Eswatini

Country Operational Plan (COP) 2021

Strategic Direction Summary

May 03, 2021

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Acronym and Word List

ADR	Adverse Drug Reactions
AE	Adverse Event
AG	Adolescent Girls
AGYW	Adolescent Girls and Young Women
ALHIV	Adolescents Living with HIV
ANC	Antenatal Clinic
ARV	Antiretroviral
ART	Antiretroviral Therapy
C/ALHIV	Children and Adolescents Living with HIV
CAGs	Community Adherence Groups
CANGO	Coordinating Assembly of Non-Governmental Organizations
CBS	Case-based surveillance
CCD	Community Commodity Distribution
CCM	Country Coordinating Mechanism
CMAC	Conciliation, Mediation and Arbitration Commission
CMIS	Client Management Information System
CMS	Central Medical Stores

CoAg	Cooperative Agreement
COVID-19	Coronavirus Disease 2019
CQI	Continuous Quality Improvement
CS	Civil Society
CSO	Civil Society Organization
DBS	Dried Blood Spot
DQA	Data Quality Assessment
DMPPT	Decision Makers Program Planning Toolkit
DREAMS	Determined, Resilient, Empowered, AIDSFree, Mentored, and Safe
DSD	Differentiated Service Delivery
DTG	Dolutegravir
EDCU	Epidemiology and Disease Control Unit
EHLS	Eswatini Health Laboratory Services
EID	Early Infant Diagnosis
EQA	External Quality Assessment
ENAP	Eswatini National AIDS Program
EU	European Union
FCI	Faith and Community Initiative
FDC	Fixed dose combination

FP	Family Planning
FSW	Female Sex Workers
GBV	Gender Based Violence
GKoE	Government of the Kingdom of Eswatini
GF	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GDP	Gross Domestic Product
GNI	Gross National Income
HCWs	Health Care Workers
1HP	Ultra-short course regimen for daily isoniazid and rifapentine for 28 days
3HP	A short-course TPT regimen that combines two antibiotics active against TB i.e., Isoniazid (INH) and Rifapentine (RPT)
HR	Human Resources
HRH	Human Resources for Health
HSS	Health Systems Strengthening
HTC	HIV Testing and Counseling
HTS	HIV Testing Services
HIVST	HIV self-testing
ICT	Index Case Testing
IEC	Information, Education and Communication

IM	Implementing Mechanism
Inkhundla	Government Administrative Unit under Region
INSTI	Integrase strand transfer inhibitor (another group of ARVs)
IP	PEPFAR Implementing Partner
KP	Key Population
KPLHIV	Key Populations Living with HIV
LES	Locally Employed Staff
LGBTIQ	Lesbian, Gay, Bisexual, Transgender/Transsexual, Intersex, Queer
LPV/r	Lopinavir with Ritonavir Boosting (a group of ARVs called Protease Inhibitors)
LIS	Laboratory Information System
MBP	Mother-Baby-Pair
MCH	Maternal and Child Health
M&E	Monitoring and Evaluation
MER	Monitoring, Evaluation and Reporting
MEPD	Ministry of Economic Planning and Development
MOPS	Ministry of Public Service
MICS	Multi Indicator Cluster Survey
MNCH	Maternal Newborn and Child Health

MOET	Ministry of Education and Training
MOF	Ministry of Finance
MOH	Ministry of Health
MSF	Médecins Sans Frontières
MSM	Men who have sex with men
MTAD	Ministry of Tinkhundla and Administration
MTC	Matsapha Town Council
NACS	Nutritional Assessment, Counseling, Support
NARTIS	Nurse-led ART initiation in Swaziland
NERCHA	National Emergency Response Council on HIV and AIDS
NCP	Neighborhood Care Points
NNRTI	Non-Nucleoside Reverse Transcriptase Inhibitors (a group of ARVs)
NTCP	National Tuberculosis Control Program
ODA	Overseas Development Assistance
OI	Opportunistic Infections
OVC	Orphans and Vulnerable Children
PCV	Peace Corps Volunteer
PEP	Post Exposure Prophylaxis
PEPFAR/E	President's Emergency Plan for AIDS Relief/Eswatini

PFSCM/SCMS	Partnership for Supply Chain Management/Supply Chain Management System
PHIA	Population-based HIV Impact Assessment
PHU	Public Health Unit
PITC	Provider Initiated Testing and Counseling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
POART	PEPFAR Oversight and Accountability Response Teams
POC	Point of Care
PPs	Priority Populations
PPP	Public Private Partnership
PrEP	Pre-exposure Prophylaxis
QA	Quality Assurance
QI	Quality Improvement
QMS	Quality Management System
RA	Regional Administrator
RASTA	Region Age Sex Testing/Treatment Attribution
RITA	Recent Infection Testing Algorithm
RTK	Rapid Test Kit

SGBV	Sexual and Gender Based Violence
SHIMS	Swaziland HIV Incidence Measurement Survey
SI	Strategic Information
SID	Sustainability Index Dashboard
SIMS	Site Improvement through Monitoring System
SLMTA	Strengthening Laboratory Management Towards Accreditation
SOP	Standard Operating Procedures
SNU	Sub-National Unit
SRH	Sexual Reproductive Health
SRHU	Sexual Reproductive Health Unit
SWABCHA	Swaziland Business Coalition on HIV/AIDS
SWAMMIWA	Swaziland Migrant Mineworkers Association
TA	Technical Assistance
TB	Tuberculosis
Tinkhundla	Third level of Governance (sub-regional administrative units)
T&S	Test and Start
TLD	Tenofovir/Lamivudine/Dolutegravir
TPT	TB Preventive Therapy
TSP	Technical Support for PEPFAR Programs

TWG	Technical Working Groups
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
VCT	Voluntary Counselling and Testing
VIA	Visual Inspection with Acetic acid
VL	Viral Load
VMMC	Voluntary Medical Male Circumcision
WMIS	Warehouse Management Information System

1.0 Goal Statement

Despite facing the world's highest overall HIV prevalence, Eswatini stands on the brink of reaching epidemic control. With the UNAIDS declaration of Eswatini as one of only two countries to achieve the ambitious 95-95-95 fast track targets, strategic programmatic shifts are driving the HIV program towards sustained control of the epidemic. As the testing and treatment gaps close across the board, unmet need is no longer restricted to any one age, sex or region – all people living with HIV (PLHIV) must receive services that support their ability to stay on treatment and be virally suppressed. Addressing the persistently high HIV incidence, prevention among populations who are most at risk of acquiring HIV (as determined through recency testing), continues to be prioritized and expanded. The overarching goal of the PEPFAR/Eswatini (PEPFAR/E) investments remains to support the Government of the Kingdom of Eswatini (GKoE) to achieve and sustain epidemic control, provide high-quality client-centered HIV services to PLHIV, and continue to rapidly reduce the number of new infections. The program activities are guided by and aligned to Eswatini's National Multi-Sectoral Strategic Framework for HIV and AIDS 2018-2022. Strengthening crucial systems that support information systems, supply chain, infection surveillance, and laboratory capacity also remain PEPFAR priorities in COP21.

The COVID-19 pandemic impacted HIV programs worldwide, and Eswatini was not spared. Lockdowns, curfews, lengthy school closures and restrictions of movement were in place to varying degrees from March 2020 and into 2021, to mitigate community spread. A devastating second wave hit the country between December 2020 and February 2021, pushing health system infrastructure, commodities and staffing beyond to its limits. Community programming for HIV prevention and treatment support was particularly affected by COVID-19, with many services paused. Elective procedures, including voluntary medical male circumcision (VMMC), cervical cancer services as well as community HIV testing, were at times paused or slowed during COP19 and COP20 implementation. Many patients had difficulty accessing facility-based services. Where possible, community services were altered to adhere to restrictions, reduce risk and deliver services. The Ministry of Health (MOH), with support from PEPFAR and Médecins Sans Frontières (MSF), implemented Community Commodity Delivery (CCD) to prevent treatment default due to challenges or risks associated with facility presentation. Major research studies planned for COP19 and COP20 implementation were delayed, including the Population-based HIV Impact Assessment (PHIA), Violence Against Children Study (VACS) and HPV Vaccine study.

COP19 and early COP20 data show that viral load suppression remains high, although there are indications of missed appointments. A reduction in prevention services, coupled with economic pressures and a year out of school for many children, is expected to increase vulnerability to HIV. COP21 will be a pivotal year to both fully implement the programs as planned, make up for the COVID-19 impacts and keep Eswatini on track to sustain epidemic control.

COP20 focused on accelerating the reduction of new infections in adolescent girls and young women and other at-risk individuals with harmonized interventions through DREAMS, pre-exposure prophylaxis (PrEP), sexually transmitted infection (STI) screening and recency testing, as well as focused prevention activities among men through VMMC and client-centered services.

COP21 will continue with the same primary focus as COP20, while simultaneously adapting and delivering programming in the context of the COVID-19 pandemic. The programming will eliminate the divide between community and facility, providing seamless services to maintain people on uninterrupted treatment, and reduce co-morbidities and mortality through client-focused service provision. As the country reaches near-universal ART coverage, case identification will be predominantly through index testing and through highly focused testing such as risk-based testing in outpatient facilities, in tuberculosis (TB) and prevention of mother-to-child transmission (PMTCT) services and through provider-initiated testing.

As we seek to strengthen our focus on continuity of treatment among all subpopulations, programming will continue to focus on targeted and population-focused strategies, such as differentiated service delivery approaches for reliable and convenient antiretroviral therapy (ART) refills for subpopulations, six-month scripting and dispensing, key communication interventions, and the effective use of community health cadres. Tackling two of the most significant causes of mortality amongst PLHIV in Eswatini, PEPFAR will continue to support the full implementation of TB preventative therapy, cervical cancer screening and treatment for PLHIV.

The DREAMS package will focus on preventing HIV for adolescent girls and young women (AGYW) ages 15-29 years, having expanded in COP20 to reach seven additional tinkhundla (sub-regional administrative units). Local government structures and traditional and faith leaders' efforts to reduce HIV incidence and stigma as well as to ensure those with HIV are on treatment will continue. VMMC services will be delivered for those aged 15 and up only. During COP21 the Eswatini Population-based HIV Impact Assessment Survey commonly referred to as the Swaziland HIV Incidence Measurement Survey (SHIMS3) will be completed. It will provide important data on the status of the epidemic at a population level and strengthen the program's ability to adapt a targeted approach. Recency testing will be implemented fully across the country, which, in combination with investments in the national electronic medical record system, will enable case-based surveillance capable of defining geographic hotspots as well as testing entry points that can guide more targeted case identification. PEPFAR/E support to the government's laboratory optimization action plan includes the scale-up of improved laboratory results communication systems.

PEPFAR/E will continue to monitor implementing partners' performance and immediately address performance issues. Program implementation will be monitored through quarterly performance reviews and regular SIMS visits. Partners will be required to report their monthly outlays against their approved COP21 levels, achievements, and targets. Sustainability is of increasing importance as Eswatini edges closer to epidemic control.

PEPFAR/E will continue to work with GKoE to address resource mobilization, human resources for health (HRH) and lab optimization, commodity security, and robust data utilization systems. COP21 shifts also include increased funding to indigenous organizations and the continued implementation of a civil society-led community feedback platform to monitor and improve HIV service delivery. Civil society (CS) and population-specific input into PEPFAR programming remain critical to appropriately tailor responsive interventions and messages to achieve results. The work with communities of faith, traditional leaders and faith-based organizations (FBOs) will leverage the unique opportunities offered by these groups' vast networks to support HIV programming.

Continued collaboration with the Global Fund and UNAIDS, through the coordination of the GKoE, will ensure that the full range of PEPFAR's investments are maximized.

2.0 Epidemic, Response, and Program Context

2.1 Summary statistics, disease burden, and country profile

Population

The Kingdom of Eswatini is one of Africa's geographically smallest countries, with just 17,300 square kilometers of land, landlocked between neighboring South Africa and Mozambique. In 2017, the country's National Population and Housing Census had counted 1,093,028 people in the population; 36% are <15 years old and 56% are <25 years old, indicating a substantial youth bulge. The population experienced an annual growth rate of 0.7% (Hhohho 1.3%; Manzini 1.1%; Shiselweni -0.2%, and Lubombo 0.2%), between 2010 and 2017, with 76% of the population living in rural areas. Manzini has the highest population (355,945), followed by Hhohho (320,651), Lubombo (212,531), and Shiselweni (204,111).

A high ratio of the male population is seen in two tinkhundla in Lubombo - Mhlume inkhundla (143 males/100 females) and Nkilongo inkhundla (130 males/100 females), and the ratio is consistently higher along the western border to South Africa in Hhohho region. These areas are locations of male-dominated economic activities such as sugarcane and wood pulp plantations that have programmatic implications to find and link men to treatment or prevention. Additional programmatic considerations arise from Eswatini having substantial crossings through both formal and informal borders, major trucking routes east to west, and to the south with well-established hot spots.

The higher population density areas are the Manzini-Mbabane corridor, connecting the economic and national capitals, Manzini in the Manzini region and Mbabane in the Hhohho region. A small geographic area, porous borders and high unemployment rates all contribute to the increasing mobility of the population, both within and across borders. Population mobility increases the challenges in the delivery of ongoing health care services and in measuring progress in the epidemic.

Economy

Eswatini is classified as a lower middle-income country, however income inequality is high, with a stagnant Gini coefficient estimated at 0.49 between 2010 and 2017. Economic challenges persist with 58.9% of the population living below the national poverty line. Use of international poverty lines also supports the persistence of poverty: the $1.90/person/day (2011 purchasing power parity (PPP)) international poverty rate has hovered around 30% since 2016, estimated at 29.7% in 2020. This rises to 52.7% when the 2011 PPP $3.20 per person per day poverty line for lower middle-income countries is used (World Bank, 2021). The COVID19 pandemic threatens to perpetuate the historically high poverty levels. Projections indicate a stagnation in poverty rates in the medium term due to reduction in employment incomes and remittances because of the COVID19 pandemic. The 2021 GDP growth projections remain uncertain at 2.7%, recovering from a 2.4% COVID-19 induced recession in 2020 (Eswatini Government Budget Speech, 2021). Economic recovery remains

uncertain and depends on the evolution of the COVID-19 pandemic, the rollout of vaccines and the pace of recovery of the global and regional economies particularly that of South Africa and the Southern Africa Customs Union (SACU). In response to the impact of the pandemic the government launched a private sector led Post-COVID19 Economic Recovery Plan in August 2020.

HIV epidemic

The average life expectancy in Eswatini declined sharply from 60 years in 1991, reaching a low of 46 years in 2005 (UNDP 2017), due to the intensity of the HIV and TB epidemics. The country mounted a forceful response to HIV, including availing life-saving ART and this has seen the life expectancy increase steadily to 57.7 years in 2018, nearly returning to the pre-1991 level. The lingering effects of the epidemic's past high mortality remain; about 20% of children aged 0-17 years are orphaned.

The Swaziland HIV Incidence Measurement Survey (SHIMS 2) in 2016-17 estimated HIV prevalence among adults aged 15 and older was 27% in 2017, the highest of any nation. The results showed that HIV disproportionately affects females, and infection rates are higher for them than their male counterparts until age 45. HIV prevalence was 13.9% among females aged 15-24 and 4.1% among males of the same age group. Among those aged 25 years and older, HIV prevalence was 41.2% among females and 29.9% among males.

The most recent national-level statistics and projections for the HIV epidemic in Eswatini (Table 2.1.1) show a growing youth and young adult population, and an epidemic that heavily affects younger women compared to their male peers. Additional statistics show high use of antenatal care (ANC) clinics among pregnant women, a disproportionate burden of TB cases among PLHIV (66% of all confirmed cases) and a male circumcision coverage of 46% in males age 15+ as of the end of COP19.

Table 2.1.1. Host Country Government Results

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	Total		**<15**				**15-24**				**25+**				***Source, Year***
			Female		**Male**		**Female**		**Male**		**Female**		**Male**		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	*Year*
Total Population	1,143,126	100%	209,682	18%	212,471	19%	117,162	10%	120,755	*11%*	250,591	22%	232,465	20%	A. 2021
HIV Prevalence (%)		27%		2.6		3		13.9		4.1		41.2		29.9	B. 2017
AIDS Deaths (per year)	2,123		69		72		178		119		880		841		A. 2021
# PLHIV	220,144		5,042		5,131		15,190		6,421		120,308		68,052		A. 2021
Incidence Rate (Yr.)		1.36%						1.87		0.79		1.84		1.5	B. 2017
New Infections (Yr.)	4,443														A. 2021

Annual births	27,936	100%														F. 2017
% of Pregnant Women with at least one ANC visit	27,517	98.5%														E. 2014
Pregnant women needing ARVs	8,853	32%														A. 2021
Orphans (maternal, paternal, double)	115,6221															A. 2021
Notified TB cases (Yr.)	2,864															G. 2019
% of TB cases that are HIV infected	1,890	66%														G. 2019
% of Males Circumcised	161,325	46%							66,610	55%			94,715	41%		D. 2020
Estimated Population Size of MSM*	5,754	100%														C. 2015
MSM HIV Prevalence		12%														J. 2021

Estimated Population Size of FSW	14,581	100%													C. 2015
FSW HIV Prevalence		58.8%													J. 2021
Estimated Population Size of PWID	1,279	100%													H. 2018
PWID HIV Prevalence															I. N/A
Estimated Size of TG	119	100%													H. 2018
	**If presenting size estimate data would compromise the safety of this population, please do not enter it in this table. Cite sources*														

A. Draft Swaziland Spectrum File (2021)	E. Swaziland Multiple Indicator Cluster Survey 2014
B: Swaziland HIV Incidence Measurement Survey 2, 2016-17 For age 25+, incidence applied is for the age 15+ from SHIMS.	F. CIA Fact Book, Swaziland National Population and Housing Census 2017
C. Characterizing the HIV prevention and treatment needs among key populations, including men who have sex with men and female sex workers in Swaziland 2015 June	G. PEPFAR program data and WHO TB estimates. The age and sex disaggregate estimates are not available
	H. "Validating and Estimating the number of Key Population Individuals at the Hot Spot Level in Eswatini", 2018. FHI360/Linkages

D. Decision-Maker's Program Planning Tool 2 (DMPPT2), end of FY20, (the total absolute number and percentage is for 15+ year old males). Percent is calculated as the coverage within the specific age group.	I. Not Available
	J. IBBS 2021

It is important to note that the above prevalence rate (based on the Swaziland HIV Incidence Measurement Survey 2, 2016-2017) masks the reality of HIV infection among men. While fewer men are HIV positive as compared to women in all +15-year age categories (e.g., Three times more women are PLHIV than men in the 15–24-year age category), HIV deaths are not so different between men and women (119 AIDS-related deaths among men compared with 178 deaths among women), which indicates the higher mortality among male PLHIV. This means that HIV treatment is not reaching the men as effectively as women.

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

Table 2.1.2 95-95-95 cascade: HIV Diagnosis, Treatment and Viral Suppression*										
Epidemiologic Data					**HIV Treatment and Viral Suppression**			**HIV Testing and Linkage to ART Within the Last Year**		
	Total Population Size Estimate (#)	**HIV Prevalence (%)**	**Estimated Total PLHIV (#)**	**PLHIV diagnosed (#)**	**On ART (#)**	**Diagnosed HIV Positive (#)**	**Viral Suppression (%)**	**Tested for HIV (#)**		**Initiated on ART (#)**
Total population	1,143,126	27	220,144	207,290	206,924	94%	96%	293,911	17,520	15,293
Population <15 years	422,153	3	10,173	8,903	9,067	89%	91%	40,443	595	605
Men 15-24 years	120,755	4.1	6,421	5,602	4,519	70%	90%	23,035	653	478
Men 25+ years	232,465	29.9	68,052	65,080	64,368	95%	97%	51,734	5,529	5,009
Women 15-24 years	117,162	14	15,190	13,253	14,747	97%	92%	85,202	3,624	2,827
Women 25+ years	250,591	41.2	120,308	114,452	114,223	95%	97%	87,439	6,358	6,372

MSM	5,754	17.7%	1,018							
FSW	14,581	70.3%	10,250							
PWID	1,279									
TG	119									

Sources: Epidemiological data: COP21 HIV Estimates, Naomi model 2021; Treatment and testing data: PEPFAR program data (Q1, FY 2021 for ART and Viral Load & Q4 2020 for Testing and ART initiations); Key Population data: Validating and Estimating the Number of Key Population Individual at the Hot Spot Level in Eswatini", 2018, Characterizing the HIV Prevention and Treatment Needs among Key Populations, including Men who Have Sex with Men and Female Sex Workers in Swaziland: From Evidence to Action, June 2015.

