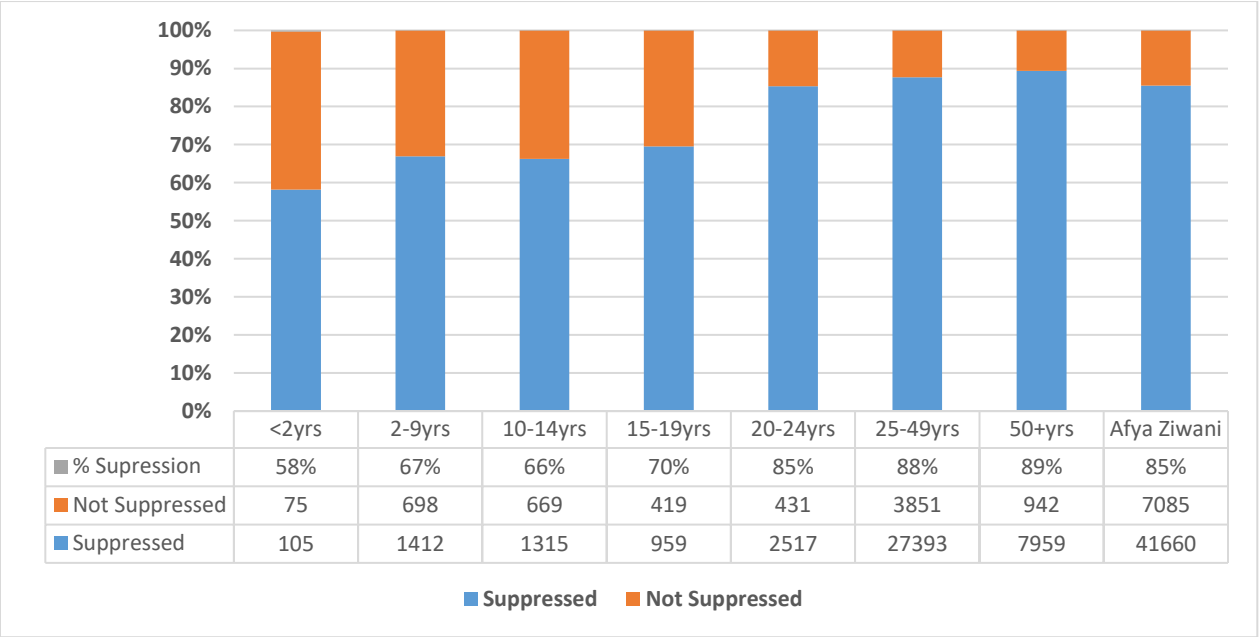
Pediatric and adolescent suppression is being addressed through strengthened adherence and disclosure counseling, enrollment in pediatric psychosocial groups, working with trained providers on pediatric HIV services, and scale up of OTZ clubs to reach all adolescents supported by the project. Available data show improved suppression among adolescents enrolled in OTZ clubs. The project will work to scale up viremia clinics.

Treatment of PLVLS

The project supported VL sample networks in the five supported counties, working with 14 subhubs linked to the four central testing laboratories: AMPATH, Kenya Medical Research Institute (KEMRI) Alupe, Walter Reed Kericho, and Kisian Kisumu. VL data were obtained from the national Lab Information System–NASCOP dashboard.

Overall suppression at reporting stood at 85 percent (from Oct 2017 to September 2018). This is a significant improvement from the suppression recorded in COP16 of 79 percent. Disaggregated by age, viral suppression was highest in the aged-25-years-and-older cohort at 88 percent and lowest among the cohort of adolescents aged 10 to 14 years old at 69 percent. Across gender, suppression rates were 84 percent for males and 87 percent for females. Figure 3 summarizes suppression results by age.

Figure 3. Overall suppression by age.

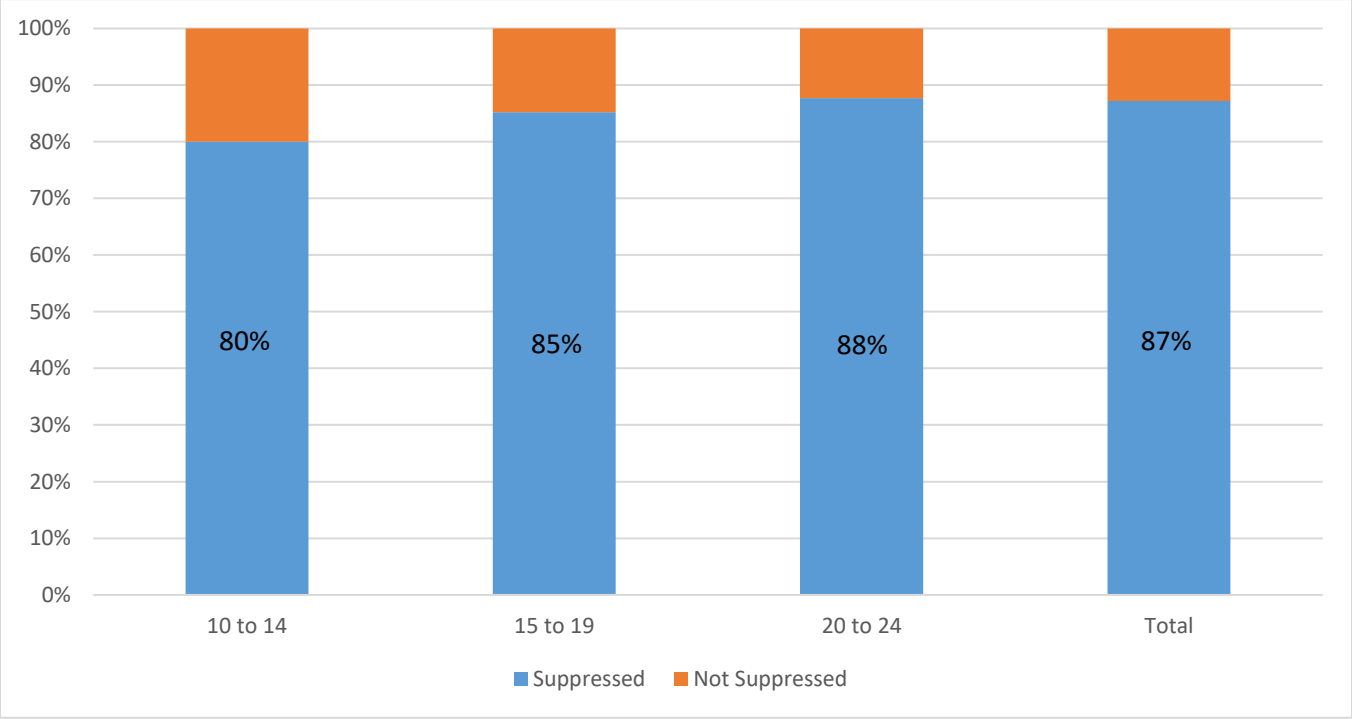


	<2yrs	2-9yrs	10-14yrs	15-19yrs	20-24yrs	25-49yrs	50+yrs	Afya Ziwani
% Supression	58%	67%	66%	70%	85%	88%	89%	85%
Not Suppressed	75	698	669	419	431	3851	942	7085
Suppressed	105	1412	1315	959	2517	27393	7959	41660

The adults were better suppressed than were the adolescent and pediatric age groups across counties. Suppression of the pediatric and adolescent cohorts is being addressed, as noted above under PHDP interventions.

For the PMTCT AGYW subgroup, viral suppression by age cohort is shown in figure 4 below.

Figure 4. PMTCT AGYW viral suppression by age group.



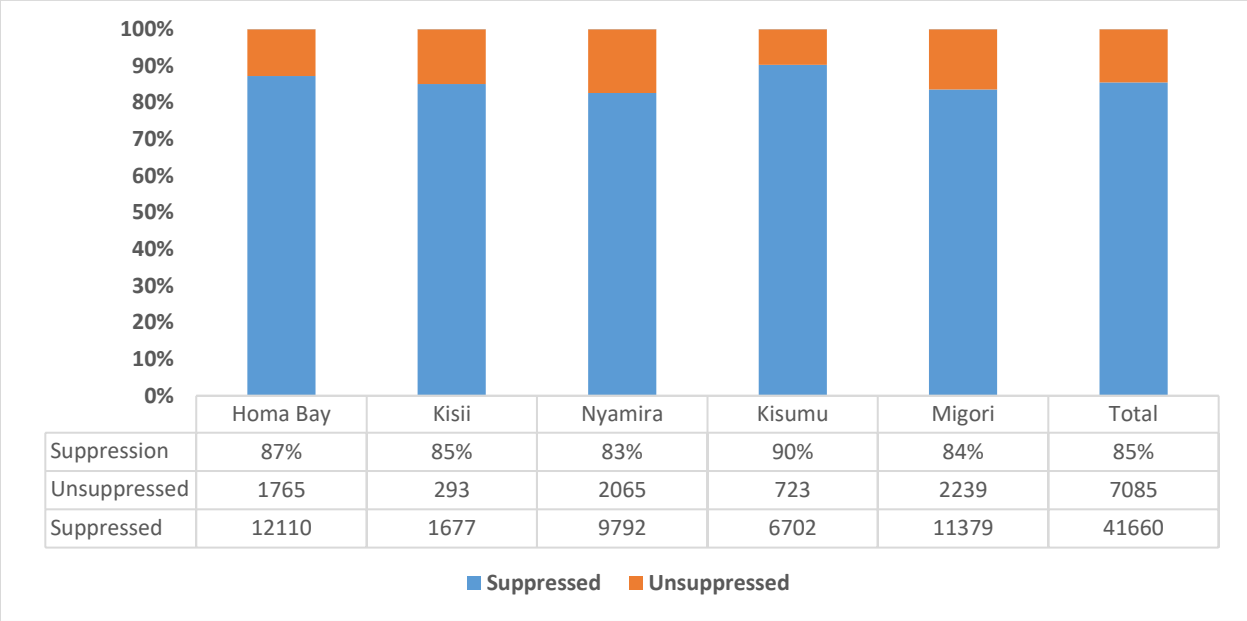
Note: AGYW, adolescent girls and young women; PMTCT, prevention of mother-to-child transmission.

The suppression among the pregnant and breastfeeding AGYW was better than the overall suppression among the AGYW at 79 percent. This could be due to the closer follow-up of pregnant and breastfeeding women. The project will leverage on the DREAMS interventions, such as Sister to Sister, as well as scaling up OTZ clubs to improve outcomes in this age group.

The project will work to strengthen the viremia clinics by having targeted viremia clinics for pediatrics, adolescents, pregnant women, and males. PSSGs for high-VL clients continue to be supported in all high- and medium-volume sites. The project will also continue to optimize highly active antiretroviral therapy, especially in pediatric clients and adolescents, in line with the new guidelines though regular chart reviews. Rollout of dolutegravir (DTG), as per the new guidelines, will also be accelerated. The project will more closely follow up on suppressed clients with detectable VLs (who account for approximately 8 percent of the suppressed clients) by managing them like STF clients. This is because they have been shown to be at a higher risk of progression to treatment failure compared to fully suppressed clients.

The overall county-specific suppression for the same period had Homa Bay at 87 percent, Kisii at 85 percent, Kisumu at 90 percent, Migori at 84 percent, and Nyamira at 83 percent, as shown in figure 5 below.

Figure 5. Suppression by county.



	Homa Bay	Kisii	Nyamira	Kisumu	Migori	Total
Suppression	87%	85%	83%	90%	84%	85%
Unsuppressed	1765	293	2065	723	2239	7085
Suppressed	12110	1677	9792	6702	11379	41660

The project has further identified the sites with particularly low suppression rates to provide more support. The project is undertaking facility-level VL QI collaborative activities that are looking at the processes in management of STF. This will improve management of treatment-failure clients and standardize best practices across the program.

Laboratory support

The project continued to provide support for project sites working with central testing laboratories—namely, KEMRI Alupe-(Busia), KEMRI/ CDC (Kisian), and the Walter Reed Program (WRP), Kericho.

Capacity-building

During the reporting period, the project supported a five-day biosafety training toward infection prevention and control (IPC) support for Kisumu County sites, reaching 25 laboratory staff. Biosafety annual refresher trainings were held for 13 sample riders and 57 HCWs. The project supported the riders with branded cooler boxes. Biosafety trainings have greatly improved on facility waste management and have aided in the reduction of occupational injuries.

An external QA meeting for HCWs was done in preparation for round 18 of the HIV PT. This was coupled with CAPA sensitization in the event of unsatisfactory results. This has seen a marked improvement in round 18 PT performance, which is at 93 percent satisfactory results compared to 75 percent satisfactory results in round 17 for the results received to date.

The project, in collaboration with AMPATH, rolled out the SMS alerts for VL/EID results for clients. It identified 12 sites as pilot sites and sensitized 14 project program officers. So far, 546 have received an SMS alert, of whom 353 have come to the facility for follow-up test results. The average turnaround time

(TAT) for those who came back after receiving SMS is seven days. This is an improvement from the previous month, which had a TAT of over two weeks, and this is expected to improve management of STF clients. The project collaborated with Population Services Kenya (PSK) to improve the subhubs as a means of scaling up VL uptake and suppression. PSK identified six high-volume subhubs which will receive computers, printers, uninterrupted power supply (UPS) and internet modems to ensure optimal operation for logging in and tracking VL sample results.

The project continues to work closely with Global Implementation Solutions (GIS) and Family Health International (FHI360) to implement the Laboratory Quality Management System and Strengthening Laboratory Management Toward Accreditation. Six laboratories are undergoing accreditation (Awendo Sub-County Hospital [SCH], Rachuonyo SCH, Nyamira County Referral Hospital [CRH], Manga SCH, Gesusu SCH, and Keroka SCH). The Africa Society of Laboratory Medicine has earmarked Keroka SCH for an external audit in November 2018. The rest are implementing continuous quality improvement (CQI) initiatives in readiness for the external audit. To enhance CQI, the project has supported capacity-building through mentorship, OJT, provision of job aids, and SOPs, all with a view toward enhancing self-centered learning and equipment maintenance. The project supported equipment-maintenance service contracts for five GeneXpert machines and one hematology machine. This has greatly improved quality of results being produced as evidenced by all the five GeneXpert sites getting satisfactory results in the national GeneXpert external quality assessment program, as well as reducing downtime.

Working closely with the Elizabeth Glaser Pediatric AIDS Foundation, an additional point of care (POC) for EID has been placed in Kabondo SCH, making it four EID POC machines in the project area. The four POC machines are serving 91 EID sites. The TAT is one day for the spoke facilities and one hour for the hubs. The project has also continued to work with KEMSA to ensure consumables, such dried blood spot filter papers and plasma preparation tubes, and reagents, such as GeneXpert cartridges and HIV rapid test kits (RTKs), are available. The project has not reported any stockouts on these commodities.

Lab networking for cluster of differentiation 4 (CD4), VL, EID, and GeneXpert samples

CD4 testing

The project continued to support 12 CD4 nodal testing sites across the five counties. In the reporting period, 1,101 baseline CD4 samples were done, against 2,078 clients newly enrolled into care, translating to 53 percent coverage. This is a marked improvement from the previous quarters and is due to increased availability of reagents. The project plans to improve on this, aiming for all new clients to get a baseline CD4 test.

Rider Led Sample Network (RLSN)

The project supports the RLSN to move samples through the hub-and-spoke model. Through project support, motorcycle riders are used to collect samples at all facilities and on a schedule. They are provided with the requisite biosafety training, and branded cooler boxes to ferry samples.

VL/EID remote login best practice

"Remote log in, greatly improves viral and EID access, TAT and reduces documentation errors!"

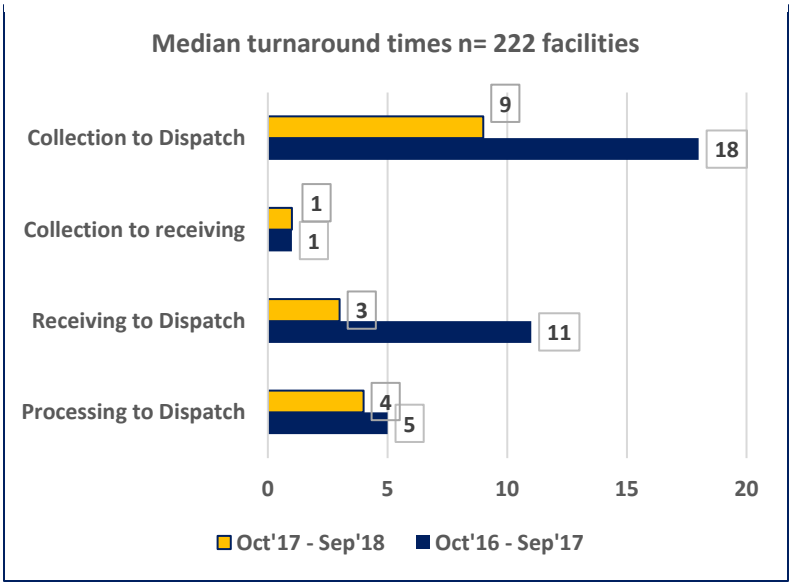
---PATH/Catherine Bonde

Rachuonyo District Hospital lab staff member receiving samples at the central lab. Photo: PATH/Catherine Bonde

The Afya Ziwani project has 222 ART facilities, with 50,501 HIV clients currently on ART and requiring access to VL testing, as per the national guidelines. In the period from October 2016 to September 2017, VL tests were sent to the central testing lab through the subhub, where both electronic data entry and processing of the samples were carried out. This resulted in several challenges, such as the high workload in data entry at the central testing lab, delayed intervention due to prolonged TAT, and increased documentation errors. The time taken from sample collection to dispatch used to take a median of 18 days (IQR 12 to 22 days). This led to patients having multiple results after clinicians resolved to have repeat samples taken. Patients also registered disappointment over missing results.

There was a need to reduce the TATs and the documentation errors. In October 2017, the project, in collaboration with county partners and other LIPs, such as KEMRI Kisian, AMPATH, and KEMRI Alupe, developed a system for remote electronic filing of VL and EID patient request forms which were then submitted to the central testing labs through a specified testing lab link. The link allows the user to view the status of the sample whether or not the lab was still processing the sample. The system allows retrieval, downloading, and printing of results, in addition to generating of reports.

Figure 6. Median turnaround times for remote VL testing.



Successful remote login entailed identifying a central site which would act as the subhub, and then mapping sites to specific facilities (spokes) where samples would be brought in for remote login and subsequent transportation to the central testing (hub) lab. It started with two subhubs serving 16 facilities in Homa Bay County which had a 7.6 percent coverage. Since then the project has scaled up to 14 subhubs serving 203 facilities, a 97 percent

coverage. This is shown in figure 6. The project has invested in HRH placement at subhubs, the staff of which will then perform the remote logins. The project also supported computers and internet bundles to access the link, printing papers and toners for printing individual results, and training for the HRH on utilization of remote login. Since its rollout, the overall TAT has reduced significantly from a median of 18 days (IQR 12 to 22) to 9 days (IQR 8 to 10). Documentation also has greatly improved, as seen in the reduced quantum of missing data. The subhubs, with reduced sample TAT and improved lab-request documentation, contributed to improvement in the project's viral suppression to 85 percent in APR 2018, up from 79 percent in APR 2017.

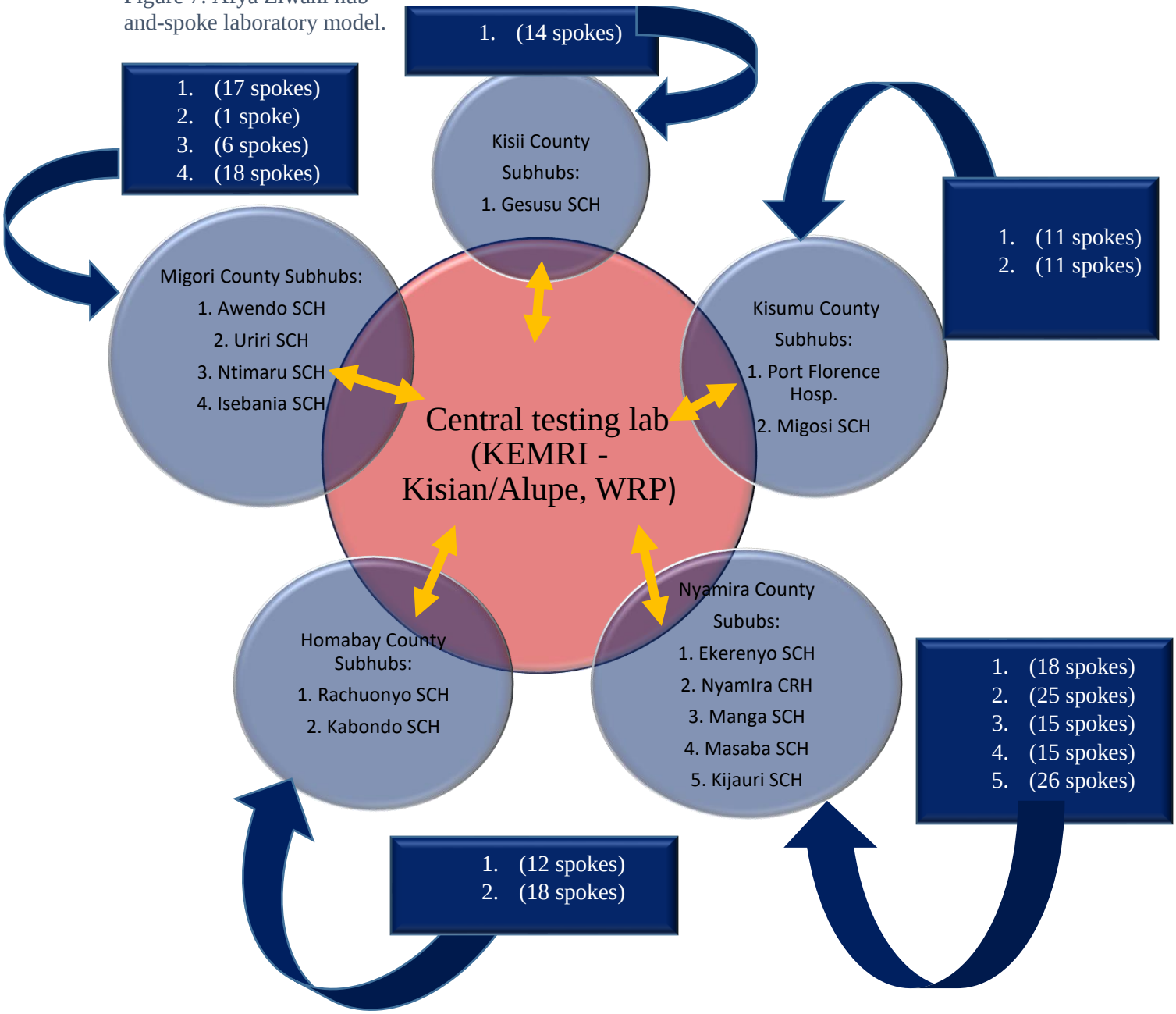
During implementation, some of the challenges identified included:

- Frequent power surges and blackouts, especially in Migori.
- Poor network coverage at some sites, with resultant delayed uploads.
- Inadequate number of printers and computers for optimization of subhubs.

