

LOCATE, TEST, TREAT AND RETAIN (L2TR) GHANA CAMPAIGN 90-90-90 ENDING THE AIDS EPIDEMIC BY 2030 ROADMAP TO TREAT ALL

SUMMARY

Five-year roadmap that sets out plans to mobilize community health workers and strengthen priority health sector actions towards achieving the 90-90-90 targets in Ghana.

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LOCATE, TEST, TREAT AND RETAIN

Executive summary

The international community adopted the 2020 global UNAIDS 90-90-90 aspirational targets which calls for;

- (a) 90% of people living with HIV to know their HIV status;
- (b) 90% of people who know their HIV status are accessing treatment; and
- (c) 90% of people receiving treatment achieving viral suppression within 12 months.

The UNAIDS established a partnership with the 1mCHW to enable it achieve these objectives. The 90-90-90 targets recognize that scaling up HIV treatment is essential for realising the prospects of ending the AIDS epidemic as a public health threat by 2030. Combined with intensified HIV prevention and non-discrimination efforts, achieving these targets by 2020 would reduce the number of people dying from AIDS-related causes by about 90% even before 2030. The targets emphasize rapid scale-up between 2016 and 2020, as a critical opportunity to lay the foundation to end AIDS (UNAIDS modelling).

The immediate treatment of all HIV positive clients as recommended in the 2015 WHO guidelines on the basis of evidence that early initiation ensures client survival, reduces overall incidence with a better cost benefit for the care of Persons Living with HIV (PLHIV), provides the impetus for Ghana to systematically work towards the 90-90-90 campaign targets.

Ghana is a priority country among the Thirty-five (35) Fast Track countries that account for 90% of the people newly infected with HIV globally. The majority of HIV infections (72% occur among stable heterosexual couples and persons involved in casual heterosexual and their regular partners (MoT, 2014). There is relatively a higher HIV prevalence among Key Populations (KPs) in Ghana with HIV prevalence of 17.5% in Men having sex with men (MSM) and 11.1% in Female Sex Workers (FSW) (IBBS 2011). The UNAIDS also identified Ghana as a priority country for the implementation of the 90-90-90 initiative.

This five-year roadmap document sets out national health sector plans to mobilize community health workers and other stakeholders to locate, test, treat and retain PLHIV in ART care, to ensure effective viral load suppression. The Ghana Health Service through the NACP is the lead MOH agency responsible for the delivery package of services to prevent and control HIV&AIDS including PMTCT and ART. The NACP's collaborative effort with respective stakeholders in developing this roadmap seeks to strengthen Ghana's commitment towards achieving the 90-90-90 targets.

The roadmap also identifies priority health sector actions required to achieve the 90-90-90 targets. Key bottlenecks in the national HIV response – such as ensuring HIV commodities

availability; extending testing services closer to households; and leveraging advances in technologies for improved monitoring, tracking, and quality of care – have been prioritized in this roadmap for consideration and possible support.

Five core actions and complementary activities would therefore be undertaken in order to realise Ghana's aspirational targets. The core actions are:

- 1. Revision of policies, plans and ART guidelines to treat all HIV positive clients irrespective of CD4 criteria.
- 2. Train service providers in the new guidelines and SI tools.
- 3. Develop and disseminate national task shifting guidelines.
- 4. Training of Models of Hope and other Community Health Workers including Lay Counsellors.
- 5. Update data reporting system to ensure reporting of 90-90-90.

The revision of national ART guidelines and launching of the "Treat all" policy by the middle of the third quarter 2016 will precede the implementation of these core activities. Implementing this policy will require sharing of tasks between highly skilled health care workers and other cadres. To this extent, a national task sharing guideline is currently under development with the support of WHO. This roadmap targets a new enrolment of approximately 135,000 ART clients yielding an estimated total of at least 230,000 clients with full viral load suppression by 2020 (90% of total cohort).



Figure 1: Current country situation

Ghana is a West African country with a democratic unicameral government system. The estimated national population is 27million (Ghana Population and Housing Census 2010) with a male to female ratio of 49:51. The total fertility rate of 4.2 translates to a little over one million expected pregnancies annually. The 2014 GDHS shows a declining trend in child mortality since 1998 to less than 60/1000 live births of infant mortality in 2014.