Note: The ART coverage is unconditional and VL coverage is conditional coverage. Individuals reported with unknown age were captured in the aggregate totals, but not included in the age disaggregated data for HIV testing and linkage.

Eswatini continues to make progress against closing the coverage gaps in all age and sex bands. As the coverage gap in Eswatini becomes increasingly narrow, estimating a precise gap at detailed age and sex levels becomes more challenging. Nonetheless, in utilizing the best available data, the ART coverage data shows that a treatment gap persists among children and young men. Total ART coverage by the first quarter of COP20 was 94%, with women continuing to have higher ART coverage than their male counterparts.

Following the initial sharp increase in the early 1990s, new infections have declined. Total deaths for PLHIV have also declined (Figure 2.1.1), although according to Spectrum models more recent increases in mortality are due to non-AIDS related deaths as the population living with HIV ages. The modeled data show a continued decline in new infections, but at a decreased rate suggesting a need for continued robust programming to identify and address new infections including the scale-up of PrEP. COP21 utilizes Naomi model projections for PLHIV, which estimates 220,144 PLHIV by September 2021. Additional projections from Spectrum for 2021 further estimates 4,100 deaths among PLHIV (all causes), and 4,440 new infections.

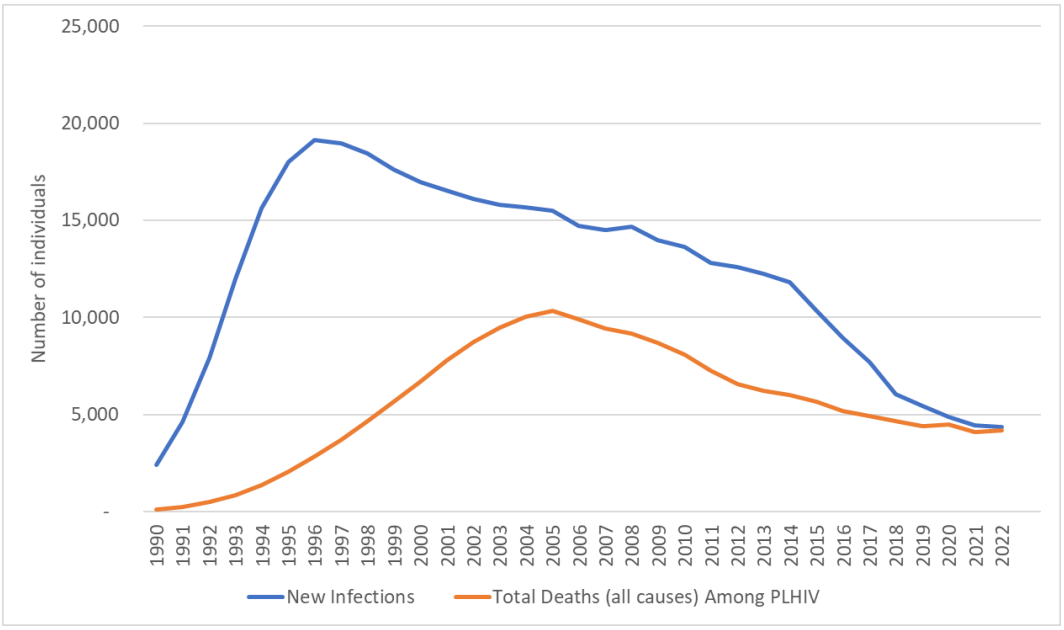


Figure 2.1.1 Updated Trend of New Infections and All-Cause Mortality among PLHIV
Source: HIV Estimates, Spectrum 2021

HIV Program Response

Figure 2.1.2 below shows the trend over time of the national number of individuals currently on treatment compared to the total subset that are PEPFAR-supported.

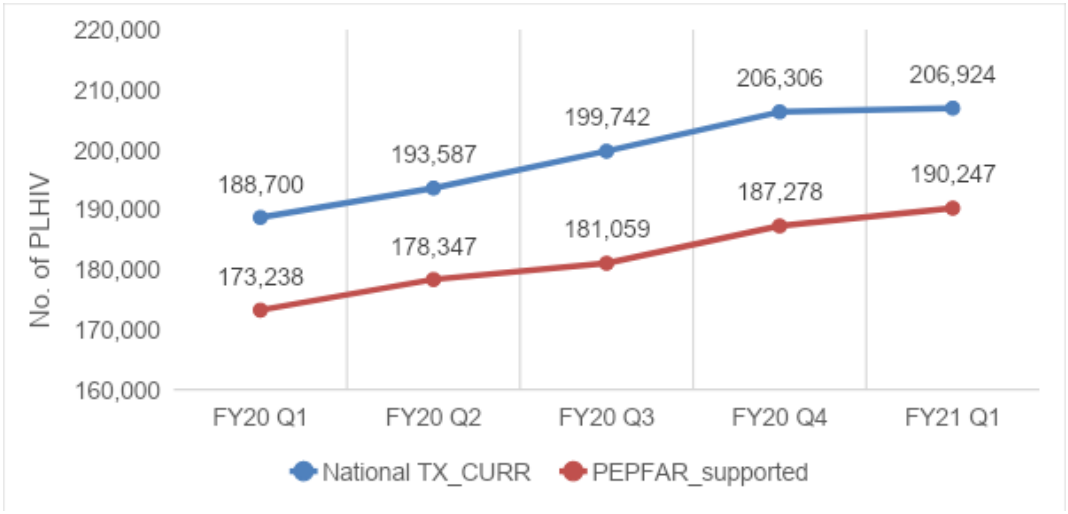


Figure 2.1.2 Updated National and PEPFAR Trend for Individuals Currently on Treatment
Source: PEPFAR program data, 2021

There is a continued need to enhance our efforts to ensure the continuity of treatment for patients on ART. Significant interruptions in treatment occur within the first year of treatment, particularly among

females 20-29 and males 25-39 years of age, and deaths are a big contributing factor to patient loss within the first six months, especially among men (Figure 2.1.3).

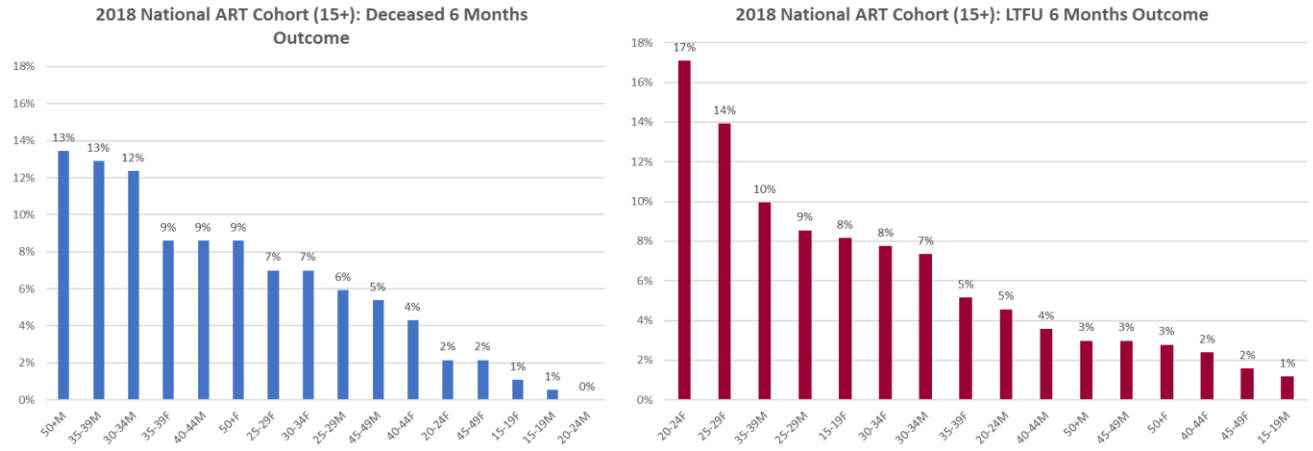


Figure 2.1.3 Clients outcomes 6 months after initiation on ART

Source: Source: 2018 National ART Cohort analysis, 2020

The PLHIV who are on treatment have increased across all age bands with significant growth in early infant diagnosis (EID) and treatment for both sexes. Focused growth in the treatment cohort is evident for targeted subpopulations where evidence suggests treatment gaps persist and new infections are occurring, this being primarily in females 15-29 and males 20-34.

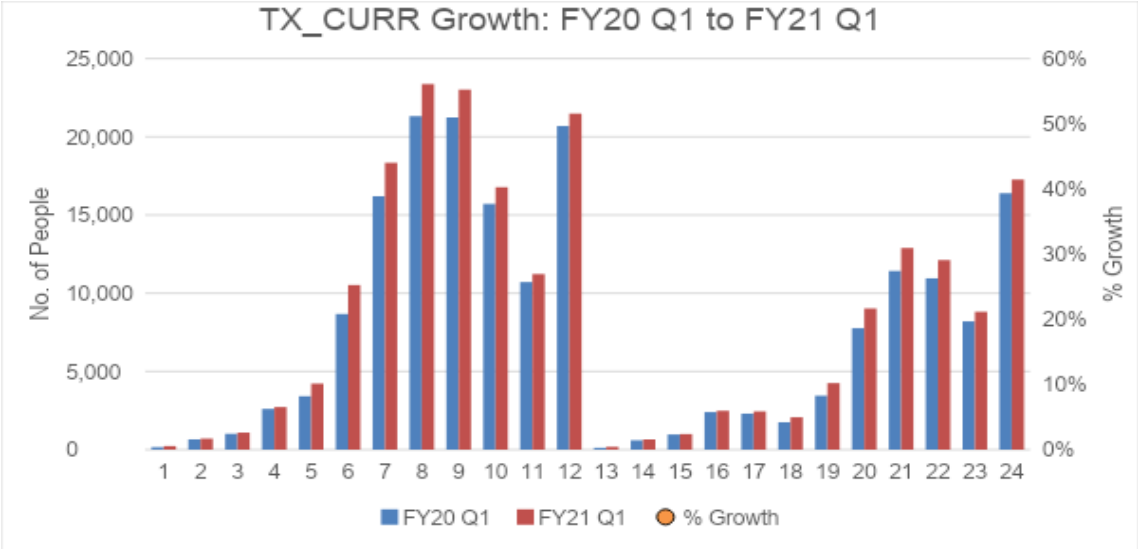


Figure 2.1.4 Net change in HIV treatment by sex and age bands 2020 Q1 to 2021 Q1

Data source: National program data FY20 Q1 and FY21

2.2 New Activities and Areas of Focus for COP21

Client-centered continuity of treatment: COP21 builds on COP20 activities and focuses on improving continuity of treatment and viral load suppression (VLS) for males < 40 years, children, adolescents, and AGYW by providing population-specific and client-centered services. PEPFAR continues work in COP20 to strengthen patient preparation for ART, to extend psychosocial support through the first six months of treatment to address early disengagement from care, to provide on-going psychosocial support to identify and address barriers to treatment, and to continue to provide advanced HIV care to reduce mortality among older men. This work will continue through COP21 and will be refined through data driven processes to ensure that the country program continues to be responsive to emerging issues.

Use of HIV recency data: Routine surveillance data from the recency testing program will be fully utilized to map clusters (especially AGYW clusters) for targeted testing and prioritize index testing for all recent cases.

Interrupting HIV transmission with pre-exposure prophylaxis (PrEP): PrEP will be scaled up, significantly targeting AGYW, pregnant and breastfeeding women, members of key populations (KPs) and men. PEPFAR will support the national PrEP program with demand creation at facility and community level, mentoring of health workers at public health facilities, and direct provision to AGYW through DREAMS on Wheels mobile clinics and adolescent friendly clinics.

STI treatment for AGYW: With DREAMS resources, PEPFAR/E will introduce diagnostic sexually transmitted infection (STI) screening and treatment for AGYW and their partners. STI screening and treatment for DREAMS AGYW will coincide with PrEP counseling and initiation. In COP21 we plan to continue to screen sexually active AGYW with GeneXpert for Neisseria Gonorrhea, Chlamydia Trachomatis and Trichomonas Vaginalis.

2.3 Investment Profile

Despite Eswatini's classification as a lower-middle-income country, economic indicators such as a weak business climate and low foreign investment reflect a low-income country status that has significant income disparity (Gini coefficient of 0.49) and substantial poverty, with 60.4% of Eswatini's population living below the lower-middle-income country poverty line ($3.20).[1] Due to the ongoing fiscal crisis, greatly exacerbated by COVID19, economic growth continues to slow down. Revised figures indicate a marginal GDP growth of 1.3% in 2019 compared to 1.9% in 2017[2].A tax to GDP ratio of 15.5% and a high total non-tax revenue of 11.2% of GDP[3]. illustrate both challenges faced in domestic revenue generation and financial dependency on the Southern African Customs Union (SACU) revenue-sharing agreement. The dual burden of high HIV and TB prevalence and number of OVC remain major health and social concerns, while non-communicable diseases also play a significant role in premature death, all of which have a substantial impact on the workforce and economy, as well as significant public expenditure.

[1] World Bank, 2018
[2] Central Bank of Eswatini, 2019
[3] Revenue Statistics in Africa 2018 oe.cd/revenue-statistics-in-Africa

The GKoE delivers most of the direct HIV services in the country and funds ARVs for adults, while donors support critical areas in HIV/TB care, treatment, and prevention, including direct service delivery, technical assistance (TA), commodities, and human resources (HR). Above site support for government program management and ownership, supply chain, laboratory, surveillance and Client Management Information System (CMIS) also continue to require donor support.

Eswatini received approximately US $278,500,000 in Overseas Development Assistance in FY 2020[4]. The health sector has been the largest beneficiary of external assistance (35.1%); the HIV/AIDS and TB epidemics have received a significant response from global development partners and donors. Despite economic challenges, GKoE remains committed to protecting the gains that have been made in the response against HIV and has budgeted US$18.94 million for the procurement of ARVs for FY20/21[5].

PEPFAR is the second largest financial contributor to the HIV response at 32%, after the GKoE which contributes 60%. The Global Fund to Fight AIDS, Tuberculosis and Malaria (GF) and other donors contribute 5% and 3.3% respectively. By program area the greatest total PEPFAR investments were in clinical care, treatment and support, HIV case identification and health system strengthening. This investment represents both DSD and technical support. The largest contribution from GKoE was in clinical care, treatment and support, predominantly through the funding of adult ARVs, while GF focused support on VL and lab reagents. PEPFAR/E and GF continue to provide support for specific commodities, particularly those that are difficult for GKoE to procure at the smaller volumes required by the country. In COP2, PEPFAR/E will support pediatric ARV, VL reagents (split with GF) and VMMC surgical kits. GKoE will support all adult ARVs.

PEPFAR/E also supports HIV prevention programming including VMMC, oral PrEP, condoms, and comprehensive interventions and services for AGYW, OVC and key populations. PEPFAR/E provides support for above-site activities to strengthen government capacity and leadership for oversight, coordination, and implementation of HIV programs, in addition to building the capacity of GKoE to collect, analyze and use data for HIV/TB program decision-making. PEPFAR/E investments also include laboratory support, survey, and surveillance and systems strengthening (cf. CMIS, LIS, WMIS) These changes to PEPFAR/E investments reflect the evolving epidemic.

Table 2.3.1: FY 20 Investment Profile by Program

Program Area	Total Expenditure	%PEPFAR	%Global Fund	% GOKE	Other
Clinical care, treatment and support	$47,392,692	32%	8%	60%	0%
Community-based care, treatment and support	$3,515,823	84%	16%	0%	0%
PMTCT	$1,607,532	57%	43%	0%	0%
HTC	$49,999,357	14%	1%	86%	0%

[4] External Assistance to Eswatini Report 2019/2020
[5]Government budget Estimates FY2020/2021

VMMC	$3,788,588	95%	5%	0%	0%
Priority population prevention (prisons, migrant workers, miners)	$2,347,203	72%	9%	18%	1%
AGYW Prevention	$5,547,227	23%	17%	0%	60%
Key population prevention (MSM, sex workers)	$1,280,770	92%	8%	0%	0%
Orphans and Vulnerable Children	$13,702,071	37%	0%	63%	0%
Lab and blood safety	$11,563,784	32%	0%	68%	0%
Strategic information, Surveys and Surveillance	$3,888,443	77%	23%	0%	0%
Health System Strengthening	$3,715,230	52%	13%	0%	35%
Total	$148,348,720	32%	5%	60%	3.2%

Source: PEPFAR Expenditure Reporting FY 20; Global fund updated resource alignment Table 2020; Government MOH accounting System and National Lab expenditure Report 2019/2020; Global Fund, Swaziland TB-HIV Funding landscape Table 2018 - 2020

The total FY20 HIV program investment of $148,348,720 was funded predominantly by GKoE (60%) PEPFAR (32%), and GF (5%) (Table 2.3.1). The programs with the largest investment were HIV testing, and clinical care, treatment, and support (including ARVS), mainly due to the proportion contribution by GKoE. Other funders contributed 3.2% of the HIV program investment in FY20.

Table 2.3.2: Annual Procurement Profile for Key Commodities

Commodities	Total Expenditure	% PEPFAR	% Global Fund	% Host Country	% Other
ARVs	$22,356,495	6%	0%	94%	N/A
Rapid test kits	$510,075	0.0%	71.1%	0.0%	N/A
Other drugs	$570,611	0%	0%	0%	N/A
Lab Reagents	$10,092,541	19%	4%	78%	N/A
VMMC kits	$226,367	100%	0%	0%	N/A
Condoms	$482,756	100%	0%	0%	N/A
Viral Load commodities	$2,799,803	0%	100%	0%	N/A

MAT	$414,517	0%	0%	0%	N/A
Other commodities	$1,760,774	27%	0%	0%	N/A
Total	$39,213,940	12%	10%	78%	N/A

Data source: PEPFAR Expenditure Reporting FY20, Financial Management Dossier
Global fund updated resource alignment Table 2020
Government MOH accounting System and National Lab expenditure Report 2019/2020

The total annual budget for commodities is $39,213,940, with the GKoE paying for 94% of the total investments on ARVs. In FY 20, PEPFAR supported 100% of VMMC kits and condoms, while the Global Fund supported 100% of viral load commodities. Lab reagent procurement was split between PEPFAR, GF and GKoE.

Table 2.3.3 Annual USG Non-PEPFAR Funded Investments and Integration

Funding Source	Total USG Non-PEPFAR Resources	Non-PEPFAR Resources Co-Funding PEPFAR IMs	# Co-Funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
Peace Corps	$872,200	n/a	n/a	n/a	Volunteer Support
Total	$872,200				

Source: Peace Corps financial data, 2021

Aside from the Peace Corps, the other United States government agencies implementing health programming at post are entirely PEPFAR funded.

2.4 National Sustainability Profile Update

The Eswatini sustainability index and dashboard 2019 (SID 4.0) development exercise was carried out in August 2019 through a collaborative and multi-stakeholder consultative process that was coordinated by PEPFAR, UNAIDS and National Emergency Response Council on HIV and AIDS (NERCHA) under the leadership of the Prime Minister's Office. Table 2.4.1 below summarizes the sustainability strengths and vulnerabilities that were identified and highlights the areas of focus for COP20. The next iteration of the Eswatini sustainability index and dashboard is scheduled for the end of FY21.

Table 2.4.1 SID 4.0 Elements

Selected SID 4.0 Element and score	**COP 20 sustainability areas of focus**
Sustainability Strengths	
Element 1: Planning and Coordination *SID 4.0 Score – 9.33, dark green*	The Prime Minister's Office, through NERCHA, provides strong leadership of the HIV response in Eswatini. Since SID 3.0 in 2017, Eswatini has developed a new National HIV/AIDS Strategic Framework (2018 – 2023) and the National Health Sector Strategic Plan (2018 – 2023). A costed National HIV/AIDS Operating Plan is under development. However, participants agreed that coordination of the multi-sectoral response could also be strengthened to minimize duplication and leverage synergies among partners. In COP 20, PEPFAR will continue to support the secondment of two officers to NERCHA to facilitate NERCHA's fulfillment of its mandate to coordinate the multi-sectoral and community-led HIV-response. The Prime Minister's Office, through the Secretary to Cabinet established a Sustainability, Co-Financing, and Transition (SCT) Steering and Technical Committee that seeks to coordinate the country's considerations for sustainable HIV, TB, and Malaria response. In addition to the Principal Secretaries from multiple Ministries, PEPFAR, UNAIDS, European Union (EU) and WHO serve in the steering committee, and representatives from these organizations also are part of the technical committee. This structure received $100,000 funding from the GF (during FY19) to develop a sustainability strategy and transition plan that will ensure that the gains in epidemic control are maintained and transitioned to the GKoE over time. PEPFAR participated in the finalization of the sustainability strategy in FY21. Further, PEPFAR is part of the newly established CCM Evolution project committee whose work will be supported into FY22.
Element 12: Technical and Allocative Efficiencies *SID 4.0 Score - 8.16, light green* Element 13: Market Openness	The GKoE continues to effectively analyze and utilize relevant HIV/AIDS epidemiological, health, health workforce, and economic data to inform HIV/AIDS investment decisions. Eswatini's government and donor policies enable fair competition and productive and non-biased participation by HIV service providers in the provision of HIV goods and services. The Ministry of Economic Planning intensified its efforts to coordinate all Bilateral and Multilateral Partner support to the GKoE and the Ministry of Finance continues to strengthen the enforcement of policies to ensure fair competition. The USG will continue working with the Ministry of Finance (MOF) and Swaziland Revenue Authority through technical assistance from the US Treasury Department.

