



# Baylor College of Medicine Children's Foundation, Malawi

## Tingathe program

Financial Year 19 Semi-annual Progress Report

October 1, 2018 – March 31, 2019



*A Tingathe HIV Diagnostic Assistant collects a dried blood spot sample from an infant at Kawale Health Center in Lilongwe, Malawi*

## Tingathe program

Technical Support to PEPFAR Programs in the Southern Africa Region (TSP) project

Cooperative Agreement: AID-674-A-16-00003

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# Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Therapy
ARV	Antiretroviral
CHW	Community Health Worker
COE	Center of Excellence
CPD	Continuing Professional Development
DHO	District Health Office/Officer
EAC	Enhanced Adherence Counseling
EID	Early Infant Diagnosis
EMR	Electronic Medical Record
FRS	Family Referral Slip
FSW	Female Sex Worker
FY	Fiscal Year
GBV	Gender Based Violence
HDA	HIV Diagnostic Assistant
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counselling
HTS	HIV Testing Services
IAC	Intensive Adherence Counselling
ICT	Index Case Testing
IPD	In-Patient Department
IPT	Isoniazid Preventive Therapy
KP	Key Population
LMS	Laboratory Management System
M&E	Monitoring and Evaluation
MOH	Ministry of Health
NRU	Nutritional Rehabilitation Unit
OPD	Outpatient Department
OTP	Outpatient Therapeutic Program
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	Provider Initiated Testing and Counselling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PSI	Populations Services International
PSS	Psychosocial Support Services
QA	Quality Assurance

QI	Quality Improvement
RHAP	Regional HIV and AIDS Program
SFP	Supplemental Feeding Program
SO	Strategic Objective
STI	Sexually Transmitted Infection
TB	Tuberculosis
TCT	Targeted Community Testing
TSP	Technical Support to PEPFAR Programs in the Southern Africa Region
USAID	U.S. Agency for International Development
VAPN	Voluntary Assisted Partner Notification

# Executive Summary

The Tingathe program, implemented by Baylor College of Medicine Children's Foundation Malawi under the Technical Support for PEPFAR Programs in Southern Africa (TSP) project, is pleased to present its semi-annual progress report for the period October 1, 2018 - March 31, 2019.

The overarching goal of the Tingathe program is to control the HIV epidemic by reaching the UNAIDS 95-95-95 targets by 2020 through care and treatment, prevention and health systems strengthening approaches. Tingathe is supporting 120 health facilities in seven districts, applying five key approaches: index case testing, HIV self-testing, retention and adherence, viral load scale up and TB/HIV identification and management.

**Key semi-annual achievements include:**

***Active Case Finding:*** The Tingathe program identified **16,381 new HIV-positive clients**, representing a program yield of **3% (16,381/547,138)**.

***Active Linkage and Retention:*** There were **15,256** individuals initiated on life-saving antiretrovirals (ARVs), with an approximate proxy linkage of **93% (15,256/16,381)**. This is an increase in program linkage from 92% in quarter one.

***Viral Suppression:*** Viral load suppression at Tingathe supported sites is **82%** according to Laboratory Information Management Systems (LIMS) data (October 2018 - February 2019).

***Health Systems Strengthening:*** A total of **4,389 adolescents** attended Teen Clubs at 59 sites in six districts. Tingathe reached 1,052 clients during early morning services, as well as 188 clients at nurse-led ART clinics.

***Prevention:*** A total of **72 individuals** received gender-based violence (GBV) services in the supported health centers in Machinga.

***Cervical Cancer:*** A total of 7,803 women were screened for cervical cancer. Of these, **3,242 were women living with HIV**, representing 41.5% screening coverage of women living with HIV. Out of the 3,242 women screened, 184 were found to be VIA positive, with 121 of them treated using thermocoagulation the same day.



# Tingathe Overview

TSP is a five-year (2016-2021) cooperative agreement between Baylor College of Medicine Children's Foundation Malawi (Baylor-Malawi) and the USAID Regional HIV and AIDS Program (RHAP). TSP covers ten countries, with an aim to reduce the impact of HIV and AIDS and attain the ambitious UNAIDS 95-95-95 goals, and to build capacity of country teams to eventually take full ownership of the programs.

Baylor-Malawi is a locally registered trust with a majority local Malawian Board of Directors. Under the leadership of Executive Director Dr. Peter Kazembe, Baylor-Malawi was the first organization to provide ART for children in Malawi starting in 2004 and is the country's largest provider of pediatric HIV care, with over 25,000 patients enrolled at the Clinical Center of Excellence (COE) and its satellite clinics. Baylor-Malawi has been a USAID care and treatment partner since 2010. Over the past five years, Baylor-Malawi has successfully managed over \$30 million in funding, with \$18 million from USAID. Baylor-Malawi has a diverse portfolio of clinical, training, program delivery, research, and policy activities for integrated and comprehensive pediatric and family-based HIV care.

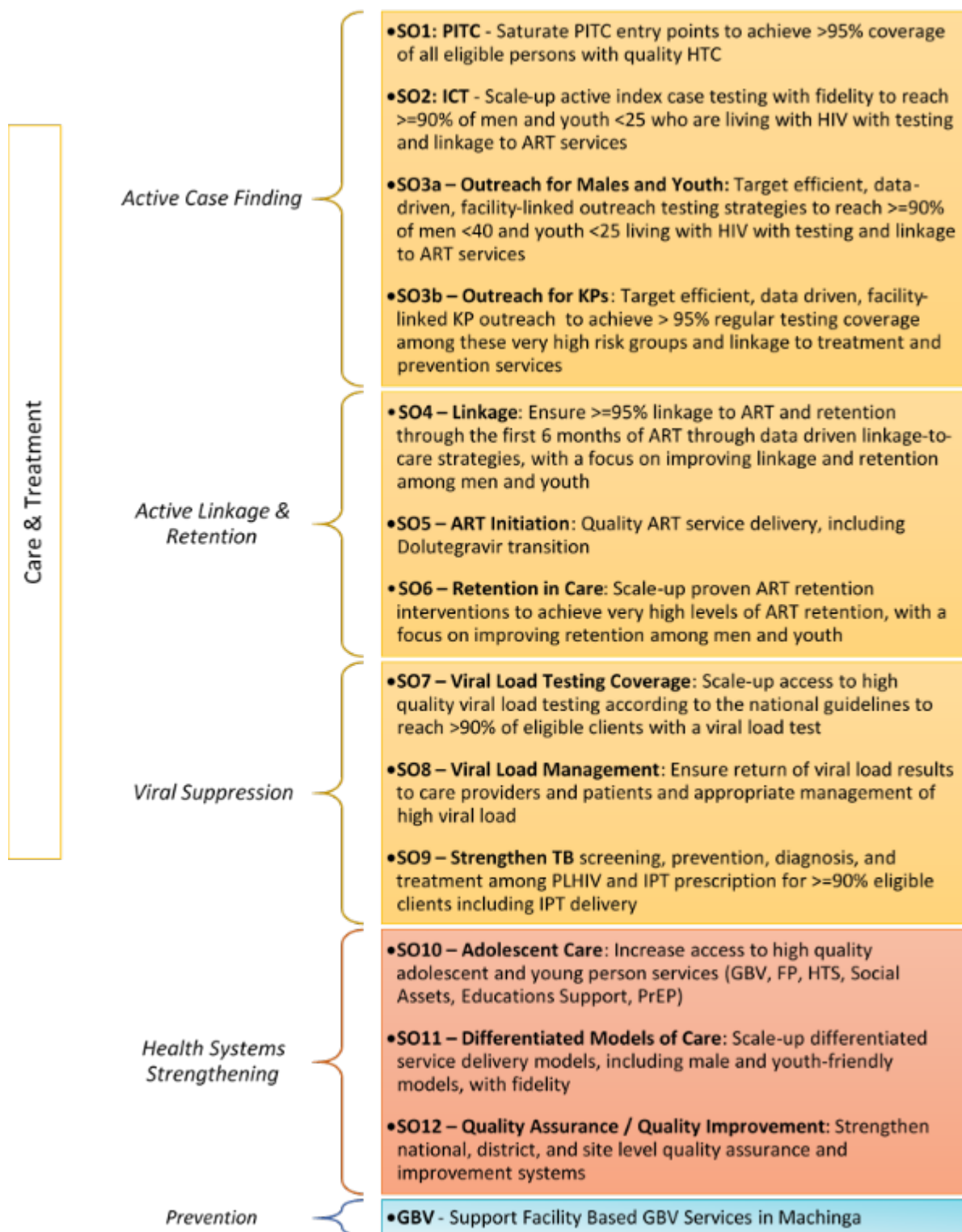
Baylor-Malawi has a long-standing clinical mentorship and health systems strengthening program with the Ministry of Health (MOH) and an international reputation for innovative evidence-based HIV service delivery programming. In 2007, Baylor-Malawi developed a novel program to use community health workers (CHWs) to conduct pediatric case finding and provide adherence support for HIV-infected pregnant women, called 'Tingathe'. Within two years the program resulted in an over 20-fold increase in the rate of pediatric HIV enrollment (from 50 patients to over 2,000 at three initial sites) and improvement in retention of mother-infant pairs from less than 20% to over 80%. Since 2010, USAID has supported Tingathe program expansion from three pilot sites to 120 sites in seven districts in Malawi. With a broad and diverse research portfolio, Baylor-Malawi advances clinical management of pediatric HIV and demonstrates, via operational research, program delivery successes and lessons learned. For over 10 years, Baylor-Malawi has assisted the MOH and influenced policy to improve prevention of mother-to-child transmission (PMTCT), early infant diagnosis (EID), and both pediatric and adult HIV care and treatment services, including early guidance on national scale pediatric HIV management, simplification of eligibility criteria allowing non-pediatrician clinicians and nurses to initiate treatment, and simplified management guidelines for pediatric patients.

With the TSP program, Baylor-Malawi is well positioned to continue to support USAID, PEPFAR and the Malawi MOH in the quest towards HIV epidemic control. With 10 years of experience supporting quality HIV service delivery in Malawi, the Baylor-Malawi team is comprised of a unique combination of skilled, motivated technical staff backed by a strong operations team with experience at national, district, facility and community levels. Baylor-Malawi's success is



derived from developing and building leadership at the community level, with a focus on building local capacity by training and supporting lay health workers to deliver high quality services at health facilities and in communities, and developing the skills of health care workers and the systems intrinsic to effective program delivery through a highly experienced mentorship team.

*Tingathe FY19 strategic objectives*



# Program Summary

Indicator	Semiannual target	Quarter one results	Quarter two results	% of semi-annual target achieved to date
HTS_TST	310,963	255,041	287,066	174%
HTS_TST_POS	16,059	7,673	8,708	102%
TX_NEW	17,142	7,146	8,110	89%
TX_CURR	119,548	198,084	196,381	330%
PMTCT_STAT	67,697	39,915	44,411	125%
PMTCT_ART	5,659	3,370	3,524	122%
PMTCT_EID	5,661	5,771	5,611	201%
TB_STAT	1,242	622	658	103%
TB_ART	604	296	366	110%
TB_PREV	345	85		25%
TX_TB, D	116,830	177,903		152%
TX_PVLS, D	75,585	19,327	21,848	54%

From October 2018 to March 2019, the Tingathe program surpassed the majority of the semi-annual targets, with the exception of the target for viral load suppression in ART patients within the past 12 months and TB preventive therapy in ART clients. Tingathe's performance improved significantly during quarter two to achieve these results. The program results section below highlights the progress and achievements on activities implemented to achieve these targets.

## Program Results

### Active Case Finding

SO #	SO	Explanation
1	PITC	Saturate PITC entry points to achieve >95% coverage of all eligible persons with quality HTC
2	ICT	Scale-up active index case testing with fidelity to reach >=90% of men and youth <25 who are living with HIV with testing and linkage to ART services
3a	Outreach for males and youth	Target efficient, data-driven, facility-linked outreach testing strategies to reach >=90% of men <40 and youth <25 living with HIV with testing and linkage to ART services

3b	Outreach for KPs	Target efficient, data driven, facility-linked KP outreach to achieve > 95% regular testing coverage among these very high-risk groups and linkage to treatment and prevention services
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Tingathe utilizes multiple case finding approaches, including provider-initiated testing and counselling (PITC), self-testing, index case testing (ICT) and targeted community testing (TCT) in all supported districts. HIV Diagnostic Assistants (HDAs) and Community Health Workers (CHWs) play a key role in each of the approaches by providing testing and counselling. From October 2018 - March 2019, the Tingathe program identified 16,381 newly diagnosed HIV-positive cases, with a notable increase in the number of new HIV-positive cases identified as compared to quarter one.

### SO 1 - PITC: Implementation progress

During this reporting period, PITC contributed the highest percentage (66%) of new HIV-positive cases. Testing coverage was >94% in inpatient wards with yields ranging from 1% (pediatrics) to 6% (NRU and adult male). Coverage was >92% in outpatient departments with prevalence ranging from 3% in SFP to 17% in STI department. Tingathe implemented various strategies to optimize PITC, as outlined below.

CHWs and HDAs provided information to clients on the importance of HIV testing during morning health talks at all entry points. They screened health passbooks and offered HIV testing to all clients who had never tested, those who had a negative HIV test result more than three months ago, and those who stated that they had tested for HIV but the result was not documented. This strategy contributed to high numbers of clients tested for HIV and a large number of new positive cases identified, but reduced the yield. To address the decreased yield, Tingathe implemented a small change in outpatient department (OPD) screening criteria in March 2019, offering HIV testing services (HTS) to clients who had not tested in the past 12 months, as opposed to three months, at four selected sites in Mangochi district. The results showed a 41% reduction in testing numbers (from 3,915 in quarter one to 2,299 in quarter two), with an 18% increase in HIV case identification (from 118 people diagnosed with HIV in quarter one to 139 diagnosed in quarter two), and a 2.2% increase in yield (from 3.5% in quarter one to 5.7% in quarter two). As a result, Tingathe plans to roll out this revised process to all sites in quarter three.

