

Malawi Country Operational Plan 2022 **Strategic Direction Summary**

April 29, 2022

Table of Contents

1.0 Vision and Goal Statement	3
2.0 Epidemic, Response, and Program Context	7
2.1 Summary statistics, disease burden and country profile	7
2.2 New Activities and Areas of Focus for COP22, Including Focus on Client ART Continuity	14
2.3 Investment Profile	16
2.4 National Sustainability Profile Update	19
2.5 Alignment of PEPFAR investments geographically to disease burden	21
2.6 Stakeholder Engagement	21
2.7 Stigma and Discrimination	24
3.0 Geographic and Population Prioritization	27
4.0 People-Centered Program Activities for Epidemic Control	28
4.1 Finding people with undiagnosed HIV and getting them started on treatment	28
4.2 Ensuring viral suppression and ART continuity	30
4.3 Prevention	34
4.4 Additional country-specific priorities listed in the planning level letter	48
4.5 Additional Program Priorities	48
4.6 Commodities	52
4.7 Collaboration, Integration and Monitoring	53
4.8 Targets by population	57
4.9 Cervical Cancer Screening and Management	60
4.10 Viral Load and Early Infant Diagnosis Optimization	61
5.0 Program Support Necessary to Achieve Sustained Epidemic Control	64
6.0 USG Operations and Staffing Plan to Achieve Stated Goals	68
APPENDIX A – PRIORITIZATION	71
APPENDIX B – Budget Profile and Resource Projections	74
APPENDIX C – Tables and Systems Investments for Section 5.0	77
APPENDIX D – Minimum Program Requirements	78
APPENDIX E – Assessing Progress towards Sustainable Control of the HIV/AIDS Epidemic	83
APPENDIX F – List of Acronyms and definitions	86

PEPFAR Malawi's Country Operational Plan 2022 (COP22) embodies joint priorities from national and subnational dialogues building on the 2020-2025 National Strategic Plan for HIV/AIDS. The interagency team has developed a person-centered, district-tailored and Malawi Population-Based HIV Impact Assessment (MPHIA)-informed strategy through extensive engagement with Government of Malawi (GoM) and Civil Society Organizations (CSOs) to sustain HIV epidemic control. At the end of COP21, PEPFAR Malawi was commended for contributing to reaching epidemic control in strong collaboration with GoM and stakeholders including the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund). This includes enrollment of 88% of recipients of care on three or more months of antiretroviral treatment (ART), better outcomes for Malawian children through remarkable efforts in Orphans and Vulnerable Children (OVC) programming and progress made towards reaching men with more intentional and focused programming.

PEPFAR Malawi's COP22 strategy aims to advance epidemic control gains through personcentered prevention, care, and treatment interventions aligned with GoM priorities and complemented by health systems investments. The COP22 Strategy is aligned to the Ministry of Health's (MoH) new guidelines and strategies, including revised integrated rapid testing guidelines, comprehensive HIV clinical guidelines, a PrEP scale- up plan and the upcoming National HIV/AIDS Prevention Strategy, 2022 - 2026. With Malawi estimated to have achieved epidemic control at 88-98-97 of the 95-95-95 UNAIDS goals, evidenced by MPHIA 2020/2021 results, the interagency team envisions a transformative path ahead enhancing data use to guide refinement in program strategies. The PEPFAR Malawi team continues its focus on direct funding to local partners including to government through its government to government (G2G) mechanisms. In COP22, PEPFAR Malawi will support development of an HIV financing strategy that will enhance efforts to expand the domestic resource base for the HIV/AIDS response. In COP22, the PEPFAR Malawi program has planned to identify the remaining 12% of people living with HIV who are not aware of their HIV status, reach 56,884 people living with HIV with ART, and retain the over 900,000 people living with HIV who are currently in care with comprehensive and well-integrated services. Using the equity lens and rights-based approach, PEPFAR Malawi and implementing partners (IPs) will intensify interventions that reduce the risk of HIV transmission for priority and key population through accelerated treatment literacy efforts and scale-up of high impact HIV prevention programs. The interventions will include PrEP and voluntary medical male circumcision (VMMC).

At the COP22 Virtual Planning Meeting, PEPFAR Malawi presented a comprehensive COP22 strategy to address the 95-95-95 gaps guided by MPHIA data. Primary case finding focus remains on targeting men 20-39 years and women aged 15- 34 years with the right service, at the right time and in the right places. Case finding and treatment efforts for pediatrics and adolescent individuals will be prioritized and intensified as data has shown treatment gaps and vulnerabilities in these subpopulations. PEPFAR Malawi is implementing HIV recent infection surveillance to support the National Program to continuously identify and respond to clusters of new infections with targeted HIV prevention and treatment efforts. In COP17, PEPFAR Malawi supported early implementation of a recent infection surveillance system to estimate HIV incidence and detect recent infections among pregnant AGYW in Blantyre, Lilongwe, Zomba,

and Machinga. In COP18, the scope was broadened to establish a surveillance system among all newly diagnosed populations beyond AGYW to monitor recent HIV infection by age, sex, and geography across multiple HIV testing service delivery points. Between COP19 and COP21, the recency surveillance system was expanded to 253 health facilities in 27 districts to cover 80% of newly diagnosed people living with HIV nationally. In COP21, investigations into potential transmission hotspots were conducted based on surveillance data, and initial response efforts have begun (e.g. more targeted testing). The investigation and response of identified geographic and subpopulations with ongoing HIV transmission will continue in COP22. In addition, at least 50 new sites will be activated to update the list of facilities covering 80% of new HIV diagnoses. PEPFAR Malawi will build on COP21 programmatic successes and address barriers to pre-exposure prophylaxis (PrEP) scale-up including challenges young people and KP face in accessing HIV services. Over COP22-23, the PEPFAR Malawi team will conduct a KP size estimation study to inform scale and design of future KP programs.

In COP22, Malawi continues to strengthen joint planning, information sharing and technical exchange with GF in key areas including addressing commodity shortfalls and improving efficiencies in the environment of rising costs and periodic uncertainties, technical exchanges around AGYW, KP, community-led monitoring (CLM), health information systems (HIS), laboratory, and human resources for health (HRH) investments. Ensuring alignment on key priorities, requires reinvigorated dialogue and collaboration with the Ministry of Health and Finance which will continue to ensure consensus in the vision, prioritization and implementation of life saving and enhancing interventions.

PEPFAR prevention programs, VMMC, and TB services, experienced disruptions during COP21 implementation due to COVID-19. COP22 plans to make up for lost ground by expanding DREAMS program to two districts and the prioritization of VMMC services in six districts that have high unmet need. The program will operationalize a database to enhance tracking of the KP cascade at national level alongside the KP population size estimate study where COP22 will focus on protocol development. TB screening services will be offered to participants enrolled in the orphans and vulnerable children (OVC) program to address an increased number of TB related deaths registered in COP 21 among children living with HIV. In addition, Malawi prepares for the return of Peace Corps volunteers who will support various communities and institutions in the implementation of prevention programs, in-service and pre-service training of health workers.

With care and treatment program indicators on track, PEPFAR Malawi will continue to advance FY22 Q1 successes. Reports indicated that index testing was one successful testing modality. This key intervention contributed to case finding among children. Additional successes include a high rate of children transitioned to pDTG at 99%, increased multi-month dispensing (MMD) at all treatment sites (86% on \geq 3MMD and 38% on 6 MMD), continued growth of Malawi HIV treatment cohort and high VL suppression at 93% among adults in Malawi. Meeting the challenges informed by Q1 includes a hyper focus in COP22 on negative new growth for young people less than 15 years of age; addressing where people living with HIV face significant interruption in treatment and suboptimal VL testing coverage in addition to the plateauing of VL suppression rates among children and adolescents. Through implementing partners, we will strengthen index testing, scale up social network testing strategy (SNS) along with continuity of treatment-related interventions. PEPFAR Malawi will continue addressing treatment interruption and employ enhanced 'welcome back to care' approaches. Information collected from

community-led monitoring (CLM), from in-person site visits and from direct encounters with People Living with HIV, partners and families will help to respond to the unique and changing needs of newly diagnosed as well as people already on ART. CSOs will provide the checks and balances through community led monitoring and collaborative problem solving.

In COP22, PEPFAR Malawi will continue to invest in HRH which is a critical input for maintaining epidemic control. Main activities will address various pillars which GoM is supportive of given known gaps.

- 1. Governance and accountability, including training of district health leadership in governance, financial and program accountability.
- 2. Key training and development needs of service providers through pre-service and inservice training models that include mentorship, supportive visits and coaching by service.
- 3. HRH management and development focus guides the work on quantification of HRH needs and gaps at national and district levels to promote more equitable distribution of clinical and lay cadres, among other activities.
- 4. Strengthening partnerships, mainly through continuous engagement and collaboration with district health authorities (DHA), Local Councils and other stakeholders.

Central to these relationships are also dialogue with Global Fund and World Health Organization to make progress in the evolvement of HRH sustainability plans; transition of PEPFAR supported cadres into government payroll and capacity development at sub national levels. Improvements and support tailored to districts and local councils in financial oversight, procurement processes, assets management and multi-disease reporting, remains essential as part of broader government-to-government technical assistance in COP22.

In COP22, PEPFAR Malawi continues to invest in strengthening laboratory services that improve VL and early infant diagnosis (EID) coverage and reduce turnaround time of results. Other areas for laboratory strengthening include expansion of the "pull system" for sample transportation to ten additional districts and scale up of the VL/EID laboratory information management system (LIMS) and electronic medical records (EMR) interface for automated results return to provide continuous quality improvement and optimization of the laboratory diagnostic network.

PEPFAR Malawi will also procure commodities that fill critical gaps not currently supported nationally nor by Global Fund. These include VMMC kits, condoms, lubricants, ARVs and laboratory reagents, including Hepatitis B for PrEP. In addition, while resources are limited to procure drugs needed to treat sexually transmitted infections, PEPFAR will continue coordinating with GF and stakeholders to identify alternative resource commitments and support reintegration of the parallel supply chains to achieve efficiency. In COP22, PEPFAR Malawi will also continue coordinating with Global Fund to strengthen Central Medical Store Trusts (CMST's) inventory management capacity, and ability to outsource and manage contracts for some components of the supply chain to the private sector. PEPFAR Malawi will continue supporting systems strengthening at both national and sub-national levels. These multi-year efforts address persistent systems barriers, ensure quality data management, and inform HIV/AIDS program improvements. Enabling the host government, partners, and local entities to utilize data and HRH inputs is essential beyond HIV/AIDS with positive implications and spillover benefits across multiple diseases.

Malawi COP22 strategy reflects a culmination of robust planning, enhancement in interventions and COP21 build back-approaches to accelerate gains in the aftermath of delays and losses experienced in the past two years due to the COVID-19 pandemic. Working within the flat lined budget level, activities and oversight will ensure smart programming and investment with long lasting effects. Within Malawi's constrained domestic resource environment, the joint understanding and agreement between PEPFAR, DHA, National AIDS Commission, CSOs and other donors were paramount to addressing the COP22 design and prioritization of resources. Therefore, the Malawi Strategic Direction Summary that follows remains in the spirit of USG-GoM-Global Fund collaboration and alignment with UNAIDS, Bill and Melinda Gates Foundation (BMGF), and Clinton Health Access Initiative (CHAI), other key development partners. The policy and program level priorities attend to both essential initiatives as outlined in the planning level letter and the feedback from CSOs, where feasible. As we have reached epidemic control, PEPFAR Malawi continues to focus efforts on maintaining gains and supporting host government plans that explore post-epidemic control sustainability considerations.

2.0 Epidemic, Response, and Program Context

2.1 Summary statistics, disease burden and country profile

Malawi is a low-income country (GNI: 580 per capita^[11]) with a population of 19,465,149^[2]. Malawi's HIV prevalence, at 5.1% overall and 8.2% among adults, is among the highest in the world^[3]. An estimated 982,470 Malawians are living with HIV, of which, 62% are women, 38% men, and 5% are children under 15 years old.

Malawi has made good progress towards reaching the 95-95-95 UNAIDS goals. Results from MPHIA 2020-2021 shows that Malawi has almost achieved the 95-95-95 goals (88%-98%-97%). Results were similar for men and women except for the first 95 where men were slightly behind at about 85% awareness of their HIV infection. Despite progress, some critical disparities between geography and populations persist. The greatest gaps to reaching first 95% are among young people 15-35 years and males 15-34. Geographically, the greatest ART treatment gaps are in the Districts of Lilongwe, Thyolo, Blantyre, Mangochi, Zomba, and Mzimba.

MPHIA 2020-2021⁴ results further show HIV prevalence varied considerably across geographical areas in Malawi; it was markedly lower in the Central East, Central West and North zones, at 4.0%,4.6%, and 6.6%, respectively, than in other zones. Prevalence of HIV peaked at 14.2% in the Southwest zone and Blantyre City. Prevalence is highest in the urban centers of Blantyre and Lilongwe (14.2% and 10.6% among adults aged 15-64 years with urban residence) respectively. Among adults (\geq 15 years) HIV prevalence ranged from 1.7% among older adolescent girls 15-19 years to 22.1% among women 45-49 years, and from 1.4% among older adolescent boys 15-19 years to 20.0% among men 50-54 years. HIV prevalence was twice as high among women than among men in each five-year age group between 20 and 39 years. The migration of youth to urban centers, a growing youth bulge, and sub-optimal levels of viral suppression in urban areas have contributed to higher incidence and prevalence among young people.

PEPFAR Malawi has already implemented most of the PEPFAR Minimum Program Requirements. Malawi adopted the Test and Start strategy several years ago and it is currently being implemented at all sites. We have achieved very high linkage rates (>95%) across the age groups except for adolescent males 15-19 years which remain sub-optimal. Over 99% of adults are on DTG based regimens. At the end of FY22 Q1, 99% of children on pediatric formulations were on pDTG demonstrating strong transition progress to optimized regimens. Safe and ethical index testing is fully implemented in all priority districts and scaling up to sustained ones has started in COP21 and will be completed in COP22. In collaboration with OVC IPs, clinical partners are striving to test children under 19 years old with at least one HIV positive biological parent. Malawi has also made significant progress in implementing DSD models including 6MMD. About 40% of the adult ART cohort were on 6MMD in FY22 Q1.

Major programmatic and systems gaps and barriers in sustaining epidemic control include: (1) the evolving policy environment; (2) health information systems that require infrastructure and sustained investment; (3) inadequate human resources for health for HIV and health service delivery; (4) limited host country institutional capacity; (5) limited commodity management and storage capacity; and (6) inadequate optimization of laboratory mechanisms. Each of these

barriers requires particular attention during COP22 given their potential to stall implementation of HIV interventions across the cascade.

^[1] World Bank. GNI per capita, Atlas method (current USD\$). <u>https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?locations=MW</u> Accessed March 30, 2022

^[2] Government of Malawi National Statistical Office. 2018 Population and Housing Census: Main Report. http://www.nsomalawi.mw/images/stories/data_on_line/demography/census_2018/2018%20Malawi%20Population%20And%20Housing%20Cen_sus%20Main%20Report.pdf. May, 2019.

^[3] Spectrum 2022 estimates, for 2021

⁴ Malawi Population-based HIV impact assessment (MPHIA) 2020-2021; Summary sheet, March 2022

Table 2.	1.1 Ho	st Cou	ntry Gove	ernmen	t Result	S									
	Tot	al		<15				15-24				25-	÷		Source, Year
	10	ai	Fema	le	Male		Female	-	М	ale	Femal	e	Male		Teur
	Ν	%	N	%	N	%	Ν	%	Ν	%	Ν	%	N	%	
Total Population	19,456,1 49	100	4,015,557	21	4,035,838	21	2,125,479	11	1,958,27 7	10	3,889,948	20	3,440,050	18	Naomi 2022 estimates, for 2022
HIV Prevalence (%)		5.0		0.6		0.6		2.6		1.5		NA		NA	Naomi 2022 estimates, for 2022
AIDS Deaths (per year)	11,967		738		747		736		605		3,749		5,393		Spectrum 2022 estimates, for 2022
# People living with HIV	982,470		25,073		25,197		61,846		33,498		515,349		321,507		Naomi 2022 estimates, for 2022
Incidence Rate (Yr)		0.21						0.42		0.07					MPHIA, 2020-21
New Infections (Yr)	17,687														Spectrum 2022 estimates, for 2022
Annual births	649,351	100													Spectrum 2022 estimates, for 2022
% of Pregnant Women with at least one ANC visit		98.7		NA				98.4				98.9			MPHIA, 2020-21
Pregnant women needing ARVs	37,450	NA													Spectrum 2020 estimates, for 2020
Orphans (maternal, paternal, double)	1,030,65 1		NA		NA		NA		NA		NA		NA		OVC rates from 2018 populatio n census applied to 2022 populatio n projection
Notified TB cases (Yr)	13,940		NA		NA		NA		NA		NA		NA		National TB Program Quarterly Data, FY2021
% of TB cases that are HIV infected	6,301	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	National TB Program Quarterly Data, FY2021
% of Males Circumcised	686,351	15.3							459,083	23.6			264,231	10. 4	MPHIA, 2020-21

									(Applied to NSO popn projection s for 15- 49 years)
Estimated Population Size of MSM*	23,200	NA							IBBS Report, 2020
MSM HIV Prevalence	12.8	NA							IBBS Report, 2020
Estimated Population Size of FSW	36,100	NA							IBBS Report, 2020
FSW HIV Prevalence	49.9	NA							IBBS Report, 2020
Estimated Population Size of PWID	NA								
PWID HIV Prevalence	NA								

	E	pidemiologic Da	ta		HIV Treatme	ent and Viral S	HIV Testing and Linkage to ART Within the Last Year			
	Total Population Size Estimate (#)	HIV Prevalence (%)	Estimate d Total People living with HIV (#)	People living with HIV diagnosed (#)	On ART (#)	ART Coverage (%)	Viral Suppressi on (%)	Tested for HIV (#)	Diagnosed HIV Positive (#)	Initiated on ART (#)
Total population	19,465,149	5.05%	982,470	919,718	901,96	91.8%	93%	2,800,3 75	89,607	79,556
Population <15 years	8,051,395	0.62%	50,270	40,989	40,642	80.8%	73%	178,561	3,464	4,305
Men 15-24 years	1,958,277	1.71%	33,498	27,271	26,836	80.1%	83%	207,930	3,125	2,729
Men 25+ years	3,444,050	9.34%	321,507	287,923	273,255	85.0%	95%	289,348	21,154	26,120
Women 15- 24 years	2,125,479	2.91%	61,846	58,082	58,085	93.9%	88%	505,649	11,138	12,715
Women 25+ years	3,889,948	13.25%	515,349	505,453	503,150	97.6%	95%	451,619	24,317	30,764
MSM	12,261	12.8%	1,569	no data	no data	no data	95%	8,002	932	618
FSW	33,633	49.9%	16,784	no data	no data	no data	88%	17,096	4,158	2,865
PWID	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Priority Pop (AGYW)	3,353,069	2.22%	74,452	68,625	68,507	92%	85.4%	540,704	11,757	13,249

Table 2.1.2 95-95-95 cascade: HIV Diagnosis, Treatment and Viral Suppression

Source: Spectrum/Naomi, DATIM

Figure 2.1.3 Updated National and PEPFAR Individuals Currently on Treatment (TX_CURR)





Figure 2.1.4 Infections and All-Cause Mortality among people living with HIV

Figure 2.1.5 Assessment of ART program growth in FY21





Figure 2.1.6 Clients Gained/Lost from ART by Age/Sex, FY21Q2 to FY22Q1







Figure 2.1.8 Net Change in HIV Treatment by Sex and Age Bands 2020 Q4 to 2021 Q4

Malawi Treatment Growth, FY20Q4-FY21Q4, ALL PSNU

2.2 New Activities and Areas of Focus for COP22, Including Focus on Client ART Continuity

COP22 has a focus on equity, that is, a focus on the populations that are lagging. In COP22, the PEPFAR Malawi program will implement new activities with particular focus on reaching the youth and men. Malawi PHIA (MPHIA) 2020-2021 results showed that adolescents and young people are behind on epidemic control goals. All age groups achieved at least 90% on the first 95 goal except Males aged 20-39 years and females aged 15-34 years. The strict definition of youth is 15–24 years¹. However, based on MPHIA results our focus goes beyond 24 years into the 30's and we are referring to these loosely as young adults in this document. Undiagnosed people living with HIV within these population groups comprise 44% of all undiagnosed people living with HIV². The gap is bigger for males aged 20–39 years who contribute 32% while females 15-34 years contribute 12% to all undiagnosed people living with HIV. Nearly 60% of the undiagnosed people living with HIV in these population groups that are behind are in seven districts including Blantyre, Lilongwe, Zomba, Mzimba, Thyolo, Mulanje, and Mangochi, with nearly half (47%) being in the four urban districts with cities². Key new activities for COP22 therefore aim to reach these young adults. We acknowledge that we may not be able to reach and find all these populations if we only work at health facilities. We also recognize that existing community-based youth-led organizations work in this space. The goal is to leverage these existing youth-led CBOs, particularly in the cities, develop hubs in the community and reach out to adolescents and young people. This would include demand creation and mobilization, SRH,

¹Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation. Geneva: World Health Organization; 2017. License: CC BY-NC-SA 3.0 IGO

² 2022 Malawi Spectrum/Naomi estimates

HIVST and SNS for case finding, with appropriate linkages to treatment and preventive services. MPHIA 2020–2021 showed good second 95 achievement with 97.9% of all people living with HIV aware of their HIV status receiving ART. This suggests good overall linkage to treatment and continuity on treatment in the Malawi program. Malawi HIV treatment program has continued to see growth in the cohort on ART (2.2.1).



Figure 2.2.1: Quarterly TX_CURR Trend

Overall, at the end of FY21 96% of people living with HIV in care were retained³. In FY21, the program also continued to see a declining trend in persons interrupting treatment or in the cycle of interruption and return (figure 2.2.2).





By FY21 Q4, the rate of interruption in treatment was at 3% and overall, 5.2% of the entire cohort was in the cycle of interruption or returning. A substantial number of people who have disengaged from care are returning to care. In FY21 those that returned represented 67% of all treatment interruptions. People-centered interventions to ensure treatment continuity are discussed in section 4.2.

³ PEPFAR monitoring, evaluation and reporting (MER)

2.3 Investment Profile

The Malawian health sector relies heavily on funding from external sources; the national HIV program is 95% funded by international donors for various programming components. The Global Fund finances the procurement of health products, paying for 99% of all HIV-related commodities. While Malawi has limited fiscal space, PEPFAR commends the GoM for increasing its investments in health systems strengthening including HRH, health infrastructure, essential medicines, and prevention efforts. Furthermore, MoH has demonstrated initial efforts to continue the national dialogue and plans to take up some of the costs of anti-retroviral therapy in the future. With the backdrop of the COVID-19 pandemic, growing debt, lower domestic revenue (as compared to prior years), and depreciation of the exchange rate, these combined factors potentially threaten the country's ability to meet domestic resource mobilization goals and the 2023 Global Fund co-financing requirement. Since 2004, PEPFAR has invested over \$1 billion in HIV service provision and prevention to efficiently identify people living with HIV, ensuring all newly diagnosed people living with HIV are immediately linked to treatment, retained on treatment, and are virally suppressed.

In COP22, the PEPFAR Malawi program will invest over \$177 million, continuing its support to the HIV program implementation and maintaining epidemic control. In a unique and catalytic partnership with the GoM, PEPFAR and USAID Basic Education are currently implementing the Secondary Education Expansion for Development (SEED) project, a \$90 million initiative to build up to 200 new secondary schools where educational access has been limited and expand classroom space in crowded urban center secondary schools. This initiative will ensure thousands of AGYW can complete additional years of secondary school, which has been shown to decrease the lifetime risk of HIV acquisition among AGYW. The COP22 development cycle provided an opportune time for PEPFAR Malawi and Global Fund to reaffirm commitments to support the national HIV response, and for development partners to rethink how we interact, deliver services, and support the GoM.

Leveraging investments and approaches for keeping both healthcare providers and clients living with HIV/AIDS safe remains paramount while mitigating the effects of COVID-19 on HIV, TB, and Malaria programs through a focus on high impact interventions and multi-stakeholder coordination in the current New Funding Model III grant. As the 2022 COVID-19 Resource Mechanism application process continues, the USG team is actively engaged in ensuring the proposed interventions and investments serve those most affected by the three diseases and at highest risk of co-mortalities and morbidities. PEPFAR Malawi's significant investment in service delivery, including human resources and technical assistance along with Global Fund grants where gaps exist will ensure a secure commodity supply chain, namely for ARVs, lab monitoring, and HIV tests. Close coordination between PEPFAR Malawi, Global Fund, and other donors will maximize use and impact of resources to fully combat HIV/AIDS possible.

Table 2.3.1 Investment Profile for HIV Programs, 2022

	-					
	\$	%	%	%	%	2018-2022
are and Treatment	\$230,610,828	0%	64%	36%	0%	
HIV Care and Clinical Services	\$223,583,140	0%	66%	34%	0%	
Laboratory Services incl. Treatment Monitoring	\$4,822,577	0%	0%	100%	0%	
Care and Treatment (Not Disaggregated)	\$2,205,111	0%	10%	90%	0%	
IV Testing Services	\$14.011.855	0%	59%	41%	0%	
Facility-Based Testing	\$7,863,504	0%	62%	38%	0%	
Community-Based Testing	\$3,982,988	0%	52%	48%	0%	
HIV Testing Services (Not Disaggregated)	\$2,165,363	0%	65%	35%	0%	
revention	\$39,196,957	0%	21%	79%	0%	
revention	\$29,190,957	0%	21%	/3%	0%	~
Community mobilization, behavior and norms change	\$12,491,104	0%	6%	94%	0%	
Voluntary Medical Male Circumcision	\$12,779,189	0%	1%	99%	0%	
Pre-Exposure Prophylaxis	\$2,671,333	0%	2%	98%	0%	
Condom and Lubricant Programming	\$7,864,180	0%	83%	17%	0%	
Opioid Substitution Therapy	\$0					
Primary Prevention of HIV & Sexual Violence	\$427,097	0%	3%	97%	0%	
Prevention (Not Disaggregated)	\$2,964,054	0%	31%	69%	0%	
ocio-economic (incl. OVC)	\$8,174,954	0%	5%	95%	0%	\sim
Case Management	\$2,897,021	0%	0%	100%	0%	
Economic Strengthening	\$2,404,710	0%	0%	100%	0%	
Education Assistance	\$1,413,384	0%	0%	100%	0%	
Psychosocial Support	\$402,721	0%	21%	79%	0%	1
Legal, Human Rights, and Protection	\$347,202	0%	86%	14%	0%	
Socio-economic (Not Disaggregated)	\$709,916	0%	6%	94%	0%	· · · ·
bove Site Programs	\$26,621,658	0%	41%	59%	0%	
HRH Systems	\$2,606,876	0%	62%	38%	0%	
Institutional Prevention	\$60,000	0%	0%	100%	0%	\sim
Procurement and Supply Chain Management	\$874,400	0%	25%	75%	0%	~
Health Mgmt Info Systems, Surveillance, and Research	\$12,943,913	0%	26%	74%	0%	
Laboratory Systems Strengthening	\$4,848,471	0%	46%	54%	0%	×
Public Financial Management Strengthening	\$961,344	0%	51%	49%	0%	
Policy, Planning, Coordination and Management of	\$3,075,204	0%	64%	36%	0%	
Disease Ctri Programs						\sim
Laws, Regulations and Policy Environment	\$0	0%	97%			
Above Site Programs (Not Disaggregated)	\$1,251,450			8%	0%	
rogram Management	\$32,356,740	0%	10%	90%	0%	
Implementation Level	\$32,356,740	0%	10%	90%	0%	
otal (incl. Commodities)	\$355,535,005	1%	51%	48%	0%	~
commodities Only	\$164,124,928	0%	98%	2%	0%	

Source: HIV Resource Alignment. Domestic Gov't and Other Funders data included where available. PEPFAR regional program data were not available

disaggregated by country for 2018-2019.

Table 2.3.2 Investment Profile for HIV	Commodities, 2022
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	Total	Domestic Gov't	Global Fund	PEPFAR	Other Funders	Trend
	\$	%	%	%	%	2018-2022
Antiretroviral Drugs	\$70,325,906	0%	100%	0%	0%	\sim
Laboratory Supplies and Reagents	\$35,819,362	0%	100%	0%	0%	\sim
CD4	\$0					
Viral Load	\$0					-
Other Laboratory Supplies and Reagents	\$35,819,362	0%	100%	0%	0%	
Laboratory (Not Disaggregated)	\$0					——
Medicines	\$11,616,136	0%	100%	0%	0%	\sim
Essential Medicines	\$5,005,189	0%	100%	0%	0%	\sim
Tuberculosis Medicines	\$2,467,725	0%	100%	0%	0%	
Other Medicines	\$4,143,221	0%	99%	1%	0%	
Consumables	\$21,612,456	0%	90%	10%	0%	\sim
Condoms and Lubricants	\$10,674,474	0%	94%	6%	0%	\sim
Rapid Test Kits	\$9,545,993	0%	98%	2%	0%	
VMMC Kits and Supplies	\$1,391,989	0%	0%	100%	0%	\sim
Other Consumables	\$0					
Health Equipment	\$379,910	0%	100%	0%	0%	\sim
Health Equipment	\$124,889	0%	100%	0%	0%	\sim
Service and Maintenance	\$255,021	0%	100%	0%	0%	~~~
PSM Costs	\$24,371,158	0%	97%	3%	0%	\sim
Total Commodities Only	\$164,124,928	0%	98%	2%	0%	

Source: HIV Resource Alignment. Domestic Gov't and Other Funders data included where available. PEPFAR regional program data were not available disaggregated by country for 2018-2019.

Table 2.3.3 Annual US	G Non-PEPFAR Fu	nded Investments a	nd 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	\$18,000,000	\$1,796,000	6	\$2,541,143	To reduce maternal and child morbidity and mortality, strengthen health systems to deliver primary health care services.
USAID TB	\$4,000,000	\$1,300,000	3	\$604,408	To strengthen TB screening prevention, diagnosis, and treatment among people living with HIV, including IPT delivery.
USAID Malaria	\$24,000,000	\$13,399,000	2	\$2,662,947	To strengthen health systems to deliver primary health care services.
Family Planning	\$12,000,000	\$3,400,000	4	\$2,209,279	These co-funded mechanisms provide family planning/reproductive health support and strengthen health systems to deliver primary health care services.
Nutrition	\$7,000,000	\$769,000	5	\$534,076	To provide nutrition specific interventions and to strengthen Health Systems to deliver primary health care services
NIH					
CDC (Global Health Security)					
Peace Corps/ Malaria*	\$0*	\$31,016	1	\$1,378,155	To reduce burden of malaria among community members through promotion of malaria preventive behaviors. To strengthen the capacity of community educators in effective

					delivery of malaria prevention messages.
DOD Ebola					
MCC					
Other (specify)					
Total	\$65,000,000	\$20,695,016	21	\$9,930,008	

*\$31,016.38 for Peace Corps malaria program is funded through USAID and already accounted for under USAID Malaria.

2.4 National Sustainability Profile Update

Malawi's resource constrained health system and operating environment represent dual challenges to be addressed amid the COVID-19 pandemic, cyclones and recent polio and cholera outbreaks. Limited domestic funding and mobilization continues to be a threat to successful HIV/AIDS program implementation and sustainment of epidemic control. As aforementioned, the national HIV program continues to be over 95% donor funded, and the Global Fund procures 99% of all HIV-related commodities. In October 2021, PEPFAR Malawi, UNAIDS, Ministry of Health, the Global Fund, IPs and CSO representatives reviewed progress toward the Responsibility Matrix (RM) and the four sustainability domains below. The 2021 SID review found that Malawi has experienced progress in some sustainability elements:

- **Planning and Coordination:** Malawi has an updated multi-year National Strategic Plan for HIV/AIDS (NSP 2020-2025) and a near final HIV prevention strategy. Significant progress has been made on behalf of NAC to ensure an CSOs, KPs, and other stakeholders are included in the national planning and review processes
- **Policies and Governance:** New and updated policies and procedures were introduced due to an improved consultative environment that included stakeholder engagement and input. There was also increased engagement of Civil Society through community-led monitoring.
- Strategic Financing and Market Openness: There is promising progress in market openness and increased engagement within the private sector.
- **Strategic Information:** There have been significant improvements in the increased availability of epidemiological, financial, and performance data for decision making. However, these activities continue to be primarily donor funded and require extensive technical assistance.

In addition, GoM has supported efforts that commit financial resources toward the health response. For example, the development of a health fund including commitments to absorb funding for human resources for health supported by Global Fund after June 2024 closure of the fourth grant.

However, there are sustainability vulnerabilities and threats that must be addressed:

- **Domestic Resource Mobilization:** GoM budget allocation for health continues to be low and the HIV/AIDS response is heavily donor dependent.
- **Technical Allocative Efficiencies:** Data is lacking on HIV-specific government resources for the highest burdened sub-national units (SNUs).
- **HRH:** There is a need for more systematic collection and use of health workforce data for HIV/AIDS services, health workforce planning and management, as well as gaps in infrastructure and staffing at health facilities
- **Private Sector Engagement:** Although the private sector is also listed above as an area of progress, collaboration with the private sector requires alignment with the public sector, and leading and guiding both continues to be challenging.

PEPFAR Malawi is responding to critical gaps in Malawi for further investments in the national health system and service delivery, as well as strategic information. In COP22, PEPFAR Malawi will prioritize and make investments exceeding USD17 million primarily towards HMIS, laboratory systems strengthening, and for HRH. These investments reflect an increased effort from COP21 to address vulnerabilities identified in the 2021 SID review. Key activities are planned to continue beyond the end of COP22 as current local capacity to take over these activities is limited. However, PEPFAR Malawi anticipates the development of a pathway for consideration to transition key HRH to be absorbed within government. Similarly, PEPFAR Malawi will build the Government of Malawi's capacity to run, manage and maintain the EMR over the next 5 years with the aim of handing over some HIS responsibilities to GOM starting in COP25.