SID 4.0 Score – 9.69 dark green	
Sustainability Vulnerabilities	
Element 6: Service Delivery *SID 4.0 Score – 4.90, yellow*	Health-facility level service delivery continues to be strong. The major gaps remain in the provision of consistent and high-quality community services. Although there is some community outreach, COP21 PEPFAR-support will facilitate the intensification of community outreach programs to improve patient adherence to ARVs and continuity of treatment.
Element 10: Laboratory *SID 4.0 Score – 4.38, yellow*	The PEPFAR/E lab implementing partner will work with the government to improve quality management systems (QMS) in-country. In COP19, through PEPFAR support, the Eswatini Health Laboratory Services (EHLS) was able to get the National Molecular Reference and the National TB Reference laboratories internationally accredited. PEPFAR through the lab partner will continue supporting QMS for accreditation, the focus in COP21 will be to get all the three remaining Molecular laboratories in the country accredited. In COP21, PEPFAR/E aims to have at least 80% of laboratory professionals trained on the implementation of Strengthening Laboratory Management Towards Accreditation (SLMTA) to be able to sustain QMS and accreditation activities and implement Strengthening Laboratory Improvement Program Towards Accreditation (SLIPTA) to track and monitor the proper implementation of the ISO 15189 elements. PEPFAR/E will also support the development of the Laboratory Strategic Plan in FY22.
Element 8: Commodity Security and Supply Chain *SID 4.0 Score – 5.83, yellow*	The GKoE is the primary funder of adult antiretrovirals (ARVs), an area that has continued to be prioritized despite the fiscal constraints. However, for FY22, part of the GF grant will be used to support the procurement of adult ARVs in order to mitigate against potential resource constraints on the GKoE' s part. PEPFAR remains responsible for the procurement of all pediatric ARVs and a portion of condoms. GF is the primary supporter of other lab commodities. While all three entities fund viral load reagents, PEPFAR will fund 100% VL reagents for FY22 due to decreased lab funding in the GF grant. Commodity management at primary facility level (clinics) remains weak and with the intensification of differentiated service delivery models, additional support will be required. In COP21, PEPFAR will continue to assist GKoE in forecasting and supply planning as well as strengthen capacity in contracting and financing.

Source: Sustainable Index Dashboard, COP2020

Transition to indigenous partners

In COP21, 28% ($9,055,228) of USAID's program budget is allocated to local indigenous partners. This represents an increase from COP20 when funding to local partners was 25% of the program budget.
In COP21, USAID will fund four local prime partners:

- The Luke Commission (TLC), a local FBO, will continue to provide comprehensive integrated treatment, care and prevention services for vulnerable populations.
- Young Heroes and World Vision Eswatini, two local primes will continue to provide OVC and DREAMS services.
- A local sub-grantee currently operating under PACT will graduate in COP20 Q4 to become a prime partner providing OVC and DREAMS services in designated sub-national units (SNUs).

CDC is continuing its commitment to increase funding resources to indigenous partners. From COP20 to COP21, funding to local prime partners decreased slightly from $2,208,938 to $2,050,939. CDC's current prime indigenous partner is the Ministry of Health and CDC also funds many indigenous sub-awards. The major reason for this decrease in indigenous partner funding from COP20 to COP21 was that MOH received a significant amount in funding for the COVID-19 response. CDC worked with the MOH to deduplicate COVID-19 funding from various sources for activities mitigating the effects of the pandemic on PLHIV. In addition, CDC developed five new Funding Opportunity Announcements in COP20. Georgetown University was one of the new awards with sub-awards to the MOH. This five-year cooperative agreement is structured to provide a roadmap to sustainability for the MOH.

2.5 Alignment of PEPFAR investments geographically to disease burden

PEPFAR's investments support availability of clinical and community services in all four regions. Financial investment decisions are linked to disease burden, with the most implementing partners and resources in the region with the most PLHIV. COP21 will continue to utilize real-time program data, including recency testing, to identify potential transmission "hotspots" (areas identified with high levels of HIV transmission within the past 12 months) to guide programmatic focus on subpopulations across regions. COP21 recency testing will have national coverage to enable continuous refinement of case identification and resource allocation strategies. The PHIA study, known as SHIMS3, that was scheduled for FY20 was delayed due to COVID-19 and expected to be completed in FY21. Results from this study will be used to shift programming to meet any identified gaps.

Figure 2.5.1 below, shows PEPFAR/E's targeted treatment and viral load monitoring coverage for PLHIV. Targets for COP21 were set ensuring that coverage gaps across regions and five-year age and sex bands continue to close. In addition, the targets were further refined through continuous triangulation of modeled treatment gaps with routine program data to ensure responsiveness to the current epidemic as evidenced by real-time program data and calibrated to ensure that the right subpopulations are newly diagnosed, linked to treatment, remain on treatment, and attain and maintain viral load suppression.

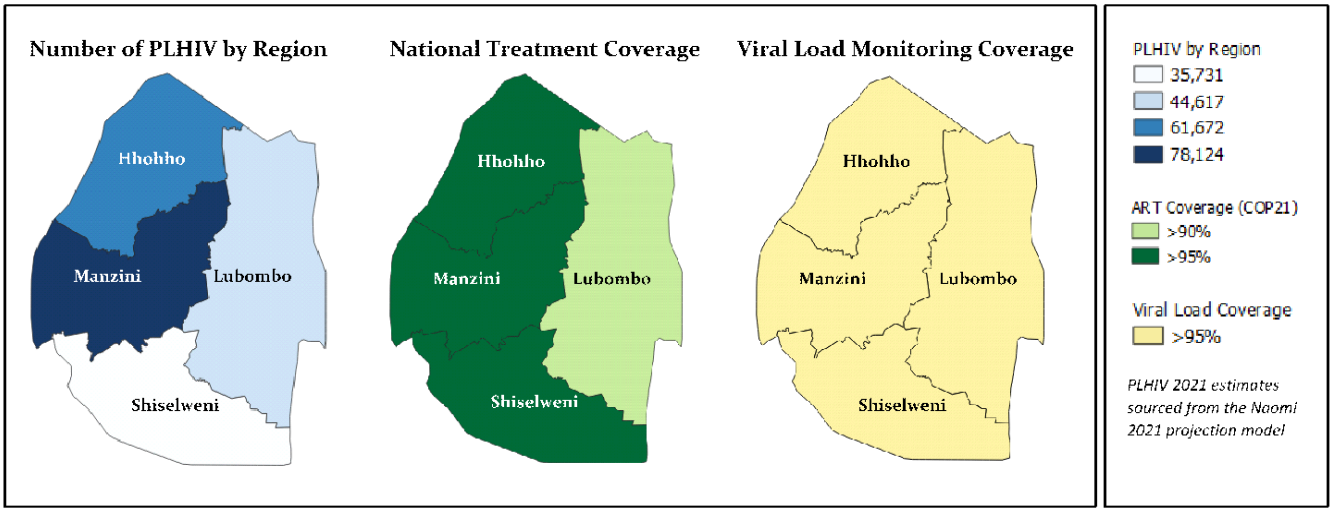


Figure 2.5.1 COP21 Targeted PLHIV Treatment Coverage and Viral Load Coverage
Source: HIV Estimates, Spectrum 2021 and COP21 National Target

2.6 Stakeholder Engagement

The COP21 planning process maintained a high level of stakeholder involvement, despite challenges posed by COVID-19. A virtual stakeholder meeting was held in January 2021 to review key global and country-specific planning guidance along with the program context and results. Following this, the Ministry of Health, NERCHA, UNAIDS and PEPFAR leadership jointly determined membership of multi-sectoral task teams focused on continuity of treatment and viral load suppression, case finding, AGYW, OVC, key populations, PrEP and VMMC. The task teams met to review the program-specific guidance, prior year's program implementation, COP19 results and to hold discussions to reach consensus on the proposal of program adjustments. Task team co-leads presented the COP21 program proposals to PEPFAR/E and MOH leadership, PEPFAR headquarters staff including the SGAC Chair and Agency points of contact, and external stakeholders.

PEPFAR/E provided briefings to the Prime Minister/Acting Prime Minister, Cabinet and Parliament during COP18 and COP19 on program progress and goals and will continue to do this during COP20 and COP21. PEPFAR/E continues to meet with the senior leadership of the Ministry of Health monthly, and NERCHA regularly, to provide high-level briefing on the overall policy development requirements, program priorities, program results, COP Guidance and targets. In addition to participating in national-level technical working groups (TWG), PEPFAR/E also meets with Ministry of Health, Deputy Prime Minister (DPM), Ministry of Tinkhundla and Administration (MTAD), Ministry of Education, and NERCHA technical leads to discuss and agree on technical-level oversight, development of national strategies and performance management. The COP21 task teams were co-led by PEPFAR/E, Ministry of Health, NERCHA and UNAIDS and in addition to the GKoE government members from the above sectors, they included implementing partners, other bilateral and multilateral donors, NGOs and civil society representatives.

External Development Partners

PEPFAR/E is a member of the GF's Country Coordinating Mechanism (CCM) and sits in the CCM Oversight Committee. PEPFAR /E shares financial and programmatic information with the GF and CCM members. PEPFAR/E has standing quarterly meetings with the GF to engage on areas of shared interest, such as commodities, CMIS, supply chain management, AGYW and key populations to avoid potential duplication. PEPFAR and UNAIDS have monthly meetings for coordination, and PEPFAR participates in the quarterly Coordination meetings convened by UNAIDS. MSF and the broader United Nations (UN) family are also key PEPFAR/E partners, with meetings and communication as needed through the year and they participated in COP21 stakeholder meetings.

Civil Society /Community Engagement

PEPFAR/E convened several meetings with civil society organizations (CSOs) along with the HIV Consortium of the Coordinating Assembly of Non-Governmental Organizations (CANGO), the Civil Society (CS) umbrella coordination group, to provide updates on the quarterly PEPFAR Oversight and Accountability Response Teams (POART) results and COP21 planning. Five CS representatives participated in the Virtual Planning Meetings, representing PLHIV, AGYW, key populations and men. Large stakeholder meetings that included CS were held in January and February 2021 to solicit input for COP21. PEPFAR/E shared information with CS about the COP21 strategic direction before and after the Virtual Planning Meeting, incorporating input into the PEPFAR programming. Drafts of the Strategic Direction Summary (SDS) were also shared to gain valuable feedback and input from CS. In COP21, the PEPFAR/E small grants program will prioritize implementation of the CS-led platform to collect community input on HIV services. Several CS meetings held as part of COP21 planning were dedicated to the planning and budgeting of the proposed platform. PEPFAR/E will also build on COP20 engagements with FBOs to leverage FBO structures and communities in the HIV response, particularly related to community messaging, active case-finding among men, and retention support for young adults.

Private Sector

PEPFAR/E has a public private partnership (PPP) with Coca-Cola and the Matsapha Town Council that targets the economically mobile population of Matsapha. In collaboration with the Swaziland Business Coalition on HIV/AIDS, the PPP fills gaps in access to services, through the provision of comprehensive clinical services at times and places that are convenient to the population of Matsapha. This model could potentially be replicated with other companies in the private sector as part of PEPFAR/E's sustainability strategy.

3.0 Geographic and Population Prioritization

The Kingdom of Eswatini has reached the second and third 95 at a national level, resulting in all regions attaining saturation (Table 3.0).

Table 3.0 Current status of ART saturation

Prioritization Area	Total PLHIV% of all PLHIV for COP21	# Current on ART (FY21 Q1)	# of SNU COP20 (FY21)	# of SNU COP21 (FY22)
Attained	100%	206,924	4	4

Source: PEPFAR Program data (national),2021

PEPFAR/E routinely analyzes epidemic patterns by age, sex and, where possible, by location (Appendix A), as well as the primary modes of transmission and underlying behavioral and structural factors among sub-populations. Continuous triangulation of treatment coverage gaps (based on the modeled PLHIV estimates) with routine program data allows for a more informed approach to a targeted response. As such, the COP21 approach to targeting by sub-population focuses on closing the coverage gaps, but also seeks to focus on those sub-populations with disproportionate levels of recent infections, as evidenced by new programmatic recency data. These sub-populations include females 15-29 and males 20-39. Once available, SHIMS3 data will provide updated information on the population-level impact of HIV programs to date and highlight the populations that continue to require greater attention and services to meet their needs. These data will be triangulated with routine program data to further support an agile programmatic approach to responding to population and geographic gaps.

VMMC coverage at the end of 2020 was approximately 37% in males age 15+. According to SHIMS2 data (2017), male circumcision coverage for men in this age group is highest in Manzini at 29%, followed by Hhohho and Lubombo at 26.6% and 25.7% coverage, respectively, with Shiselweni having the lowest coverage at 22.9%. Among the target age bands 15-29, SHIMS2 self-reported data showed that 29% of males ages 15-24 and 17% of over 25-year-old have been circumcised. In COP21, PEPFAR/E in partnership with GKoE, will aim to scale up VMMC coverage to 80% among males 15-29 years by utilizing 15 fixed sites and an outreach clinic initiative which will expand the access to the hard-to-reach rural areas and also to populations who do not have the time to travel to a facility multiple times as a result of their work.

Geographic Context

Although PEPFAR/E program coverage extends nationally, the below geographic specific information was considered during programming for COP21.

Manzini

The highest number of PLHIV is in the Manzini region, which has an industrial corridor where many people (especially young women and men) from other regions come to seek employment. These areas are also known hot spots for sex workers and men who have sex with men (MSM). Other areas in Manzini region have lumber and mining activities that attract men for employment, and subsequently the women who

follow them. Services with extended hours and specific activities to engage men cater to those employed in factories or male-dominated jobs in this region. Aggressive promotion for male testing and outreach for testing and linkages is prioritized in this region.

Hhohho

Hhohho, where the capital of the country is located, is the second most populated region and while there it has slightly less PLHIV than Manzini, there is a need for additional testing for men especially 25 to 40 years. The northern and western areas of Hhohho are dominated by logging, citrus farming and small-scale industries that attract men. The main border crossing at Oshoek is a large truck stop with transient men and women.

Lubombo

As a primarily rural region, Lubombo has lower population density, higher levels of poverty and food insecurity, a high burden of OVC and female-headed households and reduced access to services and transportation. As a reflection of need, it should be noted that only 52%of the population in this region has access to safe water, compared to the urban regions who have closer to 80%. This level of poverty impacts people's ability to seek health services at facilities and thus there is a greater reliance on mobile services and community engagement and outreach.

Shiselweni

Shiselweni is the poorest region in Eswatini, and it is a primarily rural area similar to Lubombo. Like Lubombo, Shiselweni has a high burden of food and water insecurity. Much of the population in Shiselweni have very difficult access to transportation and services. There are concentrations of high-risk populations drawn to the area by textile factories that attract women seeking work, and the main truck route to the Durban Port and its border crossing, Lavumisa, which is a hot-spot and has a dynamic and transient population. Mobile services and outreach to the poorest populations, along with focused programming (with extended hours) in new industrial and hotspot zones will be prioritized as well as leveraging DREAMS and other outreach efforts to link these priority populations to testing, treatment, and social services.

4.0 Client-Centered Program Activities for Epidemic Control

Table 4.0 ART Target for Epidemic Control

Prioritization Area	Total PLHIV	Expected current on ART (APR FY21)	Additional patients required for 80% ART coverage	TARGET Current on ART (APR FY22) *TX_CURR*	TARGET Newly initiated (APR FY22) *TX_NEW*	TARGET ART Coverage (APR FY22)
Attained	**220,144**	**202,122***	**N/A**	**220,136**	**8,698**	**100%**

*The country has surpassed APR FY21 expected results as of FY21 Q1. FY21 Q1 results currently stand at 206,924.
Source: HIV Estimates, Naomi HIV estimation model 2021; COP20 National Targets, FY21 Q1 National Results, COP21 National Targets

Eswatini has made significant progress and reached 95-95-95 at national level. As of March 2021, ART coverage at the national level is estimated to be about 94% of all PLHIV. In COP 21 PEPFAR targets an ART coverage of 100% at the national level with a focus on closing treatment gaps by specific age and sex bands, and a VLS of >95% across all age, sex and geographies.

4.1. Identifying HIV-positive Individuals not on Treatment and Getting them on Treatment

Eswatini has made significant progress in scaling up targeted case-finding and HIV testing services for identification of individuals and populations that are at high risk of HIV infection to all parts of the country and population groups. The PEPFAR/E HTS program's main role therefore is to ensure effective and sustainable case identification and strong linkages to ART in the PEPFAR-supported sites for all sex and age disaggregates where coverage gaps remain. Utilizing the UNAIDS Naomi modeled COP21 PLHIV estimate of 220,144 together with national programmatic data, it is estimated that 10% of all PLHIV in Eswatini are unsuppressed, and 57% of those unsuppressed individuals are unaware of their status. In aiming to reach these individuals who remain unaware of their status, HTS targets are not only aligned with the national goal of achieving >95% ART coverage but are further focused by sub-population and geography as guided by programmatic HIV recency data and ART coverage gaps as informed through the COP21 HIV Estimates obtained through the Naomi HIV estimation model.

In COP21, the PEPFAR/E program will identify 8,377 new children and adults living with HIV and link 95% to care and treatment services, with an expected aggregate positivity rate of 10% (10% for adults, while the yield for children will be 2%). These targets were derived using the unmet ART need data by age, sex, factoring in yield by age and modality assumptions for the different populations and approaches. The bulk of COP21 targets will come from the observed highest proportions of clients who tested RITA recent (females 15-29 and males 20-34).

Since COP19 Q3, PEPFAR/E has been experiencing a declining trend of HIV-positive cases identified across the quarters (Figure4.1. 1) for both males and females. The decline in HIV-positive cases can largely be attributed to COVID-19, both changes in non-emergency health-seeking behavior as well as the COVID-19

impact and mitigation measures, as people's movements were restricted, community testing paused, and clinical partners were unable to track index contacts in communities.

COP21 HIV case finding approaches will reflect a pivot in HTS programming to evolve with the country's changing epidemic. In COP21, the PEPFAR-supported HTS implementing partners will be responsible for all HIV case identification and linkages to treatment to ensure minimal loss of patients through the cascade and ensure cost efficiencies in the program, building towards sustainability in the era of epidemic control.

PEPFAR will continue to optimize case finding through a) targeted provider-initiated testing and counselling (PITC) strategy through a specific focus on females ages 15-29 and men ages 20-34; b) continuing to scale up index partner testing; and c) use of recency testing to identify populations and geographies where active transmission is occurring.