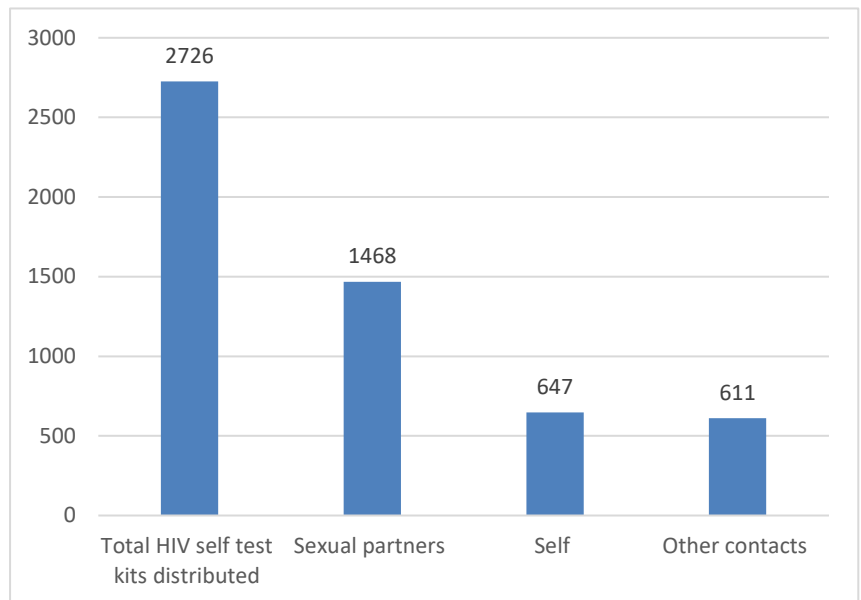
Early morning testing (Monday to Friday from 6-7am) and weekend testing (Saturday from 8-12am) continued to provide extra hours of access to HTS in most supported sites.

HIV self-testing was rolled out in Mangochi and Machinga districts in January 2019. From October 2018 to March 2019, 142 HIV self-test kit distributors were trained, and 36 sites in Mangochi and 20 sites in Machinga started distributing the test kits, targeting men and youth. Clients who decline facility-based testing services due to stigma now have an opportunity to learn their HIV status privately through the use of HIV self-test kits. During this reporting period, a total of 2,726 HIV self-test kits were distributed in Machinga and Mangochi districts. Of those, 1,468 (54%) were distributed for use by sexual partners, 647 (24%) were for the individual collecting the self-test kit, and 611 (22%) were for other contacts. Clients were

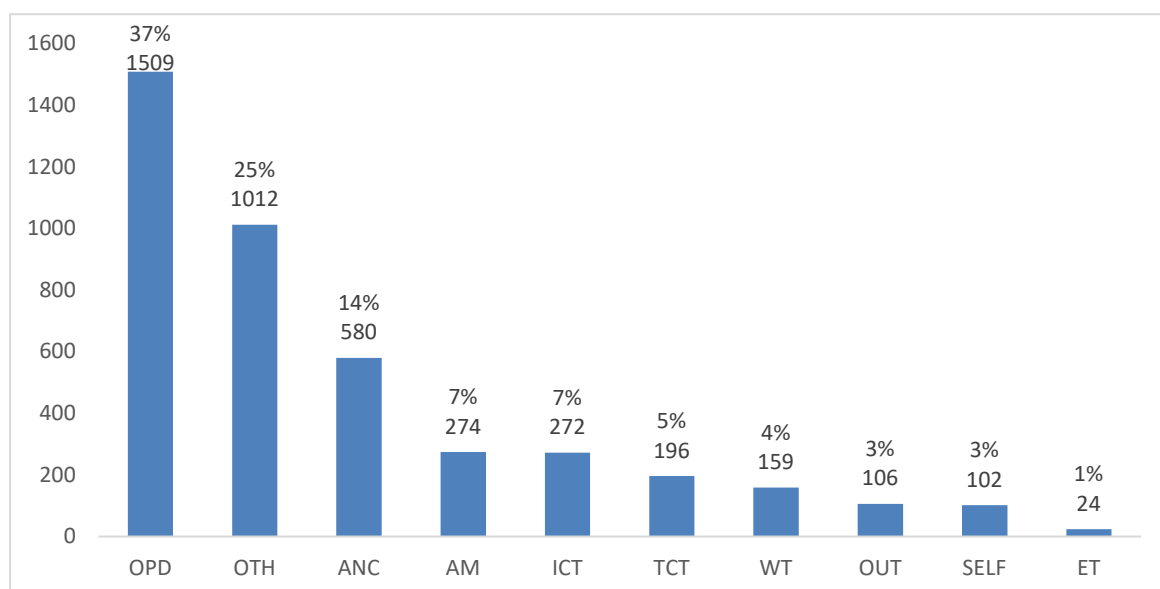
encouraged to come to the facility for a confirmatory rapid HIV test if they receive an HIV-positive result, as HIV self-testing is used as a screening tool. In order to monitor clients who return for a confirmatory test after a positive result from HIV self-testing, Tingathe is working with HTS providers in Mangochi and Machinga districts to screen clients accessing HTS services to learn if they used HIV self-testing and encouraging them to document this in the HTS register.

Machinga and Mangochi districts continued to use coding in the HIV testing and counselling (HTC) register in all supported sites to identify strategies with the highest yield and to help sites focus on high-yield strategies to identify more HIV-positive cases. Testing data is collected from all sites on a monthly basis, and performance feedback is given to sites through feedback loop meetings. OPD continued to contribute the largest percentage of new HIV-positive cases, with OTH (including PITC) and antenatal care (ANC) service delivery points following.

*Figure 1: HIV self-test kits distributed in Mangochi and Machinga districts from January – March 2019*



*Figure 2: Proportion of new HIV-positive cases identified in Mangochi and Machinga districts from January – March 2019, by strategy*



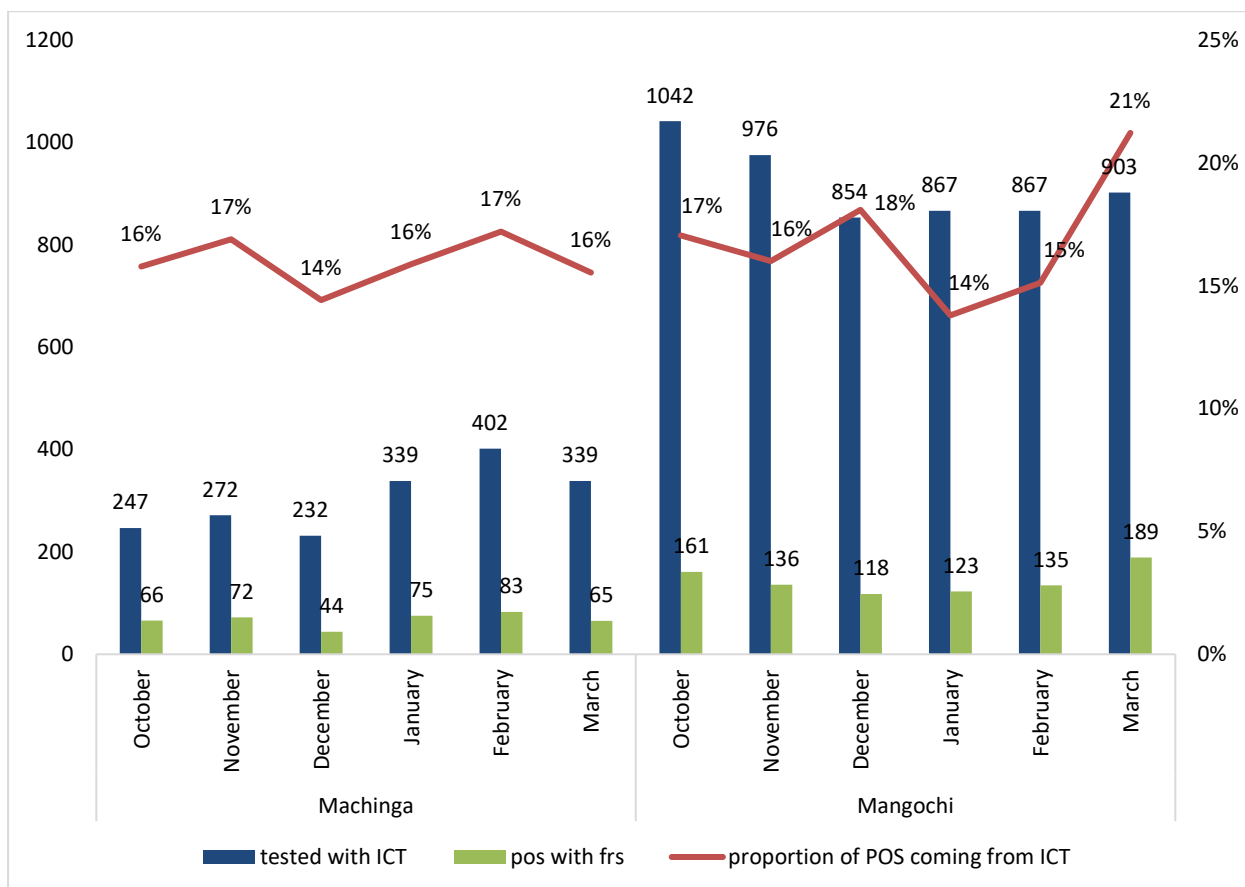
## SO 2 - ICT: Implementation progress

Index case testing (ICT) continues to be the highest-yield strategy in HIV case identification, with a 31% yield. During this reporting period, the Tingathe program prioritized clients newly diagnosed with HIV and those with high viral load for ICT in an effort to optimize testing yield. Clients were offered passive referral (family referral slips - FRS) in all seven districts and active referral methods (voluntary assisted partner notification - VAPN) in Machinga and Mangochi districts.

There was an important reporting change in quarter two for HTS\_INDEX. The number of contacts tested is populated from the HTS registers by counting all persons tested who had a *partner positive* (as indicated in the HTS register). In previous quarters, Tingathe reported all persons tested with a family referral slip as a contact tested. This reporting change in quarter two led to an increase in the number of new positive cases identified through ICT.

The number of contacts returning for testing with FRS and new HIV-positive cases identified through ICT in Machinga, Mulanje and Phalombe districts continued to increase from October 2018 due to improved documentation of index clients through the use of an ICT register. CHWs were trained and deployed in quarter one, which improved client education on the importance of testing contacts of HIV-positive clients. Machinga district established a WhatsApp group for daily reporting on ICT implementation, monitoring and remote supervision. Mangochi continued to use its WhatsApp group for the same purpose. Gatekeepers meetings were held in Machinga, Mulanje and Phalombe districts to introduce CHWs and their work in the communities to acquire buy-in from community leaders in quarter two, facilitating the introduction of ICT services and allowing CHWs to begin home follow-up of index clients whose contacts did not return for testing towards the end of quarter two.

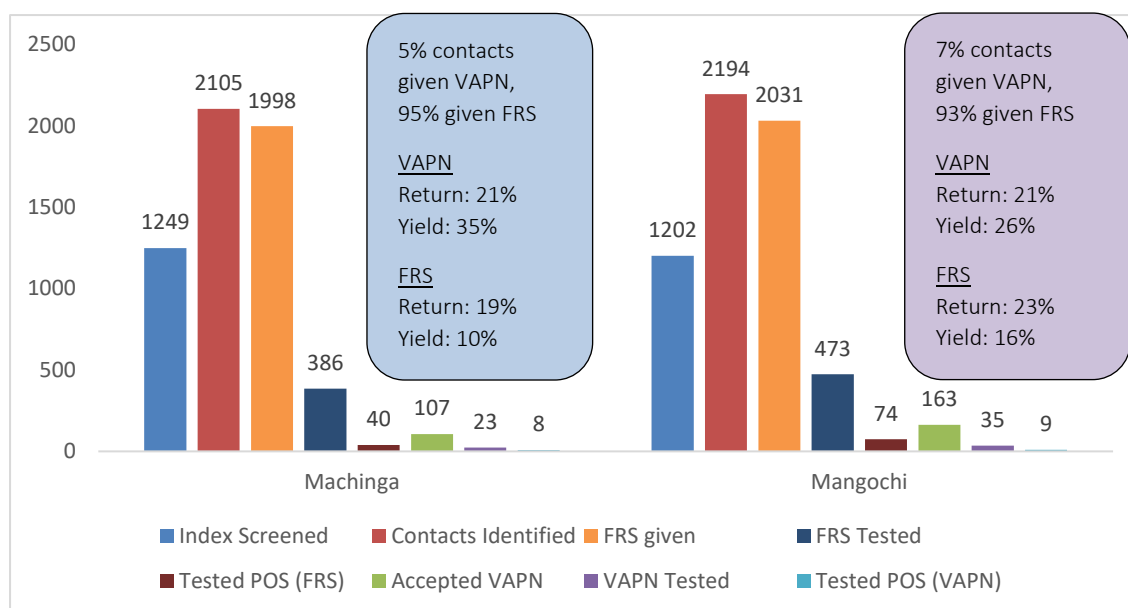
Figure 3: Results of index case testing in Machinga and Mangochi districts from October 2018 – March 2019



From October 2018, there has been an increase in persons tested through ICT. The proportion of overall new positive cases coming from ICT was highest in March 2019 in Mangochi (21%).

Tingathe continues to implement the VAPN study in six sites (two in Mangochi and four in Machinga). During this semi-annual reporting period, routine (non-study) VAPN services were initiated in 21 sites: 6 in Machinga and 15 in Mangochi. Tingathe continued to scale up routine VAPN implementation by training 255 providers (124 in Mangochi and 131 in Machinga) from 29 sites in the two districts. The Tingathe program produced a higher yield among VAPN contacts tested (29%) as compared to general ICT (21%). Tingathe will complete training of all remaining sites in Mangochi and Machinga by the end of quarter three. In addition to training the remaining sites, to continue to optimize this strategy, as FRS continues to constitute a majority of index testing, Tingathe will train additional providers at sites already implementing VAPN to increase access to the services. Finally, Tingathe plans to establish VAPN services in additional districts (Mulanje and Phalombe) in quarter four.