The project, working with PSK, is mitigating some of the challenges outlined through strengthening of subhubs through the provision of computers, printers, UPS, and telecom modems.

The project-supported hub-and-spoke model is shown here below in figure 7.

Figure 7. Afya Ziwani hub-and-spoke laboratory model.



Notes: CRH, county referral hospital; KEMRI, Kenya Medical Research Institute; SCH, subcounty hospital; WRP, Walter Reed Program.

TB–HIV coinfection services

The implementation of TB–HIV services in all the 222 supported sites were conducted through continued provision of DSD with a focus on various capacity-building initiatives, which included sensitization of HCWs, mentorship, facility CME, joint supportive supervision, and performance-review meetings to improve on the testing of TB cases for HIV.

Key TB–HIV performance indicators for COP17 are shown in table 23 below.

Table 23. Key TB–HIV performance indicators for COP17.

TB–HIV performance indicators	COP17 Targets	Y1Q1	Y1Q2	Y1Q3	Y1Q4	Total
Number of TB cases registered	1,961	401	399	516	446	1,762
Number of TB patients who were counseled, were tested for HIV, and received results	1,897	395	391	505	433	1,724
Proportion counseled and tested for HIV and received results against COP17 targets		99%	98%	98%	97%	98%
Number of HIV-infected TB patients	839	174	172	207	166	709
Proportion of TB–HIV coinfection		44%	44%	41%	38%	41%
Number of HIV-infected TB patients on cotrimoxazole		172	160	203	159	694
Number of HIV-infected TB patients on ARVs	835	166	168	200	155	689
Proportion of HIV-infected TB patients on ARVs against COP17		95%	98%	97%	93%	97%
Number of HIV-positive clients screened for TB	62,595	46,604	46,803	49,646	47,621	47,621
Proportion of PLHIV clients screened for TB against currently on ART		95%	94%	96%	94%	94%
TB_PREV		1,815	2,721	1,535	1,807	7,878

Source: TIBU. Note: ARV, antiretroviral; COP, country operational plan; PLHIV, people living with HIV.

The project was on track in reaching TB performance indicators for the APR 2018 period. The project achieved 90 percent newly registered TB cases, 83 percent coinfected clients on ARVs, 95% percent HIV-positive individuals screened for TB, and 95% percent of CCC clients who completed IPT.

TB cascade

During the period from April to September 2018, 962 TB patients were newly registered in project-supported sites, of whom 938 (98 percent) were counseled and tested for HIV; of those, 373 (40 percent) were identified as coinfected with HIV (sourced from TIBU system data). All counties reported above 95 percent HIV testing with Homa Bay reporting 99 percent, Migori 96 percent, Nyamira 98 percent, Kisumu 97 percent, and Kisii 95 percent. All patients with missed HIV testing were followed up with and reached with testing services. Some incorrect documentation in a few facilities were noted and corrected.

For the APR 2018 period, 1,902 new TB cases were identified, of whom 1,868 were counseled and tested for HIV, a 98 percent counseling-and-testing uptake among the TB-infected clients. When compared with the COP17 target of 1,897, this is a 98 percent achievement. Table 24 summarizes these figures.

Table 24. APR 2018 TB cascade.

County	All TB registered Cases	TB Known Status	TB–HIV Coinfection	TB–HIV on CPT	TB–HIV on ART
Homa Bay	281	280(100%)	142(51%)	142(100%)	134(94%)
Kisii	117	113(97%)	31(27%)	31(100%)	30(97%)
Kisumu	302	292(97%)	133(46%)	133(100%)	132(99%)
Migori	438	428(98%)	166(39%)	165(99%)	164(99%)
Nyamira	764	755(99%)	229(30%)	224(98%)	224(98%)
Afya Ziwani	1902	1868(98%)	701(38%)	695(99%)	684(98%)

Note: ART, antiretroviral therapy; CPT, cotrimoxazole preventive therapy.

The project will continue supporting the 23 cough monitors in the high-volume sites that are in place to improve on TB case detection. In the period from April to September 2018, the project started reporting the active case findings electronically, and this has greatly improved on the accuracy of the reports, as well as the data for decision-making. In the period from April to September 2018, 4,220 TB suspects were identified in various SDPs by the cough monitors. Of these 177 (4 percent) were confirmed TB positive and started on treatment. Also, during this period, the project continued to provide DSD through mentorship and facility CME at all entry points to strengthen the use of presumptive TB registers and laboratory follow-up of presumptive TB cases. The project also supported the printing and distribution of more presumptive TB and IPT registers and intensified case-finding cards to ensure that there was no missed opportunity in TB screening and HIV testing among the registered TB patients with clear documentation on the TB4 registers.

TB ART

During the period from April to September 2018, 355 clients of the 373 identified as TB–HIV coinfected (95 percent) were put on ART. Follow-up of the 18 clients who did not go on ART showed that some were still in the initial two-week window of TB treatment initiation by end of the reporting period, while others were identified in non-ART sites and referred to ART sites, but the documentation was not completed. The county-specific ART uptake showed that Migori County was at 97 percent, Kisumu at 97 percent, Nyamira at 93 percent, Homa Bay at 99 percent, and Kisii at 100 percent.

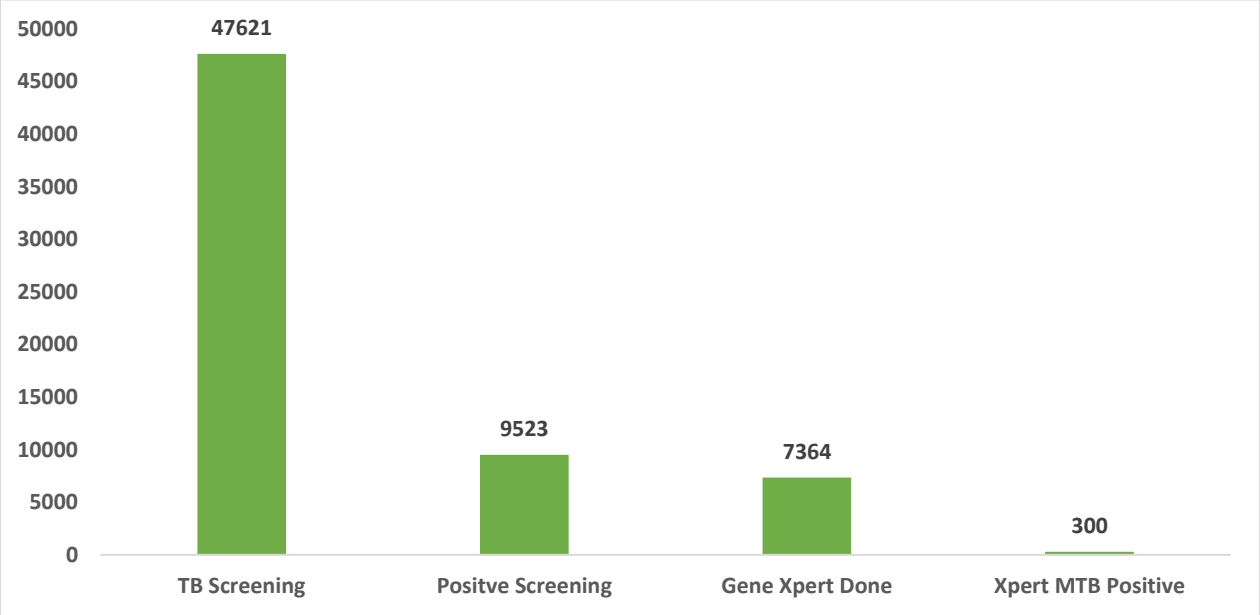
For the entire APR 2018 period, of the 701 coinfected clients 684 have been put on ART (97 percent ART uptake) and 695 on cotrimoxazole prophylaxis (99 percent uptake). The project achieved 81 percent (684) against the COP17 target of 835 TB–HIV coinfected clients to be put on ART (sourced from TIBU system data). To improve on TB ART uptake, the project will continue to provide DSD support—with a focus on improving active case findings—and improve use of GeneXpert for all TB suspects, irrespective of HIV status, and various capacity-building initiatives.

The project will also support regular performance-review meetings and operationalization of TB TWGs to ensure proper documentation, reporting and data use

TB screening

During the reporting quarter, the project achieved 94 percent (47,621 of 50,501) of the total ART clients screened for TB, using a symptom-based intensified case-finding screening tool. Of these 9,523 (20 percent) screened positive for one or more symptoms of TB, and 8,670 (91 percent) had a sample sent for bacteriologic diagnosis, with 7,364 of those (85 percent) also being sent for GeneXpert testing. Of those who underwent Xpert testing, 300 were diagnosed with TB and put on treatment. Figure 8 summarizes the results.

Figure 8. TB screening cascade.



Note: MTB, mycobacterium tuberculosis.

The county performance review indicated that Migori reported 99 percent screening rates, Nyamira 98 percent, Kisii 99 percent, Kisumu 93 percent, and Homa Bay 87 percent. The lower performance in Homa Bay was a result of poor documentation of TB indicators. The project has developed a tool to monitor all TB indicators monthly, which will improve documentation of all the indicators.

To ensure improved and sustained quality of TB screening, the project will continue to provide DSD in all supported facilities through sensitization of HCWs to ensure that all clients are screened for TB and that the symptomatic clients are registered in the presumptive TB registers, with their samples subjected to GeneXpert testing. The cough monitors approach will also assist the facility teams in quality screening and proper documentation of all screened clients. The RLSN will also support timely submission of specimens to the GeneXpert sites and the relay of hard copy results to the clinicians. The project teams will continue to work closely with the SCHMT and health record information officer / data clerks to ensure that TB screening is documented as per National Tuberculosis, Leprosy and Lung Disease Program and NASCOP guidelines.

Provision of TB preventive therapy

The project continued to support implementation of IPT initiatives in all the project-supported counties, with focus on the number of asymptomatic clients who were initiated on IPT and with clear analysis of the IPT outcome among the clients who were initiated on the therapy six months earlier.

During the semiannual reporting period from April to September 2018, 3,382 clients competed TB preventive treatment out of the 3,750 who had started six months prior, translating to a 90 percent completion rate. County-specific analysis showed that completion rates were 96 percent in both Kisumu and Kisii, 86 percent in Nyamira, 95 percent in Migori, and 84 percent in Homa Bay.

Overall performance in COP17 was at 95 percent completion of IPT (7,530 of 7,898). All counties except Homa Bay (91 percent) and Nyamira (94 percent) reported completion rates of over 95 percent. Table 25 summarizes the completion outcomes by county, gender, and age.

Table 25. IPT completion outcomes for COP17.

	TB_PREV				
	Female		Male		
County	<15yrs	15+yrs	<15yrs	15+yrs	Total
Homa Bay	91%	90%	90%	92%	91%
Kisii	96%	100%	100%	96%	99%
Kisumu	94%	99%	100%	96%	98%
Migori	97%	95%	100%	97%	96%
Nyamira	91%	95%	100%	93%	95%
Afya Ziwani	93%	95%	98%	94%	95%

Note: TB_PREV, number of ART patients who completed a standard course of TB preventive therapy within the reporting period.

Poor documentation, defaulters, and HCWs' industrial actions, as seen in Nyamira, accounted for the drops in the reporting period as compared to the other quarters. To ensure sustainability and improvement on IPT documentation and completion, the project will provide DSD through capacity-building initiatives and mentor HCWs and pharmacists on accurate documentation in IPT registers as well as timely ordering of IPT tablets and other commodities.

In the reporting period, the project conducted a file review to establish the IPT status among the clients in the CCCs. Of the 50,501 clients, 46,605 client information was abstracted, with 40,690 (87 percent) having been started on IPT. Of these, 36,381(89 percent) completed IPT treatment. The county breakdown is highlighted in table 26.

Table 26. IPT status for current ART patients.

County	Currently On ART	Abstracted Clients	Started on IPT	# Completed IPT	% IPT Completion
Homa Bay	14,224	13,241	11,088	9,978	90
Kisii	2,121	2,008	1,787	1,609	90
Kisumu	7,905	7,761	6,746	5,759	85
Migori	13,232	12,765	11,511	10316	90
Nyamira	13,019	10,830	9,558	8,719	91
Afya Ziwani	50,501	46,605	40,690	36,381	89

Note: ART, antiretroviral therapy; IPT, isoniazid preventive therapy.

Currently, 3,754 clients are continuing with IPT; the rest defaulted, died, or had IPT discontinued for different reasons.

GeneXpert diagnostics utilization

During this reporting quarter, 161 clients were diagnosed with mycobacterium tuberculosis by GeneXpert at supported sites. Five were diagnosed rifampicin resistant in Rachuonyo SCH; of those, three of the clients are on care in Kasipul and Kabondo Subcounties and two were referred to nonproject sites. The error rate in all the sites were less than 5 percent, the national target.

Table 27 shows the GeneXpert utilization rate per testing site.

Table 27. GeneXpert utilization, July to September 2018.

GeneXpert site	Total Tests Done	Utilization Rate	MTB		RIF		Error Rate	Invalid	# Sent for Culture
			+ve	-ve	RR	Ind			
Kuria	197	27%	12	185	0	0	1 (1%)	1	0
Rachuonyo	727	101%	57	670	5	0	16(2.2%)	3	0
Manga	168	23%	7	161	0	0	0	0	0
Nyamira	457	63%	46	411	0	0	3 (2%)	0	0
Keroka	386	54%	29	357	0	0	1 (1%)	3	7
Ekerenyo	191	27%	10	181	0	0	1 (1%)	0	0

Note: MTB, mycobacterium tuberculosis; RIF, rifampicin; RR, rifampicin resistance; +ve, Positive; -ve, Negative.

There was low utilization of GeneXpert in Kuria SCH, Manga SCH, and Ekerenyo SCH of less than 50 percent. This can be attributed to GeneXpert cartridge stockouts at all three sites and the HCW industrial action in Nyamira County (adversely affecting Manga SCH and Ekerenyo SCH, as well as Keroka SCH and Nyamira CRH). The commodity situation has since stabilized and the HCW strike in Nyamira resolved. For Kuria SCH, there was the additional challenge of frequent power outages that generally affected the whole of Migori County. The project is working toward providing a high voltage UPS solution for the site to mitigate this challenge. Expect to see an improvement in subsequent quarters. Scale-up of GeneXpert utilization is being done with all TB samples referred for GeneXpert diagnostics.

Drug-resistant (DR) TB management

The project continued to support multidrug-resistant (MDR) TB treatment through clinical meetings and tracing of contacts of MDR TB clients. During the quarter there were 18 clients continuing on MDR TB treatment—10 in Nyamira of which 2 completed treatment, 1 in Kisii, 3 in Migori, 1 in Kisumu, and 3 in Homa Bay. To address management and care for DR TB clients, the project will continue to support capacity-building initiatives through CME, mentorships, and attendance at Extension for Community Healthcare Outcomes (ECHO) sessions on short-course regimen of DR TB. For better management and care of the patients, the project will continue to support contact screening and multidisciplinary TB review meetings at facilities with diagnosed patients. In addition, the project will purchase N95 masks to address IPC measures at the facility and community levels.

IPC

The project supported implementation of facility IPC activities as part of the TB 5 I's collaboration. Technical support was provided to ensure the minimum amount of administrative and environmental resources are used and protection of personal equipment are in place. For high-volume facilities with

functional infection-prevention committees, the project is working to incorporate TB infection control into the facility at all SDPs.

Community TB

Building on the strength of community involvement in TB care, the project will continue to work with community structures to improve TB case detection, DOTs, contact, and defaulter tracing. In collaboration with community strategy focal persons, the project will participate in school health, especially schools with pupils diagnosed with smear-positive TB. They will benefit from screening (household and schools) and school health education to improve TB diagnosis.

TB cohort analysis.

The cohort analysis of 447 TB clients registered one year earlier (July-September 2017) showed that 238 were bacteriologically confirmed cases and 209 sputum negative TB cases. Of the bacteriologically confirmed cases, 66 percent were cured, 19 percent completed treatment but had no smear test bringing the total to 85 percent for those who competed treatment. Seven percent of the bacteriologically confirmed cases died, and 7 percent were lost to follow up while 3 (1 percent) moved to category 4 after failing treatment. The small number who did not have the final smear not done have been followed up. Sensitization through CMEs, OJT and support supervision are also done to identified sites to improve on follow up of the sputum positive cases. Among the 209 clinically diagnosed clients, 79 percent completed the course of treatment, 16 percent died, and 4 percent were lost to follow up. Overall mortality in the cohort was 11 percent. All clients who died while on the course of treatment had a mortality audit conducted by the county and sub county TB team to improve management. The program is working with the PSC peer educators and other partners to follow up clients lost to follow up.

The project will continue working towards improving TB outcome through capacity building. To reduce death rates the project will focus on early detection of TB through active case finding, improving the quality TB screening for both HIV positive and negative clients and timely treatment initiation of diagnosed clients

Table 28: July-September 2017 TB cohort analysis

	Initial cohort	Outcomes						
		Smear Negative	Smear not done	Completed Treatment	Died	LTFU	MT4	**Total**
Sputum Positive	238	156	46		17	16	3	**238**
Sputum Negative	209			166	33	9	1	**209**
Total	**447**			**368**	**50**	**25**	**4**	**447**

Data source: TIBU System. LTFU, Lost To Follow Up; MT4, Moved To Category 4

Elimination of mother-to-child transmission of HIV

The project provided DSD support to 168 PMTCT sites through site-level capacity-building, specifically focused on on-site and off-site mentorships, support supervision, CME, and OJT to promote uptake of counseling and testing among pregnant and breastfeeding women. It conducted sensitization on dual HIV/syphilis testing in all counties, reaching 288 providers, to improve uptake of syphilis testing at antenatal care (ANC) facilities. It conducted review meetings on the elimination of mother-to-child transmission (EMTCT) in all the five counties, the major agenda being ANC identification, PCR positive audit, PMTCT missed opportunities, and viral suppression among PMTCT clients. The project also conducted orientations on the new, revised NASCOP EID tools and on documentation and accuracy using sample request forms, plus continued with follow-up CME and OJT at the facility level. HIV testing was optimized at ANC, labor and delivery, and postnatal clinics in all the supported sites to ensure no missed opportunities. Additionally, the project monitored the progress of PMTCT indicators through the facilities' monthly EMTCT dashboards and enhanced support supervision on a case-by-case basis to the sites that were not on track.

During the reporting period, 8,445 first-contact ANC clients were seen in the project-supported facilities. Of these, 8,306 (98 percent) knew their HIV status, a slight drop from last quarter, which was at 10,078. The overall PMTCT_STAT achievement as at APR 2018 against the COP17 target stood at 73 percent (36,439 of 49,649).

Table 28 below shows the PMTCT summary achievement for the period from October 2017 to September 2018 against the COP17 targets.

Table 29. PMTCT summary achievements, October 2017 to September 2018.

Indicator	COP17 Target	Q1	Q2	Q3	Q4	Total	% Achieved
Number of pregnant women with known status	49,814	8,434	9,656	10,074	8,306	36,474	73
Number of pregnant women that are HIV positive	3,423	762	812	785	781	3,140	92
Number of pregnant women known to be HIV positive (known positives)		541	581	571	586	2,279	
Number of pregnant women newly positive		221	231	214	195	861	
Number of pregnant women issued with prophylaxis	3,423	755	795	780	748	3,078	90
Number of infants issued with prophylaxis	3,423	735	788	776	725	3,024	88

Source: Ministry of Health (MOH) 731/ MOH 711. Note: PMTCT, prevention of mother-to-child transmission; COP, country operational plan.