The COP22 PLL advises PEPFAR Malawi to utilize HRH inventory data to examine the alignment of current staffing investments, scale up case-based surveillance, support local supply chain management capacity, continue integration and capacitation of a robust EMRS system to sustain HIV impact and security against new and emerging health threats. In response, PEPFAR Malawi has targeted investments in key areas of COP22 from previous years. Despite the Global Fund's increased investments in commodities and supply chain, gaps remain. Findings from the RM show that the Global Fund and PEPFAR Malawi retain primary responsibility for the funding of commodities and implementation support. While the GoM retains primary oversight and management responsibility, they are working on developing a Sustainability Framework. This resource should offer additional information on financial responsibility including proposals that look beyond PEPFAR and Global Fund to focus on domestic resource mobilization approaches that limit known vulnerabilities.

Ongoing sustainability considerations must accompany progress made to transition funding to a diverse range of indigenous partners while deepening oversight and financial management competencies, two essential prerequisites for effective transition. COP22 continues to focus on driving shifts from international organizations to GoM and local partner-led activities in prevention, treatment and other service delivery and systems strengthening priorities that advance the national HIV/AIDS response. 59% of USAID funding goes to local partners. 25% of CDC funding is going to local partners while 16% funding is yet to be determined through competitive grant proposal solicitation processes. The share of funding to local partners is expected to grow in COP22 because of capacity development initiatives built into existing work and upcoming new awards that have funding preferences to local organizations. These combined efforts are also inclusive of PEPFAR Malawi's significant commitment to increase funding to Ministry of Health, Ministry of Finance, and district authorities primed to take on aspects of technical, financial, and data-specific program areas over subsequent years.

2.5 Alignment of PEPFAR investments geographically to disease burden Figure 2.5.1: Malawi total number of people living with HIV by SNU, ART coverage of people living with HIV, and viral load coverage by SNU



The figure above outlines HIV prevalence and district-level ART and viral load coverage. Urban centers, such as Lilongwe and Blantyre, have the highest number of people living with HIV prevalence. While PEPFAR invests in all districts throughout Malawi, PEPFAR most strategically focuses investments in high-burden, scale-up districts. In COP22, PEPFAR will focus on the 11 scale-up districts with the greatest people living with HIV burden and largest remaining gaps to 95% ART coverage in Blantyre, Chikwawa, Chiradzulu, Lilongwe, Machinga, Mangochi, Mulanje, Mzimba, Phalombe, Thyolo, and Zomba.

2.6 Stakeholder Engagement

COP22 development included continuous dialogue, planning, and prioritization of areas for investment and attention with various stakeholders. Key virtual meetings with the PEPFAR Malawi interagency team provided a space for discussions and feedback loops with Civil Society, implementing partners, the Government of Malawi, bilateral, and multilateral partners amid the COVID-19 pandemic include:

- June 10 11, 2021: PEPFAR HRH Standardization Meeting whose overall objectives were to:
 - $\circ~$ Discuss and build consensus on the terms of reference (TOR) of the Taskforce and Roadmap for lay cadre standardization
 - Collaborate with other PEPFAR implementing partners in building consensus in standardizing the different lay cadre parameters across PEPFAR IPs to improve operational efficiency and facilitate transition of key lay cadre positions to the government structure
- June 17, 2021: HIV testing services (HTS) Core Group Meeting led by DHA to discuss among other things; HTS program updates and performance. The discussions also included National HIV Reference Laboratory (NHRL), recency and Rapid Test Continuous Quality Improvement (RTCQI) updates. Participants shared experiences on the use of HTS screening tools and active index testing

implementation. The meeting was attended by USG, implementing partners, and the Ministry of Health

- June 18, 2021: PEPFAR Malawi introduced quarterly KP Partners meeting to harmonize KP program implementation across PEPFAR supported IPs. This is a platform for partner coordination, sharing best practices, understanding program performance gaps, resources sharing, and harmonizing data collection, analysis and reporting amongst other important areas. The focus was on the following areas:
 - Q2 performance: understanding gaps in linkage of new HIV positives and GBV screening/ identification
 - Deep Diving into KP_PREV indicator and reporting
 - Managing co-enrollment prevention in districts with multiple KP partners
- June 22, 2021: NAC-led meeting on HIV programming for Adolescent Girls and Young Women
- June 22, 2021: PEPFAR Malawi led PrEP Partners meeting to discuss number of staff trained (both providers and other health care workers), number of sites currently providing PrEP, number of sites ready to start in Q3 or Q4, progress against targets on PrEP_New and PrEP_CURR, demand creation activities happening or in pipeline and challenges experienced.
- June 29: Georgetown University presented the Blantyre Prevention Strategy (BPS) year 1 review and year 2 plans
- June 30, 2021: DHA-led HIV Care & Treatment Technical Working Group meeting
- July 8, 2021: PEPFAR Malawi COP21 Strategy and FY21 Q2 POART Implementing Partner debrief
- July 9, 2021: NAC-led initial meeting on the Development of the 2020-2025 National HIV Prevention Strategy to review the expired strategy and develop a new one to guide HIV Prevention programming in the country for the next five years
- July 14 15, 2021: Follow–up HRH lay cadre standardization workshop to review proposed job descriptions
- July 23, 2021: NAC-led Malawi HIV and AIDS Partnership Forum to review the National HIV and AIDS Policy as the last version had expired. The meeting also reviewed the Aide Memoire Report of the 2020 Joint Annual Review Meeting in preparation for the 2021 Joint Annual Review
- July 28, 2021: PEPFAR Malawi/Georgetown University/UNAIDS/UCSF Meeting focused on:
 - Sharing plans for HIV prevention activities in Blantyre and partners implementing (a brief presentation from each stakeholder)
 - Sharing updates on program implementation:
 - Status of the Blantyre Fast Track City HIV Prevention program
 - Implementation of the HIV Prevention Strategy for Blantyre City including ME
 - COP20 implementation
 - Supporting supervision and mentorship activities programs critical for ensuring compliance to national standards
 - Increasing access to and quality of service through infrastructure support
 - Integrating continuous quality improvement approaches
 - Sharing best practices through joint partner review and using granular data for program management
- August 5, 2021: Launch of digital health initiatives by EGPAF. Investments supported by USG/PEPFAR Malawi/CDC
- August 26, 2021: PEPFAR Malawi meeting with VMMC IPs
- September 10, 2021: EMPOWER/PEPFAR Malawi- FTS Project, empower presented the FTS project concept including the developed materials and shared plans on how to assess the campaign using both the planned surveys and the routine aggregate data
- September 14 & 21, 2021: PEPFAR Malawi CLM Quarterly meeting focused on best practices in planning, collecting, disseminating CLM data as well as looking at Q2-Q3 field findings
- September 20, 2021: PEPFAR Malawi led DREAMS IPs to discuss progress on layering data, COVID-19 adaptations and effects on the program, scale of interventions, economic strengthening

activities, education support, PrEP training and referral pathways to the facility, challenges and solution including database updates

- September 28, 2021: CLM National Engagement meeting led by MANASO where Liu Lathu CLM project presented CLM Q3 findings covering March to June 2021 to DHA and NAC
- September 28, 2021: PEPFAR Malawi virtual stakeholders meeting focused on lessons learnt from virtual site visits in a COVID-19 environment
- October 13-14, 2021: UNAIDS and PEPFAR Malawi held verification and consolidation meetings followed by validation of SID outcomes and identified opportunities and key areas of focus for collaborative strategic planning and investments for sustainability, specifically for COP2022 planning to prioritize investments across stakeholders
- October 19, 2021: Georgetown funded project leads and partners for the Blantyre Prevention Strategy gave an update on the PALMS dashboard by CooperSmith. The dashboard showed analytics for all sites in Blantyre for different indicators and program areas, noting quarterly performance trends
- October 20, 2021: PEPFAR Malawi Key Populations Implementing Partners meeting focused on Q3 viral load performance by KP type and district-partners, FY21 results, challenges, best practices and recommendations, Social Network Strategy as an opportunity for HIVST integration and size estimation, updates on national KP database and KP Size validation exercise, and Children of FSW and OVC linkage
- November 22, 2021: PEPFAR Malawi-GF calibration meeting preparation
- November 23, 2021: PEPFAR Malawi-BMGF catch up
- December 1, 2021: PEPFAR Malawi led DREAMS IPs Meeting
- **December 7, 2021:** PEPFAR Malawi CSO engagement to discuss updates on HRH, Technical Assistance versus Direct Service Delivery and Q4 POART debrief
- December 8, 2021: Georgetown-BPS/PEPFAR Malawi meeting in preparation for COP22
- January 19, 2022: PEPFAR Consultative Lay Cadre Transition Strategy meeting with GoM on the standardization process and possible implications of this process
- January 20, 2022: PEPFAR Malawi/CSO consultative lay cadre transition meeting and GoM Strategy discussion
- January 31, 2022: PEPFAR Malawi brief with the Secretary of Health and DHA on:
 - COP22 high level overview of budget and what's new (PCO)
 - Policy Status Updates
 - Status of Guidelines: HIV Clinical Guidelines, 3-Test Algorithm, Streamlined PrEP, TPT for ART
 - COVID-19: Opportunities to leverage ART clinics for COVID-19 vaccines
 - **Planning:** Understanding the overall process for HSSP development
 - Technical: Coordination of HRH across the GoM
 - **Communication & Coordination:** Engagement with DHOs
- **February 7-8, 2022:** PEPFAR Malawi COP22 strategic planning retreat to kick-off the COP22 planning process with MoH, CSOs, multilateral institutions, and IPs to reach the following key objectives:
 - Common understanding of high performing and low performing facilities (site level data)
 - Common understanding on what is working to reach men, adolescents and AGYW, key populations and what is not proving to be effective or at limited scale
 - Recognition of anticipated/known tradeoffs by program area in lieu of budget reductions, scalability of interventions and achievements against targets
 - Learnings from a look at performance trends and Q2 projections based on end of year results and gaps
 - Consensus on key PEPFAR Malawi positions, technical direction, and desired outcomes
- **February 15, 2022:** CSO-led national stakeholders meeting where CSOs shared their COP22 community priorities

- **February 15, 2022:** HBCU consultative meeting with key stakeholders and GoM to share background on the HBCU Initiative which would enable the HBCUs to interact with community health administrators in Malawi. The meeting discussed opportunities for cross-learning, key logistics, as well as reviewing a draft timeline for program implementation
- February 17, 2022: NAC-led meeting of the National HIV Prevention TWG
- **February 23, 2022:** PEPFAR Malawi COP22 district engagement aimed at engaging district leadership at the early stages of COP22 development process by sharing performance progress in the current year and collaboratively discuss priorities in the upcoming year
- February 25, 2022: NAC-led Malawi HIV and AIDS Partnership Forum meeting
- March 21-24, 2022: PEPFAR Malawi Virtual Planning Meetings with S/GAC, MoH, CSOs, and multilaterals. Meeting objectives included:
 - Identify and agree on critical solutions, including services, policies, and systems efforts, to advance each country's ability to accelerate and sustain epidemic control and HIV impact
 - Engage in robust dialogue and develop a shared country-driven understanding with Partner Country Government, multilateral partners and civil society for COP2022 direction
 - Identify the best ways to maintain treatment gains, through improved retention and viral suppression of clients on treatment and also through increased case finding (where necessary), improved linkage, and the highest impact prevention activities
 - Finalize COP2022 activities, budget, and targets
- April 11, 2022: PEPFAR Malawi Virtual COP22 Approval Sessions

2.7 Stigma and Discrimination

In line with 2025 AIDS Targets by UNAIDS, ensuring elimination of stigma and discrimination in the provision of HIV services remains a key priority and a critical strategy for achieving equity in HIV services in Malawi. The UNAIDS 2025 AIDS Target of "less than 10% of people living with HIV and KP experience stigma and discrimination" aims to reduce the prevalence of HIV-related stigma and discrimination taking into account the growing HIV burden among KP and pernicious effects of stigma and discrimination on efforts to address HIV-related needs of KP.

Stigma and discrimination are a huge barrier to health care service access which may lead to individuals not knowing their HIV status, not starting ART as soon as possible, challenges in treatment continuity, and consequently sub-optimal viral load suppression. Men who have sex with men (MSM) and transgender people are the most affected by stigma and discrimination, as homosexuality remains criminalized in Malawi. Disclosing their sexual orientation at health facilities makes their "coming out" unintentionally and they may not trust care providers for confidentiality. Therefore, training of health service providers on sexual orientation, gender identity and expression (SOGIE) is imperative and will continue in COP22.

Education of KP on universal human rights and working with CSOs on advocating for policy changes is key to creation of an enabling environment. PEPFAR Malawi is implementing "know your provider" sessions, a strategy that brings health care providers and key populations together to discuss barriers to service access and how they can be addressed. This platform also provides an opportunity for the care providers and key populations to build a rapport. This is vital as it makes KP comfortable to visit health facilities as they meet familiar faces when they visit the facilities. Similar sessions are held with police officers and court magistrates.

PEPFAR Malawi IPs will continue reinforcing confidentiality by ensuring that all staff are trained and sign confidentiality forms. Unique identifiers will continue to be used and program data will be secured at all data collection, storage and management levels. Provision of services by KP led organizations help PEPFAR Malawi reach the most hidden network members covertly. Peer educators understand their peers' needs and are empathetic, hence providing services in a non-stigmatizing and discriminating environment and process.

Integration of PrEP with other services addresses stigma and discrimination of the targeted populations. However, there are concerns about packaging of oral PrEP pills being like that of ARVs. Some PrEP users feel judged by partners, friends, family, and community as HIV positive and high risk. Discussions on considering different PrEP packaging are ongoing. General education and community sensitization on PrEP as one important prevention tools is ongoing. PEPFAR Malawi IPs will continue to engage and sensitize communities on roles and responsibilities of hospital ombudsmen in addressing any human rights concerns. Ombudsmen have been placed in public facilities to support service users that feel violated and work with authorities to address all human rights concerns experienced by service users that may hinder safe and quality services access. Community-led monitoring supported through PEPFAR, and Global Fund will help to elucidate stigma and discrimination issues to inform actions that can be taken by PEPFAR Malawi and GoM. In summary, COP22 will aim to achieve the 2025 AIDS target of "less than 10% of people living with HIV and KP experience stigma and discrimination" in line with table 2.7.1.

UNAIDS 2025 AIDS Target of "less than 10% of people living with HIV and KP experience	Planned COP22 Strategies
stigma and discrimination	
Less than 10% of people living with HIV report internalized stigma	 PEPFAR Malawi will continue supporting treatment literacy component of the CLM to ensure that patients are adherent to ART; and remain health PEPFAR partners will continue to provide counseling on importance of early HIV status disclosure
Less than 10% of people living with HIV report	 PEPFAR Malawi will support programs on community sensitization against stigma and discrimination
experiencing stigma and discrimination in health care and community settings	 PEPFAR partners will continue enforcing patients' rights at health facilities
	 PEPFAR partners will continue providing KP sensitive and affirmative trainings to HCW
Less than 10% of KP report experiencing stigma and discrimination Less than 10% of general population reports discriminatory attitudes towards people living with HIV people living with HIV report	 PEPFAR partners will continue implementing know-your provider sessions to build rapport between HCW and KP
	 PEPFAR partners will increase awareness on the roles and responsibilities of hospital ombudsman among clients.
	 PEPFAR partners will intensify provision of participatory education, which involves activities that encourage dialogue, interaction and critical thinking.
Less than 10% of HCW report negative attitudes towards	 Foster motivation for change through advocacy and awareness campaigns engaging
people living with HIV	 Mobilize action to challenge stigma and discrimination at the national and community levels
Less than 10% of HCW report negative attitudes towards	 PEPFAR partners will continue to increase awareness on KP rights among law enforcement officers
КР	 PEPFAR partners will continue implementing know-your law enforcement officer sessions to create an enabling environment for KI to reach out to the officers where necessary
Less than 10% of law enforcement officers report negative attitudes towards KP	

Table 2.7.1 PEPFAR Malawi's Strategies to address Stigma and Discrimination (UNAIDS 2025 Targets)

Table 3.1.1 Curre	Table 3.1.1 Current Status of ART Saturation Total people living									
Prioritization Area	# of SNU COP22 (FY23)									
Scale-up Saturation	721,886 (73%)	626,137	11	11						
Sustained	260,584 (27%)	235,777	17	17						

3.0 Geographic and Population Prioritization

Table 3.1.2 Current Status for VMMC Saturation

SNU	Age band									
	15-19	20-24	25-29	30-34	35-39	40-44	45-49			
Blantyre	82%	89%	82%	74%	67%	58%	59%			
Chikwawa	66%	102%	100%	91%	73%	57%	44%			
Lilongwe	<mark>58%</mark>	83%	66%	44%	28%	18%	14%			
Mulanje	45%	63%	70%	65%	<mark>62%</mark>	60%	59%			
Nsanje	19%	25%	26%	26%	23%	20%	16%			
Phalombe	43%	<mark>52%</mark>	49%	35%	26%	19%	14%			

Data source: DMPPT and MPHIA

In COP21, PEPFAR Malawi is supporting VMMC in four districts: Blantyre, Lilongwe, Mulanje, and Chikwawa, targeting males aged 15 and above. Using DMPPT and MPHIA data, VMMC coverage in six districts will be prioritized in COP22. PEPFAR Malawi will expand to two additional districts, Nsanje and Phalombe, where coverage is extremely low. VMMC coverage by age band shows that: 15–29-year-olds in Blantyre have >80 percent coverage; 20-29 years in Blantyre and Chikwawa have >80 percent coverage. For 20–24 years, Lilongwe has more than 80% coverage. The other districts have moderate coverage, apart from Nsanje and Phalombe, which have very low coverage across all age bands.



Figure 4.0.1 Overview of 95/95/95 Cascade, FY21

4.1 Finding people with undiagnosed HIV and getting them started on treatment

PEPFAR Malawi is standardizing proven HIV testing strategies across all IPs to identify HIV positive men, key populations, adolescents, and children who do not yet know their status and link them to treatment. Based on HIV status awareness gaps reported in MPHIA 2021, PEPFAR Malawi will implement efficient case finding interventions targeting males aged 20-39 years and females 15-34 years within their geographical areas. PEPFAR Malawi's case finding approaches will be optimized in order to have the right 'strategic mix' of modalities focused on finding the key missing groups while ensuring routine high yield entry points and HTS for prevention are also covered (figure 4.1.1)



Figure 4.1.1 COP22 Strategies for Strengthening Targeted Case Finding

Active index testing shows potential as an efficient modality to find young adults. The program has seen high yield amongst our priority populations in the context of index testing. In FY22 Q1 HIV positivity yield ranged from 16.5% among 15–19 years age group to 24.5% among 20–24 years age group among females, while for males the yields ranged from 16.8% among those aged 15–19 years to 26.9% among those aged 35–39 years. In FY22 Q1 out of adults aged >15years newly diagnosed through index testing, 62% were either females aged 15-34 (30%) or Males aged 20-39 (32%). Active index testing has been rolled out at all sites in scale-up districts and expansion to high volume sites in sustained districts is currently underway in FY22. All sites implementing active index testing in scale-up districts were assessed for compliance with the WHO's 5Cs (consent, confidentiality, counseling, correct results, and connection), safe and ethical standards including availability of effective adverse event monitoring. PEPFAR Malawi will strengthen quality contact elicitation for index clients in these priority age groups as well as active elicitation of younger sexual partners for older index clients while ensuring safe and ethical index testing standards. Appropriate HTS training, supervision and mentorship are ongoing to improve service delivery.

Social network strategies (SNS) targeting men and KP have shown promising results in the Malawi program. The program will continue to learn and plan to expand use of social network strategies (SNS) targeting men and KP with HIVST integration. Further, social network strategy also has potential to reach youth, particularly among networks that have attributes which may render them at higher risk for HIV acquisition (pattern of relationships or alcohol use). In COP21 PEPFAR Malawi will start to utilize and refine this strategy to actively target young adults and scale the approach further in COP22. Data driven HTS using recency results will inform targeted community based HTS for men and young adults including AGYW in high burden geographical areas where clusters with high recency rates above expected threshold are identified.

PEPFAR Malawi will continue to support routine universal provider-initiated testing and counseling (PITC) in PMTCT, TB and STI settings. HTS for prevention monitoring will continue to be supported in prevention programs (VMMC, DREAMS, OVC, family planning clinics, and PrEP) and those testing positive will be actively linked to ART. MoH has adopted the new WHO recommended 3-test HIV testing algorithm for countries with low HIV prevalence to improve quality of HIV testing. The national roll out of the new algorithm is expected to be completed in FY22. PEPFAR Malawi and its implementing partners supported MoH with revision of new HTS guidelines, training curriculum, and implementation plan.



Figure 4.1.2 Testing Volume and Yield by Modality and Age/Sex, FY21

4.2 Ensuring viral suppression and ART continuity

The Malawi HIV program had overall high VL suppression rate of 94% in FY2021. This is mainly due to the successful transition of adults to TLD as the preferred first line. However, children and adolescents under 20 years have sub-optimal VLS. Over the past three fiscal years we have seen an improving VLS trend among this population from about 40% to 60% for children aged 1–4 years and from under 60% to just over 80% for children and adolescents >5 years (figure 4.2.1).



Figure 4.2.1 Quarterly Pediatric and Adolescent VL suppression

However, in COP20 this progress in VLS for children plateaued. The program started with transitioning young children to lopinavir ritonavir pellets followed by lopinavir ritonavir granules once these formulations became available on the global market. However, these formulations didn't have the desired effect due to complexity of administration and poor palatability. Pediatric dispersible DTG 10 mg tablets became available towards the end of COP20 and the program rapidly transitioned children to DTG. At the end of COP21 Q1, 99% of children on a pediatric formulation in the Malawi program were receiving pediatric DTG. This is expected to improve VLS among children over COP21 and moving forward. The program has also seen better VLS among children enrolled in OVC programs mainly due to the case management approach. The program continues to strengthen collaboration between OVC and clinical partners and currently MOUs are in place at all OVC supported facilities. This collaboration more than tripled CLHIV beneficiaries enrolled. Starting in COP21, this collaboration continues to be further strengthened with a goal of achieving VLS, tracking interventions and support provided to each child failing on treatment with a newly developed tool.

Suboptimal viral load testing coverage has been a major gap in the program and is a key priority. It is sub-optimal across all age groups. Over COP20, we had an improvement in overall VLC from 63% to 73%. Key population programs have much lower VLC than the general program. Challenges have been crosscutting starting from sample collection at the site-level (such as with milestone screening, demand creation, misalignment of visits for ART refills on MMD, and supply chain issues), to above site areas including sample transportation, laboratory systems (including HRH and commodities), system downtimes due to power challenges, incompleteness of the laboratory information system, and long turn-around times. As evidenced by the improvement in VLC in COP20, the Malawi program has been making efforts to address these gaps. Site-level implementing partners have been using two approaches to improve viral load sample collection from clients. Firstly, the partners have implemented surge initiatives to catchup sample collection among those that were missed. The backbone of these surge efforts has been data monitoring to closely track progress. Remediation activities at the facility level have included medical record audits and following up clients who were missed, collecting samples in the community, and offering extended hours. Secondly, the partners have been putting in place interventions to ensure systematic sample collection and minimize missed opportunities in the

longer-term. This has involved establishing pre-visit screening to identify those at milestone, generating a list and tagging patient files so they are easily identified, adjusting client flow such that routine clients can move from reception to sample collection, and intensified demand creation through daily health education talks as well as strengthening group and individual counselling sessions with viral load literacy. There has also been a strengthened collaboration between site-level, sample transportation and laboratory partners. The 2022 Malawi HIV policy updates also address specific target populations including 6 monthly VL testing and prioritization of POC for pregnant and breastfeeding women (PBFW) and children, as well as permitting drop-in centers DICs to become VL sample collection points for key populations.

The Malawi program generally has good continuity of treatment and 2^{nd} 95 achievement. However, the program continues to face challenges with young people and those newly initiated on treatment. In COP20 lower continuity in treatment was seen among young adults aged 20–34 years, both male and female, and children <10 years. In COP22, the program will strengthen peer treatment support directed at serving these young adults. The program will continue to scale up promising differentiated models for children such as intensive HIV care clinics, pediatric clinic days and family model clinics as well as utilizing strengthened OVC linkages to support families that are vulnerable and struggling.

Persons newly initiated on ART also have higher rates of interrupting treatment. In FY21 Q4 the rate of treatment interruption was 13.1% among those on treatment for <3 months compared to 2.8% among those on treatment >3 months. In order to prevent interruptions, all PEPFAR supported sites ensure newly enrolled people living with HIV are linked to specific supporters to help check-in on them in the community frequently and provide reminders for adherence and appointments. PEPFAR IPs have also shifted to utilizing higher qualified cadres to support newly enrolled persons, such as repurposed HDAs and psychosocial counsellors.

PEPFAR Malawi IPs have invested in comprehensive back-to-care programs to trace and return those that interrupt treatment. There is however a need to foster a welcoming culture and standardized package for clients returning back to care. People-centered differentiated service delivery models have also been critical for continuity of treatment. For adolescents, Teen Clubs are the standard of care and have been scaled up at national level. Starting in COP21 and moving into COP22 PEPFAR Malawi aims to strengthen this model further through incorporation of empowering and motivational aspects of the Operation Triple Zero model. So far, the program has only provided the opportunity for interaction at the facility groups, but moving forward, it will also enable the work through adolescent community peer supporters. Malawi has had most of the ART cohort on at least 3MMD for some time. After the onset of COVID-19 in FY20, the program rapidly scaled up 6MMD. By COP19 Q4 50% of all People Living with HIV on treatment were provided with 6MMD. This has since gradually reduced to 40% at COP21 Q1 due to re-alignments with efforts to avoid missing VL testing. PEPFAR Malawi has been expanding healthcare worker led community ART dispensing models and will continue to scale these options over COP21 and COP22. In addition to ARVs, this model delivers comprehensive care including routine clinical checkup, VL testing, TB screening and sexual reproductive health. The new Malawi HIV guidelines align with COP22 advanced HIV disease (AHD) recommendations, and implementation is underway in a phased approach. At COP21 Q1, a total of 227 PEPFAR supported facilities were implementing AHD management using a hub-spoke model. Phase two of MoH AHD scale up plan targeting 240 additional facilities started in Jan 2022. As the AHD commodities are procured using Global Fund resources, the scale up plan will be informed by the DHA. Our COP22 priorities include exploring opportunities for further expansion (CD4 capacity and strengthening the hub/spoke model.) and improving the quality of care through advanced training and mentorship.



Figure 4.2.2Number and Percent Contribution of Clients Receiving MMD by Age/Sex, FY22 Q1





4.3 Prevention

HTS

PEPFAR Malawi will incorporate HIV testing services into prevention programming and monitoring using strategic mix of modalities through OVC, VMMC, DREAMS, PrEP, and KP programs. We will build on experience to support both primary and secondary HIVST distribution and social network strategy (SNS) to effectively reach KPs. Targeted community-based HTS will be offered to eligible individuals in DREAMS, VMMC, and FSW programs using the National three-test HIV testing algorithm. Adolescent girls and young women in DREAMS supported districts who test negative for HIV will benefit from the DREAMS prevention package. Those diagnosed with HIV will actively be linked to treatment and enrolled in the Teen Club program. The HIV positive AGYW will be referred to the OVC program for additional services if they are eligible. PEPFAR Malawi will also promote data driven HTS using recency results with higher thresholds than expected to reach AGYWs in their respective communities. PMTCT program will promote universal HTS for pregnant women at ANC, delivery, and breast-feeding (at six-nine months after delivery) with additional testing for breastfeeding women based on a risk assessment. All VMMC clients will be screened for risk of HIV infection. Eligible individuals will be offered HIV testing, and those who test positive will be linked to treatment services. HIV status will not be used to deny access to VMMC services. OVC programs will facilitate index testing. Eligible OVC who test HIV-negative will benefit from the OVC prevention package while those newly diagnosed will be enrolled in the OVC comprehensive package and linked to appropriate treatment and care services.

DREAMS

The DREAMS program continues to gain momentum and was scaled up to reach full coverage in three districts in COP20. At the end of COP20, 53% of AGYW enrolled in DREAMS programs had completed the primary package; an improvement from 18% at the end of COP19. This improvement is largely due to implementation of the revised Malawi specific, age-appropriate DREAMS toolkit which takes under eight months to complete. DREAMS Malawi will continue to improve layering of services and ensure active linkage to services. PEPFAR Malawi will complete monthly tracking of layering to inform programmatic decisions. The PEPFAR Malawi DREAMS program reached saturation (reaching up to 75% of the target population with service delivery) in at least one age band in all three DREAMS districts at the end of COP20. Projected saturation calculation indicates that at the end of COP21, if targets are reached, Machinga district will be fully saturated for all age bands, Zomba will have two age bands saturation. Table 4.3.1 shows saturation at the end of Q4 COP20 and projected saturation at the end of Q4 COP21.

Saturation at end of Q4 FY 21				Projected Saturation at the end of Q4 FY22				
	Age				Age			
District	10 - 14 years	15 - 19 years	20 - 24 years	District	10 - 14 years	15 - 19 years	20 - 24 years	
Blantyre	76%	25%	20%	Blantyre	89%	65%	64%	
Zomba	74%	52%	64%	Zomba	83%	78%	67%	
Machinga	102%	56%	83%	Machinga	107%	83%	83%	

Table 4.3.1 Saturation at End of Q4 FY21 and Projected Saturation at End of FY22

In line with this projected saturation, PEPFAR Malawi has received approval to expand to two new districts, Chiradzulu and Phalombe, where the core package will be implemented in COP22. Higher targets are set in the expansion districts, compared to the three current districts. In line with COP22 guidance, more targets are set for the age bands yet to reach saturation in the phased maintenance districts of Zomba and Blantyre, while in Machinga district as well as in the age bands that will have reached saturation, small targets are set with more focus on the vulnerable AGYWs who will age-in and age-up between DREAMS age bands. In the age bands that have reached saturation, AGYW who have completed DREAMS but still need specific services will be provided with services that will reduce their current and anticipated vulnerabilities. Table 4.3.2 shows the difference between a core package and maintenance package.

	Services for DREAMS Core and		nunce 1	achages		_	_
Intervention		Core			Maintenance		
		10 - 14	15 - 19	20 - 24	10 - 14	15 - 19	20 - 24
Primary Package	Social Asset Building	Yes	Yes	Yes			
	Financial Literacy	Yes	Yes	Yes			
	Screening for HTS	Yes	Yes	Yes	Yes	Yes	Yes
	Contraceptive Information	Yes	Yes	Yes	Yes	Yes	Yes
	Condom Information	Yes	Yes	Yes	Yes	Yes	Yes
	PrEP Education & Information		Yes	Yes		Yes	Yes
Secondary Services	HIV/violence prevention (IMpower)	Yes	Yes	Yes			
	Condon Provision	Yes	Yes	Yes	Yes	Yes	Yes
	HTS	Yes	Yes	Yes	Yes	Yes	Yes
	Education Support Parenting for caregivers (Families	Yes	Yes	Yes	Yes	Yes	Yes
	Matter Program)	Yes			Yes		
	Contraceptives Clinical services (post-violence	Yes	Yes	Yes	Yes	Yes	Yes
	care, STI screening and treatment)	Yes	Yes	Yes	Yes	Yes	Yes
	Economic strengthening		Yes	Yes		Yes	Yes
	PrEP Screening and Provision		Yes	Yes		Yes	Yes

Table 4.3.2 Services for DREAMS Core and Maintenance Packages

In COP22, the DREAMS team will continue scaling up economic strengthening interventions. In comparison to COP21, the COP22 social economic program area budget has increased by 94% to allow proper scale up of economic strengthening interventions which include Siyakha-bridge to employment program, and village savings and loans (VSL). While we had a slow start up in COP21 and expect COP22 to have a strong scale up of the interventions. PrEP scale up is a high priority intervention for the Malawi DREAMS program. PrEP scale up will be aligned to MOH scale up plan which aims to increase PrEP services in the youth friendly health services both at health facility and non-health facility setting so as to increase PrEP access among AGYW. The PrEP target among AGYW in DREAMS districts has increased by 54% from COP21 at 5,603 to 12,225 in COP22. While PrEP education is currently part of the primary package, in COP22, the Malawi DREAMS program will increase demand creation using PrEP ambassadors and DREAMS mentors. Community and KP partners implementing DREAMS will strengthen linkages with health facility partners to ensure timely and active linkage of AGYW eligible for PrEP. DREAMS partners will integrate PrEP with other HIV & SRHR services including adolescent friendly health services in health facilities to ensure increased uptake. In districts not yet providing PrEP, PEPFAR IPs will work with the health facilities to assist them become certified PrEP providing sites. PEPFAR Malawi will continue to advocate for community PrEP initiation and refill as this will allow for a significant increase in uptake.

In COP21, PEPFAR Malawi will start implementing DREAMS in three higher learning institutions. In COP22, DREAMS will be scaled up to five higher learning institutions, two of which are new. The Malawi specific DREAMS toolkit is being revised to include information suitable for young women in the institutions and to remove information that they already know. In COP22, we will foster meaningful engagement of AGYW by empowering DREAMS ambassadors to become advocates of behavior change, including uptake of services like PrEP. Each DREAMS district has a DREAMS ambassador who is employed by the PEPFAR district-level IP to coordinate activities with other DREAMS ambassadors. DREAMS Malawi team and partners will continue to strengthen identification of the most vulnerable AGYW by updating the screening tool and utilizing different structures at community and health facility level, including DREAMS ambassadors. While STI screening and treatment are already in implementation, in COP22, DREAMS Malawi will ensure STI screening is done at various points of care and actively link positive cases to care and treatment.