HIV prevalence in Antenatal care clients in 2015 was 1.8%. This ranges from 1.2% in the Northern region to 3.2% in the Greater Accra region. In the Ghana Demographic and Health Survey (GDHS) 2014 report, the estimated prevalence was 2.0%. In the general population, the estimated

prevalence for 2015 was 1.6% (2015 National HIV Prevalence and AIDS Estimates & projections report). The linear trend analysis for the ANC prevalence in the past two decades shows a declining epidemic stabilizing below 2%. In 2015 there was an estimated 274,562 Persons Living with HIV, nearly 56.3% of whom are women and 6.8% are children below 15 years (2015 National HIV Prevalence and AIDS Estimates & Projections Report).

Implementation of 90-90-90

Ghana intends to adopt newly published 2015/2016 WHO guidelines on ART with specific strategy to test and treat all HIV positive clients irrespective of CD4 count and WHO clinical stage criteria and monitor clients with viral load testing.

Based on the 2015 National HIV Prevalence and AIDS Estimates & Projections Report, HIV population is projected to decline from 272,092 in 2016 to 264,660 in 2020 as per the graph below.



Figure 2: HIV population projections

To be able to reach at least 90% of the PLHIV population and ensure 90% viral load suppression by 2020, the ART client cohort must increase from 89,113 in 2015 to approximately 230,000 in 2020 (cumulative 135,000 new clients from 2016-2020). This cohort will include clients currently on ART (~32%), those in clinical care but not on ART due to current initiation criteria of CD4 <350cells/mm³ (~25%) and those to be identified through testing (43%). To achieve the latter, a cumulative total of 13.5 million tests must be conducted within the period as shown figure 3 below. An analysis of service data indicates that in 2015, only 37% of clients identified (45,863) as HIV positive were initiated on ART (16,968) out of the total 955,674 screened. A large number of clients (28,895) plus additional numbers previously in care but not on ART are therefore potentially available for immediate initiation on treatment. This figure is estimated to be up to 45,000.

HIV TESTING SERVICES (First 90)

The average number of persons tested each year in the last three years (2013-15) is around 808,000. With the new WHO 2015 guidelines on HIV, Ghana is committed to increasing the number of persons tested each year from 955,674 in 2015 to 2,700,000 in 2017. The number to be tested will then be maintained at 2.7 million each year from 2018 to 2020. The data from past years (NACP annual reports) show that the low average number of HIV positive people who are enrolled onto ART is partly due to the previous guideline of using CD4 <350 for initiation on ART as well as the inadequate ARVs amongst other factors. The chart below shows the number of persons to be tested each year (2016-2020) in line with meeting the 90-90.



Figure 3: Total Number of Persons to be Tested: 2016 - 2020

Community Health Workers towards "90-90-90"

Addressing the human resource challenge is essential to achieving the 90-90-90 target. The effort to reach the 90-90-90 targets will require building a robust, sustainable community health system that will also support the achievement of the SDGs. Task sharing has emerged as a powerful strategy for enhancing the efficiency of health service delivery and optimally leveraging finite health resources to maximise health impact.

The Ghana Health Service is partnering with the 1mCHW Campaign and the Youth Employment Agency to deploy 20,000 community health workers to help strengthen the community-based health planning and services (CHPS). The CHWs will be complementing the efforts of Community Health Officers (CHOs) in the CHPS zones to extend the reach of health services to underserved communities. The 90-90-90 offers the opportunity to harness the skills, experiences, energy and institutional strength of multiple actors for the AIDS response. It will also leverage the strategic partnership required to support the achievement of the 90–

90–90 targets and to lay the foundation for sustainable health and development¹. Ghana's plan to expand access to ART and maximise rates of viral suppression will benefit immeasurably from greater use of community health workers and rational models for chronic care management.