Figure 4: Index cascade in Mangochi and Machinga districts from January – March 2019



### SO 3a - Outreach for males and youth: Implementation progress

Tingathe conducts targeted community testing (TCT) and outreach clinics to improve access to hard-to-reach populations and specialized workplaces. Events are structured to facilitate testing at appropriate times and places for populations with known high prevalence rates such as sex workers, fishermen, bicycle taxi drivers, and for clients with limited access to testing (such as men and youth). Events are coordinated through partnership with organizations and influential leaders of key populations.

During this reporting period, events were held targeting female sex workers, fisherfolk, estate workers, policemen, teachers, men at beer halls, youth at remote family planning clinics, community members in remote areas, and youth in Mangochi and Machinga districts. Events with the highest yield were those with farm workers in Balaka (13%), vendors in Machinga (6.6%), and fishermen in Mangochi (6.5%). Clients diagnosed with HIV were referred to nearby health centers for treatment services. Tingathe will continue to focus on careful planning of TCTs and outreach testing events to improve testing yield.

Table 1: TCT and outreach events conducted in quarter two

District	Event	Target population	Location	Number tested			Total positive	Yield	Collaborating partners
				Total	M	F			
Machinga	TCT	Female sex workers	Liwonde	7	0	7	0	0%	YONECO
Machinga	TCT	Fisherfolk	Liwonde, along Shire River	29	29	0	1	3.4%	
Machinga	TCT	Estate workers	Mkwepere	83	70	13	4	4.8%	



District	Event	Target population	Location	Number tested			Total positive	Yield	Collaborating partners
				Total	M	F			
Machinga	TCT	Workplace (Policemen and teachers)	Mangamba	34	26	8	1	2.9%	
Machinga	TCT	Vendors	Mpiri	61	50	11	4	6.6%	
Machinga	Outreach	Men at local beer halls	Namandanje	86	58	28	3	3.5%	
Machinga	Outreach	Women at outreach family planning clinics	Namandanje	47	0	47	0	0%	
Mangochi	Outreach	Youth	UNDI village	47	29	18	1	2.1%	AMREF
Mangochi	TCTs	Men	Bars, rest houses and beaches, tobacco farms, trading centres	491	272	226	14	2.9%	
Mangochi	TCTs	Female sex workers	Rest houses, bars, trading centres	115	55	60	11	9.5%	Pakachere
Mangochi	TCT	Fisherfolk	16 beach sites	752	522	231	49	6.5%	PACT
Mangochi	Outreach	Community members from remote areas	Wandikanda, Kadewere, 7 Likulungwa villages	145	37	108	0	0%	PSI
Mangochi	Outreach	Youth	Mayuni Secondary School	576	155	427	1	0.2%	World Vision
Balaka	Testing at poultry farm	Farm workers, especially men	Phalula	23	16	7	3	13%	MOH

### SO 3b - Outreach for KPs: Implementation progress

Machinga district held TCT events jointly organized with YONECO, targeting female sex workers and men in Liwonde. A total of seven female sex workers were tested in Machinga district, all of whom tested HIV-negative. YONECO has drop-in centres where all newly diagnosed HIV-positive clients are referred for treatment services. In Mangochi, a total of 115 people were tested during a number of TCT events targeting female sex workers and organized in

collaboration with Pakachere. Of these, 11 people tested HIV-positive, representing a 9.5% yield. The Tingathe program will continue to collaborate with partners to reach key populations with testing services.

Tingathe attended a meeting with FHI 360 and DREAMS program implementing partners (key population partners) to map a way forward on the coordination and implementation of services targeting key populations. Tingathe HDAs will provide HTS and CHWs will provide linkage services during TCT events targeting key populations.

### Active Case Finding challenges and responses

- Tingathe experienced low testing yield due to high testing numbers in OPD. In quarter three, Tingathe will change the screening criteria to improve yield and optimize tests done by offering testing to clients who have not tested in the past 12 months (rather than three months).
- OPD clients were not offered PITC in some sites in Machinga district due to poor client flow. Client flow was rearranged in most sites to enable screening at OPD, which increased access to HTS in quarter two.
- Access to testing for men remains a challenge in Tingathe supported sites. Mangochi District Hospital started a men's wellness clinic on Wednesdays during this reporting period to address this gap. The clinic started the third week of January and saw 60 men, of which 53 were eligible for testing. Of those, three tested HIV-positive (5.7% yield). Tingathe plans to increase awareness of the clinic and distribute self-test kits to all women in ANC who do not present with a partner to increase distribution to men in quarter three.
- Index case testing is not yet optimized in Machinga, Mulanje, Phalombe and Lilongwe sites. Addressing this challenge is a key priority of the program. Actions taken thus far include mentorship to site supervisors to assign CHWs to daily screen clients for ICT and follow up index cases whose contacts did not return for HIV testing within two weeks, prioritization of highest-risk clients for ICT (newly diagnosed clients and ART clients with high viral load), and increasing the number of providers trained to provide VAPN services. Finally, CHWs began following up ICT clients in the community after the gatekeepers meetings toward the end of quarter two, which has improved the uptake of testing among contacts.
- Physical space for testing remains a challenge. Lilongwe sites have identified additional space at Area 25 and Kawale Health Centers through refabricated buildings constructed by CDC. Nandumbo Health Center in Balaka also received additional space for HTS, which will be used for testing ANC clients. Tingathe continues to use tents in select facilities and hopes to provide renovations to some sites in the second half of the fiscal year.
- In this reporting period, Tingathe experienced some challenges related to lack of support from MOH staff who did not understand the significance of some case identification strategies. To address this, Tingathe conducted facility meetings with clinical staff in Lilongwe and held HTS review meetings in Balaka, which helped staff to understand the strategies' contribution to improved HIV care and treatment services. Their attitudes are slowly improving.

- There were transport challenges to support TCT events and follow-up of ICT clients in remote areas. Some planned TCTs were unable to be conducted in Phalombe district due to logistical challenges, as the Phalombe office has just one vehicle. To address this, the Phalombe team has developed approaches to improve planning to allow for logistical support from the Lilongwe office and will relocate a motorbike to prevent this from recurring.
- A lack of supervisors in some sites affects the organization and coordination of the Tingathe site teams. Completion of site supervisor deployment will take place early in quarter three.
- Impassable roads due to the rainy season made visits difficult using the vehicles, and ICT outreach clustering was consequently suspended at some facilities. Flooding also disrupted services in some sites, affecting the number of people seeking health services, including HTS.

### Active Case Finding activities in the next quarter

District	ACF activities
All districts	<ul style="list-style-type: none"> <li>• Continue to prioritize ICT services for newly diagnosed HIV clients and HIV-positive clients with high viral load.</li> <li>• Implement new OPD screening criteria to achieve smarter testing in OPD, which includes screening for clients who have not tested or have no documentation of an HIV test done in the past 12 months, all men above 25 years old, and key populations.</li> <li>• Ensure optimized ICT through clustering ICT clients and assigning a CHW to each cluster for follow-up.</li> <li>• Continue monthly site-level data feedback meetings to help sites develop plans to improve performance.</li> <li>• Provide self-test kits to women at ANC for their untested partners.</li> <li>• Continue to participate in task force to develop PITC screening tool for use in OPD</li> </ul>
Mulanje	<ul style="list-style-type: none"> <li>• Optimize ICT through clustering ICT clients and assigning a CHW to each cluster for follow-up.</li> <li>• Include ICT in monthly site-level data feedback meetings to help sites develop plans to improve performance.</li> </ul>
Mangochi	<ul style="list-style-type: none"> <li>• Intensify awareness messages of the men's wellness clinic at Mangochi District Hospital.</li> <li>• Distribute self-test kits to all women in ANC who indicate that it will be difficult to get their partners to present at the clinic for testing.</li> <li>• Conduct meetings with community leaders in all supported sites to highlight services for men to help them in sensitizing communities. Talking points will be distributed to each community leader to assist in accurate message delivery.</li> <li>• Train 21 remaining sites in VAPN service delivery and initiate VAPN services in all sites.</li> </ul>
Machinga	<ul style="list-style-type: none"> <li>• Scale up weekend testing to sites with significant OPD attendance over the weekends.</li> </ul>

District	ACF activities
	<ul style="list-style-type: none"> <li>• Train six remaining sites in VAPN service delivery and initiate VAPN services in all sites.</li> <li>• Enhance ICT through scheduling of CHWs at ART clinic to screen clients with high viral load for ICT and clustering of ICT clients for follow-up at all sites.</li> </ul>
Lilongwe	<ul style="list-style-type: none"> <li>• Conduct TCT and outreach testing at community-based organizations, MOH outreach clinics, orphanage centers, and other locations to optimize HIV case identification.</li> <li>• Target more men for testing by encouraging women to bring their partners during ANC visits. Women accompanied by their partners will be fast-tracked for services.</li> <li>• Improve ICT coverage through assigning CHWs for screening and follow-up of ICT clients, documentation in ICT register, and mentorship to ICT focal point persons and site supervisors.</li> </ul>
Balaka	<ul style="list-style-type: none"> <li>• Optimize ICT through clustering ICT clients and assigning a CHW to each cluster for follow-up.</li> <li>• Monitor PITC progress and support the lower-performing facilities.</li> </ul>

## Active Linkage and Retention

SO #	SO	Explanation
4	Linkage	Ensure $\geq 95\%$ linkage to ART and retention through the first 6 months of ART through data driven linkage-to-care strategies, with a focus on improving linkage and retention among men and youth
5	ART initiation	Quality ART service delivery, including Dolutegravir transition
6	Retention in care	Scale-up proven ART retention interventions to achieve very high levels of ART retention, with a focus on improving retention among men and youth

### SO 4 - Linkage: Implementation progress

The Tingathe program aims to achieve 100% linkage for all HIV-positive clients. CHWs conduct active follow-up of clients who do not start ART within two weeks of being diagnosed with HIV as well as those who miss appointments within seven days of their appointment date. During this reporting period, appointment registers were used to enhance clinic bookings for ART clients and facilitate identification of clients who missed appointments. Linkage focal persons (a selected CHW at each site) monitored progress and reported the number of clients linked out of the total number of HIV-positive clients identified each week to the site supervisor to monitor progress.

There were 15,256 individuals initiated on ART from October 2018 to March 2019, with an approximate proxy linkage of 93% (15,256 initiated/16,381 tested HIV-positive). Program

linkage increased from 92% in quarter one and is attributed to a number of interventions implemented during this reporting period as outlined below.

ART initiation services were provided daily at the majority of Tingathe supported sites, and a provider was made available during lunch hour and late afternoon hours to initiate clients in some sites. This consistent day-long flow reduced clients' waiting time and fostered linkage. Additional psychosocial counsellors in Machinga and Mangochi districts assisted in prompt management of clients with psychosocial issues (e.g. newly tested discordant couples), which in turn facilitated improved linkage.

Monthly data feedback to the sites from the M&E team and weekly reporting of the number of clients linked to care (linkage rate) helped to highlight linkage issues, which led to sites developing and reviewing tracing strategies. This included ensuring that a CHW is assigned to the linkage system at each site and that all newly diagnosed clients are initiated on ART on a daily basis. Monthly disaggregated data collected in Machinga and Mangochi districts facilitated development of focused attention to improve linkage for a particular gender or age.

*Table 2: Linkage by age and sex in Machinga and Mangochi districts  
January - March 2019*

Sex	Age	New Positive	New on ART	Proxy Linkage
Females	Unknown age	1	12	1200%
	<1	0	14	N/A
	1-4	57	66	116%
	5-9	32	31	97%
	10-14	46	43	93%
	15-19	166	157	95%
	20-24	528	463	88%
	25-29	566	542	96%
	30-34	430	432	100%
	35-39	334	311	93%
	40-44	151	150	99%
	45-49	83	88	106%
50+	168	162	96%	
Males	Unknown age	0	9	N/A
	<1	0	11	N/A
	1-4	55	60	109%

Sex	Age	New Positive	New on ART	Proxy Linkage
	5-9	24	21	88%
	10-14	29	27	93%
	15-19	27	27	100%
	20-24	98	81	83%
	25-29	198	184	93%
	30-34	248	195	79%
	35-39	266	267	100%
	40-44	195	181	93%
	45-49	131	133	102%
	50+	199	206	104%
<b>Total</b>		<b>4,032</b>	<b>3,873</b>	<b>96%</b>

### SO 5 - ART initiation: Implementation progress

The majority of Tingathe supported sites across the seven districts provide same-day ART initiation. During the reporting period, Tingathe supported the MOH to roll out plans to transition all male ART clients weighing 30 kgs and above, all females above 45 years, and women under 45 years who are on permanent family planning to Dolutegravir (DTG)-based antiretroviral treatment from January 2019. To date, all the supported sites have started transitioning eligible clients to DTG-based treatment. Tingathe staff provided health talks during the ART clinics to promote awareness of the transition, and Tingathe coordinators supported facilities to ensure that providers are orientated and there are adequate supplies for the transition at all sites.

During this reporting period, Tingathe supported three ART trainings (two in Mangochi and one in Salima), in which 77 providers were trained (49 MOH/CHAM staff and 28 Tingathe clinical staff). Of those trained, 26 people (34%) failed the initial post-test and had to repeat in order to be certified - an alarming trend with the 2018 ART training, and one which Tingathe staff are working with the DHA to address. Site-level orientation for CHWs, HDAs, and other MOH staff on the new regimen was conducted, and job aids for health talks, as well as pre-ART and pediatric switch guides, were distributed to all supported sites. Tingathe mentors provided one-on-one support and mentorship to ART providers who had not yet been trained on the new guidelines.

### SO 6 - Retention in care: Implementation progress

Tingathe promotes retention by applying a case management approach, with appointment tracking and follow-up tracing of missing clients as well as provision of high-quality, relevant

education, counseling, and client support to overcome barriers to adherence and retention. CHWs provide pre-ART counselling to all HIV-diagnosed clients to enhance their understanding of ART and improve uptake and adherence. Appointment registers are used to identify and track clients who miss appointments and tracing forms are used to track clients listed for follow-up.