Peace Corps Response Volunteers (PCV) are expected to return to Malawi during COP22, and they will be placed at district level to strengthen programming and coordination across partners. The PCVs play an essential role ensuring AGYW receive the complete DREAMS package based on their unique needs and facilitate collaboration across district health office counterparts and other stakeholders. District coordinators will be supported by the PEPFAR Malawi DREAMS team. Malawi's network of AIDS services organizations will host a monitoring and evaluation specialist who will support the development of tools and templates for routine data collection and reporting which will be used at district level.

Peace Corps will also place health and education volunteers in DREAMS districts to support education and health services for youth, with a focus on AGYW. Three education specialists specifically will help headmasters in the Secondary Education Expansion for Development (SEED) and *Apatseni Mwayi Atsikana Aphunzire* (AMAA) schools to set up administrative and
management systems and introduce gender-sensitive pedagogy to create gender equitable learning opportunities.

Orphans and Vulnerable Children (OVC)

Building off COP21, PEPFAR Malawi will provide comprehensive HIV impact mitigation, prevention, and care and treatment support services to 172,272 OVC \leq 17 years old and their households to address contributing factors to vulnerability with particular focus on: 1) supporting HIV testing for children at risk of HIV infection, 2) facilitating linkage to treatment and providing support and case management for vulnerable children and adolescents living with HIV, 3) reducing risk for adolescent girls in high HIV-burden areas and for girls and boys \leq 14 years old regarding primary prevention of sexual violence and HIV, 4) supporting EID continuum (special focus on young mothers living with HIV), 5) screening for TB and malaria symptoms and support linking children /adolescents living with HIV (C/ALHIV) to health facilities for follow up if necessary. Activities will be implemented in 140 high burden health facility catchment areas in nine districts (Machinga, Mangochi, Zomba, Blantyre, Chikwawa, Phalombe, Mulanje, Thyolo, and Lilongwe). In COP22, the program will expand to two new high-volume sites. In COP22, the program will continue to combine three effective models for achieving epidemic control among children and adolescents.

Figure 4.3.3 Continuing the successful collaboration between OVC and clinical IPs to support families to become healthy, safe, stable, and schooled



The comprehensive model has a target of 85,073 (50% of OVC_SERV target, OVC<18 64,202 and 20,871 caregivers). This model supports children, adolescents, and their caregivers. Priority sub-populations include children and adolescents living with HIV (46%), HIV exposed infants (25%), sexual violence survivors, children of people living with HIV (22%), children of FSW living with HIV (7%), at risk AGYW, and child-headed households. In COP22, we will strengthen efforts to ensure at least 46% of the OVC_SERV <18 cohort are C/ALHIV, while ensuring 90% of TX_CURR <19 at the 140 facilities in the OVC catchment area, are offered enrollment into the OVC comprehensive program. Priority enrollment will be given to newly identified C/ALHIV, C/ALHIV with poor viral suppression, and those who have experienced interruption in treatment. Further, using its community network and through household visits and support, OVC frontline providers will identify siblings of C/ALHIV, link children of index

clients, conduct HIV risk assessments, facilitate access to testing, and ensure linkage to and continuation of treatment for those living with HIV. Through the case management approach, the program provides age-appropriate activities as needed, including psychosocial support, promotion of positive parenting and norms change; child protection and GBV services; savings and loans groups; work readiness and market-based income-generating activities. The program will also emphasize supporting parents and caregivers living with HIV to remain in care.

Strengthened collaboration with health facilities and networks of community and clinical support will be essential to improve CLHIV outcomes. This includes MOUs between clinical and OVC IPs, placement of OVC staff at health facilities including roving social workers, facility-based case management and case conferencing. The facility based OVC cadre is trained to assess, recruit, and ensure referral completion of C/ALHIV into the OVC program. Viral load monitoring services will be scaled up to reach all C/ALHIV enrolled in the program. Activities will span across four main domains; healthy, safe, stable, and schooled support areas, coordinated through tailored, comprehensive family centered case management efforts. PEPFAR will increase enrollment of C/ALHIV into age-appropriate support groups based in the communities and the facilities. These 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. Treatment Literacy interventions will be extended to the caregivers and guardians of C/ALHIV through various activities including positive parenting. Treatment literacy will be prioritized for improved treatment outcomes. The OVC program will strengthen its collaboration with KP implementing partners to reach more children of FSW through the OVC program.

PEPFAR Malawi will also support keeping children in school through community mobilization and intensifying household economic strengthening so that caregivers and guardians are able to pay school fees. Peace Corps volunteers and their counterparts will support ALHIV and their caregivers through teen clubs. The activities will include information on good nutrition, life skills, treatment adherence, hygiene, cooking demonstrations and home gardens among others. Deliberate effort will be made to ensure that PCVs are placed at facilities being reached by the OVC program.



Figure 4.3.4 Supporting the Early Infant Diagnosis (EID) Continuum

The Malawi HIV program will emphasize support to young mothers/caregivers living with HIV and HIV-exposed children 0–24 months old to assure early diagnosis, adherence, and retention on treatment, and provide holistic parenting support to optimize HIV-exposed children's developmental outcomes. Currently the OVC program actively engages in high volume PMTCT sites. In COP22, the World Education Bantwana Early Childhood Stimulation Model will also be scaled up for increased support. OVC IPs will work closely with clinical partners and health facility staff in line with GoM guidelines on TB and malaria screening for C/ALHIV. OVC case workers are uniquely positioned to improve screening for both TB and malaria symptoms and support linking C/ALHIV to health facilities for follow up if necessary. The screenings will be done at each visit/encounter and referred to health facilities, as necessary.

Primary Prevention

The Malawi HIV program will reach 32,183 (18% of the OVC_SERV target) OVC under the preventive model. Preventing sexual violence and HIV for the 10-14-year-old girls and boys and reducing risk for AGYW in non-DREAMS districts through leveraging schools, community groups, and faith-based networks will be a key focus in COP22 in line with the Malawi National Intervention Framework. This model focuses on preventing sexual violence and HIV risk to help boys and girls reduce risk or consequences of risk exposure. For the 10-14 age group, activities will focus on primary prevention and for the 15-17 age group, activities will focus on a combination of preventing and reducing risk. The program will use age-specific evidence-based curricula with skills building components such as Families Matter, Sinovuyo Teens, and Grassroots Soccer for 10-14 age group. PEPFAR Malawi will intensify collaboration with FBOs and CBOs through community mobilization/norms change interventions (SASA! Faith and Coaching Boys into Men). PCVs will target the 10-14 youth with interventions that address sexual violence, HIV prevention and early sexual debut by utilizing the Grassroots Soccer curriculum that has been adapted to include the evidence-based S/GAC modules at both school and community settings. Programming will be sensitive to sexual violence and other factors shaping adolescent sexual behaviors.

PEPFAR Malawi will ensure IPs have standard operating procedures to refer beneficiaries reached under the preventive model for services under the comprehensive model and DREAMS when necessary. COVID-19 prevention will continue to be mainstreamed in the interventions. OVC and DREAMS programs have three shared districts (Blantyre, Machinga, and Zomba) where the OVC program will not implement activities targeting AGYW 10-17 years as they will be reached through DREAMS programming (55,016 AGYW, 32% of the OVC_SERV target). The referrals between OVC and DREAMS will be strengthened to achieve enhanced outcomes for AGYW. OVC and DREAMS will implement joint planning where appropriate, including primary prevention activities for 10 -14-year-old girls and boys.

In COP22, PEPFAR Malawi will continue to work with the Ministry of Gender to build a strong national case management system. Professionalization of the community-based social welfare workforce will continue to be prioritized. Building capacity of voluntary community-based child protection structures will be strengthened. We will continue to inject much- needed, qualified social workers into the child protection system through the Chancellor College award that will train graduate social workers, diploma (CPW) and certificate (CCW) in partnership with the GoM Magomero training college. The OVC program will continue to support the strengthening of case management through the USAID Health Office G2G support to Zomba District Council.

Prevention of Mother to Child Transmission (PMTCT)

Prevention of mother-to-child transmission (PMTCT) of HIV forms the core programming to prevent HIV in children. The PMTCT program in Malawi is a model to many countries for pioneering implementation of Test and Start for PBFW. The 2021 PEPFAR annual progress report indicates high service coverage with 95% HIV status ascertainment and nearly universal ART coverage among pregnant women attending ANC. Additionally, PEPFAR IP performance on PMTCT indicators has consistently been high. The program has seen improvement in EID coverage over the last several years and approaching the target of 95%. We also continue to see low early transmission rates below 2% in COP21 Q1. Overall, 96% of newly diagnosed infants were confirmed on ART in COP21 Q1.

Despite having made significant progress, Malawi is not on the WHO-tiered path to elimination framework until further reduction in overall transmission rates can be realized. WHO criteria for validation of eMTCT require high service coverage indicators (>95% ANC attendance, status ascertainment, and ART coverage), transmission rates of <5%, and a case rate of <50 cases per 100,000 live births. Spectrum estimates for 2022 indicate a prevalence rate of 5.7%, a final transmission rate of 6.5%, and an estimated case rate of 371 per 100,000 live births. The Malawi 2021–2025 National HIV Prevention Strategy aims to reduce the final MTCT rate to < 5%, reduce the case rate to < 350 /100,000 live births and reduce the estimated number of new infections among children to < 1,000 per year. The 2022 Spectrum estimates indicate that the major sources of new infections in children have changed since roll out of treat all approach. Previously most infections occurred due to failure to diagnose and ART initiation. Now nearly 60% of transmission occurs during the long breastfeeding period, primarily from WLHIV who experience interruptions in treatment, and from incident infections among women who were previously HIV-negative.



Figure 4.3.5 Spectrum 2022 Malawi Sources of New HIV Child Infections (Total estimated new HIV infections in children 2,100)

PEPFAR Malawi will continue to implement interventions to strengthen the PMTCT program to address the key barriers to attaining elimination of mother-to-child transmission of HIV in Malawi in COP22 inlcuding:

- Address dropping out from care
 - o Support Mother-Infant-Pair clinics at all PEPFAR supported sites
 - o Provide mentor mothers for community support at all PEPFAR supported sites
 - o Expand support for young vulnerable mothers under 29 years old through the OVC program
- Prevent/address incident infections during breastfeeding
 - Retesting during breastfeeding at six-nine months. Subsequent retesting in the breastfeeding period will be done based on risk assessment.
 - PrEP scale up from seven districts in COP21 to all 28 districts in COP22 for high risk PBFW as part of a comprehensive prevention package
 - o Enhanced postnatal prophylaxis for high-risk infants born to mothers with incident infections during pregnancy
- Ensure virological suppression among PBFW (3rd 95)
 - o Implement new policy for VL testing at first ANC visit and every six months during pregnancy and breastfeeding
 - Prioritize point of care testing (POCT) for VL for PBFW in line with updated 2022 guidelines. An unsuppressed VL will result in the woman being enrolled on intensive adherence counselling immediately



Figure 4.3.6 PMTCT Cascade FY22 Q1

Key Populations

PEPFAR Malawi implements a comprehensive and integrated KP program by targeting female sex workers (FSW) and their partners, men who have sex with men (MSM), imprisoned persons, and transgender people in 11 high volume and high burden districts. PEPFAR Malawi core package of service is person-centered, in line with WHO recommendations and integrated from the community to the facility level through a "handshake" system of service provision. Clients choose where to access services. Drop-in-centers and KP-friendly facilities provide a full package of prevention, treatment, and care services. In COP22, we will strengthen and work with private clinics to offer KP friendly services. Below is Malawi's comprehensive package of service provision for key populations.

Figure 4.3.7 Malawi's Comprehensive Package of Service Provision for Key Populations

Core Package for all KP	HIV negative female sex	HIV positive female sex				
1. Peer education, risk assessment, counseling, risk	workers	workers				
reduction planning	All core package	All core package				
2. HIV Testing and Counseling (HTC)	interventions	interventions except HTS				
3. Promotion of partner/client HTC	Quarterly HIV testing and	Linkages to clinical care				
4. Linkage and treatment management	Counseling	and treatment				
5. Condom & lubricants distribution; promotion of	Quarterly STI screening and	Referral for PMTCT				
use	management	if/when pregnant				
6. Sexually Transmitted Infection	Repeated and regular risk	Community care and				
7. Cervical Cancer Screening and referrals	reduction counselling	treatment adherence				
8. Family planning services and post abortion care		monitoring				
9. TB screening and referral		Quarterly STI screening				
10. Referral and linkages between services		and management				
11. GBV screening & Post GBV	HIV Negative MSM	HIV Positive MSM				
12. PrEP 13. PMTCT	All core package	All core package				
14. Hepatitis B	interventions	interventions except HTS				
15. Treatment Literacy T=T (<i>Tizirombo tochepa</i> =	Quarterly HIV counseling and	Linkages to clinical care				
Thanzi) (U=U)	testing	and treatment				
16. Exploited young girls' management	Quarterly STI screening and management	Weekly or per demand				
	STI screening and treatment	Community care and				
		treatment adherence				
		monitoring				
	Repeated and regular risk	Quarterly STI screening				
	reduction counseling	and management				

In COP22, PEPFAR Malawi will continue to maintain strategies that have been working well to identify high risk and hard to reach KP and provide prevention and clinical services. PEPFAR Malawi implements targeted testing through the blending of HIV self-testing (HIVST) with active index testing (AIT) and SNS. COP21 data shows 26% and 27% HIV positivity among MSM and FSW, respectively. SNS contributed 80% of all the positives identified in FY20 and FY21.

Programmatic data and engagement with CSO have helped us to understand that current KP size estimates are likely far lower than the reality. It is important to note that the KP size estimates currently in use in Malawi are outdated. The National AIDS Commission, with support from the Global Fund, conducted a bio behavioral survey in 2019/2020 which only included five PEPFAR districts (Blantyre, Zomba, Mwanza, Mangochi and Mchinji). Over COP22-23 we will conduct a national size estimation for all districts targeting all KP populations. Currently PEPFAR Malawi and Global Fund are providing services in high burden districts with high HIV prevalence. Figure 4.3.8 shows districts where PEPFAR Malawi and Global Fund KP activities are being implemented.





In COP22, PEPFAR Malawi will continue to work with IPs to reach the remaining high risk and unidentified infected KP. Interventions that have worked well for a successful KP program include AIT, HIVST, SNS, partner notification, moonlight testing, peer-driven interventions, as well as outreach services that include HTS in hotspots. In an effort to identify more people living with HIV, IPs will be required to focus on reaching sexual contacts/ partners of all FSWs reached including partner notification from FSW identified as HIV positive. PEPFAR Malawi intends to conduct mapping and validation of locations and facilities with high numbers of people living with HIV and focus implementation of KP programs in those areas to reach more KP. In COP22, PEPFAR Malawi will strengthen coordination with the OVC program and map all biological children of KP in all districts where we provide KP services. We will strengthen the referral processes and ensure that children of KP that are HIV exposed and HIV positive children of KP are linked to appropriate testing or treatment services and supported in their enrollment into comprehensive OVC programs.

PrEP scale up for KP is progressing well and will follow the National PrEP acceleration plan that is under development. In COP 22, PEPFAR Malawi has increased PrEP targets by 30% compared to COP21 targets. PrEP initiation and refill will continue to be offered in KP friendly health facilities and DICs. PEPFAR Malawi will continue to work closely with CSOs and GoM to advocate for community PrEP delivery to make PrEP more accessible to the KP. The Ministry of Health has recently adopted WHO recommendations by removing mandatory creatinine test for clients under the age of 30 which was a barrier for PrEP initiation. This will allow more sites to be able to provide PrEP PEPFAR Malawi will continue to work with KP-led and KPcompetent organizations on service delivery. Currently, PEPFAR Malawi prime partners are subcontracting to six KP led organizations in providing services which has improved the reach and accessibility of the program. The PEPFAR Malawi team will continue to support KP-led support groups and ensure that newly diagnosed KP initiate treatment immediately, and those struggling with adherence, are provided with differentiated service delivery options. We will engage with KP groups in design and implementation of these programs and will work with GoM to develop a system for documenting and remediating instances in which policy and/or persistent stigma adversely impacts access to HIV testing, linkage, treatment, and prevention. PEPFAR Malawi will further encourage IPs to utilize safety and security toolkits for KP, and to adequately consult indigenous organizations for all programming, and the monitoring of effectiveness of stigma and discrimination programming.

In COP22, PEPFAR Malawi will continue supporting KP program implementation in 19 prisons. This will include HIV, TB, STI, COVID-19, eMTCT, VMMC, cervical cancer screening and referral services. Establishing effective strategies for linking released inmates to facilities for ART continuation and care will remain a priority. Prison ART groups, treatment adherence counselling, Viral load monitoring, screening and treatment of opportunistic infections will continue as T= T strategies in COP22 to enhance T=T. PEPFAR Malawi will also continue working with other relevant stakeholders to advocate for a comprehensive prevention package as PrEP, condoms and lubricants are not allowed in Malawi prisons. The PEPFAR Malawi team will continue to advise the GoM on KP policies with the aim of ensuring safe and appropriate access to services for KP that adhere to international standards. Community-led monitoring will continue to be supported to evaluate the KP program and inform implementation.





VMMC

PEPFAR Malawi used the Decision Makers Program Planning tool (DMPPT) with input from MPHIA results to determine district level VMMC coverage and unmet need. The DMPPT results show that six of 12 VMMC prioritized districts per the national HIV and AIDS Strategic plan have reached 80% saturation for males 15–49-years-old; two of the six districts below 80% have coverage less than 40%. Only four districts (Chikwawa, Blantyre, Lilongwe, and Mulanje) are actively providing VMMC services in COP21 through PEPFAR support, whereas MoH plans to begin implementing VMMC activities in the Mangochi, Balaka, Machinga, and Zomba districts with Global Fund support. In COP22, PEPFAR Malawi will add Phalombe and Nsanje districts which have lower VMMC coverage compared to the four PEPFAR-supported districts in COP21. Military facilities are also part of the PEPFAR Malawi VMMC program.

A total of 143,200 males over the age of 15 have been targeted for VMMC in the six districts plus military settings. The target setting process considered the HIV prevalence in men, districts saturation for 15-49 age group, and unmet need for VMMC. Districts with higher unmet need have been allocated a higher target. Achievement of these targets at the end of COP22 will contribute to increases in district coverage; however, some districts will still be lower than 80% at the end of COP22 as shown in Table 4.8.2. The estimated time to reach 80% saturation in the six districts ranges from one to three years with Blantyre reaching saturation in one year, Nsanje in two years while Lilongwe, Phalombe and Mulanje are projected to reach saturation in three years. We will maintain a presence in Chikwawa to ensure that adolescents who reach the age of 15 receive services through outreach and mobile services, as well as quarterly campaign activities.

The VMMC program continued to gain traction and has adapted to the COVID-19 environment, with the number of circumcisions in COP21 Q1 reaching 30,233 (21%) of the annual target. Overall, VMMC performance in COP21 Q1 was better than the same reporting period in previous years. Innovative methods for generating demand, customer planning, and remote monitoring were used to achieve the results. The use of devices such as the Shang Ring makes VMMC more acceptable while decreasing the number of adverse events. In COP21 Q1, 20% of all VMMCs were conducted with the Shang Ring device, and all individuals had their Shang Ring removals completed within the time frame. One device displacement was managed, and the individual recovered well. The PEPFAR Malawi VMMC program fully transitioned to circumcising males aged 15 years and above as shown in Figure 4.3.3. All PEPFAR Malawi IPs have now transitioned to reusable kits with varying degrees of site implementation and roll out. In COP22, we will only procure Shang Rings, reusable kits, and the necessary essential consumables to increase the number of circumcisions performed using reusable kits (by 50%) and Shang Rings (50%). PEPFAR Malawi partners will continue to carry out activities for continuous quality improvement and the implementation of fidelity checks to ensure compliance with standards and the prevention of adverse events. The VMMC partners will continue to engage the KP partners to ensure referral of men who have sex with men to the VMMC program.



Figure 4.3.10 VMMC Quarterly Trends by Age



The Division of HIV and AIDS will conduct annual external quality assurance activities and will monitor VMMC sites on a regular basis. PEPFAR Malawi will continue to collaborate with IPs and MoH to ensure that well-trained and supervised providers participate in the program, and that service delivery teams receive refresher training. As a result of the task-shifting to lower cadres, the Medical Council has approved the training of medical assistants to perform the procedure. The Ministry of Health will work with non-PEPFAR-supported public clinics and private facilities to ensure that all circumcisions are routinely reported and to strengthen coordination at the national and district levels. PEPFAR Malawi will support the following sustainability activities: assist DHA/NAC in integrating routine VMMC services in public facilities; inventory all trained providers in all districts and estimate those active; refresher trainings; improve reporting; scale up task shifting to medical assistants (Nurse Midwife Technician still outstanding); assist DHA in developing VMMC AE monitoring system; fund DHA for national coordination activities: review meetings; fund DHA for national coordination activities such as review meetings (district review meetings, TWG), CQI, DQA/EQA, training VMMC providers in non-PEPFAR-supported districts to support integration of VMMC services, supervision and mentorship, and strengthening private facility engagement.

We will also support the full transition to reusable kits; strengthen demand creation strategies for men aged 25-39 years to align with where the greatest HIV incidence and gaps to saturation exist; continue to scale Shang Ring devices, particularly for older men; scale up a combination of

different service delivery models throughout the year to minimize seasonality in VMMC; continue CQI to ensure quality of services; strengthen AE reporting; and screen for HTS. For those who test HIV positive, VMMC will be performed after three months of ART adherence (viral load 200 copies/ml); referral to and from other prevention programs such as PrEP, HTS, and STI clinics will be strengthened; and all HIV positive people will be linked to care and treatment.

PrEP

PrEP implementation started in March 2021 following the approval of the national PrEP guidelines in December 2020. The phased-in PrEP implementation has made PrEP currently available in 119 out of 429 facilities in the 11 PEPFAR Malawi priority districts. Malawi's PrEP guidelines recommends PrEP for individuals ≥ 15 years-old at substantial risk of HIV but prioritizes KPs (FSW, MSM, and transgender), AGYW, sero-discordant couples, and PBFW. We have supported the development and dissemination of the oral PrEP communication and advocacy strategy which led to the approval of information, education, and communication (IEC) materials. The approved PrEP demand creation tools include the interpersonal communication for health care workers and lay cadres (peer educators, DREAMS ambassadors and PrEP champions); print materials: posters, flyers, and pamphlets; jingle, talk shows and PrEP panel discussions for mass media; use of social media influencers; and activations of hot spots for KP. In COP22, PEPFAR Malawi will support rapid PrEP scale-up in all 28 districts to reach PrEP-NEW and PrEP CT targets of 51,786 and 11,935, respectively. Global Fund support for PrEP commodities, does not include the PEPFAR targets and is based on the NSP (2020-2025) targets, set at 7,000 in COP22. In COP22, PEPFAR Malawi will procure additional PrEP commodities (ARVs, lab reagents, and supplies) to support attainment of the ambitious targets.

To achieve the desired PrEP impact PEPFAR Malawi will work with MoH and its stakeholders to address the following barriers:

- Limited access to PrEP due to the phased-in approach and unavailability of PrEP delivery in the community for all clients at substantial risk of HIV
- Limited capacity and availability of laboratory equipment, infrastructure, and staff to conduct the initial and subsequent creatinine and Hepatitis B screening tests.
- Lack of trained staff to integrate PrEP into HIV/SRH services (family planning, antenatal care, post-natal care, STI and YFHS)
- PrEP product stigma where there is no difference in the branding of PrEP and ARV for treatment and discrimination of potential users by the community.
- Limited follow up for clients who discontinue PrEP

Key priorities for COP22 will include:

- Rapidly scale-up PrEP to new public and private facilities in all districts in Malawi in line with the national PrEP acceleration plan that is under development
- Enhance tailored and generalized demand creation activities in all populations at substantial risk and community engagement for secondary influencers (sexual partners, parents, and community gate keepers) to reduce myths and misconceptions around PrEP
- Support MoH to develop PrEP enabling policies/guidelines for:
 - Exemption of creatinine test for PrEP clients < 30 years without kidney comorbidities
 - Community PrEP delivery for all clients at substantial risk
 - New PrEP products i.e., Cabotegravir long-acting injectable (CAB-LA)
 - PrEP module in the electronic medical records system

- Support for implementation of multiple differentiated service delivery models for PrEP uptake and continuation (including regular adherence counseling and client follow up)
- Strengthen linkage and integration of PrEP into comprehensive SRH services: STI, ANC, post-natal care, family planning, and other HIV prevention services (adolescent/youth friendly services) through capacity development for PrEP and SRH service providers
- Incorporate PrEP-specific screening and counseling in HTS post-test counseling for multiple testing modalities.
- Active PrEP referral of HIV negative partner in a sero-discordant couples found to not be virally unsuppressed
- Strengthen efficient and effective systems for supply chain for PrEP commodities (TDF/FTC and/or TDF/3TC, HepB and creatinine tests), lab capacity and creatinine sample transportation and results system
- Routine inquiry about GBV among people accessing PrEP and referring suspected cases to post-GBV services
- Strengthen PrEP oversight and coordination structures at the national and district levels

4.4 Additional country-specific priorities listed in the planning level letter

In addition to PrEP, KP service delivery, OVC, recency testing, local partner transition planning, active and ongoing community and CSO engagement including (but not limited to) CLM, the COP22 planned allocation and strategic direction letter highlights the following recommendations to address in collaboration with GoM:

- Persistent improvement in VL coverage in Lilongwe and Blantyre, targeted case finding and treatment efforts for adolescents, and prioritization of critical HRH
- Intensified collaboration with Global Fund to address commodity shortfalls and close alignment on key priorities
- Aligned vision and reinvigorated partnership in jointly sustaining control of the HIV epidemic, support for national public health approach and primary care platforms
- Strengthen PrEP oversight and coordination structures at the national and district levels In tandem, these cross-cutting priorities and stakeholder-central partnerships continue to anchor the Malawi HIV program alongside broader multi-diseases support described in Section 4.5.

4.5 Additional Program Priorities

The PEPFAR Malawi team akin to other development partners, has a vested interest in ensuring not only gains in the journey to sustained epidemic control, but also in mitigation of other health threats. Support for community outreach, vaccination and health systems strengthening in the context of COVID-19, targeted polio eradication efforts, an ongoing cholera outbreak, and effects of tropical storm Ana and cyclone Gombe in Malawi, remains paramount. While HIV program priorities are not diverted to fund interventions directly, technical assistance to various taskforces and committees leading the GoM response to these emergencies requires staff time and attention. For example, routine public health surveillance must be at scale to detect epidemic and program changes, particularly in the context of COVID-19 and other vaccination campaigns. In addition, sustained support for people living with HIV including access to treatment in response to environmental emergencies, also remains a priority.

On March 10, 2022, the Malawi Ministry of Health released the new clinical HIV management guidelines with updated policies. Table 4.5.1 outlines some of the new policies, their intended impact and reference to Minimum Program Requirements.

New policy	Intended impact	Implementation status
1. Use semi-quantitative rapid CD4 count test for people living with HIV initiating ART or with suspected clinical treatment failure where quantitative CD4 testing is not available.	Improved quality of care especially for those with Advanced HIV Disease and ART Treatment failure	Not yet scaled up. Currently at a few high-volume facilities
2. Give 3HP to all People living with HIV initiating ART (without contraindications) using a fixed-dose combination tablet of rifapentine/isoniazid.	Reduced notified TB cases and mortality among those newly initiated on ART	Implemented at all sites
 Screen all ART patients 40+ years annually for diabetes using blood glucose testing. 	Improved detection and management of NCDs among older people living with HIV	The policy will be fully implemented once the Provider trainings are completed
4. Intensive adherence support for patients with unsuppressed viral load must be provided by an experienced clinician or nurse, not by a lay provider	Reduced number of people living with HIV developing HIV treatment failure as the quality of counseling for those with unsuppressed viral load is expected to improve	The policy will be fully implemented once the Provider trainings are completed
 Emphatically welcome treatment interrupters to return to ART, either self- motivated or after active follow-up. Openly advertise at OPD and HTS that interrupters are welcome to restart ART at this facility. 	Increased number of ART patients who experienced an interruption in treatment (IIT), who successfully restart ARVs	The policy will be fully implemented once the Provider trainings are completed
 For children on pediatric regimens, pregnant and breastfeeding women, a new VL is scheduled every 6 months after the last test, preferably utilizing POCT. 	Improved viral load monitoring among children, pregnant and breastfeeding women	Already implemented for children on pediatric regimens but the policy will be fully implemented once the Provider trainings are completed
 Use the mobile phone-based electronic reporting form (Medsafe-360 USSD platform) in addition to paper-based reporting of all suspected adverse drug reactions 	Improved monitoring and timely detection of Adverse drug reactions (ADRs)	The policy will be fully implemented once the Provider trainings are completed
8. WHO recommended new 3-test HIV testing algorithm	Improved predictive value given the low positivity rates for the general population of <5%	Implementation will be at all sites once provider trainings are completed
9. HTS for breastfeeding women at 6-9 months postnatal and additional HTS based on a risk assessment	Reduced new pediatric HIV infections by providing prevention including PrEP for HIV negative breastfeeding women at elevated risk and early identification of infants who may be exposed or newly infected	Implementation will be at all sites once provider trainings are completed
10. Enhanced postnatal prophylaxis for high- risk infants	Reduced new pediatric HIV infections	Implementation will be at all sites once provider trainings are completed

Table 4.5.1. New policies that impact the HIV care and treatment program

PEPFAR Malawi is supporting implementation of safe and ethical index testing services, and to date all sites implementing index testing in scale up districts were assessed to ensure adherence to

standards. Remediation action plans were implemented. Scale up of index testing at high volume facilities in sustained districts is in progress and IPs are ensuring that sites meet minimum standards before implementing index testing services.

Based on MPHIA and Spectrum modelling data, the priority for COP22 is to focus on adolescents and young people, particularly males who are still unaware of their HIV status. The program will optimize index testing to actively elicit sexual contacts in this population. In COP20 only 53% of facilities at OU level reported active index testing and PEPFAR Malawi will expand active index testing to high volume facilities in sustained districts. The program will also introduce social network testing strategy to reach males and youth in general. This approach uses "recruiters" to reach people in their social networks (e.g., friends, sex or drug-using partners, family members, etc.) who may be at risk for HIV.

The program will utilize recency data to identify clusters with high recent infections among the youth, and guide intensification of case finding and prevention efforts. Further, PEPFAR Malawi will implement a new strategy leveraging peer-led services through existing community youth-led organizations as hubs for mobilization, demand creation, case finding and linkage to appropriate preventive or treatment services, in a total of seven districts including all four urban districts with cities. At the facility level, the PEPFAR program will expand peer-led youth friendly approaches including youth corners/spaces and use of youth champions for service navigation. Teen club implementation will also be augmented through incorporation of empowerment content as well as enabling peer supporters to provide community treatment support i.e., go beyond the interaction at the facility groups as is the case currently.

Another priority is improving VL coverage for all and VLS among children. PEPFAR Malawi will continue to implement the surge catch-up interventions and strengthen long-term systems interventions at site and above site levels to continue improving VL coverage. Due to plateauing of pediatric VLS in COP20, we will strengthen OVC support to children experiencing treatment failure and implement a newly developed tracking tool to follow all interventions provided to reach VLS in the PMTCT program. This is due to persistent gaps in final outcome and transmissions due to interruptions in treatment. PEPFAR Malawi will expand OVC support for young vulnerable mothers <29 years in COP22 with a goal of achieving complete mother-infant-pair follow up ensuring all necessary treatment, prophylactic and diagnostic services are received.

Partner performance management is central to PEPFAR Malawi's goal of sustaining epidemic control. In COP22, PEPFAR Malawi will continue to use a more rigorous monitoring framework to track the implementation of critical interventions with fidelity at site level (i.e., index case testing, viral load monitoring) which will include periodic collection, review, and provision of feedback to IPs on select indicators. In COP22, we will monitor program achievements, including both target achievement and trends in performance, in relation to financial data (including outlays and partner level expenditures) to determine the significant areas of underperformance. Mechanism-level performance will be evaluated through a comprehensive review of performance across all indicators and metrics assigned to the mechanism.

In the event of underperformance, PEPFAR Malawi will identify the contributing internal and external factors. We will put in place specific management interventions based on timing and level of underperformance. The prescribed PEPFAR MER indicators will be used; any partner with either <15% of target achievement at three months; or less than 40% of target achievement

at six months, will have a complete review of performance data (including trends in performance) and expenditures to date by program area, implement remediation, and conduct intensive follow-up. These elements (i.e., review, remediation, and follow-up) will be incorporated into existing IP work plans. An additional quarter of consistently poor performance by the IP will result in the implementation of a Corrective Action Plan (CAP).

The program will continue to review annual workplans and ensure that the planned activities are aligned with PEPFAR priorities. In COP22, site improvement through monitoring systems (SIMS) assessments and site visits will be continued at the facilities/sites implementing PEPFAR supported activities. For site visits, PEPFAR Malawi will target both high and low performing facilities to understand the factors contributing to better or low performance. We will continue to promote learning across sites and partners. PEPFAR Malawi will also continue to conduct program review meetings on weekly, monthly, or quarterly basis. In COP22, these reviews will focus on the IP performance towards achieving their weekly, monthly, and quarterly targets; and identifying barriers, effective strategies and best practices observed during the implementation periods. As already mentioned, the review will also facilitate the partners to develop remedial action plans to improve their performance towards target attainment. PEPFAR Malawi will enforce accountability at the individual and partner levels to ensure that safeguarding policies, procedures, codes of conduct, and monitoring tools are actively used by IPs to protect all participants or recipients of care and respond appropriately when incidents occur.