Treatment (Second 90)

In 2014, 23,961 new HIV positive clients were receiving HIV clinical care². This number of PLHIV are readily available to be enrolled on ART. Six regions (Ashanti Region, Greater Accra Region, Eastern Region, Western Region, Brong Ahafo Region and Volta Region) have high disease burden, accounting for about 88% of clients. They also have almost 73% of the total ART sites. These regions will be targeted to increase the number of new HIV positive persons on treatment by 22,000 in 2017 and 25,000 in 2018. Implementation of the policy will therefore start with the four priority regions (Ashanti, Greater Accra, Eastern and Western).



Figure 4: Projected ART Cohort

Viral load suppression (Third 90)

Viral Load Testing

Consistent with a cascade approach to treatment targeting, the third 90 target requires sustained use of HIV treatment and ongoing virologic monitoring to verify treatment success and to intervene to support treatment adherence and re-engage defaulters.

Operationalization of the third component of the new treatment target will require concerted efforts to improve access to viral load testing technologies. To meet the 90-90-90 targets and thereby lay the foundation to end the AIDS epidemic, every person starting HIV treatment will need to have access to viral load testing. Viral load monitoring is essential for HIV treatment optimization, and every person living with HIV has the right to know his or her viral load.

Figure 5: Viral load suppression of ART cohort

http://www.unaids.org/en/resources/presscentre/featurestories/2016/february/20160202 909090 2014 NACP annual report, pg. 27



In addition to optimizing treatment outcomes, viral load testing may also help lower treatment costs. Where viral load tests are unavailable, clinicians are unable to identify early treatment failure and intervene to support patients who are having difficulty adhering to prescribed regimen.

There should be proper utilisation of current viral load machines to improve utilisation from the low level of less than 10% being done now. There is an active pipeline of point-of-care viral load technologies, which may help accelerate access to diagnostic tools and improve outcomes across the HIV treatment cascade. Further use of other platforms for viral load testing will be pursued. Ensuring universal access to viral load testing in all settings, urban and rural, will likely require a combination of centralized laboratories and point-of-care tools. NACP in collaboration with PEPFAR will review laboratory policy and strategic plan, develop guidelines and scale up plans for viral load (VL) testing and train all laboratory staff on these documents. These guidelines would support an increase in the uptake of VL.

The appendix of this document captures a differentiated strategy for the four priority regions as a guide.

Strengthening the Models of Hope and Lay Counsellors as part of CHWs initiatives to Fast Track Achievement of the 90-90-90

Models of Hope are PLHIV who are trained to provide HIV-related information and services in the community and at a health facility.

A Model of Hope must be an open minded person, approachable and trustworthy, nonjudgmental, and must have exhibited virtues like patience, humility, and maturity. The Models of Hope support, link and retain PLHIV on ART. They also support in providing psychosocial and adherence counseling; link PLHIV with condom and lubricant services; keep records and prepare reports on all activities carried out in the facility.

Additional responsibilities include ensuring PLHIVs are screened regularly for TB, ensuring bed-ridden PLHIV still get their ARVs on regular basis, handle issues of stigma that client might

face, ensure that pregnant women maintain a regular hospital schedule and do not miss their drugs.

This support group is very critical and will be actively involved in the implementation of this roadmap. The Models of Hope will be empowered using standardised training manuals and guidelines to facilitate their role in both facility and community to improve retention and care for their peers. They will be supported to meet on a monthly basis to review their activities, share experience and re-strategize for impact.

Lay counsellors will be trained within the Civil Society community to provide HIV Testing Services.

Challenges

HIV Testing Services

HIV testing rates in the general population remain low in Ghana. Data from 2014 GDHS indicates that 43% of women aged 15-49 years ever tested for HIV and received their results (with 13% of them doing so in the last 12 months). Among men of the same age, only 20% have ever been tested and received their results (6% in the last 12 months).

The report of the End Term Evaluation (ETE) of NSP 2011-2015 notes that the number of men and non-pregnant women tested, counseled and received their results has declined from about 500,000 in 2011 to about 150,000 in 2013. This increased to about 200,000 in 2014.

The ETE also found that considerably more non-pregnant women were tested and counseled for HIV than men each year since 2008. The drop was due to stock out of HIV test kits and the suspension of The Know Your (HIV) Status campaign in 2012 which is the flagship of the HTS programme.