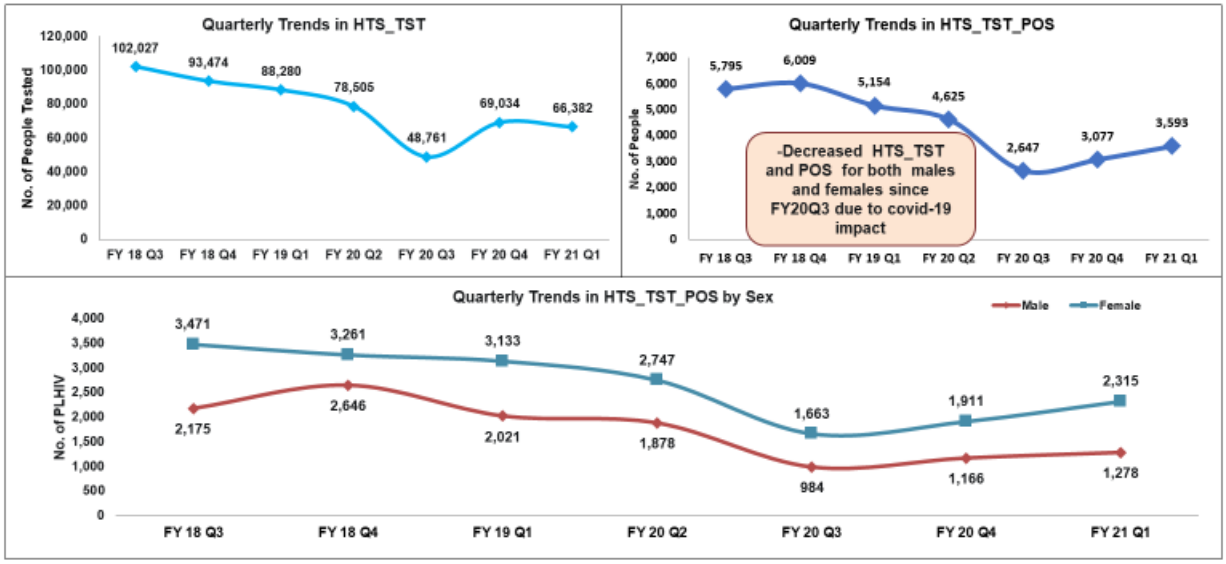


Figure 4.1.1 Trends in HTS_TST_POS by Sex
Source: PEPFAR/E program data, 2021

Case Finding Strategies for COP21 to Identifying the Remaining Undiagnosed Populations

In COP21, 50% of all cases will be from index testing, and only 14% from other PITC which will be highly targeted, and symptom- and risk-based, and the rest will be identified through TB, PMTCT and diagnostic testing. Index testing all new HIV positive and unsuppressed women living with HIV will be the main modality for identifying children (<19 years) living with HIV (CLHIV). Community testing will only be prioritized for AGYW, KP and OVC programs. Community testing will focus on index testing based on follow-up needed from selected facility entry points which include antenatal care (ANC), TB, STI, and targeted outpatient department (OPD). Community testing will also include using the HIV self-test (HIVST) kit which will be prioritized in the KP, DREAMS, OVC, churches and selected pharmacies (see Figure 4.1.2).

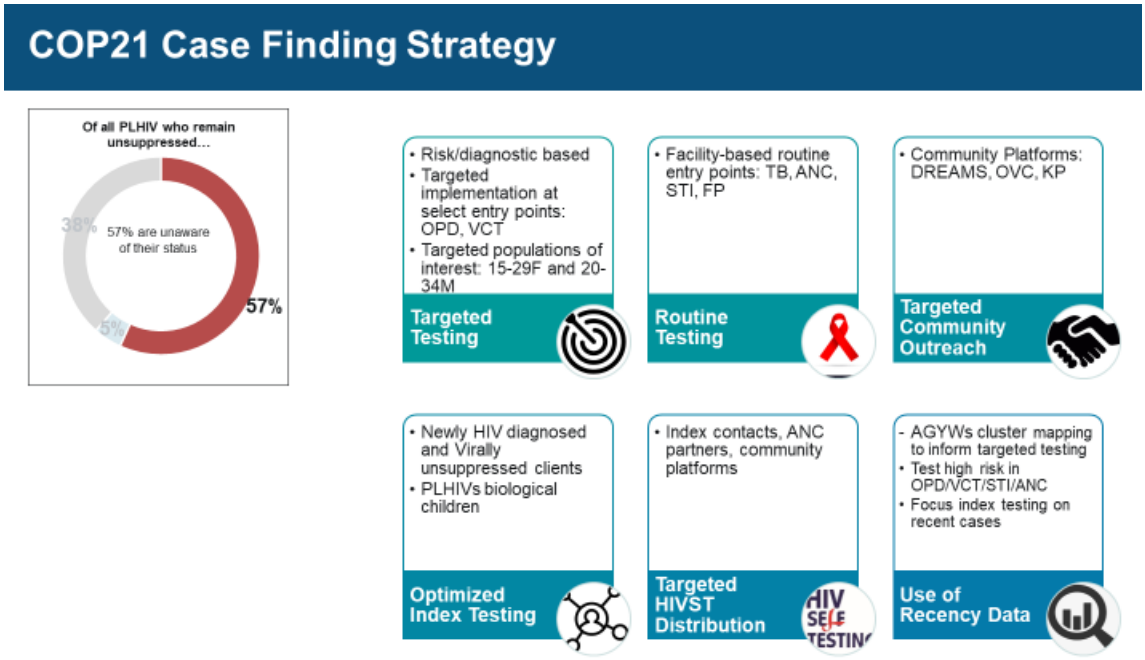


Figure 4.1.2 COP21 Case Finding Strategy

Routine testing in Selected Facility Entry Points

1. **Testing for pregnant and breastfeeding mothers:** Due to the high HIV prevalence and high testing yield among all age bands receiving antenatal care, there is an ongoing need to ensure that deliberate, standardized prevention and testing strategies are provided to pregnant and breastfeeding women. The national program data also suggests that 6% of recent infections are found at ANC and post-natal care (PNC). In COP21, PEPFAR/E will provide HTS at ANC visits, including implementing maternal retesting at appropriate intervals in line with national testing guidelines, utilize the maternal, newborn and child health (MNCH)/PMTCT platform as a springboard for reaching male partners through secondary distribution of HIVST kits as well as index testing, and prioritize PrEP for pregnant and breastfeeding women.
2. **Testing for TB-presumptive and TB diagnosed patients:** HIV testing of TB-presumptive and TB-diagnosed patients will be an important approach to identify HIV positive men (15-49 years) due to the disproportionate number of men with TB and higher HIV testing yield compared to the general population. In 2019, over 99% of TB patients received HIV testing. In COP21, 100% of TB patients should have documented HIV status. All presumptive TB patients should be offered HIV testing, and all should be investigated. In community TB screening services, contacts of TB patients and presumptive patients will be offered HIVST kits by community health care workers. The use of presumptive TB and TB treatment registers will enable tracking of HTS services for TB presumptive and TB diagnosed patients, respectively.
3. **Testing for STI clients:** Program data suggests high yields (16%) among STI clients, but low volumes of cases identified. Moreover, the national program data suggest high proportions of recent infections amongst clients with STIs. PEPFAR/E will provide HTS to all eligible clients with STI and track sexual contacts for treatment and index testing.
4. **Targeted OPD and VCT testing for females age 15-29 and males age 20-34 at selected sites:** The national program data suggest high recent infections among females age 15-29 and males age 20-34. The testing modality "Other PITC", commonly known as OPD and voluntary testing and

counselling (VCT) will identify the targeted age and sex band populations through using the revised symptom and risk-based screening tool. These entry points will contribute 14% and 5% of the HIV cases respectively. Testing volumes by site will be monitored on a weekly basis to ensure an increase in the positivity yield and decrease in the volume of testing numbers

5. **Optimize testing for AGYW outside OPD entry points**: Program data suggests that the highest proportions of patients who tested RITA recent are observed among males aged 20-34 and females aged 15-29. Recency data will continue to be analyzed to identify potential hotspots for targeted testing in communities. Moreover, social network testing will be implemented to identify AGYW outside of facility testing and lastly the country will conduct targeted HIVST distribution in communities to further reach more AGYW.

Targeted Testing among Men

Social networking strategies used in the KP program have improved case finding among men. COP21 programming will maximize the use of expanded male-friendly services at all the designated VMMC sites, which offer VMMC, HIV testing, TB screening, PrEP, and non-communicable diseases (NCD) services through health delivery approaches that attract adult men (e.g., expanded hours) and training all service providers on male-friendly service provision without requiring dedicated space or male staff.

Use of HIV recency data

Routine surveillance data from the recency testing program will be fully utilized to map hotspots for targeted HIVST distribution, index testing, prevention and other related services to target areas of new infections. AGYW cluster mapping will be conducted to inform targeted testing.

Targeted HIVST Distribution

HIV self-testing will be integrated into the Index Testing program to reach those "hard to reach sexual partners" through secondary distribution especially in high risk pregnant and breastfeeding women (PWBF) and clients of FSWs. Targeted distribution will take place in churches, selected pharmacies and HIV testing outreaches (DREAMS, KP). Parents of biological children >2years will be provided with HIVST kits to screen their children and lastly, PEPFAR/E will support MOH to initiate discussions with private pharmacies to start HIVST distribution.

Optimized Index Testing

Index testing will contribute 50% of the HIV cases and index seeds will be generated through the non-index testing modalities while expecting a high index testing yield of at least 26%. All newly diagnosed PLHIV, virally unsuppressed clients and biological children (19 years old and under) of PLHIV will be prioritized for index testing services. PEPFAR/E will support the implementation of PEPFAR's minimum requirements for index testing. All sites will be monitored to ensure they meet minimum program quality for index testing. Continuous collaboration and oversight with in-country CSOs will be supported to ensure that index testing remains confidential, voluntary and consented. Program monitoring will be strengthened at site level to identify performance issues, target interventions to poor performing sites, and use best practices from the highest performing sites across the program. Ensuring the safety of patients through intimate partner violence (IPV) screening remains a critical component to index testing and will be tracked pre- and post- index testing services. All HTS implementing partners will continue to report on index testing on a weekly basis to monitor trends and ensure scale and fidelity with the strategy.

The country will implement index testing with fidelity through improving contact elicitation ratio (from 2.4 to 3) and testing coverage (from 74% to 95%) through the following strategies: a) use of skilled index

champions for contact elicitation at each clinical visit; b) continue to improve or maintain the already high levels of offering of index testing to all newly diagnosed individuals(>98%); c) ensure that 100% of newly identified PLHIV and their biological children who are 19 years old and under are offered index testing services; d) ensure contact elicitation of all virally unsuppressed patients; and e) prioritize contact elicitation for all cases with recent infection and routinize more frequent (weekly) index testing data reviews by IPs.

Improving Testing Coverage

The main goal is to improve testing coverage for all eligible index contacts through the following strategies: a) Provide parents (index clients) with HIVST to screen biological children >2 years of age; b) increase testing uptake by providing transport reimbursement to indexed clients who cannot present at facility for testing due to financial challenges; c) prioritize the secondary distribution of HIVST kits to PLHIV who are not ready to bring their partners for index testing; d) flex testing hours, and client-preferred testing venues; e) integrate index testing with other innovative HTS approaches (recency and social network testing); and f) limit community case identification to tracking of index contacts who are not able to come to the health facilities and/or prefer community-based testing.

At the community, the index team will initiate contact tracing and testing in the community. ART and PrEP will be offered in the community to all eligible contacts. Active linkages and referrals to treatment, VMMC and PrEP will be implemented. A referral list will be used to track clients referred from communities.

Case Finding Strategies for Key populations (KP)

In COP21 PEPFAR/E will continue to utilize the findings of the IBBS to identify the gaps in HIV case finding and treatment outcomes for all KP. Recency testing will continue to be used to target hotspots with a high rate of new infections and inform prevention programs implementation.

Case finding rates remained low in COP20 Q1 even though higher absolute numbers were observed. In COP21, the KP program will intensify case finding efforts through KP networks, social media, trained KP outreach workers, targeted HIVST, safe and ethical index testing and other KP DSD models to identify KPLHIV and link them to treatment. Further refinement of the risk assessment to be used with fidelity will be implemented in COP21. Self-testing will be optimized with intensified follow-up approaches to improve case finding. Case finding efforts will also actively link HIV-negative KP to PrEP and other prevention and support services.

Quarterly Enhanced Peer Outreach Approaches (EPOA) will be maintained as an effective model to bring KPs who have not previously accessed HIV services into the program. The methodology is linked to positive seeds from newly diagnosed KP and elicits both indexes[6] and other higher-risk networks of KPs. Online programming will be optimized building on COP19 and 20 achievements to find KPLHIV who may not be found through the other strategies. Based on feedback from sub-populations among the KPs, continuous adjustments will be made to the modalities that are most appropriate and effective to reach different types, ages, and other contextual factors related to different segments of KP.

[6] Note that index case finding has been suspended and will only be reinstituted following certification and assurance that no human rights violations occur.

4.2. Retaining Clients on Treatment and Ensuring Viral Suppression

The majority of interruption in treatment (IIT) happens three months after treatment initiation. At the beginning of COP19 Q3, there was a concern that IIT would increase due to COVID-19 and the restrictions implemented to reduce the spread of the virus. PEPFAR/E acted swiftly by introducing interventions to ensure that patients continued to receive their medications despite COVID-19 restrictions. One of the major interventions implemented was CCD. This intervention brought services closer to the clients, decongested facilities and freed up critical time for healthcare workers to attend to the escalating COVID-19 case load and ensure continuity of other essential health services. CCD was coupled with Fastrack services and a rapid scale up of multi-month dispensing (MMD) including 6MMD. Figure 4.2.1 below shows a marked decline in IIT through Q3 and Q4 of COP19, which were heavily impacted by COVID-19 restorations. COP20 Q1 saw the beginning of the deadlier second wave of COVID-19 with many healthcare workers testing positive, being unable to work due to quarantining as a close contact of someone who was positive, and some dying. The upsurge in IIT in COP20 Q1 was mostly due to EMR downtime leading to backlogs in data capture. This is being addressed in COP21. It is also noteworthy that IIT as a proportion of TX_CURR remains < 1% per quarter.

PEPFAR/E has achieved >95% viral load suppression (VLS) across all SNUs for patients on ART and 90% VLS for all populations on ART. However, populations aged less than 20 years have not achieved >95% VLS. Challenges remain with viral load testing coverage and these were highlighted by the COVID-19 pandemic, especially in Lubombo region where sample transport shortages came to the fore. A national sample transport system built on aging fleet that experienced frequent breakdowns and fuel challenges, collapsing logistics and other disruptions in government services during an intense second wave of COVID-19 resulted in a significant drop in viral load testing coverage.

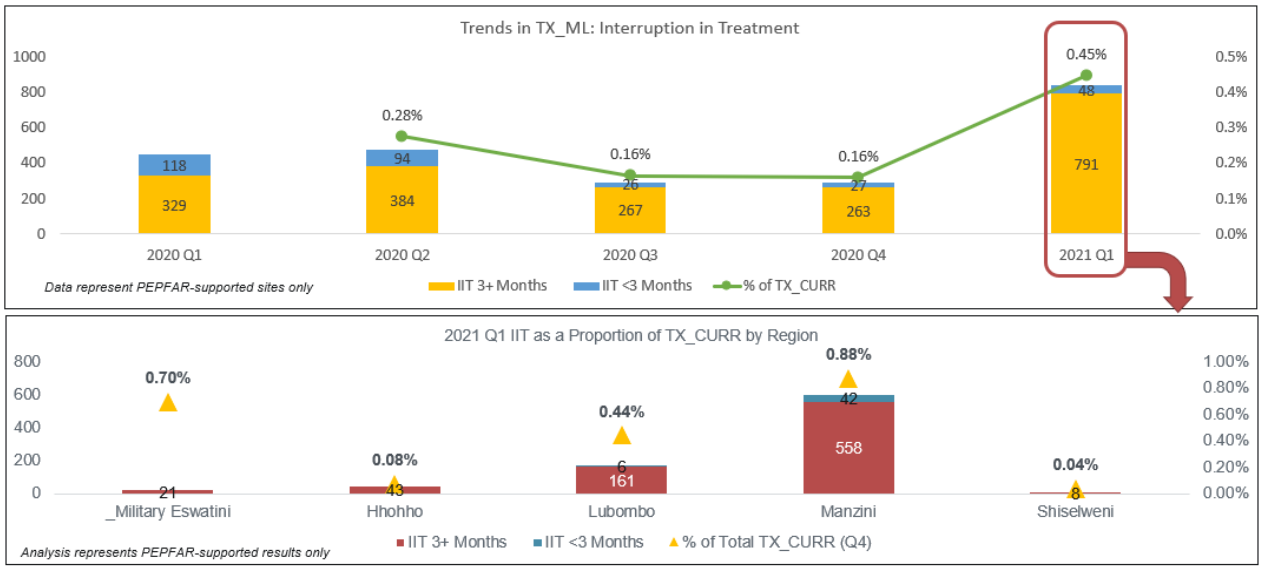


Figure 4.2.1: Q1 FY21, Interruption in treatment by quarter and by region
Source: PEPFAR program data, FY201Q1 results, TX_ML analysis

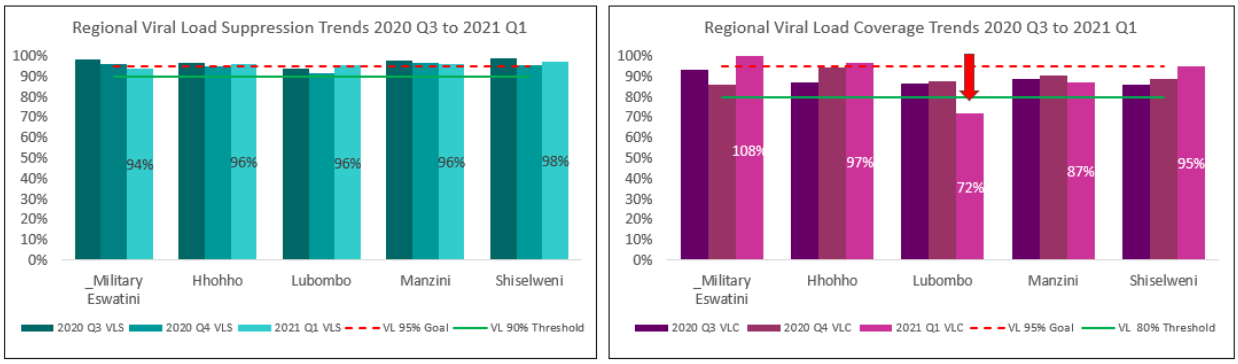


Figure 4.2.2: Viral load suppression (VLS) and viral load testing coverage by region and quarter
Source: PEPFAR program data, FY21 Q1 results

PEPFAR/E will continue to support the roll-out of DSD models for HIV care and treatment. Currently, 46% of all PLHIV are on 6MMD with just under 13% on less than 3MMD. CCD will continue to be an important component of DSD models in the country and the OU will continue to integrate other diseases into this modality to improve uptake and treatment outcomes.

PEPFAR/E will continue to close the community-facility divide through strategic deployment and use of peers to link recipients of care to services in both communities and facilities. Memoranda of Understanding (MOUs) between facility-based partners, DREAMS partners, and other community-based programs have been developed and signed and will institutionalize strong bidirectional referrals. The OU will also examine findings from the community led monitoring platform to adjust service delivery at facilities to reduce IIT and VLS as well and improve facility-community linkages. These approaches will assist the country to the achieve the target of 80% of PLHIV receiving 6 MMD by the end of COP21.

The COP21 focus is to improve continuity of treatment services and VLS for all PLHIV on treatment. This builds on a strong COP20 plan that is currently being implemented. The risks posed by COVID-19 to COP20 implementation are clear and PEPFAR/E will continue mitigation measures. COP20 is focusing on granular use of site-level/ patient level data for decision making and building on granular interventions implemented through the 2018 surge, like early tracking of missed appointments, return to care messaging to encourage those who interrupted treatment to return and appropriate training and support for healthcare workers to warmly receive those with IIT. Program data showed an upsurge in treatment re-initiations in FY18 and TX_RTT thereafter. To date a significant proportion of TX_NET_NEW is still contributed by TX_RTT. Below are select COP21 interventions designed to build on COP20 program implementation:

- Automated SMS reminder system that will be integrated into CMIS. A low-cost high-impact intervention to help improve on-time drug pickup. It is similar to the system currently employed by one of the PEPFAR IPs (TLC) with good results. Other IPs are currently phoning high-risk patients to remind them about their appointments two to three days prior to the appointment. This effort is labor intensive, and the SMS reminder system will bring a more efficient approach to scale.
- Tracking feasibility of injectable treatment options. The program continues to evaluate the feasibility (cost, availability, and formulations) of alternative treatment approaches to improve treatment continuity and VLS for early adoption.

- Improving services and linkages for youth through peer-led and youth-specific interventions will continue to be a focus in COP20 implementation and in COP21.
- Improving transition for teens to adult services, building on COP20 implementation of youth friendly services.
- Continuing to improve services for men – with male providers in male clinics in all fixed VMMC sites and men's corners.
- Scaling up virtual support tools – taking lessons learnt from the first two waves of COVID-19 to ensure that facility staff and clients continue to receive support even when there are restrictions to movement and gatherings as well as ensuring that PEPFAR and IP staff are protected.
- Decentralizing advanced HIV disease services to include pediatrics.
- Strengthening COVID-19 adaptations, especially Community Commodity Distribution.

Other COP21 interventions like the overhauling patient preparation for ART and ongoing psychosocial support should impact both IIT and VLS. This will build on the continued treatment optimization as well as MMD to ensure improved treatment adherence and VLS.

A. Treatment Strategies for Specific Population

Pediatric Care and Treatment

PEPFAR/E will strengthen pediatric index testing, through improving elicitation and testing coverage of biological children (less than 19 years) of newly identified and virally unsuppressed PLHIV. In addition, the program will increase testing uptake among older children through leveraging social media and scaling up pediatric self-testing for children aged 2 years and older.