In COP22, PEPFAR Malawi will continue to provide funding to CSOs for community-led monitoring of the HIV and AIDS response in seven PEPFAR scale-up districts. CLM implementing partners will continue to work towards empowering communities especially people living with HIV, AGYW, adolescent boys and young men (ABYM) and KP to fully participate in making decisions about HIV services. In line with national and PEPFAR strategic priorities, monitoring of person-centered care at site and community-levels is central to this effort. COP20 CLM evaluation informed the Peoples' COP22, and Table 4.5.2 highlights some of the important recommendations that have been considered for COP22 priorities.



CSOs will continue collecting quantitative and qualitative data about HIV and other health care services from recipients of care, service providers and other key stakeholders with the aim of improving quality of services and informing policy decisions. An effective feedback mechanism that enables timely resolution of problems was established in COP20. Feedback and advocacy to relevant stakeholders is done at facility, community, district, and national levels. It is important for PEPFAR Malawi and MoH to hear community voices so that they can facilitate the implementation of the necessary changes. CSOs will engage with relevant stakeholders (including relevant parliamentary committees and other government or non-government departments) to address barriers to quality health care services.

In COP22, Malawi CLM will prioritize:

- Ensuring KP access to treatment services and exploring solutions to treatment interruption
- Implementing CLM activities in seven districts, one of which will be a new addition
- Addressing capacity building needs of CSOs in health service monitoring, data collection and analysis, and evidence-based advocacy e.g., triangulation of data streams to assess standards against target achievement and performance management. This includes use of SIMS and MER data
- Tracking and ensuring accountability for child, adolescent, and family-centered care
- Expanding use of CLM as a QA/QI tool
- Utilizing CLM to advance equity and support improvement in programs, especially for populations who are not yet at/near HIV epidemic control

Malawi CLM will continue to track commitments made at all levels following the feedback and advocacy meetings.

Condom Strategy:

PEPFAR Malawi will support the review of Malawi's expired National Condom Strategy 2015-2020. The strategy's goal is to improve the availability and accessibility of quality male and female condoms to all sexually active people in Malawi, thereby contributing to the prevention of HIV infection, STIs, and unintended pregnancies. The Malawi National Condom Strategy serves as a guide for condom program planning, implementation, monitoring, and resource mobilization in Malawi. The strategy establishes a multisector framework for long-term, coordinated, and comprehensive condom programming (CCP) and outlines the roles and responsibilities of all stakeholders over a five-year period. The framework in this strategy will help bring together all players involved in condom programming in procurement, distribution, and storage of condoms. The strategy will also ensure that there is a national technical working group that is functioning by meeting frequently to discuss and plan for condoms to be able to reach to the last mile.

4.6 Commodities

In COP 22, PEPFAR will support a patient centered supply chain for Malawi through four broad areas; First, PEPFAR will support supply chain technical capacity building through supervision and mentorship to strengthen inventory management at facility level, including pharmacovigilance and mitigating supply chain risks. PEPFAR will also support collection of accurate and timely supply chain data for decision making and implementation of MOH End-to-End visibility for supply chain data through support for logistics system interoperability and commodity traceability (GS1 and NPC). PEPFAR will provide technical assistance through strategic secondments for supply chain management and strengthen coordination with MOH and

Global Fund around commodity procurement and pipeline monitoring. Lastly, in COP 22, PEPFAR will coordinate with Global Fund and other donors on reintegration of parallel supply chains including exploring private sector partnerships in managing some components of the supply chain. The PEPFAR strategic support in COP 22 will ensure continuous availability of HIV and related commodities is key to maintaining epidemic control and achieving annual targets

In COP21, MoH communicated to stakeholders a potential commodity funding gap of around USD \$97 million across different commodity areas. Beginning Q4, COP21, there are concerns of stock outs of selected commodities starting with HIV self-test kits. MoH is however cautiously optimistic in the prospect of savings through global commodity cost reductions to meet at least half of the funding gap in the GF NFM3 grant. In COP22, MoH, Global Fund, and PEPFAR Malawi will work together to ensure efficiency gains in the NFM3 grant are used to cover the gap. Other key commodity areas likely to be impacted beyond COP22 (2023-2024) include ARVs, VL & EID reagents, opportunistic infections, conventional test kits, STI, and blood safety. Specific for VL and EID commodity management, MoH has so far only been able to implement an all-inclusive pricing model for Hologic Panther platform. PEPFAR Malawi will support MoH to expand all-inclusive pricing agreements including reagent costs, service and maintenance on the remaining platforms which are currently on ex-works model as outlined in the 2022 – 2024 HIV EID & VL scale up plan.

While the majority of HIV commodities are procured through Global Fund, PEPFAR Malawi fills gaps for selected commodities such as VMMC, PrEP, and condoms to achieve program targets. In COP22, we will support MoH with procurement of VMMC kits and related commodities in line with annual VMMC targets, and procurement of PrEP ARVs, HepB and Creatinine reagents to support PrEP scale up. For condoms, PEPFAR Malawi supports quantification, supply planning, and commodity procurement in coordination with MoH (DHA & RHD), GF, and UNFPA to ensure uninterrupted supply of condoms and lubricants. In COP 22, we will leverage the Commodity Fund (\$706,500) to procure female condoms to support national needs, lubricants for national KP needs, branded Chishango male condoms for social marketing to achieve a total market approach for condoms.

To mitigate effects of the COVID-19 pandemic on supply chains, PEPFAR Malawi will continue intensified coordinating with supply chain backstops with increased focus on early warning global supply chain risks which increases the OU's ability to provide timely intervention in coordination with MoH and Global Fund. Additionally, PEPFAR Malawi is leveraging USAID HQ's global supply chain partner suppliers to cushion COVID-19 related extended lead-times and volatile freight costs for commodities. In-country, we are also providing supply chain management support for COVID-19 control to mitigate impact on HIV programs. These efforts include provision of TA to Expanded Program on Immunization (EPI) supply chain staff at national and sub-national levels to build their capacity to manage ultra-cold chain equipment and safely receive, deploy, and minimize wastage of USG donated vaccines including Pfizer COVID-19 vaccines. We are also leveraging existing resources and infrastructure, such as OpenLMIS to provide data visibility for COVID-19 vaccines, PPEs, and related commodities.

4.7 Collaboration, Integration and Monitoring

PEPFAR Malawi continues working in collaboration with GoM, partners, and external stakeholders including the Global Fund. In COP22, the PEPFAR team will strengthen micro and

macro-planning and cross-technical collaborations with specific ministries of GoM including Ministry of Health, Ministry of Youth, Ministry of Gender, Ministry of Education, Ministry of Finance, and various inter-ministerial departments responsible for planning, budgeting, and coordination. We will make efforts to identify and address technical and management issues across the clinical cascade. This takes the form of active participation and feedback into national working groups and larger processes such as joint annual reviews, global AIDS monitoring, steering committee meetings, strategy, and policy development workstreams such as prevention, AGYW and comprehensive clinical updates for DHA and ministries that are central to the HIV epidemic response.

In-depth engagement involves continuous planning and decision-making inputs into various reporting and management of activities/interventions at IP and above-site levels (e.g., POART, IP-cross-technical taskforces, clinical and CLM data reviews and feedback loops) to support implementation across agencies and with external stakeholders. The USG role as bilateral representative on the Country Coordinating Mechanism; subject matter expertise on the Oversight Committee and convenor role in monthly PEPFAR Coordination Office- Geneva Malawi Country team calls, are paramount to address opportunities for better collaboration and integration, where needed. Specific Global Fund new funding model HIV and TB grants, and technical oversight support also encompasses quarterly performance reviews with principal recipients and site visits to key program areas such as AGYW, KP, and supply-chain related work with intensive support across PEPFAR Malawi coordination and supply chain teams. Additionally, the USG carries out essential leadership and advisory duties such as chairing the HIV/AIDS Donor Group and the Health Donor Group. These activities facilitate cross-fertilization of HIV and multi-disease programming, strategic information, and oversight activities.

In COP22, PEPFAR Malawi will work with IPs to promote implementation of innovative strategies across the whole cascade. PEPFAR Malawi will review the implementation of innovative strategies during the weekly, monthly, and quarterly review meetings and determine the ones that are working for possible scale up in other facilities and regions; and will recommend which strategies to be discontinued. The timely review of the implemented innovative strategies will ensure not only implementation fidelity, but also rapid scale up of those showing promising results. PEPFAR Malawi will also review implementation costs to ensure that they are accommodated within the approved IP budgets. Whenever necessary, PEPFAR IPs will revise their COP22 work plan to accommodate the new strategies and refinement where the need is identified. PEPFAR Malawi IPs will present promising results of their innovative strategies to MoH through TWGs to inform policy changes; and to IPs and other stakeholders to promote learning and sharing best practices. Through SIMS and sites visits, PEPFAR Malawi teams will visit health facilities to ensure that PEPFAR quality standards are being followed.

HIV service delivery in Malawi has integrated provision of key services. TB and HIV integrated services are essential to the Malawi program; 45% of all TB notified cases co-infected with HIV in COP20. TB screening is done at every clinic visit including for pediatrics and OVC. PEPFAR Malawi will continue to strengthen TB and COVID-19 screening integration to optimize resources but also efficiencies in case finding. Although the recent WHO guidance advocates for TB screening using molecular platforms for people living with HIV, the Malawi program will prioritize optimizing the diagnostic utilization of these platforms before making provisions for

TB screening. Meanwhile, PEPFAR Malawi will support training of lay cadre providers in TB symptom screening to improve the quality of TB screening. Sample transportation and molecular testing is integrated for TB, VL, EID and COVID-19. All TB and presumptive TB clients are offered HTS. Management of TB/HIV co-infected clients is aligned through applicable DSD to minimize the burden on clients. People living with HIV, including CLHIV, who do not have active TB disease are offered a course of TPT, preferably with 3HP. However, with the TPT policy for Malawi limiting TPT to people living with HIV who are new-to-care, about 400,000 people living with HIV may not be able to access TPT. As such, PEPFAR Malawi will continue to advocate for a favorable policy to reach all eligible people living with HIV with TPT.

Cervical cancer screening integrated into treatment is essential for WLHIV and is covered in section 4.9. Three models of integration are utilized. 83 large PEPFAR supported sites are providing screening and ablative therapy within the ART clinics. An additional 43 hub and spoke sites are served through 29 of the 83 sites with all necessary personnel and equipment available within the ART clinic. Other sites are served through active linkages between the ART clinic and the cervical cancer screening and treatment delivery points. Strengthening these linkages is a priority for COP22 to ensure that WLHIV continues to access these services even when they are not available within the ART clinic. Other services that are integrated within HIV care include provider-initiated family planning, diagnosis and management of sexually transmitted infections, infant and child feeding, diagnosis, and management of chronic diseases, particularly hypertension and diabetes with an ageing cohort, integration of HIV care in antenatal care, labor and delivery, and integrated mother-infant-pair follow-up.

Only provider-led community ART delivery models are being implemented by PEPFAR Malawi. These are therefore not only drug delivery points, but provide fully integrated services including viral load testing, TB screening and sexual reproductive health. Community-led monitoring will build on COP21 CLM activities and be designed to help PEPFAR programs pinpoint persistent problems, challenges, barriers, and enablers to effective client outcomes at the site level. In addition to prescribed and routine engagement during PEPFAR's annual business cycle, including around COP planning and quarterly POART processes, PEPFAR Malawi will support CLMN activities targeting treatment services in close collaboration with GoM and IPs. We will continue to strengthen community engagement and accountability mechanisms for ensuring quality HIV services for all ART clients accessed by all. Community-led monitoring IPs will work towards empowering communities, especially people living with HIV guardians to participate in making decisions about HIV services. Additionally, we will encourage MoH service providers and PEPFAR Malawi IPs to be responsive to CLM observations and results.

In COP22, PEPFAR Malawi will continue to support CSOs to implement CLM activities including treatment observatories and conducting provider and community scorecards for PEPFAR Malawi supported sites on a quarterly basis. The program will support the training of support groups including KP, youth, and women on treatment observatories. This activity will be combined with orientation of community groups including youth, KP, and women through CBOs, youth clubs and support groups in CLM, advocacy, engagement skills and human rights. The community scorecard is a participatory tool aimed at positively influencing the quality, efficiency and accountability with which services are provided at different levels of the health system. The training will aim to equip them with skills to collect data on the delivery of HIV services that include testing, care, and treatment. It will also increase their knowledge and skills

on community engagement, advocacy, and human rights. These skills will help CLM groups to engage service providers effectively on issues of quality of HIV services. These trained support groups will collect data monthly using treatment observatories; community and service providers' score cards sessions on availability, quality, accessibility, and friendliness of health facility in relation to provision of HIV services from the health facilities to monitor the quality of services being offered to ART clients. The core implementation strategy to achieve the goal is using dialogue in a participatory forum that engages both service users and service providers.

The program will also continue to use a mobile phone SMS platform for community health service monitoring and suggestion boxes in strategic places at health facilities. The facilities in collaboration with health facility ombudsman will be collecting and compiling the issues monthly and the compiled issues will feed into the routine program reporting and redress element with the aim of improving the quality of the health services. This SMS platform will also be used for sharing HIV messages including treatment literacy messages to communities. In COP22, PEPFAR Malawi will support advocacy and follow up sessions with service providers on issues raised from the mobile SMS platform, agreed from the scorecard sessions and suggestion boxes to make a community-informed HIV treatment program. The advocacy/engagement meetings with relevant stakeholders and service providers will be held at community, district, and national levels. These sessions will be conducted on a quarterly basis. PEPFAR Malawi IPs will facilitate alignment of HIV programming to CLM priorities and recommendations.

PEPFAR Malawi will work with GoM to develop a system for documenting and remediating instances in which policy or persistent stigma adversely impacts access to HIV prevention and treatment services. Key population groups through diversity forum and KP-led organizations will be involved in designing and implementation of KP activities. We will continue to support subnational structures in translating policy guidelines into annual operational plans and provide continuous monitoring support for effective implementation. Strengthened governance structures will facilitate the implementation of key policies and guidelines to improve the coverage of high impact interventions. Information, Education and Communication (IEC) approaches will be developed to increase awareness and understanding of key policies, benefits of prevention and treatment services for KP, address stigma and promote services among the clients of FSWs and children of KP. We will facilitate collaboration between government, non-state actors and the private sector. In the effort of bringing services closer to people, DIC's, small private pharmacies, accredited drug dispensing outlets which are often the first source for medicines for KP in hard to reach and underserved areas, will be supported in the dispensing of multi-month ARV prescriptions and other services.

Table 6 will be used as a monitoring matrix for all above site activities. Each activity is mapped against a key systems barrier with clear indicators, benchmarks, deliverables, and timelines for completion. On a quarterly basis all TWGs will be monitoring progress for each activity, and during POARTs progress will continue to be monitored in collaboration with SGAC bi-annually. At national level, TWG co- chairs will have a responsibility to share progress with other TWG members. present any challenges, and collaboratively reach solutions. Internally, progress is monitored on a quarterly basis within the relevant technical working group.

Table 4.8.1 A	RT Target	s by Prioritiza	ation for Epide	mic Control		
Prioritization Area	Total People living with HIV	Expected current on ART (APR FY22)	Additional patients required for 80% ART coverage	Target current on ART (APR FY23) TX_CURR	Newly initiated (APR FY23) <i>TX_NEW</i>	ART Coverage (APR 23)
Scale-Up Saturation	721,886	642,282	0	675,357	45,973	94%
Sustained	260,584	239,462	0	254,438	19,964	98%
Total	982,470	881,744	0	929,795	65,937	95%

4.8 Targets by population

*Military not included

Table 4.8.2	2 VMMC Covera	age and Targets by A	.ge Bracket in	Scale-up Dist	ricts
	Target Populations	Population Size Estimate	Current Coverage	VMMC_CIRC	Expected Coverage
SNU		(SNUs)	(FY22)	(in FY23)	(in FY23)
Blantyre	15-49	367,809	77%	11,352	80%
Chikwawa	15-49	141,416	80%	826	81%
Lilongwe	15-49	753,394	52%	79,999	62%
Mulanje	15-49	167,112	59%	9,000	65%
Nsanje	15-49	67,957	23%	22,800	56%
Phalombe	15-49	105,485	39%	10,244	49%
	Total/Average	1,603,173		134,221	

Table 4.8.3 Target Populations for Prevention Interventions to Facilitate Epidemic Control
Table 4.0.5 Target 1 opulations for 1 revenuon interventions to Facilitate Epidemic Control

Target		Population Size	Disease Burden	FY23 Target								
Population	District	Estimate	(people living with HIV)	AGYW_PREV (Denominator)	AGYW_PREV (Numerator)	PP_PREV	KP_PREV					
	Blantyre	236529	9455	25,539	15,323	31115	N/A					
	Chiradzulu	64311	3006	19,820	11,892	29027	N/A					
	Dedza	155895	1588	N/A	N/A	33	N/A					
Adolescent	Lilongwe	507172	9315	N/A	N/A	199	N/A					
Girls and	Machinga	143050	2603	8,459	5,075	8832	N/A					
Young	Mangochi	220378	5586	N/A	N/A	133	N/A					
Women*	Ntcheu	125863	2180	N/A	N/A	33	N/A					
	Phalombe	81442	2798	25,368	15,221	27943	N/A					
	Salima	92460	1544	N/A	N/A	67	N/A					
	Zomba	160776	5477	12,933	7,760	13433	N/A					
	Balaka	360	180	N/A	N/A	N/A	342					
	Blantyre	7441	3713	N/A	N/A	N/A	7069					
	Chikwawa	1371	684	N/A	N/A	N/A	1303					
	Chiradzulu	662	331	N/A	N/A	N/A	629					
Ermals Car	Lilongwe	7,134	3,560	N/A	N/A	N/A	6,777					
Female Sex Workers	Machinga	1,371	684	N/A	N/A	N/A	1,302					
workers	Mangochi	5,579	2,784	N/A	N/A	N/A	5,300					
	Mwanza	1,436	717	N/A	N/A	N/A	1,364					
	Mzimba	5,516	2,752	N/A	N/A	N/A	5,240					
	Phalombe	595	297	N/A	N/A	N/A	565					
	Zomba	2,168	1,082	N/A	N/A	N/A	2,059					
	Balaka	111	14	N/A	N/A	N/A	105					
	Blantyre	2,136	273	N/A	N/A	N/A	2,029					
	Chikwawa	1,430	183	N/A	N/A	N/A	1,359					
	Chiradzulu	311	40	N/A	N/A	N/A	295					
	Lilongwe	2,100	269	N/A	N/A	N/A	1,995					
MSM	Machinga	750	96	N/A	N/A	N/A	713					
	Mangochi	906	116	N/A	N/A	N/A	860					
	Mwanza	532	68	N/A	N/A	N/A	505					
	Mzimba	1,918	246	N/A	N/A	N/A	1,822					
	Phalombe	134	17	N/A	N/A	N/A	127					
	Zomba	1,933	247	N/A	N/A	N/A	1,836					
	Balaka	84	34	N/A	N/A	N/A	80					
	Blantyre	537	215	N/A	N/A	N/A	510					
	Chikwawa	120	48	N/A	N/A	N/A	114					
	Chiradzulu	37	15	N/A	N/A	N/A	35					
_	Lilongwe	307	123	N/A	N/A	N/A	292					
Transgender	Machinga	90	36	N/A	N/A	N/A	86					
women	Mangochi	436	174	N/A N/A	N/A	N/A	414					
	Mwanza	64	26	N/A N/A	N/A	N/A N/A	61					
	Mzimba	250	100	N/A N/A	N/A	N/A N/A	237					
	Phalombe	53	21	N/A N/A	N/A N/A	N/A N/A	50					
	Zomba	85	34	N/A	N/A	N/A N/A	81					
	Blantyre	2,700	459	N/A N/A	N/A N/A	N/A N/A	2,700					

	Dedza	340	58	N/A	N/A	N/A	340
	Lilongwe	6,400	1,088	N/A	N/A	N/A	6,400
	Mwanza	340	58	N/A	N/A	N/A	340
People in	Mzimba	2,700	459	N/A	N/A	N/A	2,700
prisons and	Neno	100	17	N/A	N/A	N/A	100
other	Nkhata Bay	550	94	N/A	N/A	N/A	550
enclosed	Ntcheu	550	94	N/A	N/A	N/A	550
settings	Ntchisi	540	92	N/A	N/A	N/A	540
	Rumphi	800	136	N/A	N/A	N/A	800
	Thyolo	780	133	N/A	N/A	N/A	780
	Zomba	4,700	799	N/A	N/A	N/A	4,700
Total				92119	55271	110815	66056

***Source**: Spectrum/Naomi estimates (AGYW population size and disease burden): DATIM/Biological and Behavioral Surveillance Survey report, BBS 2020 (KP size estimates and Disease burden)

Table 4.8.4	Targets for OVC	and Linkages t	o HIV Service	S	
SNU (District)	Estimated # of Orphans and Vulnerable Children**	Target # of active OVC (FY23 Target)	Target # of OVC (FY23 Target)	Target # of active OVC (FY23 Target)	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY23 Target)
		OVC_SERV Comprehensive	OVC_SERV Preventative	OVC_SERV DREAMS	OVC
Blantyre	72,792	11702	3979	14594	10836
Chikwawa	36,298	4188	1776	N/A	3908
Chiradzulu	24,932	N/A	N/A	10458	N/A
Dedza*	52,551	N/A	50	N/A	N/A
Lilongwe	124,618	13215	9890	N/A	12277
Machinga	46,580	4999	2976	7708	4621
Mangochi	78,534	8018	4094	N/A	7479
Mulanje	47,121	7206	2227	N/A	6730
Ntcheu*	43,089	N/A	50	N/A	N/A
Phalombe	29,763	4143	1550	13698	3761
Salima*	29,525	N/A	100	N/A	N/A
Thyolo	48,166	6024	2484	N/A	5569
Zomba	51,921	8559	3007	8558	7919
TOTAL	685,888	68054	32183	55016	63100

* Peace Corps-only districts

** Source: Malawi Population and Housing census Report 2018/Spectrum/Naomi estimates

4.9 Cervical Cancer Screening and Management

Women living with HIV (WLHIV) are six times more likely to develop persistent precancerous lesions that progress to cervical cancer compared to HIV negative women, often with more aggressive forms and with higher mortality. Since COP18, PEPFAR Malawi has supported the MoH to integrate cervical cancer "screen and treat" in high-volume ART clinics, from an initial 39 to 129 facilities in FY22. Despite COVID-19 related service interruptions in FY21, 116,165 screenings were performed and 76% of women who screened positive received treatment. Since COP18, PEPFAR Malawi has employed a "screen and treat" approach using visual inspection of cervix with acetic acid (VIA), and treatment of precancerous lesions using thermocoagulation, cryotherapy (as an alternative to thermocoagulation) and LEEP (for lesions covering >75% of the cervix).

All PEPFAR Malawi-supported sites have trained providers, uninterrupted supply of essential commodities, and at least a Thermocoagulator and a cryotherapy machine for back up. At some of the spoke sites where outreach is performed, portable Thermocoagulators are used to provide treatment on site. Through a hub and spoke model, PEPFAR Malawi has scaled-up cervical cancer screening services to 129 sites in COP21, with 26 hub sites covering 43 spoke sites. In COP20, the University of North Carolina and the Clinton Health Access Initiative (CHAI) piloted human papilloma virus (HPV) DNA testing at family planning and ART clinics, respectively. Evidence from these projects will be crucial as Malawi braces to revise policy to make HPV testing the primary cervical cancer screening method. Currently, the 11 facilities that participated in the CHAI pilot project continue to provide a combination of both the "screen and treat" and "screen, triage, and treat" approaches.

In COP22, PEPFAR Malawi aims to maintain a hybrid approach while steadily scaling up HPV DNA testing where conditions, such as lab capacity, allow. WLHIV aged 50-65 years will be prioritized for a single HPV DNA test and managed accordingly. Additionally, PEPFAR Malawi will expand to four additional facilities. By the start of COP19, PEPFAR Malawi had ensured that most supported facilities had at least a Thermocoagulator. These Thermocoagulators were procured using GF resources. PEPFAR Malawi ensures that providers are well trained to provide treatment for precancerous lesions. PEPFAR Malawi IPs have progressively improved to a treatment coverage of 76% in COP20, from an initial treatment coverage of 60% in COP18. The 90% treatment target was not met because of the low coverage of LEEP services which are available at four facilities by the end of COP20. To improve coverage, PEPFAR Malawi IPs have established referral systems for WLHIV requiring LEEP and those suspected of cervical cancer. This includes logistical support for transfers to referral sites and payment of costs for histopathology examination. By the end of COP20, IPs reported referral outcomes for over 70% of the referred WLHIV, although the majority of WLHIV referred for LEEP were only booked for a later date.

In COP21 through COP22, PEPFAR Malawi in collaboration with CHAI will scale up LEEP services through training, supervision, and mentorship, at sites where GF procured LEEP equipment has been distributed to improve access to LEEP services. Between 2020 and 2021, CHAI supported LEEP training for 27 providers from 27 sites, and 11 more facilities have initiated LEEP through this support. PEPFAR Malawi will support more mentorship sessions so

that more sites are activated within COP21 and COP22. Besides, PEPFAR Malawi will continue to strengthen and optimize treatment of ablation-eligible lesions and promote same-day treatment where conditions allow. In COP22, PEPFAR Malawi will also continue to support WLHIV who are suspected of cervical cancer with referral logistics and explore opportunities for incorporating palliative care services at ART clinics for WLHIV diagnosed of cervical cancer.

Since COP18, PEPFAR Malawi IPs have worked diligently to create demand for cervical cancer screening especially in the ART, maternal and child health, and family planning clinics. This is also extended in the community in collaboration with HSAs and CSO networks. The approaches used are designed to identify and address misinformation and myths around cervical cancer screening. This includes group health talks and one-on-one encounters with eligible WLHIV. IPs will continue to support the development and distribution of IEC tools. PEPFAR Malawi has ensured that cervical cancer screening and treatment services are provided with the best quality possible. Between COP18 and COP19, we have accomplished the following quality milestones in the Malawi program: (a) revised the service delivery guidelines which were only last updated in year 2005 by that time, (b) the SOPs, provider job aids and IEC tools, (c) the provider training curriculum, and (d) the M&E framework including tools to align with the DHIS2. PEPFAR Malawi IPs always ensure that providers are well-trained and mentored at their facilities. IPs also have focal persons at facilities who coordinate these services, monitor for quality, and manage data and reports. Same-day treatment especially for ablation-eligible lesions has been prioritized with over 90% of women treated on the same-day in FY21. In addition, PEPFAR Malawi will support the evaluation of automated visual evaluation (AVE) which uses artificial intelligence to determine presence of precancerous lesions. AVE can be used in place of VIA.

In COP20 alone, 96% of the cervical cancer screening among WLHIV and 89% of the WLHIV who were treated for precancerous lesions were supported by PEPFAR Malawi. From the rest of the non-PEPFAR supported facilities, 84,527 women were screened and only 6% were WLHIV. This is likely due to non-PEPFAR IPs employing minimal efforts to screen WLHIV. Therefore, PEPFAR will closely engage with non-PEPFAR IPs at high-volume facilities within scale-up districts to create and reinforce systems that will improve cervical cancer screening services access for WLHIV receiving ART care at these facilities. Lastly, PEPFAR Malawi will continue to collaborate with CSOs, mission hospital leadership and MoH to eliminate all formal and informal user fees for cervical cancer screening at all mission hospitals where PEPFAR supports these services.

4.10 Viral Load and Early Infant Diagnosis Optimization

PEPFAR Malawi continues to support viral load and EID tests in both high throughput and point of care testing (POCT) laboratories. In COP20, laboratories conducted 877,765 viral load and 39,388 EID tests using high throughput and POCT platforms, respectively. Viral load coverage remains low across each quarter averaging at 66%. Laboratories had a high turnaround time from sample collection to result return that likely contributed to the low viral load coverage. Ninety-nine percent of viral load tests were conducted in high throughput laboratories, of which 90% were performed on older Abbott m2000 platforms that are prone to frequent breakdowns. Absence of an integrated electronic result transfer system from testing labs to ART clinics also contributed to high turnaround time. The third and fourth COVID-19 waves in Malawi also disrupted critical shipments of reagents, resulting in prolonged stockouts that led to large backlogs. Even though PEPFAR Malawi deployed 65 laboratory technologists and 44 data

clerks to help reduce the backlog, the GoM still has a challenge to employ adequate staff to handle the VL/EID workload.

In the current year, several strategies are underway to identify key bottlenecks throughout the viral load cascade, both at ART clinics and laboratories. The PEPFAR Malawi team prioritized 97 facilities that have high patient volume (i.e., $\geq 2000 \text{ TX}_\text{CURR}$) with low viral load coverage (i.e., <95%) in 22 districts. In phase one, four districts that have more than 10 low performing facilities are prioritized for remediation, including monitoring stock status and filling gaps to avoid service interruption, providing trainings to maintain staff competency, improving sample and result tracking systems to minimize long TAT, maintaining quality assurance through external quality assurance (EQQ) and continuous quality improvement (CQI), and improving data collection, analysis and interpretation for decision making. Implementation strategies are being developed, including data collection and progress monitoring tool that will assess progress. Key Populations DICs are being certified by MoH for VL sample collection, and clients will have direct access to testing labs through the existing sample transportation system.

To improve VL coverage and quality of services in laboratories, PEPFAR Malawi supported the review and development of a four-year national EID and viral load scale up plan. Diagnostic Network Optimization (DNO) was conducted to guide implementation. During the DNO exercise, data was analyzed on existing equipment capacity for optimal utilization, identification of HRH gaps for extra shifts, and the sample referral system was reviewed to ensure service accessibility to all eligible patients. The DNO exercise also found that for molecular labs to work as a standalone department for an eight-hour shift, 12 laboratory technologists are needed. For a 12-hour work shift, 34 more technologists are needed in the 14 high throughput laboratories. With the GoM, PEPFAR will continue to review the deployment of PEPFAR supported staff to make sure these staff are assigned in laboratories that have high workload, and additional technologists and data clerks will be recruited to fulfill the demand.

The existing sample referral system covers all ART facilities in 28 districts. During the DNO exercise, the existing network was revised based on patient volume and laboratory capacity. In COP22, 772 facilities will be networked to the 14 high throughput laboratories. PEPFAR Malawi will continue to replace aged motor bikes, expand motorbike fleet in response to the increasing number of EID and VL samples, and procure cold chain equipment to transport temperature sensitive samples. PEPFAR Malawi will continue support to improve the efficiency and cost effectiveness of the sample transportation system through implementation of demand-based sample transport (i.e., pull system). Using the route optimization tool, riders map their sample transport routes a day in advance to prioritize sites with clear demand for sample collection or results drop off. This has resulted in a reduction in both TAT and wasted trips. The pull system is being piloted in five districts in 2022 and will add 10 more districts in 2023. Another 10 districts will be added in 2024.

In COP22, the equipment number for integrated HIV, TB and COVID-19 tests will increase from 95 platforms to 105, covering the entire country. MoH is in the process of replacing old Abbott m2000 equipment with new high throughput Abbott AlinityM platforms. Two AlinityM platforms are already installed in two high-volume central hospitals, and an additional two are expected to be installed in two more laboratories by 2023. Two central hospital laboratories are using Hologic Panther platforms; this will increase to four before the end of 2023. In COP20,

MoH opened two molecular laboratories in the Southern and Northern regions with a plan to open an additional two in the Central region. According to the national scale up plan, Malawi will have a capacity to conduct 2,430,500 tests per year using a 12-hour workday in 14 high throughput labs. This capacity will be adequate to accommodate the estimated 1,259,948 VL and COVID-19 tests in 2023. In high throughput labs, PEPFAR Malawi will continue to support optimized equipment utilization, ISO15189 accreditation efforts, and availability of calibrated and certified ancillary equipment.

In COP22, PEPFAR Malawi will continue to support near point of care laboratories and POCT facilities to complement the high throughput platforms and maximize multiplex testing. In FY21, 56 GeneXpert laboratories were able to process 43,321 TB, 33,348 unsuppressed VL, 35,459 EID, and 21,567 COVID-19 tests. MoH has increased the number of GeneXpert labs from 56 to 80 which will maximize the capacity to conduct 520,000 tests per year. During the national scale up review, MoH established a policy to prioritize GeneXpert platforms for VL tests for pregnant and breastfeeding women (PBFW), infants, children, and adolescents. PEPFAR Malawi will focus on expansion of the existing quality assurance system using the WHO SPI-POCT tools. EQA services will be strengthened for all PEPFAR-supported tests including TB-GeneXpert, TB-LAM, CrAg, CD4 and creatinine to extend the service to AHD patients and PrEP clients. PEPFAR Malawi supports the GxAlert (ASPECT) system that monitors performance of GeneXpert machines. In COP22, 92 existing GeneXpert machines and 42 new machines will be monitored through this system. PEPFAR Malawi will also support training of Health workers on GxALERT/ASPECT system and support installation of new Xpert machines.

In COP21, PEPFAR Malawi piloted integration of EMRS and EID/VL LIMS in Lilongwe district. This will be scaled up to additional districts as guided by MoH during COP22 and will facilitate direct result transmission from testing laboratories to requesting facilities. MoH and Cooper/Smith, a BMGF funded project, are piloting a digital result return platform. The platform will use mobile phones to deliver VL results to health care workers at health facilities that provide HIV services, and to patients. For appropriate and safe VL results delivery, the text message provides a link to a secure server containing the VL results. Patients provide passwords to access results. The current pilot is March through August 2022 in three rural areas and in Lilongwe.