High workload and attrition among health workers increasingly makes it difficult to solely rely on clinical health staff for the ambitious HTS target set out in this 90-90-90 Roadmap.

Stigma and discrimination

Stigma and discrimination against PLHIV remain a big challenge. The 2014 GDHS showed that the percentage of adults with accepting attitudes towards PLHIV decreased from 19 % in 2008 to 14% for males and from 11% to 8% for females in 2014. This is much lower than the 50% acceptance target by 2015 in the NSP 2011-2015. The 2013 HIV Stigma Index study shows persistence of stigma against PLHIV in the country.

The proposed increase in persons to be tested from an average of 808,000 in the past three years to about 2.66m each year in the next four years will be challenging. Critical challenges include:

- 1. Persistence of significant barriers that perpetuate and sustain stigma and discrimination against KPs including social, structural, and legal barriers
- 2. Insufficient funds to support general population HIV campaigns
- 3. PLHIV indicate critical issues barriers that continue to affect their self-esteem and livelihoods, these include financial worries, limited support from families and the government, unemployment, and social seclusion especially not having life partners.

Treatment

There are 197 ART sites in 145 districts out of the 216 districts. About 53% (2,152) of health facilities offer PMTCT services and a little over 20% having the capacity to collect DBS for EID. There are nine functional DNA PCR testing laboratories in nine regions in Ghana. The ART cohort analysis for 2015 showed a 74% twelve months ART retention rate. The unmet need for ART is approximately 65% with low paediatric ART coverage less than 30%. Adopting

"Treat All" will require the Programme to significantly scale up the numbers to be tested and treated.

Due to inadequate ARVs however, ART initiation since 2015 has been done at CD4 count <350cells/mm³ within current implementation framework with the Global Fund to Fight AIDS, TB and Malaria. In summary, these are the gaps to be addressed with this campaign,

- 1. Current policy and guidelines for treatment require revision.
- 2. Limited physical and laboratory infrastructure to support sudden scale-up to lower levels of service delivery.
- 3. Inadequate number of frontline cadre of healthcare workers to initiate therapy since ART is physician led. The need for task sharing and capacity building are hence critical.
- 4. Supply chain system worsened by CMS fire in 2015.
- 5. Low viral load testing coverage and non-routine reporting of viral load results.
- 6. Need to strengthen client data monitoring through DHIMS 2 and the eTracker.

Proposed Activities

Five core actions and complementary activities would therefore be taken to realise the aspirational targets in Ghana beyond current programmatic interventions.

Preparatory work towards implementation of test and treat will include:

- 1. Revision of policies, plans and ART guidelines to treat all HIV positive clients irrespective of CD4 criteria.
- 2. Train service providers in the new guidelines and SI tools.
- 3. Develop and disseminate national task shifting guidelines.
- 4. Training of Models of Hope and other Community Health Workers including Lay Counsellors.
- 5. Update data reporting system to ensure reporting of 90/90/90.

Testing to Know Your Status

- 1. Scale-up of HIV testing in differentiated care settings for high positive yield and timely ART initiation.
 - a. Reactivate Provider-initiated testing services to include testing of children on admission, emergency room testing, Increased testing in DOTS corners, MNCHC settings, Blood donor testing and diagnostic testing to include all Hepatitis B and C positive clients.
 - b. Expand cadre of service providers for outreach testing services and Know-Your-Status (KYS) campaigns to include community health workers, Models of Hope and Lay Counsellors.
 - c. Improve targeted testing of KPs. There are approximately 30,579 MSM and 51,937 FSWs in Ghana. KPs will be targeted for testing starting with the four priority regions (Ashanti, Eastern, Greater Accra and Western) and Brong Ahafo.

Treatment

1. Fast track enrolment of clients including KPs receiving clinical care

2. Intensify current enrolment of HIV positive pregnant women, children, TB clients, hepatitis B and C clients, KPs and sero-discordant clients.