PEPFAR/E will improve linkage to treatment of newly identified C/ALHIV through strengthening same-day ART initiations and linkage case management. In COP20, PEPFAR/E will introduce pediatric DTG 10mg (Dispersible Tablet) and will fully transition all eligible CLHIV to DTG-10mg in COP21. The program will strengthen transition groups for C/ALHIV graduating into adulthood to meet their ongoing needs and maintain viral suppression. PEPFAR/E will expand and strengthen DSD models for C/ALHIV, such as teen clubs and the Family-Centered Care model (FCCM), a DSD model where children receive care with their parents (or caregivers) at health facilities as one unit. Furthermore, PEPFAR/E will continue investing in social workers and psychologists to support caregivers and C/ALHIV with complex psychosocial circumstances that may act as barriers to treatment continuity.

To improve viral load coverage among C/ALHIV on treatment, PEPFAR/E will scale up and strengthen the use of viral load (VL) DBS. Decentralization of VL DBS testing will also be considered in COP21 to improve coverage and turn-around-time of VL results. PEPFAR/E will support the 'flagging' of children that are due for VL testing using the CMIS and generate SMS reminders to caregivers informing them about their next scheduled clinic visits. In addition, PEPFAR/E will strengthen the collaboration between clinical and community implementing partners (including OVC partners) to improve community tracking of C/ALHIV that are due for (or would have missed) their scheduled VL testing visit. Working through implementing partners and disclosure consent processes whereby families consent to community referrals, PEPFAR/E will offer 90% of all C/ALHIV on treatment enrollment into the OVC program.

Treatment Targeting Key Populations

To increase continuity of treatment among KP, PEPFAR/E will

1. Implement an intensive case management approach for initiation and treatment continuity. Once stable on ART, clients will receive continued support through maintenance case management.
2. Maximize the use of KP-led community centers (drop-in centers equivalent), and 'pop-up' sites which provide safe, convenient and quality spaces to improve same day initiation, offer drug refills and support for continuity of treatment.

Prevention of Mother-to-Child Transmission (PMTCT)

In COP21, PEPFAR/E will implement several strategies to improve continuation on treatment and VLS among pregnant and breastfeeding women. These approaches will include:

1. Strengthening collaboration between facility and community partners (including the OVC platform) to track HIV-exposed infants (HEI) with unknown final outcomes at 18-24 months
2. Scaling up and routinely offering PrEP to HIV negative pregnant and breastfeeding women
3. Reviewing the laboratory request form to facilitate completion of pregnancy and breastfeeding status and supporting ongoing HCW mentorship and support supervision through implementing partners to ensure correct documentation of pregnancy or breastfeeding status on VL requisition forms
4. Rolling-out point-of-care VL testing for pregnant and breastfeeding women and children under 15 years using the GeneXpert platform in a phased approach
5. Scaling up DSD models for pregnant and lactating women such as Mother-Baby Pair (MBP) clubs and pregnant adolescent groups

B. Community and Male Engagement

Robust engagement of local government, traditional and faith leaders, and men in the comprehensive HIV response supports the strategic shift towards effective targeting of men across the entire cascade particularly focusing on their continuity of treatment to address early disengagement and death of PLHIV and the prevention of new infections among HIV negative males. Also, these leaders and engaged men have important roles to play in supporting DREAMS programming, addressing teen pregnancy and sexual and gender-based violence.

In COP21, PEPFAR/E will continue strengthening the multi-sector response through local government (Chiefdom and municipal structures) in 30 DREAMS tinkhundla as well as at regional and national levels. With an aim towards sustainability, PEPFAR/E will transition this critical support from an international partner to NERCHA and the Ministry of Tinkhundla Administration and Development (MTAD). PEPFAR/E will build on its investments in the Community Data for Action Platform (CDAP) and will continue to support chiefdom, municipal, and regional leaders to use data to lead and coordinate the multi-sector HIV response. Over the past two years, PEPFAR/E has trained and mentored these chiefdom structures to analyze epidemiologic and contextual data, develop community profiles, and local HIV action plans with measurable targets. The GKOE will also work to leverage the GF and the World Bank to expand support to other tinkhundla.

Eswatini is deeply rooted in its culture. Traditional structures and leaders are highly respected. These leaders can mobilize populations to action, shape social and gender norms and address harmful practices. Besides, these respected leaders are effective advocates for communicating key HIV prevention, treatment

and retention messages such as VMMC, PrEP and U=U. Further, in Eswatini's patriarchal society, men are the gateway to their families and community's health and wellbeing and thus it is critical to fully engage men for a sustainable HIV response, as well as to provide them with male-friendly health and HIV services. In the 30 DREAMS tinkhundla, PEPFAR/E will bring together, the chiefdom support, DREAMS interventions (including mobile outreach services), as well as critical HIV prevention, treatment and retention services to communities and especially men including:

1. Mobilizing and engaging the traditional and faith community leaders and men in the response to order to increase uptake of testing, treatment, prevention (PrEP, VMMC) and condoms
2. Targeting and disseminating key messages about HIV testing, linkage to treatment, prevention and retention
3. Building demand for and providing male-friendly services including the confidential comprehensive HIV services
4. Supporting and strengthening retention and adherence
5. Promoting positive masculinity.

The below map shows the coverage of community and male engagement

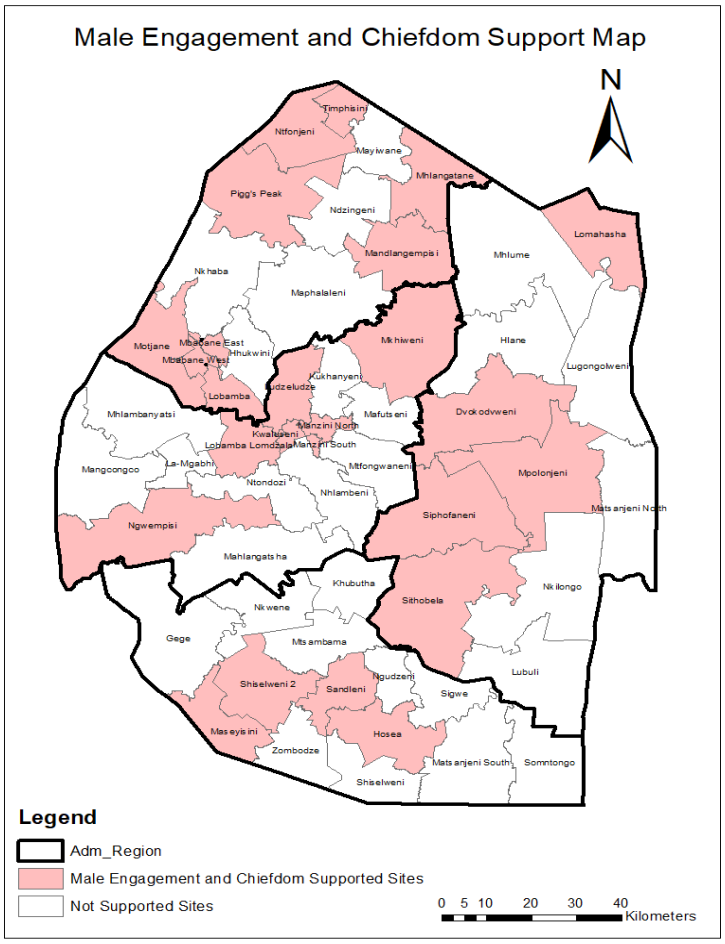


Figure 4.2.3 Coverage of community and male engagement
Source: NERCHA

4.3 TB/HIV program

A. TB Preventive Therapy

TB preventive therapy (TPT) has been scaled up at ART clinics. Completion rates are high at 92%, based on COP19 Q4 results (Figure 4.3.1). The OU targets to initiate, and complete, TPT for 40,522 ART patients by the end of COP21

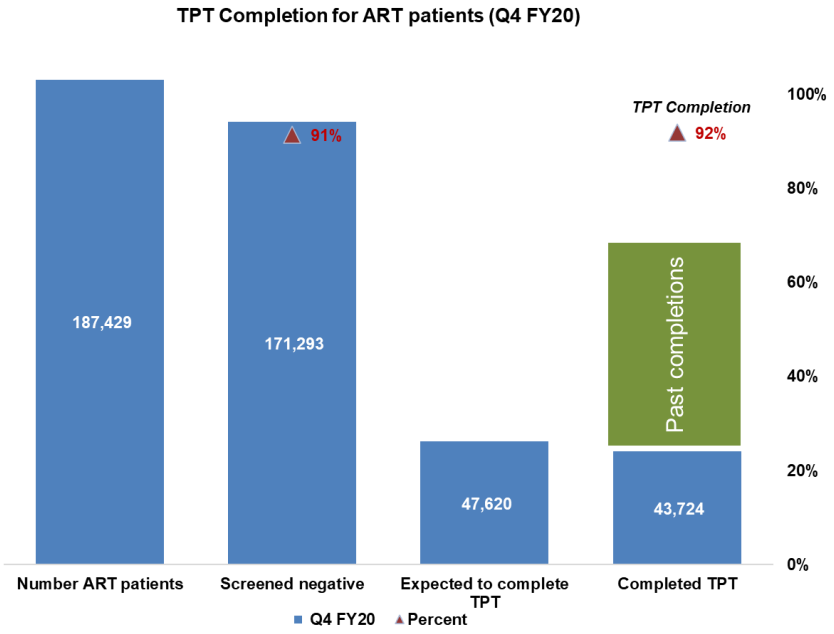


FIGURE 4.3.1: PERCENT OF ART PATIENTS COMPLETING TPT COURSE IN COP19

PEPFAR/E will continue to support full TPT coverage among all eligible PLHIV (both newly enrolled on ART and already on ART) through the following initiatives:

1. Early TPT initiation: Eswatini guidelines allow patients to initiate TPT at one month after starting ART. The successful implementation of test and start provides an opportunity for starting TPT even earlier for stable ART patients who screen negative for TB. Patients who screen positive will undergo TB testing procedures using GeneXpert Ultra and immediately start TB treatment if diagnosed with TB.
2. Integrating TPT activities into existing DSD models, including efficiently aligning and harmonizing TPT provision with multi-month dispensing to optimize TPT acceptability and uptake.
3. Addressing existing major barriers to TPT uptake:
   a. Provider hesitancy due to fear of adverse events (AEs)
      - Support MOH to train providers, strengthen ADR reporting, data analysis, strategic feedback channels and guidance to health facilities following serious ADRs.
   b. Need for fixed dose combinations and shorter TPT regimens
      - Scaling up of fixed-dose combination of INH/Pyridoxine/Co-trimoxazole
      - Scaling up shorter-term regimen of 3-HP fixed dose combo

c. Stock ruptures of TPT commodities:
   - Providing technical support to MOH to forecast, procure and adequately monitor TPT supplies and consumption.

4. Reviewing and evaluating TPT coverage gap and projecting future TPT needs.

B. TB Case Detection and Treatment among PLHIV

Eswatini experienced a continuous decline in TB case notifications from 11,057 in 2010 to 2,900 in 2019. This is largely due to enhanced TB/HIV collaborative activities and the roll out of more sensitive GeneXpert platform promoting early TB case detection. ART expansion and HIV prevention programs contributed to reduction of the burden of HIV among TB patients from 82% in 2010 to 65% in 2019 according to Eswatini annual program reports.

In 2020, WHO estimated the Eswatini TB treatment coverage to be at 69%, showing a drop from 80% reported in 2019, signaling missed opportunities for case detection and treatment. PEPFAR/E will support the National TB Program (NTP) with TB screening activities including provision of cough officers to help identify TB cases, register them, and initiate appropriate TB treatment to prevent further transmission of TB in communities. The Eswatini TB drug resistance survey (2018) showed that 58% of rifampicin resistant TB cases are missed by the GeneXpert platform due to prevalent Ile491Phe mutation. The Ministry of Health with support from the Germany Ministry of Health is currently working on establishing TB genomic sequencing to identify the Ile491Phe mutation and PEPFAR will collaborate to ensure the success of this initiative.

In COP21, PEPFAR/E through its implementing partners will support MOH to increase TB case detection and provide appropriate TB treatment through the following activities:

1. Routine TB screening of all ART patients, PLHIV and TB key populations using WHO-approved, locally adapted screening tools.
2. Scaling up to more sensitive GeneXpert Ultra as the TB testing platform to maximize case identification.
3. Supporting Eswatini conduct TB sequencing to decrease the number of missed DRTB cases due to Ile491Phe mutation.
4. Providing technical support for TB contact tracing and testing procedures, including HIV testing for contacts found to be presumptive of TB.
5. Decentralizing point of care TB lipoarabinomannan (TB LAM) test for HIV patients who are immunocompromised or seriously ill and decentralizing CD4 point of care tests to identify PLHIV with advanced disease.
6. Supporting MOH to ensure that all TB cases identified and registered including those identified at in-patient departments.

C. ART Provision, Viral Suppression and addressing High TB Mortality among TB/HIV Co-Infected Patients

ART coverage was at 98% nationally (MOH annual report 2019) and 98% across PEPFAR supported sites (APR 2020). Despite different data periods, the ART coverage figures are now comparable indicating improvements in early ART initiation and swift actions to update quarterly reports which previously led to lower ART coverage within PEPFAR *quarterly* reports compared to the national *annual* reports.

To ensure that 100% of HIV-positive TB patients receive ART, PEPFAR/E will support:

1. Expansion of the integrated service delivery model and support TB BMU accreditation scale up for ART sites.
2. Implementation of site-based quality improvement activities to identify and address the underlying causes of delayed ART initiation such as clients' refusal and mortality prior to ART.
3. Integration of non-communicable disease screening, application of lessons from mortality audits and reviews to reduce mortality among TB/HIV patients through improved quality of clinical care.

To ensure durable viral suppression among TB/HIV co-infected patients, PEPFAR/E will continue to strengthen the use of efficient regimens including dolutegravir and provide technical support in appropriate ART regimen for clients who require second and third-line regimens. PEPFAR/E will support the scale up of advanced HIV disease package, including screening for cryptococcus using CrAg and use of TB LAM as an aid to TB diagnosis for patients who fail ART and those with low baseline CD4 counts.

To address high mortality (10%) among TB/HIV coinfected patients, PEPFAR will support national HIV and TB programs through:

- improving access to treatment by advocating for more TB basic management units to be set up at clinics closest to people,
- providing technical support to utilize the increasing the role of chest X-rays in TB screening,
- expanding access to sequencing to assist with correct diagnosis and proper treatment of TB cases given that DRTB death is as high as 16%,
- technical support in scaling up shorter regimens for DRTB treatment and management of AHD,
- supporting TB Expert review meetings and mortality audits and translating lessons to better mentorship and clinical care of patients.

4.4 Prevention; Specifically, Detailing Programs for Priority Programming

The DREAMS program will use the national PrEP communication strategy, alongside PrEP ambassadors to enhance demand creation for PrEP among AGYW. The program will target same day PrEP initiation for all eligible and interested AGYW to close linkage gaps and enhance access to PrEP. In COP 21, the DREAMS program will work closely with DREAMS ambassadors in creating more opportunities and spaces for AGYW to participate in decision making centered on the needs of AGYW and advocacy for addressing gaps.

In COP 21, the PEPFAR/E program will strengthen the implementation and monitoring of core DREAMS packages (primary and secondary interventions) to measure progress towards completion of these packages. As such, in COP 21 the PEPFAR/E program has targets measured using the indicator AGYW_PREV to facilitate the measurement of completion rates. The table below summarizes AGYW_PREV targets for the program.

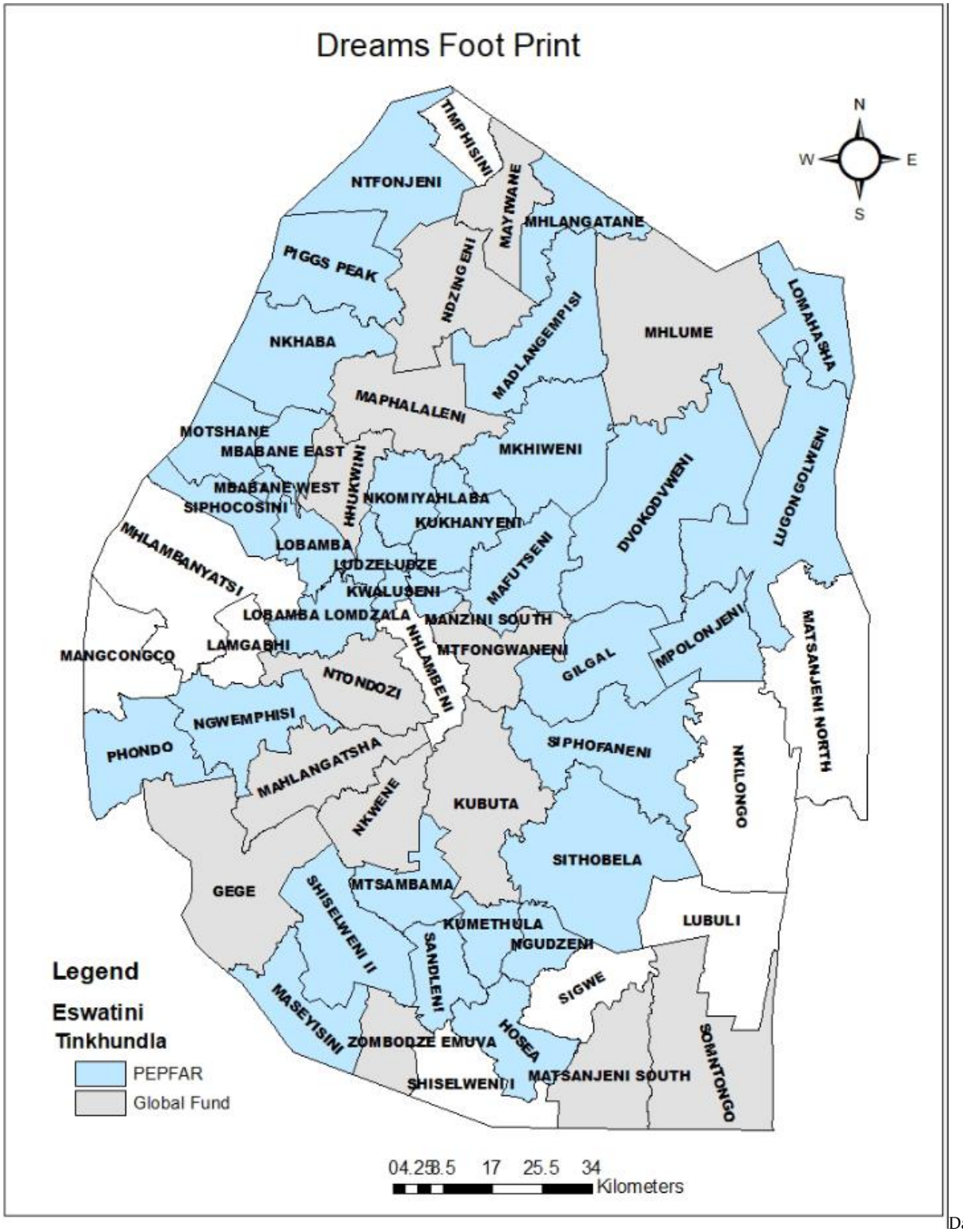
Table 4.4.1 Target Population for Prevention Intervention to Facilitate Epidemic Control

Target Population	Estimated population size	Target # of Active AGYW in DREAMS program	Target # of DREAMS beneficiaries who completed the primary package (FY22 target)
10-19	137,263	37,651	26,421
20-29	98,779	24,871	14,922
Total	236,042	62,522	41,343

*Represents DREAMS SNUs only
**Targets reflect AGYW_PREV targets.

4.4.1 DREAMS

In COP 21, the PEPFAR/E program maintains DREAMS implementation in 36 tinkhundla across the four regions of Eswatini. The following map shows the PEPFAR/E DREAMS program coverage in COP 21.



Data

Figure 4.4.1 COP21 Program Coverage for Adolescent Girls and Young Women Program

In line with the priorities for DREAMS listed in Eswatini's COP 21 PEPFAR Planning Letter, PEPFAR/E will implement the following:

Geographic Implementation
In COP 20, DREAMS expanded to an additional 7 tinkhundla (2 in Hhohho region, 2 in Shiselweni region, 1 in Lubombo region, 2 in Manzini region), increasing the coverage of vulnerable AGYW in these tinkhundla from 50% to 77%. At the end of COP 19, Eswatini delineated tinkhundla boundaries in the country, which changed the Eswatini tinkhundla from 55 to 59. This impacted some of the DREAMS tinkhundla, translating to 36 DREAMS tinkhundla from 30 in COP 20. This, however, does not equal real geographic expansion.