During the reporting period, CHWs followed up clients who missed their clinic appointment date by two weeks through phone calls or home visits. Site and Cluster Coordinators involved MOH supervision teams from the district hospitals to mentor ART providers in the health facilities to ensure that attending ART clinic is a positive experience for clients – especially those that may have missed appointments. ART providers were also mentored to ensure a consistent supply of ARVs and prompt and effective management of side effects. Psychosocial counselors have been placed at strategic sites in five districts to provide counselling for adherence, manage psychosocial issues, and support adolescent adherence specifically.

To improve referral closure, clients were given information on the importance of making official transfers to other facilities during pre-ART counselling to reduce the number of clients documented as lost to follow up while still in care, with emphasis particularly for transient populations such as fishermen and sex workers in Mangochi district. Tingathe worked in collaboration with community support groups to conduct mass education on the importance of adherence and re-initiation of ART for those who have stopped treatment.

*Table 3: Tingathe client retention for quarters one and two, by district*

District	Alive on ART	ART registrations	Transferred out	% 12 months retention rate
Balaka	663	1,073	233	79%
Lilongwe (peds)	275	470	91	73%
Machinga	1,086	1,774	313	74%
Mangochi	1,693	2,757	490	75%
Mulanje	1,703	2,307	213	81%
Phalombe	963	1,195	88	87%
Salima	551	898	114	70%
<b>Overall</b>	<b>6,934</b>	<b>10,474</b>	<b>1,542</b>	<b>78%</b>

Tingathe achieved a consistent overall 12 months retention rate of 78% in quarters one and two. Tingathe continues to work to improve its approaches to improve retention. ART clinic models previously implemented in Mangochi were extended to Machinga during the reporting period – an ART clinic for men was introduced at Ntaja Health Center as well as an extended hour (early morning) ART clinic at Machinga District Hospital to reach men who miss appointments due to busy work schedules or fear of stigma and discrimination. The ART clinic for men at Ntaja Health Center was established towards the end of March 2019, and 13 men attended the one clinic was conducted at the end of quarter two. At Machinga District Hospital extended hour ART clinic, 463 people attended between January and March 2019. Tingathe plans to increase community awareness about the clinics to reach more men.

## Active Linkage and Retention challenges and responses

- Inadequate documentation in the Linkage register provided challenges with identifying clients who failed to link to care. Facility meetings were held with HDAs, CHWs, site supervisors, and focal persons on the importance of completing the Linkage register, and documentation has improved.
- Some clients give false addresses and phone numbers, making it difficult to follow them up when they miss appointments or do not return to care. Health education is given each morning in waiting areas on the importance of providing correct information for follow-up. Tingathe is also addressing this challenge by strengthening the quality of pre-ART counselling to increase client understanding about the importance of remaining on treatment and providing support for clients to disclose to partners/family members, as this is a contributing factor to failure to link to and remain in care.
- Some clients are not started on ART on the same day of diagnosis due to a lack of willingness by the client, while in other cases providers are not willing to provide treatment on the same day due to a high workload among the few trained providers. Among clients who are not willing to start ART on the same day, Tingathe provides pre-ART counselling and clients are counselled to return for ART initiation within two weeks. CHWs follow up clients who do not come for ART initiation to provide further counselling and support. Tingathe coordinators continue to work with facilities to ensure daily ART initiation services are available, working together with the ART coordinator to change service availability in cases where facility providers are unwilling to offer daily ART.
- Some clients live far from health facilities providing ART services. Mangochi established outreach ART clinics in quarter two in Chapola and Debora, making access more convenient, and with the goal of supporting better appointment and treatment adherence. These services are currently being evaluated for impact. Machinga district will implement a similar model in quarter three.
- Newly diagnosed HIV-positive clients reached during outreach or TCT activities organized by other partners are sometimes not linked to care and are difficult to trace, as the locator details are not well updated in the register. Collaborative meetings were held with other HTS partners and strategies were developed to ensure that all clients are linked to care.

## Active Linkage and Retention activities in the next quarter

District	ALR activities
All districts	<ul style="list-style-type: none"> <li>• Intensify the use of the client tracing list to closely track client follow-up to improve linkage and retention in care.</li> <li>• Support the DHA to improve ART training and once updated, train additional ART providers on the new ART guidelines.</li> <li>• Conduct collaborative meetings with community HTS partners to ensure HIV-positive clients identified during community testing events are linked to care.</li> </ul>
Mangochi	<ul style="list-style-type: none"> <li>• Introduce intensified ART care clinics on select clinic days, spaced every four weeks, where coordinators are available to provide mentoring on complex medical cases, assess high viral load clients</li> </ul>



District	ALR activities
	and monitor all children on ART. In-charges will receive quarterly calendars showing these special clinic dates so that they can schedule clients accordingly.
Machinga	<ul style="list-style-type: none"> <li>Introduce intensified ART care clinics on select clinic days, spaced every four weeks, where coordinators are available to provide mentoring on complex medical cases, assess high viral load clients and monitor all children on ART. In-charges will receive quarterly calendars showing these special clinic dates so that they can schedule clients accordingly.</li> <li>Scale up models of differentiated ART service delivery, including extended hour clinics, men's clinics and multi-month scripting.</li> </ul>

## Viral Suppression

SO #	SO	Explanation
7	Viral load testing coverage	Scale-up access to high quality viral load testing according to the national guidelines to reach >90% of eligible clients with a viral load test
8	Viral load cascade management	Ensure return of viral load results to care providers and patients and appropriate management of high viral load
9	Strengthen TB management	Strengthen TB screening, prevention, diagnosis and treatment among PLHIV and IPT prescription for >=90% eligible clients including IPT delivery

### SO 7 - Viral load testing coverage: Implementation progress

The program achieved 59% of the viral load target during this reporting period, with 69% viral load coverage (assuming 5% of the ART cohort should receive a viral load each month in alignment with DHA estimates) and a viral suppression rate of 87%. Multiple approaches were taken to address the gaps in viral load coverage. First, comparisons of data from viral load registers and LIMS data were undertaken to understand data accuracy concerns – large discrepancies between the LIMS and viral load registers were noted, and Tingathe continues to work with laboratories and facilities to understand and address these challenges. Despite the data concerns, however, there was still room for significant improvement in viral load coverage. The client flow was adjusted in order to draw viral load samples from eligible clients before seeing a clinician. CHWs were assigned to screen clients' master cards during clinic days and refer eligible clients to have their viral load drawn. Early morning viral load sample collection was scaled up in all supported sites to reduce waiting time before official services began. In Mangochi district, WhatsApp messaging was used to implement "remote supervision" and allow coordinators and district leadership to monitor daily uptake of viral load

testing and provide real-time feedback to sites. This was quite effective and thus expanded to include other districts. Mastercard audits were also conducted on a weekly basis to ensure that all eligible clients had their viral load drawn. CHWs were assigned to actively screen mastercards for clients who are due for viral load testing, and the appointment register was used to flag clients due for viral load testing during the appointment visit. Viral load data feedback was given to sites on their coverage and suppression rates to identify areas in need of improvement. Routine health talks were given by CHWs to raise awareness among clients on the importance of viral load testing to monitor treatment efficacy. The program anticipates an improvement in all viral load indicators through implementation of these approaches.

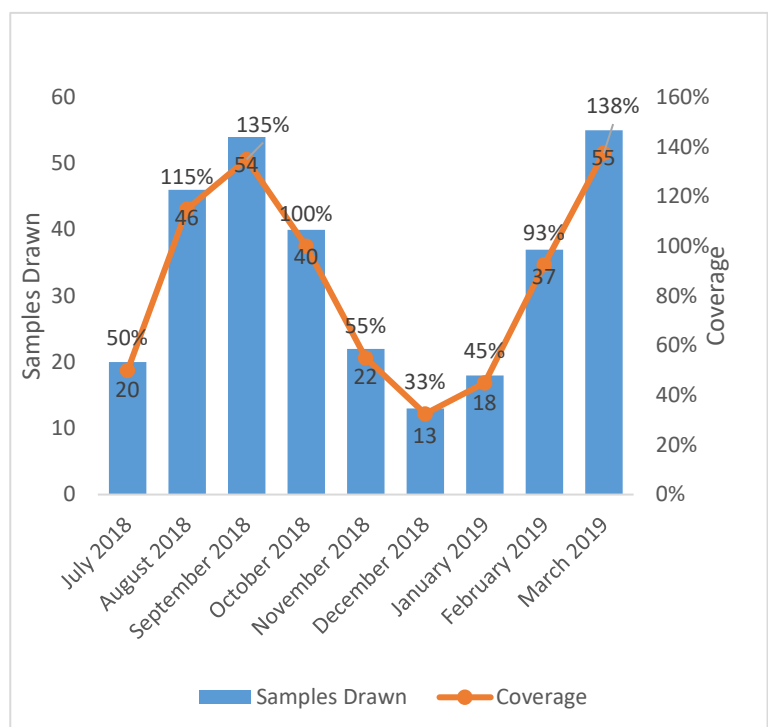
Noting poor coverage toward viral load targets, Mangochi district put into place a quality improvement project targeting 13 sites whose quarter one averages were around 60%. The project was comprised of four simple steps:

- 1) Active screening – CHW assigned to actively screen clients in ART/OPD (integrated)
- 2) Client flow: Clients in waiting area → Viral load draw → ART refill → Out
- 3) Allocate additional HDAs for busy days
- 4) Supervision - WhatsApp group reports viral load draws done by 10am and 2pm

The revised flow allows clients to get viral load draws early in the process so that they will not lose their place in the ART line, nor will they have a chance to leave the clinic after receiving ART, but before getting a viral load done.

By the end of March, all but one of the sites achieved over 100% of the target (see Mase Health Center data). Corroborating this improvement, March viral load collection results from Mangochi District Hospital laboratory showed a 9% increase over January/February averages (2,416 vs. 2,636) (Source: Mangochi District Hospital Laboratory data).

*Figure 5: Viral load samples drawn and coverage at Mase Health Center, Mulanje district*



Also helping to improve the viral load process in quarter two, Mangochi District Hospital reduced the average turn-around time of samples (from site collection to delivery of results) by 25% as compared to quarter one (22 days in quarter two vs. 29 days in quarter one). This was due to regular meetings with Riders for Health and the creation of a minimum/maximum target for getting samples from

facilities to the laboratory. Additionally, a WhatsApp group was established as a

communication platform where site supervisors, the lab team, and the Riders for Health leader could follow up if pickups were delayed or re-scheduled.

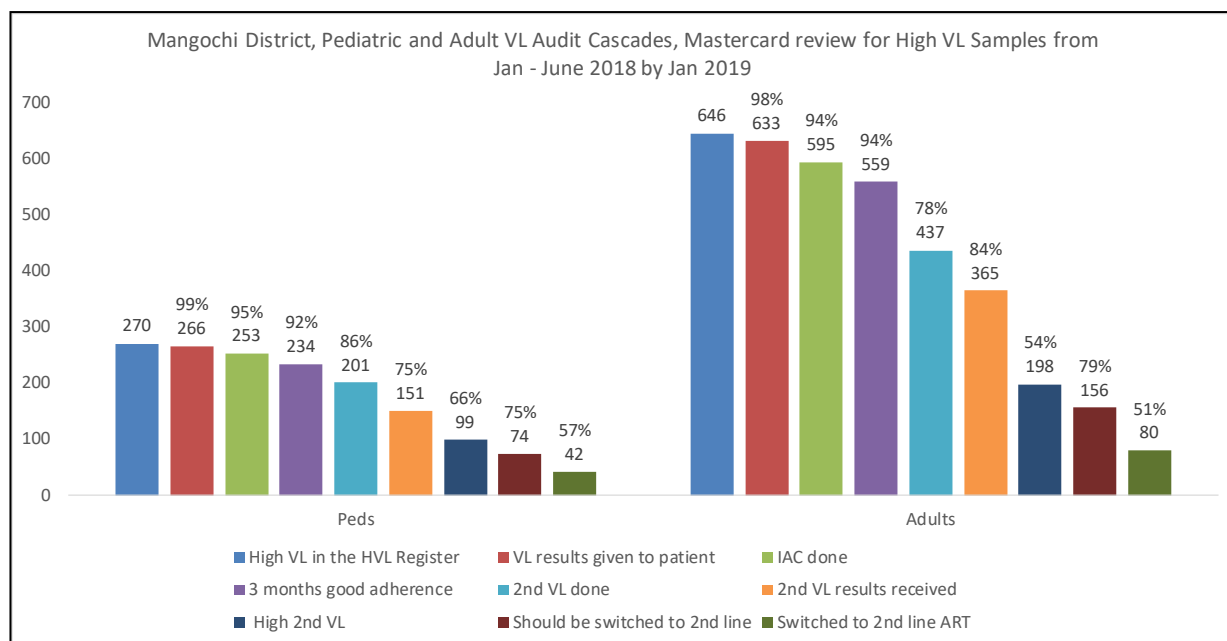
## SO 8 - Viral load cascade management: Implementation progress

Tingathe implemented activities to promote viral load cascade management, including provision of intensive adherence counselling, support to identify and manage treatment failure, support for advanced HIV care provision (clients on 2<sup>nd</sup> and 3<sup>rd</sup> line regimens), and management of co-morbidities such as malnutrition, chronic disease, and cancer, in all supported sites. A second round of viral load audits were conducted in all supported sites in Mangochi district to identify cascade improvements from the first audits. Follow-up on turn-around time for viral load results was done with the DREAMS molecular laboratory. The viral load focal person, a CHW or HDA at each site, worked hand-in-hand with the site supervisor to ensure that viral load results received from the laboratory were attached to each client's mastercard and entered into the viral load registers and EID logbooks. Site supervisors assigned a CHW to each client with a high viral load result to support them through the viral load cascade. Site and Cluster Coordinators mentored ART providers on interpretation of viral load results.

Results from the second round of viral load audits during quarter two showed an increase in suppression rates to 90% and above at 7 of 25 sites (28%) which had less than 80% suppression rates in quarter one. Ten of these sites (40%) have increased their suppression rates to 80%. Only 8 of the 25 sites (24%) still have suppression rates of under 80%. Despite these improvements, the program noted persistent gaps in switching clients to 2<sup>nd</sup> line treatment for multiple reasons including lack of trained 2<sup>nd</sup> line providers. To address these challenges, Tingathe is creating intensified care ART clinics in which clients requiring switch to 2<sup>nd</sup> line will be seen and supported by Tingathe mentors to ensure a trained 2<sup>nd</sup> line provider is available. In addition to the routine activities, Mangochi district also implemented the following:

- Monthly viral load audits and provision of immediate feedback to sites on clients who are delayed or stalled in the cascade process.
- Use of a new tracing form which accommodates viral load tracing and outcomes so that CHWs can keep connected to the clients until each outcome is achieved on the high viral load cascade.