- a. Scale-up ART in TB DOTS sites
- b. Scale-up PMTCT sites
- c. Implement the new ART paediatric accelerated plan for Ghana

Viral load suppression

1. Strengthening of viral load monitoring of ART clients.

a. Improve viral load specimen referral system

- b. Expand access to viral load testing
- c. Ensure proper utilisation of current viral load equipment
- d. Explore the use of other platforms for viral load testing
- e. Enrol viral load testing sites on an external quality assurance program and continuous quality improvement

Health Systems Strengthening

Human Resource and Management

The campaign seeks to harness the full potential of health professionals to ensure a smooth implementation. There is therefore the need to improve upon the current capacity and where necessary recruit additional staff to match this ambitious but noble scale-up. Additionally, supportive supervision and mentorship at all levels and for all service providers particularly the models of hope and community health workers is necessary for quality assurance.

Physical infrastructure

As treatment sites are expected to be expanded to the district and sub district levels, the need to augment the current infrastructure is critical to sustain the anticipated cohorts. These include the refurbishment of clinical, laboratory and medicine storage areas.

Supply chain

Urgent and regular revision of commodity quantification to match the forecast is very necessary. Urgent measures will be taken to ensure the implementation of Ghana's commodity supply master plan and framework for efficient procurement and distribution of key commodities to end users. Modern Early Warning systems and eLMIS shall be augmented to improve commodity stock reporting and management.

Monitoring and Evaluation (Strategic Information)

Ghana's 90/90/90 campaign will be monitored and evaluated using a robust M&E system to ensure strategic information sharing. This roadmap posits the strengthening of Ghana's M&E system to play its needful role towards ensuring a timely reporting of the 90-90-90 indicators and data sharing with relevant stakeholders. In this regard the following actions will be undertaken

- a. Update indicators on viral load suppression
- b. Develop, print and distribute data collection tools in line with the scale-up
- c. Establish E-tracker for clients
- d. Improve data quality system to include commodity consumption
- e. Conduct regular data validation and quality assessment
- f. Procure equipment for SI (backpacks, mobile phones, solar chargers, data bundle)
- g. Institute systems for operational research– baseline, midline and end line.

Plan for core activities

Focus /	Objective	ve Activities 2016				016 2017					2018	2019	2020
Strategic Focus / Domain / Area			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
HIV TESTING SERVICES	Targeted testing to ensure high yield	Revision of testing guidelines											
		Training of CHWs, Lay Counsellors KPs and Models of Hope to provide HIV testing services											
		Support for targeted outreach activities for HTS											
		Case finding among KPs in 5 regions											
		Case finding among KPs in remaining regions											
		Provision of commodities for HIV testing											
		Revision of ART guidelines											
		Training of service providers on the revised ART guidelines											
	Create a national	Scale up of ART sites starting with DOTS sites.											
TREAT ALL	policy framework to support treatment of all	Assessment, accreditation, and improving infrastructure of sites (health system strengthening).											
	HIV positive clients irrespective of CD4 count (Test and	Implementation of the policy in four priority regions											
	Treat)	Implementation of the policy in the remaining six priority regions											
		Development and dissemination of national task shifting guidelines											

		Commodities for treatment						
LABORATORY AND DIAGNOSTICS	Strengthen Viral	Scale-up EID, VL testing and equipment access						
	Load testing and specimen referral system	Training of service providers						
		Explore use of Gene Xpert for VL monitoring & EID						
	Improve data reporting system and strategic information	Update indicators on viral load suppression						
		Train service providers in LMIS						
STRATEGIC		Establish E-tracker for clients						
INFORMATION (M&E)		Establish data quality system to track 90-90-90						
(mac)		Equipment for SI (laptops, backpacks, mobile phones, solar chargers, data bundle) Monitoring and data audit visit to sites						

APPENDIX: 90-90-90 Differentiated Strategy for the Four Priority Regions

In line with the 90-90-90 targets, a cascade of the numbers to be tested, treated and monitored for viral load suppression has been determined for the four priority regions in Ghana namely Greater Accra, Eastern, Western and Ashanti Regions. The strategies for achieving the UNAIDS target have been differentiated for each region up to the regional level.

Based on the 2014 GDHS HIV prevalence, projected population and the 2015 SPECTRUM figure of 272,092 PLHIV population estimate for each region, the numbers to be targeted for testing in 2016 are shown for these four priority regions in Figure 1 below.