The project reached 36,474 clients with known status as at APR 2018 against the COP17 target of 49,814, which is a 73 percent achievement. The project cumulatively identified 3,140 HIV-positive pregnant women (92 percent against the COP17 target) as at APR 2018, with 861 (27 percent) new positives and 2,279 (73 percent) known positives. A total of 3,078 pregnant women and 3,024 infants were issued

maternal ART and infant prophylaxis, respectively, an achievement of 90 percent and 88 percent, respectively, against COP17 targets.

Each county's PMTCT known status performance is shown in table 29.

Table 30. PMTCT_STAT summary achievements by county, October 2017 to September 2018.

County	COP17 Target	Achievement	% Achievement
Homa Bay	6,493	6,138	**95**
Kisii	1,848	2,296	**124**
Kisumu	5,202	6,246	**120**
Migori	13,467	12,110	**90**
Nyamira	22,639	9, 684	**43**
Total	49,814	36,474	**73**

Note: COP, country operational plan; PMTCT, prevention of mother-to-child transmission.

At the county level, the performance against the COP17 target for the reporting period was as follows: Homa Bay at 95 percent (6,138 of 6,493), Kisii at 124 percent (2,296 of 1,848), Kisumu at 120 percent (6,246 of 5,202), Migori at 90 percent (12,110 of 13,467), and Nyamira at 43 percent (9,684 of 22,638). Kisii and Kisumu achieved their COP17 targets, and Homa Bay and Migori were at over-90-percent achievement. Nyamira did not achieve the COP17 target due to high targets compared to the county's expected pregnancies (at approximately 13,000/annum) and a prolonged HCW industrial action during the reporting quarter. There were 139 missed opportunities for testing at first ANC contact in the reporting quarter, most of them in Nyamira (119). Other counties with missed opportunities were Kisii (8) and Migori (12). The huge number in Nyamira was due to the health care strike between June and August 2018. Other challenges experienced were refusal by the MCH nurses to test mothers for HIV (and this is being addressed nationally through the nurses' professional body by MOH/NASCOP) and frequent rotation of staff in ANC departments, especially in high-volume facilities. The mothers were followed up in subsequent visits and testing offered except in Nyamira, where the project is still in the process of following up with some mothers to get them to come in for testing. To improve the proportion of ANC clients with known status during the reporting quarter, the project hired locum staff to cover MCH and other HIV SDPs in affected facilities in Nyamira County. In addition, the project supported MOH mentors in visiting medium- and low-volume facilities to provide technical mentorship and provide services.

Other strategies employed in all the counties include strengthening escorted referrals done by CHVs, who are able to identify mothers in the community not attending ANC services, and following up with ANC mothers who missed their appointments in facilities with low uptake. The project also supported open ANC/maternity days, a strategy that led to an increase in ANC attendance, early ANC, and skilled delivery in Homa Bay, specifically in Kabondo SCH and Ober Health Centre. To improve household screening, the project supported CHV's sensitization on household screening and mapping and escorted referrals in low-performing facilities in Migori County.

Challenges faced during the reporting period included client charges for ANC profile testing in private and faith-based organization sites, limiting universal access to PMTCT services and retention up to the fourth ANC visit. Inadequate utilization and support for community-level structures to enable them to assist CHVs in doing ANC mapping and referrals led to few mothers being referred to the facilities by

CHVs. There also was a shortage of the mother-baby booklets, which affected uptake of Linda Mama services.

The project will continue to participate in community dialogue days and hold discussions with CHVs to improve on household pregnancy screening. Maternity open days will be supported in poorly performing sites. In Nyamira, PMTCT catch-up activities will be carried out in October and November 2018 with an aim of reaching mothers who were missed during the HCW industrial action. This will be done through community outreaches, especially in hard-to-reach areas, and through escorted referrals by CHVs.

The project identified 3,140 HIV-positive pregnant women, a 92 percent achievement against the COP17 target. ARV prophylaxis was offered to 3,078 pregnant HIV-positive women (98 percent uptake) against a COP17 target of 3,413, a 90 percent achievement as at APR 2018. The counties' performance against COP17 targets was as follows: Homa Bay, 100 percent (900 of 898); Kisii, 96 percent (66 of 69); Kisumu, 126 percent (775 of 617); Migori, 106 percent (964 of 912); and Nyamira, 41 percent (373 of 917). The low performance in Nyamira mirrors the low performance in the testing of pregnant women (PMTCT_STAT) against COP17 targets. Efforts will be directed at improving the testing coverage of pregnant women at both facility and community levels to identify more eligible HIV-positive women to be initiated on ARVs.

The project continues to record a high number of known positive clients, reporting 73 percent (2,279 out of 3,140 positives identified), which is attributed to known positive clients desiring to have children due to the success of the PMTCT program and improved quality of life with good viral suppression. The project supported integration of FP services at the CCC level through facility-based CME and OJT to improve on uptake of modern contraceptives and to do properly documented referrals for FP services not provided in the department or facility. The project will strengthen pregnancy intention assessment screening and contraceptive use by providing pregnancy intention assessment tools and building the capacity of HCWs through facility-based CME on contraceptive use and preconception counseling among women of reproductive age living with HIV.

PMTCT Cascade

During the reporting period from July to September 2018, 8,445 first-contact ANC clients were seen in the project-supported facilities. The project supported 8,306 pregnant women to know their HIV status a slight drop from last quarter, which was at 10,074. Table 30 summarizes counseling and testing uptake results.

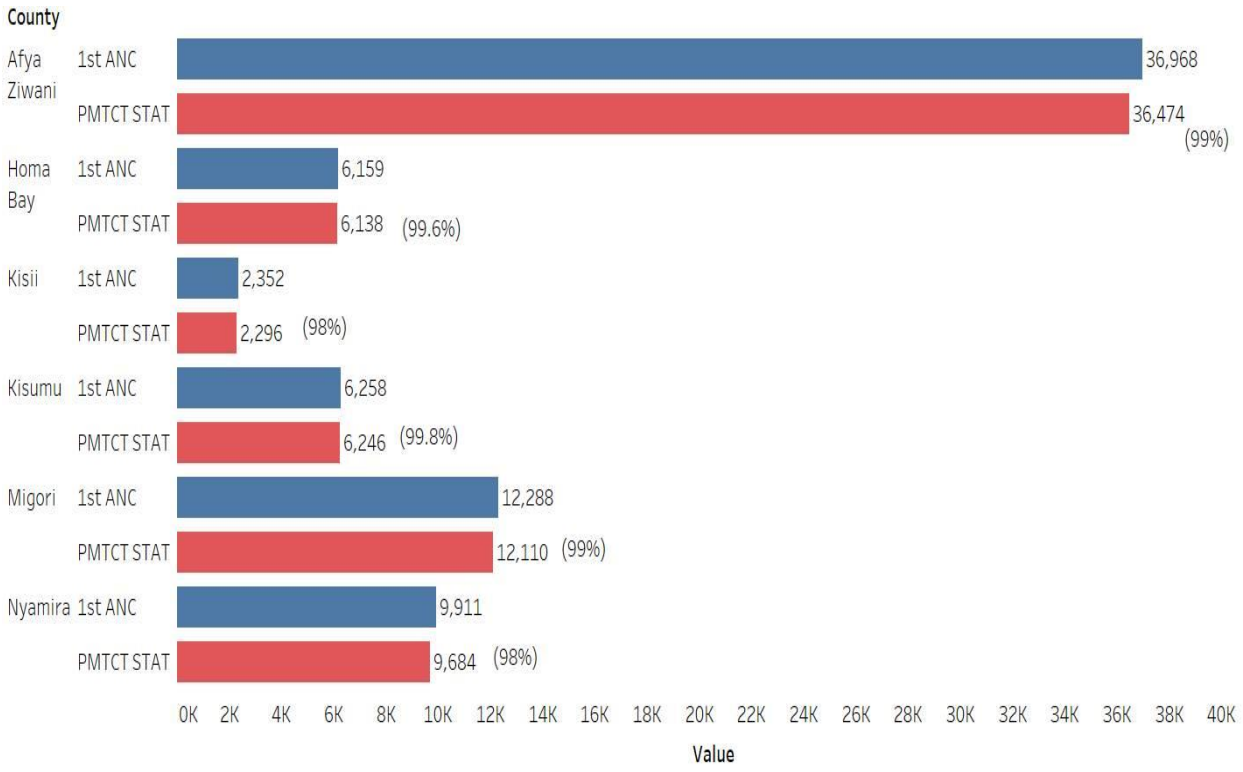
Table 31. Counseling and testing uptake by county, July to September 2018.

County	1st ANC	PMTCT STAT	Known Positive	New Positive	Testing missed opportunity
Homa Bay	1,507	1,507	193	60	0
Kisii	744	736	8	10	8
Kisumu	1,521	1,521	150	46	0
Migori	2,917	2,905	186	49	12
Nyamira	1,756	1,637	49	30	119
Total	8,445	8,306	586	195	139

Source: Ministry of Health (MOH) 711/MOH 731. Note: ANC, antenatal care; PMTCT, prevention of mother-to-child transmission.

Overall access to counseling and testing among women attending ANC services was 98 percent, the same performance as compared to last quarter, with Kisumu and Homa Bay reporting the highest performance at 100 percent, Kisii and Migori at 99 percent, and Nyamira County at 93 percent, a drop from last quarter for Nyamira, when they had a performance of 97 percent. The overall project achievement for counseling and testing uptake from October 2017 to September 2018 is shown in figure 9 below.

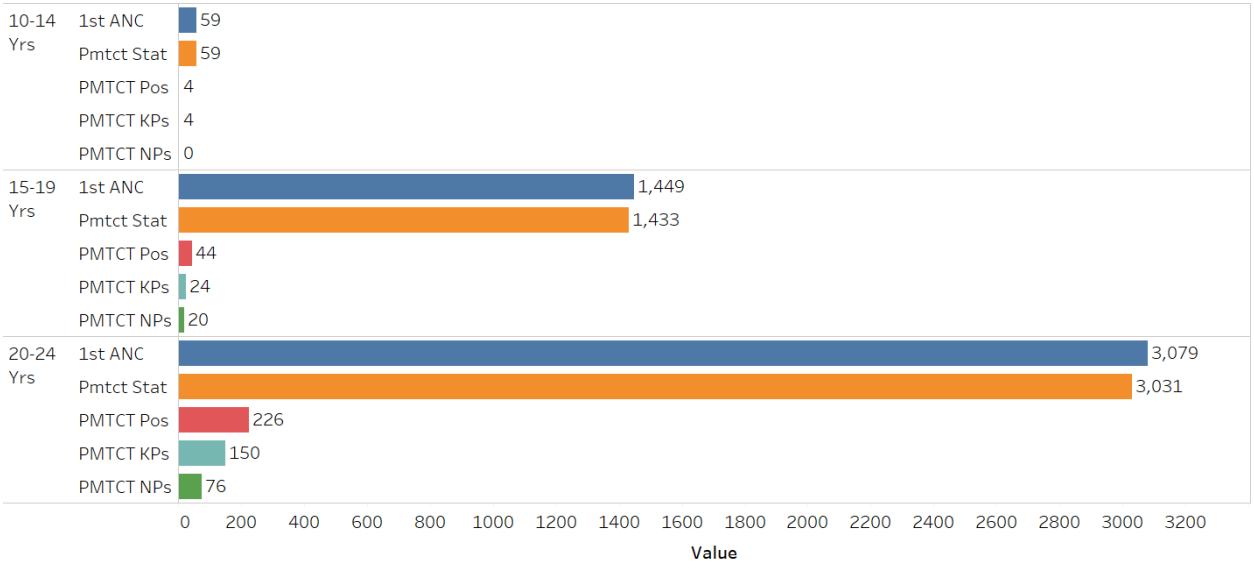
Figure 9. PMTCT counseling and testing uptake from October to September 2018.



Note: ANC, antenatal care; PMTCT, prevention of mother-to-child transmission.

The project further disaggregated AGYW PMTCT performance as shown in the figure 10.

Figure 10. AGYW PMTCT Cascade.



Source: Project databases.
Note: AGYW, adolescent girls and young women; PMTCT, prevention of mother-to-child transmission.

In the reporting quarter, 781 women were identified as HIV positive at ANC (586 known positives and 195 newly identified positives). Maternal ARV prophylaxis uptake among the total number of HIV-positive women identified in the period from July to September 2018 was 96 percent (748 of 781) and infant prophylaxis at 93 percent. This was a drop from Y1Q3, which was at 99 percent for both maternal ART uptake and infant ARV prophylaxis uptake. The counties' quarterly maternal ART uptake performance was Homa Bay at 98 percent (249 of 253), Kisii at 83 percent (15 of 18), Kisumu at 97 percent (190 of 196), Migori at 93 percent (220 of 235), and Nyamira at 93 percent (74 of 79). There were 33 maternal ART and 56 infant ARV prophylaxis missed opportunities during the reporting quarter. The main reasons for the missed opportunities were issues of inadequate and/or incorrect documentation, shown by data audits undertaken; mothers' declining of ART; the desire by some to consult their spouses (disclosure issues); and the fact of not being ready for ART at the first ANC visit. The facilities followed up with these mothers closely to ensure they get ART prophylaxis in the subsequent visits. The project will conduct weekly register review and address gaps in documentation and reporting and perform DQA on a monthly basis before submission of reports. Table 31 summarizes PMTCT prophylaxis uptake.

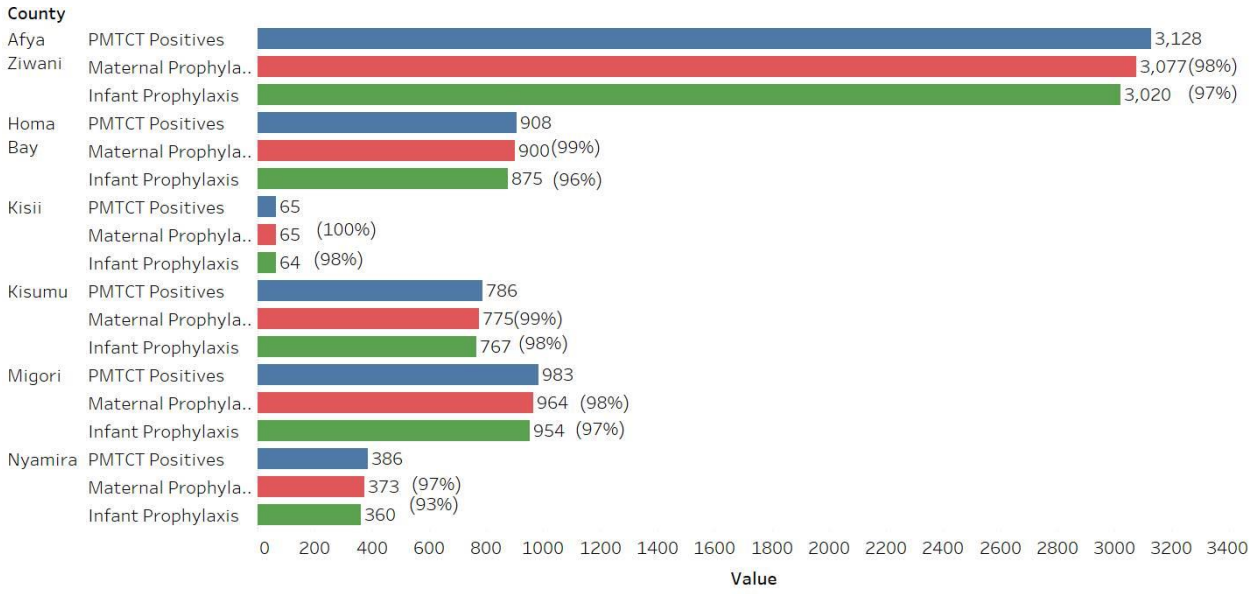
Table 32. Maternal and infant prophylaxis uptake of the PMTCT cascade (July to September 2018).

	Homa Bay	Kisii	Kisumu	Migori	Nyamira	Overall
# HIV positive	253	18	196	235	79	781
# Maternal prophylaxis	249	15	190	220	74	748
# Infant prophylaxis	232	18	187	220	68	725

Source: Ministry of Health (MOH) 731. Note: PMTCT, prevention of mother-to-child transmission.

The project's overall achievement for PMTCT prophylaxis uptake from October 2017 to June 2018 is shown in figure 11.

Figure 11. Project overall achievement for PMTCT prophylaxis.



Note: PMTCT, prevention of mother-to-child transmission.

Overall, there has been good uptake of ART prophylaxis at above 95 percent except in Nyamira and Kisumu, where there was a lower maternal prophylaxis uptake of 97 percent and 99 percent, respectively. Follow-up is being done to ensure the infants receive prophylaxis before delivery.

In the reporting period, 748 pregnant women were put on ART prophylaxis, a slight decrease from 780 mothers who were put on prophylaxis in the previous quarter. Against the COP17 targets, 3,078 pregnant HIV-positive women were put on prophylaxis against a target of 3,413, a 90 percent achievement. The counties' performance against COP17 targets for maternal prophylaxis was as follows: Homa Bay at 100 percent (900 of 898), Kisii at 96 percent (66 of 69), Kisumu at 126 percent (775 of 617), Migori at 106 percent (964 of 912), and Nyamira at 41 percent (373 of 917). The low performance in Nyamira mirrors the low performance in the testing of pregnant women (PMTCT_STAT) against COP17 targets. Efforts will be directed at improving the testing coverage of pregnant women at both facility and community levels to identify more eligible HIV-positive women to be initiated on ARVs, particularly in Nyamira.

The project supported DSD interventions at all supported PMTCT sites through site-level capacity-building (CME, OJT), mentorship, and support supervision; commodity consumption, forecasting, and reporting; correct data documentation, review, and reporting; as well as county and subcounty stocktaking and performance-review meetings. The HCWs were supported to continuously account for missed opportunities, with PEs and MMs conducting home visits to trace and bring back the mother-baby pair into care. Site-level DQAs were supported to enhance correct interpretation and reporting of PMTCT indicators and corrections made in the District Health Information Software (DHIS) where necessary.

To improve VL uptake and suppression among pregnant and breastfeeding women, the project supported facilities in holding CME and subcounty mentors in reaching smaller sites to support management of

high-VL clients and hold switch meetings. To improve retention of the mother-baby pair, maternal cohort analysis was conducted monthly and displayed in the PMTCT cohort dashboard. The findings were discussed during facility data-review meetings to identify retention and suppression gaps within the cohort. The project also conducted MM training with the aim of building the capacity of MMs to support on follow-up and retention of the mother-baby pair. A total of 27 MMs were trained across the Counties: Kisumu (7), Homa Bay (7), Migori (7), Kisii (1), and Nyamira (5).

EID

During the July to September 2018 reporting period, 675 initial virologic PCR HIV test samples were done to HIV-exposed infants (HEI) within 12 months of age. This was a drop from 895 in the quarter from April to June 2018, attributable to industrial action in Nyamira and low identification by service providers of eligible infants across the other counties. Overall, as at APR 2018, 3,260 initial virologic tests were done for infants between 0 and 12 months old, translating to 95 percent of the 3,428 targets for COP17. Overall, county performance was as follows: Homa Bay, 86 percent (773 of 898); Kisii, 158 percent (109 of 69); Kisumu, 120 percent (731of 610); Migori, 119 percent (1,115 of 934); and Nyamira, 58 percent (532 of 917), as shown in table 32 below.

Table 33. Overall EID tests between 0 and 12 months old, Oct 2017 to Sept 2018.

County	Target	Q1	Q2	Q3	Q4	Total	Total Y1 APR % Achievement
Homa Bay	898	196	208	198	171	773	86
Kisii	69	30	26	20	33	109	158
Kisumu	610	197	183	191	161	731	120
Migori	934	277	316	329	193	1,115	119
Nyamira	917	113	145	157	117	532	58
Total	**3,428**	**813**	**878**	**895**	**675**	**3,260**	**95**

Note: APR, annual program review; EID, early infant diagnosis; Y, year.

Kisii, Kisumu, and Migori achieved the APR 2018 target, compared to Homa Bay and Nyamira, neither of which achieved the COP17 target. This can be attributed to the lower-than-expected PMTCT_STAT achievements for Nyamira and Homa Bay. The targets in Kisii were low, explaining the overachievement.

EID testing achievement in the July to September 2018 period for infants under two months old was at 73 percent (493 of 675), an improvement from the overall EID testing for that age group of 56 percent, as at Y1Q3. County performance for the reporting period was as follows: Homa Bay at 74 percent (126 of 171), Kisii at 76 percent (25 of 33), Kisumu at 81 percent (131 of 161), Migori at 72 percent (138 of 193), and Nyamira at 62 percent (73 of 117). The achievement summary is shown in table 33.

Table 34: EID test performance for 0-2 months old as at APR 2018.

County	# 0–2 Months Old	# 2–12 Months Old	Total	% Achievement 0–2 Months Old
Homa Bay	558	215	773	72
Kisii	69	40	109	59
Kisumu	478	253	731	65
Migori	559	556	1115	50
Nyamira	290	242	532	55
Total	**1,950**	**1,306**	**3,260**	**60**

Note: APR, annual program review; EID, early infant diagnosis;

Overall for the project for APR 2018, this a 60 percent achievement for EID testing of infants under 2 months old. There was also a notable quarter-on-quarter improvement in EID testing uptake for that age group.

This lower-than-expected uptake of PCR testing for infants under 2 months old is attributed to mothers coming late for follow-up; missed opportunities on sample collection due to lack of skills by providers to draw PCR samples from the infants (and this was observed across the counties). Some health providers, mainly the nurses, see this activity as not part of their duties, especially witnessed in Nyamira and Migori County project-supported sites.

