Malawi Country Operational Plan

COP 2018

Strategic Direction Summary

April 6, 2018

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1.0 Goal Statement

Malawi has 1.1M people living with HIV (PLHIV), including 350,000 people who are not yet on antiretroviral therapy (ART), most of whom (75%) are unaware of their status. Although the 2016 Malawi Population-Based HIV Impact Assessment (MPHIA) reported significant progress toward 95-95-95 targets (73-90-91 in 2016), we must make innovative investments targeting those geographic areas and population groups furthest behind in the treatment cascade for Malawi to reach 95-95-95 by the end of Fiscal Year (FY) 19 (2020). Although the annual number of new HIV infections has dropped more than 60% since 2003 coinciding with the increase in ART coverage, HIV incidence (30,000/year) still exceeds HIV mortality (15,500/year), showing the need for effective, targeted strategies to achieve epidemic control.

MPHIA and FY 17 age/sex disaggregated data indicate a high gap to 90% ART coverage among males aged 15-40, largely due to slower progress in diagnosing males living with HIV. MPHIA also showed high HIV incidence among adolescent girls and young women (AGYW) with HIV incidence point estimates eight times higher among females aged 15-24 than males of the same age. Therefore, the **overarching goal of COP18 is to find the missing youth (inclusive of AGYW) and men (ages 15-40) through targeted testing and provide same-day treatment to reduce incidence, while intensifying primary prevention efforts in these population groups.** COP18 strategies reflect updated policies that enable active case finding for those not seen in facilities (i.e., men and youth) – namely, self-testing and active index testing, in addition to ensuring saturation of key facility-based testing entry points. In addition, combined scale-up of same-day ART, Dolutegravir-based regimens, viral load monitoring as part of the "Undetectable" campaign,[1] and viral load-guided male- and youth-friendly differentiated service delivery will accelerate 95-95-95 achievement

PEPFAR Malawi's **Epidemic Control Plan** (Figure 1) uses age- and sex-targeted case finding prioritized by district.

- *Acceleration* districts (representing 51% of the saturation gap) include a surge investment with active index testing, self-testing, saturation of facility entry points, and a human resources for health supported pathway to treatment or prevention interventions [including Pre-exposure Prophylaxis (PrEP)].
- *Scale-up* districts (representing 23% of the saturation gap) receive steady investments to close the gap by age and sex using efficient case finding, same-day treatment and prevention services.

[1] "Undetectable" references "Undetectable=Untransmissable" (U=U) (U=U taking off in 2017. Lancet HIV 4: e475). Data show that HIV transmission risk from PLHIV can be brought to zero by ensuring PLHIV have undetectable viral loads through ART and regular viral load monitoring. U=U is a multi-stakeholder movement proposed by civil society to ensure each client with HIV is empowered to know his/her viral load suppression status through regular viral load monitoring. In Malawi, the target is to do an additional 400,000 viral load tests in FY19 and FY20, with additional funding requirements.

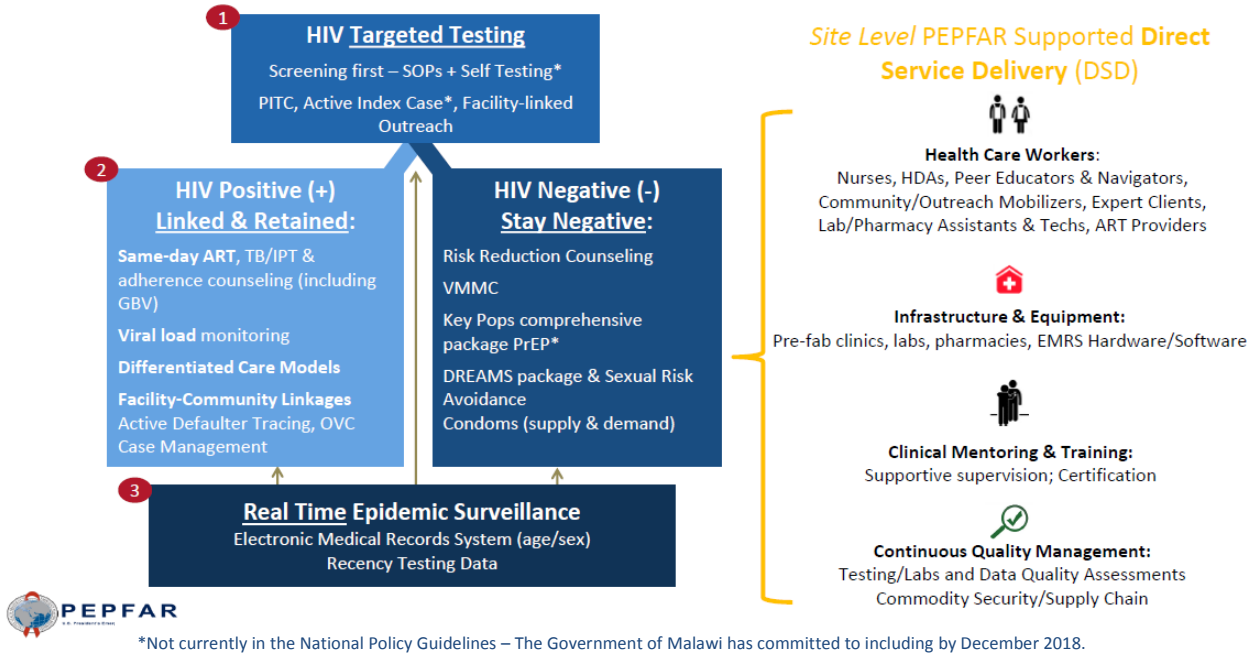
- *Sustained* districts have a sustained facility-based response focused on maintaining quality service provisions and careful surveillance to monitor epidemic control.

Three cross-cutting "critical enablers" for COP18 success include:

1. **Using age-sex disaggregated data**: Through scale-up of the Electronic Medical Records System (EMRS) and district capacity for capture of disaggregated data from existing tools, PEPFAR and the MOH now use near real-time age-, sex-, and region-disaggregated data to target, refine and accelerate epidemic response. In COP18, scale-up of recency testing through routine surveillance systems using the rapid Asante test will enhance surveillance capacity to identify "hotspots" of HIV transmission to better target resources to reach epidemic control.
2. **Enhancing implementer management to maximize impact**: PEPFAR Malawi will continue close coordination with civil society and district leadership to ensure active data-use to address program challenges. Implementer performance issues are monitored regularly at the site level. The PEPFAR interagency will take remedial steps to address implementers with consecutive quarters of low performance.
3. **Continued engagement with civil society organizations (CSO), Faith-Based Organizations (FBO), and other stakeholders**: CSOs and FBOs ensure input into, advocacy for, and monitoring of sustained, efficient, evidence-based investments to tackle the epidemic.

Figure 1. PEPFAR Malawi's Epidemic Control Plan

Focused Programming: Epidemic Control Plan



*Not currently in the National Policy Guidelines – The Government of Malawi has committed to including by December 2018.

2.0 Epidemic, Response, and Program Context

2.1 Summary statistics, disease burden and country profile

Table 2.1.1 Host Country Government Results															
	Total		<15				15-24				25+				*Source, Year*
			Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total Population	17,931,637	100	4,100,044	22.9	4,163,366	23.2	1,806,324	10.01	1,737,400	9.7	3,195,197	17.8	2,929,306	16.3	National Statistical Office, Malawi, population projections for 2018
HIV Prevalence (%)		6.3		1.5		1.5		3.4		1.5		18.2		13.0	MPHIA, 2015-16
AIDS Deaths (per year)	14,813		1,141		1,188		702		569		4,632		6,579		Spectrum 2018 estimates, for 2019
# PLHIV	1,089,321		33,797		34,591		79,169		34,704		544,374		362,687		Spectrum 2018 estimates, for 2019
Incidence Rate (Yr)		0.39		NA		NA		0.40		0.05		0.61		0.42	MPHIA, 2015-16
New Infections (Yr)	41,401														Spectrum 2018 estimates, for 2019
Annual births	665,000														UNICEF, 2016 2015 statistics
% of Pregnant Women with at least one ANC visit		99.4		NA				99.6				99.2			MPHIA, 2015-16 Women 15-49
Pregnant women needing ARVs	57,306	8.6													N from Spectrum 2018 estimates, for 2019 % of annual births
Orphans (maternal, paternal, double)	958,740		NA		NA		NA		NA		NA		NA		DHS 2010 projection for 2015 OVC. Orphans and Vulnerable Children 1,438,564 of which 958,740 are orphans
Notified TB cases (Yr)	17,064		NA		NA		NA		NA		NA		NA		National TB Program Quarterly Data, FY2017
% of TB cases that are HIV infected	8,485	50.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	National TB Program Quarterly Data, FY2017
% of Males Circumcised	503,934 (0-64)	9.2 (adults 15+)			123,753	3.2			207,232	12.8			172,949	6.9	MPHIA, 2015-16 Children 0-14 (medical) Men 15-64 (medical)
Estimated Population Size of MSM	46,000														Global Fund Concept Note 2014; PLACE Study available for 6 districts only (2016) with additional districts in progress

Table 2.1.1 Host Country Government Results															
	Total		<15				15-24				25+				*Source, Year*
			Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
MSM HIV Prevalence		18.2													Lancet, Geographical disparities in HIV Prevalence among MSM, 2017
Estimated Population Size of FSW	24,000														GFCN, 2014
FSW HIV Prevalence		62.7													2013 BBSS for prevalence, Size estimate GFCN 1.5% total pop 15-49*
Estimated Population Size of PWID	NA														
PWID HIV Prevalence		NA													
Other Priority Populations															
Estimated Population Size of AGYW (15-24)	1,806,324														National Statistical Office, Malawi, population projections for 2018
AGYW HIV Prevalence (15-24)	58,157	3.4													MPHIA, 2015-16
Estimated Population Size Female Estate Workers	NA														
Female Estate Workers HIV Prevalence		22.7													2013 BBSS
Estimated Population Size of Male Estate Workers	NA														
Male estate workers Prevalence		15.3													2013 BBSS
Estimated Population Size of Prisoners	9,583														GFCN, 2014
Prisoner HIV Prevalence		19.7													Prison Study 2012
Estimated Population Size of Fishermen	NA														
Fishermen HIV Prevalence		11.5													2013 BBSS

Table 2.1.1 Host Country Government Results															
	Total		**<15**				**15-24**				**25+**				***Source, Year***
			Female		**Male**		**Female**		**Male**		**Female**		**Male**		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Estimated Population Size of Male primary teachers	39,057														EMIS 2015
Male teacher HIV Prevalence		13.3													2013 BBSS
Estimated Population Size of Female primary teachers	27,675														EMIS 2015
Female primary teacher HIV Prevalence		22.8													2013 BBSS
Estimated Population Size of Male police officers	NA														
Male police officers HIV Prevalence		16.6													2013 BBSS
Estimated Population Size of Female police officers	NA														
Female police officers HIV Prevalence		22.6													2013 BBSS

Table 2.1.2 90-90-90 cascade: HIV diagnosis, treatment and viral suppression*										
Epidemiologic Data					**HIV Treatment and Viral Suppression**			**HIV Testing and Linkage to ART Within the Last Year**		
	Total Population Size Estimate (#)	**HIV Prevalence (%)**	**Estimated Total PLHIV (#)**	**PLHIV diagnosed (#)**	**On ART (#)**	**ART Coverage among PLHIV diagnosed (%)**	**Viral Suppression among those on ART (%)**	**Tested for HIV (#)**	**Diagnosed HIV Positive (#)**	**Initiated on ART (#)**
Total population	16,310,431	6.3	1,089,321	837,180	725,002	86.6	91.3	3,792,339	148,583	130,530
Population <15 years	7,560,071	1.5	90,868	68,334	45,913	67.2	57.9	N/A	N/A	N/A
Men 15-24 years	1,561,461	1.5	33,777	26,094	12,145	46.5	80.8	N/A	N/A	N/A
Men 25+ years	2,657,889	13.0	353,016	272,722	216,476	79.4	90.2	N/A	N/A	N/A
Women 15-24 years	1,634,274	3.4	77,057	59,224	43,911	74.1	81.4	N/A	N/A	N/A
Women 25+ years	2,896,736	18.2	529,856	438,933	406,557	92.6	92.9	N/A	N/A	N/A
MSM*	3,023	18.2	550	160	N/A	N/A	N/A	1,677	107	91
FSW**	10,800	62.7	15,048	5,986	N/A	N/A	N/A	4,698	1,549	1,582
PWID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Priority Pop (specify)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*MSM size estimate and epidemiologic data represents 6 districts utilizing a clustered site methodology. MSM prevalence (2013 BBSS) differs from the National MSM Size Estimate Study. For COP 18, PEPFAR used the 9% observed positivity rate. PEPFAR tracked TX_CURR for a sub-set of KP receiving ART in DICs.

**FSW size estimate and epidemiologic data represents 6 districts, based on a validated hotspot approach. PEPFAR tracked TX_CURR for a sub-set of FSW receiving ART in DICs.

Figure 2.1.3 National and PEPFAR Trend for Individuals Currently on Treatment

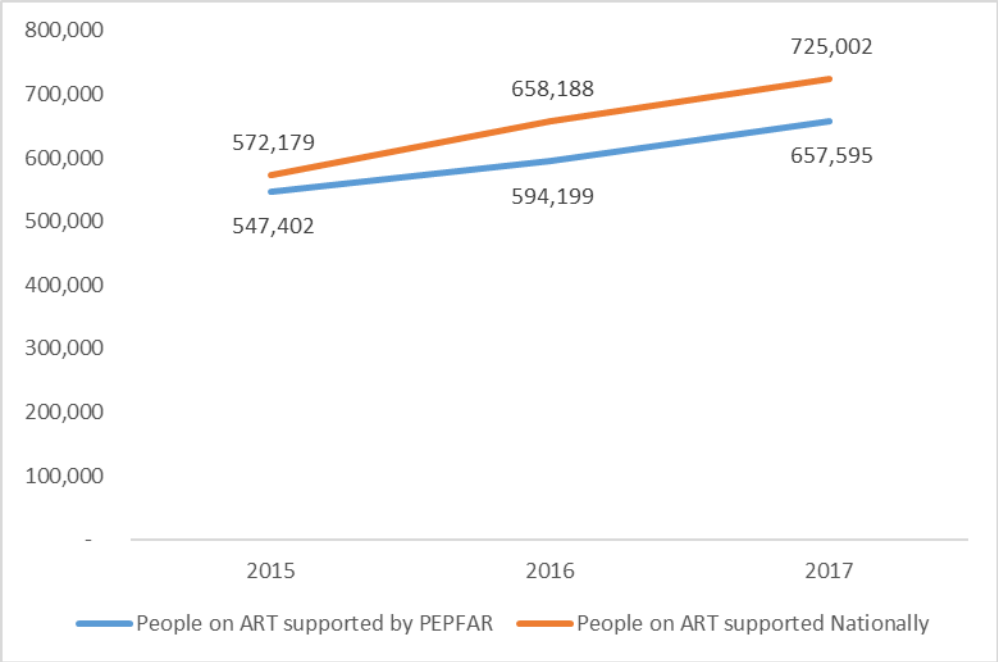


Figure 2.1.3 captures the PLHIV on ART reported by PEPFAR and the MOH between 2015 and 2017. Previously PEPFAR reported on 90% of national results, but from COP18 onwards, PEPFAR will report on all national results.

2.2 Investment Profile

Table 2.2.1 Annual Investment Profile by Program Area

Annual Investment Profile by Program Area

Program Area	Absolute Total	Absolute PEPFAR	Absolute GF	Absolute Host Country	Absolute Other
Clinical CTS	176,826,109	37,176,513	131,751,367	185,688	7,712,541
Community-based CTS	7,112,396	5,888,939	-	-	1,223,457
PMTCT	6,916,914	5,201,339	1,562,164	143,555	9,855
HTC	19,141,789	19,124,638	-	17,151	-
VMMC	13,137,256	11,657,474	-	529,721	950,061
Priority Population Prev.	24,713,940	10,357,468	3,007,472	174,679	11,174,321
AGYW Prevention	3,232,405	-	3,232,405		-
Key Population Prev.	3,214,462	1,892,685	885,168		436,609
OVC	8,720,250	8,720,250	-		-
Laboratory	8,666,548	8,666,548	-	-	-
SI, Surveys and Surveillance	2,226,643	1,295,827	-	-	930,816
HSS	15,230,219	4,892,573	2,397,674	1,831,332	6,108,641
TOTAL	**289,138,931**	**114,874,254**	**142,836,250**	**2,882,126**	**28,546,301**

Source: *MoH Resource Mapping 2017; Global Fund Expenditure Report 2017; PEPFAR 20167 Expenditure Analysis*

Table 2.2.2 Annual Procurement Profile for Key Commodities (COP17)

Table 2.2.2 Annual Procurement Profile for Key Commodities (COP 17)

Commodity Category	Total Expenditure	% PEPFAR	% GF	% Host Country	% Other
ARVs	69,713,358.09	8.5	91.5	0	0
Rapid test kits	4,419,939.15	0	100	0	0
Other drugs	8,922,233.44	0	100	0	0
Lab reagents & Viral Load Commodities	18,739,435.02	8	92	0	0
Condoms	3,478,645.97	29.5**	70.5	0	0
VMMC kits & commodities	2,591,461.00	66	0	0	34***
HIV/TB	3,642,349.09	0	100	0	0
MAT	-				
Other commodities (lubricants)	96,000.00	100**	0	0	0
Total	**111,603,421.76**	**1**	**99**		**0**

*Purchase of LPv/r pellets & other pediatric ARVs - ACT funding; ** USAID Commodity Fund (lubricants, female condoms and social marketed condoms); *** World Bank

N/A- Government of Malawi allocated $23M as national drug budget for 2016/17 lump sum for essential medicines (excluding ARVs, RTKs, VMMC kits, and condoms), amount for OI drugs unavailable

Table 2.2.3 Annual USG Non-PEPFAR Funded Investments and Integration					
Funding Source	**Total USG Non-PEPFAR Resources**	**Non-PEPFAR Resources Co-Funding PEPFAR IMs**	**# Co-Funded IMs**	**PEPFAR COP Co-Funding Contribution**	**Objectives**
USAID MCH	14,500,000	0			Reduce maternal and child morbidity and mortality, strengthen health systems to deliver primary health care services.
USAID TB	1,500,000	1,300,000	1	1,640,000	Strengthen TB screening, prevention, diagnosis, and treatment among PLHIV, including IPT delivery
USAID Malaria	22,000,000	11,414,500	3	5,484,240	These co-funded mechanisms support commodities, supply chain management, health worker pre-service training, host country institutional development. Of the total amount of co-funding resources, 79% is for malaria commodities and distribution.
USAID Family Planning	-	-	-	-	
USAID Nutrition	5,000,000	-	-	-	Prevent and treat malnutrition at facility and community level.
USAID-Education (Development Assistance) Secondary Education Expansion Development -(SEED)*	20,000,000	20,000,000	1	0	To reduce individual HIV risk, create safe communities and school environments for girls, and promote adoption of Social Norms to Reduce HIV Vulnerability.
USAID WASH	-	-			
NIH	-				
CDC (Global Health Security)	-				
Peace Corps	-				
DOD Ebola	-				
MCC	-				
Total	**63,000,000**	**32,714,500**	**5**	**7,124,240**	
*Funds subject to Congressional Notification Clearance					
Source: FY2018 Congressional Budget Justifcation					

Table 2.2.4 Annual PEPFAR Non-COP Resources, Central Initiatives, PPP, HOP						
Funding Source	**Total PEPFAR Non-COP Resources**	**Total Non-PEPFAR Resources**	**Total Non-COP Co-funding PEPFAR IMs**	**# Co-Funded IMs**	**PEPFAR COP Co-Funding Contribution**	**Objectives**
USAID (PEPFAR) Secondary Education Expansion Development-SEED*	$20,000,000					To reduce individual HIV risk, create safe communities and school environments for girls, and promote adoption of Social Norms to Reduce HIV Vulnerability.
Other PEPFAR Central Initiatives [Cervical Cancer]	$5,409,699					Cervical Cancer screening - include treatment for pre-invasive lesions for WLHIV and the initial service delivery should begin at high volume antiretroviral treatment clinics at district hospitals
Other Public Private Partnership	$2,500,000	$2,000,000				Strengthens case finding, treatment initiation, and retention among men in Mulanje district as described in MOU between ETAF and PEPFAR. COP 18 (FY 19) will be year 2 of implementation.
Total	**$27,909,699**	**$2,000,000**	**$0**	**$0**	**$0**	

*Funds subject to Congressional Notification clearance

2.3 National Sustainability Profile Update

Sustainability Index Dashboard (SID) 3.0 Planning Process: In early October 2017, UNAIDS and PEPFAR created a planning team of representatives from PEPFAR, UNAIDS, civil society, National AIDS Commission (NAC) and the MOH. The SID 3.0 planning team met in October 2017 to review SID tool and guidance, develop an inclusive participant list, and discuss facilitation roles, responsibilities, and meeting logistics. PEPFAR and UNAIDS sent invitations to stakeholders listed in the SID guidance.

Stakeholder Consultative Meeting: UNAIDS and PEPFAR jointly hosted the November 7, 2017 Malawi SID 3.0 Stakeholder Consultation Meeting during which participants reviewed, discussed and scored the SID domains and elements resulting in the SID 3.0 Dashboard Scores Snapshot (Figure 2.3.1). Groups discussed the results and proposed corrective action plans for domains with low scores. The event included representation from GOM, civil society, private sector, and donors.

Figure 2.3.1 SID 3.0 Results –Dashboard Scores Snapshot

Sustainability Analysis for Epidemic Control: Malawi

Epidemic Type: Generalized
Income Level: Low income
PEPFAR Categorization: Long-term Strategy
PEPFAR COP 17 Planning Level: 74,786,369

SUSTAINABILITY DOMAINS and ELEMENTS	2015 (SID 2.0)	2017 (SID 3.0)	2019	2021
Governance, Leadership, and Accountability				
1. Planning and Coordination	9.00	8.62		
2. Policies and Governance	8.64	6.12		
3. Civil Society Engagement	5.86	4.58		
4. Private Sector Engagement	4.47	4.61		
5. Public Access to Information	6.00	6.00		
National Health System and Service Delivery				
6. Service Delivery	5.65	5.00		
7. Human Resources for Health	6.83	7.78		
8. Commodity Security and Supply Chain	4.16	3.72		
9. Quality Management	6.05	4.67		
10. Laboratory	6.11	6.25		
Strategic Investments, Efficiency, and Sustainable Financing				
11. Domestic Resource Mobilization	5.00	5.48		
12. Technical and Allocative Efficiencies	3.02	5.33		
Strategic Information				
13. Epidemiological and Health Data	2.96	5.08		
14. Financial/Expenditure Data	4.58	6.67		
15. Performance Data	3.78	7.47		

Sustainability Strengths Identified: Participants rated Planning and Coordination, Human Resources for Health (HRH), and Performance Data highest. For sustainability strengths, the participants identified Malawi's National Strategic Plan for HIV/AIDS 2015-2020 (NSP), which informs PEPFAR and Global Fund investments, and which includes the 90-90-90 framework. Current national HIV/AIDS technical practices follow WHO guidelines for initiation of ART (Test and Start for all populations). The active engagement of stakeholders (CSO, Private Health Sector, Business and Corporate Sector, External Agencies – Donors and Multilateral Organizations etc.)

in the national strategy development is a strength. Participants attributed a high score for HRH to a large number of effective community-based health worker (HCW) cadres largely supported by donors. These lay HCWs include facility-based HIV Diagnostic Assistants (HDAs), mentor mothers, expert clients, and community cadres who support HIV activities beyond the facility. Malawi scored well on performance data due to timely availability of HIV clinical data (harmonized national monitoring and evaluation system); frequency of surveys and surveillance; and the ability of the government to collect expenditure data effectively using the Global AIDS Monitoring (GAM), National AIDS Spending Assessment (NASA), and National Health Accounts (NHA).

Sustainability Vulnerabilities: Domestic Resource Mobilization, Private Sector Engagement, and Commodity Supply scored low. The overall state of economic development contributed to a low score for Domestic Resource Mobilization. As the Malawi HIV/AIDS national response is donor dependent (at the moment less than 15% of the total expenditure is from domestic sources), the country needs a health financing strategy and a domestic resource mobilization strategy. The PEPFAR interagency and the Mission Lilongwe Front Office continue to advocate for increased government commitment to funding the national HIV/AIDS response. In 2018, PEPFAR will participate in a finance mapping led by MOH (with support from Bill and Melinda Gates Foundation, BMGF) to assist the MOH to optimize resource allocation for the HIV response. Private Sector Engagement also scored low due to a lack of established or harmonized platforms (e.g., corporate social responsibility engagement is ad hoc and not tailored to needs; oversight of private sector providers involves multiple regulatory authorities, etc.). Nonetheless, groups in the private and non-profit sectors have strengthened their HIV/AIDS workplace programs.

Commodity Supply scored low because Malawi uses few domestic resources for purchase of HIV related commodities, and the country does not have a single, harmonized plan for supply chain management. Due to past challenges with accountability, donor-funded parallel supply chains are predominate for HIV, TB and malaria. The well-functioning supply chain for HIV and TB, almost entirely supported by the Global Fund, ensures commodities are available over 90% of the time. The GOM, in collaboration with donors, conducted a supply chain assessment of the Central Medical Stores and is implementing a roadmap to integrate these discrete, donor-funded supply chains under the country's Central Medical Stores Trust (CMST). Malawi is making progress on the roadmap, although at a slow pace. The USG is committed to support the process toward reintegration; however, will be cautious about putting donated commodities into CMST. The USG requires strong assurance of the accountability, transparency, and visibility of CMST systems before integration. There can be no leniency in achieving the roadmap. Meeting participants recommended that Malawi conduct a broader assessment of the entire national supply chain. Participants also identified weak commodity management information systems as an impediment to sustainability.

The SID 3.0 Policies and Governance element scored lower than in SID2.0. For example, although national policies are generally progressive, legal frameworks are weak and do not facilitate access

to services for key populations. Civil society and the NAC initiated efforts to educate key populations about legal rights under the national response. Additionally, while the MOH has a policy on patients' rights, the policy does not explicitly refer to PLHIV. Moreover, the National Strategic Plan needs more clarity and focus on policies and programs for key populations. Due to poor coordination between the Ministries of Health, Education, and Social Welfare, the government provides limited services for vulnerable children. The GOM's National Strategy for Adolescent Girls and Young Women will improve coordination among these ministries to ensure effective and targeted prevention and impact mitigation efforts by both GOM and donor partners for this population.

CSO Engagement: PEPFAR Malawi recognizes the important and continued contributions of local CSOs to the National HIV/AIDS Program. In SID 3.0, the domain for Civil Society Engagement reflects a slight decrease from 5.86 to 4.58. The SID 3.0 participants noted that the resource-challenged landscape for CSOs results in sub-optimal opportunities for direct implementation and monitoring by CSOs. PEPFAR continues to provide funding by application for local organizations, including CSOs and FBOs, through the U.S. Ambassador's PEPFAR Small Grants Program for HIV/AIDS (PSGP) and during numerous engagement points during the COP 18 development process, invited and continues to welcome CSOs to submit a targeted concept note[2]. To build CSO capacity, PEPFAR Malawi continues to orient CSOs on HIV/AIDS data access and utilization through the PEPFAR Panorama platform. The Bill and Melinda Gates Foundation also promotes CSO data utilization through its COMPASS Grant initiative. As outlined below in Section 4.1.1 (U=U Initiative), Section 4.2.5 (*Voluntary Male Medical Circumcision*), and Section 6.4 (*Need for optimization of lab mechanisms and lab infrastructure to effectively and efficiently utilize lab resources*), PEPFAR and other stakeholders are exploring COP18 opportunities for increased CSO engagement in demand creation activities.

2017 HIV Bill: Although not captured in this SID 3.0 assessment, on November 28, Parliament adopted an amended HIV Prevention and Management Act that strengthens workplace protections for PLHIV after the USG, UNAIDS, CSOs, the Parliamentary Committee on HIV and Nutrition, and the Minister of Health successfully advocated for removal of problematic provisions that criminalized transmission of HIV. The Act makes the NAC a state institution whose mission is to coordinate the national HIV response. The Act addresses medical and legal issues surrounding HIV testing, disclosure, and treatment. It enumerates rights and responsibilities of PLHIV, including the right to free government-provided medication, and provides for steep fines on those who discriminate against PLHIV.

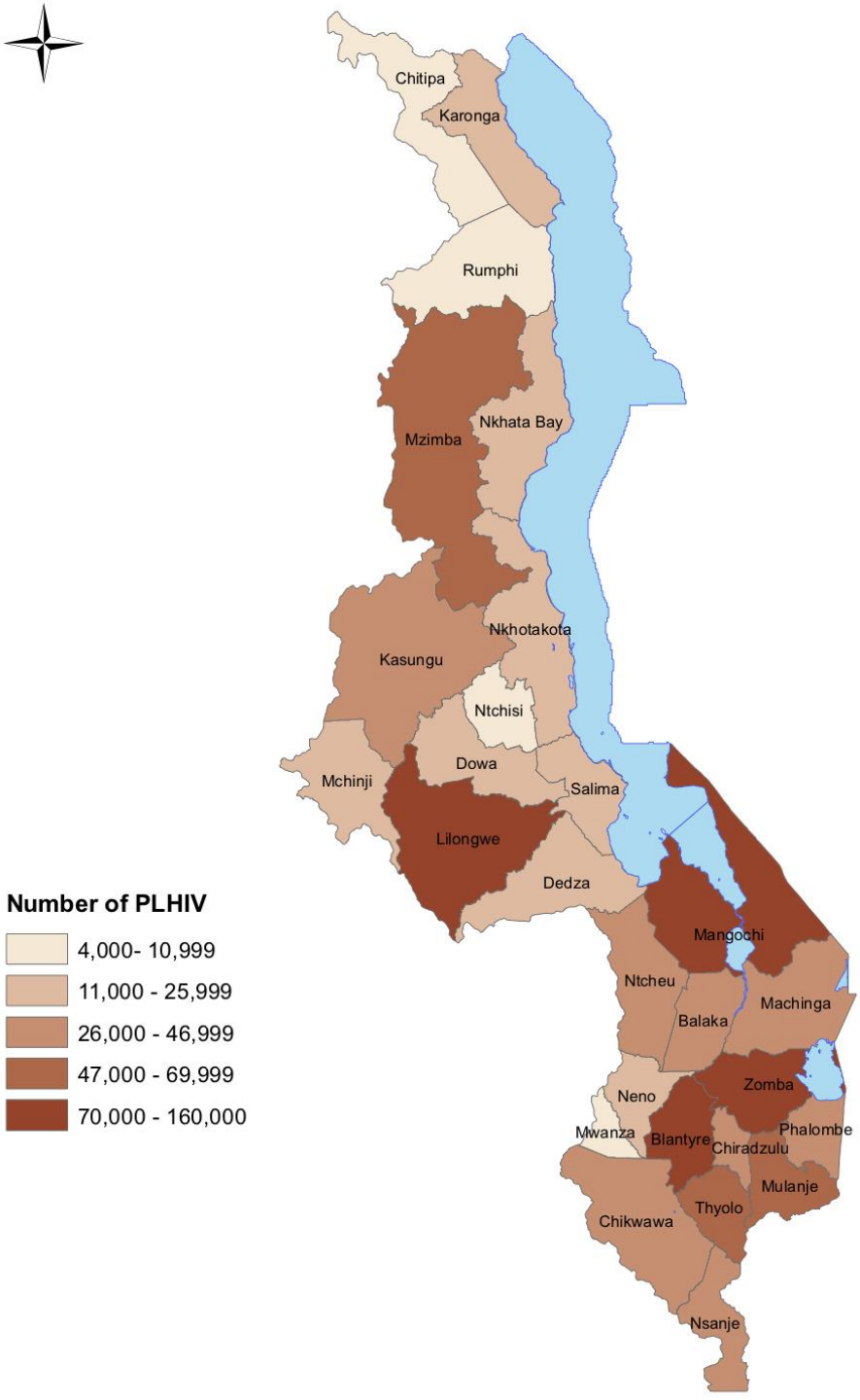
2.4 Alignment of PEPFAR investments geographically to disease burden

[2] Funding of this will be subject to availability though following RPM, the PEPFAR Malawi team engaged with other PEPFAR programs on how they were able to fund CSOs who were engaged in accelerating epidemic control. A concept note was a key first step.

The maps below illustrate the burden of HIV and ART coverage in PEPFAR supported sites. PEPFAR strategically focuses investment in high burden scale-up districts. In COP18, PEPFAR will continue to expand investments in the five high-burden scale-up districts with the greatest treatment gaps: Blantyre, Mangochi, Zomba, Machinga, and Chikwawa. Lilongwe urban has also been included as a priority acceleration area due to the high prevalence and concentration of PLHIV in the urban part of the district.

While Malawi has made significant progress in scaling access to viral load testing throughout the country, challenges remain with underperformance in both routine and targeted viral load testing. PEPFAR supports national sample transport to all ART sites, and continues to strengthen laboratory performance and provider capacity to utilize viral load results for clinical decision making.