Figure 1 Numbers to be targeted for testing in each of the four priority regions

Region	Number to	Estimated	<u>90% of</u>	ART	<u>PMT</u>	Number	Number	Number to find
	be tested	<u>HIV</u>	<u>est HIV</u>	<u>sites</u>	<u>СТ</u>	on	<u>in clinical</u>	through testing
		population as	pop		<u>sites</u>	treatme	<u>care but</u>	to reach 1 st 90
		proportion of				<u>nt</u>	<u>NOT on</u>	
		SPECTRUM					<u>ART to</u>	
		Figure of 272,					<u>immediat</u>	
		<u>092</u>					<u>ely</u>	
							<u>initiate</u>	
AR	<u>393,362</u>	<u>51,157</u>	<u>46,041</u>	<u>21</u>	<u>152</u>	<u>21,882</u>	<u>5,030</u>	<u>19,129</u>
<u>ER</u>	<u>403,524</u>	<u>40,087</u>	<u>36,078</u>	<u>19</u>	<u>431</u>	<u>11,942</u>	<u>3,274</u>	<u>20,862</u>
GAR	<u>552,499</u>	<u>57,790</u>	<u>52,011</u>	<u>34</u>	<u>204</u>	<u>18,836</u>	<u>4,901</u>	<u>28,274</u>
WR	<u>405,798</u>	<u>34,683</u>	<u>31,215</u>	<u>28</u>	<u>332</u>	<u>7,545</u>	<u>2,127</u>	<u>21,543</u>

GREATER ACCRA REGION

The cascade is shown in Figure 2 below.



Figure 2: 90 90 90 Cascade for Greater Accra Region



EASTERN REGION

Figure 3: 90 90 90 Cascade for the Eastern Region

WESTERN REGION



Figure 4: 90 90 90 Cascade for Western Region

ASHANTI REGION



Figure 5: 90 90 90 Cascade for Ashanti Region

The following differentiated strategies will be applied to all regions as appropriate.

STRATEGIES TO IMPROVE TESTING YIELD

- ✓ HIV testing should be routinely offered to all in-patients, emergency room patients and outpatients to maximise provider-initiated testing. Yield is expected to be higher from health facility testing than from testing at other non-health facilities. It is also cheaper to carry out facility based testing compared to outreaches where the logistic needs are higher.
- ✓ HIV testing services will be routinely offered to all mothers attending CWC.
- Private clinics especially STI and dermatology clinics should be encouraged to offer routine HIV testing to all their clients.
- ✓ Children in child protection homes, orphanages and special clinics will also be targeted for testing.

- Know-Your-Status campaigns (Outreach testing) will be re-introduced to diagnose HIV positive clients in the general population. However, this will be targeted at districts and sub-districts with high prevalence.
- ✓ The programme will also encourage SR to increase their test kits allocation to the Prison health facilities. The health care workers, wardens and counsellors would be trained to offer HTS where applicable. With respect to Key populations (KP), the programme will strengthen collaboration with NGOs like ADRA, PPAG, WAPCAS and MICDAK to increase coverage.

TREATMENT STRATEGIES AT HEALTH FACILITIES

- ✓ Decongestion of ART clinics by providing existing stable patients as much as 6 month appointments for medicine refill.
- Community Health Workers within the communities can serve as facility treatment supporters being the link between treatment facilities and the clients. They will refill for stable clients while carrying out other community health within the context of task sharing. This will also help decongest the health facilities.
- ✓ Within the various levels of health facilities, HIV care will no longer be physician led but other trained health care workers will provide HIV care (Task sharing policy).

STRATEGIES TO IMPROVE VIRAL LOAD TESTING

- ✓ SOPs for sample collection, storage and transportation will be distributed to all ART sites.
- ✓ District HIV focal persons will be supported by the NACP to lead in the sample collection and transportation to testing sites.
- ✓ Testing demand will be reinforced through refresher for the new guidelines.
- ✓ Intensify proficiency programme for viral load testing and reporting.

These strategies will be implemented in all other regions as well in line with the roadmap.