In reviewing the month-on-month trend in EID initial testing uptake for infants 0 to 2 months old, the project demonstrated an upward trajectory, with uptake as at June 2018 of 69 percent (206 of 297), at July 2018 of 72 percent (158 of 219), at August 2018 of 77 percent (187 of 242) and at September 2018 an uptake of 69 percent (148 of 215), albeit a small drop in September. The project continued to provide mentorship on use of the new NASCOP EID forms and sensitization during EMTCT review meetings. The project further provided site-level technical mentorship and OJT on sample collection and proper documentation using the new tools. MMs and PEs played a key role in line listing infants eligible for a test and provided appointment reminders to the mothers for sample collection. Establishment of EID POC in Uriri and Awendo SCHs has helped to reduce TAT of results and allow caregivers to receive results within 24 hours.

The project conducted monthly reviews of EID tests during the EMTCT review meetings and further conducted supervision to sites performing dismally to provide mentorship on identified challenges. To continue improving EID uptake for infants under 2 months old, the project will further intensify early enrollment of infants from maternity, early postnatal, and immunization screenings to avoid missed opportunity at the 6- to 8-week initial PCR testing. The project technical staff will also identify the low-performing sites, conduct targeted mentorship, and provide mentorship on early infant testing. The MMs will ensure follow-up of the mother-baby pair and send a SMS reminder for the sample collection dates/month. The project team will continue to build the capacity of HCWs on EID sample collection and documentation on the EID request form. Case managers will be supported to conduct household tracing for the EID missed opportunities.

The project will work with all the stakeholders supporting MCH activities to enhance identification of exposed infants during the immunization outreaches. At the facility level, the project will support continuous assessment of all infants attending immunization services, pediatric in-patient wards, and special clinics (e.g., assess nutrition to determine exposure status by strengthening implementation of 2018 national ART [EID] guidelines on testing and retesting of postnatal mothers). The project will continue to build capacity of HCWs working in MCH facilities through mentorship, OJT, and CME to optimize on HTS at postnatal and child welfare clinics.

To enhance the retention of the mother-baby pair, the project facilitated MMs and PEs in all supported sites to follow up and conduct defaulter tracing through provision of airtime. In all the high-burden and high-yield facilities, the project supported facilitation of home visits to new HIV-positive pregnant clients and high-risk clients by MMs and PEs to enhance adherence and retention to treatment, as well as promote skilled delivery. Facility- and community-linkage activities through the Community Mentor Mothers (CMMs) and CHVs was strengthened to enhance defaulter tracing mechanisms. The project supported HEI cohort analysis (HCA) in all supported PMTCT facilities.

EID cascade and linkage of positive infants

The project EID cascade for the reporting quarter is shown in table 34.

Table 35. Early infant diagnosis (EID) cascade, July to September 2018, initial tests only.

EID Cascade (July to September 2018)		
Number HIV-positive women	781	
Number initial PCR 0-12 months old	675	
Number PCR test 0-2 months old	493	73%
Number confirmed PCR positive	19	2.8%
Number HEI PCR POS linked to treatment	19	100%
Number PCR POS baseline VL	16	84%

Note: HEI, HIV-exposed infant; POS, positive; PCR, polymerase chain reaction; VL, viral load.

Using the PMTCT_POS as a proxy denominator for PCR testing, we recorded a lower number of PCR at initial testing (675) compared to the total number of HIV-positive pregnant women (781) for the quarter within 0 to 12 months, with 19 PCR positive, giving a mother-to-child transmission (MTCT) rate of 2.8 percent for the reporting period.

Overall, the project reported 25 infants confirmed HIV positive, with 19 initial and repeats (at 0 to 12 months old) and 6 initial and repeats (after 12 months old), based on data picked from the EID website and validated at the facility level during the reporting period. Out of the 25 total PMTCT_HEI_POS identified, all (100 percent) had a documented outcome—namely, 24 out of 25 (96 percent) have been enrolled and initiated on treatment, while 1 mother (4 percent) declined having her infant enrolled and initiated on treatment but is on follow-up to ensure enrollment in a subsequent visit. This was an improvement on infants accounted for and enrolled on treatment compared to last quarter, which was at 91 percent of infants initiated on treatment.

Table 35 summarizes the findings on all HIV-positive infants for the reporting quarter.

Table 36. Linkage status of all HIV-positive infants, July to September 2018.

Linkage to HEI treatment and other outcomes	
Total HEI confirmed positive	25
Number enrolled and initiated on treatment	24
Number died before enrollment	2
Number LTFU	1

Source: National AIDS & STIs Control Programme (NASCOP) / early infant diagnosis (EID) website.
Note: HEI, HIV-exposed infant; LTFU, lost to follow-up.

Overall as at COP17, 101 samples were identified PCR positives at initial test and repeats at second and third PCR tests for infants 0 to 12 months old. On validation, 81.2 percent (82 of 101) were confirmed as positive and initiated on treatment, 4.0 percent (4 of 101) died, 5.9 percent (6 of 101) were LTFU, 3.0 percent (3 of 101) were adult samples, 4.0 percent (4 of 101) were unknown to the facility, and 2.0 percent (2 of 101) were baseline infant VL, as shown in table 36.

Table 37. PCR validation.

PCR Validation and Linkage to HEI Treatment and Other Outcomes, October 2017–September 2018		
Total PCR positive result	101	100%
Number confirmed, enrolled, and initiated on treatment	82	81.2%
Number died before enrollment	4	4.0%
Number LTFU	6	5.9%
Adult sample	3	3.0%
Infant baseline VL	2	2.0%
Unknown to facility and not accounted for	4	4.0%

Source: National AIDS & STIs Control Programme (NASCOP) / early infant diagnosis (EID) website.
Note: HEI, HIV-exposed infant; LTFU, lost to follow-up; PCR, polymerase chain reaction; VL, viral load.

More efforts will be put toward achieving 100 percent ART enrollment through prompt defaulter tracing for LTFU, provision of quality HEI follow-up of exposed infants, and early identification of the exposed infants.

DSD support by the project during the reporting period included weekly sharing of the EID positive outcomes for early initiation to treatment with facility teams. Other DSD support provided by the project to reduce MTCT rate included capacity-building initiatives for the HCWs, nonclinical counselors and PEs; support supervision and follow-up focusing on mother-baby pair appointments and linkage to HIV services; support for data documentation, reviews, and reporting; and site-level program support for clinical management and documentation by both HCWs and PEs. There has been marked improvement on labeling of samples for EID tests and improved uptake for baseline VL for infants. Out of the 19 infants who turned PCR positive in the reporting quarter (a proxy denominator for baseline VL for infants), 16 of them received baseline VL with results available, an 84 percent infant baseline VL uptake (obtained from the EID website), an improvement from 60 percent in Y1Q3. More technical mentorship support will continue to be provided to ensure 100 percent of infants receive a baseline VL.

HEI MTCT audits were conducted for all the 19 infants identified positive by initial and repeat tests during the reporting quarter. A majority of the infants who tested HIV positive by PCR were due to missed opportunities at ANC and then later identified during postnatal visits, unskilled deliveries, mixed feeding by the HIV-positive mothers, and mothers who remained in denial and thus had poor adherence due to nondisclosure and lack of acceptance of their HIV status.

HEI mortality audits

In the period from July to September 2018, there was no HEI-positive reported deaths. Overall, as at APR 2018 we have had four HEI positives reported as dead. The project supported mortality audits for the four infants who died during the year to inform program implementation. Mortality audit revealed that one infant died of malaria and pneumonia and, further history elicited, stated that the mother accessed treatment late when the child was already critically ill. The other infant was identified as HIV exposed at 9 months old and came to the facility with opportunistic infections. The child had a history of exposure to TB, and this was possibly the cause of death. Two other infants were identified late and died of AIDS-related illness: GE with severe dehydration. The project will continue to provide technical support and reporting of HEI mortality audits. It will continue to discuss such audits during facility and EMTCT review meetings to inform quality of services.

HEI positivity audits

HEI audits were conducted for all the 25 infants identified as positive at initial and repeats during the quarter, with an aim of understanding the possible causes of transmission and finding solutions to prevent such causes where possible. Table 37 summarizes the findings of the positivity audits.

Table 38. Outcome of HEI positivity audits, July to September 2018.

Infant PCR Audit Report			Maternal Details	
Total PCR positive	25		Total audited	25
Total PCR positive audited	25		Attended ANC	19
PCR positive <2/12	10		Known positives	11
PCR positive > 2–2/12	6		Newly diagnosed	14
PCR Pos> 12/12	9		Partner tested	12
HEI missed infant prophylaxis	15		Maternal prophylaxis received at ANC	18
Baseline VL	21		Good adherence	12
Exclusive breastfeeding by 6 months	8		Hospital delivery	12
Outcomes			Disclosure done	17
Enrolled on treatment	24		Mothers with high VL at ANC	3
Dead	0		**Outcomes**	
LTFU and unlinked	1		Alive	24
Transferred out	0		Dead	1

Note: ANC, antenatal care; HEI, HIV-exposed infant; LTFU, lost to follow-up; PCR, polymerase chain reaction; VL, viral load.

The MTCT audits showed that reasons for MTCT were lack of skilled deliveries (48 percent of the cases), missed infant prophylaxis (60 percent), missed maternal prophylaxis (28 percent), late PCR tests after two

months (64 percent), and lack of attendance at ANC by the mothers (24 percent). The high number of missed opportunities for skilled delivery may be due to the limitations of any facility not providing 24-hour maternity services and mothers preferring home delivery by traditional birth attendants. This was based on a focus group discussion conducted with the eight mothers in Homa Bay claiming good care by the birth attendants compared to hospitals. PCR testing beyond 2 months old is attributed to mothers with late presentation at postnatal care, maternal appointment adherence challenges, and/or defaulting on treatment at ANC. Mentorship support and follow-up of these mothers by the MM and community volunteers is being strengthened to ensure the mother receives skilled delivery services and the baby an initial PCR within 2 months of birth as appropriate. The PCR audit results were discussed monthly during EMTCT review meetings and quarterly county TWGs to discuss the gaps and the possible causes of transmission and how best to curb them where possible. There was improved baseline infant VL uptake at 84 percent compared to last quarter, which was at 60 percent, attributable to frequent mentorship and the central hubs' rejecting of a confirmatory sample without a baseline infant VL sample.

HCA / 12- and 24-month cohort review

During the reporting period, PMTCT infant outcome results were reviewed for an 18-month cohort across the 12 months. The primary goal was to establish MTCT rates and the percentage retained/active in follow-up as demonstrated in table 38 below.

Table 39. HIV-exposed infant (HEI) cohort analysis at 12 months (July to September 2018) reporting period).

HEI Cohort Analysis Outcome / 12-Month Cohort of July to September 2017	Absolute Numbers	% outcomes
Total enrolled into the cohort	699	
Active in follow-up	570	84.0
Died between 0 and 12 months old	18	3.0
Missing 12 months follow-up	42	7.0
Identified as positive between 0 and 12 months	29	4.8
Transferred out between 0 and 12 months	54	9.0

Overall, the project's retention rate among the 12-month cohort was 84 percent, with a 4.8 percent MTCT rate, while the same indicators for the 18-month cohort were 95 percent and 5 percent MTCT rate. Retention rates at the 12-month cohort is relatively good, though below 90 percent. The project recorded only 7 percent of infants missing 12-month follow-up. This performance can be attributed to the project's continued focus on promoting retention of mother-baby pairs by strengthening appointment and defaulter tracing systems; PMTCT PSSGs; quality improvement team (QIT) meetings with clinicians, PEs, and MMs; and capacity-building of HCWs and PEs/MMs on maternal, infant, and young child feeding. In addition, routine MTCT and mortality audits created opportunity for corrective actions on gaps identified. The project will continue to support the MM program and technical support to HCW to improve on follow-up of infants missing their 12-month follow-up and antibody test at 18 months. The project will also follow up the LTFU cases by doing a drill down and trace the mothers of these infants using the available locator information at the facilities

HCA data for infants 24 months ago for the entire 12-month reporting period were reviewed. The outcomes are shown in table 39.

Table 40. HEI cohort analysis / PMTCT_FO at 24 months (July to September 2018 reporting period).

HEI Cohort Analysis / PMTCT_FO Outcome 18-Month Cohort	Absolute Numbers	% Outcomes
Total enrolled into the cohort	2,466	
Antibody (AB) test negative at 18 months	1,778	95
Active at 18 months but no AB test done	39	2
Died between 0-18 months	37	2
Identified positive 0-18 months	92	5
Lost to follow-up 0-18 months	238	10
Transferred out	282	11

PMTCT_FO; PMTCT Final Outcome

Total number of infants enrolled in the cohort were 2,466: Homa Bay (790), Kisii (68), Kisumu (534), Migori (678), and Nyamira (396). Of these, infants with HIV-uninfected outcome at 18 months out of those active at 18 months were 1,778 of 1,870 (95 percent). County achievement for HIV-uninfected outcome at 18 months were as follows: Homa Bay at 96 percent (557 of 579), Kisii at 86 percent (42 of 48), Kisumu at 96 percent (404 of 420), Migori at 96 percent (504 of 525), and Nyamira at 90 percent (271 of 298). Infants with HIV-infected outcome identified between 0-18 months were 92 of the 1870 active at 18 months and have a test, a 5 percent MTCT rate. County MTCT rates for the cohort in review is Homa Bay at 3.8 percent (22 of 579), Kisii at 12.5 percent (6 of 48), Kisumu at 3.8 percent (16 of 420), Migori at 4.0 percent (21 of 525), and Nyamira at 9 percent (27 of 298). Kisii and Nyamira have high cohort MTCT rates of above 5 percent. These two counties have high rates of stigma and disclosure, and these children are identified late after delivery during Child Welfare Clinic (CWC), and some of the mothers are defaulters on treatment during ANC and early postnatal period.

A total of 596 infants in the cohort of review have an unknown HIV final status (transferred out 282, LTFU 238, died 37, and 39 on care but no test done), a 24 percent contribution to the 18-month outcome. There was a huge magnitude observed in Homa Bay (211 of 596), Migori (150 of 596), and Kisumu (110 of 596). Nyamira had 82 of 596, and Kisii was even better at 20 of 596. Most of these infants were LTFU and transfer-outs, as well as a number of deaths reported in Homa Bay and Nyamira County. Mortality audits were conducted on the infants who died, and most of them were late identification who presented with opportunistic infections. More efforts will be put into ensuring quality of care is provided to all exposed infants.

PMTCT cohort analysis and viral suppression

PMTCT cohort analysis was conducted in all PMTCT-supported sites to establish client retention at 3, 6, 9, and 12 months after enrollment and viral suppression. According to the EID website, there has been an improved trend of PMTCT cohort suppression with an overall average suppression of 86 percent among pregnant women and 88 percent in the breastfeeding population. In reviewing the month-on-month VL suppression trend, the project demonstrated an upward trajectory with suppression at September of over 90 percent. Table 40 summarizes the findings.

Table 41. Average VL suppression among PMTCT clients, October to June 2018.

PMTCT VL suppression Cascade October to September 2018						
	Pregnant			Breastfeeding		
	<15 years	15–19	>20 years	<15 years	15–19	>20 years
Number of samples taken	22	49	976	15	103	2372
Number suppressed	18	37	849	13	87	2085
% Suppression	**82**	**75**	**87**	**87**	**84**	**88**

Source: National AIDS & STIs Control Programme (NASCOP) / early infant diagnosis (EID) website.
Note: PMTCT, prevention of mother-to-child transmission; VL, viral load.

The overall viral suppression of over 90 percent is attributed to the lack of proper documentation in a few sites and some missed opportunities on VL uptake. VL monitoring for PMTCT clients was also not done well as per the guidelines. The project conducted facility-based CME on VL uptake and VL results management for the clients. Adherence-support counselors supported adherence sessions for the clients with high VL who were accessing enhanced adherence sessions in the high-volume sites. The project will continue to build the capacity of HCWs through OJT, mentorship on the registers, and real-time collection of samples and dispatch of results in all supported sites. The project will also ride on the rollout of the new guidelines to sensitize MCH staff on VL monitoring and management of high VL mothers.

Maternal cohort analysis

PMTCT cohort analysis was conducted in all PMTCT-supported sites to establish client retention at 3, 6, 9, and 12 months after enrollment and viral suppression performance. Table 41 illustrates the quarter's performance.

Table 42. PMTCT cohort analysis, July to September 2018.

Indicator	3M Cohort			6M Cohort			9M Cohort			12M Cohort			24M Cohort		
	KP	NP	Total	KP	NP	Total	KP	NP	Total	KP	NP	Total	KP	NP	Total
Enrolled into cohort	371	249	620	363	250	613	320	210	530	280	167	447	273	261	534
Transfer in (T.I)	61	1	62	57	5	62	40	0	40	32	6	38	40	6	46
Transfer out (T.O)	10	17	27	18	20	38	15	22	37	19	21	40	34	43	77
Net Cohort	422	233	655	402	235	637	345	188	533	293	152	445	279	224	503
Defaulters	6	10	16	3	8	11	6	2	8	0	3	3	2	3	5
Lost to follow-up (LTFU)	0	0	0	4	13	17	4	17	21	9	12	21	17	44	61
Reported Dead	0	1	1	0	1	1	1	1	2	0	1	1	1	0	1
Stopped	3	1	4	1	1	2	0	0	0	1	0	1	1	0	1
Alive and active on treatment	413	221	634	398	225	623	338	185	523	292	148	440	275	221	496
Viral load collected and results available	310		310	342	140	482	203	91	294	251	111	362	240	157	397
Virally suppressed (VL<1000)	303		303	333	131	464	201	86	287	245	106	351	231	145	376
% Virally suppressed	97.7	NA	97.7	97.4	93.6	96	99	94.5	97.6	97.6	95.5	97	96.3	92.4	94.7
%Retained	97.9	95	96.7	99	95.7	98	98	98.4	98	99.7	97.4	99	98.6	98.7	98.6

The table represents maternal cohort analysis looking at different cohorts at different point of outcome on retention and viral suppression. Retention at 3-, 6-, and 12-month cohorts was 97 percent, 98 percent, and 99 percent, respectively, within the project-supported sites and generally higher among known positive clients at 92 percent compared to the new positive of 79 percent at 12 months. This has been attributed to monthly maternal cohort analysis at the facility level, updating in the PMTCT cohort dashboard, and gaps

identified for follow-up. The same is discussed during facility data-review forums to identify retention and suppression gaps within the cohort for review. The project also plans to conduct MM training to build the capacity of MMs to support on follow-up and retention of mother-baby pairs.

Viral load uptake and suppression was similar across cohorts, the uptake at the 6-month and 12-month cohort both at 96 and 97 percent. This was attributed to continuous mentorship and tracking of eligible mothers for a VL using the patient file and PMTCT ART cohort register. Continuous chart reviews at the site level to flag any missed opportunity was also conducted, and mothers were pre-called for sample collection. Suppression levels were recorded at 96 percent and 97 percent in 6- and 12-month cohorts, respectively, with more or less the same suppression levels for both known and new HIV positives. The project will continue to provide site-level technical support through OJT, CME, mentorship on the registers, and real-time collection of samples and dispatch of results in all supported sites.

CMM initiative

The MM model is an evidence-based, peer-to-peer approach to providing support for HIV education, care, and treatment. Under this model, women living with HIV with recent PMTCT experience are recruited, trained, and employed to work as "Mentor Mothers" within their communities. Under the standard model, each MM is based at a health facility, where she works alongside the doctors and nurses at the MCH clinic and at the CCC. These facility MMs provide health education related to key reproductive, maternal, newborn, and child health services, as well as HIV services, and they support clients in navigating the health care system to access needed services.

Under the previous implementation project, the MM model was expanded to include CMMs, who work in the communities to support case management for HIV-positive women. Like their facility-based counterparts, the CMMs undergo training to build their knowledge and capacity to carry out their role. The curriculum is adapted from the Kenya Mentor Mother Training curriculum. They then provide a range of services, including intensified case-finding and referral; defaulter tracing; case management; support groups; health education; and support for enrollment, retention, and adherence, while also tracking and reporting their work. The CMMs work primarily in the community with pregnant and breastfeeding mothers infected and not infected with HIV. At the community level, the CMMs complement the role of CHVs by providing more targeted support to address the specific needs of these populations. At the facility level, they work in collaboration with the facility MMs to identify, link, follow-up with, and provide support to HIV-positive patients to ensure adherence to treatment and care. Their roles are interdependent in ensuring facility and community linkages and follow-up for a robust continuum of care for affected households.