Figure 1: Number of people living with HIV (PLHIV)



Source: COP18 Datapack

Figure 2: Percentage treatment coverage

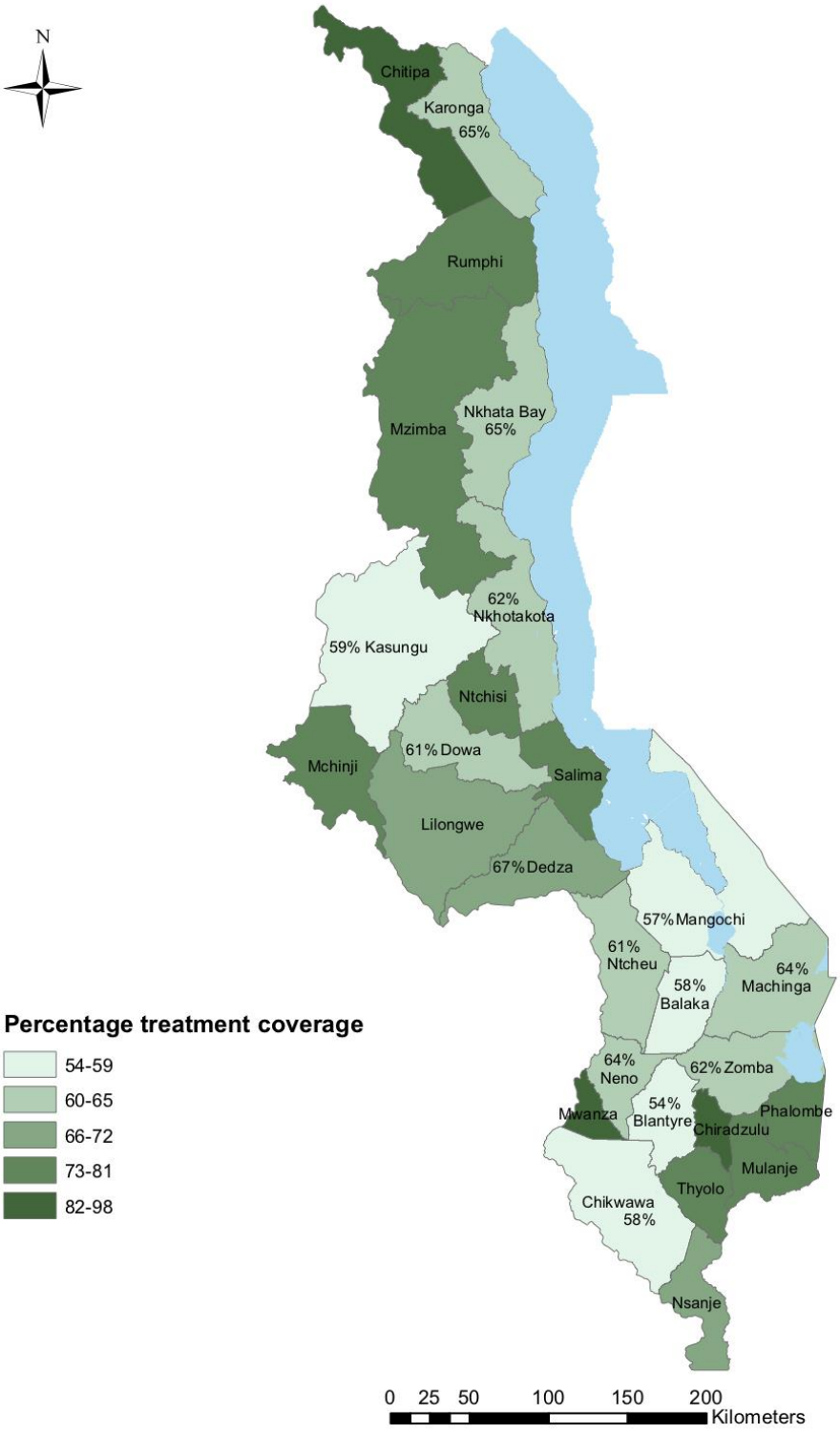
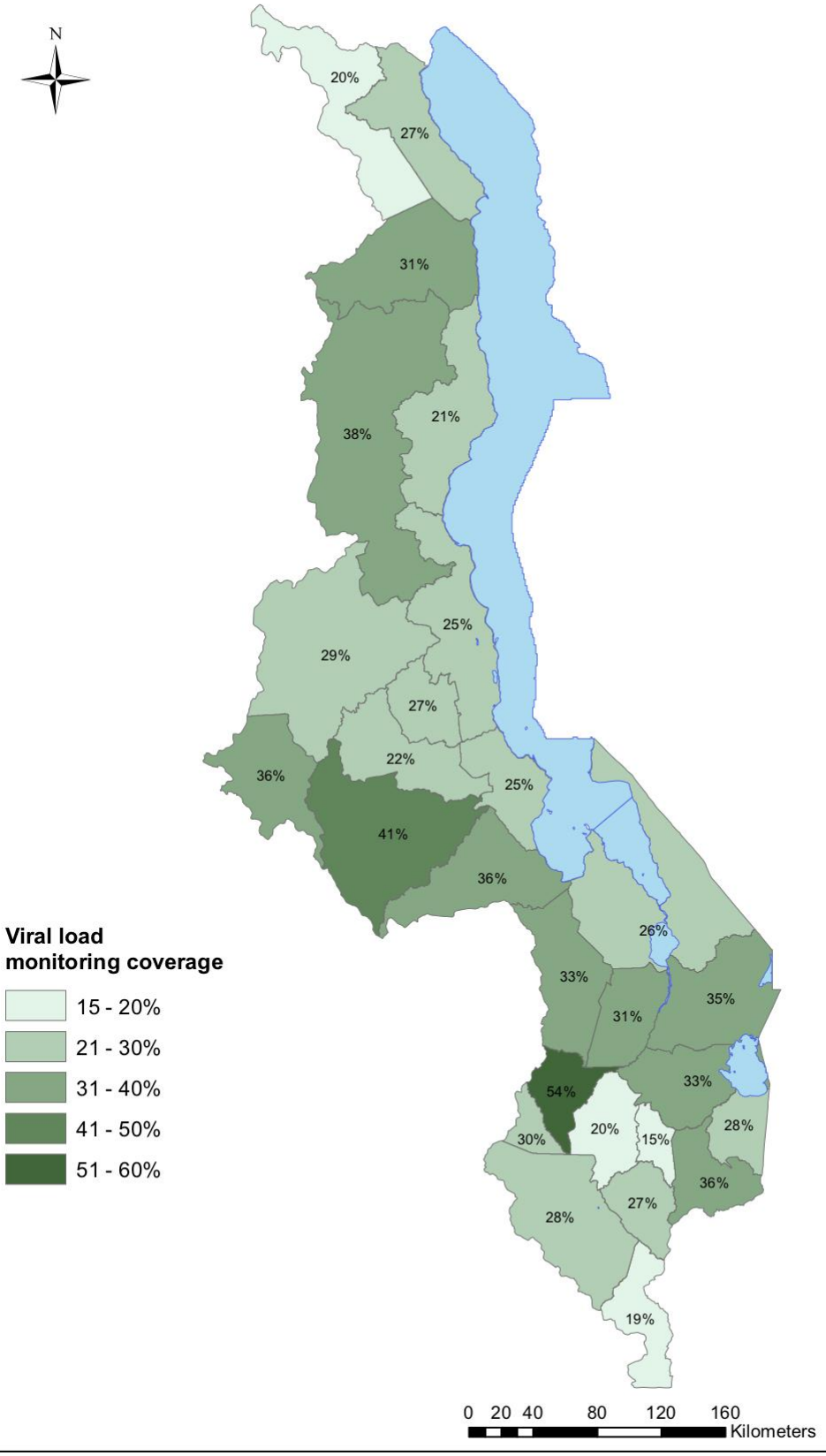


Figure 3: Viral Load Monitoring Coverage



2.5 Stakeholder Engagement

Government of Malawi

The PEPFAR Malawi team meets frequently with the Department of HIV/AIDS (DHA) to collaborate on program planning, implementation, monitoring, and policy-related issues. PEPFAR Malawi also works with other key units in the MOH, including the Directorates of Planning, Human Resources, Health Technical Support Services Department (includes Diagnostics and Supply Chain Management), the National TB Program, and the Central Monitoring and Evaluation Department. Outside of MOH, PEPFAR works with other Ministries and Bureaus, such as the National Registration Bureau, among others. Specific engagement includes:

- **Leadership level:** With support from the PEPFAR team, the Chief of Mission frequently engages with senior Government of Malawi (GOM) officials – particularly the Minister of Health, the Chief Secretary, and the Secretary of Health – to promote a strategic, targeted and effective HIV response, while assuring continued coordination with GOM priorities.
- **District Level:** PEPFAR also meets with District Commissioners and District Health Management Teams (DHMT) when conducting SIMS or site visits and when MOH convenes DHMTs.
- **Technical Working Groups & Task Forces:** PEPFAR staff participate in GOM technical working groups (TWGs) and meet as needed to coordinate program implementation and monitoring efforts. The HIV testing Core Group and National ART TWG are robust national coordinating structures. PEPFAR also works closely with the NAC, particularly for voluntary medical male circumcision (VMMC), DREAMS, and key populations programming. NAC convenes the national AGYW Task Force, which was critical to national and district roll out of DREAMS programming as well as the national key populations (KP) technical working group. PEPFAR also collaborates closely with the Ministry of Gender, Children, Disability and Social Welfare (MoGCSW) to expand and improve the quality of programming to support orphans and vulnerable children. As Malawi plans for a cross-sectoral AGYW strategy, PEPFAR interacts with the Ministries of Education and Youth.
- **PEPFAR Convened Strategy Planning, Development & Monitoring:** With PEPFAR support, MOH and NAC officials participated in the 2018 Regional Planning Meeting (RPM) in Johannesburg, South Africa. A representative from the MOH will attend the COP18 Approval Meeting. Drawing on successful data review and stakeholder meetings, PEPFAR continues to hold quarterly joint meetings with MOH as well as other key stakeholders to review programmatic performance, share successes, and discuss implementation challenges for shared solutions.

Global Fund and other External Donors

The PEPFAR Malawi team participates in the monthly HIV/AIDS Donor Group (HADG), the Health Development Partners Group (HDG), and the Global Fund Country Coordination Mechanism (CCM). PEPFAR meets regularly with other donors including UNAIDS, WHO, DfID,

GIZ and others through these mechanisms and independently as needed. For example, PEPFAR collaborates closely with UNAIDS on Spectrum and other analyses as well as areas of HIV prevention with their new HIV Roadmap. For Global Fund, the CDC Health Services Branch Chief is the bilateral representative on the GF Country Coordinating Mechanism (CCM) and Chair of the Resource Mobilization Committee. These fora bring together bilateral and multilateral donors, government, civil society and international non-governmental organizations (iNGO) to discuss progress and coordination of national health programming investments and identify solutions for obstacles and bottlenecks.

PEPFAR maintains strong and productive engagement with the Global Fund Country Team based in Geneva as well as the entities on the ground governing and managing Global Fund resources. United States government (USG) staff actively support the implementation of the new TB/HIV and Malaria grants for Allocation Period 2017-2019 (valued at $450 million). To optimize program investments, PEPFAR actively engages in Global Fund proposal development, grant-making, planning, implementation and monitoring. In FY18, PEPFAR will continue coordinating with the Global Fund Principal Recipient for AGYW and key populations investments, ActionAid, to ensure complementary programming with no geographic overlap and to extend program reach to as many high burden districts as possible while maintaining quality and impact. This collaboration includes sharing of M&E frameworks and tools, curricula materials, and joint site visits for shared learning.

PEPFAR is also working closely with the Global Fund on the switch to the new Dolutegravir regimen in 2019 (starting with a pilot in 2018) and to ensure funding for key investment areas, such as oral self-test kits and VMMC, which are currently on the unfunded Prioritized Above-Allocation Request (PAAR).

PEPFAR Malawi leadership communicates regularly with the Global Fund Country Team on key programming decisions, and the Fund Portfolio Manager meets with the Ambassador on every visit to Malawi. USG staff – including PEPFAR, President's Malaria Initiative (PMI) and USAID supply chain technical staff – meet quarterly with the Local Fund Agent (LFA) to share information and ensure resources and grant implementation is on track. PEPFAR, through USG Global Fund technical assistance resources (the 5% set-aside) funded the creation of the Program Implementation Unit (PIU) at the MOH. The PIU is legally responsible for programmatic results and financial accountability for the Global Fund-financed AIDS, TB and Malaria programs. The PIU's role is complementary to the governance and oversight role of the Country Coordinating Mechanism.

Civil Society

Starting in 2016, PEPFAR Malawi has held quarterly stakeholder meetings to engage CSOs, including FBOs and networks, in the review of PEPFAR progress and planning efforts in partnership with the MOH, NAC and UNAIDS. This engagement includes collaboration to

develop solutions to challenges down to the site level both within broader stakeholder meetings but also through more intimate meetings of PEPFAR and local CSO leaders.

Recent engagement leading up to and including COP18 development:

- **November 7, 2017** - CSOs actively participated in the SID 3.0 planning and workshop roll out, which informed key above site priorities and policy gaps for COP18.
- **December 11, 2017** – CSO focused meeting with PEPFAR Malawi to review the latest quarterly data (Q4) and collectively identify solutions. The Chief of Mission joined this dialogue to hear concerns and solutions directly from members of civil society.
- **January 11th, 2018** - CSOs – including significant representation from indigenous faith based organizations and faith-based development partners – gathered with PEPFAR field and headquarters representatives to discuss faith-based responses to the epidemic, particularly to review ways to combat charismatic (and non-effective) "faith-healing" (affecting retention) and gaps in engaging boys and men.
- **January 31, 2018** - PEPFAR hosted an engagement meeting with over 135 stakeholders from government, civil society, bilateral and multilateral development partners, FBOs, and implementers to contribute to PEPFAR's strategy for COP18.
- **February 1, 2018** - PEPFAR hosted a "closed-door session" with CSOs and FBOs to discuss their priorities for COP18.
- **February 15th, 2018** – PEPFAR hosted a RPM delegation session including representatives from local CSOs and FBOs.
- **February 26th, 2018** – March 1st – Along with the two nominated CSO members from Malawi, U.S.-based CSO representatives actively engaged in the RPM in Johannesburg, South Africa.
- **March 15th, 2018** – Civil Society along with Ministry of Health, Multilateral institutions and implementers discussed the outcomes and strategic direction established at RPM as well as next steps for further engagement and input into the collection COP18 development process.
- **March 21st, 2018** – PEPFAR met with CSOs including FBOs in their offices to discuss technical and programmatic input for the SDS. This feedback greatly enhanced the SDS and is incorporated throughout the document and strategy.

Private Sector

Private sector engagement in Malawi occurs primarily through public private partnerships and foundation investment. A few examples include:

- **Girl Effect** Foundation, a global DREAMS private-sector partner, is working closely with PEPFAR Malawi and the National DREAMS Task Force to develop a brand ("Zathu", roughly translates as "together") for youth and to provide mass media communication support for implementation of AGYW interventions, which include engaging boys and girls together. This collaboration includes provision of engaging behavior change communications content to DREAMS' Go Girls Clubs.

- PEPFAR and the **Elton John Foundation** are coordinating to ensure complementarity in programs reaching out to men who have sex with men (MSM) in PEPFAR supported districts.
- Through a public partnership with the **Elizabeth Taylor AIDS Foundation,** PEPFAR Malawi intensifies case finding and treatment efforts for men in Mulanje district.
- To meet COP17 targets to reach men for testing and linkage to treatment, PEPFAR works with **private sector employers**, including **tea and tobacco estates**, to improve access to and utilization of services.
- Through **Johnson & Johnson** support and partnership, the DREAMS Ambassadors in Malawi participated in capacity building and networking activities last year. DREAMS Ambassadors meet with PEPFAR to contribute to solution development for reaching youth with prevention, testing and treatment adherence. The DREAMS Ambassadors also serve as peer leaders and mentors in delivering social assets strengthening programs. In FY18, PEPFAR will explore leveraging the DREAMS Ambassadors to introduce new prevention technologies, such as PrEP.
- The **Bill and Melinda Gates Foundation** (BMGF), which includes Malawi as one of four focus countries for HIV investment, coordinates closely with PEPFAR to ensure complementary activities that build on the strengths and strategic priorities of each. For example, PEPFAR and BMGF work together on investments to strengthen data systems in Malawi and are currently exploring efforts to implement self-testing in acceleration districts. PEPFAR leadership participates in solicitation of BMGF partnerships as well as monitoring existing investments. During the COP18 RPM, PEPFAR and BMGF discussed future partnerships for VMMC scale up and Viral Load results reporting. PEPFAR anticipates these discussions will translate into complementary funding from BMGF for demand creation through civil society networks and new platforms leveraging SMS technology, to name a few.

3.0 Geographic and Population Prioritization

Table 3.1.1 Current Status of ART saturation and progress towards 95/95/95 across all SNUs					
Prioritization Area	**Total PLHIV/% of all PLHIV for COP18**	**# Current on ART (FY17)**	**ART Coverage as at FY17**	**# of SNU COP17 (FY18)**	**# of SNU COP18 (FY19)**
OU	1,089,321	725,002	67%	28	28
Attained	-	-	-	-	-
Scale-up/ Acceleration*	398,270	229,534	58%	5	5
Scale-up *	351,947	259,080	74%	5	5
Sustained	301,662 (28%)	200,106	66%	17	17
Sustained Commodities	37,442 (3%)	36,282	97%	1	1

* For COP18, the district classifications are: Acceleration, Scale-up, and Sustained with Lilongwe spanning Acceleration (Lilongwe urban) and Scale-Up (Lilongwe rural). For purposes of this table, Lilongwe totals are included in Scale-up

In preparation of COP18, PEPFAR Malawi used available MPHIA and program data to define geographic focus and population focus by age and sex.

In terms of geographic prioritization, PEPFAR continues its focus on the 5.5 Acceleration districts and the remaining 4.5 districts that constitute the ten scale-up districts. For FY19, the 5.5 Acceleration districts account for 44% of all PLHIV and 51% of the national gap to 90% ART coverage. Similarly, all ten districts account for 69% of all PLHIV nationally, and 70% of the national gap to 90% ART coverage. PEPFAR Malawi is focusing COP18 (FY19) resources on geographic areas where the largest numbers of PLHIV to be reached with testing and treatment reside. Figure 3.1.1 and Table 3.2.2 illustrate district-specific gaps to 90% ART coverage targets, indicating the need for continued acceleration in FY18 and FY19.

Figure 3.1.1 Gap to 90% ART Coverage by District - Focus Remains on 5.5 Acceleration Districts in FY19

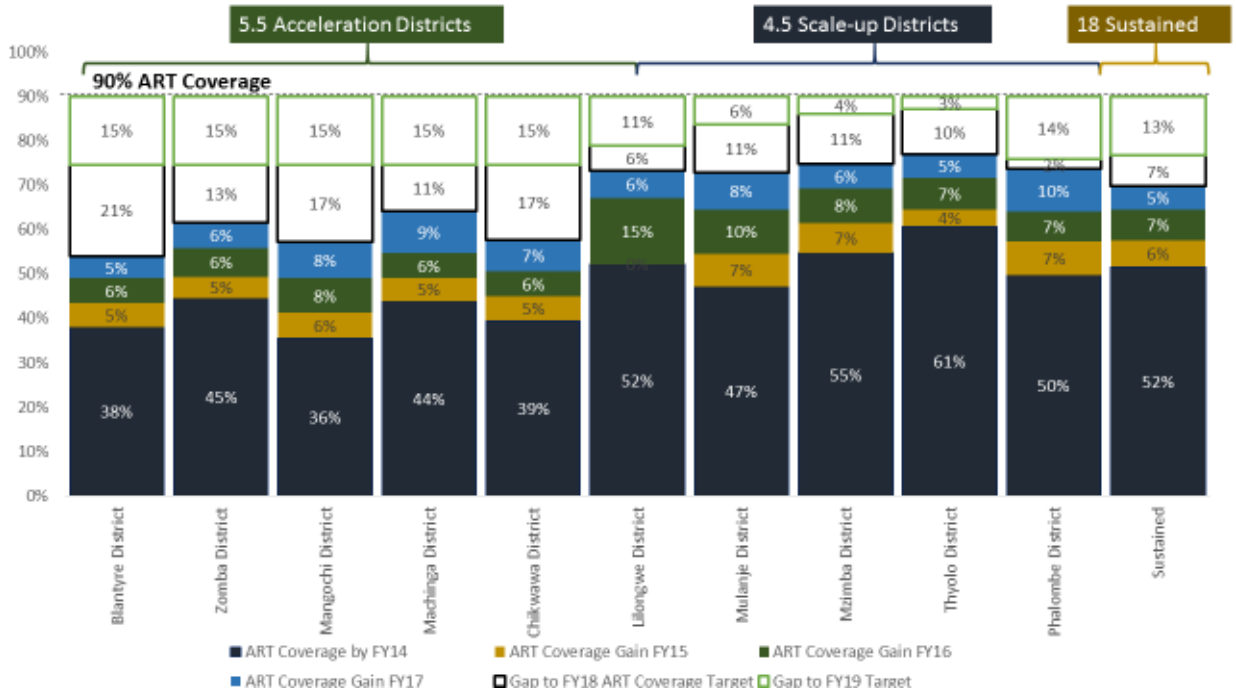


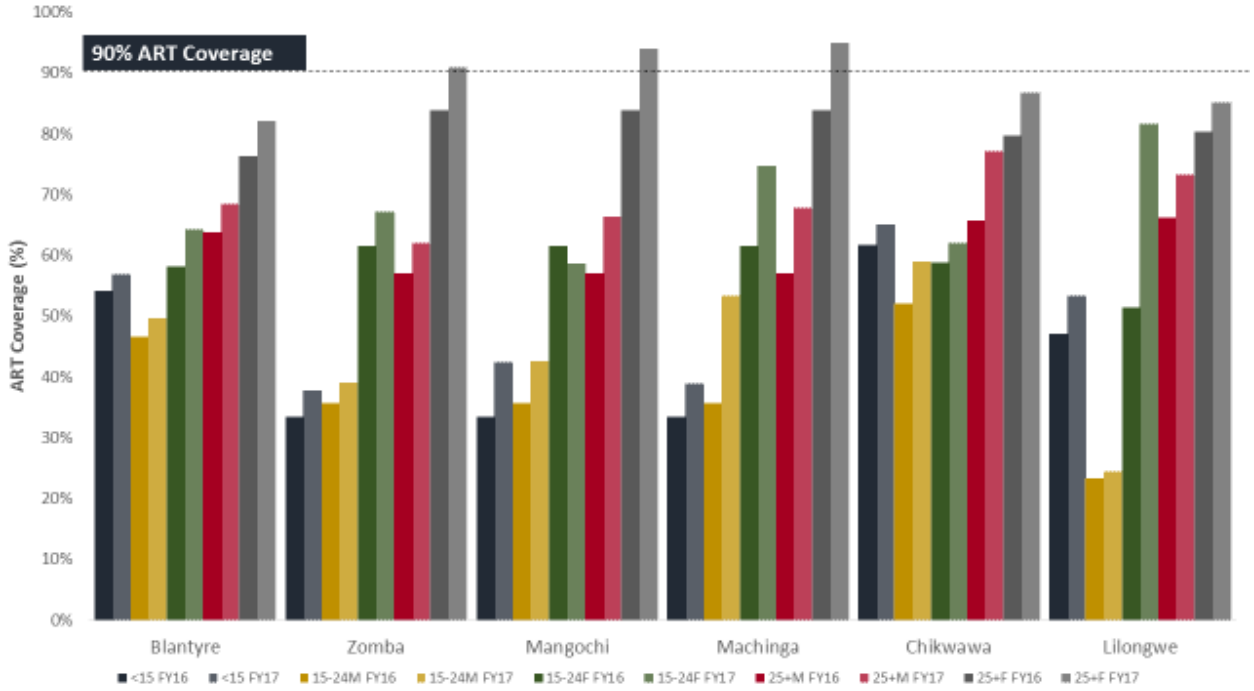
Table 3.1.2 Summary of Five Scale-up Districts targeted for Acceleration

District	Classification	ART Coverage, end of Q1 of FY18	ART Coverage, end of FY18	FY19 Target ART Coverage	Strategy for FY19 VS Current average TX_NET_NEW
Blantyre	Scale-up: Sat	54%	75%	88%	Accelerate
Chikwawa	Scale-up: Sat	58%	75%	90%	Accelerate
Lilongwe	Scale-up: Sat	73%	79%	95%	Accelerate (urban)
Machinga	Scale-up: Sat	65%	75%	90%	Accelerate
Mangochi	Scale-up: Sat	60%	75%	90%	Accelerate
Mulanje	Scale-up: Sat	71%	84%	95%	Scale-up
Mzimba	Scale-up: Sat	77%	86%	98%	Scale-up
Phalombe	Scale-up: Sat	74%	76%	90%	Scale-up
Thyolo	Scale-up: Sat	78%	87%	99%	Scale-up
Zomba	Scale-up: Sat	63%	75%	88%	Accelerate
Total/Average		67%	78%	92%	

In terms of population focus, reaching men 25-40 and youth <25 with testing and treatment remains the program focus, with offer of VMMC prevention services to targeted 15-29 year old HIV negative men, and primary prevention interventions, including DREAMS and pre-exposure prophylaxis for vulnerable AGYW and FSW.

The figure below shows for the 5.5 acceleration districts that, despite extraordinarily good progress reaching women 25 and older with testing and ART, progress reaching men and youth <25 remained sub-optimal in FY17.

Figure 3.1.2 Progress in FY17 and Gap to 90% ART Coverage by Age and Sex in the 5.5 Acceleration Districts by end of FY17 - Focus Remains on Reaching Men and Youth

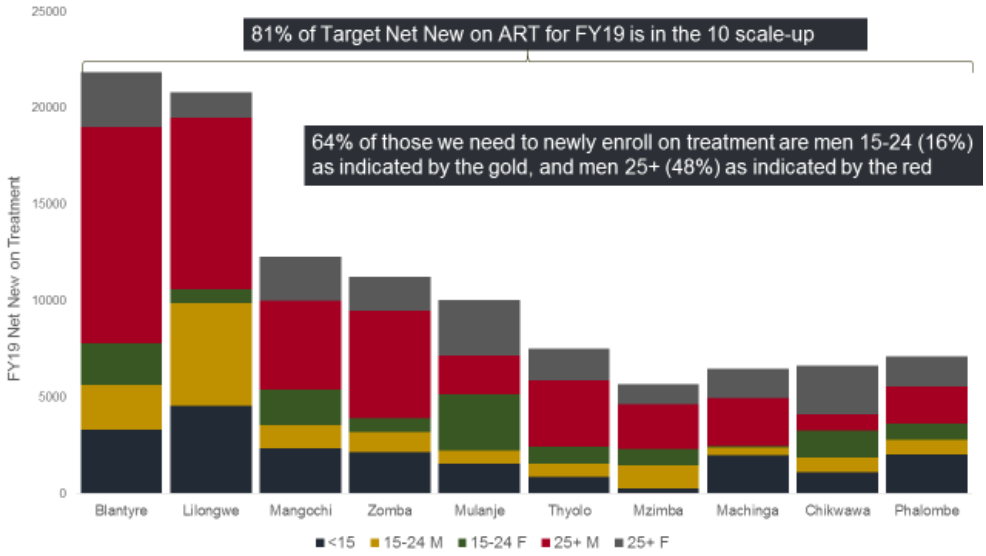


*Darker bars represent progress by age and sex as of end of FY16. Lighter bars of the same color represent progress by end of FY17 for the same age-sex group. Data source: EMRS age/sex proportions applied to DHA data.

Core strategies to reach men and youth include scale-up of active index testing, saturation of facility testing entry points, and roll out of oral self-test kits. Strong linkage to treatment and differentiated service delivery models that are friendly to youth and men living with HIV are also critical. Section 4 describes these strategies in more detail.

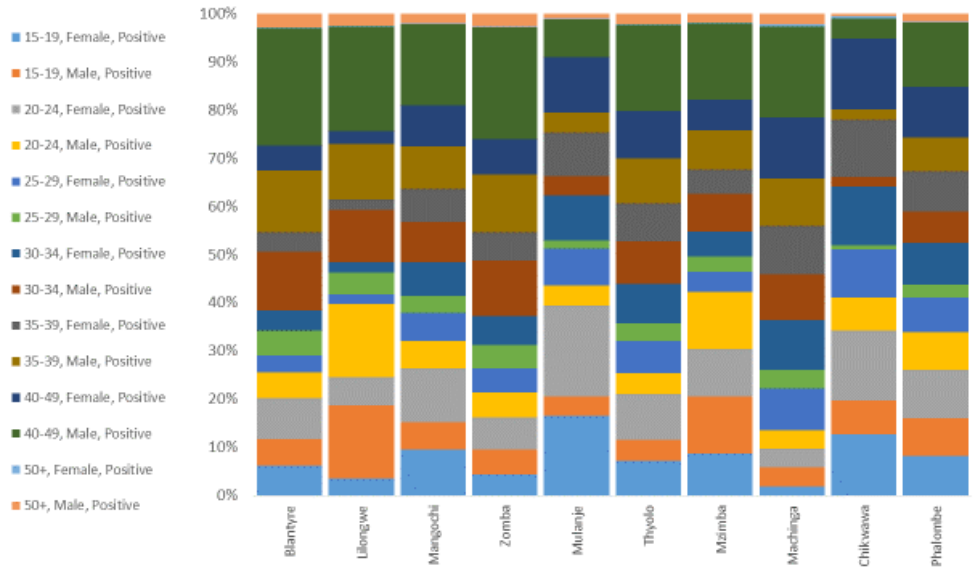
After mapping the gap to saturation (90% ART coverage) by age, sex, and district, PEPFAR Malawi developed a program model to set targets for testing and treatment by age and sex for FY19. Identifying the total number of patients to be newly enrolled and retained on treatment in FY19 by age/sex and district was first step in this target setting process.

Figure 3.1.3 Net New on ART Targets for FY19 - Focus Remains on Reaching Men and Youth in the 10 Scale-up Districts, Especially the Acceleration Districts of Blantyre, Lilongwe, Zomba and Mangochi



After setting net new on ART targets by age and sex, PEPFAR Malawi used the same program model to estimate the distribution of new on ART in the required finer age and sex disaggregation for DATIM input as shown below in Figure 3.1.4.

Figure 3.1.4: New on Treatment Targets Disaggregated by Age and Sex and District for Entry into DATIM - Men Aged 15-49 are Key Target Populations to Reach in FY19



Once the distribution of clients new on treatment was identified, PEPFAR Malawi used the program tool and real program data to estimate the likely distribution by age and sex of HIV positive tests per testing entry point and associated diagnostic yield to determine the target distribution of HIV positive tests by age, sex, and entry point for each district.

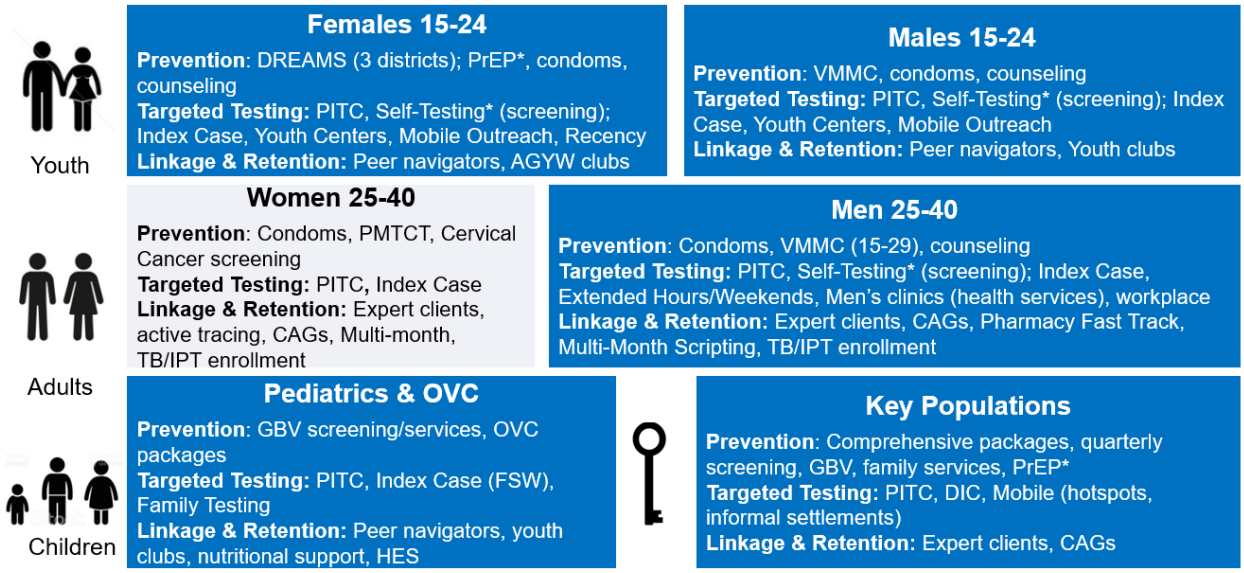
Given observed and published age and sex distribution attendance at the entry points, and yield by age and sex at each entry point, PEPFAR examined a variety of testing scenarios by test volume distribution by entry point to determine the optimized HIV testing strategy (i.e., lowest cost and most feasible), to reach the net new on ART targets (by age, sex, and district). Section 4 describes further this optimized testing strategy.

4.0 Program Activities for Epidemic Control in Scale-Up Locations and Populations

4.1 Finding the missing, getting them on treatment, and retaining them

As demonstrated in the figure below, these packages are tailored by age and sex categorization, focusing first on the 5.5 acceleration districts.

Figure 4.1 PEPFAR Malawi Epidemic Control Plan for Acceleration Districts (Regional Planning Meeting, March 2018)



4.1.1 Men

MPHIA indicates that men living with HIV in Malawi are less likely to be aware of their HIV status, diagnosed and on treatment, and virally suppressed.[3] Men are also more likely to die of AIDS-related causes. In FY17, linkage success rates in PEPFAR-supported sites were lower for men younger than 25. MPHIA results showed low viral load suppression and uptake of HIV testing services among males aged 15-40. Viral load suppression rates observed in program data are lower in males 10-24 years. Low viral suppression is mainly due to unknown HIV status, as well as low treatment linkage and adherence to ART and low coverage of clients with viral load testing services. MPHIA findings are congruent with MOH DHA data, which show a large gap in HIV testing services uptake between males and females. Moreover, once on treatment, viral load

[3] MPHIA 2016

suppression rates for men are considerably lower than for women.[4] Men often test by proxy, which means they assume that their wife's HIV status represents their status.[5] Reaching men 25 years and older is crucial to reaching 95-95-95 saturation. Of PLHIV who need to be newly enrolled on treatment, 64% are men; of this 64%, three-quarters are over 25, while approximately one quarter are aged 15-24.

Malawi's success in the 2011 nationwide rollout of Option B+ ensured high coverage of HIV testing services for pregnant women attending ANC entry points and the adoption of simplified, universal, life-long HIV treatment policies for HIV positive pregnant women (i.e. "Test and Treat"). Lessons learned from the PMTCT B+ scale-up can inform ART scale-up for men (see figure 4.1.5). Although Test and Treat is now recommended for men living with HIV, the key challenge is that currently no facility-based HIV testing gateway exists for men that mirrors the ANC HIV testing gateway for women. In addition, there are many other reasons why males are less likely to present for HIV testing services and initiate treatment when they are healthy, including:

- Knowledge gaps about the benefits of early ART initiation
- Low risk perception
- Masculinity norms (in the SEARCH trial in Kenya and Uganda, structural and cultural barriers limiting men's testing uptake included mobility and entrenched gender norms that discourage health seeking behavior and reinforce risky behavior)
- Stigma
- Perceived barriers to service access (e.g., distance and time, work and mobility)
- Quality of health care (e.g., spaces that are perceived as not male-friendly, concerns about confidentiality, bicycle security, and long waiting times at high volume clinics).

Given above reasons, lessons learned from PMTCT B+, and available literature, PEPFAR will implement two key strategies for reaching men in the scale-up districts where the greatest gap to saturation exists: (1) saturation of key PITC entry points, and (2) scale-up of active index testing. In the acceleration districts, PEPFAR will also scale up oral self-testing and highly targeted facility-linked outreach testing to reach men and youth.

Saturation of key PITC Entry Points: Analysis of FY17 and FY18 Q1 site-level data from facilities in the 10 scale-up districts shows that investments in HIV diagnostic assistants (HDAs) to cover key facility entry points increases the percentage of eligible clients offered HIV testing services, the number of tests the facility provides each year, and the number of new positive clients receiving their diagnosis. However, in many facilities, increases in testing also resulted in declines in HIV diagnostic yield. Given that men remain a critical target population for testing services in FY19 and present less frequently to health facilities than other population groups,

[4] While VLS rates for adults ages 15-64 overall are 67.6%, rates for men in this age cohort (58.6%) are significantly lower than those for women (72.9%), according to Malawi's MPHIA.
[5] Camlin C et al. Men "missing" from population-based HIV testing: insights from qualitative research, AIDS CARE, 2016, 28: S3, 67-73

PEPFAR will saturate key PITC entry points in the 10 scale-up districts to offer HIV testing services to all men. To achieve this high coverage of men, PEPFAR implementers will refine facility-level testing strategies, including the use of screening tools to prioritize certain OPD clients (e.g., men and clients with one of the 4 TB symptoms) for HIV testing such that facility staff most effectively reach OPD clients with undiagnosed HIV status and provide HTS. PEPFAR will work with implementers to tailor site-by-site, facility-level strategies for PITC optimization, including staffing-level determinations to facilitate screening activities at large facility entry points.

Scale-up of Active Index Testing: Based on available data from Malawi and the region, and following the 2016 WHO guidelines, PEPFAR will scale up active index testing in the 5.5 acceleration districts. PEPFAR will conduct this scale up in accordance with an NHSRC-approved protocol, while MOH leadership continues the guidelines revision process to allow for wider implementation of active index testing (MOH projects guideline revision by December, 2018). Field testing of the active index testing protocol will inform the content of the national guidelines revision. Active index testing involves offering client referral, provider referral, and dual referral services for index clients and contacts, as well as the standard of care Family Referral slip (FRS) method for those who decline active index testing services. PEPFAR implementers continue to develop site-level plans for the rollout of active index testing interventions. PEPFAR projects an increase in the percentage of contacts tested for HIV from 10-22% for passive approaches (e.g., FRS) to 50-75% for active index testing, while maintaining diagnostic yields above 15%.

Oral Self-Testing: In line with WHO self-testing recommendations, data from Malawi demonstrate promising approaches to reach and screen populations, particularly men who may not access other HTS strategies[6]. PEPFAR is developing self-testing initiatives at facility- and community-levels to roll out in COP17 for further expansion in COP18. These efforts draw on successful demonstration projects in informal settlements in Blantyre (Choko et al, PloS Med, 2015) and STAR Initiative data showing that a large percentage of males reached with self-testing were first time testers. Based on these learnings, PEPFAR will target select, high-burden informal settlements in Blantyre and AGYW and men in high-burden catchment areas throughout the acceleration districts for facility linked self-testing outreach. PEPFAR will also incorporate oral self-testing into active index testing approaches, particularly for clients refusing approaches outlined above. PEPFAR will ensure robust M&E strategies to monitor the effectiveness of self-testing approaches to scale up what is working and redirect resources proving less effective and/or efficient. PEPFAR and implementers work closely with MOH to develop strategies and implantation guidelines for self-testing in Malawi.