Figure 6: Pediatric and adult viral load audit cascade in Mangochi district



## Viral Suppression challenges and responses

- There was confusion regarding the two-year viral load testing milestone, with some sites calculating two years out from the last viral load, as opposed to measuring from the ART initiation date, leading to incorrect assessment of viral load eligibility. This is being clarified by coordinators during their mentorship visits to sites and through staff Continuing Professional Development (CPD) sessions.
- Delayed or missing discordant results from the National Reference Laboratory continues to slow the process of timely delivery of some viral load results. Tingathe is facilitating follow-up of results with the National Reference Laboratory and delivery of results to its supported districts. In an effort to reduce viral load sample turn-around times further, the MOH has assisted in getting the LMIS to connect the Mangochi laboratory to the LIMS system. This will facilitate access to real-time information regarding the status of a sample and the ability to access/print results of those that are delayed or have gone missing.
- There have been delays in entering the results in the Electronic Data System and updating the client mastercards in Phalombe sites. A viral load focal person has been identified to check progress weekly and ensure that the results are documented and are entered in the registers.
- Tingathe has observed poor management of high viral load cases. In response, coordinators provided mentorship to providers in all supported sites on high viral load management. ART providers were able to get remote support from Tingathe mentors on viral load and treatment failure management through the use of the clinical consultation hotline. The program is working to establish an intensified care ART clinic to care for these challenging patients. In addition, viral load audits allowed for timely feedback and action on high viral load management.

- At sites in Salima district, Tingathe observed weak links within the viral load care cascade, with no clear task allocation for some tasks within the viral load cascade. Site supervisors were mentored on developing a roster with clear tasks for the viral load cascade.

### Viral Suppression activities in the next quarter

District	Viral suppression activities
All districts	<ul style="list-style-type: none"> <li>• Support sites to transition to an annual viral load test schedule from biannual in accordance with new MOH guidelines. This will improve tracking and identification of high viral load and possible treatment failure earlier, for more effective management of ART and adherence.</li> </ul>
Mulanje	<ul style="list-style-type: none"> <li>• Conduct intensified care ART clinics to better manage high viral load clients.</li> </ul>
Phalombe	<ul style="list-style-type: none"> <li>• Implement a reorganized client flow to have clients who need intensified adherence counselling receive it before review by the ART provider.</li> <li>• Conduct quarterly mastercard audits in all the facilities for timely action on the viral load cascade.</li> </ul>
Mangochi	<ul style="list-style-type: none"> <li>• Connect the LMIS to Mangochi laboratory with support from MOH to facilitate access to results.</li> <li>• Conduct intensified care ART clinics to better manage high viral load clients.</li> </ul>
Machinga	<ul style="list-style-type: none"> <li>• Involve psychosocial counsellors in the management of clients struggling with adherence.</li> <li>• Support the scale-up of intensified care ART clinics as differentiated ART service delivery, where clients with poor adherence, high viral load, and those at risk of high viral load are managed accordingly.</li> </ul>
Salima	<ul style="list-style-type: none"> <li>• Conduct at least quarterly viral load audit activities using the newly developed audit tool.</li> </ul>
Balaka	<ul style="list-style-type: none"> <li>• Involve psychosocial counsellors in the management of clients struggling with adherence.</li> </ul>

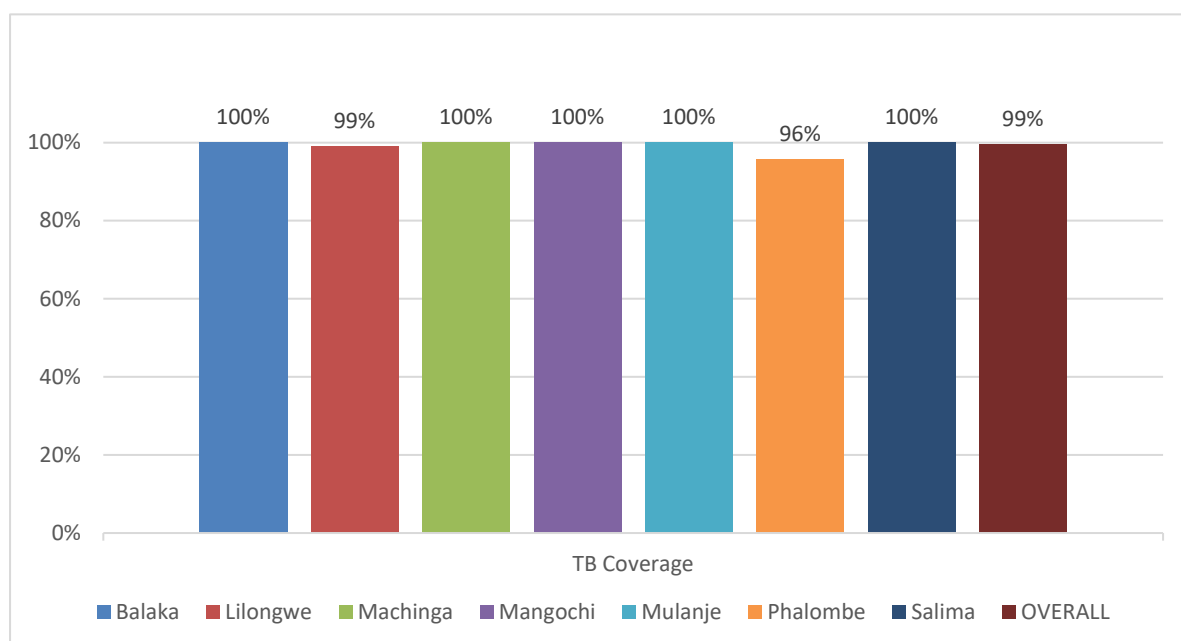
### SO 9 - Strengthen TB management: Implementation progress

As a component of comprehensive HIV care and treatment services, Tingathe supports TB intensified case finding, diagnosis, linkage to care and treatment. PITC is conducted in the TB wards and TB clinics, and clients who have not been recently tested are provided an HIV test. CHWs continuously screen clients for TB at ART clinics in all supported sites by using the four TB screening questions and referring clients who answer affirmatively to one or more of the questions to clinical screening services. Tingathe staff regularly address TB during health talks to raise awareness on the symptoms and treatment of TB. Tingathe clinicians conduct ward rounds and aid in TB diagnosis, providing mentoring to health workers. Presumptive TB

registers were placed at ART clinics to ensure documentation and follow-up of presumptive TB cases.

At Baylor COE, clients recently diagnosed with HIV are screened for TB using urine LAM. Facilities with access to GeneXpert conduct sputum testing for clients with suspected TB according to the latest algorithm. At the COE, clients with a high clinical suspicion of disseminated and extra-pulmonary TB are referred for FASH ultrasound (Focused Assessment with Sonography for HIV-associated TB), a new tool adopted by the MOH to improve diagnosis of extra-pulmonary TB, at selected district and central hospitals.

*Figure 7: Tingathe program HIV screening coverage among TB patients from October 2018 - March 2019*



### Strengthen TB management: challenges and responses

- The lack of GeneXpert machines at some sites leads to long turn-around time of results and delays in diagnosis. Additional GeneXpert machines were provided to some supported sites during this reporting period.
- Tingathe has observed insufficient knowledge and skills in diagnosing pediatric TB among some providers. Tingathe coordinators continue with mentorship to ART providers on management of TB and provide CPDs on the topic.
- There is poor adherence to isoniazid preventative therapy (IPT) due to the lack of a fixed dose formulation of IPT/CPT/B6, which causes a high pill burden. CHWs work with clients to ensure they understand the benefits of IPT and can make an informed decision about whether or not to take the medication.

### Strengthen TB management: Activities in the next quarter

- Promote the establishment of TB infection, prevention and control bodies with dedicated focal persons in order to address gaps at facilities.

- Continue to focus mentorship and ensure quality TB screening of all clients starting ART, particularly important during the DTG transition, to prevent TB immune reconstitution inflammatory syndrome.
- Support the field testing of a short course Isoniazid + Rifapentine for TB prophylaxis to improve adherence to TB prophylaxis once the project determines the eligible districts; continue to participate in TWG meetings to develop plans for this field test.

## Health Systems Strengthening

SO #	SO	Explanation
10	Adolescent care	Increase access to high quality adolescent and young person services
11	Differentiated models of care	Scale-up differentiated service delivery models, including male and youth-friendly models, with fidelity
12	Quality assurance/ quality improvement	Strengthen national, district, and site level quality assurance and improvement systems

### SO 10 - Adolescent care: Implementation progress

Tingathe is implementing two key approaches for adolescent care: Teen Clubs and a Youth Supporter Program. At Teen Clubs, adolescents living with HIV receive clinical care in a confidential space and peer support/education through group sessions. Guardian sessions are held to improve caregiver awareness of supporting their adolescent regarding adherence to ART, mental health, nutrition, life skills, and stigma and discrimination. CHW Youth Supporters have been identified as youth advocates at their facility and have been trained to provide basic individual and group counseling to adolescents, including disclosure of HIV status to children and adherence support, and basic sexual and reproductive health information for adolescents.

During this reporting period, Tingathe oriented the new districts (Machinga, Mulanje, and Phalombe) to its Teen Club programming and management, and conducted Teen Club supportive visits in all districts. A new Teen Club register with viral load monitoring and management components and viral load audit tools were introduced to all districts to assist the facilities in monitoring progress, identifying gaps, and finding ways to rectify them.

A mini-symposium was conducted in Mangochi district to strengthen the capacity of Teen Club mentors in managing the clubs. Tingathe conducted supportive supervision and mentorship visits in all five sites in Mangochi and Balaka districts to monitor progress and provide remedial solutions to identified gaps during a Youth Supporter program review meeting in February

2019. Youth testing days were promoted in all health facilities with a Youth Supporter program, with assistance from the peer educators.

The Youth Supporter program offers a wide range of services that are youth friendly as well as easily accessible for the youth aged 10 to 24 years. These services include HTS, psychosocial support, sexual and reproductive health and family planning, adherence, and disclosure, among others.

*Table 4: Services provided at 15 Youth Supporter sites in Balaka, Mangochi, and Salima in quarter two*

District	HTS	Adherence	Disclosure	Defaulter	SRH/FP	PSS	Other
Balaka	1124	230	124	19	97	51	118
Mangochi	2515	215	185	17	502	41	181
Salima	1605	131	95	6	616	86	141
<b>Total</b>	<b>5,244</b>	<b>576</b>	<b>404</b>	<b>42</b>	<b>1,215</b>	<b>178</b>	<b>440</b>

## SO 11 - Differentiated models of care: Implementation progress

Tingathe is implementing several differentiated models of care for HIV treatment and care services in all Tingathe supported sites in the seven districts, including nurse-led ART provision, Teen Clubs, intensified care clinics, and male wellness days. Meetings were held with the District Health Office, ART Coordinators and ART clinic staff in each district to orient them on differentiated service delivery models and acquire buy-in for implementation of the models. These stakeholders support the initiative.

### 1. Nurse-led ART clinic

Tingathe runs nurse-led ART clinics once a month at two remote sites (Chapola and Debora) in Mangochi district and at Chikweo Health Center in Machinga district. These clinics help to reduce the distance to health services for clients and decongestion at district hospital ART clinics. Health Surveillance Assistants raised awareness in communities around the areas two weeks before the outreach clinics. The program also introduced complex care clinics in Mangochi district. The Site and Clusters Coordinators attended at least one ART clinic in each of the assigned health facilities in their zones to provide mentorship to ART providers as well as assist with special cases, such as clients with high viral load.

*Table 5: Number of clients served at nurse-led ART clinics*

District	Site	# of ART clients
Mangochi	Chapola Outreach Clinic	84 clients (68 female, 16 male)
Mangochi	Debora Outreach Clinic	43 clients (24 female, 19 male)
Machinga	Chipolonga Outreach Clinic	58 clients (42 female, 16 male)

### 2. Extended-hours ART clinic



An extended-hour ART clinic was implemented at Mangochi District Hospital in quarter one, opening at 6am and closing at 6pm on Mondays.<sup>1</sup> In quarter two, the program focused on developing strategies for monitoring the extended-hours clinic. The extended-hours ART clinic, now operating two days a week (Monday and Thursday), targets men to allow them to access services either before or after work. After initial discussion with clients revealed that the majority preferred the early morning opening hours, the clinic is now operating from 6am to 4pm. Over time, women requested to come to the early morning clinic in Mangochi district, and it was opened to both men and women.

In Machinga, Tingathe is supporting an extended-hours ART clinic at Machinga District Hospital, serving both men and women. The clinic started in January 2019 and is held on Mondays and Wednesdays, from 6am-4pm.

*Table 6: Number of clients seen during AM extended hours at the ART clinic in Mangochi and Machinga districts*

District	Total # of clients	# male clients	# female clients
Mangochi	1,052	570	482
Machinga	463	-	-

3. **Male wellness clinic**

Male wellness clinics were started in January 2019 at Mangochi District Hospital. They are conducted once a week and provide free men’s health screening, including HIV testing and referral for men, in a private location. Since January, 61 men attended the clinic, 52 of which were eligible and tested for HIV, and three tested HIV-positive (5.7% yield).

4. **Men’s ART clinic**

In Machinga, a men’s ART clinic started at Ntaja Health Center in March 2019 and at Mangamba Health Center in February 2019. Men attend the clinic on Wednesdays from 6am to 4pm. During this reporting period, 13 men attended the clinic at Ntaja Health Center and 46 men attended the clinic at Mangamba Health Center. Men are freer to express themselves during these clinics because there only men in attendance and Ntaja Health Center registered five men returning into care after defaulting due to establishment of this clinic.