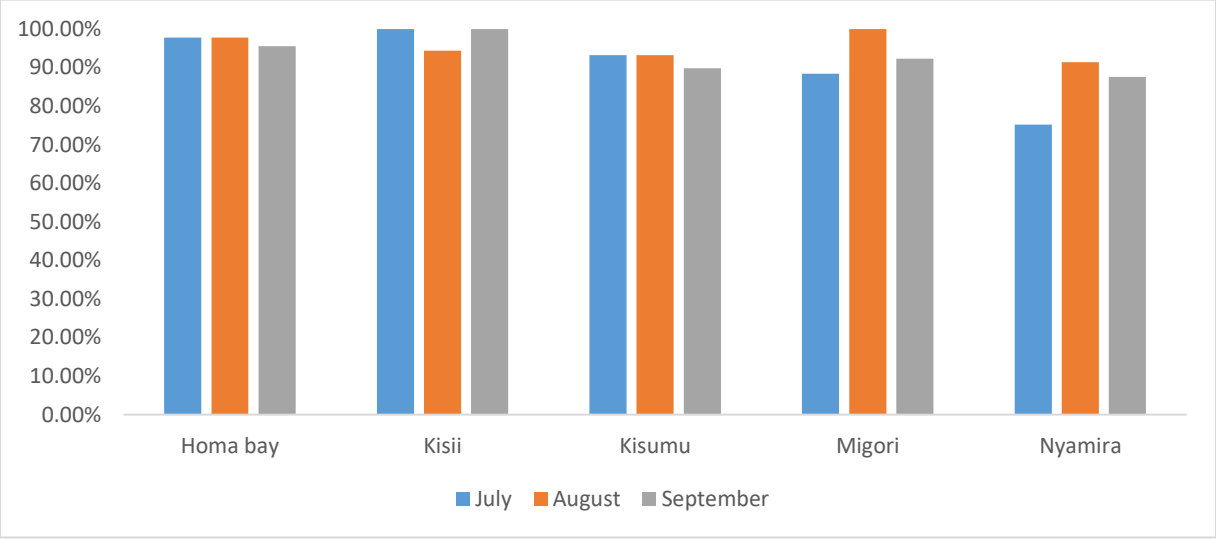
Of the seven supported facilities in Homa Bay, there has been high performance in terms of PMTCT_STAT performance, EID testing below 2 months at above 80 percent and an MTCT rate of below 5 percent. Retention rate of mother-baby pairs is above 85 percent except in Rachuonyo SCH, where they had a slightly lower performance of 79 percent. The CMM initiative is a strategy that has been shown to work and will be expanded to the neediest sites with the poorest mother-baby pair retention.

Commodity security

Improving supply chain logistics and commodity management

The project continued strengthening of county and subcounty supportive supervision teams to improve reporting rates and quality reporting. It also supported 22 ART reporting sites (18 central and 4 standalone sites) to submit monthly reports to the DHIS2 platform, achieving 93.2 percent reporting rate in the quarter. Support was provided for off-site mentorships and OJT on good commodity management practices (to improve on quantification, ordering, storage and inventory management). Figure 12 shows each of the project county's reporting-rate percentages for the quarter.

Figure 12. Central and satellite ART commodity sites' reporting rates Jul to Sep 2018 – DHIS.



The reporting rate for Nyamira County was largely affected by HCW industrial action that began in July and lasted for three months.

Support for county technical oversight and coordination for commodity management and patient safety

In the quarter, the project provided the following support:

- Quarterly commodity technical TWG meetings for Nyamira, Kisumu, and Migori.
- Continuous county supportive-supervision visits across all counties.
- Redistribution of off-schedule commodities (e.g., DTG and PrEP commodities across facilities in Migori, Nyamira, Kisumu, and Homa Bay).
- Continuous mentorship and OJT on commodity management, pharmacovigilance, and use of Web ADT.
- Support in updating the Web ADT to current version, in collaboration with the Clinton Health Access Initiative.
- Support for redistribution of short expiry HIV commodities across facilities.
- Support in sensitization of DHIS2 reporting for ART commodities.

Progress in DTG transition plans

Owing to the recent circular on potential adverse effects of DTG in pregnant and breastfeeding women, progress on DTG transition slowed down in the quarter, focusing only on eligible population (adolescents, and adult men and women over 49 years old).

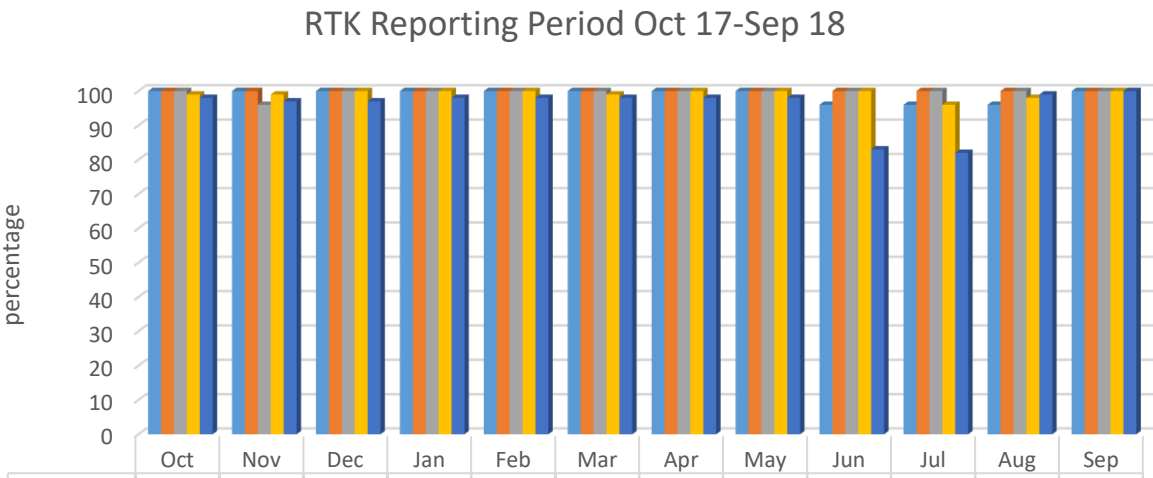
The project currently has 100 facilities with clients on DTG, which is an improvement from 56 in last quarter. Across facilities, 1,710 clients have been transitioned to TLD (tenofovir /lamivudine /dolutegravir) compared to 358 in the last quarter. This represents 3.38 percent of the Afya Ziwani total number of clients on care. The project will continue to support smooth transition of eligible populations to DTG by supporting availability of enough stock focusing on continuous CME and sensitization on TLD transition.

Laboratory commodities

Commodity being an integral part of service delivery, the project will continue to collaborate with the national mechanism KEMSA for laboratory commodities and reagents to ensure there are no service interruptions.

During the quarter under review, the project supported RTK allocation meetings for Migori, Homa Bay, Kisii, and Kisumu Counties. Additionally, there was continuous sensitization meetings on commodity management for the HCWs to improve on proper forecasting and quantification. The project continued to support the subcounty medical lab coordinators with monthly data bundles for reporting. Figure 13 breaks down the RTK reporting rates by county and month.

Figure 13. County Reporting Rates of RTK in Health Commodity Management Platform.



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Homabay	100	100	100	100	100	100	100	100	96	96	96	100
Kisii	100	100	100	100	100	100	100	100	100	100	100	100
Kisumu	100	96	100	100	100	100	100	100	100	100	100	100
Migori	99	99	100	100	100	99	100	100	100	96	98	100
Nyamira	98	97	97	98	98	98	98	98	83	82	99	100

Organizational Capacity Assessment (OCA)

The Afya Ziwani project aims to strengthen institutional capacity and accountability for management at the community, facility, and county levels. To facilitate this the project, using the USAID OCA tool version 1.0., undertook an OCA for purposes of establishing a baseline for organizational management and accountability capacity for the five CHMTs and 15 SCHMTS with which we work.

Approach

The project employed a self-assessment approach in administering the USAID OCA tool, undertaken by the CHMTs and SCHMTs separately. The self-assessment served three purposes: (1) collecting data on the eight pillars of health systems, namely leadership and governance, HRH, service delivery, HIV essential medicines and other commodities, health information systems, health financing, community health, and health research; (2) developing plans for capacity development based on priority gaps; and (3) training the CHMTs and SCHMTs on the OCA self-assessment process in preparation for the six monthly organizational capacity reviews for all the five CHMTs and 15 SCHMTs to track priority capacity interventions. To manage subjectivity, a scoring scale was applied with standard measurable parameters under each domain with a scoring scale of 0 to 4, where 0 is no capacity and 4 is the score for high capacity. Scores for individual domains and overall capacities are presented in a dashboard using traffic lights as per the OCA Likert scale in figure 14 below.

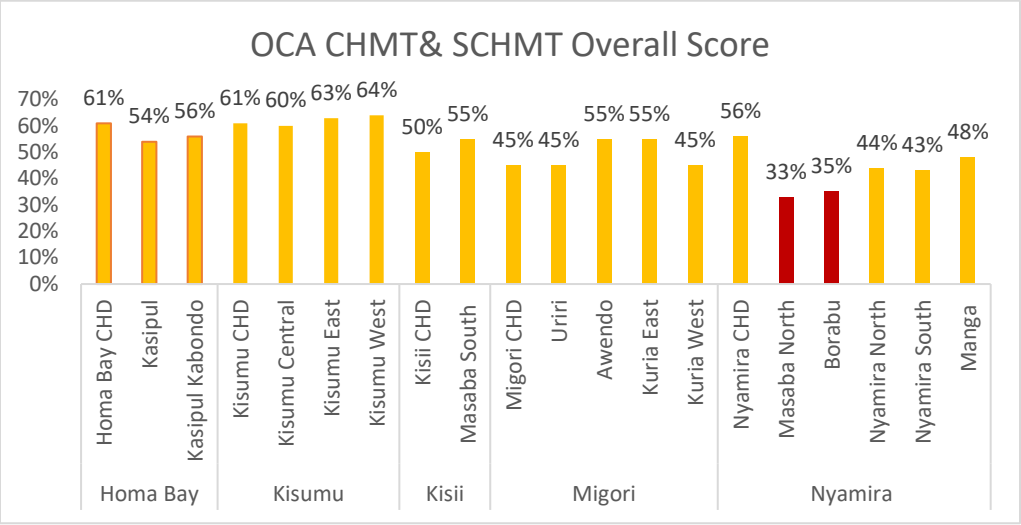
Figure 14. OCA Likert scale.

	0%–39%	Health system has limited capacity requiring significant support
	40%–69%	Health system has some capacity but has areas requiring additional support
	70%–100%	Health system is managed well and has the capacity to deliver its mandate

Results

Preliminary overall results for the CHMT and SCHMT capacities indicate that all the CHMTs from the five counties have some capacity to administer the eight pillars of health systems but require additional support, with certain pillars requiring more support than others. Out of the 15 subcounties assessed, only 2 of them have limited capacity for administration of the health system and require significant support. Figure 15 below shows the provisional aggregate organizational capacities of the CHMTs and their SCHMTs, assessed based on the Likert scale categories.

Figure 15. Summary of overall scores for CHMTs and SCHMTs assessed.



Note: OCA, Organizational Capacity Assessment; S/CHMT, sub/county health management team.

Emerging crosscutting priority capacity gaps include inadequate budgeting for HIV services in four out of the five counties assessed. In the one county that had allocated funds for HIV services, the subcounties did not know that there were funds allocated, hindering them from undertaking SCHMT-led HIV services. Staffing for HIV services was also reported as inadequate, citing that donor project support for HIV services was the main source of funding for employing staff for HIV services. Also noted was a disconnect in the coordination between the county and subcounty, with the subcounty expressing a need for orientation on matters regarding the health systems. The weakest areas of health systems, with a number zero capacity are health research and community health. These two areas require mores capacity strengthening across the board. In-depth analysis and writing of the full OCA report is under way and will be presented in the next quarter.

Key Recommendations

Feedback mechanisms between the county and the subcounty seem to be inadequate and need to be strengthened to facilitate information flow, consultation, and coordination for efficient delivery of services. In some cases, the subcounties do not know what is happening at the county level and vice versa.

There is need to harmonize the functions and roles of the county and subcounty officers in the Department of Health as defined in the County Governments Act 2012. It might be necessary to re-disseminate the County Government Act, especially to the SCHMTs, towards enforcing its implementation.

There is need to train the subcounty teams on the budgeting process as outlined in the Public Finance Management Act 2012. This will equip the SCHMTs with an understanding of their role in the budgeting process, as well as accountability for the resources assigned to them.

Leadership and governance trainings are urgently needed for SCHMTs, as well as health facility in-charges, if they are to engage meaningfully and effectively with their leaders at the county level.

While a lot of health systems strengthening efforts have previously been at the county level, it is evident that it should be mainstreamed at the subcounty and facility levels to ensure more efficient utilization of available resources, accountability, and effective health service delivery.

Lesson learned from OCA

Strengthening the annual work plan and performance-based budgeting (PBB) process

During the reporting year, the project supported consolidation of the annual work plan and budgets for 13 subcounties in four counties supported under the Afya Ziwani project. Out of the 14 subcounties supported by the project, 12 of them (86 percent) applied the PBB principles. In the next budgeting cycle, the project will be working with Health Policy Plus to train SCHMTs on the PBB process and the importance of understanding the budgeting cycle.

HRH support

Assessing staffing goals

During the first year of project implementation, Afya Ziwani worked to ensure that the project met its goal of having 95 percent of all project-supported health facilities staffed with at least 80 percent of the required full-time equivalent (FTE) employees for HIV/AIDS service delivery. The project also worked to optimize staff deployment and lay the foundation for transition to county employment.

During the reporting quarter, the project completed the drafting of the HRH assessment report following completion of data collection and analysis done in Q3. The report was reviewed and comments from project leadership addressed, and then the final report was submitted to USAID.

The HRH assessment data indicate that Afya Ziwani currently meets the USAID target to ensure that 95 percent of facilities have at least 80 percent of their FTE positions filled to carry out core HIV service provision. However, although overall staffing is currently adequate, and in some places surpasses present workload-based requirements, shortages in counseling and dispensing staff exist, with only 92 percent of facilities having at least 80 percent of the counseling and dispensing staff required. In addition, the assessment analysis indicated that the project will fall short of its overall target in 2020 if staffing gaps in selected facilities are not addressed. Based on the assessment findings, the project has identified facilities which presently require additional counseling and dispensing staff, as well as those that will experience deficits or surpluses of either clinical or counseling and dispensing staff by 2020. This has informed efforts to strategically redeploy staff so that every facility has the right staffing numbers and complements to meet projected client loads.

The HRH assessment also showed that a total of 997 employees are involved in HIV/AIDS service delivery, amounting to 781 HIV/AIDS FTE staff in the 59 high- and medium-volume sites supported by the project. This includes 199 FTE HIV/AIDS clinical providers, 146 FTE HIV technical providers, and 403 FTE lay providers, as well as 33 others. There is a heavy reliance on partner-supported contractual staff for HIV/AIDS service delivery given that 36 percent of clinical providers supporting HIV/AIDS service delivery, 44 percent of technical providers, and 97 percent of lay providers are contractual staff employed through implementing partners. The assessment further identified that only 47 percent of staff contributing to HIV/AIDS service delivery had received any HIV/AIDS training in the last 12 months and that project-supported staff were far more likely to have undergone training than civil service staff.

Afya Ziwani is actively using the findings of the HRH assessment to improve human resources (HR) coverage, workload, and performance. Within the project year, efforts were made to increase the number of civil service staff participating in project-supported trainings. The project is also revising its mentorship strategy, including expanding the mentorship role for selected clinicians in facilities with

adequate staffing. In Y2, the project technical team will present county-specific workload-based staffing requirements to each county and subcounty to build the understanding of county managers about their HIV/AIDS service delivery staffing requirements. This will the counties' opportunity to use the data to advocate with county administrators to fund the positions, as well as to understand how efficient staff management and use affect workloads and service coverage.

Improving availability and sustainability of HR for HIV services in the counties

In the reporting quarter, the project completed the hiring of 116 HCWs in Nyamira County through the CPSB. The summary of staffing numbers per county are shown in table 42.

Table 43. Project-supported staff by county and status. *

County	RCO	KRCHN	HRIO	MLT	PHARM TECH	HTS	TOTAL	Status of Contracting
Homa Bay	17	17	17	2	2	40	95	Completed
Kisii**	3	3	3	1	1	10	21	Pending[b]
Kisumu	13	13	13	2	3	15	59	Completed
Migori	19	11	15	4	4	30	83	Completed
Nyamira	12	12	12	4	5	71	116	Completed
Total	64	56	60	13	15	166	374	

Note: HRIO, health records and information officer; HTS, HIV testing services; KRCHN, Kenya Registered Community Health Nurse; MLT, medical lab technologist; RCO, registered clinical officer.
* This table includes only the positions supported by the project that are included in the civil service establishment and therefore can be hired by county governments. It does not include an additional 551 lay providers who are not presently in the civil service establishment and, therefore, cannot be transitioned through the CPSB mechanism.
** In Kisii County, the project has yet to complete the formalization of the contracting process with the county leadership owing to lack of quorum in the composition of the County Public Service Board. Contracting will be finalized in Year 2.

To reduce the HRH gaps in HIV service delivery and set the foundation for project-supported staff to be transitioned to county employment, Afya Ziwani worked with the CHMTs and the CPSBs in the five Afya Ziwani–supported counties to contract 374 health workers (Table 42 above). Staff contracted by the project were hired under CPSB employment agreements with clear transition plans for shifting financing from Afya Ziwani to counties over the project period as per Letters of Agreement (LOAs) with the counties. In collaboration with the CPSB and CHMT, all staff contracted were posted to high- and mid-volume facilities.

Establishing transition agreements (memoranda of understanding)

To guide the transition of staff to county employment, in the reporting quarter Afya Ziwani developed an HRH transition strategy. To outline the specific nature of the collaboration between Afya Ziwani and the counties in respect to contracting and transitioning project-funded health workers, the project worked with USAID to draft LOAs with the five counties. The LOAs were completed, and Afya Ziwani expects that they will be signed in Y2.

While staff employment and deployment were effectively achieved, several challenges were encountered in the project's work with CPSBs and county departments of health. The recruitment process took long.

As a result, existing staff who were waiting for their contracts to be approved by the county experienced anxiety, and some left. Existing county government laws and regulations don't envision inclusions of partners in the recruitment process; this further delayed the recruitment process as CPSBs and the county departments of health worked out how to incorporate partner participation in the process. Some counties chose to hire new candidates over those currently employed by Afya Ziwani. As a result, the project, facilities, and county lost trained and experienced staff, and continuity of services was affected.

Strengthening use of HRH-related data to manage county staffing plans

To effectively build the capacity of the SCHMT and facility managers to manage staff and to fulfill the project's commitment to coordinating with other USAID projects, Afya Ziwani worked with HRH Kenya to design an HR management refresher training program for the health facility managers and SCHMTs from Kisumu, Migori, and Homa Bay Counties. The training for Kisumu County was conducted in the reporting quarter. The project customized the MOH Advanced Curriculum for Strengthening County HR Management for the Health Sector (2016) to address priority HR management training needs, including performance management, disciplinary process, the integrated Human Resources Information System (iHRIS), and mentorship. Afya Ziwani, together with the Institute of Human Resource Management certified trainers, trained 75 county, subcounty, and facility managers using the adapted curriculum. Following the training, Afya Ziwani county HR managers have helped counties update data in the iHRIS system in reporting quarter. Table 43 provides a summary of trained personnel.

Table 44. Training by county.

County*	# Trained	Level	Cadres
Kisumu	25	SCHMT and Facility Managers from High- and Mid-Volume Facilities	Subcounty MOH, SCHAO, SCASCO, CASCO, SCMLT, SCCO, SCNO, County HRH Officer, NO I/C & CO I/C
Migori	25	SCHMT and Facility Managers from High- and Mid-Volume Facilities	Subcounty MOH, SCHAO, SCASCO, ASCO, SCMLT, SCCO, SCNO, County HRH Officer, NO I/C & CO I/C
Homa Bay	25	SCHMT and Facility Managers from High- and Mid-Volume Facilities	Subcounty MOH, SCHAO, SCASCO, DASCO, SCMLT, SCCO, SCNO, County HRH Officer, NO I/C & CO I/C
Total	75		

Note: CASCO, County AIDS STI Coordinator; MOH, ministry of health; HRH, human resources for health; SCASCO, Subcounty AIDS STI Coordinator; SCHMT, subcounty health management team; SCMLT, subcounty medical lab technologist.
* Nyamira and Kisii Counties not trained as they were yet to complete hiring through the County Mechanisms. Scheduled for Y2Q1.

To monitor and improve HRH management, the project, in collaboration with the departments of health, CHMTs and SCHMTs conducted joint quarterly support-supervision meetings on staff placement, performance management, code of conduct, disciplinary and integration measures, iHRIS utilization and updating, and training and mentorship on HIV. Afya Ziwani adapted HRH Kenya County Mechanism's

HRH Service Quality Supervision Checklist to guide this process. In Q4, the project conducted joint supervision in Migori and Homa Bay Counties as well as supported one quarterly Lake Basin Intercounty HRH TWG meeting. In FY18, the project supported a total of four quarterly Lake Basin Intercounty HRH TWG meetings to enable stakeholders to provide feedback/updates on HRH issues, staff engagement, progress on absorption of contracted staff, and use of the iHRIS as a decision-making tool. These forums are critical in fostering a strong stakeholder collaboration and spreading successful practices in HRH management across the five counties.

During the reporting quarter, the project engaged the Lead Mentors for Homa Bay, Kisii, Kisumu, Migori, and Nyamira Counties in discussions on the NASCOP mentorship model to identify mentorship gaps in nine high- and medium-volume facilities.[a] The process-involved chart reviews and register audits were carried out with the facility's comprehensive care team. Gaps identified across the facilities included errors in recording client identifiers, failure to adjust pediatric ART dosages based on current weight, incorrect Body Mass Index calculations, poor documentation in MOH client encounters and primary tools, and lack of mentorship by S/CHMT. A mentoring action plan was developed with the Lead Mentors for implementation. The process was replicated in Homa Bay, Kisumu, and Nyamira Counties, leading to the C/SCHMTs' conducting 201 mentoring visits to 15 high- and medium-volume sites across five counties in the reporting year.