Additional testing approaches to reach men include scale-up of flexible weekend service delivery hours at health facilities, extended facility hours, and dedicated male clinic days. PEPFAR will implement site-by-site modifications to patient flow and minor infrastructure changes to improve

[6] Choko et al. (2015) Uptake, Accuracy, Safety, and Linkage into Care over Two Years of Promoting Annual Self Testing for HIV in Blantyre, Malawi: A Community-Based Prospective Study. PLoS Med 12 (9).

privacy and ensure adequate space for service delivery. COP18 will implement rationalized, targeted mobile testing to reach MSM clients of female sex workers (FSW) in geographic hotspots. PEPFAR will strengthen partnerships with Faith-Based Organizations (FBOs) and traditional authorities to address gender norms and beliefs that act as barrier to uptake of HTS, ART initiation, adherence, and retention. Expanded partnerships with the private sector will increase reach of targeted male populations in urban settings and areas with high formal employment.

Other lower-volume, targeted testing strategies to reach men include:

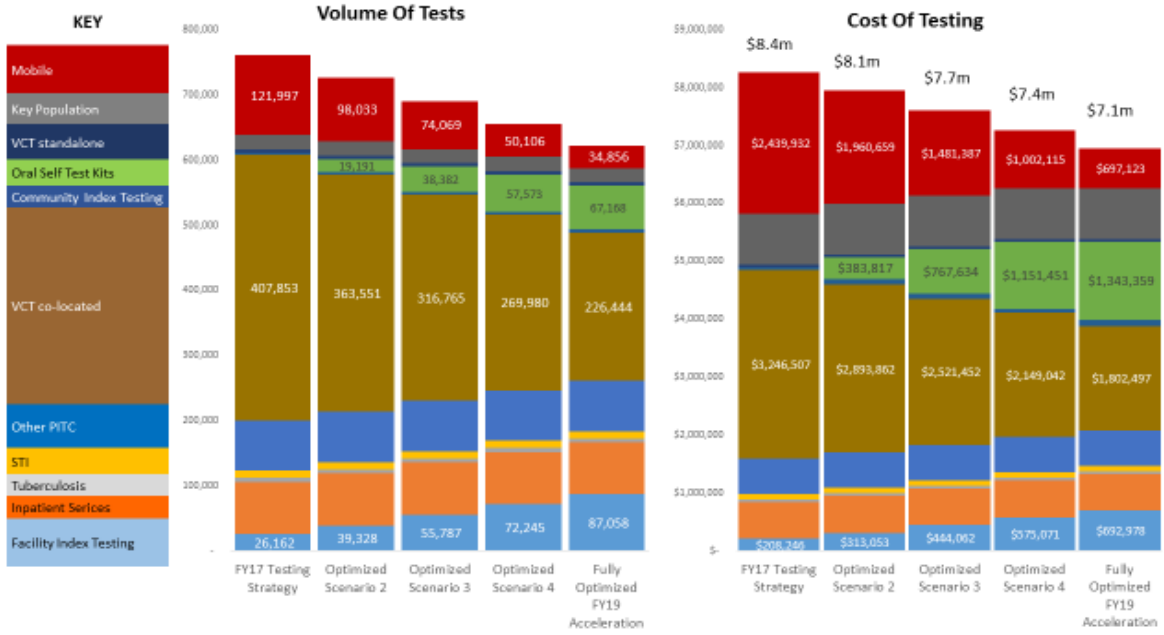
1. **Workplace testing:** Targeted, high yield workplace (formal and informal) HTS shows promising early results in identification of HIV positive men. In FY17, 70% of the 3,717 persons tested in the catchment areas of two urban facilities in Blantyre were men; yield attained 4% overall but 8% among men 20-24. Ensuring sufficiently targeted workplace testing to achieve high yield will remain important throughout COP17 for wider scale up in COP18. PEPFAR will continue to conduct targeted testing to reach men at tea estates and fishing communities, in addition to police and school teachers. A 2013-14 Behavioral and Biological Surveillance Survey (BBSS) demonstrated higher prevalence in these groups relative to the general population. Peer-focused approaches (e.g., peer educators, peer navigators, and male champions) will increase reach. COP18 activities will build on existing approaches, including reaching fishermen through Village Beach Committees and reaching men with HTS through integrated outreach health services. In FY17 Q4, PEPFAR tested 1,500+ fishermen and achieved positive yields of 15% for men ages 20-49. PEPFAR will continue to monitor targeted testing strategies for efficiency and cost.

2. **Military Testing:** PEPFAR will strengthen HIV testing in military settings for soldiers and sexual contacts, as well as a focused pre- and post-deployment package to facilitate testing and linkage into care for those testing positive.

In order to translate the above testing strategy into FY19 targets, PEPFAR Malawi developed a mathematical HIV testing strategy optimization model to achieve the optimal distribution of testing strategies that accelerate towards 95-95-95 targets. PEPFAR employed the model to inform target setting processes which will be translated into COP18 implementer work plans. The sequence of figures below shows model output for reaching men with testing services in the 5.5 acceleration districts. In all scenarios below, the number of positives identified meets requirements for acceleration towards 95-95-95 targets among men. However, by scaling up high-yield efficient testing modalities such as index testing (light blue) and oral self-testing (green), making mobile testing even more targeted (red), and using screening tools in high volume facility entry points (e.g., OPD) to decrease testing volume and increase yield, Malawi will realize program efficiencies in reaching 95-95-95 among men.

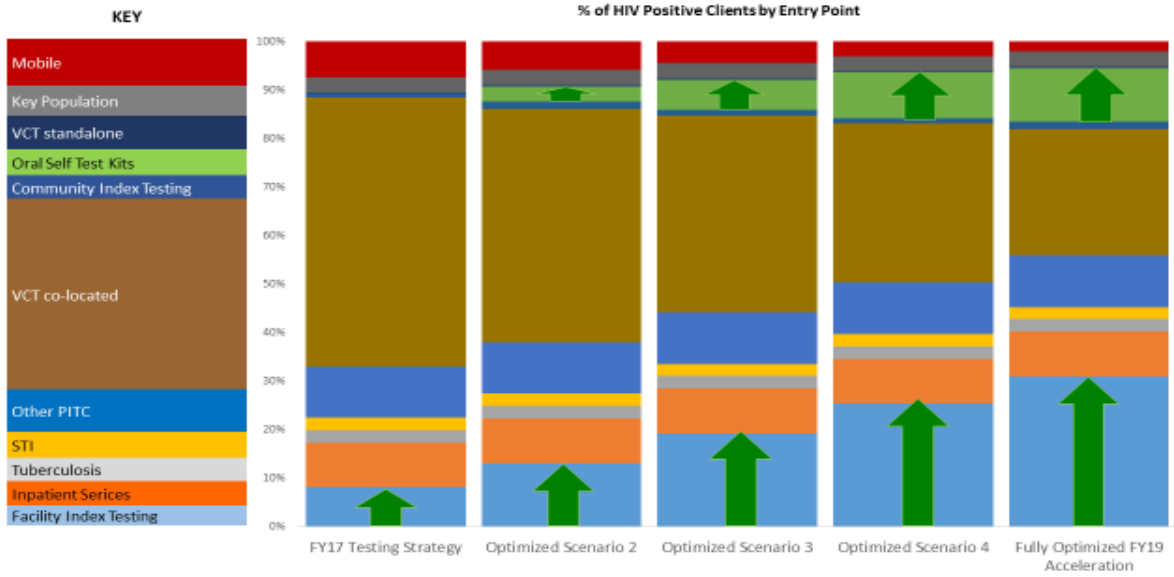
Using the HIV testing strategy optimization model, PEFPAR Malawi examined various testing scenarios, as shown in Figure 4.1.6 below:

Figure 4.1.1: An Example of Variation in Volume of Tests among Men by Testing Modality in the 5.5 Acceleration Districts to Achieve Declines in Volume and Cost of Testing while Still Accelerating towards 95-95



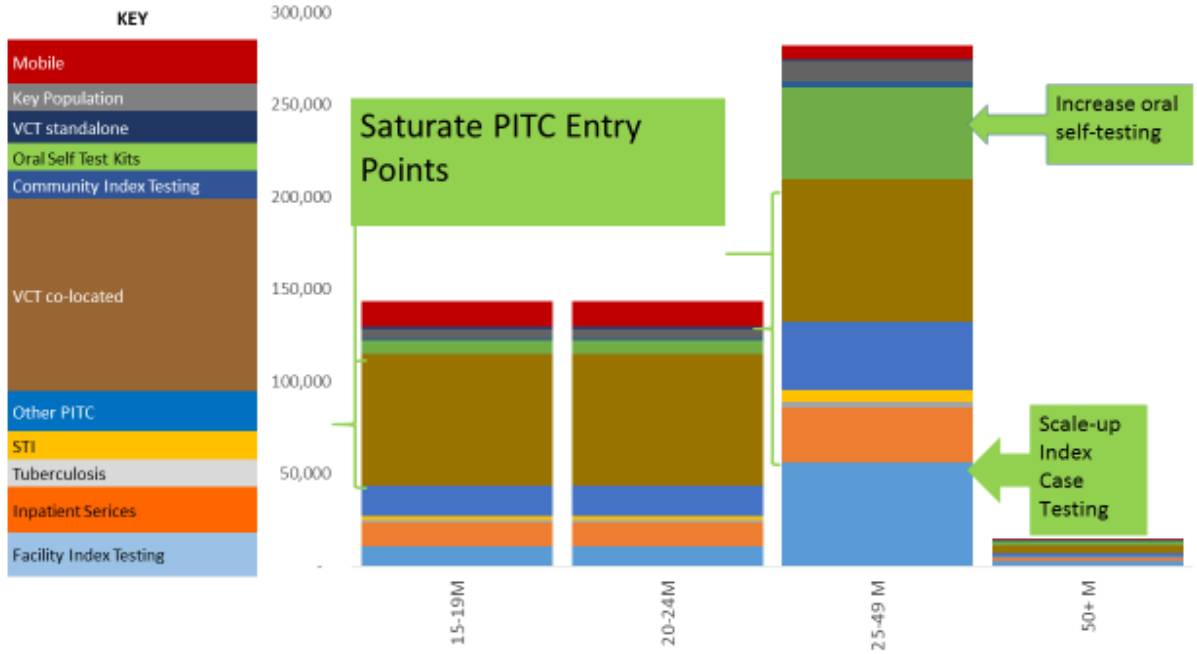
Increasing the volume of tests through index testing increases the percentage of positives identified through index testing to >30% in the acceleration districts (Figure 4.1.7):

Figure 4.1.2: FY19 Acceleration Districts Active Index Testing Targets: Accounting for 30% of all Positives, 14% of Tests, and 11% of the Testing Budget



The testing model helped inform targeted testing volume for men by age group and entry point (Figure 4.1.8):

Figure 4.1.3: Example of Optimized Volume of Tests Planned in FY19 among Men in the 5.5 Acceleration Districts by Age and Entry Point



Finding Men Early: Presentation at an advanced stage of HIV remains one of the main challenges in the HIV care continuum. Up to half of PLHIV continue to present to care with advanced HIV disease – defined by WHO as having a CD4 cell count <200 cells/mm3 or a WHO clinical stage 3 or 4 disease[7]. Furthermore, men are more likely to start ART at an advanced stage than women.[8] While delivery of quality care and treatment services to these groups of patients is important, identifying them at an earlier stage of HIV ensures better treatment outcomes and reduces risk of HIV transmission. As outlined above, in COP18 PEPFAR Malawi will implement active index testing, HIV self-testing, and targeted community based testing strategies to reach HIV-infected healthy clients and initiate treatment. Through its implementing partners and in collaboration with GOM, FBOs, traditional leaders, and relevant non-USG development partners, PEPFAR will support strategies to increase awareness and demand for services especially among men. Moreover, PEPFAR will scale approaches such as weekend testing and differentiated clinics to address barriers often encountered by men and youth.

Linkage to Treatment: Available data from Malawi and the region emphasize the importance of linking each newly diagnosed HIV positive male to an Expert Client or similar linkage expert to facilitate early HIV treatment, including same day ART initiation for consenting clients.

[7] Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy
[8] Mills EJ, Beyrer C, Birungi J, Dybul MR. Engaging men in prevention and care for HIV/AIDS in Africa. Plos med. 2012;9(2):e1001167. Pmid:22346735

INNOVATIVE PARTNERSHIP OPPORTUNITY TO IMPROVE VIRAL LOAD CONTEXT IN MALAWI: THE "UNDETECTABLE" CAMPAIGN

Available data show that once HIV viral load is reduced to undetectable levels, the risk of HIV transmission is zero. In Malawi, viral load testing at six months and then every two years is the policy and standard of care. However, coverage of viral load testing, according to current Malawi guidelines which recommend an initial viral load after 6 months and subsequently every two years remains low (60%). Barriers affecting viral load demand and access range from inadequate viral load instrument capacity (i.e., not enough platforms), inaccurate documentation of results, delayed return of results (over 2 months), long wait times, low patient demand for viral load testing, and sub-optimal use of VL results for clinical decision making, among others. In January 2019, Malawi will transition to the new TLD regimen for first-line ART. All patients transitioning will require a viral load test within 6-12 months.

The TLD transition is as an unprecedented opportunity to improve the viral load context in Malawi. At the PEPFAR Regional Planning Meeting, civil society, GOM, BMGF, the Global Fund, and PEPFAR discussed creating an innovative partnership - initially termed the "U=U (Undetectable=Untransmissable)" campaign - to reach 100% of patients on ART with a viral load test in FY19, ensure rapid return of results, and facilitate entry into the appropriate viral load-guided differentiated service delivery model. These changes will increase demand for viral load and empower patients living with HIV to know their viral suppression levels and motivate treatment adherence and other positive health-seeking behaviors.

Innovation – SMS Results: With approximately 88% cell phone coverage in Malawi, use of this technology could be a powerful catalyst for patient-centered HIV care. Through SMS, notification of results could be shared directly with the patients *within 2 weeks* of the test. Additionally, treatment literacy and other health information could also be shared.

Resource Gaps: To meet the goal of reaching 100% of patients on ART with a viral load test in FY19, additional resources are required for reagents; equipment**,** space**,** personnel**; r**eturning results to patients; and demand creation. Malawi will need 1.6 million viral load tests over three years (FY18-FY20) including 400,000 in FY18, 600,000 viral load tests in FY19, and 600,000 in FY20. With only 1.2 million viral load tests planned under the Global Fund for FY18-FY20, Malawi is 400,000 tests short for FY19 and FY20, which is costed at $9.4M at $23.50 for viral load collection and analysis. (GOM recommends $22/VL test and $1.50 for each VL collection and transport). PEPFAR COP18 resources aim to support the necessary viral load platforms, space, personnel, and sample collection and transport. However, **there is a resource gap to fund the additional reagents, negotiate additional viral load platform equipment, provide space and personnel for viral load testing, return the results to the patient, and ensure the patient enters the appropriate VL-guided differentiated service delivery pathway. Therefore, there is a need for further investment and catalytic collaboration.**

Since RPM, PEPFAR has convened two consultations with stakeholders and circulated a draft concept note. PEPFAR will continue to lead discussions with stakeholders to see this innovative partnership opportunity to fruition so that all patients know their viral load and what it means for their health.

Treatment: Cornerstones of COP18 treatment strategies include scale-up of male-friendly differentiated service delivery models, including extended hours, weekend clinics, and multi-month prescriptions to reduce wait times at the facilities. COP18 will increase retention and adherence among men through targeted individual and group peer support, expanded alternative service delivery models, and active defaulter tracing. PEPFAR Malawi will monitor strategies to improve linkage rates, and retention over time (See Fig 4.1), using weekly, monthly, and quarterly program data to refine and adjust interventions.

In alignment with MOH/DHA guidelines, PEPFAR will deploy front line ART providers, such as community HIV nurses to be recruited by facility-based implementers, to provide ART in community settings (e.g., through the facility-linked, nurse-initiated community ART approach piloted in Lilongwe). This approach will facilitate immediate ART initiation in targeted communities for those who test positive and consent.

Treatment for Late Presenters: Based on MOH's latest quarterly report (July-September 2017), 15% of new ART clients started treatment either in WHO stage 3 or 4. Patients with advanced HIV have a higher likelihood of opportunistic infections and early mortality. Recognizing that the major causes of death are attributed to TB, severe bacterial infections, fungal infections and protozoal infections Lighthouse Trust developed a package of interventions of enhanced screening and prophylaxis for opportunistic infections. An enhanced screening and prophylaxis package, adapted from REALITY trial and aligned with the 2017 WHO guidance on the management of advanced HIV was piloted by Lighthouse Trust. Patients are clinically evaluated and for patients (1) initiating ART late or (2) clinically failing ART a CD4 test is requested for all patients Although routine CD4 testing was phased out nationally with the implementation of "test and treat" and the use of viral load as the gold standard for clinical monitoring of patients on ART was phased in, two referral level ART clinics under Lighthouse preserved CD4 testing capacity for risk stratification to guide clinical management and optimize treatment outcomes. Of the new ART initiations, 25% had a CD4 of <100 cells and 44% had a CD4 of <200 cells. In COP18, PEPFAR Malawi will explore how the package of interventions proposed in the new WHO guidelines on managing advanced HIV disease can be scale up further in priority sites. This package of interventions includes screening and treatment for major opportunistic infections (especially TB through use of urine screening with TB-LAM and sputum testing with GeneXpert) rapid ART initiation and intensified adherence support. In smaller health centers, access to these services will depend on a functional referral system to district hospitals and other referral facilities that has the required diagnostic and treatment capacities. Implementation of proven retention and adherence strategies (e.g. active defaulter tracing and adherence support through lay providers such as Expert Clients) will be key to reduce the number of ART patients failing on treatment.

The table below summarizes how these approaches will be geographically targeted to improve program efficiencies.

Figure 4.1.4 Intervention Package for Men

	Acceleration Districts	Scale-Up Districts
Improve Case Identification	1. Scale up active partner notification 2. Optimize PITC e.g. male wards, STI & TB clinics 3. HIV self-testing 4. Highly targeted, lower volume community testing	1. Scale up active partner notification 2. Optimize PITC 3. Highly targeted, lower volume community testing
Improve active linkage & rapid ART initiation	1. Active linkage & rapid ART initiation 2. Scale up extended hours, male friendly services, community ART Program	1. Active linkage systems for rapid ART initiation 2. Scale up (high volume) sites with extended hours, male friendly services
Improve retention & viral suppression	1. Peer support, active follow up and adherence counselling 2. Active defaulter tracing 3. Optimized viral load monitoring	1. Active defaulter tracing 2. Optimized viral load monitoring

Primary Prevention: In accordance with the GOM-recommended prevention package, PEPFAR implementers will refer men that test HIV negative post-test counselling prevention services (e.g., condoms, information, and education) and VMMC services (15-29). PEPFAR-supported male champion/peer outreach initiatives in scale-up districts will provide risk reduction counseling, in addition to small group information and behavior change sessions targeting high-risk, age segregated male populations. PEPFAR will continue to engage community leaders, male gatekeepers, and role models to strengthen positive gender norms and implement gender-based violence (GBV) prevention and behavioral change interventions to increase service uptake and condom use.

Figure 4.1.5 Reaching Men: Lessons Learned from Malawi's Roll-Out of Option B+

REACHING MEN: TRANSLATING LESSONS LEARNED FROM MALAWI'S ROLL-OUT OF **OPTION B+ "TEST AND TREAT"**

From July to December 2011 – in just six months' time – Malawi rolled out Option B+ to all health facilities nationwide. The "test and treat" approach from Option B+ has since become the global standard of care as Malawi demonstrated the feasibility of universal ART in resource-constrained settings.*

Given the absence of a single entry point (i.e. ANC for Option B+) to reach a majority of men, PEPFAR Malawi is leveraging the following learnings from the Option B+ roll-out:

- ✓ **Integrate ART into service delivery points** where men access health services;
- ✓ **Streamline access & reduce waiting times** through standardization of service delivery procedures;
- ✓ **Inform the general public about service delivery models**, including: men's health services, extended hours and male friendly clinic days, and "test and treat;"
- ✓ **Provide adequate counselling and information for same day ART initiation**, including standardized tools for treatment readiness assessments;
- ✓ **Involve male champions and peers supporters** to increase testing uptake and promote adherence/retention.

*Kalua et al. (2017) Lessons Learned from Option B+ in the Evolution toward "Test and Start" from Malawi, Cameroon, and the United Republic of Tanzania. JAIDS vol.75, sppl1.

4.1.2 Women

According to MPHIA, women over 15 are progressing better towards the 90-90-90 goals than men over 15 and are on track to reach the 95-95-95 goals. However, the success observed among adult women is not uniformly reflected across all finer age categories. AGYW (15-24 years) lag behind in terms of case identification, linkage to treatment and viral suppression (49.8% were aware of their

status, 82.5% of those aware reported being on ART, and 78.8% of those reporting being on ART were virally suppressed).[9]

Malawi's success in the implementation of option B+ programs beginning in 2011 remains a cornerstone of the progress towards the epidemic control among women. However, there are still opportunities to further optimize the treatment cascade among HIV positive pregnant women. For instance, 20% of HIV positive prevention of mother-to-child transmission (PMTCT) clients who initiated treatment are lost to follow up in the first six months post-ART initiation.[10] The drop off in the first six months is higher than any loss in the subsequent 30 months. PMTCT implementation fidelity remains a priority to reach women 25+.

In FY18, the GOM adopted several changes to national HIV program that PEPFAR expects to steer Malawi closer to epidemic control, such as MOH adoption of a plan to switch from TLE (tenofovir/lamivudine/efavirenz) to TLD (tenofovir/lamivudine/dolutegravir) for the first line regimen; approval to implement Voluntary Assisted Partner Notification (VAPN) in 5.5 acceleration districts; PrEP demonstration targeting high-risk AGYW and FSW in the two highest burden urban areas; and PEPFAR implementation of self-testing in acceleration districts – particularly to reach those who decline active index testing.

Figure 4.1.2 Intervention Package for Women 25+

Acceleration Districts	Scale-Up Districts
1. Reduce missed opportunities in PITC: *HDAs, site-level work flow, testing space* 2. Scale up active partner notification 3. Focus on first 3-6 months post-ART initiation: *case management through lay workers* 4. Intensified mentoring, in-service training 5. Cervical Cancer screening and treatment	1. Saturate PITC: *HDAs* 2. Scale up active partner notification 3. Linkage and retention support 4. Quality monitoring

AGYW case finding

[9] MPHIA 2016
[10] MOH Quarterly Report: April-June 2017

In COP18, PEPFAR Malawi will prioritize effective and efficient testing and treatment strategies to reach AGYW. Based on the lessons learned from the implementation of VAPN in the acceleration districts, PEPFAR will expand active index testing approaches to scale up districts. PEPFAR will support sites through strategic deployment of human resources for health (HRH) who will be responsible for the oversight of index testing scale up at the site level and ART initiation in communities. In addition, PEPFAR implementers will build provider skill and site-level capacity through mentorship, supervision, and tailored systems support to address key barriers to service access and uptake.

In COP18, oral HIV self-testing will become an important component of PEPFAR's case-finding efforts among AGYW at facilities through index testing and in community settings. Self-testing will be integrated into the index-testing program to reach contacts that may decline active partner notification. PEPFAR partners will establish appropriate linkage mechanisms, ensuring those that screen positive receive confirmatory HTS and are linked to treatment as appropriate.

PEPFAR will continue its investment to ensure high coverage of PITC among AGYW across entry points (e.g., antenatal, sexually transmitted infections, and family planning clinics). Strategic deployment of HRH and support for infrastructure will address the main barriers to PITC scale up. Monitoring of HTS performance by entry point remains a priority to ensure the most efficient use of PEPFAR supported HRH, rationalizing and "right-sizing" staffing among facilities.

PEPFAR will implement innovative service delivery models, such as youth-friendly corners, after-hours, and weekend clinics to tackle common barriers to HTS uptake among AGYW. Highly targeted mobile testing will play an important role in reaching key populations and other high risk AGYWs in underserved locations. In DREAMS districts, mobile youth health services will deliver testing services, improved access to a mix of contraceptive methods and GBV response and prevention. Community-based implementers will play a leading role in work with families and faith and community leaders to tackle stigma, address harmful gender norms, and improve awareness of the importance of HTS, early ART initiation, and retention in care for positive health outcomes.

The sections below present priority COP18 interventions for AGYW. The intervention package varies by SNU category with the most intensive support being in acceleration districts.

Figure 4.1.3 COP18 Differentiated Approach for AGYW Clinical Cascade

Acceleration Districts	Scale-Up Districts
1. HTS services: *PITC, Youth Friendly Clinics, after hours, targeted mobile testing* 2. Scale up active partner notification 3. HIV oral self-testing 4. Peer support (including teen clubs) 5. Viral load audits 6. Optimizing the High VL cascade 7. Intensified mentoring, in-service training	1. Saturate PITC: *HDAs* 2. Scale up active partner notification 3. Linkage and retention support 4. Quarterly monitoring

AGYW Treatment

Program data[11] show that linkage to ART is lower among AGYW when compared to women over 25. To address this gap, PEPFAR Malawi will:

- Ensure peer support for newly diagnosed AGYW and their male peers through expert clients where expert clients are not available, and community health workers;
- Ensure availability of daily ART initiation services by addressing site-level barriers, such as shortage of HRH and infrastructure limitations;
- Support implementation fidelity of the ART referral register and maintain deployment of lay cadres (e.g., expert clients) who will trace, counsel, and re-engage unlinked patients;
- Implement the teen support line – a toll-free line for both providers and clients to get advice and counseling on HIV-related clinical and general questions.

PEPFAR will work with the Ministry of Health to scale up differentiated service delivery models such as the fast track refill (e.g. 100% coverage of the high volume facilities in both acceleration and scale up districts). While the focus will be to identify and treat AGYW early, PEPFAR will assist district and referral hospitals to build differentiated models for late presenters and those not responding to treatment.

AGYW retention and viral suppression

[11] PEPFAR Malawi FY17 Annual Report

Similar to other HIV outcome statistics, adolescents living with HIV fare poorly in retention and viral suppression. For example, many AGYW contributed were lost to follow up soon after ART initiation.[12] Moreover, program data and MPHIA show that adolescents have lower viral suppression levels compared to adult men and women.

In COP18, PEPFAR Malawi will:

- Engage lay cadres (e.g. expert clients and community health workers) as case managers for adolescents, especially in the first 3-6 months post-ART initiation where most of the loss to follow up happens;

- Expand the number of teen clubs across priority sites (increase coverage from 40% to 70% in acceleration districts). Adolescents that participate in teen clubs have been shown to have better viral suppression than those who aren't teen club members[13];

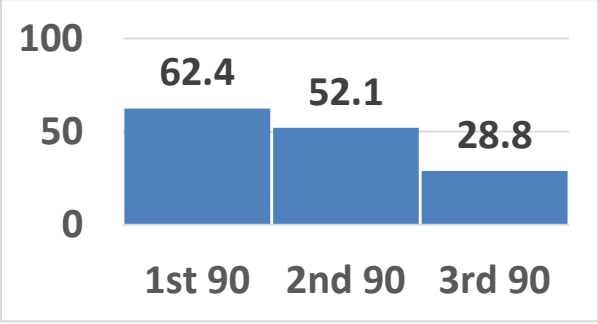
- Implement viral load audits to identify those adolescents who may have missed a viral load test despite reaching a viral load milestone and do catch-up test;

- Implement quality improvement interventions to increase performance along the "high viral load cascade." Currently, there's no national data on the "high viral load cascade." However, partner data shows significant drop offs along the cascade.

4.1.3 Children

The number of children receiving ART was 53,345 in September 2017, representing 51% coverage of the estimated 104,094 children living with HIV for 2017. Estimates of children have varied over the past five years as assumption data have become more reliable, but consistently almost half of estimated children have not accessed treatment. The main challenge for enrolling children under 15 years old on treatment is case finding.

Figure 4.1.4 90:90:90 Cascade for Children <15 years



[12] Tweya H., et al., 2014, Understanding factors, outcomes and reasons for loss to follow-up among women in Option B+ PMTCT program in Lilongwe, Malawi, http://onlinelibrary.wiley.com/doi/10.1111/tmi.12369/pdf
[13] Program Data: EGPAF

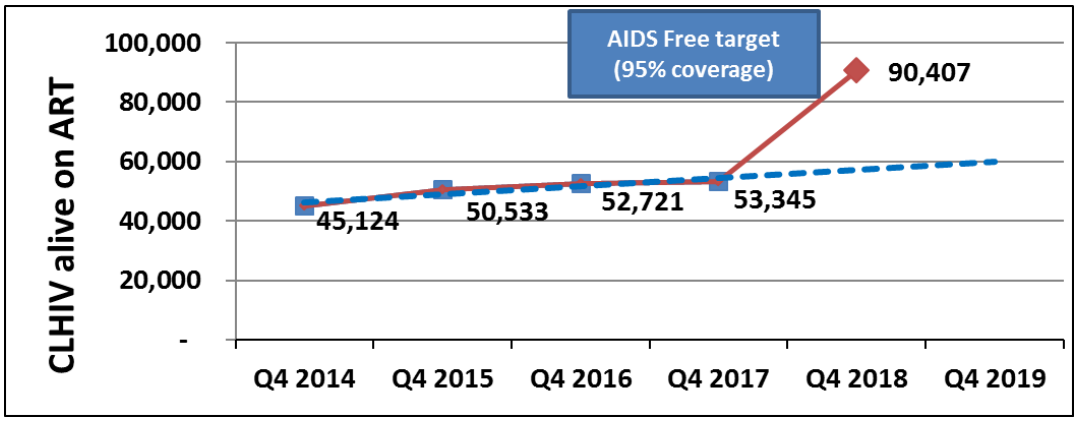
Source: MPHIA 2016-2017

Linkage to ART for children identified positive has improved to more than 85% following changes in the program, including national implementation of Test and Start, same day initiation policies, use of expert clients, and linkage registers. However, linkage to treatment services for adolescents remains a challenge.

Viral suppression rates are also lower for children and adolescents compared to adults in the program. In September 2017, MOH data reported low viral suppression rates for 'routine' samples among children (0-9 yrs: 55%) and adolescents (10-19 yrs: 66%) compared with adults in the age groups 20-29, 30-39, 40+ years whose viral suppression rates exceeded 87%, 88% and 91%, respectively.

The current slow pace in getting children on ART will not be sufficient to meet the global goals for children (Figure 4.1.5). To end AIDS in children, the UNAIDS and PEPFAR "Start Free, Stay Free, AIDS-Free" framework for children calls for ambitious scale up of programs to provide ART to 95% of all positive children by 2018. The framework recommends several high-impact practices for rapid scale up, including HIV and maternal and child health integration and timely EID and treatment initiation.

Figure 4.1.5: Children Living with HIV in Malawi and UNAIDS AIDS-Free Target, 2019



In figure 4.1.5, the red line is the UNAIDS AIDS-free target of 95% ART coverage among children and assumes a total of 95,165 children living with HIV in Malawi; the blue line represents the number of children living with HIV in Malawi on ART. The figure illustrates the significant acceleration needed to reach children living with HIV in Malawi.

The focus for COP18 is to scale up these high-impact practices to identify children, link them to ART, enhance retention and increase viral suppression. To find children, PEPFAR will support PITC saturation at in-patient wards, under-five clinics, nutritional rehabilitation units, and TB and immunization clinics; scale up documentation of coverage to implement corrective action; use index testing, campaigns, and family testing. For HIV-exposed infants, PEPFAR will ensure

HDAs and expert clients are available in facility and immunization clinics. PEPFAR will also implement innovative service delivery models, such as youth-friendly corners, after-hours and weekend clinics and target community testing for high risk adolescents.

To support treatment, PEPFAR will actively link children for rapid ART initiation; support expert clients for linkage and retention; expand Lopinavir/Ritonavir (LPV/r) first line for infants and young children; and transition to Dolutegravir-containing regimens for adolescents older than ten years and weighing more than 30kg in line with WHO guidelines as existing stocks of the current regimen are depleted.

To support viral suppression, PEPFAR will strengthen use of viral load and high viral load registers; enhance pediatric clinical mentorship and use pediatric mentorship tools that focus on quality of care, retention and viral suppression. PEPFAR will also promote use of adolescent treatment supporters; strengthen linkage with the orphans and vulnerable children (OVC) platform; and expand teen clubs and teen hotline.

4.1.4 TB/HIV

COP18 represents a critical opportunity to strengthen TB case finding and treatment among clients living with HIV; TB prevention among HIV-positive clients who do not have active TB; and integrated TB-HIV services. In terms of TB case finding, program data suggest that health care workers at facilities, similar to most countries in the region, are not screening all clients with HIV for the four WHO-recommended TB symptoms.

Similar to other countries in the region, often four-symptom TB screening is suboptimal in HIV treatment settings. Among those screening positive, the percentage of clients who subsequently submit a sputum sample for GeneXpert analysis is low. Strengthening TB screening, sputum collection, sputum analysis, and result return to the patient along with TB treatment initiation is associated with 6-month ART mortality reductions of close to 30% in Botswana. TB screening is also essential for identifying those clients eligible for TB preventive therapy, as shown in an Ivorian randomized trial to reduce ART mortality by about 35%. TB screening at facility entry points, such as outpatient departments (OPD) is important for identifying which OPD clients should be prioritized for HIV testing. In COP18, PEPFAR plans to monitor and strengthen TB screening compliance at health facilities by HDAs, ART providers and deployment of dedicated staff in high ART volume sites. By ensuring HIV testing of all presumptive TB cases within high TB burden sites, PEPFAR will intensify efforts to identify TB/HIV cases early and link late presenters to treatment. PEPFAR will also coordinate with Global Fund-supported community TB screening efforts to ensure HIV testing of all presumptive TB cases, particularly of men who may be less inclined to visit health facilities.

Malawi TB/HIV testing and treatment guidelines have been updated to align with WHO recommendations and in FY18 MOH will consider adoption of WHO guidelines to use GeneXpert

as the first test in high HIV/TB burden facilities. PEPFAR will include HIV testing among presumptive TB patients in the national program reporting tool. PEPFAR has implemented the new TB Preventive Therapy policy guideline in five high burden districts since September 2017. TB and HIV service integration will be scaled-up in the acceleration districts to ensure patient-centered care. In COP18, PEPFAR will support HIV testing for all presumptive TB and confirmed cases, including presumptive TB patients identified through community-based initiatives. HIV testing will be offered to TB household contacts routinely traced in the TB program. For co-infected patients, PEPFAR will promote early ART and TB treatment initiation, including fast-tracking HIV positive TB patients for initiation of ART, and provide an extra dose of Dolutegravir (part of the TLD regimen) to optimize HIV treatment. PEPFAR will further support:

- GeneXpert optimization
- Scale-up systematic TB screening for PLHIV in district and high volume hospitals, including PMTCT clinics and in selected communities;
- Scale-up use of TB LAM for TB diagnosis at high volume referral centers
- Implement a triaged approach for presumptive TB patients at high volume outpatient departments, antenatal clinic, and ART clinics in selected districts, and major prisons.

In COP18, PEPFAR will support active monitoring of isoniazid preventive therapy (IPT) and strengthen TB infection control in hospital settings. Currently, stable and adherent TB negative clients receive IPT monthly and ART 3-monthly. Additionally, guidelines allow TB/HIV co-infected patients to receive DOT (under supervision of a family member or other designated individual) and collect TB medication on a monthly basis. In COP18, PEPFAR will engage MOH to explore improved alignment of ART and TB treatment and prevention, including: (1) aligning IPT collection with ART multi-month scripting for TB negative patients; and (2), for co-infected patients, leveraging DOT supervision with ART adherence messaging.

Districts will benefit from technical advisors seconded to the National TB Program charged with strengthening implementation of collaborative TB/HIV activities, including diagnosis, management, prevention, commodity management, and monitoring program performance. PEPFAR will support implementation of a quality assurance program for TB diagnostic platforms. PEPFAR will also provide minor renovations to some health facilities to improve infection control and patient flow, procure GeneXpert cartridges and TB-LAM to supplement Global Fund commodities, and provide technical assistance to revise data management tools for TB/HIV to meet PEPFAR data requirements.