USAID will continue DREAMS implementation for increased saturation in the 33 sites and across the four regions of Eswatini. CDC will implement the DREAMS package in three sites in Manzini and Lubombo. Peace Corps will engage AGYW 10-24 years in GLOW[7] clubs in all 36 tinkhundla (2 clubs per tinkhundla) and provide service including linking AGYW to relevant DREAMS related service.

Collaboration with Global Fund AGYW programming
PEPFAR and Global Fund reviewed current AGYW interventions and geographic footprint and agreed on the need to harmonize service packages nationally with GKOE coordination. Global Fund will consider enhancing its service package in selected sites through its portfolio optimization process including the provision of clinical services to GF DREAMS package.

Significantly scale up PrEP
In COP20, community services were largely impacted by COVID-19 as lockdown restrictions were imposed which restricted movements and service delivery. PrEP uptake, however, has been increasing with the continuing roll-out of the national PrEP program in COP19 and COP20. In COP20, the DREAMS program expanded its demand creation strategy by using PrEP ambassadors to facilitate peer to peer demand creation among AGYW. This strategy will be strengthened in CO 21, alongside the implementation of the national PrEP communication strategy. PEPFAR will support the development of a roadmap for the country which seeks to introduce new PrEP products such as injectable PrEP, which were recommended by AGYW as critical options. PrEP is fully embedded in HIV prevention sessions for AGYW, utilizing a module on PrEP and PEP specially developed for DREAMS. In COP21, PrEP targets for AGYW have been increased and set at 7,359.

[7] Eswatini Girls Leading Our World (EGLOW) clubs is one of the primary strategies for the Peace Corps Eswatini DREAMS approach. GLOW (Girls Leading Our World) is a global project initiated by Peace Corps volunteers and local counterparts to empower young girls and improve the status of women around the world. EGLOW focuses its energy on clubs rather than camp activities and Swati EGLOW Mentors utilize a life skills curriculum that includes sexual and reproductive health education, career planning /entrepreneurship, decision-making skills, and self-esteem building to empower Swati girls to make informed and healthy decisions for their lives. EGLOW clubs offer a safe and supportive environment for girls with role modeling from trained Swati women who know and understand their realities.

STI testing and treatment
In COP20 through COP 21 Neisseria Gonorrhea (GC), Chlamydia Trachomatis (CT) and Trichomonas vaginalis (TV) screening and specific treatment will be offered to sexually active DREAMS beneficiaries. A local study (2018) on POC testing to guide STI treatment amongst adolescents and young people living with HIV in Eswatini noted that 26 (8.7%) participants were positive for an STI, and the prevalence was highest among 20- to 24-year-old females, and sexually active participants at 25.0% (15 of 60). Of the sexually active participants 15.6% (25 of 160) were positive for an STI versus 0.7% (1 of 139) reporting no prior sexual activity. Neisseria gonorrhea was the most common pathogen identified representing 15 of 32 (47%) of the pathogens detected and was followed by CT (9 of 32; 28%) and TV (8 of 32; 25%). The majority of participants with an identified STI were positive for a single pathogen (21 of 26; 80%).

Hence DREAMS beneficiaries will be screened using a risk assessment tool and further screened with urine LE and GeneXpert for NG/CT and TV to inform diagnosis and correct treatment. STI screening and treatment will be implemented in selected AGYW friendly facilities, DREAMS and KP platforms. Reagents to test for GC, CT and TV will be procured as well as drugs to treat these STIs (azithromycin, ceftriaxone & metronidazole). Support for laboratory services and specimen transport (urine samples) will also be provided.

Enhanced livelihood / socio economic approaches
The DREAMS program will intensify and diversify interventions supporting DREAMS beneficiaries with livelihood skills such as entrepreneurship and financial literacy skills development, savings groups and business mentoring. Activities will also include vocational skills development and start-up packs/supplies for small enterprises. Relationships with potential employers and internships will be promoted. Savings groups will be offered a digital savings platform.

Improved completion rates of layered DREAMS interventions for AGYW
In COP 20, the DREAMS program was severely impacted by COID-19 which resulted in poor completion rates for primary and secondary interventions since face-to-face curricular delivery is required for completion. In COP 21, the program will expedite delivery of curricular through AGYW group sessions to improve completion of core HIV prevention interventions within the DREAMS program.

Optimize targeting of vulnerable AGYW
In COP20 we already make use of multiple community and facility platforms to identify vulnerable AGYW for DREAMS. In COP21, the DREAMS Program will make optimal use of family planning and ANC platforms in health facilities to target adolescent girls who are sexually active or pregnant, as well as other entry points including STI. The program will also expand its engagement with the Ministry of Education and Training through the school health program to facilitate identification of vulnerable AGYW and enrolment from the school setting. At the community level, the DREAMS program will continue to engage community leaders, including traditional, faith, and school leaders to facilitate referrals to the DREAMS program.

Strengthen agency of AGYW to participate in optimizing DREAMS packages
As part of COP 20 guidance, the PEPFAR/E program hired four regional DREAMS ambassadors for the four regions (Manzini, Lubombo, Shiselweni & Hhohho) who have the responsibility to represent AGYW in regional stakeholder meetings, coordinate DREAMS activities at regional level, gather feedback from AGYW to inform DREAMS programming. In COP 21, the PEPFAR/E program will work in close collaboration with the DREAMS ambassadors and CSOs to create more spaces and opportunities for AGYW to participate in decision making.

4.4.2 Orphan and Vulnerable Children (OVC)

In COP21, the OVC program will continue to provide comprehensive individual case management for children aged 0-17 with known risks. Adolescents aged 9-14 who do not require comprehensive OVC care will receive group-based primary prevention of HIV and sexual violence. Adolescent girls aged 10-17 in the OVC comprehensive track will be eligible to enroll in DREAMS, thus will receive the most intensive combination of OVC and prevention services. Additionally, AG in DREAMS not also enrolled in the OVC program will receive approved OVC services such as education support and parenting programs.

In COP21, 75% of the total OVC_SERV target is allocated to the OVC comprehensive track. 13% to the preventative track, and 12% to the DREAMS track. The target proportion for the prevention track has increased over the proportion in FY20 results (3%) to ensure that children who are no longer beneficiaries of the comprehensive OVC program after the introduction of the stricter eligibility criteria introduced in the COP20 guidance for the comprehensive program benefit at least from evidence-based programming to prevent early sexual debut and HIV.

Comprehensive OVC program

The comprehensive track of the OVC program targets especially children living with HIV, children of PLHIV, HIV exposed infants, children of FSW, survivors of sexual violence and pregnant teenagers/adolescent mothers as well as other very vulnerable children with known risks such as children in child-headed households and school dropouts. Identification and enrolment will be conducted via referrals from health facilities including the mobile DREAMS on Wheels, social workers, police, community leaders and through GBV caseworkers and home visitors. All children in the OVC program with unknown HIV status will be assessed for HIV risk, and home visitors will actively facilitate HIV testing for those determined to be at risk.

For those newly diagnosed HIV positives, intensive support to families and children is provided to ensure linkage to treatment; in cases where caregivers refuse permission for children to access ART due to the associated family stigma, OVC caseworkers will also involve social workers to ensure successful linkage. For children and adolescents living with HIV (C/ALHIV), the OVC program provides individual and family-based adherence and disclosure support in addition to the broader package of OVC services. ALHIV are supported to attend facility-based teen clubs that serve as a peer support platform for HIV positive teenagers and to provide refills and clinical monitoring.

A specific focus will be on increasing coverage of the OVC program for children and adolescents living with HIV. Site-level analysis for TX_CURR for C/ALHIV aged 0-19 at health facilities and C/ALHIV in the current OVC cohort showed that 42% of HIV positive children on ART resident in OVC program sites are active beneficiaries in the OVC program. This coverage of the OVC program of children and adolescents on TX_CURR has increased from 25% in FY19. The program aims to offer enrolment into the comprehensive OVC program to at least 90% of C/ALHIV through the placement of OVC linkage assistants at high volume health facilities and implementation of referrals as described in the MoUs between OVC and clinical partners developed in COP20.

Case management is operationalized through vulnerability assessment at enrolment, development of tailored care plans and monthly home visits. Trained home visitors form the backbone of service delivery, referrals and service tracking. Graduation criteria across the four outcome domains provide the

framework to ensure children and their families achieve a minimum level of stability before they leave the program.

Children and their families in the comprehensive OVC program receive needs-based services in line with MER 2.3 Appendix D, and are focused on the PEPFAR OVC outcomes Healthy, Stable, Safe and Schooled. They include health referrals, psychosocial interventions and tailored education support (individual subsidies or school block grants). Caregivers are offered parenting skills training and participation in savings groups.

Preventive OVC program
The preventive OVC program track will target 9-14-year-old girls and boys with evidence-based HIV and sexual violence prevention education delivered to groups of adolescents. The PEPFAR prevention modules have already been integrated into the programming tool for this age group. The identification of children will be through home visitors and schools. Referrals to health and social services will be provided as needed. Children in the prevention track who show specific vulnerabilities will be referred to the comprehensive OVC program.

OVC and DREAMS integration
Female OVC aged 10-17 will be eligible to enroll in DREAMS, thus will receive the most intensive combination of OVC and prevention services. DREAMS and OVC activities are integrated programmatically and geographically as well as operationally within the same implementers, allowing for harmonized planning, alignment of curricula and tools, implementation and monitoring.

4.4.3 Primary prevention of HIV and sexual violence among 9–14-year-olds

A. DREAMS

The 10–14-year-olds curriculum targeting HIV and sexual violence prevention was approved for Eswatini and aligns with the S/GAC modules. This curriculum is delivered by mentors to AG through group-based and safe spaces approaches. In COP 21, the DREAMS program will continue to strengthen the delivery of evidence based curricular and interventions to prevent HIV and sexual violence among 10–14-year-olds.

B. OVC

The three S/GAC modules for 9–14-year-old OVCs have been integrated into the home visitors' manual and delivered through small group sessions. The PEPFAR/E program will continue to strengthen and monitor the implementation of these evidence-based interventions to strengthen the HIV and violence against children responses.

4.5 Prevention of Mother-to-Child transmission

The prevention of HIV transmission to the infants and children starts with ensuring that their pregnant and breastfeeding mothers are aware of the HIV status and receive treatment immediately if they are positive. In COP21, HTS at ANC visits including implementing maternal retesting, index testing and the secondary distribution of HIVST kits for their male partners will be prioritized. as well as prioritizing PrEP for pregnant and breastfeeding women using the 'opt-out' approach in an effort to prevent new HIV

infections during pregnancy and breastfeeding periods. The program will also intensify pediatric case finding through scaling up cohort monitoring for mother-baby pairs (MBP) to ensure timely completion of EID testing through the 18–24-month period.

ART coverage among pregnant women remains high in Eswatini at 99% with a low mother-to-child transmission rate for 6-8 weeks at 1.2%. PEPFAR/E will continue to support the placement of lay cadres at health facilities to support PMTCT activities and provide ongoing mentorship and supervision support to maintain the high ART coverage. In addition, PEPFAR/E will strengthen the integration of client-centered family planning (FP) services throughout the continuum of HIV services.

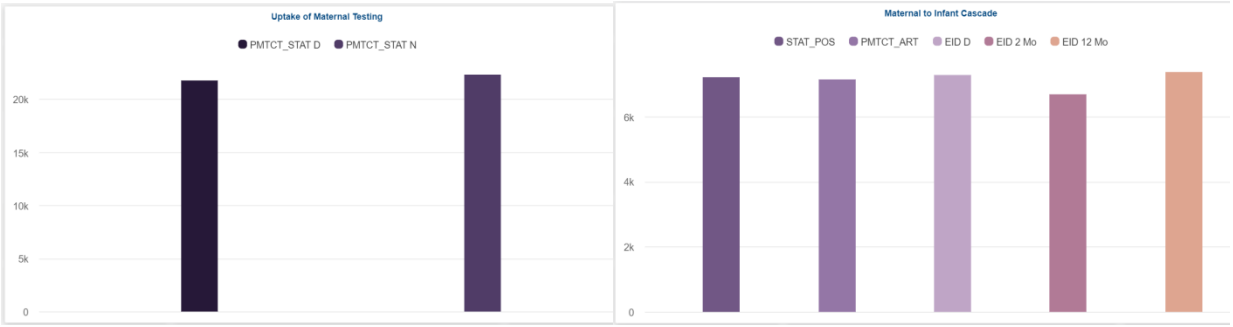


Figure 4.5.1 PMTCT Cascade
Source: PAW Single OU dossier; Overview page; PMTCT and HEI Cascade page

4.6 Key Populations

PEPFAR/E provides a comprehensive prevention and treatment package of services to FSW, MSM, transgender populations, people who inject drugs and people in prisons. Prevention interventions include pre-exposure prophylaxis, post exposure prophylaxis, recency testing, sexual reproductive health services and psycho-social support. The program also offers programming structural interventions to address structural barriers facing key populations. The structural interventions include economic empowerment such as savings groups, referrals to social protection, legal, educational, substance abuse, and other support services.

Building on investments from COP19, PEPFAR/E will continue providing PrEP services through mobile services, community centers and expanded access to PrEP refills. Working with the HIV testing programs, the KP program will implement the disaggregation of testing for PrEP follow up in order to potentially accurately evaluate testing for case finding. In COP21, PEPFAR/E support to the MOH will ensure the provision of event driven PrEP for MSM. PrEP initiations will be focused on medium to high-risk KP who want to use PrEP as the prevention method of choice. Intensive counseling for PrEP initiations will be strengthened to ensure that KP who initiate on PrEP really need it in an attempt to address challenges in continuations. PEPFAR/E will continue to ensure tracking of seroconversion of KP on PrEP. Learning from the reasons why clients drop off PrEP, the program will address these challenges to assist those who want to continue to stay on PrEP.

To ensure a comprehensive package for KP, PEPFAR will continue to support the provision of targeted free distribution of condoms and lubrication for KP. Children of FSW will continue to be linked to the OVC program and FSW aged 18 to 29 years are actively linked to DREAMS to access the comprehensive package for young women. In addition to Children of FSW and young FSW, other KP will be supported with mapping, referral and linkage to other existing structural interventions that will ensure improved HIV outcomes.

In COP19 and 20, PEPFAR/E through the KPIF supported the capacity strengthening for KP CBOs to ensure the sustainability and efficiency of the response. In COP21, PEPFAR/E will continue to support the capacity strengthening of KP CBOs by accrediting CBOs through the phases of organizational development, operation of KP community centers (drop-in center equivalent) and pop-up clinics. The support will also extend to strengthening network penetration through KP-led approaches, developing KP sub-population specific materials and U=U messages to address initiation, and retention and preventing new infections. PEPFAR/E will also support KP to develop advocacy skills, train KP navigators, case managers, counselors and outreach workers.

In COP21, PEPFAR/E will continue to work closely with MOH, health care providers, the Royal Swazi Police Service (RSPS) and human rights lawyers to address stigma, discrimination and human rights violations as substantial barriers to service uptake and increased risks for KPs and their children building on investments over the past several years, PEPFAR/E will continue to leverage on the progress towards breaking down these barriers, and increasing access to social and legal protection by providing training and mentoring with the REPS (Royal Eswatini Police Services), including establishing KP point of contact at key police stations and within the domestic violence units. This will also include continuing to work with the human rights lawyers. To reduce KP discrimination in public health facilities, PEPFAR, working with MOH, will continue to identify, train and support the establishment of KP competent centers of excellence in the highest density hotspots and will continue to strengthen and expand the number of 'KP-friendly' facilities with a specific KP focal point.

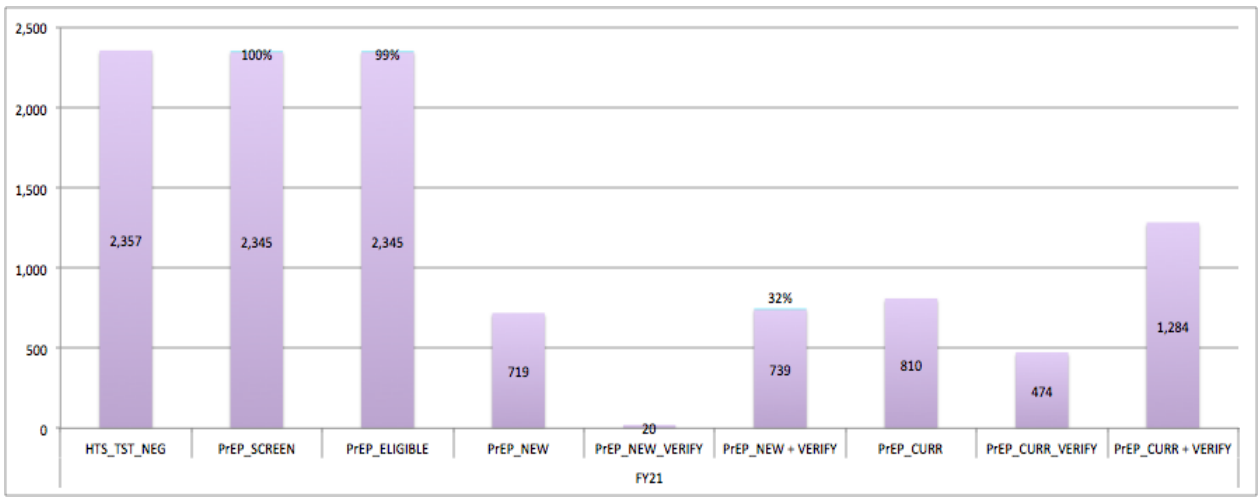


Figure 4.6.1 Prevention Continuum by Key Population Group
Source: PAW Singe OU dossier; All Prevention chapter; Prevention Continuum by KP page

4.7 VMMC

The uptake of VMMC services, defined as the proportion of men circumcised in one year divided by the proportion of men not circumcised, is still generally low in Eswatini. In the priority age group (15-29 years) there has been a leveling off over the years. Given Eswatini's status of near achieving epidemic control one of the priority strategic and integrated changes recommended is Focus on prevention and Restarting VMMC at scale.

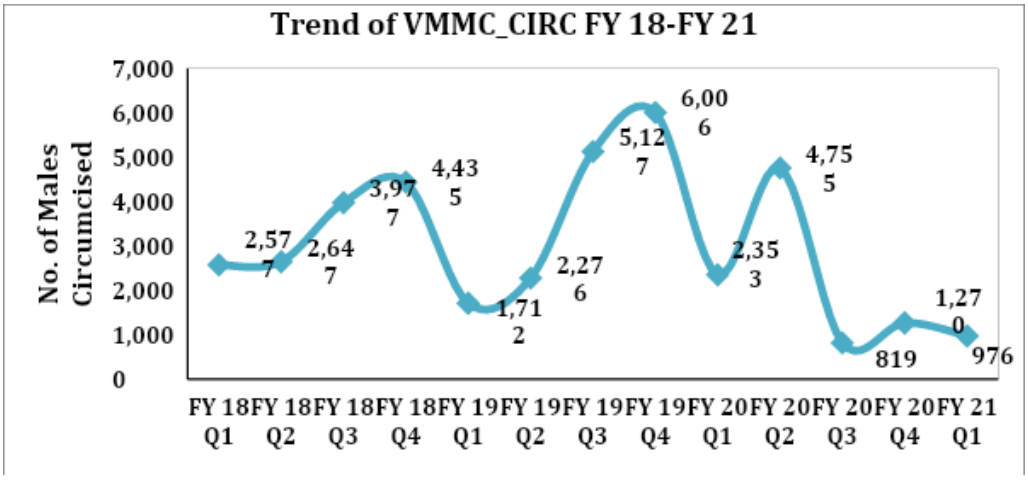


Figure 4.7.1PEPFAR VMMC Program Trends by Quarter FY18Q1 - FY21Q1
Source: PEPFAR program data/DATIM, 2021

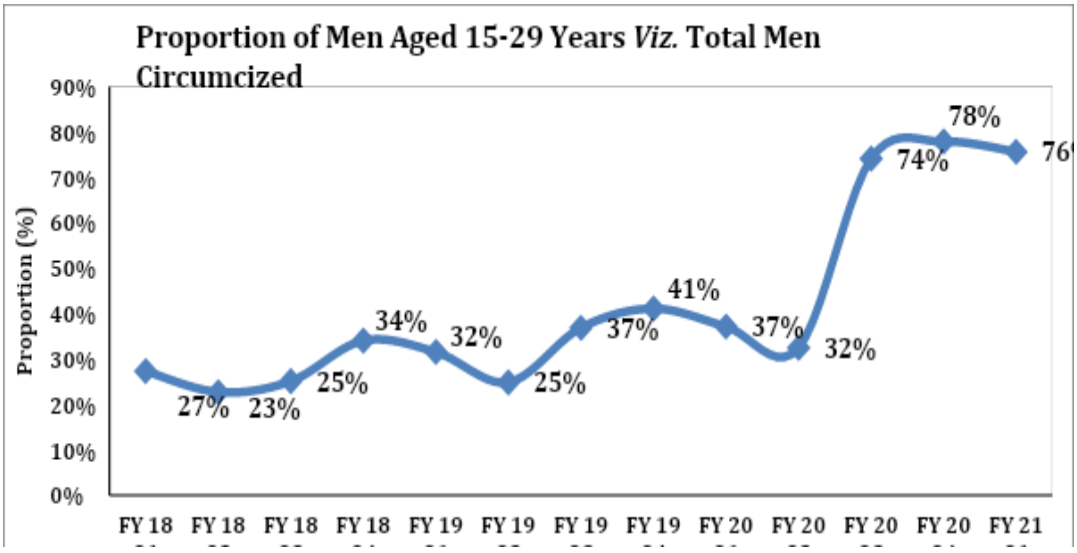


Figure 4.7.2 PEPFAR VMMC Program Trends by 15 – 29-year Age Band
Source: PEPFAR program data/DATIM, 2021

TABLE 4.7.1 VMMC COVERAGE AND TARGETS BY AGE BRACKET

	Population Size Estimate† **(SNUs)**	**Current National Coverage**** **(end 2020)**	**VMMC_CIRC PEPFAR-supported targets** **(in FY22)**	**Targeted National Coverage**** **(end 2022)**
15-29	175,647	52%	5,153	80%
30+	232,465	30%	1,830	35%
Total	353,220	46%	6,983	58%

***Estimated coverage informed by Decision-Maker's Program Planning Tool (DMPPT2) and FY2020 program data*

†Estimated 2021 population based on Spectrum outputs

The above table shows PEPFAR/E's VMMC Coverage and Targets by Age 15-29 and over 30 for COP21. PEPFAR/E achieved 13% (976/7351) of the FY21 VMMC_CIRC targets by end of Q1FY21. COVID-19 continued to negatively impact the uptake of VMMC in Q1. There was a total of 976 VMMC procedures done in Q1 FY21 compared to 1,270 procedures done in Q4 FY20. Of the 5,572 targets for the age group 15-29 years, a total of 738 (13%) were circumcised. The proportion of men aged 15-29 circumcised was 76% which is comparable with the 78% in Q4 FY20.