5. **Intensified ART clinic**

Intensified ART clinics were held at Mangamba and Nsanama Health Centers. The clinics provided ART services to clients with complex medical issues, poor adherence, and high viral load, and allow providers to spend more time with clients.

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<sup>1</sup> The regular ART clinic day opens at 8am and closes at 4pm

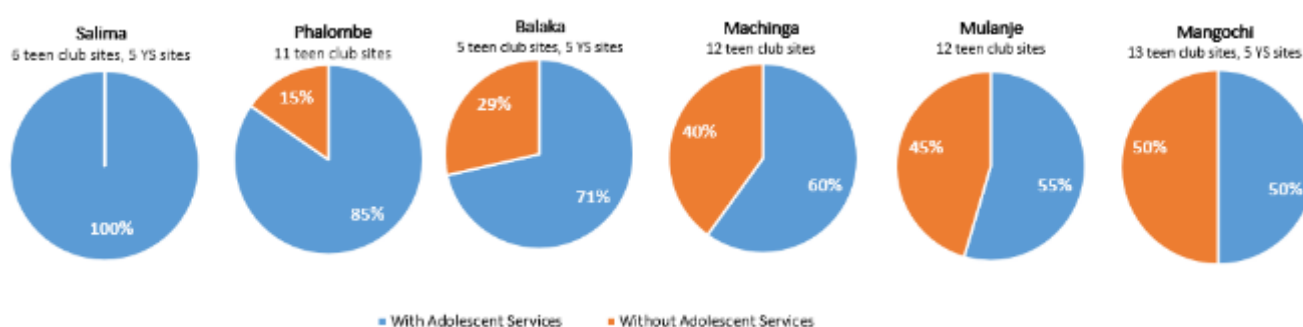
*Table 5: Number of clients served at intensified ART clinics*

District	Site	# of ART clients
Machinga	Mangamba Health Center	17 clients (13 female, 4 male)
	Nsanama Health Center	11 clients (7 female, 4 male)

## 6. Teen Club

Tingathe continued its bi-monthly support to Teen Clubs. A total of 4,389 teens attended Teen Club at 59 sites in six districts: 12 in Mulanje, 11 in Phalombe, 13 in Mangochi, 5 in Balaka, 6 in Salima and 12 in Machinga. Members' viral load uptake and adherence were monitored by the Coordinators during Teen Club days. The Coordinators also monitored documentation in the Teen Club registers.

*Figure 8: Adolescent services supported by Tingathe*



## SO 12 – Quality assurance/quality improvement: Implementation progress

Tingathe applies continuous quality improvement as a strategy for strengthening and improving services at supported health facilities, with frequent data collection and analysis, and uses this information to identify and address gaps in service delivery. Quality improvement (QI) committees exist in six supported districts (with the exception of Machinga), which discuss service delivery challenges and implement quality improvement plans. Facility meetings were held in quarter two to establish new committees and to revitalize existing QI committees.

Tingathe coordinators conduct structured monthly site assessments which incorporate USAID Site Improvement through Monitoring System requirements, MOH requirements, and Tingathe program best practices and standard operating procedures.

*Table 7: Quality improvement projects in Lilongwe and Mangochi districts*

QI project	Progress/Results	Planned actions
<b><u>Mangochi district</u></b> <b>Improvement of in-patient PITC coverage at Mangochi District Hospital</b>	Instead of using case notes to identify new clients, dedicated counsellors were dispatched to the wards at 6am to do bed-to-bed checks of new admissions. Client names were	Will be scaled up to all in-patient facilities in quarter three.

QI project	Progress/Results	Planned actions
<p><i>Issue:</i> Clients eligible for PITC being discharged before testing.</p> <p><i>Goal:</i> Improve PITC coverage in male, female and pediatric wards to 98% by the end of February 2019.</p>	<p>immediately placed in PITC registers (rather than written on separate papers), tested, and results documented in PITC and HTS registers. Supervision throughout the day assured that protocol was followed and the system institutionalized. Coverage averaged 98% or better as of January and continued at that rate through March.</p>	
<p><b><u>Mangochi district</u></b></p> <p><b>Viral load coverage improvement project</b></p> <p><i>Issue:</i> Consistently low viral load coverage across Tingathe sites</p> <p><i>Goal:</i> Improve viral load coverage in Mangochi district at lowest performing sites from an average of 73% per month to 100% by the end of quarter two.</p> <p><i>Action steps:</i></p> <ol style="list-style-type: none"> <li>1. Selected 16 lowest performing sites based on December 2018 data (Viral load coverage &lt; 75%).</li> <li>2. Implemented a four-step intervention (see SO 7 – Viral Load for details) at the district hospital and Nankumba Health Center as a pilot.</li> <li>3. Replicated the intervention at remaining low performing sites in March 2019.</li> </ol>	<p>Mangochi District Hospital improved from 65% in quarter one to over 120% in January and February of quarter two. Nankumba Health Center improved from 48% in quarter one to over 200% by February. Following this improvement, the intervention was scaled up to remaining select sites by March. Viral load coverage for these sites has risen from an average of 66% to 133%.</p>	<p>Will be scaled up to all sites in quarter three.</p> <p>Implement the use of a monthly fidelity checklist to ensure sites are implementing the intervention correctly.</p>

Q1 project	Progress/Results	Planned actions
<p><b><u>Machinga district</u></b></p> <p><b>Poor viral load coverage</b></p> <p><i>Goal:</i> To increase viral load coverage to 100% by the end of quarter two.</p> <p><i>Action steps:</i></p> <ol style="list-style-type: none"> <li>1. Completion of the appointment register</li> <li>2. Active screening of the mastercards</li> <li>3. Utilization of a WhatsApp group to monitor the viral load cascade</li> <li>4. Use of comprehensive talking points on viral load during health talks and ART counselling sessions</li> </ol>	<p>There has been an increasing monthly trend in viral load coverage in quarter two, from 23% in January to 120% in February and 140% in March.</p>	<p>To effectively document and manage clients with high viral load.</p>

## HSS challenges and responses

- The data entry team at Mangochi District Hospital laboratory lacked a sufficient number of computers to handle the input of the increased number of samples being processed, and there was no back-up system of existing data. An additional desktop computer was provided and an external hard drive will be procured in quarter three.
- Teen Club programming materials are worn out at most sites. Tingathe is exploring other sources of funding and budget lines that may cover purchase of these items.
- MOH supervisors are not always available for supervision even when funding is available. Tingathe will continue to lobby for this support.
- Testing space remains a problem. Tingathe is still using temporary space (e.g. tents) in most sites. These are deemed unacceptable by the MOH and may be removed. However, Tingathe continues to negotiate with the MOH and hopes to be provided permission to continue to use the tents while awaiting approval of infrastructure support.
- Male wellness clinics had low turn-out, but clients who do attend are happy with the service. Tingathe will publicize these clinics more outside the hospital for better awareness and uptake.
- Some Machinga site-level staff were not well versed in completion of most registers and how to extract data and develop a report. Tingathe's M&E team supported the most challenged sites with site-level trainings and provided intensified mentorship to all sites.
- A number of program tools were introduced, but this required an orientation pack for the facility teams. Tingathe supported a number of review meetings, including the

HTS review meeting and ART review meeting, where program specific challenges were discussed and action steps proposed.

- There has been confusion in some sites related to the ARV transition, but Tingathe has helped to address this through mentorship, site updates, and the consultation hotline. The feedback loop forums also covered new changes in ART management.

### HSS activities in the next quarter

District	HSS activities
All districts	<ul style="list-style-type: none"> <li>• Conduct five disclosure trainings in four districts (Mangochi, Machinga, Mulanje and Phalombe) targeting both Tingathe CHWs and MOH staff.</li> <li>• Conduct a Teen Club symposium, with clinical and programming updates and refreshers, in Phalombe.</li> <li>• Conduct youth friendly health services training in Machinga, Mangochi, Mulanje and Phalombe.</li> </ul>
Mangochi	<ul style="list-style-type: none"> <li>• Scale up the viral load coverage improvement intervention to all sites in quarter three.</li> <li>• Implement the use of a monthly fidelity checklist to ensure sites are implementing the intervention correctly.</li> <li>• Scale up intensified care ART clinics.</li> <li>• Scale up PITC coverage improvement interventions to all in-patient facilities.</li> </ul>
Machinga	<ul style="list-style-type: none"> <li>• Establish intensified care clinics at Machinga District Hospital as well as Ntaja, Nsanama, Nyambi, Gawanani, Machinga, Mangamba, and Chikweo Health Centers</li> <li>• Establish a system to collect relevant data on the impact of differentiated service delivery approaches.</li> <li>• Explore opportunities for additional outreach ART clinics.</li> </ul>

## Prevention

SO #	SO	Explanation
	GBV	Support facility-based GBV services in Machinga

### SO GBV: Implementation progress

Tingathe is implementing facility-based GBV care at six selected health facilities in Machinga district. This includes an assessment of current services, GBV response training and mentorship for health workers, collaboration with existing partners addressing GBV, development of a referral mechanism, and service provision (primarily screening and counselling for GBV within the ART clinic and HIV programs).

Tingathe conducted an orientation meeting for mentors to capacitate them to facilitate the program at district level. Two trainings were held, where clinical staff were trained on the role of the health system in the response to GBV and CHWs were trained to support survivors of GBV. In all supported sites, community mobilization meetings were conducted involving local community leaders such as chiefs, religious leaders, Victim Support Units, local organizations, and social welfare departments. The meetings focused on creating demand for GBV services provided by health facilities.

*Table 8: Clients provided with GBV services in Machinga district*

Site	Annual target	Number of GBV cases - Q1	Number of GBV cases - Q2	Semi-annual progress (Proportion of quarterly target)
Ntaja	92	2	6	17%
Nthorowa	92	2	2	9%
Namandanje	92	3	0	7%
Nsanama	92	4	10	30%
Mpiri	92	13	6	41%
Ngokwe	92	23	1	52%
<b>Total</b>	<b>552</b>	<b>47</b>	<b>25</b>	<b>26%</b>

In quarter two, GBV services were provided to 25 clients, a decrease from the 47 clients served in quarter one. This is attributed to a lack of knowledge among community members about the availability of GBV services at the facilities, as well as poor screening and documentation by providers at the facilities. In response, Tingathe conducted a re-orientation training for clinical staff and CHWs from all supported sites. The program also appointed a focal person who will lead and monitor GBV program implementation in Machinga district. The focal person will support GBV mentorship and facility audits.

Six additional sites were identified, increasing the number of sites supported with the GBV package to 12. Staff in the new sites were provided with site-level orientation on GBV service delivery. Tingathe held meetings with other implementing partners to identify areas of collaboration, including One Community, PSI Malawi, and Action Aid. These meetings included representation from the district council.

### GBV challenges and responses

- There is a lack of understanding and awareness of the post-GBV care provided at the facilities. As such, despite having GBV cases in the community, few reported cases were registered at the health facilities. Tingathe met with community leaders to enlist their support in sensitizing the communities.
- There is a notable knowledge gap among providers at the supported sites. Tingathe conducted training towards the end of quarter two and expects to see an improvement in documentation and management in quarter three.
- There is a lack of monitoring tools, and Tingathe is developing tools for GBV in quarter three.

## GBV activities in the next quarter

District	GBV activities
Machinga	<ul style="list-style-type: none"><li>• Develop a job aid on post-GBV care to be distributed to all sites. This will facilitate ease of reference among providers.</li><li>• Develop a site checklist which will be used by the focal person to evaluate the sites.</li><li>• Adapt routine mentorship schedules to include a GBV focus.</li><li>• Report GBV data on a weekly basis, as is the case with other program activities.</li><li>• Implement post-GBV care at the facility in collaboration with community implementing partners to improve management and bi-directional referral.</li></ul>

## Cervical Cancer

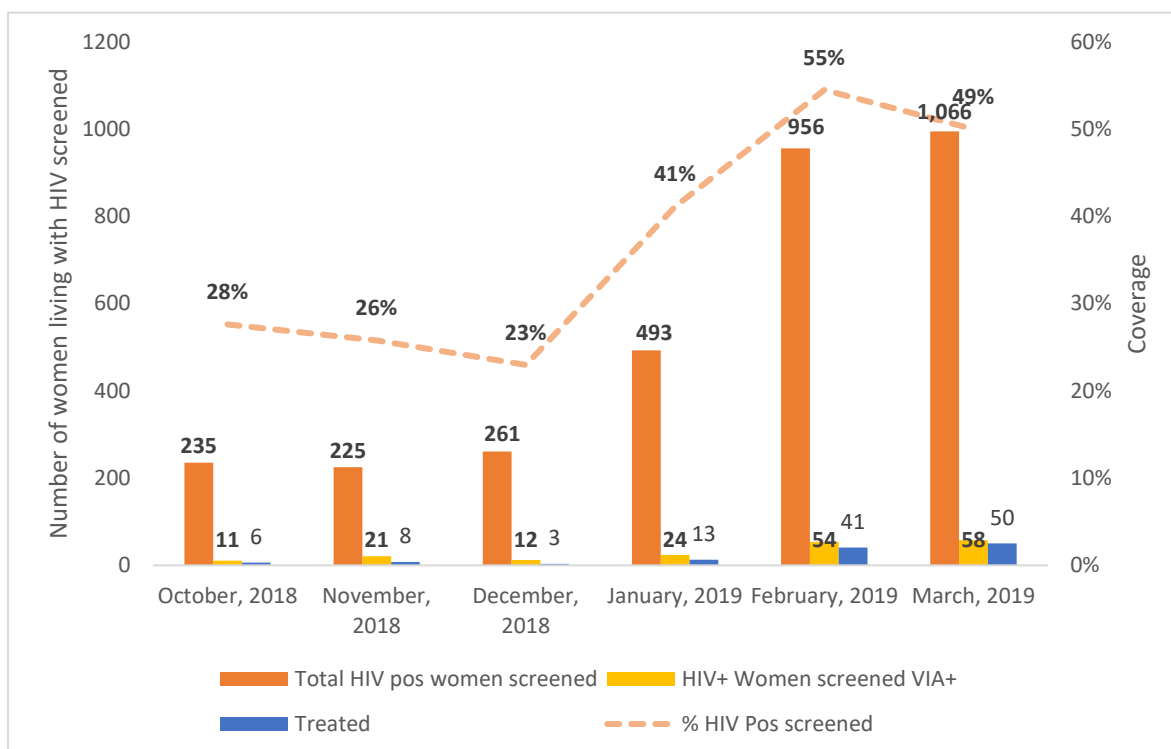
### Cervical Cancer: Implementation progress

The Tingathe program is coordinating with the Ministry of Health to scale up cervical cancer services in 9 supported sites in Balaka, Mulanje, Machinga, Mangochi, Salima and Phalombe districts. Targeting women living with HIV, the program focuses on integrating cervical cancer with ART services as well as strengthening existing systems and structures for effective service delivery. Tingathe began the scale-up by providing training to selected clinical staff, as well as supportive supervision and mentorship, on VIA screening and treatment of precancerous lesions using thermocoagulation from October 2018. As of March 2019, each of the following sites had at least four trained providers to screen women as well as provide awareness on the availability of the services: Mangochi District Hospital, Machinga District Hospital, Salima District Hospital, Phalombe Mission Holy Family Hospital, Mulanje District Hospital, Namasalima Health Centre, Mulanje Mission Hospital, Nambazo Health Centre and Balaka District Hospital.