Table 4.1.6 TB/HIV Cascade Targets Scale-up

Scale-up Acceleration Districts							
Variable	**TB Notifications**	**→**	**TB_STAT**	**→**	**TB_STAT_POS**	**→**	**TB_ART**

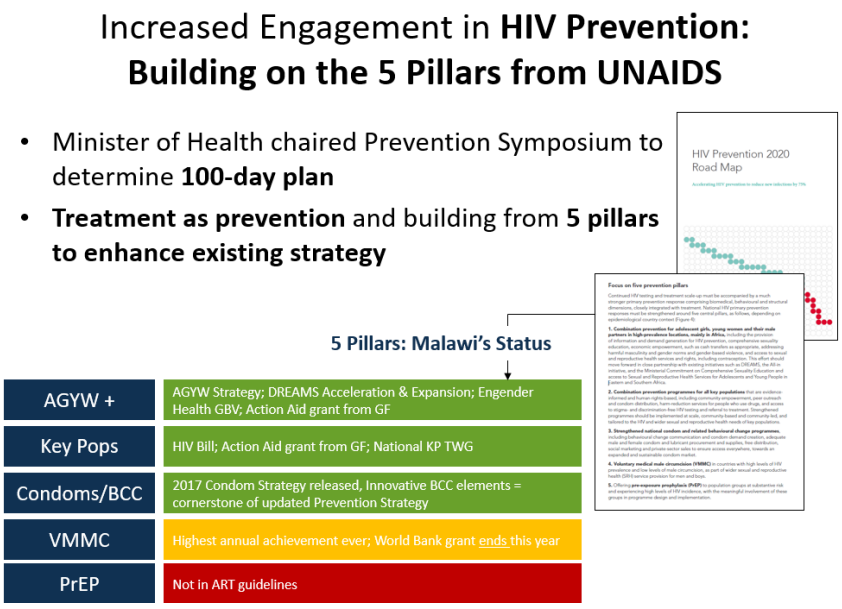
COP18 Target	5,246	→	5,209	→	2,945	→	2,857

Scale-up Saturation Districts							
Variable	**TB Notifications**	→	**TB_STAT**	→	**TB_STAT_POS**	→	**TB_ART**
COP18 Target	5,231	→	5,201	→	2,598	→	2,543

4.2 Prevention activities for priority programming

In November 2017, the GOM began work on a "100 Day HIV Prevention Roadmap and Action Plan" to reduce new cases of HIV by 75% by 2020. The HIV Prevention Roadmap and Action Plan focuses Malawi's HIV prevention priorities and uses the UNAIDS "Five Prevention Pillars" as a basis for a new *HIV Prevention Strategy*. The five pillars are: combination prevention packages for AGYW and their male partners; combination prevention programs for key populations; strengthened national condom programs; VMMC; and PrEP.[14]

Figure 4.2.1: UNAIDS Prevention Pillars and Malawi's dashboard progress



4.2.1 AGYW HIV Prevention Activities

The 2016 MPHIA confirmed that adolescent girls and young women continue to be disproportionally affected by HIV/AIDS compared to their male peers. From a young age, adolescent girls are exposed to early sexual debut, childbearing, childhood marriage, and violence.

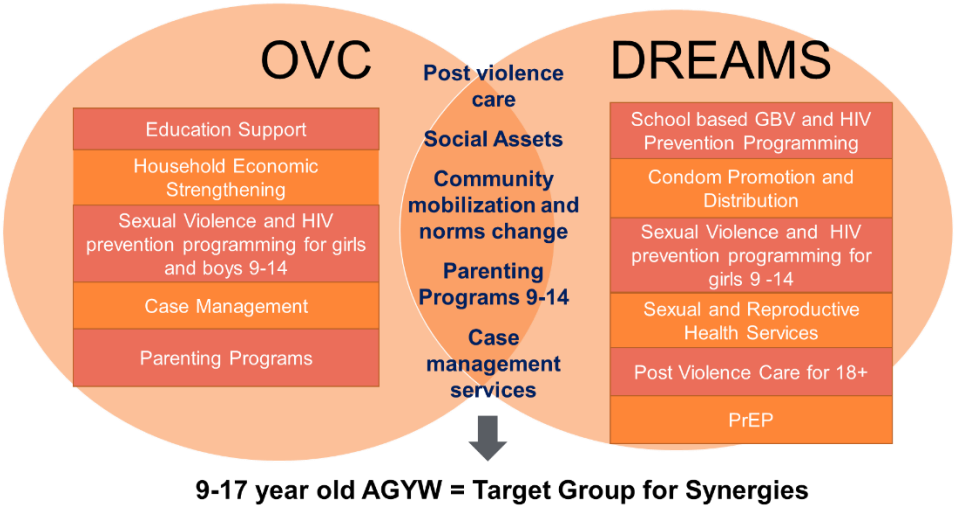
[14] *HIV Prevention 2020 Roadmap*.

AGYW face barriers to health care services and are less likely to adhere to HIV treatment. Over the past year, Malawi has seen increased political commitment to addressing challenges AGYW face with the development of a National AGYW Strategy that defines a coordination and referral framework and multi-sectoral responses to reach vulnerable AGYW.

In FY19, PEPFAR Malawi will continue to expand reach among vulnerable AGYW in the DREAMS districts (Zomba, Machinga, and Blantyre). By the end of FY19 the DREAMS initiative aims to reach 80% of estimated vulnerable AGYW across the DREAMS sites with layered interventions. In COP18, DREAMS will provide younger AGYW (10 – 14 year olds) with sexual violence reduction and HIV prevention interventions to avoid risk. Interventions targeting both 10-14 year old boys and girls already enrolled in the OVC platform with HIV prevention messaging will include use of the Grassroot Soccer curriculum that has already been adapted for Malawi, in addition to the integration of ZATHU (Girl Effect) listening group content into DREAMS clubs for the younger AGYW. A GBV-specific, age appropriate curriculum is under development in FY18 Q3, drawing from multiple evidence-based curricula for use with 10-14 year old boys and girls through both the OVC and DREAMS platforms. Interventions targeting the parents of 10-14 year olds (i.e. Families Matter!) will also play a protective role for this age group, in addition to continued engagement of traditional and faith leaders in improving gender norms and fostering supportive environments for younger adolescents. PEPFAR Malawi will further supplement these COP18 plans with evidence-based, HQ-developed materials focused on HIV and sexual violence prevention targeting 10-14 year olds. Older AGYW (20-24) will graduate from the program and transition to mentorship roles – including ZATHU listening clubs where they can continue to engage with their peers. PEPFAR will engage with religious and traditional leaders throughout COP18 to identify most at-risk girls for club enrollment and promote community-level initiatives for keeping girls in school, HIV-free, and safe from violence. PEPFAR implementing partners will also expand post-gender-based violence services in healthcare facilities and through mobile outreach services.

In FY18, DREAMS modified strategies to reach vulnerable AGYW using new community, school and facility-based screening and enrollment tools. The modified recruitment strategy uses community structures such as traditional leaders, Community-Based Organizations (CBO), child protection committees, Victim Support Units (VSUs), mother groups, schools, and Parent Teacher Associations (PTA) to identify in- and out-of-school AGYW for screening. A modified Girl Roster (enumeration tool) will be administered to a sample within each DREAMS catchment area to generate an estimate of the total number of AGYW, in turn used to approximate the reach of DREAMS interventions. Layering of DREAMS interventions will be monitored on a biannual basis. Plans for tracking layering among AGYW enrolled in DREAMS include the development and expansion of an electronic unique identifier system for enrolled AGYW to track the number of DREAMS services individual girls' access. The unique identifier system will track access across interventions, including access to mobile outreach integrated health services (family planning and HIV testing), condoms, savings and loans groups (and other economic support), post-GBV services, back-to-school services, and enhanced HIV and GBV prevention interventions.

Figure 4.2.1 DREAMS & OVC Synergies



COP18 will enhance synergies between the OVC and DREAMS portfolios (Figure 4.2.1). OVC programming will expand enrollment of 9-17 year-old AGYW reached through OVC household assessments, referrals from Mother's Groups and from AGYW presenting at ANC, Maternity and HIV services in health facilities. Club content will include GBV prevention and risk avoidance activities using evidence based curricula. PEPFAR will reach parents of younger AGYW with household case management, economic strengthening support, and parenting curricula – the latter designed to strengthen parental communication for improved home-based psychosocial and SRH support.

Peace Corps Volunteers will continue to play a critical coordination role with District Health Office counterparts to ensure continued collaboration among all AGYW stakeholders and implementers within the DREAMS districts to avoid duplication of efforts and promote collective monitoring of quarterly results for refinement. Peace Corps will also place up to ten Education Volunteers in the DREAMS districts. These Volunteers will teach at targeted secondary schools to liaise with school management and implementers on DREAMS activities, HIV prevention activities, and gender equitable teaching practices.

In early FY18, PEPFAR trained DREAMS Ambassadors (nominated by DREAMS implementers) on key issues related to girls' empowerment, GBV prevention, mentorship, and advocacy. With support from DREAMS implementers, DREAMS Ambassadors developed work plans with key activities to implement as Ambassadors in their communities throughout FY18. DREAMS implementers will monitor DREAMS Ambassadors' work plan implementation progress and address individual capacity gaps where needed. In FY19, the DREAMS Ambassadors will meet to develop skills and activities that enhance DREAMS programming.

In FY18, PEPFAR Malawi initiated the first round of a Recency study in PEPFAR-supported facilities to estimate HIV incidence among pregnant AGYW presenting at ANC in Blantyre,

Lilongwe, Machinga, and Zomba. The study commenced in November 2017 in Lilongwe and Blantyre and expanded to Machinga and Zomba in February 2018. The study will end July 2018. Results of this study inform the suitability of the assay test ($5) so results can be scaled throughout the region. Knowing the recency of infection helps target programmatic resources to reduce incidence, ensuring those most recently infected are reached with life-saving treatment and retained while they are most infective. In COP18, recency testing will continue in DREAMS and other priority districts to include other populations beyond AGYW. In FY18, PEPFAR and the MOH will implement a protocol for PrEP demonstration in Lilongwe to determine the feasibility of integrating PrEP provision for high risk AGYW into routine services.

COP18 will also implement AGYW activities across other scale up districts in Malawi. AGYW programming in five scale up districts will leverage both community HIV testing and OVC platforms. Interventions will target men and high risk AGYW identified through the OVC platform to address sexual risk and violence prevention. PEPFAR will continue to coordinate with Global Fund AGYW programming in non-DREAMS districts (Mangochi, Mulanje, Thyolo, and Lilongwe).

Peace Corps Volunteers and their counterparts will work with both out-of-school and in-school youth, ages 10 to 24 years, and their care givers to implement boys and girls clubs and camps, using Go Girls! and Grassroot Soccer curricula to promote HIV prevention and refer youth for HIV testing.

PEPFAR's OVC and key populations investments will be linked in Blantyre, Lilongwe, Mangochi, Machinga and Zomba to reach FSW children and underage AGYW found in hotspots with appropriate OVC, clinical, protection, and education services. In COP18, Girl Effect will expand its youth brand "ZATHU" nationally through their mass media program – now in its second year of production. Girl Effect has established an MOU with DREAMS implementers and other girls' networks to train facilitators and utilize ZATHU branded materials in listening clubs to incorporate messages around GBV, HIV, sexual reproductive health, and empowerment used in their mass media platform. In FY18 and FY19, PEPFAR will continue to utilize Girl Effect social and behavior change communication (SBCC) materials to supplement other curricula materials.

In FY18, Engender Health (through the State Department Office of Global Women's Issues) will implement GBV activities in four districts (Blantyre, Chiradzulu, Kasungu and Mzimba) building capacity of key civil society and government partners to coordinate a multi-sectoral approach, provide quality comprehensive GBV services, and engage in GBV prevention efforts to address the root causes of GBV (e.g., gender inequality, patriarchy, inequitable social and gender norms). PEPFAR continues to engage with Engender Health to support design and rollout of GBV responsive prevention and care content for school and community activities in PEFPAR supported districts.

In COP18 DREAMS activities in Blantyre will expand into additional catchment areas beyond the initial three identified in COP17. Since RPM, PEPFAR worked with the Global Fund and the

Country Coordination Mechanism to shift the Global Fund AGYW activities from Blantyre to another priority district. This shift allows PEPFAR and Global Fund to maximize use of resources and reach more AGYW than would have been possible previously.

A strong indigenous partner will implement PrEP for vulnerable/high risk AGYW in Lilongwe starting in FY18 and continuing into FY19, as part of a targeted evaluation. This will be an important opportunity for the country to learn about the identification, enrollment, and retention of vulnerable/high risk AGYW into a PrEP program. PEPFAR anticipates that PrEP for vulnerable/high risk AGYW will be approved in the national guidelines by December 2018. Following this guideline change, providing PrEP to vulnerable/high risk AGYW in Blantyre through facility-based structures, in close coordination with the DREAMS platform, will be possible, thereby strengthening the ability to protect vulnerable/high risk AGYW from HIV infection.

While overall fertility dropped between the 2010 and 2015-16 DHS, the 2015-16 survey noted an increase in teenage pregnancy from 26-29%. USG family planning and maternal health programs are incorporating strategies to better target information and services to AGYW. Recognizing prevention of teen pregnancy as an important outcome of DREAMS programing, PEPFAR will track these trends to better target and monitor AGYW programming. PEPFAR will use age disaggregated ANC HIV testing data, currently collected in the five acceleration districts, as a proxy for teen pregnancy given the very high coverage of ANC (95%) and high coverage of HIV status ascertainment (over 90%) during pregnancy, and will work with MOH to review available district and site level pregnancy data collected through the national DHIS2 system. The DREAMS layering assessment used by the program on a semi-annual basis to track data and services accessed by individual AGYW also provides PEPFAR Malawi an opportunity to gather information on pregnancies and early marriages occurring with AGYW enrolled in DREAMS clubs in the three DREAMS districts. To-date, since the start of DREAMS in Malawi, 128 early marriage have been annulled among participating AGYW.

Additional COP18 key activities include:

- HIV and violence prevention in after-school clubs
- Expansion of post violence care services at facilities and through mobile outreach teams
- Continued engagement of traditional and community leaders to keep girls in school, HIV free and safe from violence.
- Focus on increasing enrollment of AGYW aged 10-14 in the above programs
- Scale up recency testing in DREAMS districts and other scale up districts
- Strengthen partnership with Girl Effect in clubs and use of branded SBCC materials
- Scale up use of Families Matter curriculum to reach the parents and care givers of younger adolescents aged 10-14. Families Matter! Program will also be integrated in OVC case management.
- Integrate education support/bursaries into OVC case management to keep girls in school
- Graduate older girls into mentorship program

4.2.2 OVC HIV Prevention Activities

Malawi has 1.4 million children affected by HIV/AIDS, representing nine percent of the total population and 17% of all children.[15] Of these 1.4 million children affected by HIV/AIDS, 770,000 (13%) have been orphaned due to AIDS-related deaths.[16] Orphan-hood rises rapidly with age, from three percent among children under age five, to ten percent among children ages 5-9, and 24% among children ages 15-17. One in five (20%) Malawian children do not live with a biological parent.[17] These numbers reflect a social crisis and a significant risk to epidemic control.

Through direct service delivery, PEPFAR Malawi will provide comprehensive HIV impact-mitigation, prevention, and treatment services to OVC and their households to address contributing factors to vulnerability. AGYW continue to be a focus, hence COP18 includes a deliberate increase of targets for OVC in the AGYW age-group, even in non-DREAMS districts. The OVC program is encouraging application of evidence-based models for AGYW HIV prevention beyond the DREAMS districts.

In COP18 PEPFAR Malawi expects to reach 126,547 OVC and their caregivers with comprehensive services. The program will also work to ensure children already enrolled in the program are risk assessed and linked to appropriate services.

Activities will span four domains (healthy, safe, stable and schooled) coordinated through robust case management efforts. The OVC program will provide age-appropriate activities as needed, including risk assessment, linkage to HIV services and support, early infant diagnosis (EID), psychosocial support; group based interventions promoting positive parenting and norms change, child protection and GBV services; savings and loans groups; work readiness; market-based income-generating activities; vocational training; and school block grants and material support to ensure OVC stay in school. In COP18 PEPFAR will support keeping children in school through community mobilization, material support, school block grants and facilitation of readmission for dropouts; life skills training with integrated health messaging to children, both in- and out-of-school, and market driven vocational training for older adolescents.

[15] 2008 National Population Census projection for 2015
[16] UNAIDS, 2012
[17] Malawi Demographic and Health Survey, 2015

COP18 will strengthen efforts to enroll the 6% of children living with HIV into the OVC program. Strengthened collaboration with health facilities will lead to enrollment and implementation of OVC group activities at facilities. PEPFAR will train facility-based cadre on assessing and recruiting children living with HIV into the OVC program. PEPFAR will scale viral load monitoring work, which has already started in two sites in Blantyre, to sites in all OVC-supported districts. PEPFAR will provide children living with HIV with appropriate services and support to ensure viral suppression. To provide high quality social support and age-appropriate information about HIV infection, treatment, adherence, HIV status disclosure, positive living and life skills needed for growing into healthy adults, PEPFAR will intensify children and adolescents ages 5–19 enrollment into psychosocial support groups.

COP18 will emphasize support to mothers/caregivers and HIV-exposed children 0 – 24 months to assure early diagnosis, adherence and retention on treatment, and provide holistic parenting support to optimize HIV-exposed children's developmental outcomes. Families Matter, introduced in Blantyre in FY18, will expand to the remaining four acceleration districts (Zomba, Machinga, Mangochi, and Chikwawa) in FY19. In COP18, linkages with implementers serving Key Populations will result in more children of female sex workers reached through the OVC program.

Peace Corps volunteers will continue working with youths and their caregivers to provide education support (after-school tutoring), promotion of good health and nutrition and psychosocial care and support.

Direct service delivery OVC activities will continue to be aligned with care and treatment programming in the highest burden sites in acceleration districts. A comprehensive package of services will be provided using the case management approach.

In the remaining two scale up (non-acceleration) districts, PEPFAR will build local capacity to graduate OVCs from the program at the end of FY19. The package of services in these two districts will include limited case management and direct service delivery for the most vulnerable, transferring most vulnerable OVC to other partners (e.g., The National Association for People Living with HIV) and other GOM programs. Before graduation, all children living with HIV will participate in support groups and intensive capacity building for caregivers and the community structures in child protection. As the Lilongwe OVC program is still new, the program will continue to provide a comprehensive package of services and focus on building capacity of a local sub-partner.

The OVC program will continue to strengthen coordination and collaboration with facility-based implementers. Discussions around models of collaboration have started in Lilongwe and Blantyre and PEPFAR will expand the models of collaboration to more districts in COP18. The program will accelerate efforts to identify OVC and caregivers through this strengthened coordination between health facility and community structures. The case management system will ensure children/families are assessed for holistic health and social needs, seamlessly linked to the appropriate services, and followed up until case closure.

The program is currently working with the Ministry of Gender, Children, Disability and Social Welfare to sensitize the National Case Management System to HIV. These efforts will be intensified in COP18 and ensure all child protection workers (and other community based para-professionals) are trained in HIV issues to generate demand for HIV services and offer adherence support to those on ART. The HIV sensitive case management systems ensures children who are exposed to HIV/AIDS, violence, abuse, neglect and exploitation can access the social welfare, justice and specialized healthcare services they need. Lay workers/community-based para professionals are key components of the case management system and must be trained.

PEPFAR Malawi is contributing to a strong social welfare system. Social workforce development efforts will continue in COP18 through the training of graduate Social Workers and Child Protection Workers to retain an increasingly productive social workforce, upon whom the efficacy of OVC programming depends. PEPFAR will support 33 Graduate Social Workers to complete their Social Work degree program in COP18. The current degree program is four years; in order to shorten the turnaround time and more quickly inject additional graduate social workers into the system, COP18 will support Chancellor College to restructure the degree program to permit completion within two years. Further investments will consolidate achievements, including building capacity at various community structures and cadres to prevent and when necessary respond to child neglect, violence and exploitation.

Partner performance improved steadily in FY17 and FY18, as a result of intensive partner management efforts, and responsiveness to monitoring of data. POART reviews, SIMS visits and partner management strategies have also informed adjustments in implementation on a quarterly basis.

4.2.3 Prevention of Mother to Child Transmission (PMTCT)

Prevention of mother-to-child transmission of HIV forms the core of programming to prevent HIV in children. The PMTCT program in Malawi is a model to many countries for implementation of Test and Start for pregnant and breastfeeding women. The September 2017 national HIV program report and the 2017 PEPFAR annual progress report indicate 98% ART coverage for HIV positive pregnant women. Transmission rates have also remained below 2% in both PEPFAR Monitoring and Evaluation Reports (MER) and MOH quarterly reports for infants two months of age. Formal data on overall transmission at the end of breastfeeding are expected later in 2018 from the National Evaluation of the Malawi PMTCT Program (NEMAPP), but early HIV transmission rates at birth – six weeks of 3-4% have been reported at international conferences through NEMAPP.

MPHIA and Malawi Demographic and Health Survey (MDHS) conducted in 2016-2017 reported high levels of ANC attendance among pregnant women. MPHIA and MER reporting indicate high levels of HIV status ascertainment and ART coverage among pregnant women. COP18 will

maintain high levels of HIV case identification and high ART coverage among HIV positive pregnant and breastfeeding women.

Retention in care and early infant virologic testing remain areas of critical focus. About 30% of the women enrolled in the PMTCT program are lost to follow up by 24 months. On the other hand, early infant virologic testing improved substantially over two fiscal years – from 28% coverage in FY16 Q1 to 71% coverage in FY18 Q1. Scaling up sample transport and adding more molecular lab machines contributed to these gains. As a result, EID coverage at two months is on track to hit 85% by the end of FY18. Activities to improve retention and maintain momentum in EID testing include:

1. Continued salary support for, and increased numbers of expert clients (mentor mothers) to assist with peer navigation, psychosocial support/counselling, and community follow up for those that miss appointments
2. Index testing in antenatal clinic and maternity clinics (including use of HIV self-tests) to engage partners of HIV positive women
3. Continued scale up of Mother Infant Pair Model
4. Scale up repeat testing for pregnant women during 3rd trimester or labor and delivery as per HIV testing guidelines, which is currently not well implemented
5. Integrate EID in immunization clinics
6. Continued mentorship and implementation of quality improvement activities to refine the most effective change packages
7. Continued support for sample transportation system implementation and molecular lab functionality through quality management systems (QMS); providing technical support for EID POC roll out; implementing laboratory information management systems; strengthening supply chain management

There are no new PMTCT policy changes and partner performance is consistently high. Malawi will develop a new elimination of mother to child transmission of HIV strategy in 2018, PEPFAR will support MOH to chart strategic direction and goals and will advocate for additional viral load monitoring for pregnant and breastfeeding women and options for enhanced postnatal prophylaxis for infants at high risk of transmission.

4.2.4 Key Populations and Prison Settings

Key Populations

Key populations face numerous barriers in utilizing services. However, momentum is increasing to reach FSW, MSM, and transgender populations with targeted approaches and safe, non-stigmatizing services. In FY18, the NAC established a National Key Populations TWG to facilitate strategic planning and coordination of key population investments across donors. PEPFAR supported the establishment of national and district FSW coordination structures to build

capacity for beneficiary leadership. Key populations standard operating procedures were incorporated into national STI management, HIV testing, condom, and clinical HIV guidelines. NAC and civil society are working to incorporate language about a standard package of services for key populations based on PEPFAR's supported approach and tools (Figure 4.2.1) to include in the new HIV Prevention Strategy (currently under development).

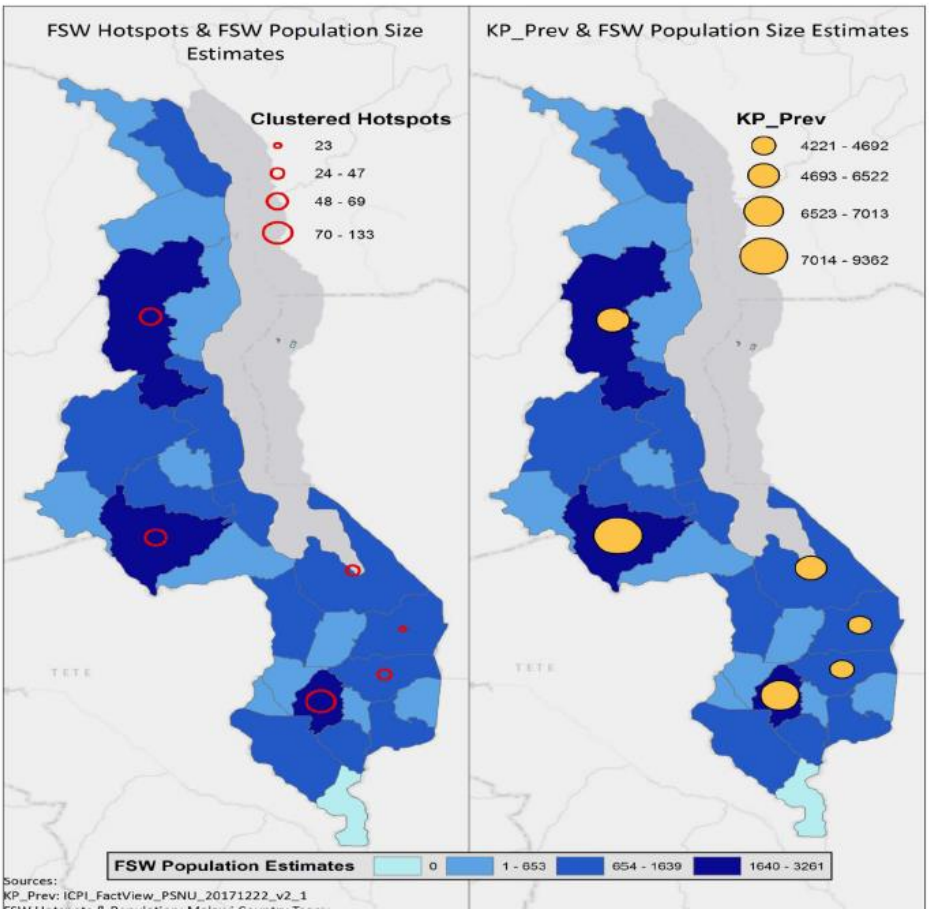
High level stakeholder engagement continues to improve with increased dialogue occurring at national, district and local levels, including a recent meeting where Parliamentary Health Committee members pledged support towards KP programs. Intensive monitoring systems for KP established under PEPFAR are expected to be adopted in Global Fund supported districts to enhance effective tracking of populations reached, condom/lubricant distribution, routine screening/treatment, linkages and peer support.

Reaching Key Populations with Services: The KP investment will continue to optimize strategies to reach HIV- and HIV+ KP with comprehensive prevention, treatment, and care services, address leakages in the clinical cascade, and expand hotspot coverage in the high-burden scale up districts of Blantyre, Zomba, Machinga, Mangochi, Lilongwe, Mzimba and Thyolo based on annual revalidated hotspot assessments. Trusted peers will reach MSM and transgender people with expansion expected among hidden MSM through the virtual platform (e.g. SMS-based and leveraging social media) piloted in FY18. Enhanced peer outreach approaches will expand to all MSM sites using newly trained peer groups and rolled out to FSW underperforming sites, targeting the hard-to-reach FSWs. Community led outreach approaches in transgender specific safe spaces will continue to focus on empowerment of transgender leaders (peer educators/peer navigators).

Figure 4.2.1 PEPFAR Package of Services for Key Populations

	Package of Services
All KP	Prevention messages Condoms and lubricant HIV testing STI screening TB screening Reduction of stigma and discrimination GBV screening Violence/crisis response team Psychosocial counseling
Additional services for FSW only	Family planning services PMTCT
Additional services for HIV positve KP only	ART provision is Drop-in centers (DICs) Links to ART in hybrid facilities Links to viral load (VL) testing KPLHIV support groups

Figure 4.2.2 FSW Populations Mapping in Malawi



Geographic Prioritization & Interventions: In six high-burden districts (Blantyre, Machinga, Zomba, Mangochi, Lilongwe, and Mzimba North), the KP program continues to provide a cascade of comprehensive HIV prevention, care, treatment KP services through 17 drop in centers, mobile outreach in hotspots, and supported public and private facilities. Key approaches include health workers to provide clinical services, KP lay personnel (peer educators and HIV+ peer navigators), and direct service delivery to beneficiaries. Peer-led activities increase self- and community-efficacy to adopt healthy behaviors and access services addressing the continuum of care for HIV+ individuals. Clinical services and/or referrals include routine delivery of condoms/lubricant, quarterly HIV testing and STI screening and treatment, family planning and cervical cancer, TB, PMTCT, post-GBV services, treatment and care. Through KP platform, PEPFAR is also providing select services including HTS, condoms and prevention messages to *clients* of FSW.

Key Populations Portfolio Performance Updates: Although implementers achieved over 50% of the FY18 annual target in Q1 for reaching MSM and transgender groups, the program did not achieve targets for identifying MSM with HIV for treatment initiation. New strategies already being implemented include enhanced peer outreach approaches to tap into new networks. Introduction of self-testing is expected to improve results.

Strategic Updates in COP18 and already under implementation for potential scale up include:

- *"Know your Provider Sessions"* - KP and health care workers meet to develop rapport in an informal setting helping to allay fears and anxiety from KP visiting health facilities.
- *ART Provision for MSM in Drop-In-Centers (DICs)* - Currently provided to FSWs at DICs and is being rolled out for MSM in close collaboration with MOH and DHOs. Provision of routine integrated medical checkups in DICs and outreach activities further facilitate treatment uptake, retention and opportunistic infections management.
- *Children & Clients of FSW* - PEPFAR will continue to reach FSW family members and clients with HTS, STI, family planning and GBV screening. In FY19 the children will continue to be tracked to ensure appropriate follow-up and referrals for child friendly services including early infant diagnosis of HIV, treatment, referral for psychosocial support, nutrition support, and social services including education and child protection.
- *PrEP:* In FY18, PEPFAR submitted a protocol to evaluate PrEP provision to 560 HIV negative FSWs enrolled in three drop-in centers in Blantyre for a period of one year as part of KP HIV service delivery platform and delivery package. The activity will provide the evidence-base necessary to access the feasibility, acceptability, and tolerability of PrEP as an additional HIV prevention method for FSW and inform future policy decisions around PrEP delivery among key populations in Malawi. Scheduled for implementation in FY18 and FY19, expansion of coverage for FSW in these sites or other districts will be determined in collaboration with DHA. PrEP is anticipated to be part of the National Guidelines by December 2018 as a targeted intervention for high risk individuals.

Prison Settings: Review of partner performance of KP in prisons during FY17 demonstrated 98-99% testing rates. However, poor tracking of remandees has led to low linkage rates. In COP18, PEPFAR will provide a prevention service package to approximately 8,571 prison inmates in 15 prisons across scale up accelerated, aggressive scale up, and sustained districts. Sustained districts were included because the risks of HIV for prison inmates (e.g., situational MSM) are the same regardless of geography. Services provided at entry, incarceration, and exit include comprehensive screening and treatment for HIV, TB, STI, nutrition, and mental health. PEPFAR has also implemented Test and Start and Viral Load monitoring. PEPFAR is working with CSOs to advocate for condom and lubricant provision in prisons; currently it is not allowed.

4.2.5 Voluntary Male Medical Circumcision

The GOM has a VMMC scale-up strategy for 2015-2020 implemented with financial resources from PEPFAR, the World Bank and the Global Fund. For the last five years, PEPFAR provided technical assistance to the GOM and facilitated the majority of VMMC nationwide, achieving 419,000 out of 561,000 circumcisions nationwide.[18] For the past five years, PEPFAR has relied heavily on central initiative funding to maintain direct service delivery in eight districts. In FY18, Malawi received $13M in central initiative funds for continued scale up in these eight districts to reach a target of 145,337 circumcisions (with an additional pipeline investment of approximately $3 million). World Bank resources, implemented in the 20 remaining districts using Ministry of Health routine service delivery and small campaigns reported 96,000 circumcisions by end of September 2017. In COP18, PEPFAR will maintain program investments in the eight priority districts with a target of 145,337 circumcisions, 70% of which will be men 15-29 years.

The VMMC program gained momentum in the country and the number of circumcisions performed continues to increase annually. In FY17, additional service providers, community mobilizers, and mobile and static sites contributed to the high number of circumcisions. In FY18, PEPFAR put in place strategies to address demand creation challenges and seasonality of VMMC campaigns, including the scale-up of static sites for year-round VMMC service delivery. In FY18, PEPFAR is providing technical assistance to MOH to finalize revisions to the VMMC National Communication Strategy, National VMMC Standard Operation Procedures and the HIV Prevention Strategy. All implementers developed specific demand creation and communication strategies with messages focusing on reducing VMMC barriers (e.g., pain) and communicating positive factors such as hygiene and sexual appeal. PEPFAR developed a site level capacity assessment tools in FY17 and implementers will develop site specific capacity improvement plans. COP18 will focus on increasing and scaling up innovative demand creation strategies targeting 15-29 year-olds and sustaining demand throughout the year; strengthening linkage of HIV negative males from all HIV testing delivery points; and scaling up use of VMMC devices.

[18] PEPFAR Malawi Annual Program Report 2017

Two WHO prequalified VMMC devices (PrePex and Shang Ring) have undergone successful acceptability and feasibility pilot studies in Malawi. MOH leadership endorsed Shang Ring and plans are underway to undertake active surveillance for Shang Ring devices in FY18. In COP18, PEPFAR will support procurement of 4,000 (500 per district and the DOD sites, except Chiradzulu) devices as part of the VMMC scale up plan.

The ending of the World Bank grant for VMMC in September 2018 is a shared concern across PEPFAR, MOH, and civil society. This program has supported VMMC services in twenty districts. PEPFAR is exploring how to address this gap together with the GOM, Global Fund, and BMGF. During RPM, the idea to explore gaps to VMMC saturation (80% coverage) were discussed at length, including the need to triangulate multiple data sources to make informed, strategic programmatic shifts now with clear 2020 goals. Discussions also considered the potential of CSOs to engage in demand creation activities. Experts from USAID and CDC will support this task force in partnership with BMGF and engaging the GF in April 2018 to recommend any further strategic shifts and realignments in district prioritization.

COP18 Key activities will include:

- Implementation of the VMMC minimum package of clinical and prevention services at every VMMC delivery point based on global guidance.
- Reorganization of the PEPFAR VMMC strategy for investment and district prioritization including exploration of opportunities for private sector and CSO involvement.
- Procurement of VMMC supplies and commodities for all PEPFAR supported sites. Provide commodities consumption forecasting and supply chain management support.
- Support the implementation of the Shang Ring device in scale up after active surveillance is complete in FY18.
- Link HIV negative males to VMMC services by strengthening collaboration between testing and treatment partners and VMMC partners and developing a referral system.
- Targeted demand creation activities for men ages 15-29 years old, utilizing satisfied clients and influential persons to mobilize peers, in addition to traditional authorities.. The demand creation messages will focus on other VMMC motivating factors like hygiene and sexual appeal.

4.2.6 Condom Programming

Reinvigorating condom programming as a core HIV prevention intervention is a national priority. Within the National Strategic Plan (NSP) 2015-2020, strategies include emphasis on a total market approach for comprehensive condom programming and effective and efficient supply. The NSP

modeled the annual need of condoms across Malawi at 280 million condoms using traditional and non-traditional platforms targeting all sexually active men and women, youth and key vulnerable populations.

The majority of public sector male condoms are procured, warehoused and distributed to healthcare facilities by MOH using Global Fund resources. Recent reports from Logistics Management and Information System (LMIS) show a strengthened supply chain management of condoms as evidenced in the marked reduction in stock outs of public sector condoms. Nevertheless, condom availability, access and stigma associated with both male and female condoms remain challenges among priority populations. Public sector male condom distribution increased in 2017 to 49,642,353 (from 47,184,712 in 2016); however public sector female condom consumption remained low at 416,067**.**

In COP16, PEPFAR facilitated the establishment of a dedicated supply chain of public sector condoms and lubricants (single use packaging) to key populations and community partners to reduce stock outs for these priority populations. In COP 18, PEPFAR will continue to support this supply chain to ensure that condoms and lubricants are available consistently outside of facilities. In addition to supporting community-level distribution of public sector condoms and lubricants, PEPFAR also supports procurement and distribution of socially marketed CHISHANGO male condoms, CARE female condoms. In 2017, 17,208,000 CHISHANGO condoms and close to 36,000 CARE female condoms were sold. PEPFAR procured and distributed 761,535 lubricants in 2017, up from 500,000 in 2016.