Compared with the previous Q1 from FY 16, Q1 FY21 had the lowest VMMC procedures done, however, this is in part explained by the reduced targets as well as the removal of the age group 10-14 years as a priority age group for VMMC. URC DoD and EGPAF had the highest target reached in this reporting period at 144/442 (33%) and 425/2168 (20%) respectively. The Luke Commission had the lowest VMMC coverage 27/611 (4%) followed by Georgetown University and PSI at 9% each. Georgetown University had VMMC services delayed in Q1 FY21 but progress over the last 6 weeks of the quarter places the program on a positive trajectory to meet the COP20 target. Although community mobilization began for TLC in Q1 FY21, levels of engagement from men were lower than pre-COVID 19 period hence the low numbers circumcised. EGPAF also suffered the negative effects of the delayed resumption of VMMC services in the previous quarter.

To reach the set target implementing partners will continue to be innovative in demand creation using the social media platform and other virtual platforms. EGPAF will conduct intensified mobilization in high schools and tertiary institutions once COVID-19 restrictions are relaxed, scale up indexing of VMMC clients at facility level and provide flexible working hours. Georgetown University will continue working very closely with community VMMC mobilisers as well as community HTS partners to strengthen systems for VMMC demand generation and meet the 80% uptake among males 15-29 years. For the next quarters, implementing partners will continue providing VMMC services in fixed sites and strengthen referrals from HTS and strengthen community demand creation where feasible to implement. PEPFAR/E continues to work with the GKoE to scale up VMMC coverage to 80% among males 15–29 years throughout the country.

In COP21, PEPFAR/E will continue to provide technical support to the MOH and other relevant government entities at the national and community level to manage and coordinate VMMC delivery. The

program will implement a robust strategy for demand creation to reach males 15-29 years old. Priority will be placed on improved quality of VMMC Services through support to the MOH and implementing partners to deliver effective, patient-centered, and human-rights- based quality VMMC services. The program will further support the national VMMC coordination committee to produce data for evidence-based decision making. VMMC will be performed within a minimum package of required services including age-appropriate sexual risk reduction counseling, counseling on the need to refrain from sexual activity or masturbation during the healing process, STI screening as clinically indicated (with deferral of surgical circumcision until treated) and treatment/referral, and linkage to care and treatment for those testing positive in HTS, post-surgery follow-up, including adverse event assessment and management, distribution of condoms.

Men with ongoing high-risk sexual behavior testing HIV negative for HIV will be offered VMMC and/or referred for PrEP. The programs will link with ongoing initiatives directed at finding men such as the Faith and Community Initiative that are identifying high risk, HIV negative men, including those over the age of 30, and be sure they are linked to VMMC and other prevention services. VMMC sites will establish relationships with ART sites to assure that immediate linkage to treatment is available for those testing positive. For those presenting between age 10-14 who are not eligible for immediate VMMC, age appropriate sexual and reproductive health education will be provided along with education on returning for VMMC at age 15.

PEPFAR/E will continue to provide direct surgical service delivery to circumcise 6,983 men. COP21 funding will support DSD at fixed 15 sites (12 of which are MOH sites) as well as through outreach VMMC services, evidence-based demand creation, salary support for health care providers and mobilizers, procurement and logistics for circumcision kits, and quality assurance activities.

The Ministry recently approved task shifting from a doctor-led to nurse-led VMMC Program. PEPPFAR/E will Support the task-shifting framework, policy and transition of the VMMC program from a doctor-led to a nurse-led program and further lead a human centered deign (HCD_-oriented process to develop, review, and revise national and regional demand creation strategies and monitor the implementation of the strategies. The VMMC IP that supports the MOH VMMC program at the national level will support the training of nurse-midwives with a government approved curriculum to enable them to perform circumcisions. Inclusive to these approaches is a national demand creation campaign which was not feasible to conduct during the peak of COVID-19. The coordination support IP will provide TA to ENAP to develop a national CQI plan and build capacity for the implementation of the developed plan at VMMC sites. The program will build capacity of service providers to provide safe VMMC surgery and to monitor and report adverse events and support the VMMC unit and facilities to monitor data to improve program performance. VMMC clients are already being re-imbursed for travel and this will continue in COP 21.

In addition to offering VMMC services at the 15 fixed sites across the country, an outreach clinic initiative will ensure that clients are able to access services and are served closer to their homes. Outreach services will increase VMMC coverage not just for hard-to-reach rural areas that do not have access to a health facility, but also to populations who do not have the time to travel to a facility multiple times as a result of their work. The program will also undertake time-limited campaigns in the course of the fiscal year.

The program will modify demand creation and service delivery activities and implement community led demand creation through VMMC Champions in each region to include the church, traditional leaders, women's group, and men's regiments. Demand creation strategies will be scaled up to increase uptake of

services, and include referrals from HIV testing sites, STI clinics, and men's clinics, as well as the strategic engagement of women (e.g., during ANC, DREAMS, female community groups), local and traditional leaders, faith-based organizations, and workplace VMMC programs. The program will explore the use of incentives given to clients for VMMC uptake. The incentives will be non-coercive in type and quantity, designed to overcome practical barriers to obtaining MC such as lost wages, including financial incentives for out-of-pocket costs such as providing transport. The use of incentives will include an effectiveness monitoring and evaluation plan.

The program will implement individual site planning and intensified regular performance monitoring using Site Capacity and Utilization tools, which will respectively enable teams to conduct community mapping, targeted community mobilization, and monitor site productivity in real-time to inform targeted demand creation among the age-pivot. Advocacy by the community, traditional, and government leadership is essential and will be leveraged to create demand for the program. Lastly, Peace Corps Volunteers, working through their counterparts and with implementing partners, will link men to VMMC services and support demand creation through BRO (Boys Reaching Out) camps and clubs.

Given the need to achieve 80% coverage among 15-29 years old and attain sustained epidemic control, PEPFAR will prioritize TA to ensure the quality of services and data for decision-making. TA for robust data and service quality will incorporate SIMS, DQA, external quality assessment (EQA), and CQI on a regular basis, as well as training and mentorship of site-based M&E officers, in the areas of data management and use.

Additionally, to ensure the safest VMMC program, the training of staff using online training (OTH), planning of practicum, assessment of staff competence will be provided to the cadres who perform VMMC. In COP 21, the program will review the utilization of the training platform and adapt it to the local context and couple OTH with face-to-face trainings. The incorporation of nurse-midwives as a cadre to perform circumcisions will be fully implemented in COP 21, hence, special attention will be made to monitoring and supporting competency in this new cadre through training, practicums, SIMS visits, CQI and adverse events monitoring. The robust adverse event (AE) oversight will also be conducted by partners and PEPFAR, including routine monitoring, thorough investigation of AEs, and corrective actions. These will be especially important as the program implements a nurse led VMMC strategy. In addition, partner performance will be tracked through weekly performance monitoring reports as well as regular technical meetings with MOH and the PEPFAR team to ensure the sites are performing at capacity. This strategy will provide a basis for refining programmatic approaches on an ongoing basis. The program will further strengthen the utilization of CMIS for VMMC data management at all VMMC sites

In COP20 the program made significant improvement to transition to reusable kits to support long term sustainability, reduce costs, improve procedure quality, and reduce waste generation. In COP 21, the program will scale up transition to reusable kits. The use of reusable instruments will be accompanied by a detailed and robust plan to ensure proper instrument reprocessing. The dorsal slit method will continue to be the method of choice for PEPFAR partners implementing VMMC.

Eswatini Military VMMC Program

The VMMC program within the military began in 2019 and is aligned with the MOH and UEDF guidelines. Entry points are through the OPD, HTS, FCI, intensive peer educator recruiting activities, and contribution from an IP sub-contractor. Peer educators are used for registration and retention of potential clients. Newly

graduated recruits are targeted between the pass out and graduation period for sensitization and recruitment. In COP20 the program was able to overachieve on its targets. The COP21 target for the military is 331 circumcisions.

4.8 Pre-Exposure Prophylaxis (PrEP)

PEPFAR/E supports a fully integrated government-led sustainable PrEP program by continuing to implement the operational plan developed in COP18. Full national scale up of PrEP is underway in COP20 with the OU on course to achieve this by FY21Q4. In COP21, the support shall strengthen the coordination for PrEP implementation across partners supporting the MOH, improve uptake of PrEP through the implementation of the demand creation and communication strategy, strengthen health facility flow to improve access for AGYW, KP, and men, PBFW, track the processes of provision, uptake and adherence to limit seroconversion rates and contribute to reduced HIV incidence. Below are service delivery activities that will be undertaken.

Strengthening the PrEP uptake and retention

1.**Expand HCW providing PrEP:** The MOH scale-up envisages PrEP provision in all ART facilities by the end of COP20, including KP sites and DREAMS on Wheels mobiles. To strengthen PrEP implementation in these sites, more focus will continue to be placed on ensuring that all HCWs are hands-on at a facility level to adjust client flow for PrEP provision at all entry points and beyond ART platforms for high volume sites.

2. **Improve client flow for PrEP:** New client flow procedures at facilities will be put in place to ensure that ARV drug pickup points are where the clients are seen, particularly at hospitals.

3. **Champion PrEP provision in facilities:** Champions/focal people among the existing staff in facilities will continue to be identified to promote prioritization of PrEP provision to high-risk negatives as part of routine services delivery.

4. **Integrate PrEP into mentorship program:** PEPFAR/E regional clinical implementing partners will continue to support facilities with refresher training and mentoring for health workers to provide PrEP services.

5. **PrEP re-packaging:** In COP21, PEPFAR/E will support repackaging PrEP containers to improve uptake. This will address the challenge where clients (especially AGYWs and FSWs) do not want to carry ARVs containers because they fear being perceived as living with HIV.

6. **Strengthen PrEP retention**: PEPFAR/E will strengthen the use of the appointment register and refill reminders such as calling, messaging/messaging apps and shortening PrEP refill waiting time by integrating PrEP refill into existing community outreach by facilities and support MOH in accrediting private facilities and pharmacies to offer PrEP services.

7. **Strengthen the M&E Platforms:** PEPFAR/E will support MOH to ensure that the full PrEP cascade is monitored and evaluated through electronic (CMIS) and manual platforms (registers) so that leaks can be identified and addressed.

8. **Strengthen demand creation for PrEP**: In COP21, PEPFAR will strengthen demand creation through the implementation of a demand creation and communication strategy. This will be supported by mobilizations both in health facilities and the community.

9. **Support for introduction of new PrEP products:** In COP21, PEPFAR will support MOH to develop a roadmap for the introduction of new types of PrEP (e.g., long acting injectables and vaginal rings)

4.9 Commodities

In COP21 PEPFAR/E will support the GKoE to procure all first line Pediatric ARVs and the following commodities

a) Rapid test kits for recency testing
b) Viral load reagents and consumables
c) POC EID/VL reagents and consumables
d) Condoms and personal lubricants
e) VMMC commodities and consumables for 6983 planned circumcisions

The Global fund will support the procurement of

a) Tuberculosis treatment and prophylaxis drugs
b) RTKs and Self-Test HIV kits
c) Adult ARVs
d) Condoms and personal lubricants
e) Tuberculosis diagnosis lab reagents and consumables

PEPFAR/E, MOH/GF in Partnership with PSM will closely monitor the international supply chain system for selected key products from their production, freight, and lead-time. In COP20 orders were placed early and they were closely tracked, Eswatini plans to place its orders early for COP21 to mitigate any challenges in TAT and freight. The country supply chain will leverage on the rolling out of eLMIS and support from Regional logistic officers to respond to supply chain challenges on the sites not using eLMIS. PSM will support the country in the CCD model in response to the COVID-19 responses the country will have in place and the country will leverage on the roll out of CMIS lite for commodity end to end visibility in the community space.

Condoms

PEPFAR/E will continue to support the GKoE to take up the procurement of public sector condoms and sustain the high utilization of condoms by the populace. Condoms remain an important HIV intervention for the HIV prevention response in the kingdom. PEPFAR will build on the total market approach (TMA), market segmentation, and priming of the private sector by engaging the government to continue to utilize these approaches in condoms programming. Acknowledging that a full transition to GKoE for condom commodity procurement and programming will take some time, in COP21, PEPFAR/E will support the GKoE with procurement of public sector condoms and lubricants for key and priority populations while continuing to engage the government of Eswatini on the commodity security to sustain the gains of the HIV and AIDS response thus far.

Pediatric DTG

Eswatini revised the integrated guidelines for the management of HIV in 2018 by considering DTG-containing ART as the preferred first-line regimen for the treatment of HIV. In July 2021 Eswatini will transition its eligible pediatric population that is on a PI-based regiment into the DTG based regiment. This is done according to the WHO recommendation that the Pediatric TWG in Eswatini uses to adapt its guidelines. This transition should be completed within three months of DTG introduction. In COP21 Eswatini will continue to advocate and transition toward optimum pediatric formulations including DTG 5mg. Robust and active pharmacovigilance systems are already in place to monitor new drug formulations and PEPFAR will continue to strengthen this area. Some keys areas that are integral to the introduction of the DTG 10mg formulation are highlighted below:

- Eswatini will procure small amounts of PI based regiments to support those that will not tolerate pDTG.
- Individuals newly started on a DTG based regiment who subsequently develop unsuppressed VL on routine monitoring will require genotyping to identify drug resistance mutations. Currently PEPFAR is supporting the cost for genotyping for individuals that are failing the 2nd line ART regimen.
- If DTG 5 mg is availed Eswatini will rapidly adopt the formulation while following the same transition process it did with the introduction of the DTG 10mg formulation
- The county will maintain enough stock levels of DTG 10mg formulation to support and implement 6 MMD prescriptions the eligible clients according to National HIV Guidelines

PEPFAR/E will continue to monitor the uptake of DTG-containing regimens for patients newly initiating ART and for those stable on the existing first-line regimen. PEPFAR/E IPs will provide technical support to MOH to build systems and capacity to operationalize pharmacovigilance systems, and provide:

- Support the MOH to provide supportive supervision and mentorship to health facilities to promote compliance with the National guidelines and Active pharmacovigilance efforts.
- Support the MOH in monitoring of new ART initiations, rapid transition of clients failing on first line and switching of individuals to second line
- Support the genotyping tests for individuals that have unsuppressed VL while on DTG based regimes.
- Monitor the rational use of DTG as per the national guidelines and new changes every quarter and share the data for continuous quality improvement (CQI) on the optimized use of DTG

Peace Corps Volunteers with a medical background or IT background will work within health facilities in rural areas to support selected supply chain management activities in Eswatini. Volunteers will continue to be trained by the MOH and PSM, which is the national partner for the supply chain management. Volunteers will help improve the following areas: inventory management and reporting through the logistics management information system (LMIS) reporting tools.

Multi-Month Dispensing (MMD)

Three months dispensing has been the standard of care for stable clients on antiretroviral treatment since 2007. The goal of the treatment program is to increase the proportion of eligible PLHIV on treatment on 6 months MMD from 46% to 80% in COP21. Scaling up 6 months MMD has a potential of improving continuity of treatment and reducing treatment interruption among clients on ART. In addition, scaling up 6 months MMD will also reduce the risk of exposure to SARS-CoV-2 infection as clients will have less frequent visits to health facilities. To ensure adequate stock to support 6 MMD, PEPFAR will support the GKoE in ensuring ARV commodity security in areas including but not limited to commodity forecasting, ordering, procurement, commodity distribution, and improving end to end stock visibility.

4.10 Collaboration, Integration, and Monitoring

A. Cross-Technical Collaboration

PEPFAR/E participates in a number of forums that improve collaboration and coordination between MOH, GF and other external stakeholders. These include but are not limited to:

i. **CCM:** The CCM coordinates all GF activities in the country, and includes representatives from PEPFAR, MOH, UNAIDS, WHO, CS and other stakeholders. PEPFAR/E technical team participated in the 2022-2025 HIV Grant writing process.
ii. **TWGs**: The TWGs, chaired primarily by the MOH and NERCHA, are designed to coordinate ongoing activities within the different program areas across all donors/partners. PEPFAR/E participates as members of these TWGs.
iii. **Commodity Planning**: PEPFAR/E also regularly engages directly with MOH and GF around issues related to commodities and programming.
iv. **UNAIDS development partner meetings**: Quarterly meeting between UN Agencies, NERCHA, and donors to coordinate activities. Monthly meetings between PEPFAR Coordinator and UNAIDS to coordinate activities.

The above regular engagements ensure that there is collaboration and no duplication in implementation or procurement across donors/partners. In addition, the continued high level of involvement of MOH, GF and UNAIDS in the COP20 stakeholder and COP21 Virtual Planning Meeting provided additional opportunities to further streamline and strategically plan for HIV/AIDS activities in Eswatini.

B. IP Management

PEPFAR/E regularly holds joint partner meetings to review data, measure progress towards targets and identify innovative strategies that can be implemented throughout HIV/AIDS programs in Eswatini. Regular SIMS visits were interrupted due to COVI19, however virtual monthly meetings with detailed partner presentation were helpful in determining partner performance. SIMS visits are expected to resume early in the year either in person or virtually, depending on the conditions on the ground. Visits will be conducted by both technical and business staff to achieve comprehensive assessments of IP's performance. Quarterly preparation for POART calls also strengthen IP management through standard reporting mechanisms.

For all partners, monthly reviews of granular data and custom indicators, financial outlays and obligations are conducted to identify problems early and implement corrective actions to address them. CDC and DOD plan to implement separate monthly financial meetings to improve financial management and to flag disproportionate burn rates to program output. DOD will conduct monthly management visits, annual SIMS visits and quarterly joint site visits. USAID will be conducting routine site visits and monthly meetings with partners to review progress and expenditure. The site visits and meetings will involve technical staff who will focus on performance, and business staff who will focus on expenditure and outlays. Regular partner meetings are convened to share best practices and lessons learned. As necessary, PEPFAR/E staff review weekly updates from poor or underperforming partners to monitor progress towards targets. Monthly and quarterly partner SI meetings are conducted to review results and reporting requirements and to provide guidance. The Agency Leadership will continue to cover the interagency business processes.

C. Integration of Above-Site Activities: HRH and Laboratory (VL)

In COP 21 PEPFAR priorities have limited laboratory support for VL, HIV diagnosis for adults, infants, and children, HIV recency testing, limited CD4, TB testing including AHD and CrAg, and PREP. The expectation is that all countries will have fully transitioned testing to country national programs. It is also expected that all OU's have a clear HRH transition focus.