5.0 Program Support Necessary to Achieve Sustained Epidemic Control

The 2021 sustainability index and responsibility matrix review identified several sustainability barriers in Malawi including lack of financial capacity; insufficient HRH to sustain epidemic control; and lack of infrastructure to provide HIV services. All activities in Table 6 are aligned with a corresponding sustainability barrier. Each technical team (Care and treatment, HRH, lab, HIS) presented identified system barriers during sustainability index dashboard (SID) discussions followed by presentations to the OU for consensus. TWGs then agreed on each Table 6 entry. Furthermore, using MER and MPHIA data, each TWG identified barriers based on issues specific to the technical area as well as information from GoM, IPs, and other stakeholders. For example, we selected SID element 8. commodity security and supply chain. The SID score for commodity security and supply chain element for Malawi is at 5.7 which highlights challenges in capacity as well as the need for continued investment. Additionally, the COP 22 PLL and guidance provided directives on supply chain focus areas, including supply chain reintegration, improving supply chain data management, building local capacity and developing private sector supply chain partnerships to ensure continuous availability of commodities which are key to implementation of all PEPFAR programs. Each TWG collaborated with their GoM counterparts, IPs, other donors, and stakeholders to identify existing investments. The Malawi PEPFAR team then worked to ensure that efforts in COP22 are not duplicative. Several TWGs worked with GoM to map the donor and intervention space to gain further efficiencies in donor funds, including PEPFAR investments. Below we discuss critical COP22 investments in technical areas that the SID review identified as vulnerabilities and threats into a robust health service delivery system and sustainment of epidemic control in Malawi.

Health Information Systems (HIS)

To improve program monitoring and allow for rapid strategic shifts at the district and site-level, successful program implementation requires near real-time individual-level data. PEPFAR Malawi has established different types of electronic information systems to facilitate availability of real time quality data. To ensure availability of near real-time individual-level data, we will continue to strengthen sustainable electronic solutions that include differentiated models based on the needs of the site and a centralized data repository (CDR), as well as systems for laboratory information management and mortality surveillance.

Electronic solutions in Malawi continue to evolve in response to the needs of the PEPFAR program and technological advances. At the facility level, PEPFAR is supporting a POC EMR system in 210 high and medium volume sites and an electronic HIV treatment system (eMasterCard) for retrospective data capture in 511 medium and low volume sites. The POC EMR has modules for ART, HTS, antenatal care (ANC), and outpatient services (OPD), as well as features that allow for the integration of laboratory information systems and ART tracking distribution. Smaller direct service delivery and technical assistance sites supported by PEPFAR enter data retrospectively using the eMasterCard application, which captures the HIV testing and treatment cascade for patients registered at each site. Together, the systems cover all 750 PEPFAR supported ART sites.

A key component to ensuring real-time access to individual level data for person-centered program management is the CDR. By consolidating patient-level databases across the country,

greater insight into program effectiveness can be achieved. For example, deduplication can identify patients classified as experiencing interruption in treatment that unknowingly transferred to another facility. Leveraging the established connectivity from facilities to the CDR allows for daily syncing of patient-level data from all connected facilities. This data is further integrated, transformed, and made available in a secure analytic environment. As a main national HIV data repository, the CDR also consolidates data from the National Laboratory Information Management System (NLIMS) and the Civil Registration and Vital Statistics system (CRVS). To support other external applications, the CDR will feed its data into the Ministry of Health's DHAMIS system and the DHIS2 system.

In COP22, PEPFAR Malawi will continue to provide system level support by improving connectivity, replacing end-of-life hardware, strengthening monitoring systems (e.g., helpdesk, connectivity uptime), and providing power backup systems at sites. PEPFAR Malawi will also maintain software and expand reporting capabilities at site and central levels to facilitate program monitoring and resource allocation. We will deploy a platform independent version of the EMR that allows the system to run on any operating system. In COP22 the system will deploy a revised HTS module (pilot in 20 sites), and new cervical cancer and PReP modules. In addition, 50 eMastercard sites will be converted to point of care EMR. A unified user interface will be fully deployed to all POC and eMastercard sites to improve data entry and ease use of the multiple modules.

In COP22, PEPFAR Malawi will continue to support the digital health division at MOH and other government entities. It will build and sustain electronic solutions to maintain quality ART services and availability of individual-level data. We will continue implementation and optimization for the multi-platform POC EMRs, index testing, back-to-care applications, as well as revised and new modules. Regarding infrastructure, PEPFAR Malawi will support MoH Digital Health Division to capacitate district information and communications technology (ICT) teams as helpdesk first line responders. DHD will take the lead on maintenance and repair of HIS infrastructure. We will continue to support ongoing upgrades for systems for hardware, local connectivity, and power. With respect to CDR, in COP22, PEPFAR Malawi will build on the syncing of data from all 721 supported facilities to improve data analyses to support programs. Furthermore, the CDR's hardware infrastructure, including servers and connectivity, will continue to be improved.

In addition to facility-based electronic systems (i.e., POC EMR and eMasterCard) installation, PEPFAR Malawi continues to address delays in reporting viral load test results by improving and expanding electronic integration of the POC EMR and the NLIMS with other laboratory related systems, including the VL/EID LIMS, and other LIMS. This work aims to significantly reduce the turn-around time for VL results from labs to facilities. In COP22, we will continue with the scale up of laboratory systems integration and improving connectivity in molecular laboratories. Furthermore, we will finalize machine integration and optimization, improve NLIMS data quality and governance, and augment interoperability of all systems within the LIMS landscape.

PEPFAR Malawi will continue to utilize a DHIS2-based system to track the clinical cascade, prevention, and referral services provided to KP through a generated unique identifier code (UIC). The system will track periodic repeat testing, continuity of service, referral to other supportive services, and facilitate real time monitoring of services accessed by this population. In

COP22, the system will be available in all service delivery point to allow real time data entry and usage. With support from PEPFAR Malawi, the GoM, through the National Registration Bureau (NRB) and MoH, established and rolled out a national birth and death registration system. Birth registration systems are in 583 health facilities in all 28 districts, of which 35 facilities have electronic birth registration systems (eBRS). NRB also installed eBRS in all district offices, which pushes data to the central database. The birth registration process is also integrated with the National ID system to ensure that each newborn is assigned an ID that will be printed on their National ID card when issued at the age of 16. Universal and compulsory facility-based electronic death registration systems (eDRS), including medical certification of cause of death (MCCoD), are implemented in 13 districts and community death registration in 12 districts. eDRS is being used in all 28 district registration offices and central hospitals, and the remaining districts register deaths on demand without MCCoD. In COP22, a pilot implementation of verbal autopsy is ongoing in two districts to establish a system for ascertaining cause for deaths occurring outside health facilities. In COP22, the focus will be on optimizing the integration of the eBirth and eDeath systems into the EMR system for ease of use by clinicians and for data reporting.

The digital health space in Malawi requires significant investment to make it fully operational. For the PEPFAR investment, a single year is insufficient to address the needs. However, we are taking a multi-year approach where each year's investments build on the previous year's accomplishments. This approach allows for the proper sequencing of PEPFAR's investment in Malawi's Digital Health Space. A key process that the Country team is currently engaging in and will further develop in COP22 is the capacity of the Digital Health Division's leadership in this space. PEPFAR will not directly support digital Health, but through our IP and direct country office technical assistance, Digital Health's leadership capacity can be built. The country team is working with other key donors in this effort (e.g., BMGF). Digital Health taking on leadership and developing a common investment framework will provide a clear structure for donors to build system into as well as keep donors from duplicating investments. Over time, building this leadership capacity will improve the efficiency of donor investments by greatly improving coordination, oversight, and eventual ownership of the systems that are built. For PEPFAR's investment in digital health, we have great success in the ART module. We will build on this module's success with the HTS, cervical cancer, PrEP, and ANC modules. Lastly, PEPFAR still needs to invest in key infrastructure issues at the site level, including power backups, connected, and data entry devices. The results of these investments will be higher quality data, more timely data, and improved clinical care.

Surveillance

Recent infection surveillance increases comprehensiveness of prevalence and incidence data. Currently data on prevalence and incidence are primarily obtained from two sources, MPHIA and mathematical modeling using UNAIDS Spectrum software. Recent infection surveillance provides both a system to monitor recent HIV infections and identify and respond to subpopulations and geographic locations with ongoing HIV transmission. Regarding the barriers identified in terms of transition to local responsibility of physical infrastructure not being complete and the legal/policy constraints, we decided in COP22 that we will continue to support the establishment and scale up of the surveillance system, including routinization of public health response. In addition, we will focus on integrating recent infection surveillance within the HTS program as well as strengthening the HTS program through utilizing recent infection surveillance to support the identification persons who are repeat testers.

The timelines and benchmarks defined allow for the monitoring of the recent infection surveillance scale up, integration into and strengthening of the HTS program over the next 3-5 years. In COP22, PEPFAR Malawi will increase the number of health facilities implementing recency surveillance by adding at least 50 sites. In addition, we are aiming to have 70% of COP22 HTS_POS receive a recent infection test in the implementing sites, these benchmarks will support monitoring of capacity needs for building capacity to collect and analyze data nationwide, including repeat testers, and use the result to inform policies.

For birth defects surveillance (BDS), in considering the transition to local responsibility, a critical element is that data collection can be done by government personnel. This was appreciated by the team ahead of COP21, which is why MoH nurses were trained in data collection during the past year. Since the birth defects surveillance requires rigorous examination and documentation of the child to screen for defects, government nurses tend not to prioritize this alongside their normal duties. However, they are able to do this when assigned to cover for study nurses and are off their normal duties. Additionally, long-term planning and monitoring of this transition has not been undertaken. In COP22, lack of integration planning was clearly identified as a barrier to transitioning to local responsibility. Our plan is the following: Reduce the number of IP nurses per site by 25% in COP22 and include more government staff. In COP23, reduce study nurses by 50% and handover to government in COP24. Our target is defined as complete government handover (100% staff) by COP24. Timelines and staff numbers could be better defined - i.e., by the end of COP22 we will achieve a 25% reduction in IP nurses per site, ensuring those reduced IP staff are being replaced by government staff (so that there is no loss in staff). Benchmarks can be better defined - i.e., on a quarterly basis we should work towards and have reporting on the transition (i.e., training of MOH nurses, reduction of IP nurses, etc.).

6.0 USG Operations and Staffing Plan to Achieve Stated Goals

Analysis of Staffing Footprint

The intra and inter-agency staffing analyses determined the appropriate footprint and organizational structure for COP22 to maximize effectiveness and efficiency of the critical technical priorities of the PEPFAR Malawi portfolio, as well as provide robust oversight of the USG investment to achieve program goals. There will be a net increase of two in staffing footprint in COP22 due to changes in staffing strategies at USAID and CDC. There will be no changes in staffing at Peace Corps and DoD. USAID's staffing footprint in COP22 is 45 and includes a fully established Local Capacity Development unit that has increased the agency's capacity to manage and support local IPs and engage with GoM through the G2G program. USAID will replace two of its current third country nationals (the Branch Chief for HIV Prevention and Biomedical Prevention Advisor) with locally employed (LE) staff in COP23. Two new LE staff will therefore be hired in COP22 to work alongside the third country nationals for capacity building. An increased level of effort of staff in COP22 will be spent in the field, monitoring the implementation of activities, and ensuring financial oversight of all awards. The staff footprint of 44 in COP22 at CDC has been structured to provide adequate leadership, technical assistance, and program management support in the key HIV/AIDs technical areas, and to conduct the robust monitoring and data analysis required to responsively adapt the program to epidemic response priorities. CDC has reduced its COP22 staff footprint by one by reducing the number of fellows from three to one. In place of one fellow, CDC will hire one new term-limited locally employed American (eligible family member (EFM)) to meet the need in the Office of the Associate Director for Science (ADS). In line with PEPFAR sustainability goals, CDC has hired LE staff to replace the contracted laboratory advisor and epidemiologist positions. To meet CDC's critical need to implement a comprehensive communications and public affairs program, the financial specialist position has been repurposed to a public health communications specialist. In COP21, the OU established an interagency CLM taskforce that provides oversight for effective implementation of CLM. The taskforce will continue to lead CLM through PEPFAR Small Grants Program (PSGP) and agency funding mechanisms; UNAIDS/MANASO at CDC and MANASO at USAID (Treatment Literacy). The taskforce will support PCO to develop a CLM specific NOFO to rapidly roll-out small grants for community-led monitoring targeting capacity building for CSOs.

Long-term Vacant Positions

The long-term vacancies have reduced from 23 in COP21 to five in COP22. This is mainly due to streamlined recruitment and classification processes at USAID, the Africa Classification Center (AFRRC) and the Department of State. The implementation of an exceptional rate range (ERR) at CDC that the Mission received in FY18 on selected technical series contributes to reduced vacancies at the agency by facilitating recruitment of highly qualified technical LE staff due to improved competitiveness on the local labor market. The five long-term vacancies as of March 1, 2022, are in three agencies: Peace Corps (1), and two each at CDC and USAID. USAID's two long-term vacancies are: the HIV division chief and the HIV testing services specialist. A candidate for the HIV division chief has already been identified and starts in Q3 of FY22. The solicitation for the HIV testing services specialist position was announced and recruitment is expected to be completed by the end of Q3 of FY22. The two vacancies at CDC are biomedical HIV prevention specialist and public health communications specialist. A candidate has been selected for the biomedical HIV prevention specialist and the candidate is expected to

start by Q3 of FY22. The position description for the public health communications specialist is undergoing classification. The vacancy is expected to be filled by the beginning of Q1 FY23. The long-term vacant position at Peace Corps is for education programming assistant. Peace Corps will continue to hold this position vacant until adequate numbers of education volunteers that are supported by this position have returned to post by June 2023. Education volunteers returned to the U.S in March 2020 due to COVID-19. A small number of them will return in September 2022.

New Positions

The OU has proposed three new positions in COP22. Two of the proposed new positions are at USAID and one at CDC. The proposed two new LE staff FSNs at USAID will replace two of its current offshore/third country nationals (the branch chief for HIV prevention and biomedical prevention advisor) who are scheduled to depart in COP23). Considering that it will take time to build the capacity of these new LE staff, USAID plans on double encumbering these positions for one year. The hiring of the proposed two new LE staff will start around mid or late FY23 (COP22). As such, the two new positions have zero increase net effect on staffing footprint after COP23. CDC proposes a new position to fill a critical need for a research administrator in the Office of the Associate Director for Science (ADS). This position is term-limited and will be filled by a LE American (EFM). This position fills a position previously occupied by a fellow and will have zero increase net effect on the staffing footprint. The summarized roles of the proposed new positions are provided below.

1. Branch Chief for HIV Prevention (USAID)

The Branch Chief for HIV Prevention is a senior public health advisor on all aspects of HIV prevention to the HIV/AIDS Team, the broader Health, Population and Nutrition (HPN) office, and the Mission as a whole. The position is responsible for the design, implementation, coordination, and evaluation of a broad range of HIV prevention program activities required to implement PEPFAR in Malawi. The incumbent leads a team of three staff in the Prevention subteam. The position serves as contract/agreement officer representative and/or activity manager for grants, contracts, and cooperative agreements and coordinates funding, reporting, and administration with the interagency team and within HPN to ensure projects are conducted according to both technical and regulatory guidelines and USG funds are utilized appropriately. The jobholder provides leadership and oversight on key technical areas including condom promotion and distribution, social and behavior change communication, pre-exposure prophylaxis (PrEP), community platforms for delivering of HIV prevention services including HIV testing, and programs targeting young boys and men (including voluntary medical male circumcision (VMMC)), KP (including FSWs, MSM, and transgender persons), and AGYW.

2. Biomedical Prevention Specialist (USAID)

The biomedical prevention specialist provides programmatic and technical expertise focusing on HIV testing and counseling as prevention, VMMC, PrEP and HIV/FP integration to support attainment of GoM 95-95-95 goals and PEPFAR Malawi objectives. The job holder will be responsible for monitoring and reporting on research, evidence, and best practices that can directly contribute to improving the HIV response within biomedical HIV interventions in Malawi. The incumbent conducts data and trends analysis and provides technical recommendations to improve the performance of biomedical HIV prevention at the national, district, and site levels. The position contributes to the prevention agenda, including the

identification of potential biomedical HIV prevention activities that contribute to the enhancement of health outcomes.

3. Research Administrator (CDC)

The research administrator supports the development and expansion of comprehensive, integrated, disease surveillance platforms and ensure national capacity to detect disease, collect, analyze, and visualize surveillance data, and implement disease prevention and mitigation measures. The jobholder ensures compliance with associated institutional regulations and requirements regarding multiple and complex public health research and non-research studies. The position provides guidance on USG, CDC and GoM policy and standard operating procedures related to research and publication procedures for staff and implementing partners as well as providing research administration services to the office of the ADS. The position coordinates and liaises with investigators, collaborators, reviewers, and research programs in Malawi and CDC HQ.

Cost of Doing Business (CODB)

The cost of doing business for the OU for COP22 is \$18,050,731, an increase of \$295,282 over COP21 level at \$17,755,449. The increase in CODB is due to adjustments in ICASS, Capital Security Cost Sharing (CSCS), and budgeting at full pre-COVID-19 operations for COP22 including full travel costs for SIMS and other program monitoring. There are also general COVID-19 related price increases due to containment measures that disrupted supply chain for imports. USAID's CODB for COP22 increased by 1.5% (\$7,286,998 in COP22 compared to \$7,177,282 in COP21). The CODB supports adequate staffing to effectively manage implementing mechanisms and support technical leadership responsibilities. The budget includes resources for targeted technical assistance to local organizations to meet PEPFAR Malawi targets, rigorous program, and expenditure reporting requirements, as well as USAID award compliance guidelines. USAID continues to support staffing costs for the position of multilateral program liaison and AGYW/DREAMS Advisor in the PEPFAR Coordination Office in COP22. CDC's budget for management and operations (\$8,522,159 in COP22) has increased by 6.5% mainly due to providing funding at full staffing footprint and budgeting travel at pre-COVID-19 levels to support SIMS and other program monitoring and technical assistance. CDC continues to support the USDH position of the Strategic Information Advisor in PEPFAR Coordination Office in COP22. The CODB at Department of Defense (DOD) (\$139,100 in COP22) increased by 6.9% due to ICASS upward adjustment. The CODB significantly reduced at Peace Corps by 29.9% (i.e., \$589,022) to \$1,378,155 due to low number of volunteers expected in COP22.

APPENDIX A – PRIORITIZATION

Continuous Nature of SNU Prioritization to Reach Epidemic Control

Table A.1

							A	ttained:		. ,	<i>.</i>					95-95 (9	0%) Ove	rall			
SNU	СОР	Prioritization	Results	0-9	10-	14	15-	10	Tre 20-		Covera 25	ge at AP	R by Age 30-		x 35-	20	40-	40	50+		Overall TX
			Reported	0-9	F 10-	M	F 15-	19 M	- 20-	-24 M	25. F	-29 M	50- F	34 M	55- F	.39 M	40- F	-49 M	F)+ M	Coverage
	COP 15		APR 16	38%	68%	71%	29%	45%	34%	20%	43%	17%	67%	36%	68%	51%	73%	71%	74%	79%	57%
	COP 16	Sustained	APR 17	50%	64%	74%	43%	43%	53%	20%	59%	18%	79%	37%	81%	51%	71%	61%	66%	66%	60%
	COP 17	Sustained	APR 18	52%	72%	84%	45%	53%	58%	28%	62%	23%	82%	36%	86%	54%	75%	64%	70%	72%	64%
Balaka	COP 18	Sustained	APR 19	61%	88%	85%	59%	112%	62%	50%	59%	29%	84%	49%	94%	70%	79%	86%	63%	94%	73%
	COP 19	Sustained	APR 20	88%	88%	88%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%
	COP 20	Sustained	APR 21	89%	92%	92%	76%	86%	80%	66%	87%	62%	91%	67%	94%	76%	97%	86%	98%	93%	89%
	COP 21	Sustained	APR 22	96%	80%	65%	51%	61%	56%	31%	76%	34%	88%	54%	108%	86%	88%	92%	70%	81%	79%
	COP 15	Sustained	APR 16	40%	74%	73%	37%	46%	45%	21%	50%	21%	80%	41%	75%	57%	61%	66%	50%	68%	57%
	COP 16	Scale-Up Saturation	APR 17	40%	78%	80%	45%	53%	50%	25%	54%	22%	81%	41%	84%	59%	67%	71%	54%	71%	61%
	COP 17	Scale-Up Saturation	APR 18	43%	77%	78%	54%	63%	58%	32%	59%	28%	82%	46%	91%	67%	70%	75%	55%	76%	66%
Blantyre	COP 17	Scale-Up Saturation	APR 19	72%	118%	116%	65%	137%	69%	62%	77%	38%	108%	65%	116%	96%	84%	106%	62%	97%	87%
	COP 18	Scale-Up Saturation	APR 19	88%	88%	88%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	89%
	COP 19	Scale-Up Saturation	APR 20	85%	90%	90%	68%	75%	74%	58%	82%	55%	87%	62%	91%	71%	94%	83%	95%	90%	83%
	COP 20	Scale-Up Saturation	APR 21 APR 22	50%	59%	59%	55%	65%	68%	43%	77%	44%	75%	53%	91%	71%	94% 83%	88%	67%	79%	75%
	COP 21 COP 15	scare-op saturation	APR 22 APR 16	61%	59% 75%	59% 71%	55% 48%	44%	69%	43% 26%	74%	31%	75% 94%	53% 45%	94% 77%	57%	60%	62%	52%	69%	63%
	COP 15 COP 16	Scale-Up Saturation	APR 16 APR 17	70%	75% 85%	82%	48%	44% 51%	74%	36%	74%	31%	94% 100%	45% 53%	88%	68%	67%	76%	52%	77%	71%
	COP 16 COP 17	Scale-Up Saturation	APR 17 APR 18	70%	85% 93%	82% 91%	66%	67%	83%	36% 46%	82%	34%	100%	55%	102%	75%	78%	76%	54% 61%	84%	71%
Chikwawa	COP 17	Scale-Up Saturation	APR 19	90%	92%	89%	57%	106%	70%	75%	101%	47%	125%	71%	102%	96%	83%	100%	61%	91%	89%
	COP 18	Scale-Up Saturation	APR 19	100%	100%	100%	96%	98%	96%	98%	96%	98%	96%	98%	96%	98%	96%	98%	96%	98%	97%
	COP 19	Scale-Up Saturation	APR 20	96%	98%	98%	77%	98%	81%	67%	87%	63%	91%	68%	96%	76%	97%	98% 87%	98%	93%	89%
	COP 20	Scale-Up Saturation	APR 21	86%	96% 84%	83%	59%	52%	79%	41%	95%	57%	91%	67%	111%	99%	83%	97%	61%	95% 77%	82%
	COP 21 COP 15	Scale-Op Saturation	APR 22	69%	133%	128%	55%	83%	47%	26%	73%	25%	131%	53%	156%	85%	151%	119%	156%	157%	109%
	COP 15	Sustained	APR 10 APR 17	63%	142%	128%	59%	87%	47%	30%	67%	23%	118%	49%	150%	80%	148%	115%	146%	149%	105%
	COP 10	Sustained	APR 17 APR 18	57%	142%	143%	74%	110%	62%	35%	68%	24%	118%	49%	162%	82%	148%	121%	158%	149%	103%
Chiradzulu	COP 17	Sustained	APR 10	101%	145%	145%	94%	179%	99%	80%	94%	46%	134%	78%	150%	111%	125%	137%	101%	159%	115%
cinicazara	COP 18		APR 19 APR 20	101%	145%	140%	94% 80%	87%	99% 80%	87%	94% 80%	87%	80%	87%	80%	87%	80%	87%	80%	87%	83%
	COP 19	Scale-Up Saturation Scale-Up Saturation	APR 20	77%	83%	83%	73%	82%	78%	63%	85%	60%	90%	65%	93%	74%	96%	85%	97%	92%	87%
	COP 20		APR 21 APR 22	62%		102%	87%	94%	78%		96%	54%	113%	71%	161%	125%	160%	161%	127%	148%	126%
	COP 21 COP 15	Scale-Up Saturation	APR 22 APR 16	80%	99% 112%	102%	87% 64%	94%	79%	57% 37%	103%	36%	113%	71%	101%	82%	139%	161%	127%	148%	126%
		Custoined						94%											-		
	COP 16	Sustained	APR 17 APR 18	87% 96%	120% 130%	136% 169%	77% 89%	94% 98%	93% 123%	54% 79%	106% 112%	48% 58%	146% 154%	82% 97%	135% 160%	91% 117%	138% 148%	114% 125%	126% 138%	152% 180%	114%
Chitipa	COP 17	Sustained																			130%
cinupa	COP 18	Sustained	APR 19	94%	136%	131% 89%	87%	165%	91%	74%	87% 89%	43%	124%	72%	139%	103% 88%	116%	127%	93%	138%	108%
	COP 19	Sustained	APR 20	89%	89%		89%	88%	89%	88%		88%	89%	88%	89%	88% 74%	89%	88%	89%	88%	89%
	COP 20	Sustained	APR 21	72%	78%	79%	73%	81%	78%	62%	85%	59%	90%	65%	93%	7 170	96%	85%	97%	91%	86%
	COP 21	Sustained	APR 22	60%	69%	72%	39%	51%	59%	40%	71%	50%	73%	64%	110%	103%	89%	91%	90%	84%	81%
	COP 15	Custoined	APR 16	36%	57%	44%	32%	33%	54%	26%	48%	22%	64%	30%	56%	37%	46%	46%	40%	47%	45%
	COP 16	Sustained	APR 17	40%	61%	49%	42%	34%	58%	33%	56%	30%	71%	40%	60%	43%	53%	52%	42%	53%	51%
Dodza	COP 17	Sustained	APR 18	39%	66%	64%	46%	48%	57%	35%	58%	33%	69%	42%	67%	43%	55%	53%	43%	57%	53%
Dedza	COP 18	Sustained	APR 19	75%	108%	104%	69%	131%	72%	59%	69%	34%	98%	57%	110%	81%	92%	100%	74%	110%	86%
	COP 19	Sustained	APR 20	88%	88%	88%	84%	87%	84%	87%	84%	87%	84%	87%	84%	87%	84%	87%	84%	87%	86%
	COP 20	Sustained	APR 21	82%	86%	87%	69%	77%	75%	59%	83%	57%	88%	63%	92%	72%	95%	84%	96%	90%	85%
	COP 21	Sustained	APR 22	81%	73%	65%	50%	61%	60%	43%	85%	57%	87%	78%	111%	97%	91%	97%	76%	84%	84%
	COP 15	C. And Sec. 1	APR 16	35%	97%	92%	49%	53%	54%	27%	46%	19%	72%	29%	71%	45%	76%	89%	80%	121%	65%
	COP 16	Sustained	APR 17	47%	78%	78%	44%	65%	62%	33%	55%	31%	82%	42%	77%	51%	76%	81%	79%	114%	69%
Douvo	COP 17	Sustained	APR 18	50%	91%	58%	52%	88%	59%	25%	60%	36%	81%	44%	79%	61%	77%	83%	76%	110%	71%
Dowa	COP 18	Sustained	APR 19	62%	90%	87%	57%	110%	60%	49%	58%	28%	82%	48%	92%	68%	77%	84%	62%	92%	72%
	COP 19	Sustained	APR 20	88%	88%	88%	73%	87%	73%	87%	73%	87%	73%	87%	73%	87%	73%	87%	73%	87%	79%
	COP 20	Sustained	APR 21	103%	103%	103%	73%	81%	78%	62%	85%	59%	90%	65%	93%	74%	96%	85%	97%	92%	88%
	COP 21	Sustained	APR 22	52%	57%	63%	41%	45%	43%	33%	62%	35%	60%	45%	85%	69%	80%	80%	75%	84%	69%