USAID's Central Commodity Fund is available for procurement of public sector condoms to address gaps in national supply, however Global Fund procurements are expected to meet current demands for free public male condoms in the country in FY19. Intensive demand generation activities at national and community levels will seek to increase demand for male, female condoms and lubricant among key and priority groups.

In COP18, PEPFAR will continue to champion a total condom market approach, mapping of condom distribution points and agents, technical assistance to operationalize national condom policy and strategy documents, and sharing of best practices for condom planning, programming, and monitoring, through public, private, socially marketing sectors and community distribution. PEPFAR will continue working with GOM to strengthen supply chain management for procured public sector condoms and condom compatible lubricants.

4.3 Additional country-specific priorities listed in the Planning Level Letter

Malawi's planning level letter, under "COP 2018 Policy Directives and Technical Approaches," lays out specific technical approaches required for Malawi to reach epidemic control by 2020. Most important, PEPFAR must optimize testing strategies to find the remaining HIV positive Malawians and start them on treatment. Optimizing testing strategies requires active index testing, incorporating self-testing as a modality alongside index testing, and verifying that optimized PITC is implemented with fidelity across all sites. As of the writing of this plan, the

GOM has yet to adopt as national policy at least two key policies to optimize testing strategies – voluntary assisted partner notification and oral self-testing. In February 2018, PEPFAR received clearance to implement a VAPN demonstration activity in the six highest burden districts. With expected MOH support and readiness to incorporate active index testing into national guidelines based upon the implementation experience, PEPFAR plans to scale up VAPN activities in COP18.

Analyzing program performance to date reveals low case finding achievement against targets as PEPFAR Malawi did not have national policies (index case testing, self-testing) essential to find missing cases who do not present at health facilities. To reach 95-95-95, PEPFAR Malawi will implement an optimized approach to reach males and youth with testing and treatment (scaling-up index testing and oral self-testing and scaling-down mobile testing and PITC of low risk facility clients). PEPFAR Malawi will also implement a focused HIV self-testing strategy to reach youth and men outside the facility and link them to facilities for follow-up testing and treatment.

PEPFAR Malawi actively manages all implementers with data driven dialogue and corrective actions. This active management shares promising practices across and among implementers in a timely manner, ensures coordination and collaboration among USG implementers at the national and sub national levels, and maximizes the efficiency and effectiveness of USG resources.

Innovative, evidence-based solutions: PEPFAR continually innovates to identify more effective and efficient programming modalities to achieve treatment saturation goals. Where these innovations are proven, the program aims to scale them to priority sites. The table below describes quarterly monitoring of some of the innovative, evidence-based solutions that PEPFAR will adopt and/or scale up in COP18.

Table 4.3.1 Quarterly Monitoring of Strategic Policy Changes on Program Implementation

	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FY19 Q1
Percent of sites with extended clinic hours, evening and weekend*	N/A				
Percent of sites with index testing services **a: Family Referral Slips** **b: VAPN**	a: 0% b: 5%				
Percent of sites with self-testing available	0%				
Percent of sites offering same day ART initiation	100%				

*PEPFAR will begin reporting in Q2

This table reflects COP18 interventions that will be taken to scale immediately in FY18 – pending policy support – so that in FY19 PEPFAR is perfecting implementation of these key interventions. PEPFAR will ensure all implementing partners make the needed strategic shifts in program implementation immediately with the expectation of site level roll-out to 100% by the end of FY18.

Partner Performance Management: In FY18, PEPFAR Malawi demonstrated its active partner performance management approach. Part of this approach focused on sharing promising practices, improving coordination and collaboration among implementers at national and sub-national levels and maximizing efficiencies of USG resources. Partner management is continuous. PEPFAR actively monitors specific priority or low performing sites on a weekly basis (for example, weekly data shared for Queen Elizabeth Central Hospital). Site visits and data reviews are monthly. All partners have quarterly financial and program reviews, participate in POART preparations and follow-up, and receive SIMS visits. PEPFAR also engages at the district level with stakeholders. PEPFAR set a new threshold for poor performance defined as less than 60% attainment of quarterly treatment targets for **four consecutive quarters**. Remediation is provided to the partner throughout, but **failure to improve performance after four quarters** triggers a review and interagency remedial action, including potential transition to a higher-performing service provider, to address the performance problems, while minimizing service disruption and cost.

USG agreement officer technical representative (AOTR), activity managers and project officers will work closely with implementers to develop work plans and ensure activities reflect COP18 strategic objectives and approaches.

To ensure activities and interventions are implemented with fidelity, partner performance and activity implementation (both site-level and above site) will be closely monitored through regular meetings, site-level analysis and sharing of best practices, scale up of quality improvement approaches to address critical bottlenecks, and SIMS and non-SIMS site visits. PEPFAR Malawi will implement the Quality Management for Epidemic Control (QMEC) approach in the COP18 guidance to understand critical bottlenecks and take remedial action in a timely manner. Implementers will train program staff and site-level service providers on data use to enable timely course correction. USG will also support quarterly district-level program reviews to share best practices.

Table 4.3.2 PEPFAR Malawi Partner Management Approach and Performance Thresholds

Interagency Approach & Expectations: Active management of all implementers with data driven dialogue, learning and corrective actions:

- **Share promising practices** across and among implementers
- **Ensure coordination & collaboration** among USG implementers at the national and sub national levels
- **Maximize efficiency & effectiveness** of USG resources

Weekly	*Monthly*	*Quarterly*
Implementer engagement, active monitoring	Site visits (interagency /inclusive) to high/low performing implementers	Financial Reconciliations of Accruals, POART, Stakeholder Engagement, SIMS, District-Level Engagement (DMT)

Poor Performance

Definition: Not reaching 60% of quarterly treatment targets in acceleration districts
Action: Robust programmatic and administrative remediation by managing agency
Interagency Engagement & Change Management:

- Following 4 consecutive quarters of poor performance, consideration of shifts from low to high performers
- Informed by interagency recommendations to minimize service disruption and cost

4.4. Commodities

The majority of key HIV/AIDS commodities (over 90%) are procured through the Global Fund grant. This is managed effectively (with support from PEPFAR-funded technical assistance) providing consistent availability of commodities. In COP17, PEPFAR supported procurement of pediatric ARVs including Lopinavir/ritonavir pellets utilizing ACT initiative resources committed in the prior year. Malawi will transition to TLD from January 2019 after the pilot beginning mid-2018, as TLD is delivered and existing TLE stocks are depleted.

PEPFAR will minimize expiries and wastage throughout the TLD transition, closely monitoring stock availability of both legacy ARVs and TLD to avoid stock outs and overstock. The Global Fund has planned and budgeted for TLD orders. At the time of submission of this report, PEPFAR Malawi learned that the production line Mylan is using for most of the TLD supply is not FDA approved. As all of the TLD for Malawi is procured through Global Fund, PEPFAR Malawi follow this situation very closely. PEPFAR Malawi will have another conversation with Global Fund to determine what delay, if any, there could be for Malawi.

In COP17, PEPFAR also provided additional resources for procurement of VMMC commodities, laboratory commodities, including viral load reagents, and will procure around 200,000 Oraquick HIV self-test kits. In COP18, PEPFAR will provide additional resources for VMMC commodities ($2,906,740), laboratory commodities such as GeneXpert test cartridges ($287,000), and Oraquick HIV self-test kits ($450,000). USAID's Central Commodity Fund will continue fund purchase of the country's lubricant needs, socially marketed condoms and female condoms to prevent gaps in condom supplies

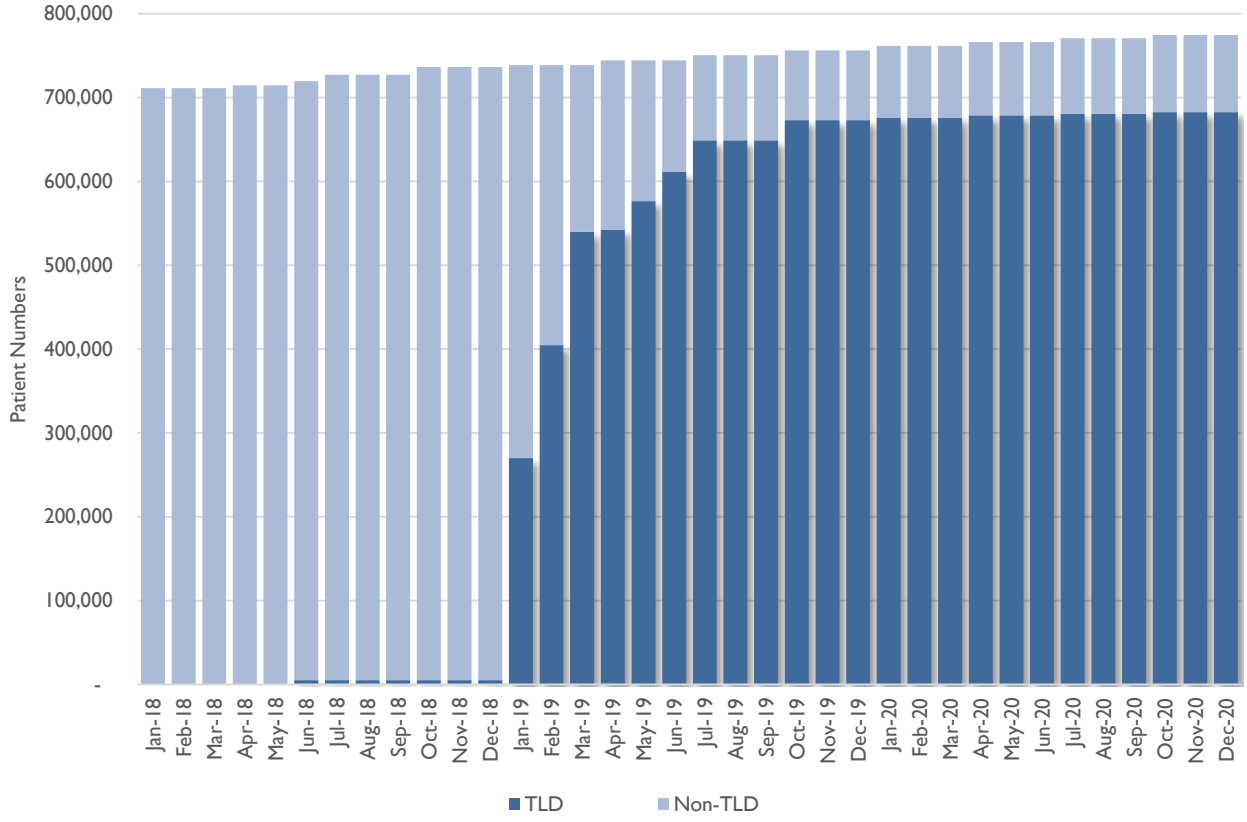
The current forecasts indicate sufficient resources for ARVs and rapid test kits until the end of FY19, including buffer stock.

TLD Transition: Malawi continues to lead in implementing innovative approaches in the management of HIV infection. In December 2017, the Ministry of Health endorsed TLD as the preferred first-line ART following recommendations from PEPFAR and other global partners. The upcoming 2018 Malawi guidelines for management of HIV stipulate that TLD will be offered to:

- Newly diagnosed HIV infected patients initiating ART
- PLHIV on first-line ART (TLE or its alternative)
- Pregnant women and TB patients. TB patients will receive an extra 50mg DTG

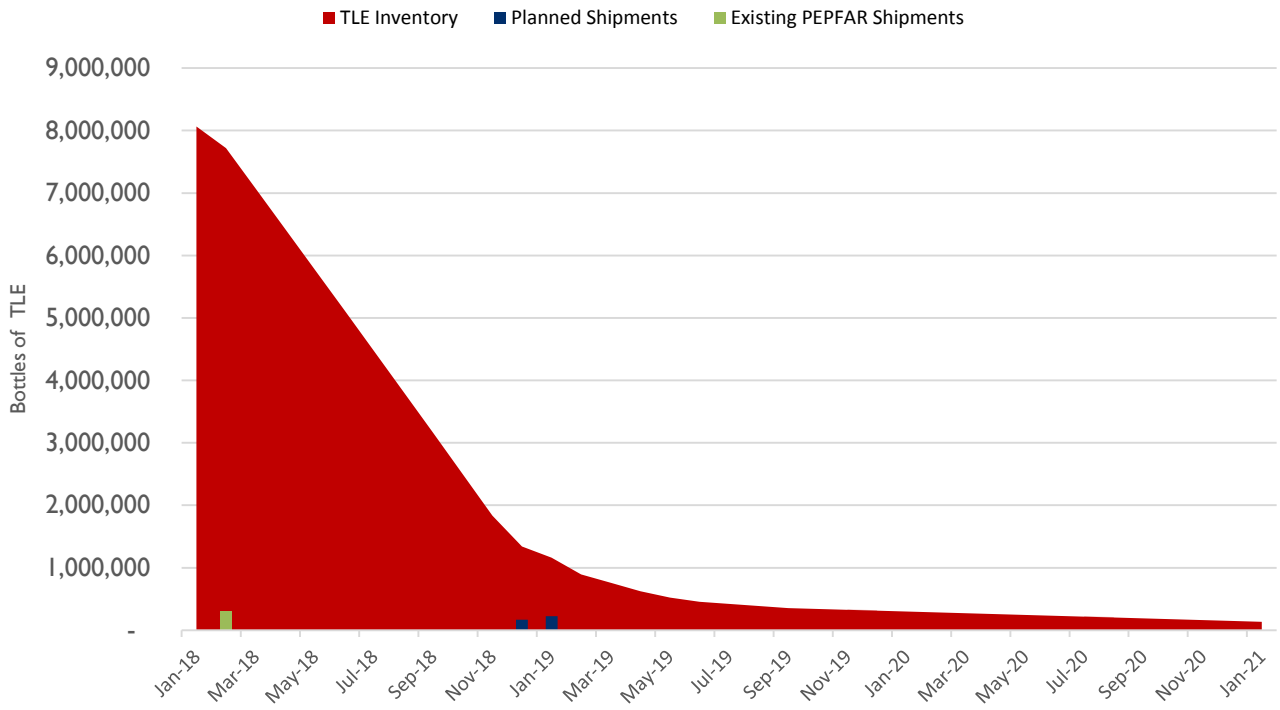
In a phased approach, Malawi will put the first patient on TLD in June 2018. It is expected that less than 5,000 PLHIV will be put on TLD between June and December 2018 after which it will scale-up to transition over 98% of the patient population from legacy ARVs to TLD by July 2019 (Figure 4.4.1). Our commodities forecast indicates that between July and December 2018, Malawi will build up enough stocks to implement the scale-up beginning January 2019. This forecast also demonstrates that TLE (and other legacy ARVs) stocks will decrease at steady rate to pave way for TLD and avoid legacy ARVs wastage at the same time (Figure 4.4.2).

Figure 4.4.1 Number of patients of TLD and all other regimens in aggregate



Malawi also takes TLD introduction as an opportunity to promote viral load testing, results delivery, improved clinical decision making and patient literacy. PEPAR is eager to work with other stakeholders to develop a transformative approach to patient centered care that harnesses the pivotal transition to TLD to empower ART patients to demand viral load results as a means of leading in their own disease management. This initiative (still under discussion) will employ resources across a public-private partnership with organization such as BMGF, the Global Fund, UNAIDS, PEPFAR, Civil Society and the Government of Malawi.

Figure 4.4.2 Projected TLE Stock in Malawi



4.5 Collaboration, Integration and Monitoring

The PEPFAR Management Team, with leadership representation from the PEPFAR Coordination Office and USG agencies, is the main decision-making body and meets frequently with the Deputy Chief of Mission and Ambassador. Five interagency TWGs serve as fora for coordination, priority setting, strategy development, and performance management across PEPFAR implementing agencies.

PEPFAR Malawi works closely with the MOH (Department of HIV and AIDS) through participation in various national technical working groups and direct engagement with key MOH staff to provide technical support in the review of policy and national guidelines. In FY17, this collaboration and engagement, which spans across the clinical cascade, resulted in the development of national linkages standard operating procedure and monitoring tools, standardized registers for viral load monitoring, capacity building for HIV testing services, development of strategies for elimination of mother to child transmission and pediatric care and treatment, differentiated service delivery models and TB/HIV. PEPFAR also provided technical assistance for the roll out of the national IPT policy. PEPFAR continues to support GOM national quarterly supportive supervision site visits, resulting in site level data validation and physical inventories of essential HIV commodities to inform quantification and forecasting, and prevent stock outs.

In COP18, PEPFAR and implementers will continue coordinating with the Ministry of Health to finalize national guidelines and scale-up evidence-based Differentiated Service Delivery (DSD) models, active index testing, self-test screening, and PrEP for FSW and high-risk AGYW in PEPFAR scale up SNUs. Similarly, PEPFAR Malawi will continue working with the MOH Planning Division as well as HIV/AIDS Departments and Ministry of Finance for smooth implementation of infrastructure and HRH initiatives in Lilongwe, Blantyre and Zomba using COP16 supplemental funding. The PEPFAR team closely monitors Global Fund grant implementation for TB/HIV to ensure PEPFAR and Global Fund priorities are well aligned. PEPFAR also engages with district level management staff to ensure performance concerns are addressed collaboratively.

In FY17, PEPFAR Malawi consistently engaged MOH, Civil Society and Faith-Based Organizations to review progress towards COP targets. As part of COP18 development, PEPFAR Malawi held multiple consultations with stakeholders, including Ministry of Health, NAC, Civil Society and Faith-Based Organizations, bilateral and multilateral development partners, and implementers to set COP priorities. PEPFAR will maintain this critical platform for dialogue and reflection throughout FY18 and FY19 implementation.

As described earlier, Partner Performance Management (PPM) is central to PEPFAR Malawi's goal of reaching saturation and achieving epidemic control. The interagency PEPFAR team has developed a framework for PPM which includes monthly performance reviews with implementers, routine site-level analyses of MER data, and implementation of remediation plans for underperforming SNUs and sites.

During FY17, the PEPFAR team began collecting data not currently collected through the national M&E system to report actual age/sex disaggregated data from five priority districts and select urban Lilongwe sites. Implementers are required to collect data that demonstrates the type of impact a particular intervention/set of interventions are having, and use that information to make timely programmatic decisions.

In COP18, PEPFAR TWGs will organize interagency partner meetings at least quarterly to provide a platform for sharing best practices for wider application in priority SNUs. Current efforts include implementer engagement in development of VAPN testing standard operating procedures, M&E tools, and training materials as well as the development of SOPs and data collection tools for the manual disaggregated data collection exercise in 5.5 districts.

Shortage of skilled human resources for health continues to be a challenge affecting all aspects of the clinical cascade. In COP16, PEPFAR received $1.8 million in supplemental funding to implement a health care worker salary support intervention to address the excessive HRH shortages in PEPFAR supported sites in Lilongwe, Blantyre, and Zomba districts. To support the smooth transition to the Test and Start policy, PEPFAR programmed resources to recruit approximately 462 HIV testing services and ART providers (nurses, clinicians, and pharmacy and laboratory staff). PEPFAR will support the health workers, who the GOM employs, for a period of

three years. In COP17, PEPFAR increased its support for HRH through implementation of a 480 person HRH surge in the five acceleration districts. Through COP17 HRH surge support, PEPFAR continues progress towards hiring goals of 120 VMMC providers and 360 ART providers in the five acceleration districts.

In addition to these HRH hiring initiatives, PEPFAR implementers continue to recruit HDAs. Since COP15, PEPFAR has supported the recruitment, training, and deployment of HDAs, in collaboration with the Ministry of Health, as a dedicated cadre for HIV testing services and collection of EID and viral load samples. As part of this effort, PEPFAR deployed 1,159 HDAs at priority sites. The need for HDAs is not yet fully met. In some sites, however, testing space is constrained by infrastructure limitations and additional HDAs may not be fully utilized. PEPFAR continues to work with implementers to rationalize HDA allocation based on available staffing and infrastructure at each site. PEPFAR also supports healthcare workers across the clinical cascade for ART services at each site, including Clinical Officers, Nurses, and Community Health Workers, as well as lay cadres such as expert clients, a cadre adopted by MOH for client retention and linkage to HIV services at the facility level. PEPFAR support for expert clients builds on more than five years of experience with and refinements to the cadre through site-level learnings.

Figure 4.5.1 HRH Distribution by Acceleration, Scale-Up, and Sustained Districts

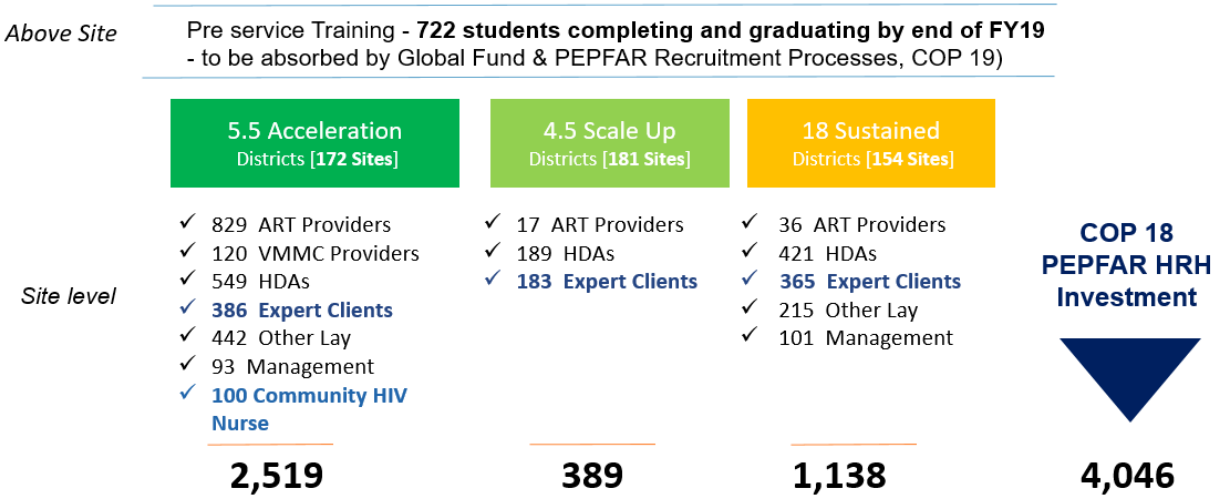


Figure 4.5.2 PEPFAR-Supported Lay Cadre Position Descriptions

Cadre Type	Cadre Title	Base	Minimum Qualification	Roles
HIV Testing	- HIV Diagnostic Assistants (HDAs)	Facility	MSCE (Secondary School Certificate)	- HIV, EID, syphilis testing and VL assessment - DBS sample collection results follow up - Data collection - Client Linkage
Community Health	- Community Health Workers - Health Surveillance Assistants (HSAs)	Facility & Community	MSCE	- HIV, EID, syphilis testing and VL assessment - DBS sample collection results follow up - Data collection - Client Linkage - Appointment scheduling & defaulter tracing
Psychosocial Support & Adherence	- Expert Clients - Mentor Mothers (PMTCT Expert Clients)	Facility & Community	**Expert Client:** Secondary School mid-point certificate (JSCE); motivated PLHIV **Mentor Mothers:** Motivated female PLHIV, some literacy, no academic requirement	- Pre-enrollment support - Appointment scheduling & Defaulter tracing - Adherence counselling - VL screening - Data collection
Linkage & Defaulter Tracing	- Linkage Facilitators - Community Linkage Facilitators - Patient Tracers - Community Mobilizers - Peer Facilitators (youth) - Patient Attendants - Cascade Monitors (facility only)	Facility & Community	MSCE	- Recruitment & bi-directional referral of priority populations (including peer tracing for peer facilitators) - Defaulter tracing - Index testing referral - TB contact investigation - Demand creation (community mobilizers)
Key Populations Outreach	- Peer Educator - Peer Navigator - Outreach Worker - Community Linkage	Community	MSCE	- FSW 1:1 and group counseling/mentoring sessions - Health service bi-directional referral - Distribution of FP/prevention commodities

	Facilitator			- HIV+ peer tracking and role modeling (Peer Navigator) - Hotspot outreach and referral (Outreach Worker only) - Post-test counselling, home visits, demand creation, and high risk site identification (Community Linkage Facilitator only)
Community Mobilization & Linkages (Including DREAMS)	- Community Engagement Facilitator - Peer Mentor - Community Resource Person (AGYW) - Mentor Mother	Community	MSCE	- **Community Engagement Facilitator:** DREAMS Recruitment and enrollment, stakeholder mobilization, bi-directional referral, HIV testing outreach - **Peer Mentor**: DREAMS referral forms, community-facility linkages - **Community Resource Person:** Lead GoGirls Clubs, SRH and GBV prevention awareness campaigns - **Mentor Mother:** Facilitate DREAMS club activities, mentorship
OVC Support	- Household Community Resource Person - VSL Facilitators - Community case worker	Community	MSCE, except for VSL Facilitator (Primary School Completion required)	- Recruitment and enrollment of OVC - Case management services - VSL club leadership for OVC household and AGYW (VSL Facilitators)
VMMC Outreach	- Male Champion	Community	MSCE	- Recruit peers for small group risk sessions - Promote VMMC and HIV testing - Assist linkage of HIV+ men

Ensuring HRH Allocation Reflects Site-Level Needs: With these large investments in HRH, PEPFAR has seen improved results in testing, retention, and linkage results over the years; however, continued focus must remain on the return on investment, including HRH impact on HTS_POS indicators. In COP18, PEPFAR will continue to maintain COP16 and COP17 HRH salary support, ensuring that existing HRH is "right-sized" and rationalized on a site by site basis to optimize impact. Through site-level program visits, routine semi-annual data collection and analysis using the USG HRH site-level monitoring tool (the Direct Service Delivery audit tool), and triangulation with program level results, PEPFAR implementers will continue to review and assess HRH allocation, workload, and challenges against HRH needs at site level, including the review and documentation of external factors impacting achievement goals. PEPFAR implementers will make timely adjustments to site level HRH allocation, job functions, and monitoring towards the ongoing alignment of HRH investments to PEPFAR results.

Health care worker availability is essential for service delivery package implementation at site level. In COP18, PEPFAR will ensure that each service package developed for a specific population group has a corresponding and clear HRH strategy to deliver services and achieve results. Critical

packages to be implemented in COP18 across the cascade include saturation of PITC, implementation of VAPN, implementation of pharmacy fast track, test and start, strengthened viral load monitoring, strengthened community outreach, and targeting of priority and key populations. Each of these interventions will require specific and dedicated HRH that can efficiently and effectively deliver the services. In COP18, PEPFAR will continue to increase HRH allocation in the 5 acceleration districts based on site level needs and will maintain and monitor HRH allocation and results in scale up and sustained districts. PEPFAR will routinely monitor the existing 1,159 PEPFAR-supported HDAs and 942 PEPFAR-supported ART providers on a regular basis for impact towards TX_RET, TX_CURR, TX-NEW, and viral load coverage results. PEPFAR will also continue to monitor the existing 1,591 lay cadre workers (Expert Clients and others) on a regular basis, particularly for impact on retention and linkage results.

In accordance with Ministry of Health and Civil Society recommendations for COP18, PEPFAR will recruit approximately 100 community nurses support implementation of VAPN and community ART initiation. This cadre will be responsible for providing VAPN services at facility level, including index case identification and tracking, as well as self-testing outreach, PEPFAR will closely monitor effectiveness of this cadre to ensure efficiency gains and greater impact on HTS_ POS and TX_RET results. PEPFAR implementers will assess quality of services provided by Community HIV Nurses on a quarterly basis and develop remediation plans to address challenges encountered. PEPFAR will also ensure high quality VAPN services through provision of in-service trainings and mentoring for Community HIV Nurses.

In addition to HRH support, PEPFAR continues to address facility level bottlenecks through infrastructure improvements and to meet the needs for a rapidly growing population in need of quality, patient-centered HIV testing and treatment services. In FY17, PEPFAR Malawi and its partners supported infrastructure improvement through renovations and use of pre-fabricated approaches, such as pharmacy-in-a-box. HRH and infrastructure investments will use resources from the COP16 supplemental budget with installation of 82 HTC/ART pre-fabricated units at an estimated 57 sites and 15 pharmacy-in-a-box units in 15 sites by December 2018. To address a key capacity gap in Blantyre, PEPFAR brought the Umodzi Family Centre in Blantyre to fruition in FY17 – more than doubling the ART capacity at Queen Elizabeth Central Hospital from twelve to twenty-four thousand.

In COP18, viral load monitoring and EID will be the focus areas for lab activities, including strengthening sample transportation systems, building the capacity of labs for VL/EID tests, QA/QI for quality control, and implementing results reporting Electronic Medical Records Systems to reduce the turnaround time and enable timely clinical decision making. In accordance with national guidelines, PEPFAR works to ensure that PLHIV receive a viral load six and 24 months, and all exposed infants are tested at two and 24 months.

PEPFAR Malawi implements various differentiated service delivery models, including: three month ART scripting for patients adherent and stable on ART; integrated TB/HIV clinics; Antenatal care/ART clinics; teen clubs; and Community ART Groups (CAGs). Service delivery

trends continue task shifting towards nurse, who play a key role in ART initiation and follow up. Lay cadres (such as Expert Clients) play a leading role in treatment literacy, adherence counseling, and active defaulter tracing – as well as directly linking newly diagnosed PLHIV to same-day treatment initiation. PEPFAR implementing partners are currently (FY18) scaling up new models of differentiated service delivery (e.g., fast-track ARV refill and nurse-led community ART distribution) - especially in acceleration districts. In COP18, PEPFAR will continue efforts towards implementation fidelity of established differentiated service delivery to achieve scale up in acceleration districts of differentiated service delivery through site-level monitoring and HRH rationalization. In COP18, PEPFAR will also continue monitoring outcomes of six month ART scripting to augment client-centered approaches for retention.

4.6 Targets for scale-up locations and populations

Table 4.6.1 Entry Streams for Adults and Pediatrics Newly Initiating ART Patients in Scale-up Districts

Entry Streams for ART Enrollment	Tested for HIV (APR FY19) *HTS_TST*	Newly Identified Positive (APR FY19) *HTS_TST_POS*	Newly Initiated on ART (APR FY 19) *TX_NEW*
Total Men	839,741	51,297	60,369
Total Women	675,096	36,346	42,411
Total Children (<15)	304,551	5,654	5,712
Adults			
TB Patients	*5,475*	610	796
Pregnant Women	*292,751*	11,517	10,910
VMMC clients	*137,255*	1,028	823
Key populations	*5,634*	1,467	1,320*
Priority Populations	*4647***	3,002	2702*
Other Testing	*208,126*	125,070	119,211
Previously diagnosed and/or in care	*N/A*	16,884	15,195
Pediatrics (<15)			
HIV Exposed Infants	*28,678*	645	613
Other pediatric testing	*275,873*	5,009	5,099

*For key populations and priority populations, there are no TX_NEW targets defined in the data pack. These targets were calculated based on the assumption of 90% of HTS_TST_POS being newly initiated.

** For priority populations, PEPFAR used the mobile testing entry point from the data pack as mobile testing is targeted to priority populations.

Table 4.6.2 VMMC Coverage and Targets by Age Bracket in Scale-up Districts					
SNU	**Target Populations**	**Population Size Estimate (SNUs)**	**Current Coverage (APR 17)**	***VMMC_CIRC* (in FY18)**	**Expected Coverage (in FY19)**
Lilongwe	15-29 yrs. old	390,717	**10%**	35,000	47%
Blantyre	15-29 yrs. old	179,548	**16%**	28,673	47%
Zomba	15-29 yrs. old	101,070	**12%**	2,484	41%
Thyolo	15-29 yrs. old	98,340	**11%**	9,588	48%
Mulanje	15-29 yrs. old	85,724	**9%**	3,500	19%
Chikwawa	15-29 yrs. old	87,263	**10%**	11,479	39%
Phalombe	15-29 yrs. old	60,516	**12%**	5,355	31%
Military _SNU	15-29 yrs. old			**5,048**	
	Total/Average				**39%**

Table 4.6.3 Target Populations for Prevention Interventions to Facilitate Epidemic Control				
PEPFAR Scale Up Districts	**KP Population Size Estimate**	**KP Coverage Goal (in FY19)**	**KP FY19 Target**	**PP_PREV FY19 Target**
Blantyre				
FSW	3,151	104%	3,283	49679
MSM	688	168%	1,159	
TG	-	-	100	
Prisons	-	-	1997	
Lilongwe				
FSW	3,133	86%	2,682	7379
MSM	854	151%	1,286	
TG	-	-	95	
Prisons	-	-	2980	
Mzimba North/South	(North)	(North)		
FSW	1,587	103%	2,640	1928
MSM	741	113%	958	
TG	-	-	64	
Prisons	-	-	1283	
Thyolo				
FSW	--		500	6520
MSM			136	
Prisons			718	
Mangochi				
FSW	1024	320%	3281	37999
MSM	529	102%	539	

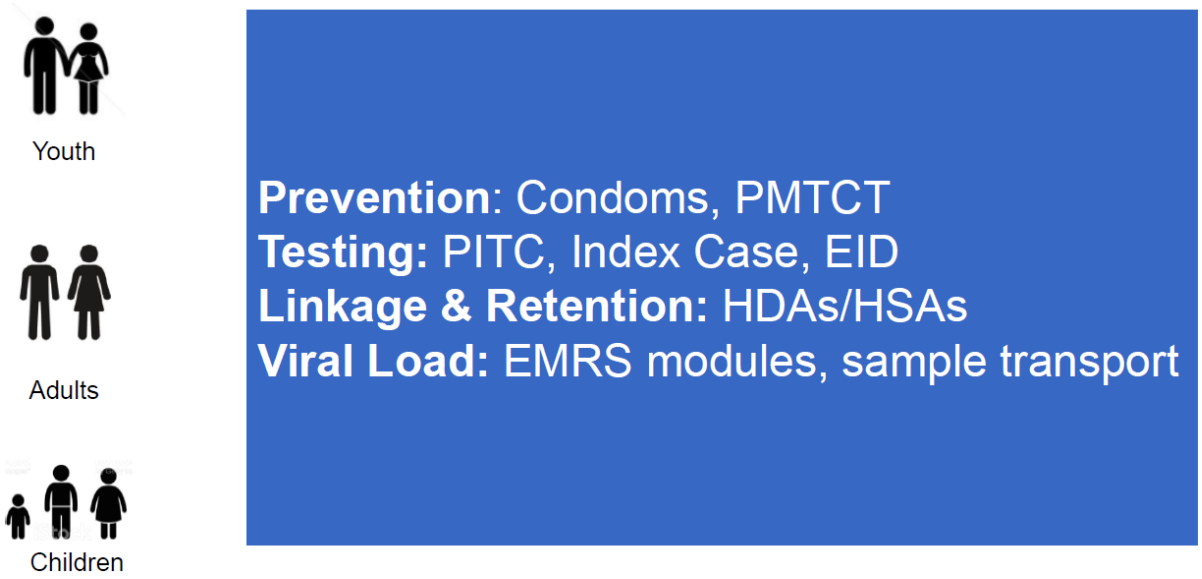
TG	-	-	40	
Zomba				
FSW	1038	122%	1268	74634
Machinga				
FSW	867	103%	892	73899
Mulanje				
	--	-	-	14978
Chikwawa				
	-	-	-	19089
Phalombe				
	-	-	-	**5335**
Sustained District Targets	**KP Population Size Estimate**	**KP Coverage Goal (in FY19)**	**KP FY19 Target**	**PP_PREV FY19 Target[=]**
Prisons	-	-	1593	4375
Military	-	-	-	4153
TOTALS			**KP Prev**	**PP Prev**
FSW	(10,800) in six districts	100% in six districts	14,546	2,999,968
MSM	(3023) in six districts	-	4,058	
TG	-	-	299	
Prisons			8571	

Table 4.6.4 Targets for OVC and Linkages to HIV Services

SNU	Estimated # of Orphans and Vulnerable Children	Target # of active OVC (FY19Target)	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY19 Target)
		OVC_SERV	OVC*
Lilongwe	**211,892**	**13,941**	**10,423**
Blantyre	**110,308**	**13,570**	**6,748**
Zomba	**73,029**	**30,985**	**16,484**
Mangochi	**99,537**	**22,772**	**13,413**
Mulanje	**50,797**	**6,588**	**3,254**
Machinga	**60,223**	**21,740**	**11,566**
Chikwawa	**50,222**	**11,312**	**6,878**
Phalombe	**35,802**	**5,582**	**3,076**
Mzimba	**76,353**	**19**	**16**
Dedza	**64,044**	**19**	**16**
Balaka	**40151**	**19**	**16**
Total	**872,358**	**126,547**	**71,890**

5.0 Program Activities for Epidemic Control in Attained and Sustained Locations and Populations

Figure 5.1.1 COP18 PEPFAR Malawi Epidemic Control Plan to Sustain the Response



5.1 COP18 Programmatic Priorities

Men and Women

COP18 interventions to reach men and women living with HIV include the provision of PITC and passive index testing. All newly identified positive men and women will be linked to ART services for early ART initiation. PEPFAR will collect and analyze program data, perform routine supportive supervision through the national program, and ensure implementers conduct targeted clinical mentoring at sites as needed. Support will include optimized viral load monitoring through sample transportation systems and analysis of viral cascade data.