During the reporting quarter, the project engaged the SCHMTs for Homa Bay, Kisii, Kisumu, Migori, and Nyamira through the Subcounty AIDS STI Coordinators (SCASCOs) and county Lead Mentors to assess monthly progress review (MPR) and CQI data to identify capacity gaps and training needs for HIV service delivery. The review process involved data comparisons between primary source registers and the MOH 731 reporting tool for HIV services. Chart audits and monthly report reviews were undertaken together with the facility staff at 15 CCCs. The SCHMTs and Lead Mentors developed a follow-up action plan with the facility staff. Gaps identified were addressed through clinical mentorship, OJT, and CME. In the reporting year, 23 high- and medium-volume facilities[b] were reached with MPR/CQI activities.

As a result, the project supported 38 hospital mentors drawn from 42 medium- and high-volume facilities across the five counties. Mentorship covered the following topics: new MOH reporting tools, PNS strategies, management of STF, and updates on the use of DTG as a replacement drug for Efavirenz among eligible clients,

Major gaps identified from the MPR/CQI Review:

1. Errors in pediatric ART dosing at low-volume facilities affecting quality of reporting.
2. Incomplete documentation of viral load results in MOH 361 B.
3. Incorrect documentation in the presumptive TB register for GeneXpert results.
4. Incorrect documentation of HEI identification number in the HEI register.
5. Incorrect management of patient appointment diaries.
6. Challenges with documenting PNS outcomes in the appropriate tool.
7. Failure of clinicians to transition eligible clients from Efavirenz to DTG medication.

[a] Port Florence Community Hospital, Migosi Sub County Hospital, Ober Kamoth Health Centre, Nyalenda Health Centre, Ntimaru Health Centre, Awendo Sub County Hospital, Kehancha Sub County Hospital, Isebania Sub County Hospital, Sony Medical Centre, Gesusu Sub County Hospital, Keroka Sub County Hospital, Nyamusi Health Centre, Nyamira County Referral Hospital, Rachuonyo District Hospital, and Kabondo Sub County Hospital.

[b] Port Florence, Migosi SCH, Airport, Ntimaru, Kegonga, Dede, Kuria DH, Ting'a, Kokwanyo, Nyamusi SCH, Nyamira CRH, Gesusu SCH, Keroka SCH, Kabondo SCH, St Marks HC, Ober Kamoth HC, Nyalenda HC Gita SCH, Disciples of Mercy, Ntimaru SCH, Rachuonyo DH, Matata Nursing Home, and Isebania SCH.

reaching 371 HCWs cumulatively in the reporting year.

Providing in-service training through existing institutions

During the reporting period, the project completed a capacity assessment of local training institution's ability to offer HIV in-service training. In total, eight training institutions were assessed, including a university, nongovernmental organization–sponsored training institute, and six medical training institutions.

Based on the assessment results, Maseno University and LVCT Health are best suited to offer in-service training in HIV. The project will work with the counties to identify their training needs and develop budgets and plans to engage with these institutions. Consolidated findings on the training institution capacity assessment are included in the *Training Institution Capacity Assessment Report* attached in Appendix 1.

Training for improved HIV service delivery

During the reporting quarter, the project worked with the NASCOP trainers and community facilitators to support the training of 6,004 HCWs and managers on various topics, including quality HIV service delivery and HRH management, and all training data are updated in the iHRIS. A total of 6,571 HCWs, community members, and managers were trained in the reporting year. Table 44 provides a summary of the trainings supported by the project.

Table 45. Trainings held in reporting quarter.

	Training	**Number Trained**
DREAMS	HCBF facilitators training in new wards of Kisumu, Homa Bay, Migori	81
	MHMC facilitators training in new wards of Kisumu, Homa Bay, Migori	96
	Shuga facilitators training in new wards of Kisumu, Homa Bay, Migori	62
	Sister to Sister and Respect K training for HTS counselors in 3 counties	34
	FMP1 facilitators training in new wards of Kisumu, Homa Bay, Migori	65
	Training of FC and entrepreneurship facilitators training	20
	Training on financial capability for AGYW	4,405
	Support Entrepreneurship training sessions for eligible AGYW	198
VMMC	VMMC service providers training on MC under LA and MC devices	40
	Refresher training of VMMC service providers on dorsal slit method	29
Laboratory	External laboratory quality assurance for laboratory technologists	38
	Refresher training on biosafety for HCWs	34
PMTCT	Training of the CMMs on KMMP in priority facilities	29

	Refresher training and CME for HCWs on EID algorithm at facility level	41
	Training on ART service provision, including PMTCT	8
	OTZ and training on management of peer support groups for the nurses	232
Prevention	Adherence-counseling training on the provision of ART literacy classes for adolescents on self-management	54
HRH	Training on HRH management and supervisory skills, including iHRIS data entry system for 3 SCHMTs	30
	Training of the S/CHMT and facility managers to improve HRH and performance management, disciplinary process, iHRIS, and mentorship	75
	Staff induction for newly hired HCWs, Nyamira County	116
EMR	Support of refresher trainings for key health care providers on EMR	150
QI/QA	KHQIF training for QIT I members to train WIT on CQI, including QI collaborative	47
HSS	Organizational Capacity Assessment Training for 5 CHMT &15 SCHMTs	120
	Total	**6004**

Note: AGYW, adolescent girls and young women; ART, antiretroviral therapy; CME, continuing medical education; CMM, Community Mentor Mother; CQI, continuous quality improvement; DREAMS, Determined, Resilient, Empowered, AIDS-free, Mentored and Safe; EID, early infant diagnosis; EMR, electronic medical record; FMP, Families Matter! Program; HCBF, Healthy Choices for a Better Future; HCW, health care worker; HRH, human resources for health; HSS, health systems strengthening; HTS, HIV testing services; iHRIS, integrated Human Resources Information System; KHQIF, Kenya HIV Quality Improvement Framework; KMMP, Kenya Mentor Mother Program; MC, male circumcision; MHMC, My Health My Choice; OTZ, Operation Triple Zero; PMTCT; prevention of mother-to-child transmission; QA, quality assurance; QI/T, quality improvement / team; S/CHMT, sub/county health management team; VMMC, voluntary medical male circumcision; WIT, work improvement team.

CME support

During the reporting quarter, the project supported the rollout of CME sessions across Afya Ziwani–supported facilities. Specifically, the project supported CMEs on OTZ in Kisumu, Nyamira, Kisii, Migori, and Homa Bay Counties, reaching 232 facility staff from 164 health facilities with the objective of improving retention and viral suppression among adolescents. Additional CME sessions on STF management covered 164 facilities, reaching 230 HCWs. Overall in the reporting year, 674 facility staff from 209 health facilities were reached with CME activities.

HCWs were oriented on the use of job aids for selected priority areas aimed at improving the quality-of-service provision at 42 medium- and high-volume facilities. The key areas addressed included PNS, STF, EID, pediatric HIV care, management of patients with high VL, HIV care among AGYW, and gender-based violence.

The project supported SCHs in Kisumu, Homa Bay, Migori, Nyamira, and Kisii to participate in web-based CME and case management sessions reaching 92 HCWs in the reporting quarter through the ECHO platform, hosted at Jaramogi Oginga Odinga Teaching and Referral Hospital by the International Center

for AIDS Care and Treatment Programs project once a week. In the reporting year, a total, 307 HCWs across five counties were reached with ECHO CME.

CME topics covered are shown in table 45.

Table 46. CME topics covered through various approaches July to September 2018.

CME Topics Covered	
Management of advanced HIV disease	Active TB case findings, management of pulmonary tuberculosis (PTB), TB treatment in all categories
Assisted partner testing	Management of drug-resistant TB
Pediatric treatment failure	Adherence and psychosocial counseling
Second-line patient management	PHDP for PLHIV
Enhanced adherence counselling	Lab-clinical interface dual testing-osteopenia and HIV infection
Client categorization	Management of diabetes mellitus in HIV infection
PMTCT testing strategies, including EID	Management of high viral load
TB in children	Drug-induced liver injury in the setting of isoniazid preventive therapy
Management of TB–HIV in children	Management of high viral load
Management of hypertension in HIV infection	Drug-induced liver injury in the setting of isoniazid preventive therapy
Anemia management in HIV	PrEP among adolescent girls and young women
Medically assisted therapy (MAT) among HIV clients	Osteopenia and HIV infection

Note: EID, early infant diagnosis; PHDP, Positive Health, Dignity, and Prevention PLHIV, people living with HIV; PMTCT, prevention of mother-to-child transmission; PrEP, pre-exposure prophylaxis.

QI

Institutionalization of QI in counties/subcounties and facility levels

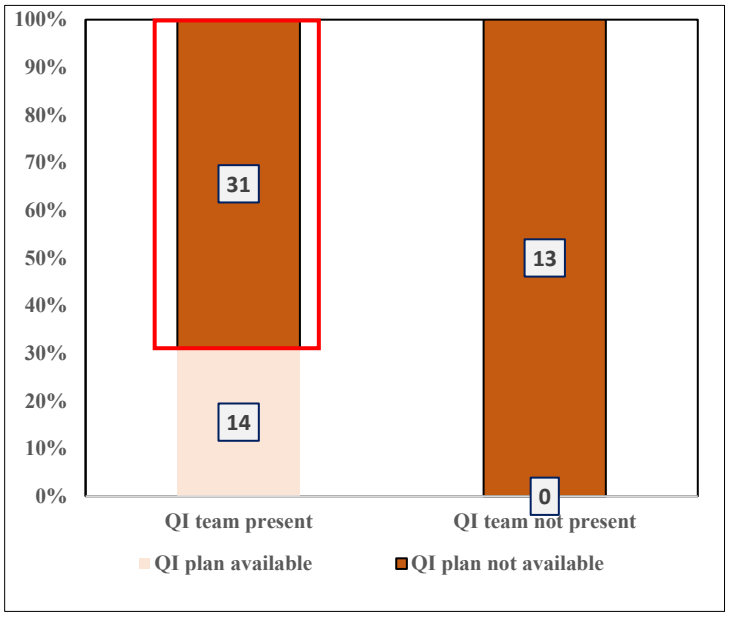
In the reporting year, baseline assessments were conducted in 59 high- and mid-volume facilities across the five counties to ascertain QI capacity and strategically target support. The results of the baseline showed a complex and relatively weak QI portrait. While many of the Afya Ziwani sites had previously received QI support from the USAID ASSIST (Applying Science to Strengthen and Improve Systems) Project, supported sites had QI projects focusing on maternal, newborn, and child health. As a result, only 3 percent of the sites assessed had evidence of Kenya HIV Quality Improvement Framework (KHQIF) service delivery indicators. In addition, the assessment found that QI teams in ASSIST-supported sites went dormant once the ASSIST project concluded. One of the reasons teams ceased to continue QI activities was that trained staff were redeployed to other sites outside Afya Ziwani coverage, and remaining staff did not have the skills to continue QI activities. Overall, the results of the QI

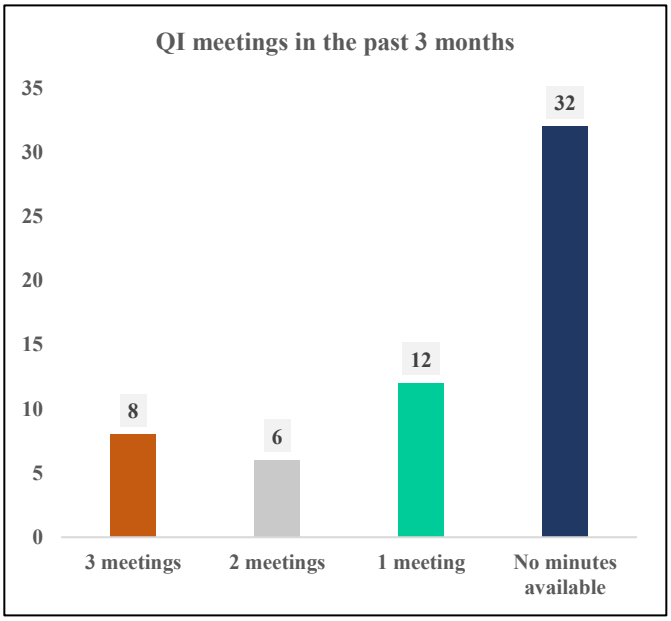
assessment showed that 78 percent of the facilities had existing QI teams but only 24 percent had a functional QI plan. In the 24 percent of sites where the assessment found active QI projects, a majority were supported by a NASCOP and the University of California, San Francisco, project. Figure 29 shows two QI structures and processes results.

Figure 16. QI structures and processes.

Note: the assessment was conducted for the 59 facilities; however, one site was excluded during analysis in some areas since the data were incomplete.

The findings were shared with the SCHMTs and CHMTs, and they developed joint work plans to bridge the identified gaps and reinforce the QI systems so it can be better managed and sustained by the counties and subcounties. To achieve this, Afya Ziwani, in collaboration with NASCOP QI Training of Trainers program, trained 73 health facility managers and staff and 10 SCHMT members on the Kenya Quality Model for Health / KHQIF implementation. In addition, a one-day sensitization meeting at the counties for both the SCHMTs and CHMTs—Sub/County AIDS STI Coordinator (S/CASCO), Sub/County

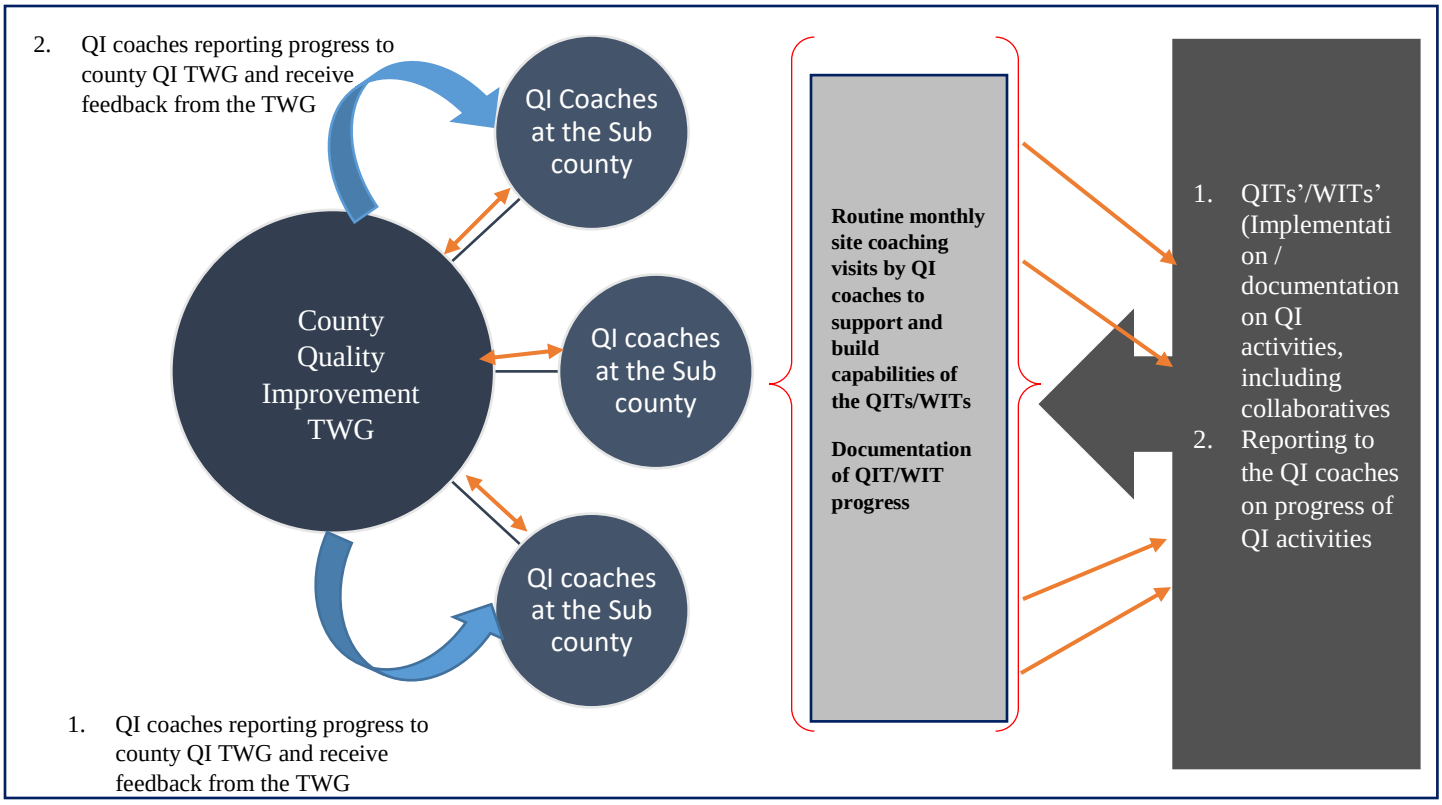




medical lab technologist (S/CMLT), Sub/County Health Records Information Officer (S/CHRIO), county pharmacist, county-lead mentor, and subcounty MOH—in all the 5 counties on QI approaches, including QI collaboratives, was conducted.

Following these sensitizations, the counties appointed 29 QI coaches comprising members of both the facility health management team and SCHMT, who will conduct coaching visits to support the facility QITs / work improvement teams (WITs) in implementation of QI activities. The project developed a QI coaching guide, which was used in sensitizing 10 of the appointed coaches from Kisumu and Homa Bay Counties on QI coaching methodologies. In Y2 the project will sensitize the remaining 19 coaches. To build the capabilities of the QI coaches to conduct coaching visits, the project conducted joint coaching visits with 5 QI coaches in four facilities in Kisumu County. The facility-based coaches will conduct on-site coaching, in addition to coaching other facility teams. The subcounty QI coaches will support the facility-based coaches through joint visits and remote coaching support. The expectation is for the QI coaches to become independent in coaching the QITs/WITs and support QI implementation at the facilities. The QI implementation framework is illustrated below in figure 17.

Figure 17. QI implementation framework.



Note: QI, quality improvement; TWG, technical working group; WIT, work improvement team.

In the reporting year, while building the capabilities of the counties, the project technical team independently conducted 75 site coaching visits to QITs/WITs in high- and mid-volume sites on KHQIF service delivery indicators, root cause analysis, and Plan-Do-Study-Act. As the project continues building the capabilities of the QI coaches who will take up the coaching visits in Y2, increasingly the county and subcounty QI coaches will take on this responsibility. This support resulted in facility-based QI projects focused on improved retention (e.g., Migosi SCH, ***see*** *"QI implementation success story" section below*); improved VL suppression (e.g., Nyamira CRH from 80 to 87 percent and Gesusu SCH from 79 to 89 percent); and improved tracking of PNS in Rachuonyo SCH and Matata Nursing Home in Homa Bay County.

To build efficiencies within the project while expanding QI knowledge and capabilities, the project integrated QI activities into other project processes. For example, during the external QA training the QI/QA advisor sensitized laboratory service providers and adherence counselors from the five subcounties in Nyamira on root cause analysis and Plan-Do-Study-Act. Fifty-four facility managers from Kisumu County were also sensitized on QI approaches during the Kisumu HRH orientation meeting.

QI Collaborative

In collaboration with the counties, the project reviewed HIV/AIDS data and identified viral suppression as a key area for a QI collaborative. They further identified 32 facilities across the five counties with low VL suppression in the last year that could benefit from participation in the VL collaborative (*see table of viral suppression collaborative sites in appendix*. A concept note, as well as process and tools to guide the

collaborative process, were developed in collaboration with NASCOP. The concept note included a change package and a set of indicators for the collaborative, which were developed in consultation with county partners. NASCOP QI coaches and the project team sensitized the teams on the QI collaborative indicators and methodology. In collaboration with the counties, VL collaborative baseline data were collected from the 32 high-volume collaborative sites. This was analyzed and shared with the county teams. Findings from the analysis include: (1) delays in initiating interventions for STF patients; (2) interventions, such as enhanced adherence counseling, that take longer than the standard duration; and (3) failure to promptly switch patients confirmed to have failed treatment to an efficacious regimen.

To engage the county, subcounty, and HCWs in the VL QI collaborative, the project is employing a positive reinforcement approach through a reward and recognition system. This includes awarding trophies/plaques for the best-performing and most improved facility QIT/WIT at every learning session to recognize sites for making changes and encourage the improvement process, publicizing the best innovations in an end-year conference, and supporting teams in developing abstracts to showcase in the NASCOP best-practice forums and Nyanza western TWG best-practice sharing forums.