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	COP 15		APR 16	49%	81%	74%	39%	52%	33%	21%	42%	17%	71%	34%	78%	52%	81%	72%	71%	99%	62%
	COP 16	Sustained	APR 17	48%	87%	89%	42%	46%	39%	19%	39%	17%	73%	31%	84%	50%	84%	77%	73%	98%	64%
	COP 17	Sustained	APR 18	54%	94%	104%	47%	56%	47%	25%	43%	21%	76%	33%	89%	53%	90%	83%	81%	105%	70%
Karonga	COP 18	Sustained	APR 19	68%	99%	95%	66%	126%	69%	57%	66%	33%	94%	55%	106%	78%	88%	96%	71%	105%	82%
	COP 19	Sustained	APR 20	88%	88%	88%	88%	87%	88%	87%	88%	87%	88%	87%	88%	87%	88%	87%	88%	87%	88%
	COP 20	Sustained	APR 21	71%	77%	77%	72%	80%	77%	62%	85%	58%	89%	64%	93%	73%	96%	84%	97%	91%	85%
	COP 21	Sustained	APR 22	51%	62%	57%	38%	46%	38%	21%	48%	25%	55%	36%	85%	67%	79%	80%	74%	76%	65%
	COP 15		APR 16	42%	83%	76%	34%	45%	34%	13%	44%	18%	79%	35%	79%	52%	73%	72%	56%	84%	59%
	COP 16	Sustained	APR 17	44%	89%	92%	41%	63%	38%	20%	47%	19%	77%	38%	85%	58%	82%	79%	59%	88%	64%
	COP 17	Sustained	APR 18	44%	96%	97%	50%	70%	43%	28%	48%	19%	74%	39%	98%	59%	89%	86%	69%	100%	70%
Kasungu	COP 18	Sustained	APR 19	60%	87%	84%	55%	106%	58%	48%	56%	28%	79%	46%	89%	66%	74%	81%	60%	89%	69%
	COP 19	Sustained	APR 20	88%	88%	88%	85%	87%	85%	87%	85%	87%	85%	87%	85%	87%	85%	87%	85%	87%	86%
	COP 10	Sustained	APR 20	98%	99%	99%	73%	81%	78%	62%	85%	59%	90%	65%	93%	74%	96%	85%	97%	92%	87%
	COP 20	Sustained	APR 22	65%	70%	66%	43%	53%	49%	33%	66%	34%	68%	50%	94%	75%	78%	84%	72%	81%	72%
		Sustaineu		05%	70%	00%	4370	33%	49%	5576	00%	5470	0676	50%	5470	7370	7070	0470	7270	0170	7270
	COP 15	C	APR 16	5.00/	42.40/	4000/	CAN	070/	F20/	2604	F.00/	2.40/	070/	4.40/	4400/	750/	4200/	4240/	4240/	4070/	050/
	COP 16	Sustained	APR 17	56%	124%	100%	61%	87%	52%	26%	50%	24%	87%	44%	118%	75%	130%	121%	121%	187%	95%
Libraria	COP 17	Sustained	APR 18	57%	125%	100%	73%	100%	56%	29%	50%	30%	93%	43%	122%	80%	127%	122%	129%	193%	100%
Likoma	COP 18	Sustained	APR 19	201%	290%	279%	124%	237%	130%	106%	124%	61%	177%	102%	199%	147%	166%	181%	134%	198%	161%
	COP 19	Sustained	APR 20	88%	88%	88%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	89%
	COP 20	Sustained	APR 21	78%	100%	100%	75%	83%	78%	62%	86%	60%	91%	65%	93%	75%	96%	85%	97%	92%	87%
	COP 21	Sustained	APR 22	136%	127%	164%	64%	57%	43%	52%	68%	33%	85%	79%	71%	135%	101%	103%	114%	116%	93%
	COP 15		APR 16	44%	62%	48%	28%	33%	55%	17%	67%	21%	101%	39%	82%	59%	66%	72%	52%	70%	62%
	COP 16	Scale-Up Saturation	APR 17	44%	68%	52%	33%	41%	60%	22%	67%	25%	96%	47%	90%	67%	72%	80%	55%	79%	67%
	COP 17	Scale-Up Saturation	APR 18	33%	53%	47%	39%	47%	59%	28%	66%	31%	92%	50%	95%	77%	77%	86%	56%	87%	70%
Lilongwe	COP 18	Scale-Up Saturation	APR 19	84%	117%	110%	47%	112%	78%	76%	96%	40%	128%	67%	129%	101%	98%	105%	65%	95%	94%
	COP 19	Scale-Up Saturation	APR 20	88%	88%	88%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	91%	87%	89%
	COP 20	Scale-Up Saturation	APR 21	77%	83%	83%	70%	78%	76%	60%	83%	57%	88%	63%	92%	72%	95%	84%	96%	91%	84%
	COP 21	Scale-Up Saturation	APR 22	57%	73%	69%	49%	59%	61%	41%	79%	42%	77%	51%	98%	77%	84%	89%	76%	88%	77%
	COP 15		APR 16	44%	58%	61%	24%	29%	36%	9%	49%	13%	77%	25%	70%	41%	57%	48%	48%	58%	49%
	COP 16	Scale-Up Aggressive	APR 17	48%	70%	77%	33%	40%	46%	19%	56%	15%	80%	26%	86%	46%	64%	58%	53%	64%	56%
	COP 17	Scale-Up Aggressive	APR 18	50%	79%	73%	39%	49%	50%	18%	56%	16%	80%	27%	95%	47%	71%	61%	58%	71%	60%
Machinga	COP 18	Scale-Up Saturation	APR 19	81%	98%	108%	61%	144%	77%	67%	82%	31%	110%	51%	124%	94%	82%	113%	64%	114%	89%
	COP 19	Scale-Up Saturation	APR 20	89%	89%	89%	97%	101%	97%	101%	97%	101%	97%	101%	97%	101%	97%	101%	97%	101%	98%
	COP 20	Scale-Up Saturation	APR 21	90%	93%	93%	73%	82%	78%	63%	85%	60%	90%	66%	93%	74%	96%	85%	97%	92%	87%
	COP 21	Scale-Up Saturation	APR 22	84%	88%	80%	53%	57%	67%	35%	95%	48%	104%	73%	126%	99%	94%	108%	69%	89%	89%
	COP 15		APR 16	64%	108%	75%	38%	50%	60%	17%	69%	17%	100%	35%	96%	48%	81%	66%	72%	86%	69%
	COP 16	Scale-Up Aggressive	APR 17	77%	131%	92%	53%	57%	71%	26%	80%	21%	108%	41%	109%	60%	91%	74%	78%	91%	79%
	COP 17	Scale-Up Aggressive	APR 18	90%	130%	100%	70%	72%	80%	34%	87%	30%	119%	49%	124%	68%	101%	83%	85%	103%	89%
Mangochi	COP 18	Scale-Up Saturation	APR 19	82%	122%	82%	54%	131%	68%	57%	95%	31%	117%	55%	122%	82%	92%	93%	73%	106%	89%
•	COP 19	Scale-Up Saturation	APR 20	99%	99%	99%	98%	102%	98%	102%	98%	102%	98%	102%	98%	102%	98%	102%	98%	102%	99%
	COP 20				5570	5570						60%	90%	65%	93%	74%	96%	85%	97%	92%	87%
				Q/1%	96%	96%	73%							0370							
1		Scale-Up Saturation	APR 21	94% 101%	96% 87%	96% 71%	73% 52%	82% 48%	78% 63%	63% 32%	85% 93%			65%	117%					83%	
	COP 21	Scale-Up Saturation	APR 22	101%	87%	71%	52%	48%	63%	32%	93%	44%	98%	65%	117% 51%	101%	86%	104%	64%	83%	84%
	COP 21 COP 15	Scale-Up Saturation	APR 22 APR 16	101% 40%	87% 60%	71% 41%	52% 23%	48% 27%	63% 28%	32% 14%	93% 33%	44% 14%	98% 51%	29%	51%	101% 38%	86% 53%	104% 54%	64% 48%	67%	84% 43%
	COP 21 COP 15 COP 16	Scale-Up Saturation Sustained	APR 22 APR 16 APR 17	101% 40% 41%	87% 60% 65%	71% 41% 47%	52% 23% 33%	48% 27% 34%	63% 28% 33%	32% 14% 17%	93% 33% 34%	44% 14% 16%	98% 51% 54%	29% 33%	51% 58%	101% 38% 45%	86% 53% 56%	104% 54% 60%	64% 48% 53%	67% 71%	84% 43% 48%
Mchinii	COP 21 COP 15 COP 16 COP 17	Scale-Up Saturation Sustained Sustained	APR 22 APR 16 APR 17 APR 18	101% 40% 41% 39%	87% 60% 65% 66%	71% 41% 47% 54%	52% 23% 33% 32%	48% 27% 34% 42%	63% 28% 33% 36%	32% 14% 17% 22%	93% 33% 34% 36%	44% 14% 16% 16%	98% 51% 54% 52%	29% 33% 34%	51% 58% 60%	101% 38% 45% 47%	86% 53% 56% 57%	104% 54% 60% 63%	64% 48% 53% 53%	67% 71% 76%	84% 43% 48% 50%
Mchinji	COP 21 COP 15 COP 16 COP 17 COP 18	Scale-Up Saturation Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19	101% 40% 41% 39% 83%	87% 60% 65% 66% 120%	71% 41% 47% 54% 116%	52% 23% 33% 32% 76%	48% 27% 34% 42% 146%	63% 28% 33% 36% 81%	32% 14% 17% 22% 66%	93% 33% 34% 36% 77%	44% 14% 16% 16% 38%	98% 51% 54% 52% 109%	29% 33% 34% 63%	51% 58% 60% 123%	101% 38% 45% 47% 91%	86% 53% 56% 57% 102%	104% 54% 60% 63% 112%	64% 48% 53% 53% 83%	67% 71% 76% 122%	84% 43% 48% 50% 96%
Mchinji	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19	Scale-Up Saturation Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20	101% 40% 41% 39% 83% 88%	87% 60% 65% 66% 120% 88%	71% 41% 47% 54% 116% 88%	52% 23% 33% 32% 76% 88%	48% 27% 34% 42% 146% 87%	63% 28% 33% 36% 81% 88%	32% 14% 17% 22% 66% 87%	93% 33% 34% 36% 77% 88%	44% 14% 16% 38% 87%	98% 51% 54% 52% 109% 88%	29% 33% 34% 63% 87%	51% 58% 60% 123% 88%	101% 38% 45% 47% 91% 87%	86% 53% 56% 57% 102% 88%	104% 54% 60% 63% 112% 87%	64% 48% 53% 53% 83% 88%	67% 71% 76% 122% 87%	84% 43% 48% 50% 96% 88%
Mchinji	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21	101% 40% 41% 39% 83% 88% 88%	87% 60% 65% 66% 120% 88% 87%	71% 41% 47% 54% 116% 88% 87%	52% 23% 33% 32% 76% 88% 67%	48% 27% 34% 42% 146% 87% 74%	63% 28% 33% 36% 81% 88% 74%	32% 14% 17% 22% 66% 87% 57%	93% 33% 34% 36% 77% 88% 82%	44% 14% 16% 16% 38% 87% 55%	98% 51% 54% 52% 109% 88% 87%	29% 33% 34% 63% 87% 61%	51% 58% 60% 123% 88% 91%	101% 38% 45% 47% 91% 87% 71%	86% 53% 56% 57% 102% 88% 94%	104% 54% 60% 63% 112% 87% 83%	64% 48% 53% 53% 83% 88% 95%	67% 71% 76% 122% 87% 89%	84% 43% 50% 96% 88% 83%
Mchinji	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21	Scale-Up Saturation Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22	101% 40% 41% 39% 83% 88% 82% 69%	87% 60% 65% 66% 120% 88% 87% 66%	71% 41% 54% 116% 88% 87% 62%	52% 23% 33% 32% 76% 88% 67% 44%	48% 27% 34% 42% 146% 87% 74% 38%	63% 28% 33% 36% 81% 88% 74% 65%	32% 14% 17% 22% 66% 87% 57% 34%	93% 33% 34% 36% 77% 88% 82% 86%	44% 14% 16% 38% 87% 55% 48%	98% 51% 54% 52% 109% 88% 87% 88%	29% 33% 34% 63% 87% 61% 71%	51% 58% 60% 123% 88% 91% 113%	101% 38% 45% 91% 87% 71% 102%	86% 53% 56% 57% 102% 88% 94% 90%	104% 54% 60% 63% 112% 87% 83% 101%	64% 48% 53% 53% 83% 88% 95% 85%	67% 71% 76% 122% 87% 89% 90%	84% 43% 50% 96% 88% 83% 85%
Mchinji	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16	101% 40% 41% 39% 83% 88% 82% 69% 56%	87% 60% 65% 66% 120% 88% 87% 66% 71%	71% 41% 54% 116% 88% 87% 62% 57%	52% 23% 33% 32% 76% 88% 67% 44% 46%	48% 27% 34% 42% 146% 87% 74% 38% 31%	63% 28% 33% 36% 81% 88% 74% 65% 64%	32% 14% 17% 22% 66% 87% 57% 34% 24%	93% 33% 34% 36% 77% 88% 82% 86% 86%	44% 14% 16% 38% 87% 55% 48% 27%	98% 51% 52% 109% 88% 87% 88% 111%	29% 33% 34% 63% 61% 61% 61%	51% 58% 60% 123% 88% 91% 113% 103%	101% 38% 45% 91% 87% 71% 102% 63%	86% 53% 56% 57% 102% 88% 94% 90% 86%	104% 54% 60% 63% 112% 87% 83% 101% 70%	64% 48% 53% 53% 83% 88% 95% 85% 75%	67% 71% 76% 122% 87% 89% 90% 71%	84% 43% 50% 96% 88% 83% 85% 74%
Mchinji	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17	101% 40% 41% 83% 88% 82% 69% 56% 65%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108%	71% 41% 54% 116% 88% 87% 62% 57% 81%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73%	32% 14% 17% 22% 66% 87% 57% 34% 24% 26%	93% 33% 34% 36% 77% 88% 82% 86% 86% 87% 91%	44% 14% 16% 38% 87% 55% 48% 27% 31%	98% 51% 52% 109% 88% 87% 88% 111% 124%	29% 33% 63% 63% 61% 71% 61% 57%	51% 58% 60% 123% 88% 91% 113% 103% 117%	101% 38% 45% 91% 87% 71% 102% 63% 70%	86% 53% 56% 102% 88% 94% 90% 86% 92%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79%	64% 48% 53% 53% 83% 88% 95% 85% 75% 80%	67% 71% 76% 122% 87% 89% 90% 71% 75%	84% 43% 50% 96% 88% 83% 85% 74% 82%
	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 21 COP 15 COP 16 COP 17	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18	101% 40% 41% 39% 83% 88% 82% 69% 56% 65% 55%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57% 59%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50% 55%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 73%	32% 14% 22% 66% 87% 57% 34% 24% 26% 35%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82%	44% 14% 16% 38% 87% 55% 48% 27% 31% 34%	98% 51% 52% 109% 88% 87% 88% 111% 124% 121%	29% 33% 63% 63% 61% 71% 61% 57% 61%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128%	101% 38% 45% 91% 87% 71% 102% 63% 70% 85%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90%	64% 48% 53% 53% 83% 88% 95% 85% 75% 80% 82%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90%	84% 43% 50% 96% 88% 83% 85% 74% 82% 87%
Mchinji Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19	101% 40% 41% 39% 83% 88% 69% 65% 65% 55% 85%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99% 132%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87% 108%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57% 59% 64%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50% 55% 127%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 73% 73%	32% 14% 17% 22% 66% 87% 57% 34% 24% 26% 35% 70%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82% 91%	44% 14% 16% 38% 87% 55% 48% 27% 31% 34% 43%	98% 51% 52% 109% 88% 87% 88% 111% 124% 121% 125%	29% 33% 63% 63% 61% 61% 61% 57% 61% 81%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128% 126%	101% 38% 45% 91% 87% 71% 102% 63% 70% 85% 102%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104%	64% 48% 53% 53% 83% 88% 95% 85% 75% 80% 82% 71%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92%	84% 43% 50% 96% 88% 83% 85% 74% 82% 87% 94%
	COP 21 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20	101% 40% 41% 39% 83% 88% 69% 65% 65% 65% 85% 85% 88%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99% 132% 88%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87% 108% 88%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57% 59% 64% 91%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50% 55% 127% 92%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 73% 73% 71% 91%	32% 14% 22% 66% 87% 57% 34% 24% 26% 35% 70% 92%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82% 91% 91%	44% 14% 16% 38% 87% 55% 48% 27% 31% 34% 43% 92%	98% 51% 52% 109% 88% 87% 88% 111% 124% 121% 125% 91%	29% 33% 63% 61% 61% 61% 61% 61% 81% 92%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128% 126% 91%	101% 38% 45% 91% 87% 71% 102% 63% 70% 85% 102% 92%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104% 92%	64% 48% 53% 53% 83% 88% 95% 85% 75% 80% 82% 71% 91%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92%	84% 43% 50% 96% 88% 83% 85% 74% 82% 82% 87% 94% 91%
	COP 21 COP 15 COP 15 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21	101% 40% 41% 39% 83% 88% 69% 56% 65% 55% 85% 88% 75%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99% 132% 88% 81%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87% 108% 88% 81%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57% 59% 64% 91% 75%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50% 55% 127% 92% 85%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 73% 73% 71% 91% 80%	32% 14% 22% 66% 87% 57% 34% 24% 26% 35% 70% 92% 65%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82% 91% 91% 86%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 92% 62%	98% 51% 52% 109% 88% 87% 88% 111% 124% 121% 125% 91% 91%	29% 33% 63% 63% 61% 61% 61% 57% 61% 81% 92% 67%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128% 126% 91% 94%	101% 38% 45% 91% 87% 71% 102% 63% 70% 85% 102% 92% 75%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91% 91% 91%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104% 92% 86%	64% 48% 53% 53% 83% 85% 85% 75% 80% 82% 71% 91% 98%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92% 92% 92% 93%	84% 43% 50% 96% 88% 83% 74% 82% 82% 82% 82% 82% 82% 82% 82% 82%
	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 21 APR 22	101% 40% 41% 39% 83% 88% 82% 69% 56% 65% 55% 85% 85% 88% 75% 58%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99% 132% 88% 81% 70%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87% 108% 88% 81% 63%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57% 59% 64% 91% 75% 40%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50% 55% 127% 92% 85% 36%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 73% 71% 91% 80% 58%	32% 14% 22% 66% 87% 57% 34% 24% 26% 35% 70% 92% 65% 26%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82% 91% 91% 86% 81%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 92% 62% 43%	98% 51% 52% 109% 88% 87% 88% 111% 124% 125% 91% 91% 93%	29% 33% 64% 61% 61% 61% 61% 61% 61% 61% 66%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128% 126% 91% 94% 109%	101% 38% 45% 91% 87% 71% 102% 63% 70% 85% 102% 92% 75% 96%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91% 91% 91% 82%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104% 92% 86% 90%	64% 48% 53% 53% 83% 85% 85% 75% 80% 82% 71% 91% 98% 54%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92% 92% 92% 93% 66%	84% 43% 50% 96% 88% 83% 85% 74% 82% 87% 94% 91% 87% 74%
	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 21 COP 15	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 17 APR 19 APR 20 APR 17 APR 20 APR 21 APR 22 APR 16	101% 40% 39% 83% 88% 69% 56% 65% 65% 85% 88% 75% 58% 58% 54%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99% 132% 88% 81% 70% 96%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87% 108% 88% 81% 63% 85%	52% 23% 33% 32% 76% 88% 67% 44% 46% 57% 59% 64% 91% 75% 40% 47%	48% 27% 34% 42% 146% 87% 74% 38% 31% 50% 55% 127% 92% 85% 36% 47%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 71% 91% 80% 58% 67%	32% 14% 17% 22% 66% 87% 57% 34% 24% 26% 35% 70% 92% 65% 26% 32%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82% 91% 82% 91% 86% 81% 93%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 92% 62% 43% 35%	98% 51% 52% 109% 88% 87% 88% 111% 124% 121% 125% 91% 91% 93% 114%	29% 33% 63% 63% 61% 61% 61% 61% 81% 92% 67% 66% 61%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128% 126% 91% 94% 109% 96%	101% 38% 45% 91% 87% 71% 102% 63% 70% 85% 102% 92% 75% 96% 79%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91% 91% 91% 82% 74%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104% 92% 86% 90% 73%	64% 48% 53% 83% 88% 95% 85% 75% 80% 82% 71% 91% 98% 54% 60%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92% 92% 92% 92% 92% 93% 66% 75%	84% 43% 50% 96% 88% 83% 85% 74% 82% 87% 94% 91% 87% 74% 75%
	COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 21 COP 21 COP 21 COP 21	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 18 APR 19 APR 20 APR 21 APR 22 APR 21 APR 22 APR 16 APR 21	101% 40% 41% 39% 83% 88% 69% 56% 65% 65% 88% 75% 88% 75% 58% 55%	87% 60% 65% 66% 120% 88% 87% 66% 71% 108% 99% 132% 88% 81% 70% 96% 106%	71% 41% 54% 116% 88% 87% 62% 57% 81% 87% 108% 88% 81% 63% 85% 96%	52% 23% 33% 32% 67% 44% 46% 57% 64% 91% 75% 40% 47% 56%	48% 27% 34% 42% 146% 87% 38% 31% 50% 55% 127% 92% 85% 36% 47% 56%	63% 28% 33% 36% 81% 88% 74% 65% 64% 73% 71% 91% 80% 58% 67% 77%	32% 14% 22% 66% 87% 57% 34% 24% 26% 35% 70% 92% 65% 26% 32% 22%	93% 33% 34% 36% 77% 88% 82% 86% 87% 91% 82% 91% 82% 91% 86% 81% 93% 103%	44% 16% 16% 38% 87% 55% 48% 27% 31% 34% 43% 92% 62% 43% 35% 39%	98% 51% 52% 109% 88% 87% 88% 111% 124% 121% 125% 91% 91% 93% 114%	29% 33% 63% 67% 61% 57% 61% 81% 92% 67% 66% 61% 70%	51% 58% 60% 123% 88% 91% 113% 103% 128% 126% 91% 94% 109% 96% 105%	101% 38% 47% 91% 87% 71% 102% 63% 70% 85% 102% 92% 75% 96% 79% 82%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91% 91% 97% 82% 74% 81%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104% 92% 86% 90% 73% 82%	64% 48% 53% 53% 83% 88% 95% 85% 75% 80% 82% 71% 91% 98% 54% 60% 62%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92% 92% 92% 93% 66% 75% 80%	84% 43% 50% 96% 88% 83% 85% 74% 82% 87% 94% 91% 87% 74% 75% 82%
Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 21 APR 17 APR 18	101% 40% 41% 39% 83% 88% 69% 56% 55% 85% 88% 75% 88% 55% 55% 55% 55%	87% 60% 65% 120% 88% 66% 71% 108% 99% 132% 88% 81% 70% 99% 106% 96%	71% 41% 54% 54% 88% 87% 62% 57% 81% 87% 108% 88% 81% 63% 88% 96% 96%	52%% 33% 32% 67% 44% 46% 57% 64% 91% 75% 40% 46% 59% 664% 67%	48% 27% 34% 42% 146% 87% 38% 31% 50% 55% 127% 92% 85% 36% 47% 55%	63% 28% 33% 81% 88% 65% 64% 73% 64% 73% 73% 91% 80% 58% 67% 80%	32% 14% 22% 66% 57% 34% 26% 35% 70% 92% 65% 26% 32% 25% 34%	93% 33% 36% 77% 88% 82% 86% 87% 91% 82% 91% 82% 91% 86% 81% 91% 86% 81% 93%	44% 14% 16% 38% 87% 48% 27% 31% 34% 43% 92% 62% 43% 39% 43%	98%% 51% 52% 109% 88% 88% 111% 124% 121% 125% 91% 91% 122% 122%	29% 33% 63% 61% 61% 61% 57% 61% 81% 92% 67% 66% 66% 61% 70% 67%	51% 58% 60% 123% 88% 91% 113% 103% 117% 128% 126% 91% 94% 109% 96% 105% 119%	101% 38% 45% 47% 91% 87% 71% 102% 63% 70% 63% 70% 85% 102% 92% 75% 96% 82% 88%	86% 53% 57% 102% 88% 94% 90% 86% 92% 101% 91% 91% 91% 82% 81% 85%	104% 54% 60% 63% 112% 87% 83% 101% 70% 79% 90% 104% 92% 86% 86%	64% 48% 53% 83% 88% 85% 85% 75% 80% 82% 71% 91% 91% 60% 62% 63%	67% 71% 76% 122% 87% 89% 90% 71% 75% 90% 92% 92% 92% 92% 93% 66% 75% 80% 81%	84% 43% 48% 50% 96% 83% 83% 85% 74% 82% 94% 91% 87% 74% 87% 94% 91% 87% 74% 75% 82% 85%
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Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 21 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 20 COP 21 COP 21 COP 15 COP 15 COP 15 COP 15 COP 18	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 17 APR 20 APR 21 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 19 APR 20	101% 40% 41% 39% 83% 88% 69% 65% 65% 65% 65% 65% 88% 75% 58% 58% 58% 57% 79% 93%	87% 60% 65% 66% 88% 87% 66% 71% 108% 99% 132% 88% 81% 70% 99% 114% 96%	71% 41% 54% 54% 88% 62% 62% 62% 81% 88% 81% 63% 88% 88% 96% 96% 96% 90% 93%	52%3 23%3 33%5 76%88% 67% 44% 46% 57% 64% 91% 40% 47% 56% 67% 67% 99%	48% 27% 34% 42% 146% 87% 38% 31% 50% 55% 127% 92% 85% 47% 56% 51% 138% 95%	63% 28% 33% 81% 88% 74% 65% 64% 73% 73% 71% 91% 80% 58% 67% 85% 77%	32% 14% 22% 66% 87% 34% 24% 26% 35% 65% 65% 26% 32% 62% 92% 62% 95%	93% 33% 34% 36% 77% 88% 82% 82% 91% 82% 91% 82% 91% 86% 81% 93% 93% 73% 99%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 43% 62% 62% 43% 35% 39% 43% 36% 95%	98% 51% 54% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 61% 61% 61% 61% 61% 61% 61% 66% 66% 66	51%, 58%, 60%, 123%, 88%, 91%, 113%, 128%, 126%, 91%, 94%, 109%, 96%, 105%, 119%, 116%, 99%,	101% 38% 45% 47% 91% 87% 71% 102% 63% 70% 63% 70% 85% 70% 82% 89% 82% 86% 95%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 90% 91% 91% 91% 82% 74% 81% 85% 97%	104%, 54%, 60%, 63%, 112%, 83%, 83%, 101%, 70%, 79%, 90%, 104%, 92%, 86%, 82%, 86%, 90%, 95%,	64% 48% 53% 83% 88% 85% 80% 82% 80% 82% 91% 91% 60% 62% 63% 99%	67% 71% 76% 87% 89% 90% 71% 90% 92% 92% 92% 66% 80% 81% 81% 95%	84% 43% 50% 96% 88% 85% 85% 94% 91% 87% 94% 91% 87% 75% 82% 82% 82% 85% 90% 90%
Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 21 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 21 COP 15 COP 15 COP 15 COP 17 COP 18	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 21 APR 21 APR 19 APR 20 APR 21	101% 40% 41% 39% 83% 88% 69% 56% 65% 65% 65% 65% 65% 55% 88% 55% 58% 58% 54% 57% 79% 81%	87%, 60%, 66%, 120%, 88%, 66%, 71%, 108%, 99%, 132%, 88%, 81%, 96%, 106%, 96%, 114%, 93%, 85%,	71% 41% 47% 54% 116% 88% 62% 57% 87% 81% 87% 81% 88% 81% 63% 85% 96% 96% 96% 96% 99% 88%	52%3 23%3 33%5 76%88% 67%44% 46% 57% 64% 91% 40% 47% 56% 67% 67% 72% 99% 71%	48% 27% 42% 42% 42% 87% 38% 31% 50% 55% 127% 92% 85% 47% 56% 51% 138% 95% 80%	63% 28% 33% 36% 81% 65% 64% 73% 64% 73% 71% 91% 80% 67% 67% 77% 85% 76% 99% 77%	32% 14% 22% 66% 87% 34% 24% 26% 35% 70% 65% 65% 65% 32% 62% 92% 66% 32% 62% 61%	93% 33% 34% 36% 77% 88% 86% 87% 91% 82% 91% 91% 86% 86% 81% 93% 103% 95% 73% 99%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 92% 62% 43% 35% 39% 43% 35% 39% 58%	98% 51% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 61% 61% 61% 61% 61% 61% 61% 66% 66% 66	51% 58% 60% 123% 88% 91% 113% 128% 126% 91% 94% 105% 105% 110% 99% 96% 93%	101% 38% 45% 47% 91% 87% 63% 70% 63% 70% 85% 70% 85% 75% 82% 88% 86% 95% 73%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 101% 91% 91% 82% 82% 74% 81% 82% 97% 99%	104% 54% 60% 63% 112% 87% 83% 101% 70% 90% 90% 90% 92% 86% 73% 82% 86% 106% 95% 84%	64% 48% 53% 53% 83% 88% 85% 80% 82% 75% 80% 82% 71% 91% 60% 62% 63% 78% 99%	67% 71% 76% 87% 89% 90% 71% 90% 92% 92% 92% 92% 666% 75% 80% 81% 915% 91%	84% 43% 96% 88% 85% 74% 82% 87% 94% 91% 87% 94% 91% 87% 75% 82% 85% 90% 90%
Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 20 COP 21	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 20 APR 20 APR 21 APR 22 APR 16 APR 19 APR 20 APR 17 APR 18 APR 20 APR 21 APR 19 APR 20 APR 19 APR 20 APR 19 APR 20 APR 21 APR 22	101% 40% 41% 39% 83% 88% 69% 56% 55% 55% 55% 55% 58% 54% 55% 55% 57% 57% 57% 57% 57% 57% 57% 57	87% 60% 65% 120% 88% 87% 66% 132% 99% 132% 88% 81% 70% 99% 81% 70% 99% 114% 83% 96% 50%	71% 41% 41% 47% 54% 87% 54% 87% 87% 81% 87% 81% 87% 81% 63% 83% 81% 63% 85% 96% 96% 96% 85%	52%% 23% 33% 32% 67% 44% 46% 57% 64% 91% 64% 91% 75% 64% 67% 72% 99% 61%	48% 27% 34% 42% 146% 87% 74% 33% 55% 55% 127% 92% 85% 36% 47% 55% 138% 95% 80% 52%	63% 28% 33% 81% 88% 74% 65% 64% 73% 73% 73% 73% 73% 67% 80% 58% 67% 77% 80% 58%	32% 14% 22% 66% 87% 34% 26% 35% 70% 65% 92% 65% 26% 32% 26% 32% 65% 65% 65% 65% 65% 66% 32% 66% 33%	93% 33% 34% 36% 77% 88% 86% 87% 91% 82% 91% 82% 91% 81% 93% 103% 93% 73% 99% 84%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 92% 62% 43% 35% 35% 35% 35% 58% 52%	98% 51% 54% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 61% 61% 61% 61% 61% 67% 66% 67% 66% 67% 66% 63% 64% 84%	51% 58% 60% 123% 88% 91% 113% 128% 126% 91% 94% 105% 105% 105% 105% 119% 99% 93% 124%	101% 38% 45% 47% 91% 87% 63% 70% 63% 70% 85% 102% 92% 75% 92% 82% 88% 86% 95% 73%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 91% 91% 91% 91% 82% 81% 81% 85% 97% 99%	104% 54% 60% 63% 112% 87% 83% 77% 90% 70% 79% 90% 104% 86% 88% 88% 82% 82% 82% 88% 82% 106%	64% 48% 53% 53% 83% 88% 85% 80% 82% 75% 80% 82% 71% 91% 92% 60% 62% 78% 99% 64%	67% 71% 76% 87% 89% 90% 71% 75% 90% 92% 92% 92% 93% 66% 75% 80% 81% 81% 81%	84% 43% 50% 96% 88% 83% 85% 74% 82% 82% 82% 87% 94% 91% 87% 74% 82% 82% 82% 82% 82% 82% 82% 82% 82% 82
Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 12	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 20 APR 21 APR 22 APR 16 APR 22 APR 21 APR 22 APR 21 APR 22 APR 21	101% 40% 41% 39% 83% 88% 69% 55% 65% 55% 55% 55% 54% 55% 54% 55% 55% 54% 54	87% 60% 65% 120% 88% 87% 66% 99% 132% 88% 99% 132% 88% 70% 99% 106% 99% 81% 88% 69% 8118%	71% 41% 47% 54% 116% 88% 87% 62% 57% 88% 81% 63% 81% 63% 85% 96% 96% 96% 96% 88% 88% 85% 107%	52% 33% 32% 33% 32% 32% 32% 32% 32% 32% 3	48% 27% 34% 42% 146% 87% 38% 55% 55% 55% 55% 47% 56% 55% 47% 56% 51% 88% 80% 52% 79%	63% 28% 33% 36% 81% 88% 74% 64% 73% 73% 73% 73% 73% 73% 73% 64% 73% 73% 73% 64% 73% 73% 73% 73% 73% 73% 73% 73% 73% 73	32% 14% 22% 66% 87% 24% 26% 35% 26% 65% 65% 26% 26% 22% 32% 32% 61% 38% 23% 25% 32% 25% 32% 25% 32% 25% 32% 25% 32% 25% 32% 22% 32% 32% 32% 32% 32% 32% 32% 32	93% 33% 34% 77% 88% 82% 82% 91% 91% 82% 91% 82% 91% 84% 81% 93% 103% 95% 84% 101%	44% 14% 16% 38% 87% 27% 31% 31% 34% 43% 92% 62% 43% 35% 39% 43% 39% 58% 52% 52% 23%	98% 51% 54% 51% 52% 51% 52% 51% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 61% 61% 61% 61% 61% 81% 92% 67% 66% 66% 66% 67% 60% 95% 64% 84%	51% 58% 60% 123% 88% 91% 113% 128% 128% 128% 91% 94% 105% 105% 105% 119% 93% 93% 124%	101% 38% 45% 91% 91% 87% 71% 102% 63% 85% 102% 92% 75% 96% 70% 82% 89% 89% 89% 89% 95% 73%	86% 53% 56% 57% 88% 94% 90% 86% 92% 92% 92% 92% 92% 92% 92% 92% 92%	104% 54% 60% 63% 112% 87% 83% 101% 90% 90% 90% 90% 90% 86% 90% 886% 90% 886% 90% 886% 95% 886% 95%	64%% 48% 53% 53% 83% 88% 85% 85% 82% 80% 80% 80% 80% 80% 80% 80% 80% 80% 80	67%, 71%, 76%, 87%, 89%, 90%, 71%, 90%, 92%, 92%, 92%, 93%, 66%, 80%, 81%, 81%, 95%, 95%, 80%, 81%, 115%, 80%, 81%, 80%, 121%, 80%, 121%, 80%, 121%, 80%, 121%, 80%, 81%, 81%, 81%, 81%, 81%, 81%, 81%, 81	84% 43% 50% 96% 88% 83% 74% 82% 82% 82% 82% 94% 91% 87% 74% 75% 82% 85% 90% 97% 86% 89% 76%
Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 20 COP 21	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 20 APR 20 APR 21 APR 22 APR 16 APR 19 APR 20 APR 17 APR 18 APR 20 APR 21 APR 19 APR 20 APR 19 APR 20 APR 19 APR 20 APR 21 APR 22	101% 40% 41% 39% 83% 88% 69% 56% 55% 55% 55% 55% 58% 54% 55% 55% 57% 57% 57% 57% 57% 57% 57% 57	87% 60% 65% 120% 88% 87% 66% 132% 99% 132% 88% 81% 70% 99% 81% 70% 99% 114% 83% 96% 50%	71% 41% 41% 47% 54% 87% 54% 87% 87% 81% 87% 81% 87% 81% 63% 83% 81% 63% 85% 96% 96% 96% 85%	52%% 23% 33% 32% 67% 44% 46% 57% 64% 91% 64% 91% 75% 64% 97% 66% 72% 66% 61%	48% 27% 34% 42% 146% 87% 74% 33% 55% 55% 127% 92% 85% 36% 47% 55% 138% 95% 80% 52%	63% 28% 33% 81% 88% 74% 65% 64% 73% 73% 73% 73% 73% 67% 80% 58% 67% 77% 80% 58%	32% 14% 22% 66% 87% 34% 26% 35% 70% 65% 92% 65% 32% 26% 32% 65% 65% 65% 65% 65% 65% 66% 32% 66% 32% 66% 33%	93% 33% 34% 36% 77% 88% 86% 87% 91% 82% 91% 82% 91% 81% 93% 103% 93% 73% 99% 84%	44% 14% 16% 38% 55% 48% 27% 31% 34% 43% 92% 62% 43% 35% 35% 35% 35% 58% 52%	98% 51% 54% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 61% 61% 61% 61% 61% 67% 66% 67% 66% 67% 66% 63% 64% 84%	51% 58% 60% 123% 88% 91% 113% 128% 126% 91% 94% 105% 105% 105% 105% 119% 99% 93% 124%	101% 38% 45% 47% 91% 87% 63% 70% 63% 70% 85% 102% 92% 75% 92% 82% 88% 86% 95% 73%	86% 53% 56% 57% 102% 88% 94% 90% 86% 92% 91% 91% 91% 91% 82% 81% 81% 85% 97% 99%	104% 54% 60% 63% 112% 87% 83% 77% 90% 70% 79% 90% 104% 86% 88% 88% 82% 82% 82% 88% 82% 106%	64% 48% 53% 53% 83% 88% 85% 80% 82% 75% 80% 82% 71% 91% 92% 60% 62% 78% 99% 64%	67% 71% 76% 87% 89% 90% 71% 75% 90% 92% 92% 92% 93% 66% 75% 80% 81% 81% 81%	84% 43% 50% 96% 88% 83% 85% 74% 82% 82% 82% 87% 94% 91% 87% 74% 82% 82% 82% 82% 82% 82% 82% 82% 82% 82
Mulanje	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 12	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 20 APR 21 APR 22 APR 16 APR 22 APR 21 APR 22 APR 21 APR 22 APR 21	101% 40% 41% 39% 83% 88% 69% 55% 65% 55% 55% 55% 54% 55% 54% 55% 55% 54% 54	87% 60% 65% 120% 88% 87% 66% 99% 132% 88% 99% 132% 88% 70% 99% 106% 99% 81% 88% 69% 8118%	71% 41% 47% 54% 116% 88% 87% 62% 57% 88% 81% 63% 81% 63% 85% 96% 96% 96% 96% 88% 88% 85% 107%	52% 33% 32% 33% 32% 32% 32% 32% 32% 32% 3	48% 27% 34% 42% 146% 87% 38% 55% 55% 55% 55% 47% 56% 55% 47% 56% 51% 88% 80% 52% 79%	63% 28% 33% 36% 81% 88% 74% 64% 73% 73% 73% 73% 73% 73% 73% 64% 73% 73% 73% 64% 73% 73% 73% 73% 73% 73% 73% 73% 73% 73	32% 14% 22% 66% 87% 24% 26% 35% 26% 65% 65% 26% 26% 22% 32% 61% 32% 25% 32% 25% 32% 25% 32% 25% 32% 25% 32% 22% 25% 32% 22% 32% 22% 32% 32% 32% 32% 32% 32	93% 33% 34% 36% 77% 88% 82% 82% 91% 91% 82% 91% 82% 91% 84% 81% 93% 103% 95% 84% 101%	44% 14% 16% 38% 87% 27% 31% 31% 34% 43% 92% 62% 43% 35% 39% 43% 39% 58% 52% 52% 23%	98% 51% 54% 51% 52% 51% 52% 51% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 61% 61% 61% 61% 61% 81% 92% 67% 66% 66% 66% 67% 60% 95% 64%	51% 58% 60% 123% 88% 91% 113% 128% 128% 128% 91% 94% 105% 105% 105% 119% 93% 93% 124%	101% 38% 45% 91% 91% 87% 71% 102% 63% 85% 102% 92% 75% 96% 70% 82% 89% 89% 89% 89% 95% 73%	86% 53% 56% 57% 88% 94% 90% 86% 92% 92% 92% 92% 92% 92% 92% 92% 92%	104% 54% 60% 63% 112% 87% 83% 101% 90% 90% 90% 90% 90% 86% 90% 886% 90% 886% 90% 886% 95% 886% 95%	64%% 48% 53% 53% 83% 88% 85% 85% 82% 80% 80% 80% 80% 80% 80% 80% 80% 80% 80	67%, 71%, 76%, 87%, 89%, 90%, 71%, 90%, 92%, 92%, 92%, 93%, 66%, 80%, 81%, 81%, 95%, 95%, 80%, 81%, 80%, 1121%,	84% 43% 50% 96% 88% 83% 74% 82% 82% 82% 82% 94% 91% 87% 74% 75% 82% 85% 90% 97% 86% 89% 76%
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Mulanje Mwanza	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 18 COP 19 COP 20 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 16 COP 17 COP 16 COP 17 COP 18 COP 10 COP 10 COP 20 COP 15 COP 16 COP 16 COP 17 COP 18 COP 10 COP 10 COP 20 COP 16 COP 16 COP 16 COP 16 COP 16 COP 17 COP 16 COP 16 COP 17 COP 16 COP 16 COP 17 COP 16 COP 16 CO	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustai	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 21 APR 17 APR 18 APR 19 APR 20 APR 20 APR 21 APR 16 APR 17 APR 18 APR 19 APR 22 APR 16 APR 17 APR 18 APR 21 APR 19 APR 21 APR 19 APR 21 APR 19 APR 20 APR 21 APR 20 APR 20 AP	101% 40% 39% 83% 88% 56% 55% 55% 85% 55% 55% 55% 55% 57% 79% 93% 81% 70% 53% 49%	87% 60% 65% 66% 88% 87% 66% 71% 108% 99% 132% 88% 81% 96% 106% 96% 96% 114% 85% 96% 118%	71% 41% 41% 54% 57% 62% 57% 81% 87% 57% 81% 87% 62% 57% 81% 87% 108% 81% 88% 81% 96% 93% 85% 107% 93%	52% 23% 33% 32% 57% 44% 46% 57% 44% 57% 67% 44% 46% 57% 67% 67% 67% 55% 61% 57% 69%	48% 27% 34% 42% 42% 42% 42% 33% 33% 55% 55% 47% 47% 47% 56% 51% 138% 95% 86% 79%	63% 28% 33% 36% 81% 65% 65% 65% 64% 73% 74% 65% 73% 73% 67% 67% 77% 80% 67% 77% 85% 76% 99% 77% 85% 58% 66%	32% 14% 22% 66% 37% 24% 26% 35% 70% 92% 65% 62% 32% 62% 95% 61% 61% 61% 38% 24% 33%	93% 33% 34% 36% 77% 88% 82% 91% 82% 91% 82% 91% 81% 93% 103% 93% 103% 93% 103% 58% 62% 67%	44% 14% 16% 16% 38% 27% 31% 34% 43% 92% 62% 43% 35% 39% 43% 35% 39% 43% 22% 22% 22%	98% 51% 52% 87% 87% 88% 88% 88% 82% 82% 8109% 124% 124% 125% 91% 93% 126% 103% 93% 89% 93% 99% 93% 92%	29% 33% 63% 61% 61% 61% 61% 61% 61% 61% 61% 66% 61% 67% 66% 67% 66% 84% 84% 84% 50% 50%	51% 58% 60% 123% 88% 91% 103% 113% 128% 128% 128% 128% 109% 96% 105% 105% 119% 99% 124% 93% 124%	101% 38% 45% 47% 91% 87% 63% 102% 63% 70% 85% 102% 92% 92% 92% 92% 96% 75% 88% 86% 86% 86% 116% 58% 67% 67% 71%	86% 53% 56% 57% 102% 94% 99% 90% 90% 91% 91% 91% 91% 82% 74% 81% 82% 97% 99% 99% 99% 95% 90%	104% 54% 60% 63% 87% 87% 101% 70% 70% 90% 104% 92% 86% 73% 86% 90% 88% 84% 81% 81%	64% 48% 53% 83% 85% 85% 85% 80% 82% 91% 91% 91% 60% 62% 62% 63% 78% 83% 83% 83%	67% 71% 76% 71% 76% 71% 76% 71% 76% 71% 76% 71% 75% 99% 99% 99% 92% 92% 92% 93% 66% 75% 80% 81% 75% 80% 81% 75% 80% 81% 115% 80% 121% 80% 121% 123% 132%	84% 43% 48% 50% 96% 83% 83% 85% 74% 82% 94% 91% 87% 94% 91% 87% 94% 91% 85% 90% 97% 85% 76% 79% 85%
Mulanje Mwanza	COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 17 COP 18 COP 19 COP 21 COP 21 COP 21 COP 20 COP 21 COP 21 COP 21 COP 21 COP 21 COP 20 COP 21 COP 21 COP 21 COP 21 COP 21 COP 20 COP 21 COP 21 COP 21 COP 20 COP 21 COP 21 COP 20 COP 21 COP 21 COP 20 COP 21 COP 21	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustai	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 21 APR 22 APR 16 APR 21 APR 20 APR 21 APR 20 APR 21 APR 21 APR 19 APR 20 APR 21 APR 19 APR 22 APR 16 APR 21 APR 22 APR 18 APR 21 APR 21 APR 20 APR 21 APR 20 APR 21 APR 21 APR 20 APR 21 APR 21 AP	101% 40% 41% 39% 83% 88% 56% 55% 85% 55% 55% 55% 55% 55% 55% 55% 55	87% 60% 65% 66% 120% 88% 71% 108% 99% 132% 88% 81% 99% 132% 88% 99% 106% 96% 106% 96% 114% 113% 115%	71% 41% 41% 54% 57% 54% 87% 62% 57% 81% 87% 108% 88% 83% 88% 83% 96% 93% 85% 96% 109% 93% 86% 107% 95% 93%	52% 23% 33% 67% 67% 44% 46% 57% 44% 46% 57% 64% 47% 67% 47% 67% 67% 67% 67% 65% 55% 57% 68% 68%	48% 27% 34% 42% 42% 42% 37% 38% 31% 50% 55% 40% 55% 47% 47% 56% 51% 47% 56% 51% 47% 88% 47% 52% 88% 95% 80% 52% 86% 86% 97% 86%	63% 28% 33% 36% 81% 65% 65% 64% 73% 73% 73% 73% 73% 80% 55% 66% 77% 85% 77% 85% 76% 99% 77% 85% 59% 66%	32% 14% 22% 66% 57% 34% 24% 26% 35% 70% 92% 65% 26% 32% 65% 32% 65% 34% 65%	93% 33% 34% 36% 77% 88% 82% 91% 82% 91% 82% 91% 81% 93% 103% 93% 103% 93% 44% 103% 62% 62% 62%	44% 14% 16% 38% 87% 27% 31% 43% 92% 62% 43% 43% 39% 43% 39% 43% 39% 43% 22% 22% 23% 23% 23%	98% 51% 54% 51% 52% 51% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29% 33% 63% 87% 61% 57% 61% 61% 57% 61% 61% 67% 66% 66% 64% 84% 84% 50% 50% 60%	51%, 58%, 60%, 123%, 88%, 91%, 113%, 128%, 126%, 91%, 128%, 105%, 105%, 105%, 105%, 105%, 105%, 105%, 114%, 99%, 93%, 124%, 108%, 108%, 131%, 131%, 131%, 131%, 131%, 131%, 131%, 135%, 13	101% 38% 47% 91% 87% 63% 102% 63% 102% 63% 70% 85% 92% 75% 92% 88% 86% 95% 82% 86% 95% 73% 116% 88%	86% 53% 57% 102% 88% 94% 90% 86% 91% 91% 91% 91% 91% 82% 74% 81% 85% 99% 99% 99% 95% 97% 9103%	104% 54% 60% 63% 112% 83% 70% 90% 104% 92% 90% 73% 86% 86% 86% 106% 84% 106% 86% 86% 95% 84% 104%	64% 48% 53% 83% 88% 85% 80% 82% 75% 80% 82% 71% 82% 71% 82% 71% 80% 62% 63% 62% 63% 83% 83% 83% 83%	67% 71% 76% 71% 76% 71% 76% 71% 76% 71% 75% 71% 75% 90% 92% 92% 92% 92% 92% 93% 66% 81% 81% 81% 80% 81% 115% 95% 80% 81% 121% 122% 122% 122% 122%	84% 43% 48% 50% 96% 88% 33% 85% 74% 82% 94% 91% 74% 75% 82% 90% 97% 86% 76% 79% 85% 97%
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Mulanje Mwanza	COP 21 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 15 COP 16 COP 15 COP 15 COP 16 COP 15 COP 17 COP 18 COP 19 COP 20 COP 21 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 15 COP 16 COP 15 COP 15 COP 15 COP 15 COP 15 COP 15 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 20 COP 21 COP 20 COP 20 COP 20 COP 20 COP 20 COP 21 COP 15 COP 16 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 20 COP 21 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20	Scale-Up Saturation Sustained Sustai	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 22 APR 16 APR 21 APR 20 APR 21 APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 20 APR 21 APR 22 APR 16 APR 21 APR 22 APR 21 APR 21 APR 20 APR 21 APR 20 APR 21 APR 20 APR 20 AP	101% 40% 41% 39% 83% 88% 69% 55% 55% 55% 55% 55% 55% 54% 55% 54% 55% 54% 53% 67% 49% 49% 70% 53% 67% 53% 67% 55%	87% 60% 65% 120% 88% 87% 66% 99% 132% 99% 132% 99% 132% 99% 132% 99% 114% 88% 69% 1113% 115% 115% 115% 115% 115% 115% 11	71% 41% 41% 47% 54% 87% 54% 87% 62% 81% 87% 81% 87% 81% 63% 88% 81% 63% 85% 109% 93% 86% 107% 93% 86% 96% 93% 61% 82% 90%	52% 23% 33% 67% 44% 67% 44% 67% 64% 57% 59% 64% 75% 64% 47% 56% 67% 67% 67% 67% 67% 67% 67% 6	48% 27% 34% 42% 146% 87% 74% 33% 55% 42% 92% 85% 47% 56% 92% 92% 92% 92% 92% 93% 47% 56% 95% 80% 95% 80% 55% 80% 55%	63% 28% 33% 36% 81% 88% 74% 65% 77% 77% 80% 58% 67% 77% 80% 59% 59% 59% 68% 69% 99% 99% 99% 99% 59% 68% 66% 72%	32% 14% 17% 66% 87% 57% 34% 26% 35% 65% 26% 32% 65% 66% 32% 61% 61% 38% 61% 33% 62% 33% 61% 33% 62% 33% 33% 33% 32% 32% 32% 32% 32% 32% 3	93% 33% 34% 36% 77% 88% 82% 87% 91% 82% 91% 84% 93% 103% 93% 73% 99% 84% 101% 58% 62% 67% 80% 67% 80% 71% 99%	44% 14% 16% 38% 87% 55% 48% 31% 34% 43% 62% 62% 43% 62% 43% 35% 39% 36% 23% 27% 22% 22% 22% 23% 27% 23% 35% 87% 59% 35% 37%	98% 51% 54% 51% 52% 51% 52% 51% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29%, 33%, 61%, 61%, 61%, 61%, 61%, 61%, 61%, 61	51% 58% 60% 123% 88% 91% 113% 128% 126% 91% 94% 105% 105% 105% 99% 93% 124% 95% 106% 93% 131% 90% 131% 90%	101% 38% 45% 47% 91% 87% 91% 87% 71% 63% 85% 102% 92% 75% 92% 73% 85% 73% 86% 95% 73% 86% 95% 73% 86% 73% 87% 73% 87% 73% 87% 73% 87% 74% 83%	86% 53% 56% 57% 102% 88% 94% 90% 92% 91% 97% 82% 74% 81% 97% 82% 97% 95% 99% 90% 95% 97% 90% 95% 99% 90% 92% 72% 72% 76%	104% 54% 60% 63% 112% 83% 101% 90% 90% 90% 90% 90% 90% 90% 104% 88% 88% 88% 81% 81% 88% 90% 71% 85% 90% 77%	64% 48% 53% 53% 83% 85% 80% 80% 82% 80% 82% 60% 62% 60% 62% 62% 62% 62% 83% 83% 83% 83% 83% 83% 83% 83% 83% 83	67%, 71%, 76%, 87%, 89%, 90%, 92%, 92%, 92%, 92%, 93%, 66%, 75%, 80%, 81%, 81%, 115%, 95%, 91%, 80%, 121%, 122%, 87%, 91%, 73%, 76%, 73%, 76%, 76%, 75%, 76%, 75%, 75%, 75%, 75%, 75%, 75%, 75%, 75	84% 43% 50% 96% 88% 85% 74% 82% 82% 82% 87% 94% 91% 82% 82% 82% 82% 85% 82% 85% 90% 90% 90% 90% 90% 90% 90% 90% 90% 85% 76% 79% 85% 85% 73%
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Mulanje Mwanza Mzimba	COP 21 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 10 COP 20 COP 21 COP 15 COP 10 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 10 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 10 COP 20 COP 21 COP 19 COP 20 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 17 COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 17 COP 18 COP 15 COP 16 COP 17 COP 18 COP 17 COP 18 COP 19 COP 20 COP 21 COP 19 COP 20 COP 20 COP 21 COP 20 COP 20 COP 20 COP 21 COP 18 COP 19 COP 20 COP 18 COP 18	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 21 APR 22 APR 16 APR 21 APR 20 APR 21 APR 20 APR 21 APR 19 APR 20 APR 21 APR 19 APR 20 APR 21 APR 21 APR 19 APR 20 APR 21 APR 21 APR 20 APR 21 APR 21 APR 21 APR 20 APR 21 APR 21 APR 21 APR 21 APR 21 APR 21 APR 20 APR 20 APR 21 APR 20 APR 10 APR 20 APR 10 APR 20 APR 10 APR 20 APR 10 APR 20 APR 10 APR 20 APR 10 APR 10 APR 20 APR 10 APR 10 AP	101% 40% 41% 39% 83% 88% 56% 55% 85% 55% 55% 55% 55% 55% 55% 53% 54% 55% 57% 79% 93% 81% 70% 53% 67% 53% 67% 53% 52% 64%	87% 60% 65% 66% 120% 88% 71% 108% 99% 132% 88% 99% 132% 88% 99% 106% 99% 106% 99% 114% 88% 69% 66% 66% 88% 95% 101%	71% 41% 41% 54% 57% 57% 87% 62% 57% 81% 87% 108% 88% 83% 84% 84% 96% 109% 93% 86% 85% 96% 93% 107% 95% 93% 69% 61% 88% 82% 90%	52% 23% 33% 67% 67% 44% 46% 57% 64% 46% 55% 64% 47% 47% 47% 67% 67% 67% 67% 67% 68% 55% 69% 68% 53% 62% 53%	48% 27% 34% 42% 42% 146% 87% 55% 127% 92% 85% 47% 47% 47% 47% 47% 85% 80% 52% 80% 52% 80% 52% 47% 87% 80% 55% 80% 55% 80% 55% 80% 80% 80% 80% 80% 80% 80% 80% 80% 80	63% 28% 33% 36% 81% 65% 65% 64% 73% 73% 73% 73% 73% 73% 73% 73% 76% 99% 77% 85% 76% 99% 77% 85% 66% 65% 72% 77% 66% 72%	32% 14% 22% 66% 37% 24% 26% 35% 62% 32% 65% 65% 65% 65% 65% 62% 32% 62% 32% 61% 38% 62% 33% 62% 33% 62% 33% 62% 33% 55% 87% 62% 33% 65% 65% 66% 32% 65% 66% 32% 65% 66% 32% 65% 66% 32% 65% 66% 32% 65% 66% 32% 65% 66% 32% 65% 66% 32% 65% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 66% 32% 32% 66% 32% 32% 66% 32% 32% 66% 32% 32% 66% 32% 32% 32% 32% 32% 32% 32% 32% 32% 32	93% 33% 34% 36% 77% 88% 82% 91% 82% 91% 82% 91% 83% 93% 103% 93% 103% 93% 103% 93% 62% 67% 80% 99% 84% 62% 67% 80% 99% 85% 91% 91% 91% 91% 95%	44% 14% 16% 16% 38% 27% 31% 34% 43% 92% 62% 43% 35% 33% 43% 35% 27% 29% 35% 87% 58% 52% 23% 27% 23% 23% 23% 35% 33% 33% 33% 33%	98% 51% 52% 87% 109% 109% 87% 88% 88% 88% 88% 88% 111% 124% 124% 124% 125% 91% 124% 125% 93% 126% 103% 93% 93% 93% 93% 93% 93% 93% 112% 112% 112% 112% 112% 112% 112% 11	29% 33% 63% 67% 61% 57% 61% 57% 61% 61% 67% 66% 66% 66% 64% 84% 50% 65% 50% 66% 87% 66% 66% 66% 66% 66% 66% 66%	51%, 58%, 60%, 123%, 88%, 91%, 113%, 128%, 128%, 94%, 103%, 103%, 103%, 103%, 104%, 93%, 104%, 93%, 100%, 103%, 93%, 93%, 100%, 93%, 93%, 100%, 93%, 100%, 93%, 100%, 10	101% 38% 45% 47% 91% 47% 91% 47% 91% 63% 63% 102% 63% 102% 92% 75% 92% 20% 86% 95% 67% 73% 86% 67% 71% 84% 87% 71% 87% 87% 83% 67% 71% 83% 83%	86% 53% 56% 57% 102% 88% 99% 90% 86% 97% 91% 91% 91% 82% 74% 81% 82% 74% 81% 97% 99% 99% 99% 99% 90% 95% 97% 77% 72% 76% 77% 72%	104% 54% 60% 63% 112% 83% 90% 90% 90% 73% 86% 73% 86% 90% 95% 84% 106% 81% 86% 85% 77% 85%	64% 48% 53% 83% 88% 85% 80% 82% 71% 80% 82% 71% 80% 82% 71% 80% 60% 62% 63% 66% 83% 83% 83% 83% 83% 83% 83% 83% 83% 83	67% 71% 76% 71% 76% 71% 75% 75% 75% 75% 80% 81% 75% 80% 81% 115% 99% 75% 80% 81% 115% 95% 91% 75% 75% 75% 75% 75% 75% 75% 75% 75% 75	84% 43% 50% 96% 88% 83% 85% 74% 82% 87% 94% 91% 87% 74% 75% 82% 85% 90% 97% 85% 90% 97% 85% 99% 85% 97% 85% 97% 85% 97% 85% 97% 77% 73% 22%
Mulanje Mwanza Mzimba	COP 21 COP 21 COP 15 COP 16 COP 17 COP 18 COP 20 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 21 COP 21 COP 20 COP 21 COP 20 COP 21 COP 15 COP 15 COP 15 COP 15 COP 15 COP 15 COP 16 COP 17 COP 18 COP 20 COP 21 COP 15 COP 15 COP 15 COP 15 COP 15 COP 15 COP 16 COP 17 COP 18 COP 19 COP 20 COP 20 COP 21 COP 15 COP 19 COP 20 COP 21 COP 19 COP 20 COP 20 COP 21 COP 20 COP 20	Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Sustained Sustained Sustained Sustained Sustained Scale-Up Saturation	APR 22 APR 16 APR 17 APR 18 APR 19 APR 20 APR 21 APR 22 APR 16 APR 21 APR 22 APR 16 APR 21 APR 20 APR 21 APR 20 APR 21 APR 22 APR 16 APR 21 APR 20 APR 21 APR 20 APR 21 APR 22 APR 16 APR 21 APR 22 APR 16 APR 21 APR 20 APR 20 APR 21 APR 20 APR 20 APR 21 APR 20 APR 20 AP	101% 40% 41% 39% 83% 88% 69% 56% 55% 88% 55% 55% 55% 55% 55% 55% 55% 55	87% 60% 65% 88% 71% 108% 99% 132% 88% 132% 88% 132% 99% 106% 99% 106% 99% 106% 99% 113% 113% 115% 145% 88% 99% 88%	71% 41% 41% 54% 57% 54% 88% 87% 62% 57% 81% 62% 57% 81% 62% 57% 81% 63% 88% 63% 96% 96% 96% 96% 96% 93% 85% 96% 61% 88% 69% 61% 82% 88%	52% 23% 33% 67% 67% 64% 65% 64% 67% 64% 67% 64% 67% 67% 67% 67% 67% 67% 65% 66% 66% 67% 67% 65% 66% 66% 66% 66% 66% 66% 66% 66% 66	48% 27% 34% 42% 42% 87% 38% 38% 38% 38% 38% 38% 38% 55% 47% 80% 52% 47% 80% 52% 47% 80% 52% 47% 80% 52% 47% 80% 52% 87%	63% 28% 33% 36% 81% 88% 64% 73% 65% 64% 77% 85% 77% 85% 77% 85% 77% 85% 66% 66% 69% 99% 77% 85% 77% 62%	32% 14% 22% 66% 57% 24% 24% 26% 35% 65% 65% 65% 65% 65% 65% 65% 66% 32% 62% 32% 62% 33% 62% 33% 62% 33% 62% 33% 62% 33% 62% 33% 62% 33% 66% 32% 66% 66% 66% 66% 66% 66% 66% 66% 66% 6	93% 33% 34% 36% 77% 88% 82% 91% 82% 91% 86% 86% 86% 91% 93% 93% 103% 93% 103% 93% 93% 103% 62% 67% 86% 85%	44% 14% 16% 38% 87% 33% 43% 43% 92% 62% 43% 43% 92% 62% 43% 35% 35% 35% 27% 23% 23% 23% 23% 35% 35% 35% 35% 35% 35% 35% 35% 35% 3	98% 51% 54% 51% 52% 51% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52	29%, 33%, 63%, 87%, 61%, 61%, 61%, 61%, 61%, 61%, 61%, 61	51%, 58%, 60%, 123%, 88%, 91%, 128%, 128%, 128%, 94%, 103%, 103%, 103%, 103%, 105%, 105%, 119%, 93%, 93%, 100%, 93%, 100%, 93%, 100%, 94%, 109%, 94%, 109%, 94%, 109%, 100%, 1	101% 38% 45% 47% 91% 47% 91% 87% 63% 102% 63% 102% 92% 75% 92% 82% 89% 86% 95% 73% 82% 86% 95% 73% 87% 71% 84% 87% 71% 87% 71% 87% 87% 88% 81% 69% 81%	86% 53% 56% 57% 102% 88% 99% 90% 86% 97% 82% 97% 81% 82% 97% 81% 85% 97% 99% 90% 95% 97% 90% 92% 77% 85%	104% 54% 60% 63% 112% 63% 87% 63% 87% 90% 104% 90% 73% 82% 86% 106% 95% 84% 106% 95% 84% 86% 95% 84% 86% 97% 88% 86% 97% 88% 86% 97% 88% 88% 88% 88% 88% 88% 88% 88% 88% 8	64% 48% 53% 83% 88% 95% 82% 77% 80% 82% 77% 80% 82% 71% 82% 60% 60% 60% 62% 63% 63% 83% 83% 83% 83% 83% 83% 83% 83% 83% 8	67%, 71%, 76%, 87%, 89%, 71%, 90%, 92%, 92%, 92%, 92%, 93%, 66%, 75%, 80%, 81%, 115%, 91%, 121%, 112%, 123%, 122%, 87%, 96%, 73%, 87%, 76%, 74%, 83%, 76%, 76%, 76%, 76%, 76%, 76%, 76%, 76	84% 43% 50% 96% 88% 74% 82% 87% 94% 91% 87% 94% 91% 74% 75% 82% 90% 97% 85% 90% 97% 85% 90% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 90% 97% 85% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 97% 85% 97% 85% 97% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 97% 85% 85% 97% 85% 85% 97% 85% 85% 85% 85% 85% 85% 85% 85
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	COP 15		APR 16	26%	63%	46%	24%	40%	20%	13%	24%	12%	47%	22%	55%	36%	64%	61%	60%	94%	46%
	COP 16	Sustained	APR 17	29%	68%	55%	32%	44%	27%	13%	26%	12%	46%	23%	62%	40%	68%	64%	64%	98%	50%
	COP 17	Sustained	APR 18	32%	69%	57%	38%	53%	30%	16%	27%	15%	49%	23%	65%	42%	67%	65%	69%	104%	53%
Nkhata-bay	COP 18	Sustained	APR 19	73%	106%	102%	67%	129%	71%	58%	68%	33%	96%	56%	108%	80%	90%	99%	73%	108%	84%
	COP 19	Sustained	APR 20	88%	88%	88%	83%	87%	83%	87%	83%	87%	83%	87%	83%	87%	83%	87%	83%	87%	85%
	COP 20	Sustained	APR 21	69%	75%	75%	73%	81%	78%	62%	85%	59%	90%	65%	93%	74%	96%	85%	97%	92%	85%
	COP 21	Sustained	APR 22	53%	63%	59%	36%	35%	41%	26%	49%	27%	63%	42%	101%	81%	89%	92%	78%	87%	72%
	COP 15		APR 16	61%	87%	81%	39%	68%	44%	26%	62%	18%	105%	55%	112%	80%	106%	118%	87%	171%	88%
, t	COP 16	Sustained	APR 17	58%	126%	92%	41%	74%	50%	27%	60%	21%	100%	57%	127%	92%	120%	127%	92%	185%	96%
. 1	COP 17	Sustained	APR 18	61%	118%	91%	46%	83%	56%	28%	66%	22%	100%	58%	131%	94%	130%	129%	94%	194%	101%
Nkhota-kota																					
Nikilota kota	COP 18	Sustained	APR 19	63%	91%	88%	59%	112%	62%	50%	59%	29%	84%	49%	94%	70%	78%	86%	63%	94%	73%
	COP 19	Sustained	APR 20	88%	88%	88%	82%	87%	82%	87%	82%	87%	82%	87%	82%	87%	82%	87%	82%	87%	84%
	COP 20	Sustained	APR 21	102%	102%	102%	70%	78%	76%	60%	83%	57%	88%	63%	92%	72%	95%	84%	96%	91%	86%
	COP 21	Sustained	APR 22	66%	58%	54%	50%	46%	47%	35%	65%	36%	76%	49%	98%	77%	90%	91%	80%	93%	77%
	COP 15		APR 16	67%	90%	83%	47%	42%	61%	20%	68%	23%	108%	44%	100%	62%	84%	78%	74%	86%	74%
	COP 16	Sustained	APR 17	78%	94%	85%	52%	57%	61%	19%	74%	26%	104%	40%	106%	65%	85%	80%	71%	84%	76%
	COP 17	Sustained	APR 18	82%	95%	109%	67%	69%	75%	24%	81%	30%	109%	43%	124%	73%	96%	91%	80%	93%	85%
Nsanje	COP 18	Sustained	APR 19	64%	93%	89%	66%	125%	69%	56%	66%	33%	94%	54%	105%	78%	88%	96%	71%	105%	81%
. [COP 19	Sustained	APR 20	91%	91%	91%	92%	96%	92%	96%	92%	96%	92%	96%	92%	96%	92%	96%	92%	96%	93%
, [COP 20	Sustained	APR 21	74%	80%	80%	75%	84%	79%	64%	86%	61%	90%	66%	94%	75%	96%	86%	98%	92%	86%
, Ī	COP 21	Sustained	APR 22	93%	86%	77%	55%	50%	80%	38%	98%	54%	109%	73%	126%	113%	96%	110%	65%	84%	89%
	COP 15		APR 16	41%	64%	67%	31%	44%	37%	14%	39%	18%	66%	28%	69%	38%	63%	55%	55%	64%	50%
	COP 16	Sustained	APR 17	43%	68%	77%	42%	52%	40%	21%	44%	23%	69%	37%	77%	43%	66%	63%	59%	71%	56%
, F	COP 17	Sustained	APR 18	40%	74%	77%	48%	53%	44%	22%	44%	24%	67%	38%	82%	49%	72%	64%	62%	78%	59%
Ntcheu	COP 18	Sustained	APR 19	68%	98%	95%	63%	120%	66%	54%	63%	31%	89%	52%	100%	74%	84%	91%	68%	100%	78%
, ···	COP 18	Sustained	APR 19 APR 20	88%	88%	88%	89%	88%	89%	88%	89%	88%	89%	88%	89%	88%	89%	88%	89%	88%	89%
-																					
, F	COP 20	Sustained	APR 21	77%	82%	82%	73%	81%	78%	62%	85%	59%	89%	65%	93%	74%	96%	85%	97%	92%	86%
	COP 21	Sustained	APR 22	83%	87%	78%	55%	59%	69%	42%	85%	54%	92%	76%	117%	106%	94%	98%	71%	83%	86%
	COP 15		APR 16	43%	54%	100%	45%	60%	37%	34%	52%	20%	83%	43%	87%	53%	87%	89%	87%	111%	70%
	COP 16	Sustained	APR 17	50%	68%	104%	49%	82%	46%	35%	48%	30%	85%	41%	92%	54%	98%	93%	87%	109%	75%
	COP 17	Sustained	APR 18	49%	87%	89%	45%	92%	52%	35%	46%	29%	87%	42%	94%	65%	97%	94%	90%	109%	77%
Ntchisi	COP 18	Sustained	APR 19	76%	110%	106%	70%	134%	74%	60%	70%	35%	100%	58%	113%	83%	94%	102%	76%	112%	88%
	COP 19	Sustained	APR 20	88%	88%	88%	73%	87%	73%	87%	73%	87%	73%	87%	73%	87%	73%	87%	73%	87%	79%
	COP 20	Sustained	APR 21	94%	97%	96%	74%	82%	78%	63%	85%	59%	90%	65%	93%	74%	96%	85%	97%	92%	88%
	COP 21	Sustained	APR 22	49%	66%	55%	42%	55%	45%	36%	55%	44%	57%	45%	82%	70%	86%	79%	79%	84%	70%
	COP 15		APR 16	78%	92%	73%	48%	43%	79%	32%	94%	41%	124%	70%	113%	83%	88%	77%	74%	79%	84%
	COP 16	Scale-Up Saturation	APR 17	90%	116%	96%	63%	48%	89%	49%	99%	52%	137%	76%	131%	99%	98%	90%	77%	84%	95%
. •	COP 17	Scale-Up Saturation	APR 18	89%	132%	105%	73%	71%	100%	56%	104%	60%	139%	87%	141%	101%	105%	98%	79%	89%	101%
Phalombe	COP 18	Scale-Up Saturation	APR 19	92%	105%	85%	51%	82%	68%	80%	101%	55%	131%	77%	128%	99%	86%	85%	62%	75%	89%
	COP 19	Scale-Up Saturation	APR 20	92%	92%	92%	93%	101%	93%	101%	93%	101%	93%	101%	93%	101%	93%	101%	93%	101%	96%
	COP 20	Scale-Up Saturation	APR 21	58%	65%	65%	76%	85%	80%	65%	87%	62%	91%	67%	94%	75%	97%	86%	98%	93%	85%
-	COP 21	Scale-Up Saturation	APR 22	79%	83%	79%	50%	43%	77%	42%	106%	65%	113%	87%	125%	111%	96%	100%	59%	67%	87%
	COP 15	Scale-op Saturation	APR 16	63%	116%	122%	52%	70%	47%	30%	54%	31%	91%	55%	94%	64%	101%	100%	86%	142%	82%
		C. J. Strand																			
	COP 16	Sustained	APR 17	45%	73%	103%	43%	75%	56%	52%	49%	33%	85%	51%	106%	67%	98%	109%	93%	149%	83%
Dumahi	COP 17	Sustained	APR 18	52%	116%	116%	71%	119%	66%	40%	57%	37%	78%	52%	112%	78%	104%	113%	98%	157%	90%
Rumphi	COP 18	Sustained	APR 19	89%	128%	124%	78%	150%	83%	67%	79%	39%	112%	65%	126%	93%	105%	115%	85%	125%	98%
	COP 19	Sustained	APR 20	88%	88%	88%	80%	87%	80%	87%	80%	87%	80%	87%	80%	87%	80%	87%	80%	87%	83%
,	COP 20	Sustained	APR 21	92%	95%	95%	73%	82%	78%	63%	85%	59%	90%	65%	93%	74%	96%	85%	97%	92%	87%
	COP 21	Sustained	APR 22	61%	63%	74%	61%	65%	61%	40%	64%	47%	70%	55%	96%	87%	91%	90%	90%	90%	80%
	COP 15		APR 16	45%	48%	47%	31%	35%	34%	11%	42%	10%	70%	31%	70%	43%	62%	62%	44%	66%	50%
	COP 16	Sustained	APR 17	50%	64%	45%	37%	41%	37%	20%	41%	17%	72%	32%	76%	47%	69%	67%	48%	72%	55%
	COP 17	Sustained	APR 18	51%	57%	53%	40%	46%	43%	24%	41%	18%	71%	32%	83%	49%	71%	70%	53%	78%	58%
Salima	COP 18	Sustained	APR 19	79%	114%	110%	73%	139%	77%	62%	73%	36%	104%	60%	117%	86%	97%	106%	78%	116%	91%
	COP 19	Sustained	APR 20	88%	88%	88%	90%	89%	90%	89%	90%	89%	90%	89%	90%	89%	90%	89%	90%	89%	89%
	COP 20	Sustained	APR 21	75%	81%	81%	69%	77%	75%	59%	83%	56%	88%	63%	92%	72%	95%	83%	96%	90%	85%
	COP 21		APR 22	87%	86%	72%	41%	54%	51%	31%	77%	36%	83%	55%	115%	86%	96%	98%	77%	98%	83%
	COP 15		APR 16	44%	73%	83%	41%	45%	46%	19%	58%	23%	93%	39%	93%	54%	88%	66%	79%	78%	67%
, ŀ		Scale-Up Saturation	APR 17	50%	82%	90%	52%	52%	59%	29%	67%	32%	98%	48%	105%	63%	92%	71%	81%	76%	74%
		Scale-Up Saturation	APR 18	42%	91%	93%	54%	69%	53%	26%	59%	25%	88%	39%	112%	67%	102%	86%	84%	94%	77%
' ľ	COP 17	pessie op sucuration			131%	134%	95%	162%	103%	68%	72%	38%	105%	62%	126%	104%	102%	119%	79%	94% 117%	98%
Thyolo		Scale-Lin Saturation	ADD 10		131%	134%	95%	87%									90%	87%		87%	
Thyolo	COP 18	Scale-Up Saturation	APR 19	78%	000/	000/		δ/%	90%	87%	90%	87%	90%	87%	90%	87%	90%				89%
Thyolo	COP 18 COP 19	Scale-Up Saturation	APR 20	88%	88%	88%				· · · ·	0000	P		c	0000	-			90%		000/
Thyolo	COP 18 COP 19 COP 20	Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21	88% 107%	106%	106%	78%	88%	81%	67%	88%	63%	92%	68%	95%	76%	97%	87%	99%	93%	90%
Thyolo	COP 18 COP 19 COP 20 COP 21	Scale-Up Saturation	APR 20 APR 21 APR 22	88% 107% 59%	106% 81%	106% 74%	78% 53%	88% 61%	81% 63%	39%	81%	48%	91%	67%	130%	101%	97% 109%	87% 114%	99% 73%	93% 90%	89%
Thyolo	COP 18 COP 19 COP 20 COP 21 COP 15	Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21 APR 22 APR 16	88% 107% 59% 53%	106% 81% 73%	106% 74% 71%	78% 53% 35%	88% 61% 48%	81% 63% 49%	39% 22%	81% 57%	48% 20%	91% 90%	67% 42%	130% 83%	101% 54%	97% 109% 70%	87% 114% 63%	99% 73% 66%	93% 90% 74%	89% 62%
Thyolo	COP 18 COP 19 COP 20 COP 21	Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21 APR 22	88% 107% 59%	106% 81%	106% 74%	78% 53%	88% 61%	81% 63%	39%	81%	48%	91%	67%	130%	101%	97% 109%	87% 114%	99% 73%	93% 90%	89%
	COP 18 COP 19 COP 20 COP 21 COP 15	Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21 APR 22 APR 16	88% 107% 59% 53%	106% 81% 73%	106% 74% 71%	78% 53% 35%	88% 61% 48%	81% 63% 49%	39% 22%	81% 57%	48% 20%	91% 90%	67% 42%	130% 83%	101% 54%	97% 109% 70%	87% 114% 63%	99% 73% 66%	93% 90% 74%	89% 62%
Thyolo	COP 18 COP 19 COP 20 COP 21 COP 15 COP 16	Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21 APR 22 APR 16 APR 17	88% 107% 59% 53% 58%	106% 81% 73% 79%	106% 74% 71% 76%	78% 53% 35% 43%	88% 61% 48% 50%	81% 63% 49% 52%	39% 22% 25%	81% 57% 61%	48% 20% 25%	91% 90% 91%	67% 42% 42%	130% 83% 95%	101% 54% 55%	97% 109% 70% 79%	87% 114% 63% 64%	99% 73% 66% 76%	93% 90% 74% 73%	89% 62% 67%
	COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17	Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21 APR 22 APR 16 APR 17 APR 18	88% 107% 59% 53% 58% 57%	106% 81% 73% 79% 94%	106% 74% 71% 76% 93%	78% 53% 35% 43% 49%	88% 61% 48% 50% 66%	81% 63% 49% 52% 52%	39% 22% 25% 30%	81% 57% 61% 57%	48% 20% 25% 26%	91% 90% 91% 86%	67% 42% 42% 39%	130% 83% 95% 103%	101% 54% 55% 61%	97% 109% 70% 79% 86%	87% 114% 63% 64% 71%	99% 73% 66% 76% 79%	93% 90% 74% 73% 85%	89% 62% 67% 71%
	COP 18 COP 19 COP 20 COP 21 COP 15 COP 16 COP 17 COP 18	Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation Scale-Up Saturation	APR 20 APR 21 APR 22 APR 16 APR 17 APR 18 APR 19	88% 107% 59% 53% 58% 57% 79%	106% 81% 73% 79% 94% 107%	106% 74% 71% 76% 93% 102%	78% 53% 35% 43% 49% 57%	88% 61% 48% 50% 66% 117%	81% 63% 49% 52% 52% 60%	39% 22% 25% 30% 55%	81% 57% 61% 57% 76%	48% 20% 25% 26% 35%	91% 90% 91% 86% 108%	67% 42% 42% 39% 54%	130% 83% 95% 103% 123%	101% 54% 55% 61% 81%	97% 109% 70% 79% 86% 94%	87% 114% 63% 64% 71% 91%	99% 73% 66% 76% 79% 84%	93% 90% 74% 73% 85% 98%	89% 62% 67% 71% 87%