Children

In sustained districts, PEPFAR will support PITC for all well-child outreach clinics. PEPFAR will support HIV case identification among children and adolescents seeking services at health facilities in the sustained districts using existing staff. Family referral slips will continue as a strategy for passive index testing. PEPFAR will support the roll out of a highly effective, pediatric-friendly first line regimen (Lopinavir/Ritonavir). For adolescents, PEPFAR will maintain existing teen clubs and aim for transition to MoH under the current Global Fund portfolio that has adopted support to teen clubs. PEPFAR will continue support for viral load and EID testing.

TB/HIV

COP18 implementation in sustained districts will focus on TB case-finding in HIV settings, HIV case-finding among presumptive and confirmed TB cases, and ensuring that co-infected patients are initiated on TB and HIV treatment early. At the site level, PEPFAR will support HIV testing for all presumptive and confirmed TB cases. For co-infected patients, PEPFAR will promote early ART and TB treatment initiation, including fast-tracking HIV positive TB patients for initiation of ART, and provide an extra dose of Dolutegravir (active ingredient in TLD) to optimize HIV treatment. PEPFAR will also support optimized GeneXpert use through real-time tracking and analysis of use data. To strengthen prevention, PEPFAR will support active monitoring of isoniazid preventive therapy (IPT) implementation in Chiradzulu and strengthen TB infection control in hospital settings.

Sustained districts will benefit from technical advisors seconded to the National TB Program charged to help strengthen implementation of collaborative TB/HIV activities, including diagnosis, management, prevention, commodity management, and monitoring program performance. PEPFAR will support implementation of a quality assurance program for TB diagnostic platforms focusing on district and other high-volume hospitals.

Prevention

PEPFAR will support VMMC service delivery through campaigns (no permanent mobile teams or static sites) in Chiradzulu, a sustained district and priority VMMC district for PEPFAR support. Under COP18, prisoners will be reached with HIV testing and linkage to treatment services. PEPFAR will not support other community-level programming (such as OVC, comprehensive services for key populations through drop in centers, and targeted AGYW prevention activities) in sustained districts, except through the work of Peace Corps Volunteers in their communities.

5.2 Targets for attained and sustained locations and populations

Table 5.2.1 Expected Beneficiary Volume Receiving Minimum Package of Services in Attained Support Districts*			
Attained Support Volume by Group		**Expected result APR 18**	**Expected result APR 19**
HIV testing (all populations)	*HTS_TST*	**0**	**0**
HIV positives (all populations)	*HTS_TST_POS*	**0**	**0**
Treatment new	*TX_NEW*	**0**	**0**
Current on ART	*TX_CURR*	**0**	**0**
OVC	*OVC_SERV*	**0**	**0**
Key populations	*KP_PREV*	**0**	**0**

*Note: At this time, no Malawi SNUs are categorized as attained.

Table 5.2.2 Expected Beneficiary Volume Receiving Minimum Package of Services in Sustained Support Districts			
Sustained Support Volume by Group		**Expected result APR 18**	**Expected result APR 19**
HIV testing in PMTCT sites	*PMTCT_STAT*	**179,795**	**206,045**
HTS (only sustained ART sites in FY17)	*HTS_TST/HTS_TST_POS*	**899,347/31,740**	**346,116/24391**
Current on ART	*TX_CURR*	**219,339**	**244,884**
OVC	*OVC_SERV*	**38**	**38**

Table 5.2.3 TB/HIV Cascade Targets - Sustained Districts							
Variable	**TB Notifications**	→	**TB_STAT**	→	**TB_STAT_POS**	→	**TB_ART**
COP18 Target	4,560	→	4,512	→	2,021	→	1,83

5.3 Establishing service packages to meet targets in attained and sustained districts

Men and Women

For sustained districts, PEPFAR will support the national program to offer index testing and PITC at key entry points. PEPFAR will promote index testing at facility level through the current standard of care (passive referral), while reducing mobile testing. At the site level, COP18 will support sample transportation for EID and viral load monitoring; and support logistics for the national program's quarterly supervision visits. Data validated and collected at each site during supervision visits will ensure compliance with minimum quality standards and identification of sites in need of urgent clinical mentoring. Standard operating procedures, on-the-job training, mentorship, and supportive supervision will help optimize viral load coverage.

Children

For children, PEPFAR will ensure maintenance of gains realized in the sustained districts. PEPFAR will support routine pediatric HIV testing, effective pediatric friendly treatment, and attainment of viral suppression for children on ART.

Table 5.3.1: COP18 Package of services for children and adolescents in sustained districts

Program Area	Key interventions
First '90'	- Maintain PITC in all high yield service delivery points (Pediatric wards, Nutrition Rehabilitation Units, etc.) utilizing the existing HTS Providers (HSAs and/or HDAs). There will be no further expansion. - Maintain support for infant early virologic testing - Use of family referral slips as a strategy for index case testing at facility and community level - Maintain existing linkage systems; referral tools and bi-directional facility-community referrals
Second '90'	- Targeted remedial district level clinical mentoring services - Support the roll out Lopinavir/Ritonavir pellets for newly diagnosed HIV positive children less than three years in all the facilities
Third '90'	- Continue provision of viral load sample transportation services - Maintain standardized VL sample log and high VL registers - Targeted clinical mentoring services to support clinical decision making in case of high VL
Adolescent Treatment	- Support for already established Teen Clubs for differentiated adolescent care until fully transitioned to MOH - Provide necessary technical support to MOH as they scale up Teen Club model in sustained Districts using Global Fund resources - Provide Teen support hotline services

6.0 Program Support Necessary to Achieve Sustained Epidemic Control

Malawi's resource constrained health system remains one of the continuing systems barriers to successful program implementation and the achievement of HIV epidemic control. While PEPFAR, the GOM, and other partners have made progress to address key health system barriers affecting implementation in FY17 – including the rapid scale up of Human Resources for Health (HRH) support, laboratory upgrades, and accelerated roll-out of the EMRS – key barriers persist. For COP18, PEPFAR engaged in a systems capacity gap analysis through the triangulation of MER data, SID (2017), and SIMS assessment results. Strategic above site/above service delivery activities in COP18 (reflected in Table 6, Appendix C) will achieve systemic barrier reduction of the following identified gaps:

1. Weak information systems to efficiently collect accurate, real-time epidemiological and health data
2. Inadequate HRH to implement quality targeted HIV service delivery at the site and community level
3. Infrastructure limitations restrict facility capacity to provide quality HIV services
4. Sub-optimal implementation of lab mechanisms to effectively and efficiently utilize lab resources and inadequate laboratory infrastructure to meet viral load scale-up goals for COP18
5. Unfavorable policy environment to implement innovative, evidence-based HIV interventions across the cascade of treatment and prevention
6. Limited host country institutional capacity for evidence-based management of HIV program
7. Limited commodity management and storage capacity at national, district, and facility levels

Strategic program support activities to address the above key systems barriers are outlined in the sub-sections that follow:

6.1 Weak Information Systems to efficiently collect accurate, real-time epidemiological and health data

To improve program monitoring and allow for rapid strategic shifts at the district and site level, successful program implementation requires near real time age- and sex- disaggregated information for key testing and treatment indicators to facilitate weekly, monthly, and quarterly management shifts. Previously, PEPFAR Malawi used available data from MOH or published studies to estimate age- and sex disaggregation – a practice from which PEPFAR has shifted away to improve near real-time response to the epidemic. The long-term approach to achieving

availability of near real-time age- and sex-disaggregated data is to continue building sustainable EMR systems.[19]

PEPFAR continues longstanding support for the Ministry of Health and indigenous implementer, Baobab Health Trust (BHT), to build sustainable EMRS to achieve quality ART services and age/sex disaggregated reporting. The EMRS system comprises hardware support at the facility level coupled with modules for ART, HIV testing services, antenatal care, and laboratory information systems. Through COP17 funding, PEPFAR will scale up EMRS from 120 to 270 facilities by March 2019 to support the delivery of quality HIV services and scale up age/sex disaggregated reporting capabilities.

In COP18, PEFPAR will continue rapid EMRS implementation with a focus on the scale-up districts, especially the accelerations districts – reaching an additional 50 facilities with "right-sized" EMRS installations in outpatient departments/ART clinics, HIV testing services, antenatal care clinic. COP18 EMRS installation will bring the total number of PEPFAR-supported EMRS to 320 sites throughout the country. Accelerated EMRS expansion is costed by site volume (larger sites requiring additional workstations) according to the following categorizations: high volume (alive and on ART above 1300); medium volume (alive and on ART 750-1300); small sites (alive and on ART 500-750); and BHT Lite (alive and on ART less than 500). For improved data use and efficiency, COP18 will explore the scale up of Optical Character Recognition (OCR) technology that utilizes scanning technology for paper records and translates into data. In addition, there is a possibility of collaboration with MOH, National Registration Bureau (NRB), and other stakeholders (e.g., UNDP) to scale-up solar powered Biometric Registration Systems, which are designed to facilitate birth, death, and national registration, but repurposed to facilitate capture of health-related service data (including ART services) in BHT Lite facilities.

In addition to facility EMRS installation, PEPFAR will reach ten labs with the laboratory information management EMRS in COP18. Within the context of key populations programming, PEPFAR will continue to utilize a DHIS2 based unique identifier system to track the clinical cascade and prevention and referral services provided to KP clients, including periodic repeat testing, linkage to treatment, and referral to other supportive services. The system will facilitate real time monitoring of the implementation fidelity of a comprehensive service package for this critical population.

Working in collaboration with the NRB, Ministry of Health, and other multi-lateral development partners, PEPFAR is exploring how to leverage the newly rolled-out Biometric Registration Systems with existing and developing systems, including EMRS. Alongside the NRB and Ministry of Health, COP18 will establish Birth and Death Surveillance Systems in ten districts and ensure interoperability with the National identification system. COP18 will achieve training of 300 clinicians in medical certification of cause of death to improve implementation fidelity. As these

[19] Data Disaggregation Roadmap/ Action Plan FY17-FY19, PEFAR Malawi, 2017

systems continue to scale up, the Government of Malawi will possess real-time access to updated population size, improving demographic data accuracy and use for program, policy, and other national-level forecasting applications. Alongside BHT, UNDP, and NRB, PEPFAR will continue to work on National identification interoperability with key data systems throughout COP17 and into COP18.

In COP17, PEPFAR supported early implementation of a Recency Study to estimate HIV incidence and detect recent infection among pregnant AGYW in two DREAMS districts – Zomba and Machinga, with expansion in Lilongwe urban and Blantyre. In COP18, the scope of surveillance will broaden to include all 5.5 acceleration districts; populations beyond AGYW to monitor HIV incidence by age, sex, and geography; and all HIV testing service delivery points, including the antenatal clinic. In out years, if funding allows, PEPFAR plans further expansion of the routine HIV incidence surveillance system.

In COP18 PEPFAR will support implementation of pregnancy registry and monitoring of birth outcomes. In COP17, Malawi began implementing birth defects surveillance to estimate prevalence of birth defects in sentinel sites and targeted four hospitals in Lilongwe, Blantyre, Mangochi, and Ntcheu for this surveillance. This study is also designed to examine the association of maternal use of ART and birth defects outcomes. In COP18 the protocol will be modified to include establishment of pregnancy registry and monitor birth outcomes as is required in transition plans for Dolutegravir. These data will inform treatment policy and guidelines.

In addition to the above data leveraging efforts, COP18 will continue to develop a Case-Based Surveillance system (CBS) to facilitate through a partnership with the International Training and Education Center for Health (I-TECH), Ministry of Health, and BHT. This CBS system will facilitate data access at national level and inform programmatic management and analyses. In capturing routinely collected data from existing systems (EMRS), in addition to the HIV Recency assay and mortality surveillance, CBS will generate data for an individual-level, de-identified longitudinal cohort. Such a cohort will allow for the tracking of sentinel events such as HIV diagnoses and ART initiations, as well as other individual-level health outcomes, providing robust surveillance on a real-time basis.

PEPFAR Malawi supports the Ministry of Health to monitor at regular intervals transmission and development of drug resistant HIV strains in people living with HIV. COP17 planned a study to monitor pretreatment drug resistance and acquired resistance in pediatric and adult populations at selected ART sites, to start in April 2018. COP18 will continue study support through sample analysis and drug resistance testing. With support from CDC headquarters, PEPFAR Malawi established HIV drug resistance testing in Malawi in COP17, which it plans to expand in COP18 to include expanded scope of testing samples that are failing on second line treatment. Currently Malawi sends samples to South Africa to determine whether patients failing on second line treatment should be transitioned to 3rd line. The costs of genotyping in South Africa is US$190

per sample and the country hopes to bring down this cost by half by testing the samples within the country.

Malawi has limited personnel that possess epidemiological skills to effectively monitor HIV programs. CDC introduced Field Epidemiology Training Programs (FETP) in 2016, a three month frontline in-service training to strengthen collection and analysis of epidemiological and surveillance data. This facilitates timely response to HIV program needs and diseases and events of public health importance. In COP18, CDC plans to train 60 more people in FETP.

6.2. Inadequate HRH to implement quality targeted HIV service delivery

Malawi is still regarded to have one of the most severe health workforce crises in Africa with the lowest physician-to-population ratio at 2:100,000 population and the second lowest nurse to population ratio 28:100,000.[20] Overall vacancy rate for HRH in the MOH is currently reported at 48% in public facilities and 51% in CHAM facilities.[21] Among the clinical cadres critical for service delivery, the pharmacy profession has the highest vacancy rate at 87% and clinicians have the lowest vacancy rate at 31%, while nurses are reported to have a 54% vacancy rate.[22] In 2015, Malawi instituted a hiring freeze for the civil service due to the national budget constraints. While lifting the hiring freeze is unlikely in the short term due to prevailing unfavorable macro-economic conditions, the MOH continues to hire with available resources, notably contributed through the Global Fund grants. The inability of MOH to recruit at required HCW-to-patient ratios for an extended period of time negatively affected availability and quality of service delivery across the clinical cascade.

Overall, poorly optimized HRH management systems and lacking enforcement of existing pre-service training, deployment, and retention policies further compounds the HRH barriers. However, new developments in the country promise to bring fresh change and improvements in overall HRH management. In early 2017, MOH decentralized HRH management to the district level and continues development of a new national HRH strategic plan for the period of 2018 - 2022. These developments present opportunities for the country and its partners to strengthen strategic direction for HRH planning, forecasting, and costing to avert a future crisis of HRH shortage. As outlined below, PEPFAR continues to engage with MOH in this space to ensure complementarity of PEPFAR support to national HRH priorities.

As outlined above, HRH challenges in Malawi span across health workforce planning, development, and management issues. Specific above site challenges that affect implementation of PEPFAR's HRH strategy include limited national level capacity to: adequately produce health

[20] EHRP 2019
[21] Draft HRH strategic plan 2018 -2022
[22] Draft HRH strategic plan 2018 -2022

care workers, plan and forecast for health care worker needs, and implement and monitor HRH strategic plans. These HRH challenges take place against a backdrop of a high burden of disease and contribute to a perpetual cycle of inadequate HRH at site level.

To address these challenges in COP18, PEPFAR Malawi will provide support on two broad above site HRH areas, including: providing short term technical assistance through implementer technical support to MOH HRH planning and monitoring processes; and provision of pre-service training scholarships to ongoing cohorts of HCW students

Provide short term Technical Assistance to MOH HR Directorate

In COP17, PEPFAR-funded implementing partner-provided short term technical assistance (TA) to the MOH Human Resources Directorate was instrumental in the development of the Malawi Government's HRH strategic plan and supported data collection and analysis, including critical vacancy analyses and forecasting. Similarly, implementer TA to the HR directorate fast-tracked development of the roadmap for the COP16 HCW salary support initiative, bringing district level and national level officials together to negotiate the terms for the salary support activity and ensure future sustainability. In COP18, implementing partners will provide the same short term technical support to the Human Resources Directorate to ensure implementation of key sections of the national HRH strategic plan and to ensure significant PEPFAR investments in HRH at site level are allocated and sustained through favorable strategic planning and monitoring. Critically, this short term technical support will ensure absorption plans for the COP16 HCW salary support are on track particularly focusing on aligning district and central level MOH HRH staff recruitment plans to ensure PEPFAR supported HCWs are fully absorbed in the MOH establishment. In conjunction with PEPFAR oversight, implementer-provided TA will ensure that HRH allocation at targets sides remains in line with PEPFAR targets and anticipated results.

Support for Pre-service Training

In COP17, PEPFAR continued to support cohorts of students in pre-service training, though not enrolling new students. 217 HCWs graduated in FY17 and 167 are expected to graduate in FY18. In COP18, under preservice training support, the PEPFAR scholarship program will continue to provide scholarships for 722 continuing students. PEPFAR will maintain support for pre-service training of Nurse Midwife Technicians (NMTs), Pharmacy Assistants (PAs), Medical Assistants (MAs), Lab Assistants, and Social Welfare Officers. These MOH-approved cadre form critical components of site-level staffing, particularly at hard-to-reach and yet understaffed rural health facilities which serve over 80% of the population, with a range of duties including: HIV testing, ART initiation, drug dispensing, and viral load monitoring at facility level. Trained social workers deployed to the district health offices oversee, coordinate, and manage district level efforts to support OVC.

In COP18, 33 social workers will graduate to deliver age-appropriate care and support to OVC households and vulnerable AGYW as district social welfare officers. After graduating during COP18 implementation, 31 laboratory technicians will be deployed to different labs to optimize lab capacity. 103 Nurse Midwife Technicians will also graduate during same year to provide quality targeted HIV service delivery at the site and community level.

To ensure return on pre-service training investments, PEPFAR continues to closely monitor the number of graduates who have been recruited and deployed to work in the MOH. As of FY17 Q1, 545 graduates (representing 62% of total cumulative PEPFAR supported graduates since 2010) had not been recruited. In FY17, Increased PEPFAR engagement and advocacy at national level with HRH stakeholders resulted in improved recruitment rates. By FY17 Q4, 388 graduates (71%) of the 545 had been recruited, of which 246 (64%) were directly recruited by MOH (with support from Global Fund) and 142 (36%) were recruited via COP16 PEPFAR salary support funding. PEPFAR will continue to closely monitor ongoing recruitments of the remaining 33% of existing graduates plus expected graduates in FY18 and FY19 through implementation of Global Fund and COP17 surge salary support. In FY18, Peace Corps will recruit and deploy five qualified, PEPFAR-funded response volunteers to support pre-service and in-service HRH capacity building.

6.3 Infrastructure limitations restrict facility capacity to provide quality HIV services

The negative impacts of minimal GOM investment in health facilities since the 1980s is exacerbated by rapid population growth, which has almost doubled as the HIV epidemic has significantly increased service demand. Forty percent of public health facilities have no regular electricity supply, approximately half have running water, and two thirds do not have toilet facilities. As of 2016, three quarters of all facilities had inadequate pharmacy storage space for current needs[23]. Infrastructure therefore remains a critical barrier for accessing and providing quality HIV services.

Inadequate infrastructure compromises the quality of services at service delivery levels across the cascade. In COP16, PEPFAR received supplemental funding to install pre-fabricated HIV testing counselling, ART, and pharmacy units at an estimated 72 sites to support the scale up of Test and Start and improve patient wait times. This infrastructure ensures quality and confidentiality of HIV services through privacy for clients. Despite delays in sub-contracting processes, PEPFAR and GOM have approved site designs and continue dialogue on an implementation Memorandum of Understanding (MOU). PEPFAR expects completion of these installations by December 2018. Beyond minor facility renovations to enhance work flow and improve infection control, no additional infrastructure investment is planned in COP18.

[23] A rapid assessment of Health Commodity Storage Capacity of Public Health Facilities in Malawi, USAID/Deliver Project, 2014

6.4 Need for optimization of lab mechanisms and lab infrastructure to effectively and efficiently utilize lab resources

PEPFAR and other donors have invested significantly in Malawian lab infrastructure, systems and human resources with ten molecular labs established and 16 platforms for VL and EID currently available. Although lab infrastructure has expanded, as noted in section 2.4, VL coverage is still low (60%). However, unutilized viral load instrument capacity in Malawi is only 6%.[24] As such, achieving 90% viral load coverage in Cop18 (estimated at 600,000 viral load tests) will require additional investments by donors, including additional platforms and reagents. PEPFAR is not planning to procure additional platforms. MOH also has no planned procurements of conventional lab equipment, apart from POC devices (GeneXpert for TB and additional POC devices for EID under the UNITAID/ CHAI/ UNICEF investment). The Global Fund Prioritized Above Allocation Request (PAAR) has a line item for $7.62 million for treatment monitoring (viral load) to procure an additional 15 platforms and 50,000 viral load tests and 15,000 EID tests; however, the PAAR is unfunded. To expand viral load coverage, Malawi needs a coordinated strategy and additional investment across multiple stakeholders and donors, including MOH, the Global Fund (which procures the bulk of reagents), the BMGF, and civil society. PEPFAR will continue to lead the dialogue for this investment to expand viral and achieve COP18 targets, as described in section 4.1.1 of this report.

PEPFAR provides **sample transportation** through a single implementer for cost-optimized services to 662 sites in 28 districts at least once a week (and more frequently in high burden sites). In Q1 of COP17, PEPFAR supported transportation of 84,063 viral load, early infant diagnosis, TB, and other samples. However, current sample transport is not adequate to meet demand fully. In COP18, PEPFAR will strengthen the sample transport system through sample and results tracking to reduce losses. Additionally, PEPFAR will optimize the system to halve the current turn-around-time of 46 days for viral load, 30 days for EID, and 9 days for TB.[25]

Implementation of **laboratory quality management systems** is necessary to build confidence of service users and providers. For Cop18, laboratories enrolled in the national external quality assurance program (EQA) will be maintained and an additional 26 PEPFAR supported laboratories will be enrolled. Out of 48 laboratories that have gone through strengthening laboratory management towards accreditation (SLMTA) and stepwise laboratory quality improvement process towards accreditation (SLIPTA) programs, ten will be prepared for international accreditation. Laboratories will receive mentorship and improvements and will be evaluated using the WHO/SLIPTA checklist. Routine use of Viral Load scorecards will be introduced to assess progress of the molecular labs in quality management system implementation. To ensure quality of HIV rapid test, HIV rapid test continuous quality improvement will be implemented in all PEPFAR supported HIV testing sites, with the introduction of certification for test providers and testing sites at the national level. For instrument-based POC testing, the WHO approved SPI-POCT checklist will be used to assess and monitor quality of testing.

[24] Based on WHO definition of Estimated Functional Capacity (2017)
[25] URC ST report, 2017

To address demand for trained lab professionals, PEPFAR provided **pre-service education** scholarships for 109 laboratory students for certificate and diploma level students in two colleges. Additional salary support increased the number of laboratory technologists to meet the viral load scale up demand in molecular laboratories. PEPFAR funded **in-service trainings** for molecular laboratory staff (technologists and data clerks) and health care workers on sample collection, transportation, and analysis for viral load/EID and TB tests.

Implementation of a **national laboratory policy, strategic plan and guidelines** is crucial to improve quality of services in the country. Previous poor implementation impeded progress of EID coverage through POC equipment placement in facilities; however, development and reviews of these policy level documents led to strategic shifts in implementation of viral load/EID and TB testing, which improved coverage and quality of testing.

PEPFAR made significant, ongoing progress with policy reviews, including the completion of **POC guidelines review** for HIV POC equipment placement and quality assurance monitoring and viral scale up strategic plan review in 2017. These documents supported the planning process for COP18; and PEPFAR will continue guideline review and revision for optimized laboratory policies in COP18.

PEPFAR implements **laboratory information management systems** (LIMS) in 10 molecular laboratories for viral load and EID tests. Currently, five clinical laboratories implement the national LIMS for routine laboratory services, including TB GeneXpert and TB microscopy. PEPFAR will support interfacing LIMS with polymerase chain reaction (PCR) instruments for direct result transfer to minimize transcription errors. LIMS is linked to the national EID and viral load dashboard, which needs consistent internet connection for real time data transfer and timely national-level decision making. PEPFAR will continue to salary support for one MOH staff to coordinate LIMS implementation and data flow centrally. PEPFAR will support expansion of national LIMS to 10 additional clinical laboratories and link LIMS to EMRS to minimize turn-around-time and facilitate result tracking system. Laboratory staff members will be trained on proper utilization and management of LIMS.

PEPFAR will continue to **support refurbishment and minor renovations** for 10 molecular laboratories. Most molecular laboratories have space constraints that prevent optimal workflow, including spaces for sample accessioning and reagent storage. Power outages are a constant challenge. PEPFAR will continue supporting back up power supplies for molecular laboratories, including solar panels and generators (procurement/replacement/fuel/service). PEPFAR will continue strengthening and advocating for appropriate waste management to minimize staff and environmental exposure to biohazards.

Malawi has weak **laboratory equipment management** systems. Laboratory instruments need regular servicing and preventive maintenance for appropriate functioning. PEPFAR will continue

supporting service contracts and certification of biosafety cabinets to minimize equipment downtime and service interruption.

However, improving lab systems alone will not **increase VL demand and utilization**. PEPFAR is working to expand patient and provider health literacy about viral load and benefits of low viral load. Implementers that monitor the VL cascade observe high levels of drop-off, particularly among patients with high viral load who are not receiving intensified adherence support and/or switching to second line. Civil society has a vital role in the advocacy and education of patients for viral load demand and use. Technology, such as SMS updates on the availability of results at a facility, could be helpful. Malawi learned how to improve the EID cascade through systems improvements and QI projects at the site level, and the same will be done for viral load. Strategies include: use of EMRS to identify patients eligible for VL and results return; improved organization of services; accurate documentation and availability of results during patient appointments; use of scorecards for monitoring the cascade; use of lay cadres in counseling and blood draw to minimize waiting time; and mentorship.

6.5 Unfavorable policy environment to implement innovative, evidence-based HIV interventions across the cascade of treatment and prevention

In COP17, PEPFAR identified VAPN and self-testing as critical strategies to meet first 90 goals in the treatment cascade, noting the need for the GOM to adopt policy changes to permit and support implementation. In FY18, PEPFAR will implement VAPN services in 80 high volume facilities in the 5.5 acceleration districts. In FY19, PEPFAR will expand active index approaches into scale up districts and acceleration sites not covered by the FY18 scale up. In COP18, PEFPAR will support sites by hiring 100 Community Nurse in alignment with GOM and Civil Society recommendations. Community Health Nurses will complement existing HRH investments at the site level and will be responsible for the oversight of index testing at the site level, in additional to supporting community ART initiation. PEPFAR continues to work with the Ministry of Health to ensure inclusion of VAPN (active index testing) in the national guidelines by December, 2018.

In COP18, HIV self-testing will become an important component of PEPFAR's case-finding both at the health facility level through active index testing and in community settings. HIV self-testing will be integrated into the index-testing approaches to reach contacts that decline active models of partner notification. PEFPAR will target HIV self-testing distribution to high burden communities to reach priority populations, such as AGYW and men. PEFPAR partners will ensure appropriate linkage mechanisms are established and that those screening positive receive confirmatory HIV testing services and are linked to treatment, as appropriate. PEPFAR continues to work with the Ministry of Health to develop sub-national guidelines for the implementation of HIV self-testing in the 5.5 acceleration districts. PEPFAR expects the guidelines to be finalized by April 2018 and will begin implementation in May 2018. PEPFAR continues to work with the MOH to ensure inclusion of HIV oral self-testing in the national guidelines by December, 2018.

In COP18, PEPFAR will provide technical assistance to Faith-Based Organizations to develop strategic messaging for promoting testing and retention on care. PEPFAR will develop standardized faith-sensitive HIV testing, re-testing, and retention messages through stakeholder and validation meetings. PEPFAR will also support the nascent AGYW Strategy Secretariat positioned in the Ministry of Youth to strengthen harmonized data management and data analysis through placement of two Global Health Corps Fellows.

6.6. Limited host country institutional capacity for evidence-based management of HIV program

Implementation of the Malawi HIV response is dependent on the technical capacity in GOM technical directorates. In COP17, PEPFAR seconded critical TAs for long term technical support in key MOH Directorates. These TAs ensure evidence based planning and management of the epidemic and have greatly contributed to the success of the Malawi HIV/AIDS response. The TAs also transfer skills to their GOM counterparts before their tenure is completed. TAs assisted the National AIDS Commission for prevention and Key Populations planning, National TB Program, the Directorate of HIV/AIDS for care and treatment, M&E, Supply Chain, the directorate of Health Technical Support Services for strengthening supply chain management and systems and Ministry of Finance to participate in Global Fund oversight. In COP18, PEPFAR will maintain this support to the key Directorates.

6.7. Limited commodity management and storage capacity at national, district, and facility levels

With national implementation of Test and Start and rollout of pharmacy fast track options to improve service delivery, availability of increased pharmacy storage space is critical. The parallel HIV supply chain is functional compared with other health-related supply chains in the country. However, some facilities report commodity management challenges at site level, particularly stock-outs of condoms and rapid test kits generally resulting from weak inventory commodity management skills.[26,27] The stock-out of these commodities directly affects the achievement of the PEPFAR goals and targets.

With Global Fund resources and significant technical assistance from PEPFAR, Malawi is operating a well-functioning supply chain for HIV/AIDS commodities, providing increased commodity availability at service delivery points. In COP18, PEPFAR Malawi will work with district and health facility staff to improve accuracy of inventory records through mentorship and supportive supervision. Building on successes from COP17, PEPFAR will continue to support critical supply chain activities including, annual national quantification, forecasting, and supply

[26] Supply Chain Data Quality Assessment in Malawi, GHSC-PSM, January 2018
[27] Monthly Logistics Management Information System (LMIS) Report, MOH-HTSS, 2017

planning for HIV and related commodities. In addition, to address shortage of medicine storage space at priority sites,[28] PEPFAR will complete installation of 15 additional prefabricated pharmacy storage units in COP17 (with COP16 supplemental resources).

To sustain the gains from the previous year and support the current scale-up plan, PEPFAR will provide supply chain technical assistance to health facility staff and MOH to manage the programmatic shifts and related commodity requirements. PEPFAR will support the country to manage a seamless transition from TLE to TLD regimen. The plan will ensure optimum management of legacy ARVs to avoid stock outs and potential expiries as the country transitions to TLD.

In COP18, by ensuring timely procurements, distribution, and monitoring, PEPFAR will provide targeted support for management of other key commodities such as VMMC commodities, HIV self-test kits, lubricants and condoms for priority populations.

To ensure availability of logistics data and visibility of national supply chain, PEPFAR will continue to provide technical support for maintenance of Open LMIS, the national platform for collection and reporting of supply chain data for decision making. The support will include: troubleshooting, provision of internet bundles to health facilities, equipment, on-the-job training, systems updates, and establishment of new data hubs. In COP18, PEPFAR intends to ensure that stock outs of key commodities do not exceed five percent. Through COP18, PEPFAR plans to support the development of a national laboratory commodity logistics system for collection, reporting, and monitoring of viral load reagents and lab commodities. Laboratory commodities topped the list of expired commodities in a 2017 situational analysis for expired health products.

In COP18, PEPFAR will support national efforts to establish a functional national pharmacovigilance system for monitoring ADRs, considering the transition to new ARV formulations. PEPFAR will support the design and revision of Adverse Drug Reaction (ADR) forms and strengthen reporting systems to create a functional, in-country pharmacovigilance system. Further, PEPFAR will support capacity development for detection, collection and reporting of ADRs.

6.8. Surveys and Surveillance Project Inventory & Evaluation Inventory

Surveys and Surveillance	
Birth Defects Surveillance	COP
HIV Drug Resistance Surveillance (Adult and Pediatric Drug Resistance- ADR/PDR)	COP
Antenatal surveillance to monitor HIV incidence and prevalence among pregnant women	COP

[28] A rapid assessment of Health Commodity Storage Capacity of Public Health Facilities in Malawi, USAID/Deliver Project, 2014

Case-Based Surveillance, HIV Recency Surveillance, & Mortality Surveillance	COP
HIV Incidence and Recent Infection detection and estimation among Pregnant AGYW in DREAMS in Kenya and Malawi	No additional funding requested in COP18. Funding is directed towards development of the routine HIV recency surveillance system as described elsewhere.
Malawi Population-based HIV Impact Assessment (MPHIA)	No additional funding requested in COP18
Evaluation	
Adaptation and Evaluation of the PMTCT Community Score Card approach in Dedza and Ntcheu Districts, Malawi	No additional funding requested in COP18
A demonstration evaluation of a Pre-Exposure Prophylaxis Service Delivery Program for High Risk AGYW in Lilongwe	COP
Increasing HIV Testing Among Men: Evaluation of a Strengthened Partner Notification Services Program and a Mobile-Based Wellness Program Associated with Workplace Settings in Blantyre District, Malawi	No additional funding requested in COP18
National Evaluation of the Malawi PMTCT Program (NEMAPP)	No additional funding requested in COP18
LARC - Evaluating Results from a Viral Load Health Systems Intervention	No additional funding requested in COP18
Evaluation of HIV Rapid Test Quality Improvement Initiative activities to support increased HIV Testing Performance	No additional funding requested in COP18
Assessment of new learning approaches to support the knowledge of HIV test providers in PEPFAR supported countries leading to wide dissemination and scale up of successful approaches	No additional funding requested in COP18
Provision of access to PrEP for FSW in Malawi: An Implementation Research Study	COP
Exploration of the uptake and acceptability of HIV self-testing for Female Sex Workers and Men Who Have Sex with Men in Malawi	COP
Assessment of Community-based ART Service Modalities Linking Female Sex Workers to HIV Care and Treatment in Malawi	No additional funding requested in COP18
Reduction of HIV Risk Among Adolescent Girls and Young Women, and Their Partners through the DREAMS Initiative in Malawi	No additional funding requested in COP18

Pregnancy rates and levonorgestrel concentrations among HIV-infected Malawian women using both the levonorgestrel implant and efavirenz-based therapy: results from a randomized clinical trial	No additional funding requested in COP18
The role of self-testing in routine care to improve the identification of HIV-infected individuals in Malawi: Programmatic assessment of index self-testing and strategies for linkage	No additional funding requested in COP18
Varying ART intervals to improve outcomes in HIV	COP
External Evaluation of AIDSFree, VMMC Adverse Events	No additional funding requested in COP18
Treatment of Depression to Improve HIV Care Outcomes in Malawi	No additional funding requested in COP18
Promotion of Mother-Infant Retention along the HIV Care Continuum: A Comparative Effectiveness Evaluation of Three Models for Community-Facility Linkage	No additional funding requested in COP18
Health Labor Market Capacity for HRH Absorption and Retention	No additional funding requested in COP18
Financial Diaries Research to Understand Economic Context of PMTCT Retention and Adherence	No additional funding requested in COP18

7.0 Staffing Plan

PEPFAR Malawi conducted a full, interagency analysis of its staffing capacity and overall footprint. This involved careful consideration of required skill sets for PEPFAR's new *Strategy for Accelerating HIV/AIDS Epidemic Control* (2017-2020), including the resources necessary to implement a robust program, while striking an efficient investment balance between program and management and operation (M&O) costs. The following updates were identified, launched and further supported in COP18:

1. **Updating the PEPFAR Malawi Technical Working Group Structure:** Inspired by the Epidemic Control Teams (ECT) at headquarters, PEPFAR Malawi determined that TWGs should not be in silos but work across the Epidemic Control Plan, focusing on the age and sex prioritization within the acceleration and scale up districts from the case finding entry point. TWG Co-Chairs were updated along with the TWGs themselves (e.g., these are no longer separated by 90-90-90). TWGs are the key entry points for strategic inputs and recommended shifts to the program. They further develop POART analyses through leading data analysis (by age and sex) to identify evidence-based, site-level, strategies that require scale up. Through joint site visits and SIMS, TWGs further ensure implementation fidelity to enhance patient centered care.