During this reporting period, a total of 7,803 women were screened for cervical cancer. Of these, 3,242 were women living with HIV, representing 41.5% screening coverage of women living with HIV. Out of the 3,242 women screened, 184 were found to be VIA positive, with 121 of these treated using thermocoagulation. Same-day treatment coverage increased from 43% in quarter one to 66% in quarter two.

In quarter two, Tingathe conducted a four-day refresher training for service providers. Tingathe cervical cancer nurses and coordinators conducted supportive supervision visits to all sites with cervical cancer services to train newly recruited MOH nurses on the use of all cervical cancer screening equipment. The program increased screen and treat rates and complete documentation of the treatment cascade, with support from Tingathe's nurses and M&E team. Mangochi District Hospital held a cervical cancer awareness week in March 2019, where all women were targeted. The awareness campaign aimed at increasing access of cervical cancer services to all women. A total of 496 women were reached with VIA screening during the campaign. Of these, 141 were women living with HIV.

Figure 9: Cervical cancer screening cascade for quarters one and two: women living with HIV



During this reporting period, the number of clients accessing cervical cancer screening services increased each month, from 234 in October 2018 to 1,066 in March 2019. A week-long cervical cancer screening took place at Mangochi District Health Office to mentor and supervise VIA providers trained by Tingathe for quality of VIA screening. This activity provided them an opportunity to experience using cold coagulation. It also boosted the number of people screened with VIA from the ART clinic and community. Holy Family Mission started offering VIA services for free after the administrative challenges were resolved.

### Cervical Cancer challenges and responses

- There has been a low turn-out of women to access VIA services at some sites. Tingathe plans to scale up screening week to sites such as Nambazo and Holy Family in Phalombe district and Namasalima in Mulanje district.
- A limited number of VIA providers at some sites affects program performance. Tingathe plans to recruit community health nurses to oversee program implementation at sites including Salima District Hospital, as well as Nambazo and Holy Family Hospital (both in Phalombe district).

### Cervical Cancer activities in the next quarter

District	Cervical Cancer activities
Phalombe Mulanje Machinga Salima Balaka	<ul style="list-style-type: none"> <li>• Conduct sensitization meetings with community groups to raise awareness about cervical cancer services being provided at Nambazo and Holy Family Mission Hospital to improve uptake.</li> <li>• Conduct cervical cancer mentorship and screening week for Nambazo and Holy Family Mission Hospital.</li> </ul>



District	Cervical Cancer activities
	<ul style="list-style-type: none"> <li>• Conduct a cervical cancer screening review meeting/CPD in each of the supported districts.</li> <li>• Conduct MOH supervision visits to all supported sites.</li> </ul>

## Monitoring & Evaluation and Data Quality

The Tingathe program works continuously to ensure data quality throughout the entire M&E process of data collection, entry, analysis, and reporting. Tingathe is committed to using routine program data and conducting operational research for continuous quality improvement. The M&E team provides supportive supervision and mentoring on a monthly basis at site level to ensure accurate and complete documentation in all MOH and Tingathe registers and program tools. Reports submitted by site supervisors are verified by the M&E team at the time of collection using the source documents in order to minimize transcription errors and data manipulation. Data quality is discussed during monthly M&E site-level feedback loop data review meetings, and solutions are discussed with both Tingathe and MOH counterparts.

The following activities were implemented to promote data quality during quarterly disaggregated data collection in acceleration districts:

- Conducted MOH report-writing trainings at three sites in Machinga in quarter two.
- Worked with MOH facility staff to strengthen report-writing before the MOH supervision team visit.
- Conducted a data alignment exercise to document and explain discrepancies between Tingathe and MOH data and identify areas for improvement.

The following were notable challenges encountered during disaggregated data collection:

- Access to Electronic Medical Record (EMR): Some facilities have stopped using paper-based systems (such as Ntaja Health Center ANC), making it difficult to collect and report the data. Therefore, Tingathe must completely rely on the EMR data.
- Tingathe experienced challenges in accessing One Community's data during the disaggregated data collection exercise, despite communicating prior to the visits. However, other partners' data (such as PSI and Banja la Mtsogolo) have been collected.

The total number of clients tested in the register does not always align with what is in the facility report due to double counting or issues with page totals in the registers. Where discrepancies were noted, the Tingathe M&E team discussed with the site in-charge to discuss the reporting issue. Additionally, sites where reporting challenges have been noted will receive enhanced mentorship by the M&E team in the coming quarter to improve reporting and documentation.

## Tingathe Custom Indicators (Non-PEPFAR)

Indicator	Description	Data Source	Quarter one results	Quarter two results
INPAT_COV	Testing coverage at inpatient wards	Tingathe PITC Registers	Adult Male: 97% Adult Female: 98% Pediatric (>1y): 97% NRU: 99%	Adult Male: 100% Adult Female: 100% Pediatric (>1y): 94% NRU: 100%
INPAT_POS	HIV positive yield at inpatient wards	Tingathe PITC Registers	Adult Male: 4% Adult Female: 4% Pediatric (>1y): 3% NRU: 7%	Adult Male: 6% Adult Female: 4% Pediatric (>1y) 1% NRU: 6%
OUT_COV	Testing coverage at outpatient departments (OTP, SFP, STI, FP)	MOH departmental registers	STI: 92% OTP: 92% SFP: 92% FP: 93%	STI: 92% OTP: 93% SFP: 94% FP: 94%
OUT_PREV	HIV prevalence at outpatient departments (OTP, SFP, STI, FP)	MOH departmental registers	STI: 17% OTP: 7% SFP: 4% FP: 7%	STI: 4% OTP: 7% SFP: 3% FP: 7%
HTS_FRS	Number of clients tested with an FRS slip	MOH HTS register <i>Acceleration sites only</i>	2,869	2,347
HTS_FRS_POS	Number of clients newly tested positive who came with an FRS slip	MOH HTS register <i>Acceleration sites only</i>	276 (9.6% yield)	263 (11.2% yield)
INDEX_SCR	Number of clients screened who have at least one untested contact	Tingathe Index Register	2,147	3,787
ART_REF	Number of clients referred for ART	MOH ART Referral register	6813* (85% started on ART within the month). 86% linkage for	7,556

Indicator	Description	Data Source	Quarter one results	Quarter two results
			men, 84% linkage for women.	
VL_HIGH	Number of clients with high viral Load	MOH Viral Load Register	5,123 (out of 29,069 total samples returned (82% suppression))	2,942 (out of 21,974 total samples returned (87% suppression))

## Operational Research

### Ongoing research projects

Tingathe is currently implementing the following research projects:

- a. Kim MH, Mazenga AC, Zomba G, Abrams EJ, Chinkhumba J, Ahmed S, Kazembe PN. **VITAL Start (Video intervention to Inspire Treatment Adherence for Life) – note that this study is supported through an external funding stream.**

Description and Progress: The team developed an innovative 35-minute, single session counselling video aimed at standardizing pre-ART education and promoting behavior change using pre-tested messages woven into an entertaining drama. The video promotes partner involvement, maternal initiation and retention on ART by providing an intervention at the critical teachable moment between testing HIV-positive and committing to life-long ART. To understand more fully how VITAL Start compares to the standard of pre-ART counselling currently being done at health facilities, Tingathe is conducting a formal evaluation of VITAL Start and examining impact on partner outcomes and maternal ART adherence. The pilot study started in December 2016 and will end when the last enrolled participant attends their one year follow up visit. The main study started on September 20, 2018, and by March 31, 2019, a total of 219 women against a study sample of 704 participants were enrolled across the three sites in Mangochi (Mangochi DHO) and Lilongwe (Kawale and Area 25 Health Centers). There is good collaboration with all stakeholders present at the facilities.

- b. Buono N, Worku A, Kasola J, Ng'ona K, Mitambo C, Auld A, Goldstein R, Nyangulu M, Odek J, Kim E, Wadonda-Kabondo N, Maida A, Shiraishi R, Valverde E. **Assessing the Effectiveness and Feasibility of Voluntary Assisted Partner Notification Services in High HIV Burden Districts of Malawi: a Pragmatic, Non-Randomized Stepped-Wedge Study.**

Description and Progress: The aim of this study is to evaluate the effectiveness of Voluntary Assisted Partner Notification in real-world programmatic settings; a non-randomized, stepped wedge study in high volume facilities in six high HIV burden focus districts (Blantyre, Zomba, Chikwawa, Machinga, Mangochi and Lilongwe urban). The primary objective is to compare the percentage of contacts tested during the standard of care

phase (i.e., using FRS index testing methodology) with the percentage of contacts tested during the standard of care phase plus VAPN phase, by 1, 2, and 3 months after the initial contact with the index client. The study was approved on February 5, 2018, by the National Health Sciences Research Committee (Malawi) and on November 8, 2018, by Baylor College of Medicine IRB (USA). Baylor-supported sites in Mangochi (Koche and Mangochi District Hospital) and Machinga (Ngokwe, Nsanama, Ntaja, Machinga District Hospital) commenced study recruitment in November and December 2018, respectively. The conduct of the study is being overseen by MOH, CDC and USAID.

## Articles published in the reporting period

There were no publications during the reporting period.

## Presentations in the reporting period

- a. Bvumbwe MJ, Dziweni L, Ulaya K, Masambuka M, Kazembe PN. Viral re-suppression in suspected second-line HAART failure in the era of intensive adherence counselling (IAC) sessions at Baylor Clinical Centre of Excellence Lilongwe, Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- b. Simon K, Holmes B, Maulidi B, Solanki A, Matupa E, Bvumbwe BJ, Odo M, Kazembe PN, Kim MH. Early results from provision of lopinavir/ritonavir (LPV/r) pellets as part of first and second-line ART regimens for young children in an urban health center in Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- c. Mazenga AC, Maleta K, Ahmed, Kazembe PN, Kim MH, Moodie R, O'Hare B. The relationship between depressive symptoms and adherence to antiretroviral therapy (ART) in adolescents living with HIV (ALHIV) in Lilongwe and Zomba, Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018*
- d. Simon K, Hartig M, Wetzel E, Chester E, Chembezi C, Kabwinja A, Nkhono Z, Kavuta E, Nyirenda R, Kazembe PN, Ahmed S, Kim MH. The surge: a targeted, multi-strategy approach to accelerate HIV case finding in Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- e. Villiera J, Kamiyango W, Mehta PS, Kazembe PN, El-Mallawany NK. Potential for improved survival outcomes after treatment with intensified chemotherapy and antiretroviral therapy in children with pulmonary Kaposi sarcoma presenting with severe pleural effusions. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- f. Tembo T, Simon K, Ahmed S, Beyene T, Wetzel E, Kabwinja A, Kammera W, Chibowa H, Chavula B, Nkhono Z, Kavuta E, Kazembe PN, Kim. Scale-up of a passive referral model of

HIV index case testing to accelerate case identification in Mangochi, Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*

- g. Wanda W, Manda G, Mpasas A, Wachepa S, Mtete I, Butia B, Chasela M, Sabantini M, Chirwa G, Bank R, Mulemba T, Itimu S, John T, Wasswa P, Huibers M, Kazembe PN, Martin S. Treatment outcomes of paediatric non-hodgkin lymphoma (NHL) following chemotherapy completion: a single centre experience- Kamuzu Central Hospital (KCH), Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- h. Wetzel E, Simon K, Beyene T, Turetsky R, Kabwinja A, Kammera W, Chavula B, Chikoti C, Chibowa H, Mhango J, Kazembe PN, Ahmed S, Kim MH. Achieving the second 90: Linking adolescents living with HIV to treatment in rural Malawi in the era of test and treat. *Poster Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- i. Makoza B, Makuti S, Magalasi P, Mikwamba G, Mafeni C, Katema C, Daire C, McKenney A, Lungu J, Kazembe PN. Evaluating the impact of child HIV disclosure trainings to health care workers in 13 health centers in Malawi. *Oral Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- j. Manda G, Wanda W, Mpasas A, Wachepa S, Mtete I, Butia M, Chasela M, Mulemba T, Sabantini M, Chirwa G, Bank R, Lemon S, Nandi B, , Huibers M, John T, Wasswa P, Kazembe PN, Martin S. Combination chemotherapy of Wilm's tumour with vincristine, doxorubicin and cyclophosphamide (VDC): challenges and treatment outcomes from a resource limited setting in Lilongwe, Malawi. *Poster Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- k. Wanda W, Manda G, Mpasas A, Wachepa S, Mtete I, Butia M, Chasela M, Sabantini M, Chirwa G, Bank R, Mulemba T, Itimu S, John T, Wasswa P, Huibers M, Kazembe PN, Martin S, Margolin J. Paediatric chronic myeloid leukaemia in Lilongwe Malawi. *Poster Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- l. Ng'ambi A, Tembo T, Chavula B, Kavuta E, Kawonga S, Beyene T, Kazembe PN. Increasing HIV testing uptake among key groups through targeted community outreach setting. *Poster Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*
- m. Phiri D, Tembo T, Kawonga S, Mbendala B, Kavuta E, Thomson H, Ulambo J, Beyene T, Simon K, Kazembe PN. Voluntary HIV counselling and testing of family members of adults attending Chinsawa support group led to high HIV case identification in Balaka, Malawi. *Poster Presentation, 20<sup>th</sup> BIPAI Network Meeting, Johannesburg, South Africa, 12<sup>th</sup> - 16<sup>th</sup> November 2018.*

## Management and Operations

Tingathe has established and maintains strong, efficient and flexible management and operations systems to support its programming. These include administration, procurement, human resources and financial teams which work under the supervision of an overall Operations Manager.