APPENDIX B - Budget Profile and Resource Projections

B1. COP22 Planned Spending in alignment with planning level letter guidance Table B.1.1 COP22 Budget by Program Area

	Graph	B.1.1 COP22 Bi	udget by Progra	am Area		2 ⁷
Fiscal Year			2023			
Program						
ASP: HMIS, surveillance, & research						
ASP: Human resources for health						
ASP: Laboratory systems strengthening						
SP: Policy, planning, coordination & management of	-					
ASP: Procurement & supply chain management						
ASP: Public financial management strengthening						
C&T: HIV Clinical Services						
C&T: HIV Laboratory Services						
C&T: Not Disaggregated						
HTS: Community-based testing						
HTS: Facility-based testing						
HTS: Not Disaggregated						
PM: IM Closeout costs	I					Interaction Type
PM: IM Program Management						Service Delivery
PM: USG Program Management						Non Service Deliver
PREV: Comm. mobilization, behavior & norms change						
PREV: Condom & Lubricant Programming						
PREV: Not Disaggregated						
PREV: PrEP						
PREV: Primary prevention of HIV and sexual violence	I					
PREV: VMMC						
SE: Case Management						
SE: Economic strengthening						
SE: Education assistance						
SE: Legal, human rights & protection						
SE: Not Disaggregated	I					
SE: Psychosocial support						
	\$10	M \$20M	\$30M	\$40M	\$50M	

Table B.1.2 COP22 Budget by Program Area

		Table B.1.2 COP22 Budget b	by Program Area				
Program	Metrics	Prop	oosed COP22 Budget		Percent of Pro	posed COP 22 Budget	
	Sub-Program	Non Service Delivery	Service Delivery	Total	Non Service Delivery	Service Delivery	Tot
Total		\$83,073,014	\$93,826,986	\$176,900,000	47%	53%	100
C&T	Total	\$17,006,931	\$51,222,646	\$68,229,577	25%	75%	100
	HIV Clinical Services	\$14,516,482	\$43,898,760	\$58,415,242	25%	75%	100
	HIV Laboratory Services	\$1,558,647	\$3,393,478	\$4,952,125	31%	69%	10
	Not Disaggregated	\$931,802	\$3,930,408	\$4,862,210	19%	81%	10
HTS	Total	\$308,483	\$8,147,381	\$8,455,864	4%	96%	10
	Community-based testing	\$231,166	\$2,029,790	\$2,260,956	10%	90%	10
	Facility-based testing		\$5,603,717	\$5,603,717		100%	10
	Not Disaggregated	\$77,317	\$513,874	\$591,191	13%	87%	10
PREV	Total	\$2,953,378	\$25,143,255	\$28,096,633	11%	89%	10
	Comm. mobilization, behavior & norms change	\$1,295,475	\$6,964,878	\$8,260,353	16%	84%	10
	Condom & Lubricant Programming		\$1,256,034	\$1,256,034		100%	10
	Not Disaggregated	\$371,089	\$1,709,019	\$2,080,108	18%	82%	10
	PrEP	\$770,839	\$3,624,896	\$4,395,735	18%	82%	10
	Primary prevention of HIV and sexual violence		\$314,156	\$314,156		100%	10
	VMMC	\$515,975	\$11,274,272	\$11,790,247	4%	96%	10
SE	Total	\$1,820,293	\$9,313,704	\$11,133,997	16%	84%	10
	Case Management	\$950,669	\$2,298,351	\$3,249,020	29%	71%	10
	Economic strengthening	\$344,059	\$4,384,083	\$4,728,142	7%	93%	10
	Education assistance	\$134,476	\$1,317,486	\$1,451,962	9%	91%	10
	Legal, human rights & protection		\$50,000	\$50,000		100%	10
	Not Disaggregated	\$301,089	\$165,483	\$466,572	65%	35%	10
	Psychosocial support	\$90,000	\$1,098,301	\$1,188,301	8%	92%	10
ASP	Total	\$21,908,409		\$21,908,409	100%		10
	HMIS, surveillance, & research	\$13,338,419		\$13,338,419	100%		10
	Human resources for health	\$2,035,116		\$2,035,116	100%		10
	Laboratory systems strengthening	\$2,604,259		\$2,604,259	100%		10
	Policy, planning, coordination & management of disease control programs	\$2,619,924		\$2,619,924	100%		10
	Procurement & supply chain management	\$550,000		\$550,000	100%		10
	Public financial management strengthening	\$760,691		\$760,691	100%		10
PM	Total	\$39,075,520		\$39,075,520	100%		10
	IM Closeout costs	\$60,000		\$60,000	100%		10
	IM Program Management	\$29,035,114		\$29,035,114	100%		10
	USG Program Management	\$9,980,406		\$9,980,406	100%		10

Table B.1.3 COP22 Total Planning Level

Table B.1.3 COP22 Total Pla	anning Level	<u>u</u> ⁿ :
	Proposed COP22 Budget	
Applied Pipeline	New	Total
\$12,595,691	\$164,304,309	\$176,900,000
\$12,595,691	\$164,304,309	\$176,900,000

*Data included in Table B.1.3 should match FACTS Info records and total applied pipeline amount required in PLL guidance.

Table B.1.4 COP22 Resource Allocation by Program and Beneficiary

		Table	B.1.4: COP22	Resource Allo	cation by Prog	gram and Bene	ficiary							u ⁿ [
Metrics			Pro	posed COP22 B	udget					Pe	rcent to To	tal		
Beneficiary	C&T	HTS	PREV	SE	ASP	PM	Total	C&T	HTS	PREV	SE	ASP	PM	Total
Total	\$68,229,577	\$8,455,864	\$28,096,633	\$11,133,997	\$21,908,409	\$39,075,520	\$176,900,000	100%	100%	100%	100%	100%	100%	100%
Females	\$4,763,253	\$1,143,255	\$9,503,018	\$6,628,414	\$400,000	\$6,212,279	\$28,650,219	7%	14%	34%	60%	2%	16%	16%
Key Pops	\$2,362,513	\$728,476	\$2,181,770		\$500,000		\$5,772,759	3%	9%	8%		2%		3%
Males	\$595,892	\$536,014	\$11,740,458			\$1,734,817	\$14,607,181	1%	6%	42%			4%	8%
Non-Targeted Pop	\$59,541,745	\$3,423,534	\$3,935,654	\$240,483	\$21,008,409	\$31,128,424	\$119,278,249	87%	40%	14%	2%	96%	80%	67%
OVC	\$100,000			\$4,265,100			\$4,365,100	0%			38%			2%
Pregnant & Breastfeeding Women		\$2,584,585					\$2,584,585		31%					1%
Priority Pops	\$866,174	\$40,000	\$735,733				\$1,641,907	1%	0%	3%				1%

B.2 Resource Projections

Malawi used program/activity-based, incremental budgeting approach (Funding Allocation to Strategy Tool - FAST) to develop the COP22 budget by implementing mechanisms, management efficiency, and operating costs. This inter-agency process took into consideration the following:

- Base funding from COP 20 and COP21 complemented by critical review of work plans and interventions in consultation with implementing partners to account for the COP22 strategy across beneficiary, population, and geographic areas
- A consistent and standardized methodology, developed through consultation between HIV/AIDS global partners viz. PEPFAR/USG, the Global Fund and UNAIDS, to generate routine cost information for HIV/AIDS and/or related health services at all levels of support
- MoH and implementer performance reports to refine lessons learned, identify innovations and best practices to replicate/scale-up, and strategies to de-emphasize; doing more with less money to reflect implementation with fidelity
- COP20 PEPFAR Expenditure Reporting (ER) data and unit expenditures, partner financial data and estimates, pilot data for new activities, pipeline and outlay review, and standard cost databases (salary scales, unit price lists for commodities) to tease out cost drivers for major activities (such as trainings, implementing partners' staff salaries including for health facility staff, lay cadre, etc.)
- Priorities for scale-up e.g., PrEP, new scale-up guidelines, KP prevention, etc.
- MoH commodity gaps that are essential to PEPFAR program implementation and maintain epidemic control e.g., PrEP.
- The Sustainability Index Dashboard to identify critical HIV programmatic gaps, identify corrective actions aligned with Table 6.

The budget represented in the FAST includes available central funds (Condoms), applied pipeline and new funding for all implementing mechanisms. As in previous years, all planned outlays for the 12 months of COP22 are included. The team frequently used the FAST Review tabs to evaluate the COP22 funding data entered for alignment with Malawi's COP22 strategy.

APPENDIX C – Tables and Systems Investments for Section 5.0





SRE Tool - SaSr.pdf

APPENDIX D – Minimum Program Requirements

This should be addressed in narrative in the sections above however in this section succinctly note if the program is meeting or not meeting the minimum program requirement. Address assessment of MPRs by SNU and by proportion of sites meeting standards, as applicable. The minimum requirements for continued PEPFAR support include:

Care and Treatment	Progress
1) Adoption and implementation of Test and Start, with	Test and Start services are available at all 755 ART
demonstrable access across all age, sex, and risk groups,	sites.
and with direct and immediate (>95%) linkage of clients	
from testing to uninterrupted treatment across age, sex, and	
risk groups.	
2) Rapid optimization of ART by offering TLD to all	DTG transition for older children and adults was
people living with HIV weighing \geq 30 kg (including	completed in COP20. Even for younger children <
adolescents and women of childbearing potential),	20kgs and at least four weeks of age, rapid transition
transition to other DTG-based regimens for children who	to optimized DTG based regimens is almost
are \geq 4 weeks of age and weigh \geq 3 kg, and removal of all	completed with over 99% on pediatric DTG at the
NVP- and EFV-based ART regimens.	end of FY22 Q1.
3) Adoption and implementation of differentiated service	All PEPFAR Malawi supported sites are
delivery models for all clients with HIV, including six-	implementing and will continue to implement DSD
month multi-month dispensing (MMD), decentralized drug	models including 6MMD. At FY22 Q1, 40% of
distribution (DDD), and services designed to improve	adults (\geq 15 years) were on 6MMD. Community
identification and ART coverage and continuity for	ART dispensing using the Nurse-led model is
different demographic and risk groups.	continuing. Teen Club model for adolescents is
	scaled up nationally.
4) All eligible people living with HIV, including children	Malawi initially offered TPT in 5 of 28 districts,
and adolescents, -should complete TB preventive treatment	implementing 6H (six-month INH) starting in 2018.
(TPT), and cotrimoxazole, where indicated, must be fully	Over COP19 and Q1 of COP20, TPT has been scaled
integrated into the HIV clinical care package at no cost to	up to all the districts in the country.
the patient.	Due to COVID-19, this nation-wide scale up faced a
	6-month delay but was fully in effect by Q1 of
	COP20. Malawi introduced of 3HP in five districts in
	Q1 of COP20. Malawi planned to transition to 3HP
	as the main TPT regimen due to a shorter course
	which could improve acceptability and completion
	rates. However, this introduction was curtailed due to
	CPNP impurities reported in the commodities
	globally by the manufacturer. All drugs were
	recalled from the facilities and pending orders
	cancelled.
	Provision of 3HP for children over five years and
	adults has restarted. All ART sites are now providing
	TPT and CPT. Children under five years are given
	6H (6months of Isoniazid). However, the current
	orr (omonuis or isomazia). However, the current

5) Completion of Diagnostic Network Optimization activities for VL/EID, TB, and other coinfections, and ongoing monitoring to ensure reductions in morbidity and mortality across age, sex, and risk groups, including 100% access to EID and annual viral load testing and results delivered to caregiver within 4	MoH policy only restricts the provision of TPT to those newly enrolled on ART. There are ongoing discussions with MoH to consider all people living with HIV. PEPFAR will continue to work with the MoH and stakeholders to support safe implementation of 3HP for TPT including ensuring adequate storage conditions for the drugs
weeks.	
Case Finding	
6) Scale-up of index testing and self-testing, ensuring consent procedures and confidentiality are protected and assessment of intimate partner violence (IPV) is established. All children under age 19 with an HIV positive biological parent should be offered testing for HIV.	Index testing policy adopted. MoH-led development of national index testing registers, reporting tools, and they are rolled out at all sites. IPV screening is a standard practice in index testing. Individuals screening IPV positive are not offered index testing and are referred to appropriate services within respective districts. Clinical Partners in collaboration with OVC IPs are offering index testing to all children under the age of 19 born to HIV positive mothers.
Prevention and OVC	
7) Direct and immediate assessment for and offer of prevention services, including pre-exposure prophylaxis (PrEP), to HIV-negative clients found through testing in populations at elevated risk of HIV acquisition (PBFW and AGYW in high HIV-burden areas, high-risk HIV-negative partners of index cases, key populations and adult men engaged in high-risk sex practices)	PrEP will be rapidly scaled up to new public and private facilities in all 28 districts of Malawi during COP22 with an ambitious target of 51,786 PrEP NEW and 11,935, PrEP CT. Health care worker capacity development to strengthen integration of PrEP in SRH services, STI, ANC, FP and HIV prevention services (adolescent/youth friendly services); enhance demand creation services and strengthened referral and linkages are some of the priority strategies to achieve these high targets. PEPFAR Malawi will continue to advocate for equitable PrEP policies, such as community PrEP initiation and refill for all clients who are at substantial risk of contracting HIV. In COP 21 PrEP is only available in 119 of the 429 facilities in the eleven PEPFAR Malawi ART priority districts, resulting in limited access.
8) Alignment of OVC packages of services and enrollment to provide comprehensive prevention and treatment services to OVC ages 0-17, with particular focus on 1)	• > 90% of TX_CURR < 15 years from treatment sites that have the OVC program have been enrolled in the OVC program

actively facilitating testing for all children at risk of HIV infection, 2) facilitating linkage to treatment and providing support and case management for vulnerable children and adolescents living with HIV, 3) reducing risk for adolescent girls in high HIV-burden areas and for 10-14 year-old girls and boys in regard to primary prevention of sexual violence and HIV.	 100% of CLHIV enrolled in the OVC program on ART 82 628 OVC enrolled under the comprehensive model Through case management approach, the OVC program has facilitated 90% of children enrolled in the OVC comprehensive program to know their status. 50,305 children aged 9 to 14 were provided with HIV prevention services across all districts with OVC program 43,661 adolescent girls and young women aged 10 to 17 in DREAMS districts (Blantyre, Zomba and Machinga) were provided with an OVC service
Policy & Public Health Systems Support	
9) In support of the targets set forth in the Global AIDS strategy and the commitments expressed in the 2021 political declaration, OUs demonstrate evidence of progress toward advancement of equity, reduction of stigma and discrimination, and promotion of human rights to improve HIV prevention and treatment outcomes for key populations, adolescent girls and young women, and other vulnerable groups.	The UNAIDS 2025 AIDS Target of "less than 10% of people living with HIV and KP experience stigma and discrimination" aims to reduce the prevalence of HIV-related stigma and discrimination taking account of the growing HIV burden among KP and pernicious effects of stigma and discrimination on efforts to address HIV-related needs of KP, AGYW and other vulnerable groups. Training of service providers and utilization of peer educators has created a less stigmatizing environment for KP and AGYW to access services. KP and AGYW are more aware of their rights through participatory education sessions and counselling. Actions to challenge stigma and discrimination are implemented at national and community levels. Interaction sessions between KP and law enforcement officers as well as service providers create an environment of safety, assurance, and trust for KP. The presence of ombudsmen at health facilities has given the clients the confidence to a safe and quality services. This is also an opportunity for clients to report any human rights offences and have their voices heard. This is implemented in all PEPFAR supported sites contributing to 44,612 KP accessing comprehensive HIV prevention, treatment and care services representing 137% of the set targets for PEPFAR Malawi while 103239 AGWY were reached in the DREAMS program.

10) Elimination of all formal and informal user fees in the public sector for access to all direct HIV services and medications, and related services, such as ANC, TB, cervical cancer, PrEP and routine clinical services affecting access to HIV testing and treatment and prevention.	Malawi's public health facilities have no user fee, making services accessible. Also some private facilities and all Christian Health Association of Malawi (CHAM) supported facilities also signed a service level agreement with GoM to allow them offer all direct HIV services and medications including STI screening and treatment, as well as services like ANC, TB, Cervical cancer screening and management, PrEP and clinical services related to HIV testing, treatment and prevention without any user fee. This helps to remove barriers to service accessibility by users.
11) OUs assure program and site standards, including	CQI will remain an integral approach to identifying
infection prevention & control interventions and site safety	and addressing bottlenecks that hamper Malawi's
standards, are met by integrating effective Quality	progress towards sustaining epidemic control.
Assurance (QA) and Continuous Quality Improvement (CQI) practices into site and program management.	
QA/CQI is supported by IP work plans, Agency	
agreements, and national policy.	
12) Evidence of treatment literacy and viral load literacy	Malawi has developed a national T=T (<i>Tizirombo</i>
activities supported by Ministries of Health, National AIDS	tochepa = Thanzi) Campaign Strategy. This is a
Councils and other host country leadership offices with the	contextualized version of the global U=U campaign.
general population and health care providers regarding U=U and other updated HIV messaging to reduce stigma	The final document will be presented to Senior MoH Management for approval in April 2022. The MoH
and encourage HIV treatment and prevention.	will conduct a national launch of T=T Strategy either
	in May or June 2022. PEPFAR Malawi Partners will
	continue to provide treatment literacy at all PEPFAR
	supported facilities and in the communities.
13) Clear evidence of agency progress toward local partner	PEPFAR Malawi is actively working on a
direct funding, including increased funding to key populations-led and women-led organizations in support of	localization agenda. Malawi Key Population activities are funded and managed by Key
Global AIDS Strategy targets related to community-, KP-	Populations-led and women-led organizations in
and women-led responses	accordance with the Global AIDS Strategy.
in a state of the	Malawian Key Population and an adolescent girls'
	competent organization lead and manage the
	prevention projects. The US government provides
	direct funding to two organizations: CEDEP (for
	MSM, MSW, and TG) and PAKACHERE (for
	AGYW, FSW, and PFSW). We are also partnering
	with six KP-led and KP-competent CSOs as sub-
	partners to our primary recipients to provide direct service delivery and address structural barriers.
	Additionally, PEPFAR Malawi is funding one local
	organization (MANASO) for community-led
	monitoring, and this organization is working
	collaboratively with a network of civil society
	organizations to support community activities.

14) Evidence of partner government assuming greater responsibility of the HIV response including demonstrable evidence of year after year increased resources expended	
15) Monitoring and reporting of morbidity and mortality outcomes including infectious and non-infectious morbidity.	
16) Scale-up of case surveillance and unique identifiers for patients across all sites.	A key component to ensuring real-time access to individual level data for client centered program management is the Central Data Repository (CDR). By consolidating patient-level databases across the country, greater insight into program effectiveness can be achieved. For example, de-duplication can identify patients classified as defaulters but who have silently transferred to another facility.
	In previous years, CBS has been scaled up across districts. Now CBS includes all 728 sites across Malawi. While improving data quality and system efficiency will always be important, to scale-up data access and use, NOFO focused on data use has been published for COP22.

APPENDIX E – Assessing Progress towards Sustainable Control of the HIV/AIDS Epidemic

1. Misalignments between Investments and Outcomes





Responsibility Matrix ratings will also be presented to show the degree of functional responsibility that each major funder (i.e., Partner Government, Private Sector, PEPFAR, or Global Fund) has for each investment area, and where there may be opportunities to transition to greater domestic responsibility.

Figure E.1.2. Percer	nt Primary Respo	nsibility Ratings from	n Responsibility Matrix
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Health Systems Area	Host Country	PEPFAR	Global Fund	
HMIS	67%	48%	11%	
Laboratory Systems	74%	44%	22%	
Supply Chain	63%	37%	33%	
HRH Systems	89%	15%	0%	
Policy	93%	7%	4%	
PFM	74%	30%	19%	
Other Systems Support	74%	11%	4%	
Health Workforce	26%	0%	0%	





Figure E.1.4. Remuneration by Site/Above Site & Service Delivery/Non-Service Delivery



3. Engagement with Partner Country Governments in COP22 to Ensure Sustainability of Core Elements of the HIV Response

As part of the COP 22 planning, PEPFAR Malawi held multiple stakeholder consultations including with MoH, District Health Offices, CSOs and IPs. These consultations involved a review of MPHIA findings and routine program data to assess status of the HIV/AIDS epidemic in Malawi and identify priorities for COP22. As per MPHIA 2020-2021, Malawi has achieved HIV Epidemic Control. In COP22, PEPFAR Malawi will work with GoM and other stakeholders on specific approaches to address remaining 95-95-95 gaps and build stronger health systems that will help sustain epidemic control. Key areas for ongoing consultation with the government include:

- HRH transition plans: HRH is one of PEPFAR Malawi's primary investments for direct service delivery in Malawi. As of the end of COP20, there were 13,606 PEPFAR-supported healthcare workers across the 28 districts of Malawi. In COP21 PEPFAR has worked with the GoM to characterize the private sector and public sector health workers to understand the types of HRH available at national level. Furthermore, in COP21 using Workload Indicator Staffing Needs (WISN) PEPFAR in collaboration with MoH will quantify HRH for HIV program needs. Building upon COP21 work, in COP22, the PEPFAR Malawi team will work with various offices of GoM, including MoH, DHA, Department of Human Resource Management and Development (DHRMD), Ministry of Gender and the Ministry of Finance on a multi-year HRH plan that will transition these staff to GoM management and payroll.
- Increasing the role of the government in direct implementation of PEPFAR programs: PEPFAR Malawi is actively working on SGAC's "localization" agenda. As of COP21, xx% of PEPFAR program funds are being directly managed by local partners. This includes central and district level government to government (G2G) mechanisms. In COP22, two G2G mechanisms will undergo a mid-term review. Findings from these reviews will inform future G2G scale up decisions as well as G2G planning, implementation, and monitoring strategies.
- Strengthening Electronic Medical Record (EMR) systems: PEPFAR-supported EMR systems are playing a key role in clinical service delivery as well as program monitoring and evaluation. In COP22, PEPFAR Malawi will continue to invest in EMR systems. With the aim of transitioning some of the EMR responsibilities to the GOM by COP25, in COP22, then we will work with key stakeholders including DHA and Digital Health Department to develop a multi-year transition plan.
- Development of HIV Financing Strategy: Malawi's national HIV/AIDS response relies heavily on donor funding (>90% of HIV resources). Expanding the resource base including increasing domestic funding for HIV is critical for sustained epidemic control. In COP22, PEPFAR Malawi will engage with relevant government offices (Ministry of Health, Ministry of Finance) and other stakeholders to develop an HIV financing strategy that will be part of the overall Malawi Health Financing Strategy. The strategy will recommend necessary reforms in health financing, track routing expenditures aligned with GoM priorities and identify areas to increase funding that can help achieve health sector goals. The strategy will help increase understanding of financing situation for HIV/AIDS, challenges and bottlenecks in the system and what resources are available.
- **KP Size estimation**: Key Population prevention and treatment services are key components of PEPFAR Malawi's support to the national HIV response. In COP22, PEPFAR Malawi will work with GoM, CSOs and other stakeholders to develop a protocol for a national KP size estimation exercise in COP22 targeting all types of KPs. This exercise will provide valuable information that guides the scale, type and focus of the national KP program with the actual size estimation study conducted in COP23.

APPENDIX F - List of Acronyms and definitions

A E- Adverse Events ABYM - Adolescent Boys and Young Men ADR - Adverse drug reactions AGYW - Adolescent Girls and Young Women. AHD - Acute HIV Disease AIDS - Acquired Immune Deficiency Syndrome **AIT- Active Index Testing** ALHIV - Adolescent Living with HIV ANC - Antenatal Care **ART - Antiretroviral Treatment** ARV - Antiretroviral C/ALHIV - Children and Adolescent Living with HIV CAP - Corrective Action Plan **CBO** - Community Based Organization **CDC** - Center for Disease Control **DR** - Central Data Repository CIRA - Cycle of Interruption and return to ART CLHIV - Children Living with HIV CLM - Community Led Monitoring CMST - Central Medical Store Trust COP - Country Operational Plan. COVID - 9 – Coronavirus Disease 2019 **CQI - Continuous Quality Improvement** Crag - Cryptococcal Antigen **CRVS - Civil Registration and Vital Statistics** CSO - Civil Society Organization DHA - Department of HIV and AIDS DNA - Deoxyribonucleic Acid **DNO - Diagnostic Network Optimization** DQA - Data Quality Assessment DREAMS- Determined, Resilient, Empowered, AIDSfree, Mentored, Safe DTG - Dolutegravir EBRS - Electronic Birth Registration Systems EDRS - Electronic Death Registration Systems EGPAF - Elizabeth Glaser Pediatric AIDS Foundation **EID - Early Infant Diagnosis EMC - Electronic Master Card EMR - Electronic Medical Record** EMTCT - Elimination of Mother to Child Transmission **EPI - Expanded Program on Immunization** EQA - External Quality Assessment **FP** - Family Planning FSW - female Sex Workers FY22- Financial Year 2022 G2G - Government to Government **GBV-** Gender- Based Violence

MOU - Memorandum of Understanding MPHIA - Malawi Population Based Impact Assessment. MSM - Men who have sex with men NAC - National AIDS Commission NFM - New Funding Model NHRL - National HIV Reference Laboratory NLIMS- National Laboratory Information Management Systems NOFO - Notice of Funding Opportunity NSP - National Strategic Plan. **OPD** - Outpatient Department **OU - Operating Unit** OVC - Orphans and Vulnerable Children PALMS - Prevention Adaptive Learning and Management System **PBFW - Pregnant and Breastfeeding Women** pDTG - Pediatric dolutegravir **PEPFAR - Presidential Emergency Plan for AIDS** Relief. PITC - Provider-initiated Testing and Counselling PLHIV - People Living with HIV PMTCT - Prevention of Mother to Child HIV Transmission **POART - PEPFAR Oversight and Accountability Response Team** POC - Point of Care **POCT-** Point of Care Testing **PPE-** Personal Protective Equipment. PrEP - Pre-Exposure Prophylaxis Q1- Quarter 1 QA - Quality Assurance QI - Quality Improvement **RHD-** Reproductive Health Department **RM** - Responsibility Matrix **ROP** - Regional Operation Plan **RTCQI - Rapid Test Continuous Quality** Improvement S/GAC - Office of the U.S Global AIDS Coordinator and Health Diplomacy (Bereau in the State Dept) SDS - Strategic Direction Summary SEED - Secondary Education Expansion for Development SHRH - Sexual Reproductive Health and Rights SID - Sustainability Index and Dashboard

GF - Global Fund GFATM - The Global Fund to Fight AIDS, Tuberculosis and Malaria. **GNI - Gross National Income** GOM - Government of Malawi. HAD - HIV Diagnostic Assistants HBCU - Historically Black Colleges and Universities. HCW - Health Care Workers Hep B - Hepatitis B HIS - Health Information System HIV - Human Immunodeficiency Virus **HIVST - HIV Self Testing** HMIS- Health Management Information Systems (HMIS). **HPV - Human Papilloma Virus** HRH - Human Resources for Health HSSP - Health Sector Strategic Plan **HTS- HIV Testing Services** ICT- Information and Communication Technology. **IIT** - Interruption in treatment **IM** - Implementing Mechanism **KP** - Key Population LAM - Lipoarabinomannan LIMS - Logistics Information Management System MANASO - Malawi Network of AIDS Service Organizations MCCoD - Medical Certification of Cause of Death MCH - Maternal Child Health MER - Monitoring, Evaluation and Reporting MMD - Multi-Month Dispensing MoH - Ministry of Health

SIMS - Site Improvement through monitoring system SNS - Social Network Testing Strategy SNU - Sub-national Units SOGIE - Sexual Orientation, gender identify and expression SPI POCT - Step Wise Process for improving Point of Care testing. SRH - Sexual and Reproductive Health **STI - Sexually Transmitted Infections** T=T – Tizirombo Tochepa = Thanzi (U=U-Undetectable Viral Load = Untransmittable) **TAT-** Turnaround Time **TB-**Tuberculosis TOR - Terms of Reference **TPT- Tb Preventive Treatment** TX Curr - Treatment Current UCSF - University of California and San Francisco **UIC - Unique Identifier Code UNAIDS** - Joint United Nations Programme on **HIV/AIDS** USAID - U.S Agency for International Development USAID - U.S. Agency for International Development VL - Viral load VLC - Viral Load Coverage VLS - Viral Load Suppression VMMC - Voluntary Medical Male Circumcision VSL - Village Saving Loan Groups WHO - World Health Organization