2. **Identifying efficiencies in the PEPFAR Malawi staffing complement:** PEPFAR Malawi undertook an analysis of its staffing composition with close attention to cost savings achieved by evolving positions from off-shore hires to local expertise. The analysis determined that PEPFAR could transition certain U.S Direct Hire (USDH) and Third Country National (TCN) positions to highly qualified Malawians, saving substantial resources for investment into programmatic interventions without sacrificing quality.
    a. **Local Employed Staff (LES) positions** - Embassy Malawi received authorization for an exception to the existing rate range (ERR) for highly-qualified LES PEPFAR staff, allowing PEPFAR to be more competitive in hiring and retaining highly qualified Malawians in the fight against HIV.
    b. **Shifting to Local Hire** - With the new ERR facilitating the recruitment and retention of the highest-qualified LES, for COP18, PEPFAR Malawi will transition four positions (two are currently vacant) from USDH or TCN to LES, saving approximately $1.1M per year.

3. **Strategic staffing of the PEPFAR Coordination Office:** To leverage the expertise of the agencies and reflect an interagency staffing complement, the Coordination office is hiring through a variety of USG mechanisms:
    a. *State:* Coordinator (Limited Non-Career Appointment), Senior Advisor and Administrative Specialist

b. *USAID:* Global Fund Liaison and AGYW Coordinator positions (currently the AGYW position is filled through a temporary U.S. local hire in place through September 2018)
c. *CDC:* Strategic Information Advisor (with an updated position description reflecting advanced skills in data analysis, visualization, and tool utilization as fundamental to the position).

Peace Corps will incorporate a Program Manager and Driver to support placement of Response Volunteers in pre-service and in-service capacity building of the health workforce. Previously, headquarters funded these positions through the Global Health Services Partnership Program. These positions will be reviewed annually to determine if position justification is supported by volunteer numbers.

The PEPFAR team does not recommend other new positions in COP18. A renewed emphasis currently and continued into COP18 is site visits – both as part of SIMS and in assessing implementation fidelity of programmatic interventions such as extended hours and human resources for health (e.g., the size and burden of the site has the requisite number and aligned cadres needed) to determine strategic shifts and rationalizations building from the site level up.

APPENDIX A – PRIORITIZATION

SNU Prioritization - Malawi

SNU	COP	Prioritization	Results Reported	*Attained: 90-90-90 (81%) by Each Age and Sex Band to Reach 95-95-95 (90%) Overall*																				Ave.TX Coverage
				Treatment Coverage at APR by Age and Sex																				
				<1		1-9		10-14		15-19		20-24		25-29		30-34		35-39		40-49		50+		
				F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	
Blantyre	COP 15	Acceleration	APR 16	52%	50%	41%	41%	76%	75%	55%	73%	59%	33%	63%	27%	92%	47%	97%	67%	74%	78%	57%	74%	49%
	COP 16	Acceleration	APR 17	54%	53%	44%	43%	80%	79%	61%	78%	66%	35%	68%	29%	99%	50%	105%	72%	80%	84%	61%	79%	54%
	COP 17	Acceleration	APR 18	72%	70%	57%	56%	106%	105%	72%	118%	77%	53%	73%	31%	106%	55%	112%	79%	85%	92%	65%	87%	75%
	COP 18	Acceleration	APR 19	88%	88%	88%	88%	106%	105%	88%	118%	88%	88%	88%	88%	106%	88%	112%	88%	88%	92%	88%	88%	88%
Lilongwe	COP 15	Acceleration/Saturation	APR 16	52%	45%	42%	36%	61%	58%	35%	30%	59%	20%	72%	29%	100%	49%	98%	73%	79%	80%	54%	75%	67%
	COP 16	Acceleration/Saturation	APR 17	59%	51%	48%	41%	69%	66%	56%	31%	93%	21%	77%	32%	106%	55%	104%	81%	84%	88%	58%	83%	73%
	COP 17	Acceleration/Saturation	APR 18	88%	76%	70%	61%	103%	97%	77%	100%	128%	68%	81%	35%	112%	60%	110%	88%	88%	97%	61%	91%	79%
	COP 18	Acceleration/Saturation	APR 19	90%	90%	90%	90%	103%	97%	90%	100%	128%	90%	103%	90%	112%	90%	103%	90%	103%	90%	103%	91%	95%
Mangochi	COP 15	Acceleration	APR 16	38%	34%	30%	27%	48%	33%	52%	57%	66%	25%	77%	21%	99%	38%	101%	56%	80%	67%	66%	79%	49%
	COP 16	Acceleration	APR 17	48%	43%	38%	35%	61%	41%	50%	68%	63%	29%	86%	24%	111%	45%	113%	65%	90%	78%	74%	92%	57%
	COP 17	Acceleration	APR 18	85%	77%	68%	62%	108%	73%	64%	120%	80%	52%	96%	28%	122%	51%	125%	74%	99%	89%	82%	104%	75%
	COP 18	Acceleration	APR 19	90%	90%	90%	90%	108%	90%	90%	120%	90%	90%	109%	90%	122%	90%	125%	90%	109%	90%	109%	104%	90%
Zomba	COP 15	Acceleration	APR 16	35%	35%	28%	28%	43%	41%	60%	55%	62%	25%	62%	24%	92%	39%	103%	57%	83%	67%	77%	75%	56%
	COP 16	Acceleration	APR 17	39%	40%	31%	32%	49%	46%	65%	61%	68%	28%	68%	27%	100%	42%	112%	62%	90%	73%	83%	82%	62%
	COP 17	Acceleration	APR 18	78%	79%	62%	64%	97%	92%	73%	116%	76%	54%	73%	32%	108%	51%	120%	75%	97%	88%	90%	99%	75%
	COP 18	Acceleration	APR 19	90%	90%	90%	90%	97%	90%	90%	116%	90%	90%	111%	90%	111%	90%	120%	90%	111%	90%	111%	99%	88%
Machinga	COP 15	Acceleration	APR 16	36%	35%	29%	28%	39%	43%	52%	56%	66%	25%	72%	19%	100%	32%	111%	57%	78%	72%	62%	76%	55%
	COP 16	Acceleration	APR 17	42%	41%	33%	33%	45%	50%	63%	83%	80%	38%	82%	22%	114%	38%	126%	68%	88%	86%	71%	90%	64%
	COP 17	Acceleration	APR 18	81%	79%	65%	64%	87%	96%	74%	117%	94%	53%	91%	26%	127%	44%	140%	79%	98%	99%	79%	104%	75%
	COP 18	Acceleration	APR 19	90%	90%	90%	90%	90%	90%	90%	117%	94%	90%	90%	90%	127%	90%	140%	90%	98%	99%	90%	104%	90%
Chikwawa	COP 15	Acceleration	APR 16	74%	70%	59%	56%	67%	65%	51%	65%	62%	45%	81%	34%	105%	53%	95%	70%	71%	77%	54%	73%	51%
	COP 16	Acceleration	APR 17	78%	73%	63%	59%	71%	69%	54%	73%	66%	51%	88%	40%	114%	62%	104%	82%	78%	90%	59%	86%	58%
	COP 17	Acceleration	APR 18	91%	85%	72%	69%	82%	79%	65%	93%	79%	65%	95%	46%	123%	71%	112%	94%	84%	104%	64%	98%	75%
	COP 18	Acceleration	APR 19	91%	90%	90%	90%	90%	90%	90%	93%	90%	90%	98%	90%	123%	90%	112%	94%	98%	104%	98%	98%	90%
Mulanje	COP 15	Scale-Up Saturation	APR 16	65%	60%	52%	48%	88%	72%	55%	74%	61%	41%	70%	30%	99%	58%	98%	72%	75%	77%	60%	71%	65%
	COP 16	Scale-Up Saturation	APR 17	66%	61%	53%	49%	89%	73%	48%	88%	53%	48%	79%	34%	112%	67%	111%	83%	85%	88%	68%	82%	73%
	COP 17	Scale-Up Saturation	APR 18	89%	82%	71%	66%	119%	98%	78%	120%	87%	66%	89%	39%	126%	76%	124%	94%	95%	100%	76%	92%	84%
	COP 18	Scale-Up Saturation	APR 19	90%	90%	90%	90%	119%	98%	90%	120%	90%	90%	99%	90%	126%	90%	124%	94%	99%	100%	99%	92%	99%
Thyolo	COP 15	Scale-Up Saturation	APR 16	59%	54%	48%	44%	87%	90%	56%	85%	60%	35%	56%	24%	85%	42%	99%	68%	85%	81%	68%	84%	72%
	COP 16	Scale-Up Saturation	APR 17	61%	56%	49%	45%	89%	92%	60%	90%	65%	38%	61%	26%	92%	45%	108%	73%	92%	87%	74%	90%	77%
	COP 17	Scale-Up Saturation	APR 18	83%	77%	67%	62%	123%	126%	82%	142%	89%	59%	66%	32%	99%	55%	116%	90%	99%	108%	79%	111%	87%
	COP 18	Scale-Up Saturation	APR 19	90%	90%	90%	90%	123%	126%	117%	142%	117%	90%	90%	90%	90%	90%	116%	90%	99%	108%	90%	111%	99%
Mzimba	COP 15	Scale-Up Saturation	APR 16	74%	67%	60%	54%	124%	106%	52%	42%	53%	15%	54%	26%	79%	45%	91%	63%	81%	77%	66%	105%	69%
	COP 16	Scale-Up Saturation	APR 17	76%	69%	61%	56%	128%	109%	60%	48%	61%	17%	59%	28%	85%	49%	98%	68%	88%	84%	72%	113%	75%
	COP 17	Scale-Up Saturation	APR 18	81%	73%	65%	59%	136%	116%	85%	149%	86%	53%	63%	32%	92%	56%	105%	78%	94%	97%	77%	131%	86%
	COP 18	Scale-Up Saturation	APR 19	90%	90%	90%	90%	136%	116%	90%	149%	90%	90%	106%	90%	106%	90%	106%	90%	106%	97%	106%	131%	98%
Phalombe	COP 15	Scale-Up Saturation	APR 16	41%	37%	33%	29%	40%	32%	50%	36%	67%	35%	82%	37%	110%	54%	106%	67%	75%	61%	55%	56%	64%
	COP 16	Scale-Up Saturation	APR 17	47%	42%	38%	34%	46%	37%	53%	44%	70%	43%	92%	45%	123%	66%	119%	82%	84%	74%	62%	68%	74%
	COP 17	Scale-Up Saturation	APR 18	94%	84%	75%	67%	91%	73%	62%	78%	82%	75%	103%	53%	137%	77%	132%	97%	93%	87%	69%	80%	76%
	COP 18	Scale-Up Saturation	APR 19	94%	90%	90%	90%	91%	90%	90%	90%	90%	90%	110%	90%	137%	90%	132%	90%	110%	90%	110%	90%	93%
Balaka	COP 15	Sustained	APR 16	37%	36%	29%	29%	38%	42%	52%	55%	66%	26%	71%	23%	94%	42%	98%	62%	83%	67%	73%	70%	54%
	COP 16	Sustained	APR 17	40%	39%	32%	32%	42%	46%	53%	56%	68%	26%	76%	24%	100%	44%	105%	65%	88%	71%	78%	74%	58%
	COP 17	Sustained	APR 18	71%	69%	57%	56%	74%	81%	54%	99%	69%	47%	80%	26%	106%	48%	111%	70%	94%	76%	83%	79%	65%
	COP 18	Sustained	APR 19	71%	71%	71%	71%	74%	81%	68%	99%	68%	66%	106%	71%	106%	71%	111%	71%	106%	76%	106%	79%	82%

Chiradzulu	COP 15	Sustained	APR 16	55%	48%	44%	38%	98%	95%	70%	97%	54%	29%	44%	18%	74%	34%	96%	58%	89%	82%	86%	101%	98%
	COP 16	Sustained	APR 17	54%	47%	43%	38%	97%	94%	69%	95%	53%	29%	43%	18%	72%	33%	94%	57%	87%	80%	84%	100%	97%
	COP 17	Sustained	APR 18	97%	84%	77%	67%	172%	167%	129%	201%	99%	60%	59%	30%	100%	56%	131%	95%	121%	134%	116%	167%	108%
	COP 18	Sustained	APR 19	107%	107%	107%	107%	172%	167%	129%	201%	107%	108%	107%	107%	107%	107%	131%	107%	121%	134%	116%	167%	126%
Chitipa	COP 15	Sustained	APR 16	82%	82%	66%	64%	92%	109%	47%	38%	55%	17%	55%	35%	82%	53%	82%	63%	82%	74%	70%	98%	87%
	COP 16	Sustained	APR 17	90%	90%	73%	70%	102%	120%	67%	50%	79%	23%	64%	41%	95%	61%	94%	72%	94%	86%	81%	113%	97%
	COP 17	Sustained	APR 18	99%	99%	80%	77%	111%	131%	87%	128%	103%	58%	72%	46%	107%	69%	107%	82%	107%	97%	91%	128%	82%
	COP 18	Sustained	APR 19	103%	103%	103%	103%	111%	131%	120%	128%	120%	90%	110%	100%	110%	100%	110%	100%	110%	100%	110%	128%	110%
Dedza	COP 15	Sustained	APR 16	48%	39%	39%	32%	56%	48%	34%	19%	57%	18%	87%	47%	102%	62%	92%	65%	75%	79%	58%	75%	58%
	COP 16	Sustained	APR 17	43%	36%	35%	29%	51%	43%	23%	26%	39%	24%	99%	56%	116%	74%	104%	78%	86%	95%	66%	89%	67%
	COP 17	Sustained	APR 18	87%	71%	70%	57%	101%	87%	51%	79%	86%	73%	111%	65%	130%	87%	117%	90%	96%	110%	74%	104%	75%
	COP 18	Sustained	APR 19	87%	71%	71%	71%	101%	87%	60%	81%	86%	81%	115%	109%	130%	109%	117%	109%	115%	110%	115%	109%	97%
Dowa	COP 15	Sustained	APR 16	32%	30%	26%	24%	41%	40%	54%	69%	71%	39%	56%	25%	81%	33%	74%	41%	73%	62%	73%	82%	57%
	COP 16	Sustained	APR 17	36%	34%	29%	27%	45%	45%	59%	75%	78%	43%	60%	27%	86%	36%	79%	44%	78%	67%	78%	89%	61%
	COP 17	Sustained	APR 18	70%	66%	56%	53%	88%	87%	64%	94%	84%	53%	64%	32%	92%	42%	84%	51%	84%	78%	83%	104%	67%
	COP 18	Sustained	APR 19	70%	70%	70%	70%	70%	70%	84%	94%	84%	71%	87%	71%	92%	71%	87%	71%	87%	71%	87%	104%	79%
Karonga	COP 15	Sustained	APR 16	76%	73%	61%	59%	106%	113%	61%	36%	49%	18%	42%	18%	77%	35%	89%	58%	87%	86%	72%	107%	62%
	COP 16	Sustained	APR 17	78%	75%	62%	60%	109%	116%	64%	39%	52%	19%	44%	19%	82%	37%	95%	61%	92%	92%	76%	113%	65%
	COP 17	Sustained	APR 18	80%	77%	64%	62%	111%	119%	85%	111%	68%	54%	47%	20%	87%	39%	100%	65%	98%	97%	81%	120%	73%
	COP 18	Sustained	APR 19	85%	85%	85%	85%	111%	119%	85%	111%	77%	75%	90%	81%	90%	81%	100%	81%	98%	97%	90%	120%	92%
Kasungu	COP 15	Sustained	APR 16	34%	24%	27%	19%	44%	44%	69%	93%	64%	27%	48%	15%	79%	32%	88%	51%	81%	67%	56%	72%	53%
	COP 16	Sustained	APR 17	37%	27%	30%	22%	49%	49%	80%	123%	74%	36%	53%	17%	86%	38%	96%	60%	89%	78%	61%	84%	59%
	COP 17	Sustained	APR 18	69%	50%	55%	40%	90%	90%	90%	153%	83%	45%	57%	20%	93%	43%	105%	68%	96%	88%	67%	95%	63%
	COP 18	Sustained	APR 19	67%	67%	67%	67%	90%	90%	95%	153%	95%	98%	92%	79%	92%	79%	105%	79%	92%	79%	92%	95%	89%
Likoma	COP 15	Sustained	APR 16	32%	24%	36%	27%	67%	54%	65%	69%	50%	19%	37%	15%	62%	28%	81%	46%	88%	71%	81%	102%	121%
	COP 16	Sustained	APR 17	29%	21%	33%	24%	61%	49%	71%	81%	55%	22%	40%	17%	68%	31%	88%	51%	96%	78%	89%	113%	140%
	COP 17	Sustained	APR 18	114%	83%	128%	94%	237%	192%	175%	285%	135%	78%	74%	38%	126%	70%	163%	113%	178%	176%	165%	253%	147%
	COP 18	Sustained	APR 19	143%	143%	143%	143%	237%	192%	175%	285%	152%	153%	154%	153%	154%	153%	163%	153%	178%	176%	165%	253%	173%
Mchinji	COP 15	Sustained	APR 16	50%	40%	40%	32%	55%	45%	51%	25%	49%	15%	55%	24%	85%	49%	96%	67%	87%	81%	77%	95%	66%
	COP 16	Sustained	APR 17	45%	37%	37%	29%	49%	41%	76%	58%	73%	34%	63%	28%	97%	58%	110%	80%	100%	97%	88%	113%	74%
	COP 17	Sustained	APR 18	102%	82%	82%	66%	111%	91%	101%	117%	96%	68%	71%	33%	109%	68%	124%	93%	112%	113%	100%	132%	85%
	COP 18	Sustained	APR 19	102%	82%	82%	81%	111%	91%	122%	117%	122%	108%	116%	109%	116%	109%	124%	109%	112%	113%	116%	132%	109%
Mwanza	COP 15	Sustained	APR 16	54%	68%	44%	54%	85%	79%	45%	83%	65%	36%	89%	37%	105%	60%	96%	77%	68%	72%	50%	68%	69%
	COP 16	Sustained	APR 17	55%	69%	45%	55%	86%	80%	24%	60%	35%	26%	102%	42%	120%	68%	109%	87%	78%	81%	57%	77%	75%
	COP 17	Sustained	APR 18	71%	89%	58%	71%	111%	103%	63%	128%	89%	57%	114%	47%	135%	76%	123%	97%	88%	90%	64%	85%	81%
	COP 18	Sustained	APR 19	82%	82%	82%	82%	111%	103%	54%	128%	89%	66%	113%	91%	135%	91%	123%	97%	113%	91%	113%	91%	97%
Neno	COP 15	Sustained	APR 16	56%	67%	44%	54%	85%	79%	45%	82%	65%	36%	90%	37%	105%	60%	96%	77%	68%	72%	50%	68%	60%
	COP 16	Sustained	APR 17	53%	63%	42%	51%	80%	74%	49%	92%	70%	41%	97%	41%	115%	66%	104%	85%	74%	79%	55%	74%	64%
	COP 17	Sustained	APR 18	62%	74%	49%	60%	94%	87%	53%	108%	75%	48%	102%	42%	120%	69%	109%	88%	78%	82%	57%	78%	68%
	COP 18	Sustained	APR 19	64%	64%	64%	64%	64%	64%	73%	108%	75%	74%	102%	82%	120%	82%	109%	88%	97%	82%	97%	82%	83%
Nkhata-bay	COP 15	Sustained	APR 16	84%	59%	68%	48%	126%	101%	60%	46%	49%	13%	38%	17%	65%	33%	84%	52%	91%	83%	84%	120%	58%
	COP 16	Sustained	APR 17	89%	62%	72%	51%	134%	108%	70%	50%	57%	14%	41%	19%	71%	36%	93%	57%	100%	91%	93%	132%	65%
	COP 17	Sustained	APR 18	94%	66%	76%	54%	142%	114%	84%	140%	69%	39%	45%	21%	78%	39%	101%	63%	109%	100%	101%	144%	74%
	COP 18	Sustained	APR 19	93%	93%	93%	93%	142%	114%	84%	140%	82%	76%	98%	89%	98%	89%	101%	89%	109%	100%	101%	144%	102%
Nkhota-kota	COP 15	Sustained	APR 16	30%	30%	25%	25%	47%	35%	61%	78%	68%	35%	44%	12%	71%	30%	91%	46%	84%	62%	60%	88%	56%
	COP 16	Sustained	APR 17	32%	32%	26%	26%	49%	37%	56%	78%	63%	35%	49%	15%	78%	38%	100%	59%	92%	78%	66%	111%	62%
	COP 17	Sustained	APR 18	65%	65%	53%	53%	99%	76%	61%	104%	69%	47%	53%	19%	85%	45%	108%	71%	100%	95%	72%	135%	66%
	COP 18	Sustained	APR 19	67%	67%	67%	67%	99%	76%	61%	104%	69%	66%	93%	95%	93%	95%	108%	95%	100%	95%	93%	135%	87%
Nsanje	COP 15	Sustained	APR 16	81%	63%	65%	51%	69%	64%	53%	85%	61%	35%	71%	31%	97%	42%	99%	69%	75%	81%	61%	79%	67%

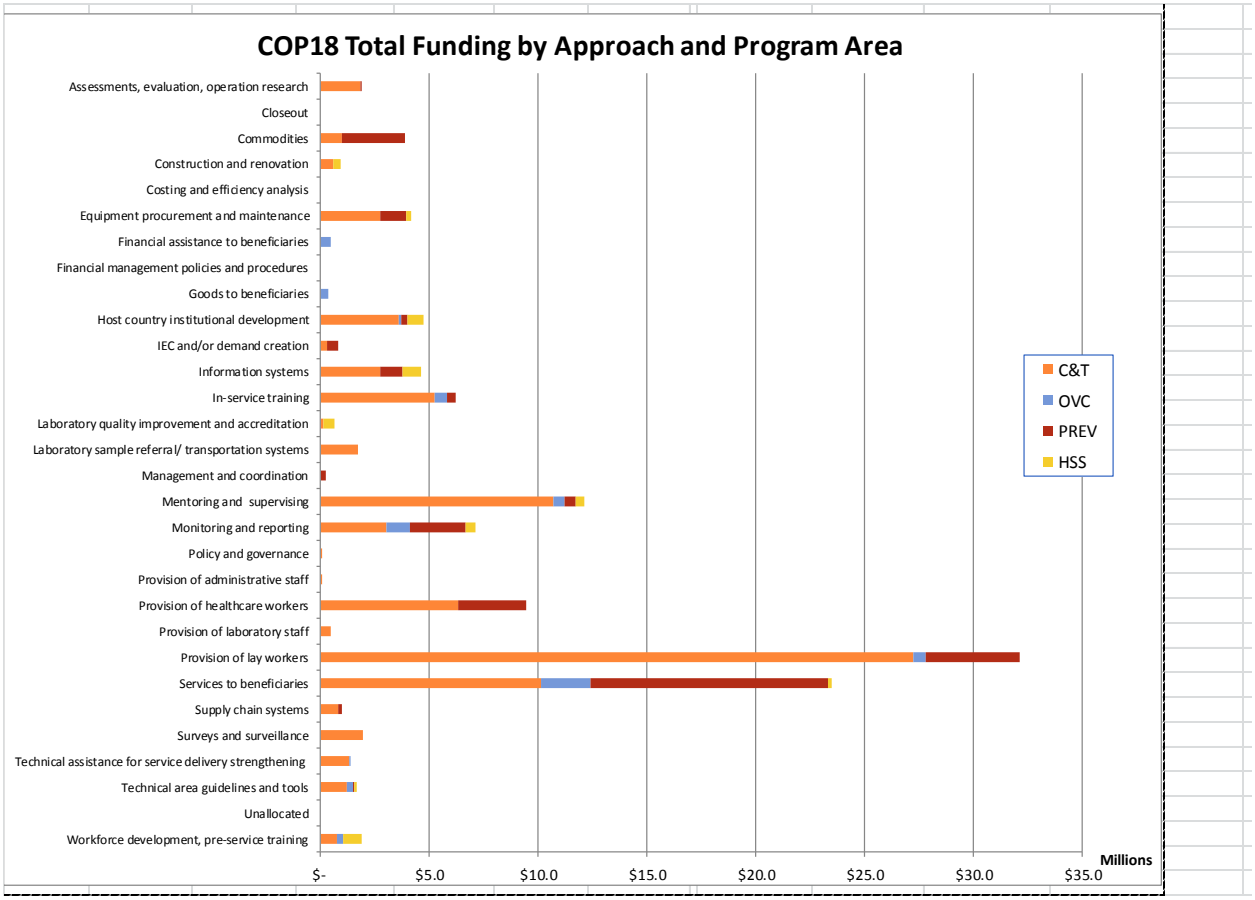
	COP 16	Sustained	APR 17	82%	64%	66%	52%	70%	65%	49%	92%	57%	38%	75%	32%	104%	44%	106%	72%	80%	85%	65%	82%	70%
	COP 17	Sustained	APR 18	89%	70%	71%	57%	76%	71%	61%	111%	71%	46%	80%	34%	110%	46%	112%	75%	85%	88%	69%	86%	68%
	COP 18	Sustained	APR 19	89%	70%	71%	69%	76%	71%	63%	111%	71%	72%	96%	75%	110%	75%	112%	75%	96%	88%	96%	86%	84%
Ntcheu	COP 15	Sustained	APR 16	41%	41%	33%	33%	54%	58%	54%	30%	48%	12%	58%	28%	88%	52%	102%	61%	84%	83%	72%	93%	54%
	COP 16	Sustained	APR 17	47%	48%	38%	38%	63%	68%	110%	43%	96%	17%	65%	25%	99%	45%	115%	53%	94%	72%	80%	80%	61%
	COP 17	Sustained	APR 18	94%	95%	76%	77%	125%	136%	166%	116%	145%	47%	72%	29%	109%	53%	127%	62%	104%	85%	89%	94%	70%
	COP 18	Sustained	APR 19	104%	104%	104%	104%	125%	136%	203%	116%	203%	78%	111%	61%	111%	61%	127%	61%	111%	85%	111%	94%	110%
Ntchisi	COP 15	Sustained	APR 16	39%	21%	31%	17%	36%	50%	66%	81%	66%	33%	44%	17%	74%	30%	83%	41%	80%	68%	70%	80%	80%
	COP 16	Sustained	APR 17	36%	20%	29%	16%	34%	47%	77%	105%	77%	43%	47%	21%	79%	36%	89%	50%	86%	82%	75%	96%	87%
	COP 17	Sustained	APR 18	125%	68%	101%	53%	115%	162%	100%	165%	100%	67%	61%	33%	103%	57%	116%	78%	112%	128%	97%	151%	100%
	COP 18	Sustained	APR 19	125%	98%	101%	98%	115%	162%	111%	165%	111%	115%	105%	111%	105%	111%	105%	111%	112%	128%	105%	151%	117%
Rumphi	COP 15	Sustained	APR 16	61%	80%	48%	65%	107%	123%	52%	35%	53%	18%	45%	25%	67%	43%	97%	54%	84%	86%	75%	100%	79%
	COP 16	Sustained	APR 17	69%	91%	54%	74%	121%	139%	55%	38%	57%	19%	46%	26%	69%	44%	99%	55%	85%	88%	77%	103%	81%
	COP 17	Sustained	APR 18	77%	101%	60%	82%	135%	155%	94%	140%	96%	72%	57%	35%	85%	60%	122%	75%	106%	120%	96%	140%	95%
	COP 18	Sustained	APR 19	109%	109%	109%	109%	135%	155%	99%	140%	99%	97%	97%	97%	97%	97%	122%	97%	106%	120%	97%	140%	111%
Salima	COP 15	Sustained	APR 16	38%	38%	30%	30%	36%	27%	62%	71%	68%	38%	49%	19%	84%	32%	91%	52%	79%	67%	52%	70%	65%
	COP 16	Sustained	APR 17	43%	43%	34%	34%	40%	30%	56%	98%	61%	53%	54%	22%	94%	37%	101%	60%	87%	79%	58%	81%	73%
	COP 17	Sustained	APR 18	100%	100%	79%	80%	95%	70%	77%	118%	84%	63%	59%	29%	103%	49%	111%	80%	96%	104%	64%	107%	82%
	COP 18	Sustained	APR 19	100%	100%	86%	86%	95%	86%	76%	118%	76%	100%	96%	91%	103%	91%	111%	91%	96%	104%	96%	107%	95%

Table A.2 ART Targets by Prioritization for Epidemic Control						
Prioritization Area	**Total PLHIV**	**Expected current on ART (APR FY18)**	**Additional patients required for 80% ART coverage**	**Target current on ART (APR FY19) *TX_CURR***	**Newly initiated (APR FY19) *TX_NEW***	**ART Coverage (APR 19)**
Attained	**0**	**0**	**0**	**0**	**0**	**0**
Scale-Up Saturation	**750,217**	**585,800**	**14,374**	**681,634**	**102,220**	**91%**
Scale-Up Aggressive	**0**	**0**	**0**	**0**	**0**	**0**
Sustained	**301,662**	**219,339**	**21,991**	**244,884**	**27,897**	**81%**
Central Support	**0**	**0**	**0**	**0**	**0**	**0**
Commodities (not included in previous categories)	**37,442**	**40,522**	**10,568**	**43,814**	**3,721**	**117%**
Total	**1,089,321**	**845,661**	**25,796**	**970,332**	**133,838**	

APPENDIX B – Budget Profile and Resource Projections

B1. COP18 Planned Spending

Table B.1.1 COP18 Budget by Approach and Program Area



Source: COP18 Malawi Funding Allocation to Strategy Tool (FAST)

Table B.1.2 COP18 Total Planning Level		
Applied Pipeline	**New Funding**	**Total Resources**
$US 1,156,001	**$US 137,322,099**	**$US 138,478,100**

Table B.1.3 Resource Allocation by PEPFAR Budget Code (new funds only)

Program Area	Budget code	Description	TOTAL
C&T	HBHC	Adult Care and Support	$ 4,821,027
	HTXS	Adult Treatment	$ 47,391,664
	PDCS	Pediatric Care and Support	$ 4,401,166
	PDTX	Pediatric Treatment	$ 9,992,502
	HTXD	ARV Drugs	-
	HVTB	TB/HIV Care	$ 5,670,045
	HVCT	Counseling and Testing	$ 14,287,503
PREV	MTCT	Mother to Child Transmission	$ 3,188,884
	CIRC	Male Circumcision	$ 16,732,908
	HMBL	Blood Safety	$ 605,738
	HMIN	Injection Safety	-
	HVAB	Abstinence/Be Faithful Prevention/Youth	$ 3,738,279
	HVOP	Other Sexual Prevention	$ 5,095,359
	IDUP	Injecting and Non-Injecting Drug Use	-
OVC	HKID	Orphans and Vulnerable Children	$ 6,763,788
HSS	HLAB	Lab	$ 1,751,874
	HVSI	Strategic Information	$ 2,239,305
	OHSS	Health Systems Strengthening	$ 2,369,106
M&O	HVMS	Management and Operations	$ 8,272,951
	TOTAL		**$ 137,322,099**

Source: COP18 Malawi Funding Allocation to Strategy Tool (FAST)

B.2 Resource Projections

Resource Projection Inputs and Methods

The PEPFAR team used a program-based, incremental budget approach (Funding Allocation to Strategy Tool - FAST) to develop COP18 budgets by implementing mechanisms, management efficiency, and operating costs. This interagency process took into consideration the following sources of information:

- Base funding from COP17 complemented by critical review of strategic objectives to account for the COP18 strategy across population and geographic areas;
- MOH and implementer performance reports to refine lessons learned, identify innovations and best practices to replicate/scale up, and strategies to de-emphasize;
- 2017 PEPFAR expenditure data, partner financial data and estimates, pilot data for new activities, and standard cost databases (salary scales, unit price lists) to tease out cost drivers for major activities (such as health facility staff, lay cadre, trainings, etc.);
- The Sustainability Index Dashboard 3.0 to identify critical HIV programmatic gaps, identify corrective actions aligned with Table 6.

The budget represented in the FAST tool includes available central funds (e.g., Cervical Cancer), applied pipeline and new funding for all implementing mechanisms. As in previous years, all planned outlays for the 12 months of COP18 are included. The team frequently used the FAST analysis tabs to evaluate the COP18 funding data entered for alignment with Malawi's COP18 strategy.

APPENDIX C – Tables and Systems Investments for Section 6.0

The Table 6 Excel workbook should be submitted with SDS for PDF conversion and formatting by HQ as per updated guidance.