### Program Operations

Tingathe opened three new district offices between September and October 2018: Machinga, Mulanje, and Phalombe. The required furniture and supplies have been procured and distributed to these offices. Power backup (inverters) were installed in all the new offices. Internet connectivity was initially a challenge in Phalombe and Mulanje but is now becoming stable. Tingathe is installing a higher-capacity electricity line in the Machinga office to manage its needs and is considering relocating the office due to the electricity limitations.

In quarter two, Tingathe received approval for purchase of a generator and heavy-duty copier for the Machinga office. The generator was procured and installed, and the receipt of the copier is pending. The partitioning works in Machinga offices commenced in March and are expected to be handed over in April 2019. Tingathe received approval for the purchase of a vehicle for the Cervical Cancer program; payment was made and the order has been confirmed. Approval is pending for the purchase of vehicles dedicated to M&E functions in all districts to enable the team to adequately manage its workload.

### Human Resources

Tingathe began hiring staff for the new sites in Machinga, Mulanje, and Phalombe to ensure positions were filled for program implementation and previous districts including Lilongwe and Mangochi to replace staff that were promoted or resigned. From October 2018 to March 2019, Tingathe hired a total of 483 staff for the following areas:

- Programs: 452 staff
- M&E: 17 staff
- Research: 6 staff
- Administration: 8 staff
- Finance: 2 staff
- Transport: 8 staff

## Success Stories

### Integrating cervical cancer and HIV services for early detection and treatment in Malawi

Malawi has the second-highest rate of cervical cancer in the world, with 72.9 cases per 100,000 people.<sup>2</sup> According to the National Cervical Cancer Control Strategy (2016-2020), cervical cancer is the second most common cancer in Malawi, representing 40% of all cancer cases.<sup>3</sup> Despite the fact that the disease is preventable and curable in its early stages, 63% of the 3,684 women diagnosed with cervical cancer annually do not survive.<sup>4</sup> Women living with HIV are at higher risk of the disease.

The Government of Malawi, through the Ministry of Health (MOH), has been committed to implementing a Cervical Cancer Control Program (CECAP) in collaboration with its stakeholders. In 2004, the MOH piloted a cervical cancer screening program in eight health facilities in the southern part of Malawi, which was scaled up to 81 health facilities across the country by 2011. The CECAP focuses on the following key priority areas: community awareness and mobilization, policy and advocacy, primary prevention (including human papilloma virus vaccination scale-up), secondary prevention, tertiary care, and research, monitoring and evaluation.

Despite the introduction of the CECAP, Malawi experiences low cervical cancer screening coverage – at 27% in 2015 – and more than 80% of cervical cancer cases are diagnosed too late for treatment.<sup>5</sup> Cervical cancer nurse Kelita Maston, stationed at Mangochi District Hospital, explains, “The low cervical cancer screening coverage is a result of a lack of awareness among the general public, a shortage of healthcare providers and policymakers, inadequate cervical cancer prevention and control equipment and services, poorly-coordinated referral systems between and within health facilities, and fragmented healthcare infrastructure.” Research on barriers to screening and early treatment services conducted in 2012 highlighted a lack of equipment and supplies, staff and space shortages, long distances to health facilities, inadequate knowledge about cervical cancer, preference for female providers who are older than the client, and lack of involvement of male partners as factors contributing to a low uptake of cervical cancer services.<sup>6</sup>



*Liana Charles receiving counselling on cervical cancer at Mangochi District Hospital*

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<sup>2</sup> World Cancer Research Fund. Available at: <https://www.wcrf.org/dietandcancer/cancer-trends/cervical-cancer-statistics>

<sup>3</sup> National Cervical Cancer Control Strategy 2016-2020. Available at: [https://malawi.unfpa.org/sites/default/files/resource-pdf/National\\_Cervical\\_Cancer\\_Strategy\\_A5\\_30Oct17\\_WEB.pdf](https://malawi.unfpa.org/sites/default/files/resource-pdf/National_Cervical_Cancer_Strategy_A5_30Oct17_WEB.pdf).

<sup>4</sup> Cervical cancer control and prevention in Malawi: need for policy improvement. Available at: <http://www.panafrican-med-journal.com/content/article/22/247/full/>.

<sup>5</sup> National Cervical Cancer Control Strategy 2016-2020.

<sup>6</sup> Exploring barriers to the delivery of cervical cancer screening and early treatment services in Malawi: some views from service providers. Available at: <https://www.dovepress.com/exploring-barriers-to-the-delivery-of-cervical-cancer-screening-and-early-peer-reviewed-fulltext-article-PPA>

In an effort to increase cervical cancer screening and treatment coverage among women living with HIV, the USAID-funded Tingathe program, implemented by Baylor College of Medicine Children's Foundation Malawi, is coordinating with the Ministry of Health to offer cervical cancer services in 10 health facilities – including the district hospitals – in Balaka, Machinga, Mangochi, Mulanje, Phalombe, and Salima districts. The program focuses on integrating cervical cancer with antiretroviral therapy (ART) services as well as strengthening existing systems and structures for effective service delivery. Tingathe began by providing training to clinical staff, as well as supportive supervision and mentorship, on VIA screening and treatment of precancerous lesions using thermocoagulation from October 2018.

To create demand for uptake of these services, the Tingathe program conducts awareness-raising within the health facilities and in the communities, including health talks by community health workers on ART days. Those who consent to screening are fast-tracked and linked to a nurse overseeing the cervical cancer services. Clients with a VIA positive result – who have signs of abnormal cells or precancerous lesions – are treated with cryotherapy, a treatment which destroys these cells by freezing them, or thermocoagulation, which applies high temperatures to destroy the cells, right at the health facility. Clients who are diagnosed with more invasive cancer are referred for specialized therapy.

As of March 31, 2019, a total of 7,803 women have been screened for cervical cancer. Of these, 3,242 were women living with HIV, representing 41.5% screening coverage of women living with HIV. Out of these 3,242 women screened, 184 were found to be VIA positive, with 121 of these treated using thermocoagulation.

The Tingathe program conducted a one-week cervical cancer awareness campaign at Mangochi District Hospital from March 18-22, 2019. The campaign aimed to increase access to cervical cancer services as well as mentor newly recruited VIA providers on the use of thermocoagulation to promote high quality VIA screening. A total of five nurses, one clinical officer, one VIA coordinator and two VIA mentors were available to offer these services. The hospital made use of the public address system to spread messages across the communities surrounding the hospital on the availability of cervical cancer screening at the hospital. The cervical cancer nurses at the hospital promoted the campaign through health talks at the ART clinic. A total of 496 women were screened during the awareness week, where 141 were women living with HIV. Out of 141 HIV-positive women screened, 11 were VIA positive, with two having precancerous signs. A total of 15 VIA positive cases were treated and seven were referred for palliative care.

Tingathe plans to scale the services to additional communities through outreach screening, where existing screening points will be utilized. The program also plans to expand screening spaces in other health facilities such as Balaka District Hospital. Tingathe's collaboration with the MOH to integrate services and standardize cervical cancer screening as a core component of routine ART care for women living with HIV should contribute toward early diagnosis and treatment, ensuring Malawian women live longer and healthier lives.



## Improving viral load coverage and suppression among people living with HIV in Mangochi, Malawi

Asibu is a 13-year-old boy who lives with his aunt Joyce Banda in Mangochi district in Malawi. He was diagnosed with HIV in 2016, after experiencing a series of opportunistic infections. Joyce shared, “My son’s health was suffering for a long time. His health was not good.” His condition began to improve after starting antiretroviral therapy (ART). Asibu’s first viral load to assess treatment efficacy was drawn in July 2017 and the results from the Monkey Bay Community Hospital laboratory revealed that Asibu had a viral load of 3,408 copies of HIV per ml of blood. While demonstrating that the treatment was having an effect in his body, the results indicated an issue, as Asibu should have been virally suppressed, with an undetectable viral load.<sup>7</sup> The hospital staff decided to refer Asibu and his aunt to Nankumba Health Center, which is only two kilometers from their home and where they could receive more intensive support.



*Aunt Joyce Banda and Asibu, sitting in front of their home*

Routine viral load testing is important to monitor treatment efficacy and identify cases of treatment failure. However, clients may miss having this critical test for a variety of reasons. In September 2018, only 42% of clients on treatment who were eligible for a viral load test (both adults and children) at Nankumba Health Center had received one.

The USAID-funded Tingathe program, implemented by Baylor College of Medicine Children’s Foundation Malawi, works closely with the Ministry of Health to support the provision of high-quality HIV services in 120 health facilities in seven districts - including Nankumba Health Center. In an effort to improve its viral load coverage, Tingathe conducted an audit of client files in October 2018 to identify and address gaps in the viral load cascade, such as testing conducted; results received, recorded, and delivered to the client; and provision of intensive adherence counselling sessions to clients with an unsuppressed viral load. Among pediatrics, the audit showed that only 78% of children with a high viral load result had completed intensive adherence counselling, and only half of them were changed to second-line ART when this switch was indicated.

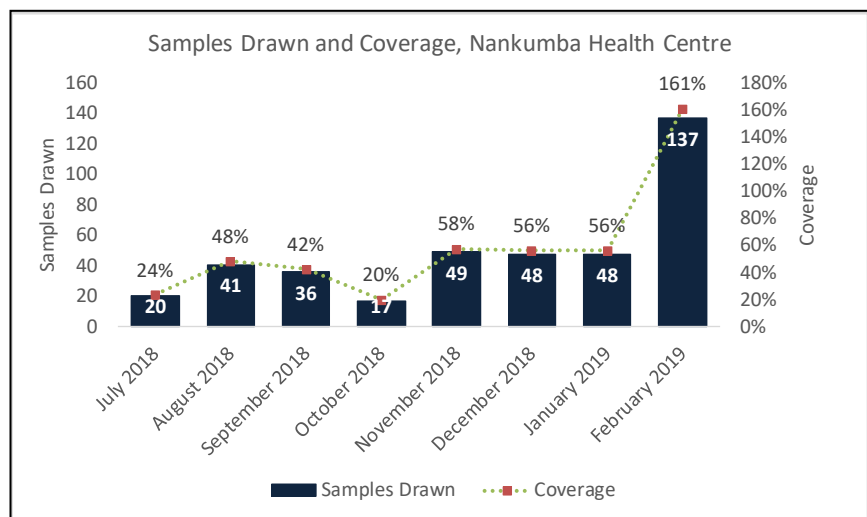
Tingathe responded to the audit findings by implementing several approaches. One of these approaches was screening all client mastercards and flagging all client files found to be eligible for viral load testing to ensure all eligible clients were referred for testing on their next clinic visit. Client flow was optimized by using clients’ waiting times prior to seeing the ART provider to send clients for viral load draws, and HDAs utilized the early morning (6am to 8am) to draw viral loads on a daily basis. All clients without viral load results were actively tracked to ensure they received the results as well as the appropriate follow-up. Additionally, a WhatsApp group was created to facilitate timely communication between health facility staff and Tingathe’s

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<sup>7</sup> Viral load suppression is achieved when a person on antiretroviral therapy has an undetectable amount of HIV in their blood. Those who are virally suppressed are typically able to live a healthy life, managing HIV as a chronic condition, with a very low risk of transmission to others.

mentorship team on viral load uptake and coverage. “We found the WhatsApp group to be very helpful,” Limbani Kumambala, Tingathe Cluster Coordinator for nine health facilities in Monkey Bay zone, Mangochi, explained. “We were able to monitor daily progress and make corrections if viral load uptake was low on a particular day.” The team communicates twice each day: the morning report includes challenges being experienced at the health facilities related to viral load collection and the afternoon report contains the day’s data on screening and sample collection. These combined interventions contributed to a significant increase in the number of clients at Nankumba Health Center receiving viral load tests in February 2019 compared to the previous month.

As client viral load results are returned from the laboratory, Tingathe staff flag those with a high viral load in their files and trace them to return to the health facilities for follow-up care, including intensive adherence counselling and close monitoring to detect possible resistance and treatment failure.



Asibu is one of the clients who has benefitted from Tingathe’s case management approach. Emmanuel Gama, the community health worker who oversees Asibu’s care, visited the family at home to better understand factors which may be affecting his adherence and provided the intensive adherence counselling sessions. He discovered that Asibu had not been taking his treatment correctly and was overdosing on Efavirenz. Consequently, Asibu was usually feeling drowsy and confused, and had poor coordination. Emmanuel assisted the family to correct the treatment dosage and reinforced information on good adherence and nutrition.

Asibu’s next viral load test in February 2019 demonstrated that he had achieved viral suppression. His aunt Joyce declared happily, “I was so excited to see that the viral load had gone down.” Asibu is now much healthier, and his mental clarity and physical coordination have improved. Joyce appreciates the ongoing support: “Ever since then, Baylor has been helping us and still [continues] to help us.”

From a viral load coverage of 42% of clients on treatment (both adults and children) in September 2018, Nankumba Health Center has achieved viral load coverage of over 100% as of February 2019 due to catch-up viral load drawing. Based on a second viral load audit conducted in January 2019, the number of adults who completed the intensive adherence counselling sessions and the number of viral load results received at the health facility have both increased by 15%. The health facility also achieved a 21% increase in the number of adults switched to second-line ART based on high viral load results, and all children with a high viral load result were switched to second-line ART, as indicated.

Tingathe will continue to use responsive, data-centered strategies to attain ongoing improvement in Malawi's health sector in collaboration with the Ministry of Health and other partners – ultimately contributing to survival, quality of life, and prevention of transmission by ensuring that people living with HIV access appropriate treatment and achieve viral suppression.