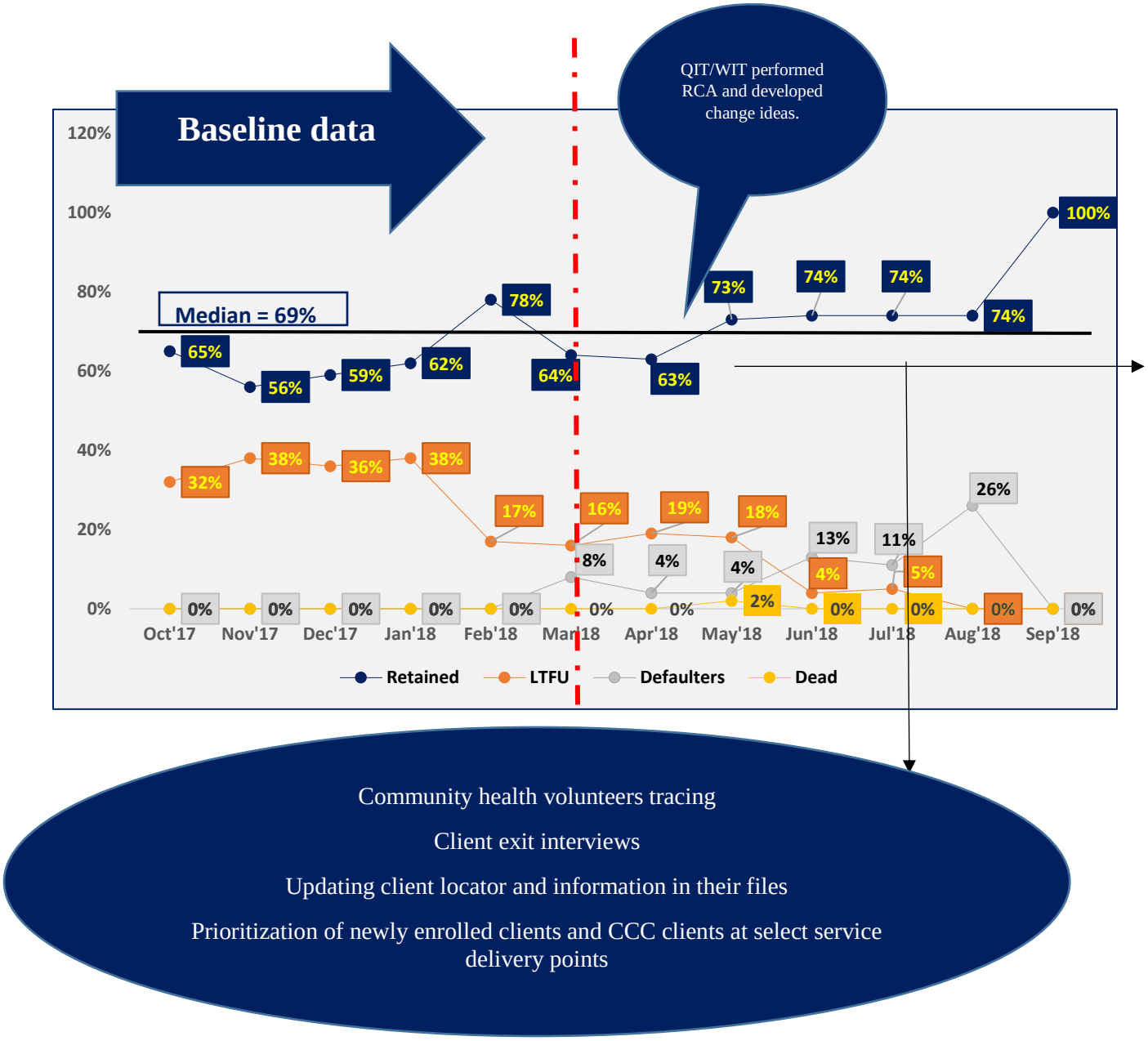
The project is working with the counties to integrate an HR performance improvement (HRPI) approach into QI activities in ten sample sites. HRPI focuses on clarifying staff roles and responsibilities, documenting task lists, identifying skills gaps, and providing skill building, supervision support, and recognition to improve staff performance and achieve better outcomes. In collaboration with county partners, project technical team oriented two of the ten facility teams participating in the first phase of HRPI in Kisumu in the reporting quarter. In Y2, results in VL suppression from sites with HRPI will be compared with sites implementing QI without HRPI, with the process scaled up as we gain county buy-in.

QI implementation success story / Migosi Health Centre

Migosi SCH, one of the high-volume hospitals within an urban setup in Kisumu County, proposed to use a QI methodology approach to improve their net new-treatment retention from 57 percent to 90 percent (goal) within 6 months. The facility has 1,515 clients currently on ART as at Sept 2018. On average, they enroll 26 patients in a month; however, the team realized they were only retaining 57 percent of the newly enrolled clients in care.

Root cause analysis by the facility team was done. The findings included poor service-provider attitude toward patients, long waiting times, especially at the pharmacy and the laboratory service points, and competitors (other clinics) who are offering better services and incentives, such as food supplements. Other findings were known positives posing as new clients at the HTS, patients who self-transfer out without notifying the clinic, and weak defaulter tracing mechanisms, all factors leading to high attrition. The team implemented several change ideas, which resulted in an improved net new retention of 74 percent as at August 2018 (*see below run chart*). This intervention is ongoing. Some of the change ideas implemented included prioritization of CCC patients at the laboratory to shorten the waiting times and of the newly diagnosed (enrolled) clients at all SDPs. Utilization of CHVs in defaulter tracing of patients who miss appointments and linking newly enrolled patients to individual CHVs was also put in place. The opening times for the clinic were reviewed for early opening of the clinic, as from 7:30 a.m., and six monthly client exit interviews were implemented. Some of the lessons learned include the following: (a) review and updating of client locator information is key in tracing patients who miss appointments; (b) client satisfaction determines choice of facility, hence patient–service provider relationships should be built on trust and mutual understanding; and (c) community involvement in management of patient appointments improve retention. Figure 31 demonstrates an implementation chart for Migosi HC.

Figure 18:QI Implementation chart in Migosi HC



Note: N = 322

Health informatics

EMR and ADT

The Afya Ziwani project has continued to support 40 facilities that were furnished with KenyaEMR, built on top of OpenMRS platform whose primary partner was I-TECH Kenya. A total of 35 facilities (87.5 percent) have achieved POC usage of the system; 29 facilities (70 percent) have achieved EMR data concordance threshold of over 90 percent; and 6 facilities (15 percent) have achieved EMR data concordance ranged from 80 to 89 percent. On-site mentorship and OJT on data use to support EMR for clinical decision-making at the facility level have been done. Off-site training for clinical decision-making and data visualization on national data warehouse have been conducted for Kisumu, Homa Bay, and Migori Counties. Supportive supervision, technical support, hardware maintenance, replacement of accessories, and data mining have been done and will continue to be offered to the county and subcounty management, clinical team, and health records staff. The KenyaEMR system currently supports HTS, care and treatment services (pediatric, adolescent, and adult), ANC and maternity services, EID, and TB–HIV services. Upload of monthly EMR report extracts to the NASCOP national data warehouse for data visualization are available, with login rights provided.

Data quality threshold has been achieved in 18 facilities in Nyamira County, 4 in Migori County, 2 in Homa Bay County, 3 in Kisumu County, and 2 in Kisii County, totaling 29 facilities.

The project has initiated 13 facilities (32.5 percent) to POC—2 in Kisumu County, 2 in Kisii County, and 9 in Nyamira County—having them engage with the department of health in the respective counties to transition to paperless mode. The process has started, and we are aiming to transition the remaining 27 facilities to paperless mode or reduced paper in the next two quarters.

The project has continued to support 17 health facilities that host the ADT through software upgrade with core features to manage commodities. Through use of ADT tools, facilities are able to report and direct transmission of VL results from the NASCOP website, where results are synchronized with patient data in the system. More so, the project conducted OJT at the facility levels. Given the shift to the electronic dispensing and inventory tracking tools, Web ADT was developed by the Clinton Health Access Initiative.

Through health informatics, with support from the monitoring and evaluation (M&E) department, the project managed to roll out PRISM, which supports all thematic areas for program aggregate data report. The project has developed data capture tools for data entry for both MER (monitoring, evaluation, and reporting) and non-MER measures. These include revised MOH 731; HCA; comprehensive IPT and QI VL collaborative reporting; defaulter tracking; accounting for current ART drop/gains; maternal cohort analysis; PMTCT, HTS, TB, and STF reporting; differentiated care model; OTZ, PSSGs, CARGs, etc.

Challenges

The project experienced challenges in implementation of EMR in selected facilities, which has hindered continuity and consistent POC use of EMR, affecting reporting concordance. Some of these challenges include frequent power outages in Migori and Homa Bay Counties, inherent system gaps, the inability to generate registers and a lack of a dispensing module, the lack of internet connectivity at the facilities to support automatic download of VL results from the NASCOP website, and high staff turnover. Others are hardware malfunctions (e.g., N-Computing devices which have been used for more than five years and are worn-out), hence the need for extra computers to replace those destroyed by power surges. The project is in the process of EMR equipment procurement, and most of these challenges will be addressed.

Strategic M&E

Enhancement of availability and capacity to use reporting tools at all levels

During the reporting period, the project received a go-ahead to bridge the gaps in the shortages of the revised MOH tools. The project did a quick assessment to find out which tools were needed the most, and from that assessment the most needed tools were chosen by each county and printed. The project collaborated with the subcounty health record officials in the distribution of the printed revised tools in the five project-supported counties (table 46) based on the gaps, by facility.

Table 47. Number of tools printed and distributed, by project-supported county.

Register	Daily Activity Register (DAR)	DAR for ARVs & OI	Green cards	HEI register	HTS	IPT Register	ART Cohort	Treatment preparation register	Appointments cards MOH 258
Kisumu	30	0	3000	24	35	9	30	20	100
Homa Bay	33	33	4000	27	40	2	5	0	100
Migori	50	0	3000	35	60	2	42	42	100
Nyamira/Kisii	170	90	15000	64	300	2	90	165	1200
Total	**283**	**123**	**25000**	**150**	**435**	**15**	**167**	**227**	**1500**

Note: ART, antiretroviral therapy; ARV, antiretroviral; HEI, HIV-exposed infant; HTS, HIV testing service; IPT, isoniazid preventive therapy MOH, ministry of health; DAR, Daily Activity Register; OI, Opportunistic Infections.

In the reporting quarter from July to September 2018, the project also undertook a tools gap quantification exercise in all the supported sites to inform NASCOP and the US President's Emergency Plan for AIDS Relief (PEPFAR) of the shortages in tools. The exercise was being done for the second time to quantify the shortage of tools in the project-supported sites and also quantify the extend that implementing partners may have bridged these gaps. The project is hopeful that the information provided will contribute to the availability of the reporting tools and to improvements in updating patient records and data quality at the facility level. The project noted an acute shortage of DAR usage across the counties due to it getting filled up fast in high-volume sites—a high-volume site with over 2,000 patients will use one DAR per month.

Capacity-building of MOH systems, structures, and personnel on data collection and use

Training key health care providers on revised tools

As from April 2018, the use of revised health management information systems (HMIS) tools, including registers and the summary 731 reporting tool, took effect. To ensure that the HCWs had a good understanding of the indicators and that this translated to better documentation and accurate reporting, the project supported the training on the revised tools to 127 HCWs from 60 health facilities in Migori County. This was largely due to the project-supported staff transition in the county that resulted in many new staff joining the project's sites who had minimal understanding of the registers and reporting tools. The training was later supported by focused mentorship to drill into the staff a deeper understanding of the tools.

Strengthening HCW capacity on reporting tools, indicators, and data use

The newly introduced MOH tools took effect starting in April across all the supported counties. To meet the anticipated challenges in understanding the new tools, the project continued to strengthen its support for on-site mentorship use of the documentation and reporting tools across the five supported counties. A total of 338 health workers were reached during the quarter: 105 in Homa Bay, 50 in Migori, 23 in Kisumu, 110 in Nyamira, and 50 in Kisii Counties. The support focused on gaps that were identified during site support supervision visits, monthly data-review meetings at the project level, quarterly data-review meetings at the subcounty level, and routine DQAs at the site level. The focus was on addressing documentation challenges in DARs, the ART register, the ANC register, and the HCA, as well as on reporting challenges in the use of the new MOH 731.

Improvement of data quality and data use

Performing facility data quality audit and data cross-checks

The project, in liaison with HRIOs at health facilities, conducted DQAs in 50 project-supported high-volume health facilities during the quarter. The data cross-check exercise was conducted in all the project counties, with Kisumu doing the DQA in 6 sites, Nyamira in 13 sites, Migori in 15 sites, Kisii in 2 sites, and Homa Bay in 14 health facilities. The DQA was built on previous, similar audits that had been carried out by the project. These audits focus on comparison of data across three data points (namely, registers, MOH731 summaries, and the DHIS2) to assess and document data consistency. All variances were corrected and a QI plan developed to mitigate future variances.

Supporting monthly data-review meetings at county level before report submission

The M&E officer supporting the respective project-supported county took lead in supporting the monthly data-review activity at the respective county office before data submission to the regional office. This informed the program team on areas of focus and the county achievements in terms of COP targets. During the meetings, facility-level data on HIV testing and counseling, care and treatment, PMTCT, and VMMC were reviewed. Key gaps in performance and data quality, including missed opportunities in service provision, were discussed and strategies formulated for data QI at the facility level.

Improving data demand and use by facilities and subcounties through quarterly data reviews

Through the SCASCOs and SCHRIOs the county conducted data reviews at the subcounty level, where facilities presented their HIV data from DHIS. A total of 12 data-review meetings were held—Homa Bay (4), Migori (3), Nyamira (3) and Kisumu (2). The data-review meetings brought together all the facility in-charges, HRIOs, clinicians, and other key facility staff who offer HIV services at the facilities to present and discuss their data. Gaps were identified, and facilities were tasked on corrective measures to meet targets and ensure quality of care to the patients. This led to ownership of the data. Recommendations for data quality audits, joint supportive supervision, and mentorship with participation of the sub CHMTs on a quarterly basis were also discussed and agreed upon

Conducting routine data collection, analysis, and presentation to ensure quality data are used for decision-making by the program and SCHMTs

The M&E team ensured data from all project sites were collected and submitted on time. In the reporting quarter, the project fully migrated to the new MOH 731 and to its new PRISM system, a new DHIS2-

based system that the project rolled out to consolidate all its data in one central online system. In agreement with the several SCHRIOs at the subcounty level, the migration to the new 731 eased the burden on the SCHRIOs where they previously had had to enter two 731 reports into DHIS. The project also developed custom data collection tools in PRISM to collect the nonroutine, non-MER data into PRISM, which included the OTZ data, Viremia clinics data. and differentiated care model data.

To ensure that the rich contextual data were used to understand the PNS approach, the project rolled out patient-level electronic data collection of PNS data using ODK collect. This enabled the project to understand and answer PNS questions, like PNS refusal rates and reasons, elicitation rate comparisons by age, sex, occupation, and marital status, and time from elicitation to testing, also by age, sex, occupation, and marital status.

IPT data collection, cleaning, and entry into DHIS

During this reporting quarter Afya Ziwani undertook a patient-level data abstraction to ascertain IPT coverage of all clients on ART. This was informed by a TB–HIV stakeholders' forum, which noted low reporting in the national HMIS system—DHIS 2. The project used the ODK mobile-based data abstraction tool to capture the data from the sites quickly. The abstraction included all active files as at January 2015 (inclusive of any attritions from treatment), focusing on determining their current status and IPT initiation and completion status. Aggregation, cleaning, and analysis were done with keen focus on updating the National HMIS system with the IPT initiation and completion data. This was backdated to January 2017. The final, cleaned data were shared back to the SCHRIOs for subsequent updating of the DHIS.

National care and treatment DQA

During the reporting quarter from July to September 2018, a national DQA was conducted by joint NASCOP and HIV care and treatment mechanisms—USAID, CDC, and DOD.

The objectives of the DQA were to:

- Assess the quality of reported data for selected indicators—TX_CURR, TX_START, PMTCT_POS, PMTCT_ART, infant prophylaxis, number circumcised (VMMC_CIRC), and EID PCR.
- Verify the quality of reported HIV patient monitoring data and systems at the facility level.
- Cross-validate a sample of patient records by conducting a manual count of patient records.
- Determine the extent of over or under counting of people on ART nationally.

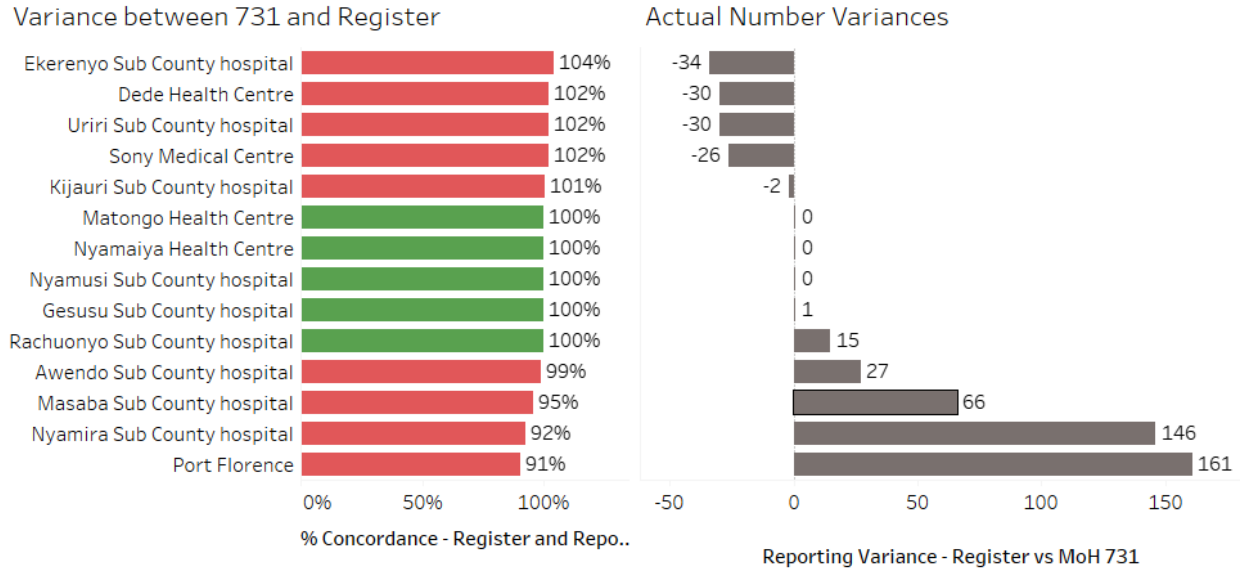
The DQA was conducted in 14 Afya Ziwani care and treatment sites—4 in Migori County, 1 in Homa Bay, 1 in Kisumu, 1 in Kisii and 7 in Nyamira County. It was also conducted in an additional 2 VMMC sites that are not Afya Ziwani care and treatment sites. Chart abstraction was performed in 4 of the 14 sites—Rachuonyo SCH, Awendo SCH, Masaba/Keroka SCH, and Nyamira CRH. The data reviewed were for the period from April to June 2018, while for EID PCR, the period was June, July, and August.

The DQA consisted of three components:

- Component 1: Facility systems assessment. This was meant to assess the facility capacity to produce quality data.
- Component 2: Data verification.
- Component 3: Medical records abstraction. Actual patient files were sampled and several indicators, including appointment dates and next TCAs, were abstracted and compared what was in the Daily Activity Register (DAR) and the ARV Dispensing Tool (ADT).

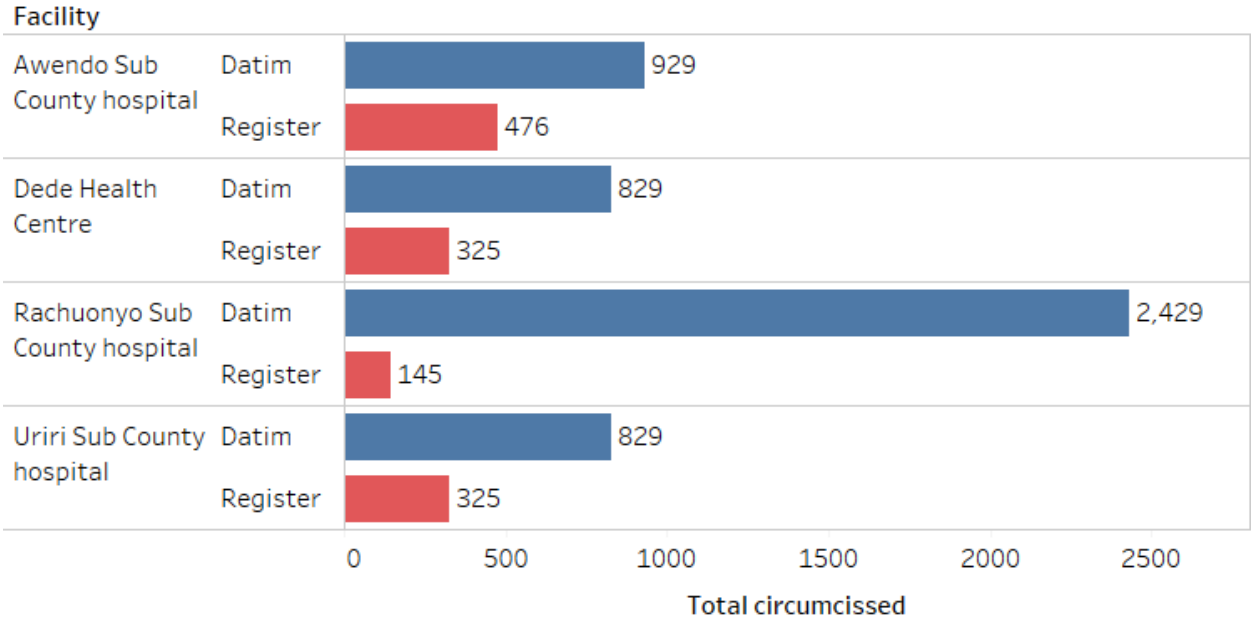
The project sites scored mixed results across several indicators and sites. There was good concordance between the reporting tools with DHIS 2 and with PEPFAR system (DATIM) in all indicators apart from VMMC. The discordance in VMMC data with what was in the MOH systems versus what the project reported into DATIM was due to the project's supporting other VMMC sites as outreaches and reporting their data under a static/core site in DATIM. This since has been clarified, and, starting in the reporting quarter (from July to September 2018), the project reported all its data at each site. Figure 19 compares MOH 731 and DAR data for those currently on ART, and figure 20 demonstrates data comparisons between DAR and DATIM for VMMC clients.