Table 6 Attachment

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
1	USAID	Strengthening the National OVC Pr	UNICEF	15888	OVC	Workforce developme	Provide scholarships for 70 GoM social welfare staff to upgrade to degree level	Inadequate HRH to implement quality targeted HIV service delivery at the site and community level	All supported students graduated at degree level and providing services in Ministry of Gender, Children, Disability and Social Welfare
2	USAID	Strengthening the National OVC Pr	UNICEF	15888	OVC	Technical area guidelir	Support development of an effective Child Protection HIV sensitive Case Management program for the Ministry of Gender, Children, Disability, and support relevant trainings for child protection workers	Limited host country institutional capacity for evidence-based management of HIV program	A functional HIV sensitive Child Protection Case management system developed and in-place
3	USAID	HP+	Palladium Group	17480	PREV	Host country institutional development	TA provided to MOH-DHA through placement of one subject matter expert in Ministry of Health (RHD) for quantification support of commodity (condom & lubricants) stocks	Limited commodity management and storage capacity at national, district, and facility levels	Improved availability and acces to condoms and lubricants
4	HHS/CDC	Strengthening Malawi's Vital Statis	National Registration Bureau Malawi	17487	HSS	Information systems	Strengthen Malawi's CRVS governancce and organizational infrastructure in 28 districts and at all levels through through stakeholder meetings among National Statistics Office, Ministry of Health, and the National Registration Bureau	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Improved production of vital statistics to inform Government of Malawi policy and planning

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
1	2 years	# of social workers graduated (HRH_PRE) (IP Reports)	Zero Social Workers graduated; 70 in the training pipeline (IP Reports)	33 Social workers graduated		Remaining 37 social workers graduated
2	1 year	# of child protection workers trained in HIV sensitve case management; HIV sensitive Child protection system in place; National Plan of Action for Vulnerable Children in Malawi 2015-2019 (Objective 3)	Current Child Protection Case Management System does not have HIV sensitive bench marks	A functional HIV sensitive Child protection Case Management System in place; 58 additional child protection workers trained; additional 50 trainers trained on HIV sensitve case management		n/a
3	3 years	Stock out rates for condoms and lubricants (OpenLMIS and KP commodity dashboard from HP+)	5.3 % stock out rate for female condoms; 8 % stock out rate for male condoms; zero for lubricants (OpenLMIS and KP commodity dashboard from HP+)	Achieve average of 5% stock out rate for condoms (male and female); maintain zero percent stock out rate for lubricants		Achieve average of 4% stock out rate for condoms (male and female); maintain zero percent stock out rate for lubricants
4	2 years	# of stakeholder meetings conducted; vital statistics report	No regular coordination among National Statistics Office, Ministry of Health, and the National Registration Bureau	One vital statistics report published as a result of stakeholder meetings among National Statistics Office, Ministry of Health, and National Registration Bureau		One vital statistics report published as a result of stakeholder meetings among National Statistics Office, Ministry of Health, and National Registration Bureau

#	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP/ ROP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
1		n/a	
2		n/a	
3		Achieve average of 3% stock out rate for condoms (male and female); maintain zero percent stock out rate for lubricants	
4		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
5	USAID	Project SOAR	Population Council	17590	PREV	Host country institutio	Collection of remaining site capacity VMMC data and work to establish systems to sustain data collection for use in the GIS online tool	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Compeletion and roll out of the GIS VMMC online tool to the national and partner level
6	USAID	Challenge TB	KNCV Tuberculosis Foundation	18005	C&T	Host country institutio	Provide Technical Advisors for Procurement & Supply Chain Management for TB/HIV commodities (co-funded by TB funds)	Limited host country institutional capacity for evidence-based management of HIV program	1 SCM TA deployed (co-funded with TB funds), skills transfer maintained and service quality improved
7	USAID	Challenge TB	KNCV Tuberculosis Foundation	18005	C&T	Host country institutio	Provide Technical Advisors for Diagnostic Network strengthening and National Reference Lab (co-funded by TB funds)	Limited host country institutional capacity for evidence-based management of HIV program	1 Diagnostic Network Advisor deployed (co-funded with TB funds), skills transfer attained and service utilization increased
8	USAID	Challenge TB	KNCV Tuberculosis Foundation	18005	C&T	Host country institutio	Provide Technical Advisors for Zonal TB/HIV collaborative activities imlementation	Limited host country institutional capacity for evidence-based management of HIV program	2 Zonal Advisors deployed at key Zones. Delivery of collaborative TB/HIV activities improved

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
5	1 year	GIS VMMC Online Tool developed	DHIS2 platform available in 28 districts including GIS functionality (inactive)	GIS Online tool (including DMPTT online tool and site capacity utlization tool) functional in 8 PEPFAR VMMC districts to provide accurate site data collection for optimized program planning, in absense of functional DHIS2 GIS application at national level; updated VMMC coverage estimates (referencing Specctrum and other epi data) in 8 PEPFAR VMMC districts		n/a
6	1 year	# of Stock-out days for firstline TB drugs, IPT and Xpert cartridges at site level; # of stock monitoring visits conducted;	One Procurement & Supply Chain Adviser maintained at NTP; Mentorship visits to 7 of the 15 high priority districts; 20 Pharmarcy Technicians/Assistants trained on TB/HIV supply management; TB drugs	Maintain PSCM Advisor seconded to NTP; Zero Stock out of first and second-line TB drugs maintained; Zero Stockouts of Xpert Cartridges; Zero Stockout of IPT at participating sites (new); conduct 17 stock monitoring visits to Priority distict Pharmacies; 40 staff received training on supply chain management	n/a	n/a
7	1 year	Xpert Utilization rate; # of Xpert sites with functional Gx Alert system, No of Xpert platforms participating in EQA program, # of Xpert machines receiving annual check and are on service warranty; # of Labs receiving EQA visits	Inadequate proficiency in carrying out Drug sensitivity testing/Low coverage of EQA for microscopy/low Xpert utilization rate (33%), only 44 of 69 Xpert platforms co-managed with MOH are on service warranty	All 9 Technicians at NTRL pass Proficiency assessment in DST/Xpert utilization rate increased to 50%, 76 Xpert platforms have functional Gx Alert systems, 69 Xpert platforms reveive annual check have service warranty		Xpert Utilization rate increased to 60%/Mechanism closing by Sept 2019
8	1 year	# of days of Stock-out for firstline TB drugs, IPT and Xpert cartridges at site level; Xpert Utilization rate. Monthly stock reports and GX alert records will be used respectively to verify results	Lack of oversight and technical support from Zonal Office to District teams/ poor TB/HIV collaboration/Poor documentation and reporting of HIV testing among TB Presumptive patients	Improved supervision of districts by Zonal staff/Improved TB/HIV collaboratio/ Documentation and reporting of HIV testing among TB presumtive patients remarkably improved (Mechanism closing out by Sept 2019)		n/a

#	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP/ ROP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
5		n/a	
6		n/a	
7		Xpert Utilization rate increased to 70%/Mechanism closing by Sept 2019	
8	improved supervision of districts by Zonal staff/Improved TB/HIV collaboratio/ Documentation and reporting of HIV testing among TB presumtive patients remarkably improved (Mechanism closing out by Sept 2019)	n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
9	USAID	Challenge TB	KNCV Tuberculosis Foundation	18005	HSS	Construction and renc	Renovation of 4TB/HIV registration sites in acceleration districts and 4 TB/HIV registration sites in scale up districts districts to facilitate TB/HIV service integration	Infrastructure limitations restrict facility capacity to provide quality HIV services	4 x TB/HIV Facilities receive minor renovations (acceleration); 4 x TB/HIV Facilities Renovated (scale up)
10	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	C&T	Technical area guidelines and tools	Design/ revise Adverse Drug Reaction (ADR) forms and strengthen reporting system in order to create a functional, in-country pharmacovigilance system	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	A functional national pharmacovigilance system in place for reporting ADRs
11	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	PREV	Supply chain systems	Procurement, forecasting, quantification and supply planning in order to ensure uninterrupted supply of VMMC commodities	Limited commodity management and storage capacity at national, district, and facility levels	VMMC commodities quantifed, forecasted, on an annual basis and supply plan monitored quarterly to ensure uninterupppted
12	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	HSS	Information systems	Support maintenance of existing national OpenLMIS at national and district levels through troubleshooting, internet, equipment, on-job training, systems updates, and establishment of newq data hubs	Limited commodity management and storage capacity at national, district, and facility levels	National OpenLMIS functional, HIV commodity stock status available on a monthly basis
13	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	HSS	Host country institutional development	M&E TA provided to MOH- HTSS to support commodity database, quality system & OpenLMIS	Limited commodity management and storage capacity at national, district, and facility levels	Database and key supply chain indicators (stock status and stock out rates) shared, and DQAs done

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
9	1 year	# of sites renovated; # of presumptive TB patients identified and # that completed diagnostic workup	2017 Presumptive Rgister Baseline Data	4 Facilities in acceleration sites and 4 Facilities in scale up sites to receive minor rennovations in FY2019 to facilitate quality TB/HIV service delivery		n/a
10	3 years	ADR collecting and reporting tools developed and distributed to all facilites by September 2019	No comprehensive pharmacovigilance in-country	Revised ADR Forms and reporting system available		Roll-out of standard ADR forms in 50% of scale-up acceleration sites
11	3 years	Stockout rates for VMMC commodities (Partner and consolidated GHSC VMMC monthly stock status reports)	VMMC commodities will continue to be procured and managed by USG	Annual Quantification and Forecasting report completed, supply plan and stock status monitored to ensure uninterrupted supply of VMMC Commodities		Annual Quantification and Forecasting report completed, supply plan and stock status monitored to ensure uninterrupted supply of VMMC Commodities
12	3 years	Monthly HIV commodity data reviewed and reports shared	OpenLMIS recently rolled out in 2017 at all district hospitals for reporting commodity stock status; 90% reporting rates	Monthly HIV commodity stock status data reviewed and reported, DQA completed		Monthly HIV commodity stock status data reviewed and reported, DQA completed
13	3 years	HIV commodity database shared on monthly basis	Commodity data shared on monthly basis (Benchmarks	Monthly HIV commodity stock status database and reports maintained		Monthly HIV commodity stock status database and reports maintained

#	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP/ ROP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
9		n/a	
10		Roll-out of standard ADR forms in all scale-up acceleration sites	
11		Annual Quantification and Forecasting report completed, supply plan and stock status monitored to ensure uninterrupted supply of VMMC Commodities	
12		Monthly HIV commodity stock status data reviewed and reported, DQA completed	
13		Monthly HIV commodity stock status database and reports maintained	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
14	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
15	USAID	Challenge TB	KNCV Tuberculosis Foundation	18005	C&T	Laboratory quality imp	Conduct Zonal level EQA supervision for District, Central, and large CHAM hospitals; Support District to Peripheral Hospital EQA supervision; Conduct Zonal AND District EQA review meetings	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Strengthened Lab services to support TB/HIV services
16	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	PREV	Supply chain systems	Procurement, forecasting, quantification and supply planning (condoms and lubricants)	Limited commodity management and storage capacity at national, district, and facility levels	Improved availability and acces to condoms and lubricants
17	USAID	HP+	Palladium Group	17480	PREV	Technical area guidelines and tools	Develop tools for reporting and monitoring of condom use for community and KP programs	Limited commodity management and storage capacity at national, district, and facility levels	Commodity reporting forms for community and KP programs developed to track commodity movement
18	USAID	HP+	Palladium Group	17480	PREV	Supply chain systems	Forecasting, quantification, pileline monitoring, and supply planning for condoms and lubricants for KP programs	Limited commodity management and storage capacity at national, district, and facility levels	Condoms and lubricants quantifed, forecasted on an annual basis and supply plan monitored quarterly to ensure uniterrupted supply
19	USAID	Strengthening the National OVC Pl	UNICEF	15888	OVC	Host country institutio	Support the Ministry of Gender, children, Disability and Spcial Welfare to effectively coordinate OVC programs in Malawi through data validation and improved partner coordination	Limited host country institutional capacity for evidence-based management of HIV program	Coordination structures are developed and are in place at national and district levels (Objective needs to be more specific)

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
14	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
15	1 year	% of labs that received at least one EQA visit; % of labs visited that scored > 90% EQA blinded rechecking score. (quarterly IP reports)	226 of 315 (71%) TB microscopy labs received EQA visit in FY 2017. 218 of them scored > 90% on blind rechecking; Xpert Utilization rate was at 33% in FY 2017 (IP Reports)	42 District, Tertiary and Large CHAM labs will receive atleast one EQA visit in FY2019; 120 peripheral Health Facility labs will receive atleast one EQA visit in FY2019; Conduct Conduct Zonal Review meetings in 2 Health Zones in FY 2019; Conduct District EQA review meetings in 4 selected districts. Xpert Utilization rate to increase from 33% in FY 2017 to 60% by Q4 of FY 2019.		n/a
16	3 years	Stock out rates for condoms and lubricants (OpenLMIS and KP commodity dashboard from HP+)	5.3 % stock out rate for female condoms; 8 % stock out rate for male condoms; zero for lubricants (OpenLMIS and KP commodity dashboard from HP+)	Average of 5% stock out rate for condoms and lubricants		Maintain an average of 5% or lower stock out rate for condoms and lubricants
17	2 years	Reporting forms developed for community commodity monitoring	No forms available for reporting condoms used in communities in 7 focal districts	Reporting forms piloted in 7 focal districts; reporting forms fully rolled out and available in 7 focal districts		100% districts community partners reporting commodity consumption through respective districts
18	3 years	Stock out of condoms and lubricants for KP programs (OpenLMIS, KP commodity dashboard)	Condoms and lubricants for KP programs managed by USG only	Annual Quantification and Forecasting report completed, supply plan and stock status monitored on quarterly basis		Annual Quantification and Forecasting report completed, supply plan and stock status monitored on quarterly basis
19	1 year	Number of national and disitrict leel coordiantion meeting undertaken; National Plan of Action for Vulnerable Children in Malawi 2015-2019 (objective 4)	Zero National Conference and quarterly district level meetings for OVC program coordination	Improved implementation fidelity of OVC case management system through validation at national and district level ofcoordinated referral system, case conferencing, and data validation		n/a

#	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP/ ROP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
14	*[REDACTED]*	*[REDACTED]*	
15		n/a	
16		Maintain an average of 5% or lower stock out rate for condoms and lubricants	
17		n/a	
18		Annual Quantification and Forecasting report completed, supply plan and stock status monitored on quarterly basis	
19		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
20	USAID	Malawi Scholarship Program	World Learning	18028	HSS	Workforce developme	Provison of scholarships for pre-service training of 200 nurse midwife Technicians and 50 Pharamcy assistants	Inadequate HRH to implement quality targeted HIV service delivery at the site and community level	200 NMTs and 50 PAs graduated
21	USAID	HRH 2030	Chemonics International	18305	C&T	Host country institutio	Support transiton of PEPFAR salary supported HCWs to Government of Malawi salaries in Zomba and Lilongwe	Inadequate HRH to implement quality targeted HIV service delivery at the site and community level	Complete transition of approximately 200 PEPFAR supported HCWs to GOM payroll
22	USAID	HRH 2030	Chemonics International	18305	HSS	Host country institutio	Provide technical assitance to MOH HR directorate to develop, implement and monitor overall national strategic priorities for HRH	Inadequate HRH to implement quality targeted HIV service delivery at the site and community level	Strenghened capacity of central level MOH Directorate to develop and execute favourable HRH polices, guidelines and strategies that support HIV service delivery
23	USAID	Linkages	FHI 360	17585	C&T	Assessments, evaluati	Continuation of implementation science to operationalize PrEP for FSW for transition to scale in COP18, pending national guideline changes	Limited host country institutional capacity for evidence-based management of HIV program	Operations research informs policy for PrEP, KP friendly community ART and responsive KP services in public facilites
24	USAID	Linkages	FHI 360	17585	PREV	Host country institutio	Technical Advisor seconded to NAC for KP and AGYW programming, District FSW coordination committee support - Training to additional LGBTI-led groups in KP programming Capacity building for PR, SRs and SSRs on service delivery models	Limited host country institutional capacity for evidence-based management of HIV program	National AIDS Commission (NAC) capacity to coordinate strategic KP and AGYW activities increased.

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
20	1 year	# of Nurse Midwife Technicians graduated # of pharmacy assistants graduated (HRH_PRE)	200NMTs and 50 PAs in training pipeline	200 NMTs and 50 PAs graduated and hiring through PEPFAR/GF		n/a
21	2 years	# of PEPFAR salary supported HCWs transitioned to Government of Malawi	0 HCWs transitioned	50% of PEPFAR salary support HCWs transitioned to Government of Malawi		Remaining 50% of intial 200 HCW transitioned to GOM
22	2 years	MOH Health sector strategic plan; MOH HRH strategic plan	Draft HRH strategic plan 2017 - 2021 under development; Health Sector Strategic Plan 2016 - 2020 completed	MOH HRH strategic plan developed in line with HRH Strategy		MOH HRH monitoring plans translated to district level action plans (2 acceleration districts)
23	1 year	# of FSW reached; # of guidelines updated; # of implementation science reports share with GOM & other stakeholders	Limited Implementation ongoing. PrEP protocol for IRB submission - expected start date in April 2018.	90% of beneficiaries retained during course of implemtation for estimated continued reach of 504 FSW (out of 560 enrolled). Implementation science findings disseminated;		n/a
24	1 year	Quarterly meeting notes of KP and AGYW subTWG meetings are available. Adoption of key actions/policies regarding effective rollout of coordinated national KP and AGYW program. National M&E framework/reporting systems in place to capture KP and AGYW performance	National KP and AGYW subTWG established . Acceleration plan for GF supported districts developed. TA plan in progress	Quarterly data review and validation conducted at national level stakeholder meetings		n/a

#	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP/ ROP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
20		n/a	
21		n/a	
22		n/a	
23		n/a	
24		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
25	USAID	HP+	Palladium Group	17480	C&T	Policy and governance	TA provide to MOF to support oversight and coordination for Global Fund	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	Capacity for MOF/ MOH increased to provide oversight and coordination for GF resources for HIV/TB
26	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	C&T	Supply chain systems	Forecasting, quantification, pileline monitoring and supply planning for RTK	Limited commodity management and storage capacity at national, district, and facility levels	RTKs quantifed, forecasted and supply plan monitored
27	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	C&T	Supply chain systems	Forecasting, quantification, pileline monitoring and supply planning for ARVs	Limited commodity management and storage capacity at national, district, and facility levels	ARVs quantifed, forecasted and pipeline monitored
28	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	C&T	Information systems	Develop a system for collecting and monitoring of VL reagents and Lab commodity stock status	Limited commodity management and storage capacity at national, district, and facility levels	System in place for collecting and monitoring stock status of VL reagents and Lab commodities
29	USAID	Global Health Supply Chain Progra	Global Health Supply Chain Program	18063	C&T	Host country institutional development	TA provided to MOH-HTSS to support Pharmacovigilance and quantification of HIV commodities	Limited commodity management and storage capacity at national, district, and facility levels	National pharmacovilance system in place and HIV commodities stock status monitored
30	HHS/CDC	Strengthening High Quality Labora	University Research Corporation, LLC	17341	C&T	Laboratory sample ref	Sample transport to laboratory and result return to requesting facilities	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Integrated sample transportation for viral load, EID ,TB and others across the 28 districts. Reduce VL/EID TAT.
31	HHS/CDC	Strengthening High Quality Labora	University Research Corporation, LLC	17341	HSS	Laboratory quality imp	Implement Laboratory quality management systems	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Laboratories produce accurate, reliable and timely result for appropriate patient care and management

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
25	3 years	TA placed at Ministry of Finance & contributing to GF on time achievement	Maintain TA support to MOF	TA to MOF maintained for on-track GF grant performance; quarterly financial reviews conducted and submitted to PEPFAR		TA to MOF maintained for on-track GF grant performance; quarterly financial reviews conducted and submitted to PEPFAR
26	3 years	Stockout rates for RTKs	An average of 5% stockout rate of RTKs across all facilities (nation-wide)	Annual Quantification and Forecasting report completed, supply plan and stock status monitored		Annual Quantification and Forecasting report completed, supply plan and stock status monitored
27	3 years	Stockout rates for ARVs	An average of 2% stockout rate of ARVs across all facilities (nation-wide)	Annual Quantification and Forecasting report completed, supply plan and stock status monitored		Annual Quantification and Forecasting report completed, supply plan and stock status monitored
28	3 years	Stockout rates for VL reagents	BL Reagent monitoring system not available	Develop logistic system for monitoring VL reagents	Develop logistic system for monitoring VL reagents	Pilot logistics system for monitoring VL reagents and related commodities at 30% of reference laboratories
29	3 years	ADR reporting system in developed and functional	No comprehensive pharmacovigilance in-country	Health care workers mentored on Pharmacovigilance in 50% of scale-up acceleration sites		Pharmacovigilance focal persons and standard ADR forms maintained and in place at 50% of scale-up acceleration sites
30	1 year	100% coverage of integrated sample transportation system	27 districts coverage out of 28	100% complete sample transportation coverage in 28 districts		Maintain 100% complete coverage of 28 districts
31	3 years	Stepwise laboratory quality improvement process towards accreditation (SLIPTA) framework	Six labs currently at one star level	Improve six laboratories to minimum of three star level		3 laboratories achieve ISO 15189 Accreditation

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25		TA to MOF maintained for on-track GF grant performance; quarterly financial reviews conducted and submitted to PEPFAR	
26		Annual Quantification and Forecasting report completed, supply plan and stock status monitored	
27		Annual Quantification and Forecasting report completed, supply plan and stock status monitored	
28		Roll out of logistics system for monitoring VL reagents and related commodities at all reference laboratories	
29		Pharmacovigilance focal persons and standard ADR forms maintained and in place at all scale-up acceration sites	
30		Maintain 100% complete coverage of 28 districts	
31	Accredit additional 2 laboratories and maintain the three labs that are already Accredit	Accredit additional 2 laboratories and maintain the three labs that are already Accredit	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
32	HHS/CDC	Strengthening High Quality Labora	University Research Corporation, LLC	17341	HSS	Technical area guidelines and tools	Support revision and implementation of national laboratory policy and strategic plan for mapping and networking of conventional and POCT	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Revised national laboratory strategic plan for optimal utilization of instruments and resources
33	HHS/CDC	Strengthening High Quality Labora	University Research Corporation, LLC	17341	HSS	Information systems	Enhance laboratory information management system for timely result return and patient management	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Minimized laboratory error and improve TAT through electronic result transfer
34	HHS/CDC	Strengthening High Quality Labora	University Research Corporation, LLC	17341	HSS	Construction and renc	Refurbishment and renovation of Laboratories to improve quality of services	Poor optimization of lab mechanisms to effectively and efficiently utilize lab	Mmproved working environment for enahced work folw and staff safety
35	HHS/CDC	Strengthening High Quality Labora	University Research Corporation, LLC	17341	HSS	Equipment procurement and maintenance	Procure laboratory equipment, maintain existing service contracts, and conduct required yearly re--certification of 10 molecular laboratories	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Minimized equipment down time, service interruption and sample backlogs. Increase volume of VLs to reach 100% of PLHIV on ART.
36	HHS/CDC	Strengthening the Delivery, Coordi	Christian Health Association of Malawi	12131	HSS	Workforce developme	Provison of scholarships for pre-service training of 445 HCWs in different cadres.	Inadequate HRH to implement quality targeted HIV service delivery at the site and community level	445 HCWs graduated
37	HHS/CDC	Strengthening the Delivery, Coordi	Christian Health Association of Malawi	12131	HSS	Information systems	strengthen Training institution information system in all 9 CHAM TRAINING Institutions	Inadequate HRH information to monitor preservice Education Investiments.	Functional training Institution Information system available in all CHAM training institutions
38	HHS/CDC	Improving Quality of Care and Hea	BAOBAB Health Partnership	14442	C&T	Information systems	Software maintenance of the ART EMR module	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Effective HIV Treatment and Care at the point of care

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
32	1 year	Optimal utilization of resources at conventional laboratories and POCT	Revision of national laboratory policy and strategic plan	Optimized lab procurement, placement, and utilization of conventional and POC instruments to integrate viral load, EID and TB testing and reach 90% of PLHIV with a viral load		Optimized lab procurement, placement, and utilization of conventional and POC instruments to integrate viral load, EID and TB testing and reach 90% of PLHIV with a viral load
33	1 year	Number of laboratories using LIMS	LIMS implemented in five laboratories. EMRs and LIMs data not yet linked.	Expand LIMS to all 10 molecular laboratories. LIMS data and EMRs linked so that lab information is connected with patient clinical information		Maintain LIMS and EMR/LIMS in all 10 molecular laboratories
34	1 year	Improved laboratory service for HIV diagnosis, viral load, EID, and TB diagnosis.	Three laboratories renovated and refurbished	Renovate and refurbish additional 10 laboratories		Renovate and refurbish additional 5 laboratories.
35	1 year	Number of equipment procured and serviced	10 molecular laboratories service contracts & required yearly recertification	Maintained existing service contracts at 10 molecular laboratories, including required yearly recertification of biosafety cabinets for Viral load and TB tests. 100% of PLHIV have at least one VL.		Maintained existing service contracts at 10 molecular laboratories, including required yearly recertification of biosafety cabinets for Viral load and TB tests
36	2 years	# of HCWs graduated	445 HCWs in training pipeline	103 NMTs graduated and hired within the health system		142 NMTs graduating and hired within the health system
37	1 year	# of schools using the system	System not fully developed	Functional information system in place in all 9 CHAM Training Institutions to track strudent completion; student completion report shared with PEPFAR		n/a
38	1 year	Number of ART EMR facilities	220	ART EMR module rolled out system to 200 more sites; 100% of facilities with EMR roll out (200 COP18 + 220 COP Baseline) produce report within 45 days and shared with PEPFAR/MOH		n/a

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32		Optimized lab procurement, placement, and utilization of conventional and POC instruments to integrate viral load, EID and TB testing and reach 90% of PLHIV with a viral load	
33		Maintain LIMS and EMR/LIMS in all 10 molecular laboratories	
34	Renovate and refurbish additional 5 laboratories.	Renovate and refurbish additional 5 laboratories.	
35		Maintained existing service contracts at 10 molecular laboratories, including required yearly recertification of biosafety cabinets for Viral load and TB tests	
36		n/a	
37		n/a	
38		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
39	HHS/CDC	Strengthening Malawi's Vital Statis	National Registration Bureau Malawi	17487	HSS	Information systems	Scale-up electronic birth registration in 18 districts and death registration in all 28 districts through deployment of birth and death registration systems	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Scaled-up birth and death registration systems to ensure functional coverage in all districts
40	HHS/CDC	Strengthening Malawi's Vital Statis	National Registration Bureau Malawi	17487	HSS	Information systems	Train clincians in medical certification of cause of death in order to support death reporting system	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	All clincians trained in Medical Certification of Cause of Death in 28 districts in order to strengthen death reporting system
41	HHS/CDC	HIV Surveillance for Epidemic Cont	University of Washington	18024	C&T	Assessments, evaluati	Conduct birth defect surveillance to monitor possible adverse effects of transition to TLD	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Completed birth defects surveillance report from monitoring of possible adverse effects of TLD transition
42	HHS/CDC	HIV Surveillance for Epidemic Cont	University of Washington	18024	C&T	Assessments, evaluati	Conduct HIV prevalance recency study to monitor trends in new HIV infections	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Completed recency study to monitor trends in new HIV infections and inform policy/programmatic interventions
43	HHS/CDC	HIV Surveillance for Epidemic Cont	University of Washington	18024	C&T	Assessments, evaluati	Conduct HIV drug resistance survellance to monitor efficacy of ART	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Completed HIV drug resistance surveillance report to monitor ART efficacy to inform policy/programmatic
44	HHS/CDC	HIV Surveillance for Epidemic Cont	University of Washington	18024	C&T	Assessments, evaluati	Graduate 60 FETP fellows. Conduct field epidemiological training program of 4 cohorts to strengthen PHIM and improve epidemiological capacity in country	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Completed field epidemiological training program of 4 cohorts to strengthen PHIM and improve epidemiological capacity in country

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
39	2 years	# of districts with functional birth registration system; # of districts with functional death registration systems	Birth registration system deployed in 10 districts; Death registration system deployed in 4 districts	Functional birth registration system scaled-up in 6 districts and functional death registration system scaled-up in 8 districts		Functional birth registration system scaled-up in 2 districts and functional death registration system scaled-up in 16 districts
40	2 years	# of clinicians trained; # of districts with full coverage in death reporting system	300 clinicians trained in death reporting system (MOH reports) in four districts, in line with phased roll out of Death Registration System	Eight additional districts with full coverage of training for clinicians in Medical Certification of Cause of Death (bringing total # of districts with full covereage to 12, in line with phased roll out of Death Registration System)		16 additional districts with full coverage of training for clinicians in Medical Certification of Cause of Death (brining total # of districts with full coverage to 28, in line with phased roll out of Death Registration System)
41	1 year	# of reports completed	2017 annual birth defects report	40,000 births assessed for birth defects. Completed birth defects surveillance report from monitoring of possible adverse effects of TLD transition		n/a
42	1 year	# of studies completed	2017 Recency Studey	30,000 HIV-positive people receive receny test. Completed recency study to monitor trends in new HIV infections and inform policy/programmatic interventions		n/a
43	1 year	# of studies completed	2017 HIV drug surveillance report	300 of high VL tests receive genotyping for HIV drug resistance. Completed HIV drug resistance surveillance report to monitor ART efficacy to inform policy/programmatic interventions		n/a
44	1 year	# of cohorts trained	2017 FETP cohort reports	Completed field epidemiological training program of 4 cohorts to strengthen PHIM and improve epidemiological capacity in country		n/a

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39		n/a	
40		n/a	
41		n/a	
42		n/a	
43		n/a	
44		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
45	HHS/CDC	Human Resources for Health (HRH	Universtiy of Washington	17451	C&T	Technical area guideli	Identify 90% of PLHIV through senior, expert Technical Advisors to the MOH that provide technical guidance and program monitoring.	Limited host country institutional capacity for evidence-based management of HIV program	PITC saturation reached 95% coverage in priority sites
46	HHS/CDC	Human Resources for Health (HRH	Universtiy of Washington	17451	C&T	Technical area guideli	Initiate and retain 90% of PLHIV on ART and transition to DTG through senior, expert TA to the MOH for supply chain forecasting, supply chain management and	Limited commodity management and storage capacity at national, district, and facility levels	DTG transition preparations completed and all patients transitioned to TLD
47	HHS/CDC	Human Resources for Health (HRH	Universtiy of Washington	17451	C&T	Technical area guideli	Prevent and treat TB/HIV co-infection through senior, expert TA to the MOH for TB/HIV program monitoring	Limited host country institutional capacity for evidence-based management of HIV program	Increased TB case detection and TB preventive therapy for PLHIV
48	HHS/CDC	Human Resources for Health (HRH	Universtiy of Washington	17451	HSS	Technical area guideli	Support MOH in the development of national EMRs to collect age and sex disaggregated data for program monitoring and improvement	Limited host country institutional capacity for evidence-based management of HIV program	HTC module rolled out to all EMR sites. Expanded age and sex disaggregated HTS POS data available
HHS/C	Human Resourc	Universtiy of Washington	17451	HSS	Technical are	Limited host country institutional capacity for evidence-based	1 year	HTS POS data disaggs	n/a
50	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
51	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
52	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
53	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
54	HHS/CDC	Improving Medical Education in M	University of Malawi College of Medicine	17488	C&T	Workforce developme	Setting up pharmacovigillance centre and reporting system for adverse drug reactions	Weak Information Systems to efficently collect accurate, real-time epidemiological and health data	Pharmacovigilance centre and reporting system set up

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
45	1 year	Better denominator data and PITC coverage estimates	Ranges by partner and entry point	PITC saturation reached 95% coverage in priority sites	PITC data available for all EMR sites	n/a
46	1 year	National program data and verified at sites during SIMS	No DTG available	All patients transitioned to DTG	Zero stockouts of DTG	n/a
47	1 year	TB_PREV	TPT rollout requires verification	All PLHIV in 5 priority districts on ART offered IPT	All PLHIV in 5 priority districts maintained on IPT for life	n/a
48	1 year	HTS POS data disaggs	Manual collection is the norm currently in 5.5 districts	HTC module rolled out to 120 EMR sites. Expanded age and sex disaggregated HTS data available	Expanded age and sex disaggregated HTS data available	n/a
HHS/C	n/a					
50	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
51	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
52	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
53	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*	*[REDACTED]*
54	1 year	Number of facilities reporting adverse drug reactions to the pharmacovigilance centre.	Pharmacovigilance centre already set up at College of Medicine	5 sentinel facilities within Blantyre (Queen Elizabeth Central Hospital, Chilomoni, Ndirande, Limbe, Bangwe)		n/a

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45		n/a	
46		n/a	
47		n/a	
48		n/a	
HHS/C			
50	*[REDACTED]*	*[REDACTED]*	
51	*[REDACTED]*	*[REDACTED]*	
52	*[REDACTED]*	*[REDACTED]*	
53	*[REDACTED]*	*[REDACTED]*	
54		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
55	HHS/CDC	Center of Excellence for Comprehe	Lighthouse	14441	C&T	Technical area guideli	Review and printing of HTS guidelines and tools develped by the national HIV program to incorporate emerging issues [HIV self-testing, active index testing] refresher trainings following PITC guideline and tool review	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	Technical area guidelines and tools reviewed and revised for HIV testing services in line with evidence, global guidance, and emerging issues; orientation of providers on revised tools and guidelines above
56	HHS/CDC	Center of Excellence for Comprehe	Lighthouse	14441	C&T	Technical area guideli	Review, printing, and implementation support of ART guidelines and tools developed by the national HIV program	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	Technical area guidelines reviewed, revised, and disseminated for HIV treatment services in line with evidence and global guidance
57	USAID	HP+	Palladium Group	17480	C&T	IEC and/or demand creation	TA provided to Faith Based Organizations to develop strategic messaging for promoting testing and retention on care	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	FBOs capacity to develop messaging around promoting testing and retention in care developed
58	USAID	HP+	Palladium Group	17480	PREV	Host country institutional development	2 Global Health Corps Fellows placed at Ministry of Labour, Youth and Manpower Development to support implementation of Government of Malawi AGYW Strategy	Limited host country institutional capacity for evidence-based management of HIV program	Improved capacity of nascent AGYW Strategy Secretariat in harmonized data management and data analysis through placement of Global Health Corps Fellows
59	USAID	EQUIP	Right To Care, South Africa	18234	C&T	Assessments, evaluation, operation research	Continue multi-month dispensing study for completion	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	Multimonth scripting completed; findings shared with stakeholders and used by MOH for policy decisions

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
55	1 year	# of providers trained (IP reports); # of guidelines/tools reviewed and developed; # of guidelines and tools printed	Revision of national policies and strategic documents in COP17	Technical area guidelines and tools updated; approximately 5,000 HTS providers oriented in new tools and guidelines; National M&E tools available at every HTS serviec delivery point to ensure compliance		n/a
56	1 year	# of providers trained (IP reports); # of guidelines/tools reviewed and developed; # of guidelines and tools printed	Current revision of national policies and strategic documents during COP17	ART MOH 2018 guideline and tools updated; 2018 ART guidelines available at every ART clinic to ensure compliance		n/a
57	1 year	Messages for promoting testing and retention developed; # of stakeholder meetings held; # of validation meetings held	Little/ no work with FBOs on testing and retention; no standardized messages currently deployed	Standardized faith-sensitive HIV testing, re-testing, and retention messaging developed in consultation with FBOs, with FBO stakeholder action plans developed for messaging deployment	Pilot and adopt standardized faith-sensitive HIV testing, re-testing, and retention messages for FBOs	n/a
58	1 year	Finalized AGYW strategy; # implementation milestones completed (milestones TBD upon finalization of Strategy and development of implementation plan)	Near-final AGYW Strategy (expected launch April, 2018))	Cross ministry, AGYW-relevent data streams harmonized to sit within MOY to build out AGYW Strategy implementation plan; AGYW Strategy implementation plan developed through GHC TA		n/a
59	1 year	# of meetings held	6month multi-month scripting not in guidelines	Study completed and report shared amongst implementers and MOH in order to inform Multimonth Scripting policy and scale with fideltity		n/a

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55		n/a	
56		n/a	
57		n/a	
58		n/a	
59		n/a	

#	Funding Agency	Implementing Mechanism Name	Prime Partner	Mechanism ID	Program Area	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Expected Outcome
60	USAID	EQUIP	Right To Care, South Africa	18234	C&T	Assessments, evaluation, operation research	Completing HIVST implemenation science to inform operationalization of self-testing scale up, pending inclusion in national guidelines (expected calendar year 2018)	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	Implementation completed and findings shared in order to inform scale up of self-testing modality with fidelity through National Guidelines revision
61	USAID	EQUIP	Right To Care, South Africa	18234	C&T	Host country institutional development	Support the National Molecular Testing Program at the PIH Molecular Lab. provide daily sample analysis using three viral load instruments and participate in strategic discussions on improving the National program; Support to MoH for reagents and equipment needed for creation of a national genotyping lab.	Poor optimization of lab mechanisms to effectively and efficiently utilize lab resources	Continued support to the national VL lab program
62	USAID	Linkages	FHI 360	17585	C&T	Host Country institutic	Continuation of FSW HIVST implementation science	Limited host country institutional capacity for evidence-based management of HIV program	Implementation science informs policy for self-testing among KP
63	HHS/CDC	Strengthening the Delivery, Coord	Christian Health Association of Malawi	12131	C&T	IEC and/or demand creation	Faith-based IEC outreach to combat faith-healing myths through convening of faith leaders at national level and media outreach	Unfavorable policy environment to implement innovative evidence-based HIV interventions across the cascade of treatment and prevention	FBOs capacity to develop messaging around promoting testing and retention in care developed

#	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP/ ROP19) Annual Benchmark
60	1 year	# of clients screened; # of clients provided confirmatory test; # confirmed positives identified	Self-testing not in guidelines	Implementation science completed and findings shared amongst implementers and MOH in order to inform self-testing policy and scale self-testing modality with fidelity		n/a
61	1 year	availability of VL lab services	48,684 VL tests done 6,695 EID tests done	73,025 VL tests done 9,093 EID tests done	n/a	n/a
62	1 year	# of new beneficiaries reached through program approach and linked to confirmatory testing and care services	Current self-testing protocol in IRB approval; Protocol to be rolled out in Lilongwe, Machinga, & Zomba	1,870 FSWs; 423 MSM reached in Lilongwe, Machinga and Zomba through program approach	n/a	n/a
63	1 year	Messages for promoting testing and retention developed; # of members of the faith community reached	MOH reports high rates of retesting among PLHIV on ART (25% of those retesting are suspected of trying to confirm their status), some of which is reportedly due to faith healing	Standardized faith-sensitive HIV testing, re-testing, and retention messaging developed in consultation with FBOs, with FBO stakeholder action plans developed for messaging deployment. 150 Faith Leaders reached with messages with plans to share messaging through their networks.		n/a

#	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP/ ROP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
60		n/a	
61		n/a	
62		n/a	
63	n/a	n/a	n/a