Figure 19. Data verification: Concordance between DAR and MOH 731 data sources for current ART.



Note: ART, antiretroviral therapy; DAR, Daily Activity Register; MOH, ministry of health.

Figure 20. Differences in actual numbers in DAR, the minor theatre, and DATIM sources for VMMC data.



Note: DATIM, Design and Analysis Toolkit for Inventory and Monitoring; DAR, Daily Activity Register; VMMC, voluntary medical male circumcision.

II. Activity progress (quantitative impact)

Please refer to the performance data tables in the attachment.

III. Constraints and opportunities

IV. Performance monitoring

Please refer to the performance data tables, attached separately.

V. Progress on gender strategy

VI. Progress on environmental mitigation and monitoring

The project supported environmental mitigation, monitoring, and reporting activities in the period ending September 2018. The focus during this reporting period was on strengthening health care waste management (HCWM) at all levels of health care service delivery in all the five supported counties. The major activities implemented include (1) provision of HCWM commodities to support IPC at project sites, (2) capacity-building through supportive supervision and technical assistance to health facility staff, and (3) improvement of waste handling and disposal infrastructure in at supported facilities.

The project supported the procurement and distribution of HCWM commodities that comprised color-coded bins and matching bin-liner bags. This was provided for all 59 high- and mid-volume care and treatment facilities and all 57 static and outreach VMMC sites. The low-volume sites are supported through the KEMSA commodity pipeline and/or county government support. The main objective of providing sharps containers, color-coded bins, and bin liners to health facilities was to bridge existing commodity supply gaps at high- and mid-volume project-supported facilities and improve segregation of waste generated in health facilities, especially from HIV SDPs. It also served to strengthen segregation as an HCWM best practice and demonstrate to the HMTs the correct specifications as per the national HCWM standards for color-coded bins and bin-liner bags. This will, in turn, inform county-supported procurements for HCWM commodities for facilities.

Supportive supervision visits were conducted in subcounties and health facilities to provide mentorship and technical assistance to HCWs on HCWM and IPC practices at the facility. All the project-supported sites were visited for supportive supervision through the end of September 2018, which was done jointly by C/SCHMT and project technical staff. Mentorship sessions for HCWs were conducted on safe waste handling and disposal practices. It is expected that, through supportive supervision and technical assistance, the project will continuously build the capacity of the HMTs to ensure that health service delivery incorporates environmental mitigation and monitoring measures.

The World Health Organization recommends secured waste disposal pits as the minimum requirement for disposal of health care waste at health facilities in resource-constrained settings. However, for high-volume facilities, it is recommended that waste incinerators be in place and that these support lower-level facilities through a hub-and-spoke model for disposal of all biohazardous infectious waste and sharps. The project continued to support and advocate for secured waste disposal pits at all supported sites. This ensures that risk to staff, patients, and the community of exposure to infectious waste and injuries is diminished since waste storage areas are secured, and unauthorized persons do not access disposal sites. The sites with incinerators include Rachuonyo SCH, Kabondo SCH, and Matata Nursing Hospital in Homa Bay County; Awendo SCH, Uriri HC, and Kuria District Hospital in Migori County; and Nyamira CRH, Manga SCH, Getare Health Centre, Isoge HC, and Kipkebe Dispensary in Nyamira County. Adherence to SOPs for waste incineration and use of personal protective equipment by waste handlers is emphasized at all times and reinforced during site supportive supervision.

The incinerator sites are central sites for final disposal of hazardous infectious waste coming from the lower sites. This waste from lower-level facilities is secured in a safe storage box/space at the facility and periodically transported to the central sites for final disposal. The challenge with the incinerators is the frequent breakdowns in the absence of preventive maintenance service contracts. Facilities and/or county governments are not able to immediately facilitate repairs, impairing time disposal of hazardous waste.

VII. Progress on links to other USAID programs

In the current reporting period, Afya Ziwani worked collaboratively with HRH Kenya and USAID Health Policy Plus on HRH strengthening and PBB, respectively. The project will continue to work collaboratively with these two mechanisms at the SCHMT level in the next quarter.

Collaboration with the global impact firm Palladium Group continued in the project quarter in the area of EMRs. The two projects worked toward improving the utilization of the EMR systems through conducting routine DQAs, support supervision, and review meetings, as well as migrating the existing EMR to the upgraded version 22. In the coming quarters, the service delivery partner is expected to support all the EMR activities apart from review meetings, which Palladium will continue to support, as well as support paperless reporting at 14 earmarked sites.

VIII. Progress on links with Government of Kenya agencies

During the reporting quarter, the project was able to hold stakeholder engagement meetings with all the five counties on various intervention service areas supported by the Afya Ziwani project. In the reporting quarter, the following collaboration was accomplished:

- The project continued to partner with the MOH in supporting service delivery activities at health facilities and safe spaces. This included conducting capacity-building activities, such as trainings, orientations, and mentorships for mentors and paralegals, and providing biomedical services.
- The project collaborated with the Ministry of Education to provide safe spaces in some selected schools, as shown in table 47. The project also supported quarterly stakeholder and gender TWG meetings in the two counties.

Table 48. Other ministries and departments with which the project collaborated.

Government of Kenya agency	Component	Area of linkage
Ministry of Health	Biomedical services	• Facilitation of trainings • Provision of biomedical outreach and referral services for AGYW
Department of Youth and Gender, Children Services Youth Enterprise Development Fund	Social-asset building	• Safe spaces for girls • Gender-based TWGs • Stakeholders' forum • Cash transfers • Loans for AGYW
Ministry of Education, Science and Technology	Education	• Safe spaces • School fees
Ministry of Internal Security (Kenya Police) Provincial Administration County Government	Security and accountability	• Post-GBV care for AGYW/accountability—legal support • Security at safe spaces • Bursaries

Note: AGYW, adolescent girls and young women; GBV, gender-based violence; TWG, technical work group.

IX. Global Development Alliance (if applicable)

Not applicable.

X. Subsequent quarter's work plan

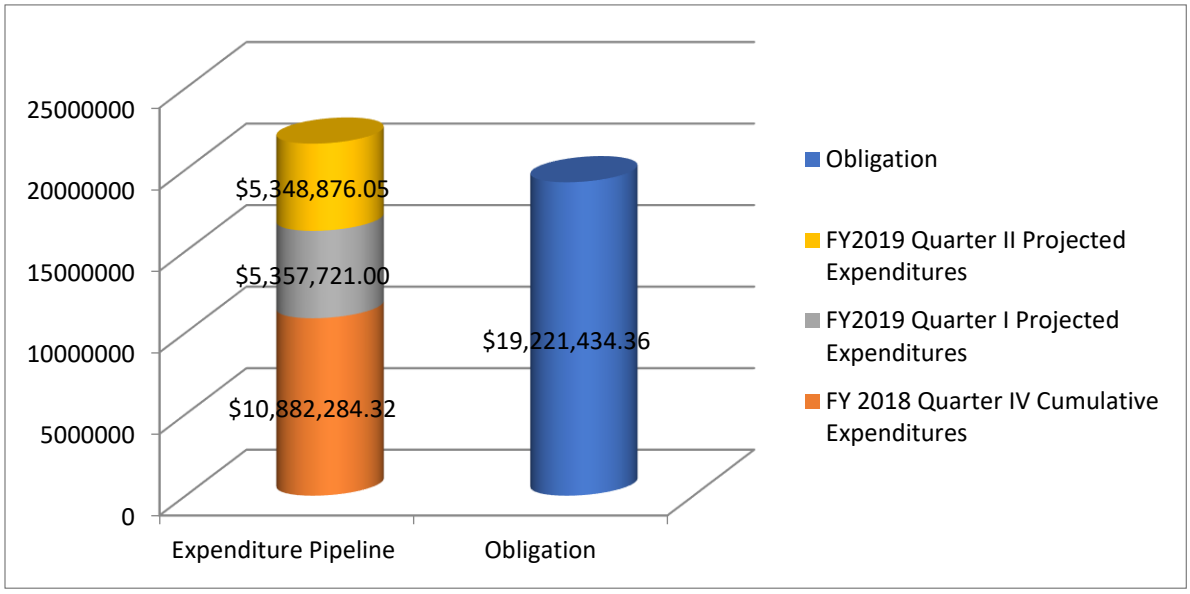
Table 49. Work plan activities, statuses, and explanations.

PLANNED ACTIVITIES FROM PREVIOUS QUARTER	ACTUAL STATUS THIS QUARTER	EXPLANATIONS FOR DEVIATIONS
INCREASED AND EXPANDED HIGH-QUALITY HIV SERVICES		
Support facility mentorship activities by the mentoring teams for ART, PMTCT, HTC, lab, and pharmacy	Fully accomplished in this quarter	
Train HCWs on the revised ART guidelines	Fully accomplished in this quarter	
Support facility-based CME for ART and PMTCT on a quarterly basis	Fully accomplished in this quarter	
Support the laboratory-networking model (CD4, EID, biochemistries, hematology, and viral load)	Fully accomplished in this quarter	
Support ART PMTCT reporting to meet COP17 quarterly targets	Fully accomplished in this quarter	
Support accelerated ART enrollment and retention activities	Fully accomplished in this quarter	
Support RDQA for EMR	Fully accomplished in this quarter	
Support facility ART/PMTCT defaulter tracing mechanisms (diaries, peer educators, airtime, and SMS reminders)	Fully accomplished in this quarter	
Support facility PLHIV support group monthly meetings (including pediatric, male, adolescent, PMTCT, general CCC)	Fully accomplished in this quarter	
Support HIV counseling and testing of pregnant mothers and mother-baby pairs at ANC and MCH clinics	Fully accomplished in this quarter	
Provide HCW mentorship on EMTCT	Fully accomplished in this quarter	
Support nonclinical counselors	Fully accomplished in this quarter	
Support DR TB patients to access treatment	Fully accomplished in this quarter	

Note: ANC, antenatal care; ART, antiretroviral therapy; CCC, comprehensive care center; CME, continuing medical education; COP, country operational plan; DR, drug-resistant; EID, early infant diagnosis; EMR, electronic medical record; EMTCT, elimination of mother-to-child transmission; HCW, health care worker; HTC, HIV testing and counseling; MCH, maternal and child health; PLHIV, people living with HIV; PMCTC, prevention of mother-to-child transmission; RDQA, routine data quality assessments; SMS, short message service; TB, tuberculosis.

XI. Financial information

Figure 21. Cash flow report and financial projections (pipeline burn rate) in USD.



Source: Project financial records, September 2018.

Budget details

Total Expected Costs (TEC): US$77,873,573.00

Cumulative Obligation: $19,221,434.36

Cumulative expenditure: $10,882,284.32

Table 50. Actual expenditure details, in USD.

Obligation	FY 2018 Quarter IV cumulative expenditures	FY 2019 Quarter I projected expenditures	FY2019 Quarter II projected expenditures
$19,221,434.36	$10,882,284.32	$5,357,721.00	$5,348,876.05
Personnel	$2,130,927.34	$720,743.00	$756,780.15
Consultants	$87,195.44	$7,000.00	$0.00
Travel and Transportation	$238,106.28	$611,543.00	$639,696.75
Other Direct Costs	$5,994,965.56	$3,012,850.00	$2,683,185.75
Overhead	$2,029,662.71	$1,005,585.00	$907,691.40
Fixed Fee	$401,427.00	$0.00	$361,522.00

Source: Project financial records, March 2018. Note: FY, fiscal year; Q, quarter.

Budget notes

Table 51. Budget notes.

Personnel	This is expected to stabilize in the next quarter with all the proposed positions now filled.
Consultants	A consultant was hired during the reporting period to carry out Organizational Capacity Assessment for the Project's supported Counties.
Travel and transportation	This is expected to stabilize in the next quarter as the rapid results initiative activities for AGWY eases out.
Other Direct costs	This is still expected to steadily rise in the next quarter as the project continue to spend on key AGYW activities that includes sub-contractor reimbursements, cash transfers and school fees payments
Overhead	Calculated as per contracts terms and conditions.
Fixed Fees	Earned as per contract terms and conditions.

Note: AGYW, adolescent girls and young women.

XII. Activity administration

Personnel

The project secured approval from USAID to engage Dr Habel Angani Alwang'a and Gerald Maina Kimondo as substantive Deputy Chief of Party and M&E specialist respectively.

Contract amendments

Modification no 2 which updated AIDAR 752.7103 contract clause.

Subcontractors

A request to sub-contract Centre for the Study of Adolescence (CSA) was approved by USAID on 11th July 18.

Other significant approvals from USAID

Purchase of tablets and networking equipment to support electronic medical records (EMR).

XIII. GPS information

Please see the GPS information sheet in the attachment.

XIV. Success stories

XV. Appendices

Appendix 1. Facilities MPR-CQI Assessments Done

Table 52. Facilities where MPR-CQI assessments were done.

County	Facilities where MPR–CQI was conducted
Kisumu	Port Florence Community Hospital
	Migosi Sub County Hospital
	Airport Health Centre
	St. Marks Health Centre
	Ober Kamoth Health Centre
	Nyalenda Health Centre
	Gita Sub County Hospital
	Disciples of Mercy
Homa Bay	Rachuonyo District Hospital
	Kabondo Sub County Hospital
	Kokwanyo Health Centre
	Matata Nursing Home and Hospital
Kisii	Gesusu Sub County Hospital
Nyamira	Ting'a Health Centre
	Nyamusi Sub County Hospital
	Nyamira County Referral Hospital
	Keroka Sub County Hospital
Migori	Ntimaru Sub County Hospital
	Kegonga Health Centre
	Dede Health Centre
	Awendo Sub County Hospital
	Kehancha Sub county Hospital
	Isebania Sub County Hospital

Note: CQI, continuous quality improvement; MPR, monthly progress review.

Appendix 2. Training Institutions capacity to offer HIV in-service training

Table 52. Training institution capacity to offer HIV in-service training.

Capacity measure	Kisii Medical Training College	Nyamira Medical Training College	Kisumu Medical Training College	Kisumu - Lake Victoria Medical Training College	Rachuonyo Medical Training College	Migori Medical Training College	Maseno University	LVCT Health
Readiness of faculty to provide in-service training	**Yes** 16 resident and 23 visiting lecturers	No requires external support, 5 resident and 4 visiting lecturers	**Yes** 26 resident and 31 visiting lecturers	**Yes** 21 resident lecturers	No 7 resident lecturers	No 5 lecturers	**Yes** 52 resident and 5 visiting lecturers	**Yes** 22 resident and 12 visiting lecturers
Training institutions infrastructure	**Adequate** 10 lecture halls, 11 office spaces, 1 functional library, Wi-Fi Internet connection	**Adequate** 10 lecture halls, 9 office spaces, 1 functional library, fluctuating Wi-Fi Internet connection	**Adequate** 12 lecture halls, 14 office spaces, 1 functional library, Wi-Fi Internet connection	**Adequate** 10 lecture halls, 11 office spaces, 1 functional library, LAN Internet connection	Inadequate 7 lecture halls, 8 office spaces, 1 library not fully equipped, Internet connection	Inadequate 8 lecture halls, 7 office spaces, 1 library not fully equipped, Internet connection	**Adequate** 6 lecture halls, 52 office spaces, 1 functional library, Wi-Fi Internet connection	**Adequate** 1 hall in Kisumu, 11 office spaces, 1 library, Wi-Fi Internet connection
HIV course	None	None	Last training conducted in 2012	None	None	None	**Yes**	**Yes**
In-service training program	**Available** nursing; anesthesia	None	**Available** pediatric; nursing; anesthesia	**Available** medical laboratory sciences	None	None	**Available** EMOC; reproductive health	**Available** HTS, PNS, APS
Accreditation status	**Accredited** Ministry of Health	**Accredited** Ministry of Health	**Accredited** Ministry of Health	**Accredited** Ministry of Health	**Accredited** Ministry of Health	**Accredited** Ministry of Health	**Accredited** Commission for University Education	**Accredited** NASCOP & Kenya Counselling Assn.

Note: APS, Assisted Partner Notification; EMOC, Emergency Obstetric care; HTS, HIV testing services; LAN, local area network; LVCT, Liverpool Voluntary Counselling and Testing; NASCOP, National AIDS & STIs Control Programme; PNS, partner notification services.

Appendix 3. ECHO CME sessions

Table 53. Health facility staff participation in the ECHO CME sessions in the year.

County	Facility	# of Staff Reached
Migori	Awendo Sub County Hospital	31
	Dede Dispensary	8
	Rabondo Dispensary	3
	Sony Medical Centre	18
	Ranen SDA Dispensary	2
	Isebania Sub County Hospital	7
	Kuria District Hospital	8
	Masaba Dispensary	5
	Kegonga Sub county hospital	6
	Uriri Sub County Hospital	28
	Tisinye Dispensary	4
	Ntimaru Sub County Hospital	7
	Mariwa Dispensary	6
Kisumu	Disciples of Mercy	7
	Migosi Sub County Hospital	36
	Port Florence Community Hospital	5
	Chiga Health Centre	1
	Nyalenda Health Centre	4
	Ojola Health Centre	1
	St. Marks Health Centre	8
	Airport Health Centre	8
	Star Hospital	5
	Gita Sub County Hospital	3
Kisii	Gesusu Sub County Hospital	15

Nyamira	Nyamira CRH	3
	Tinga Health Centre	1
	Bosiango Sub County Hospital	1
	Ekerenyo Sub County Hospital	2
	Nyamusi Sub County Hospital	1
	Kijauri Sub County Hospital	2
	Amaterio Health Centre	1
	Manga Sub County Hospital	2
	Getare Health Centre	1
	Ikobe Health Centre	1
	Keroka Sub County Hospital	2
	Magombo Health Centre	1
	Gesima Sub County Hospital	1
Homa Bay	Rachuonyo Sub County Hospital	35
	Matata Nursing Home	6
	Kabondo Sub County Hospital	13
	Othoro Sub County Hospital	2
	Ober Dispensary	1
	Nyang'iela Health Centre	2
	Ombek Dispensary	1
	Got Kamondi Dispensary	1
	Tala Dispensary	1
Total		**307**

Note: CME- continuing medical education; ECHO- Extension for Community Health Outcomes.

Appendix 4. Cumulative trainings in FY18

Table 53. Cumulative training held in the year.

Training	Number Trained
HCBF facilitators trainings in new wards of Kisumu, Homa Bay, Migori	81
MHMC facilitators trainings in new wards of Kisumu, Homa Bay, Migori	96
Shuga facilitators trainings in new wards of Kisumu, Homa Bay, Migori	62
Sister to Sister and Respect K trainings for HTS counselors in 3 counties	34
FMP1 facilitators trainings in new wards of Kisumu, Homa Bay, Migori	65
Training of FC and entrepreneurship facilitators trainings	20
Training on Financial Capability for AGYW	4,405
Support Entrepreneurship training sessions for eligible AGYW	198
VMMC service providers Training on MC under LA and MC devices	40
Refresher training of VMMC service providers on dorsal slit method	29
Train pharmacy technologists on web-based ADT (NASCOP curriculum)	32
External laboratory quality assurance for laboratory technologists	38
Refresher training on biosafety for HCWs	57
Training of the CMM on KMMP in priority facilities	29
Refresher training and CME for HCWs on EID algorithm at facility level	41
Training on ART service provision including PMTCT	8
Adherence counseling training in all high-priority sites	36
OTZ and management of peer support groups training for the nurses	232
Adherence counseling training on the provision of ART literacy classes for adolescents on self-management	54
Training on HRH management and supervisory skills, including iHRIS data entry system for 3 SCHMTs	30
Training of the S/CHMTs and facility managers to improve staff management, define training needs, and improve staffing in HIV clinics.	75
Revised DHIS2 training for key health care providers	42
Support refresher trainings for key health care providers on EMR	150
EMR training for clinicians	29
KHQIF training for QIT I members to train WITs on CQI, including collaborative	47
Training on new MOH reporting tools for facility-based HRIOs	351
Organizational capacity assessment training for 5 counties	120
Staff induction training for newly hired HCW - Nyamira County	116
Total	**6517**

Note: ADT, ART dispensing tool; AGYW, adolescent girls and young women; ART, antiretroviral therapy; CME, continuing medical education; CMM, Community Mentor Mothers; CQI, continuous quality improvement; DHIS, District Health Information Software; EID, early infant diagnosis; EMR, electronic medical record; FMP, Families Matter! Program; HCBF, Healthy Choices for a Better Future; HCW, health care worker; HRH, human resources for health; HRIO, health records and information officer; HTS, HIV testing services; iHRIS, integrated Human Resources Information System; KHQIF, Kenya HIV Quality Improvement Framework; KMMP, Kenya Mentor Mother Program; MC, male circumcision; MHMC, My Health My Choice; MOH, ministry of health; NASCOP, National AIDS & STIs Control Programme; OTZ, Operation Triple Zero; PMTCT; prevention of mother-to-child transmission; QIT, quality improvement team; S/CHMT, sub/county health management team; VMMC, voluntary medical male circumcision; WIT, work improvement team.