Building on the 2018 HRH mapping and sustainability framework through TA support through a Senior HRH Policy Advisor, the lab has been identified as a priority focus for sustainability. The development of a functional management structure is a priority for the National Health Laboratory Services (NHLS) and regional structures to define clear reporting lines between the central laboratory and the regions. This structure is informed by the findings of the CDC supported Laboratory Equipment Optimization study that will define clear roles, responsibilities and reporting lines. The inventory of donor-supported posts in the laboratory vs. what is in the GKOE FY 21/22 Establishment Register is important to inform a phased 5- year transition plan for GF and PEPFAR supported positions and a plan to integrate this into the annual recruitment plan.

A Laboratory Working Committee with representation from the Ministry of Public Service (MOPS), MOH HR Unit, PEPFAR (CDC/USAID) has been put in place to look at specifically, the Terms of Reference of the Organizational Review of the Eswatini Health Laboratory Services. The Team expanded the SOW of the consultancy, to interrogate some of the laboratory HR issues informed by the Conciliation, Mediation and Arbitration Commission (CMAC) cases that have been collated under the HRH support that tracks the nature of the grievances. A number of the cases are related to the Laboratory Assistant I and II Cadre who have taken the government to court for performing work not in their Job Description and overtime claims. This will necessitate a closer look at the Schemes of Service for the Cadre, which will clarify the core functions and qualifications required for each level of the post within the cadre. MOH is developing a new Laboratory Strategic Plan supported by WHO. This will inform the costing of the 5-year absorption plan for the Laboratory Technologists graduates from the local and regional training institutions prioritizing those that were funded by GKOE scholarship. The Management Structure will define staffing levels over the next 5 year with MOPS that will be approved by Cabinet.

The dissemination of the Transition Framework is important and will prioritize the Laboratory HRH sustainability, Eswatini National Aids Program (ENAP), and lay cadres supported by donors and the MOH/RHM Program. The GKOE views this sustainable from a cost perspective and will be complementary to the decentralized model of care in communities. This is possible with the RHM data that has been entered in the HRIS. Further, the nursing cadre (80%) of the MOH workforce has been streamlined with the Establishment Register pay point in the HRIS. The remaining work is to move the employees to the correct pay points in the Establishment Register. The remaining cadres (20%) of the health workforce will be streamlined before the implementation of COP21. MOH has approved a streamlined recruitment process across all donors supporting the Ministry of Health programs. Further, tapping on the government secondment policy to build technical skills in HIV/TB within government. The MOH Senior Management Team has approved that the sustainability framework is presented to all donors and stakeholders and that implementation should come into effect beginning COP 21.

PEPFAR has supported the scale up of VL rollout by supporting with relevant HR to ensure there is VL testing at regional level and through the implementation of diagnostic network optimization (DNO). In

COP21, there is need to support the Government of the Kingdom of Eswatini to review and implement the findings of the DNO exercise. This may assist the government to implement a phased approach absorption of donor supported positions. The first phase of the optimization process included placement of high throughput platforms in Nhlangano and the National Molecular Laboratory. PEPFAR will support 100% of VL reagents procurement and will continue supporting the HR in all the four VL testing laboratories in COP21.

Improving integration of quality and efficiencies in service delivery through improved models of care delivery across community and facility sites PEPFAR/E will look to leverage the community monitoring platform, SIMS and MER data to improve quality of treatment services delivered at both facility and community levels. Use of granular data at facility level to assess services provided and patient outcomes by facility, sex, and age bands. This includes but is not limited to regular review of i) Index cascades; ii) Missed appointment/patient tracking cascades; iii) cohort linkage data; and iv) High viral load cascades by facility, age, sex, and region. Completion of referrals and facility and community linkages are also key outputs that will be tracked. This combination of MER and custom indicators will be used to track program quality and will form a critical part of partner management in a bid to improve program quality.

D. Community-Led Monitoring

PEPFAR/E [through the PEPFAR Coordinating Office (PCO)] is working in collaboration with the UNAIDS country office and the Coordinating Assembly for NGOs to support community-led monitoring. As part of that collaboration, UNAIDS provides technical support to CLM by providing staff time through their M&E office to support reporting and data use activities amongst other support. In COP 20, PEPFAR also worked with UNAIDS and NERCHA to identify the Community Data for Action Platform (which is a DIHS2 based electronic system that is already being used at community level) from which CLM module will be run. PEPFAR/E has also engaged with Global Fund wherein the current 3-year GF HIV grant and potentially the COVID-19 grant has community monitoring activities, and those activities will be integrated into the CLM platform. PEPFAR/E has also worked with CSOs consultative group to adapt the data collection strategy for CLM to be in line with current COVID-19 prevention regulation.

CLM is being implemented through the PEPFAR small grants mechanism and the Small grants coordinator has been engaged to affect the CSO coordinating umbrella organization and implementing CBOs selection process. The CLM project staff (coordinator and M&E officer) is being engaged also. CLM oversight will be carried out through a Steering committee. The steering committee is constituted as a national level body with multi-stakeholder representation to foster stakeholder ownership of the platform and to ensure the integration and actioning of the systematic corrective actions for barriers to accessing health services that would be identified through CLM. Members of the steering committee will represent CSOs, Government, NERCHA, PEPFAR and UNAIDS. CSOs will be represented by CANGO [which is the umbrella body for NGOs in Eswatini] and the CSOs that will be selected to implement CLM, while the Government will be represented by the MOH and MTAD.

PEPFAR/E is working in collaboration with UNAIDS to determine a technical assistance mechanism that will serve on the onset to develop the CLM module within the CDAP and thereafter train the implementing CSOs on the module. While for COP20, the focus of CLM is high volume facilities and facilities where service delivery issues have been identified through program data and/or SIMS, for COP 21, the focus of

CLM is to scale reach to more facilities to have greater opportunity for client feedback with service delivery at facilities. To this end the CLM budget was increased in COP21 to support increased reach.

E. Above-Site Activities Mapped to Key Barriers

PEPFAR/E of the SID 3.0 findings, along with MER results and SIMS visit reports and identified key barriers gaps to achieving epidemic control by 2020. These barriers include: Inadequate and inconsistent supplies of drugs and commodities at facility level; Limited complete and correct Electronic Medical Records; Inadequate use of Epidemic and Health Data; and Inadequate laboratory systems and support for continuous training on lab professional development, QMS, and accreditation. COP21 above site activities are mapped to the aforementioned key barriers as well as minimum requirements to support: the establishment of a functional procurement and supply chain management system, address inadequate demand for HIV and SRH services (e.g., VMMC, PrEP, condoms, and family planning for AGYW), and strengthen government capacity in data utilization. Each of these areas maps to a section of the 2019 Sustainability Index and Dashboard in which the country scored yellow. COP21 above site activities have measurable outcomes to ensure adequate progress towards achieving epidemic control and meeting minimum requirements including increases in recency testing, increases in ART coverage for children living with HIV and adults, measurable increases in uptake and accessibility of HIV prevention services, in particular PrEP, an increase in facilities certified as KP friendly, and maintenance of a national comprehensive cervical cancer screening program.

F. Use of Unique Identifiers across Sites and Programs in Clinical Settings

Eswatini has adopted the use of the national ID number as a unique patient identifier (UPID) in the CMIS as well as in some non-clinical record systems, such as schools. For patients without national ID, CMIS creates a unique system-generated identifier. As of April 2021, almost 64% of all clients (regardless of HIV status) registered in the CMIS were registered with their national ID. Nationally, approximatley30% of citizens do not have a national ID, which poses challenges for effective tracking of unique clients which are recognized by the MOH. In 2021, the Ministry of Home Affairs has extended its operating hours and has begun mobile outreaches to facilitate uptake of UPID registration. The UPID is also used in PEPFAR supported community programs, including the DREAMS layering database. To increase the number of clients with a unique identifier, the use of biometrics using fingerprint will be piloted in June-August 2021. The biometric pilot was delayed due to COVID-19 restrictions.

The following tables provide the PEPFAR/E programs' target and coverage for COP21 by the target population and geographic area.

Table 4.10.1 Targets by Population

Target Populations	Population Size Estimate†	Disease Burden)	FY22 Target**
AG 10-19*	104,619	5.3%	25,436
YW 20-29*	88,767	29.2%	30,070
FSW	14,581	58.8%	14,290
MSM	5,754	21%	3,452
PWID	1,279*	n/a	100
TG	119*	42.2%	20

**Represents DREAMS SNUs only*

†*AGYW population size is sourced from census population projections for 2020. KP population sizes are based on the 2016 IBBS.*

*Source: * "Validating and Estimating the number of Key Population Individuals at the Hot Spot Level in Eswatini", FHI360/LINKAGES, 2018*
***AGYW targets reflect PP_PREV targets. KP targets reflect KP_PREV targets.*

Table 4.10.2 Targets for OVC and Linkages to HIV Services

SNU	Estimated # of Orphans and Vulnerable Children	Target # of active OVC (FY22Target) OVC_SERV Comprehensive	Target # of OVC (FY22Target) OVC_SERV Preventative	Target # of active OVC (FY22Target) OVC_SERV DREAMS	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY22 Target) OVC*
Hhohho	107,818	18, 728	2,289	2,263	10,811
Lubombo	101,483	21,673	3,335	1,826	12,902
Manzini	73,350	22,347	2,823	3,607	12,596
Shiselweni	72,698	12,082	1,683	1,025	12,596
TOTAL	355,349	74,830	10,130	8,721	43,360

4.11 Cervical Cancer Program Plans

Eswatini through the leadership of the National Cancer Control Unit of the Ministry of Health provides cervical cancer screening services at health facilities. Beginning COP20, 131 out of 137 (96%) of PEPFAR supported facilities were offering cervical cancer screening services using Visual Inspection with Acetic acid (VIA). Mobile screening services were also offered by PEPFAR partners providing community services.

In COP21 PEPFAR/E will continue to increase access to VIA based screening services to HIV positive women through a tiered service delivery model that takes into account the following factors:

a) Number of HIV positive women seen at the health facility
b) Availability of adequate infrastructure (space)
c) Availability of equipment
d) Technical capacity to screen and treat and perform LEEP
e) Monitoring and evaluation systems

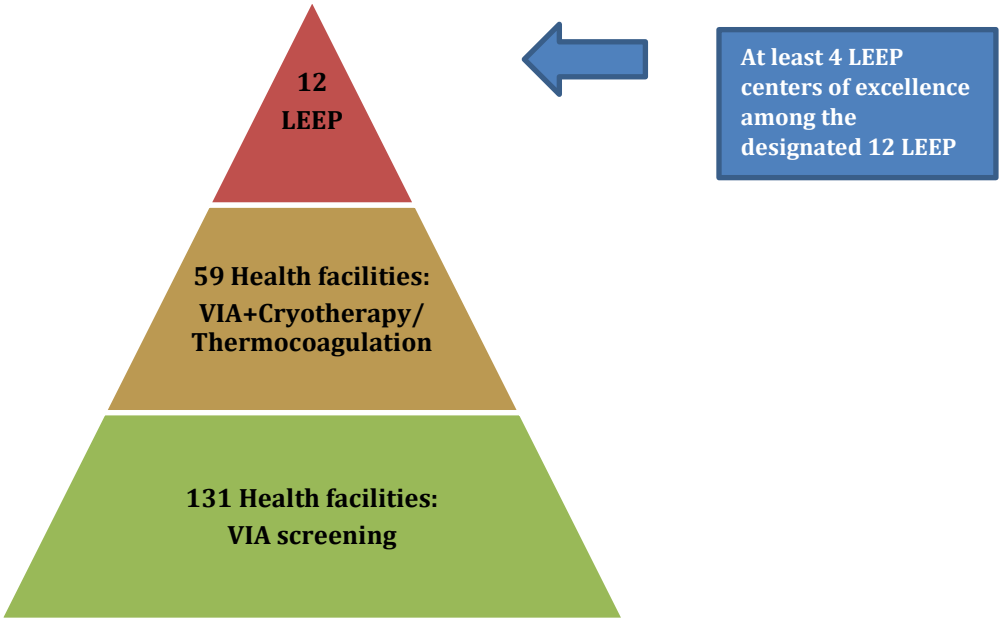


Figure 4.11.1 Cervical cancer screening approach
Source: PEFAR Eswatini Program data, FY20 Q4

Based on a national assessment conducted in November and December 2018, facilities received necessary resources to enable them to screen and refer for treatment, screen and treat onsite, provide LEEP, or refer for further treatment. In COP21, all 131 PEPFAR supported facilities will continue to provide screening services according to a tiered approach as shown (see Figure 4.11.1). Other sites will also be supported through roving teams. Regional hospitals selected to become LEEP centers of excellence with the capacity to provide prompt LEEP services including those referred from other facilities will continue to be supported in COP21. This approach initiated in COP20, was necessitated by the missed opportunities noted at LEEP designated sites where there are personnel constraints and will continue to address the issue of insufficient theatre space that has caused a long backlog of women awaiting LEEP. Regions with hospitals repurposed

for COVID-19 care will be supported to expand screening and treatment to including LEEP at alternatives health facilities within those regions.

The current 12 LEEP designated sites will be maintained with support to ensure LEEP services are functional. Each region will have at least one center of excellence for LEEP. In addition to improving laboratory capacity for histopathology services, a partnership with a private laboratory will continue to be strengthened to ensure timely availability of histopathology results for appropriate further management.
In order to ensure quality services, mentorship and onsite training on cervical cancer screening will be continued and captured in mentorship logbooks stationed at health facilities. An expert forum will be created which will allow health care workers to receive mobile images of cervical cancer lesions and participate in tele-mentoring and quality reviews.

The national referral tool will be used to ensure linkage to care and referral for cryotherapy or thermocoagulation and LEEP. Communication channels through existing PEPFAR support for mobile phones and airtime will be created to ensure prior booking confirmation and reduced waiting time of referred clients. Referring facilities will need to close the feedback loop to ensure that they receive information on the treatment outcomes of the patients they referred to and document in patient records. Palliative care will be provided either onsite or through referral. The existing SOPs will be revised to reflect this.

In COP21, PEPFAR will continue funding six Implementing Partners supporting the cervical cancer program with a funding level of $1,500,000 and will complete the implementation and disseminate the results of the HPV vaccine trial study among females stable on ART, aged 9 - 24 years. The study is to determine participants' immunological response to two vs. three doses of the 9-valent HPV vaccine.

4.12 Viral Load and Early Infant Diagnosis Optimization

The Ministry of Health has proposed a DNO review to take place in July 2021 to establish the need and cost effectiveness of integrating POC VL systems to the existing conventional systems. In order to increase VL coverage for PBFW, the idea to include POC VL for PBFW is being considered in COP21. To increase VL coverage and suppression for children and adolescents, DBS VL testing will be scaled up in COP21.2

Since COP20, PEPFAR initiated the support of TB sequencing. This support is being scaled up in COP21. Getting the lab set up for this initiative including training of staff has been accomplished in collaboration with other partners.

Since the beginning of FY20, multiplexing included integration of COVID-19 testing using VL testing platforms. In the Shiselweni region, GeneXpert is being used for COVID-19 testing, while the Panther at the National Molecular Laboratory is also being used for HPV screening. In COP21, the GeneXpert will integrate VL testing for PBFW.

The LIS/CMIS interoperability and SMS systems have been implemented and these systems are being scaled up in COP21.

5.0 Program Support Necessary to Achieve Sustained Epidemic Control

Analysis conducted by the PEPFAR/E team revealed sustainability vulnerabilities and programmatic gaps that must be addressed for the country to achieve sustained epidemic control. The Sustainability Index and Dashboard (SID), which was completed through a participatory process with key stakeholders, revealed vulnerabilities in three sustainability elements: Laboratory, Service Delivery and Commodity Security and Supply Chain. Analysis of the SID 3.0 finding, along with MER results and SIMS visit reports, identified three critical programmatic gaps that must be addressed. These programmatic gaps are: 1) inadequate community systems to improve linkage and retention; 2) inadequate supply chain capacity and infrastructure; and 3) inadequate qualifies laboratory personnel to achieve epidemic control. PEPFAR will continue to work closely with and leverage resources of key stakeholders, including the GFTAM and GKoE.

PEPFAR/E has included in the COP21 budget activities to address threats to maintaining 95-95-95 achievements and progress towards sustained epidemic control. These resources will be used to fund activities that will complement other systems investments. PEPFAR has set annual benchmarks for each above-site activity that will be used to monitor implementation and ensure achievement of results. The above-site activities in COP21 are strategic investments to strengthen GKoE' s capacity for locally managed HIV prevention and treatment programming and monitoring. Systems investments facilitate large scale information sharing ensuring adequate and reliable client and commodities data is available quickly and routinely. Furthermore, investments ensure that systems users are able to digest and utilize data to make informed decisions in programming, client care, and procurement strategies.

For COP21 as was the case in COP20, Table 6 investments in the areas listed below are carefully calibrated to strengthen government capacity and systems in key technical areas that are crucial for planning, managing, coordinating and measuring HIV care, treatment and prevention programs.

5.1 Procurement and Supply Chain Management System

Leveraging GF resources and in collaboration with CHAI, the open-source electronic logistics management information system (eLMIS) is being piloted in 3 facilities. The pilot will facilitate learning and inform the roll out to the rest of the 25mother facilities in FY21-22, with an aim to cover all ART facilities during FY22. Coupled with barcoding and Updating the Product master list, this will ensure end-to-end stock status visibility, a critical piece in stock management across all levels. Once rolled out to the 25mother facilities, the eLMIS will also be integrated with the client management information system (CMIS) as a part of the HIS integration effort at the national level.

Quantification and supply planning are key tenets of the supply chain, so too are good storage, timely commodity ordering, optimal commodity distribution and management of stock at both Central Medical Stores (CMS) and site levels. PEPFAR will closely monitor and respond to the effects COVID-19 has on the international and national supply chain and logistics support, it will continue to provide TA to both CMS and facilities to eliminate supply chain interruptions. In particular, PEPFAR will continue to offer TA, including embedding critical staff at CMS and having regional logistical officers, for supply chain management and oversight; rational medicines use; procurement and supply chain data use; medicines regulation; Maximizing the web based technologies; pharmacovigilance activities; annual quantification

and quarterly supply planning; support to CMS for warehouse management and use of e systems; as well as support to procurement and supply chain-related technical working groups. In addition, through PSM, PEPFAR will also continue with the procurement of PEPFAR-supported commodities

5.2 Client Management Information System (CMIS)

The overarching goal of the CMIS is to monitor the achievement of 95-95-95 goals and AIDS-related mortality for clients across the country. This will allow the GKoE to track epidemic control at a national level, assess coverage gaps at a regional level, improve client health management at the facility level, and facilitate patients' access to their own medical information.

CMIS is designed to strengthen patient care by improving data quality and access to provider and patient information. This system, when fully deployed across the country, will ensure that secure patient information is readily available to providers at whatever location a patient chooses to be served. It is anticipated that once it is fully operational the CMIS will reduce patient wait times, improve HIV prescribing practices and ensure greater patient safety. During COP20, CMIS was deployed to 183 of 195 PEPFAR-supported ART facilities. By December 2021, CMIS will be serving all major PEPFAR-supported ART sites, with all 195 PEPFAR-supported ART facilities online by February 2022.

Given the unreliability of the microwave WAN system in the country, multiple strategies are being employed to resolve network downtime issues, including a scaled Access Point Name (APN) cellular network solution, as well as the deployment of the CMIS Lite platform. CMIS Lite is a mobile-based CMIS application that will provide offline functionality when there are network or power outages. The integration of the HIS systems is critical for effective and efficient patient and data management. In COP21, the priority is on the complete integration of the CMIS and the Lab Information System (LIS) and the Logistics Information System (eLMIS).

5.3 Care & Treatment

Through PEPFAR support, the Kingdom of Eswatini has achieved the UNAIDS 95-95-95 target for 2030. However, the government of Eswatini still requires support at national and sub-national levels to close ART coverage gaps in two administrative regions (Manzini and Lubombo), specific subpopulations and to shift the focus from case finding to retention in care and viral load suppression (VLS). Program data shows that of 21,467 which is 10% of all PLHIV (these are the PLHIV who remain unsuppressed) 57% are unaware of their status, 5% are aware but never linked and 38% are on treatment but not suppressed. Therefore, patients who fail to link to treatment and those who interrupt treatment contribute to the 43% who are aware of their positive HIV status and are not suppressed, while 57% of those who are not suppressed are unaware of their status. Those <40 years of age are more likely to disengage from care with in the first 6 months of treatment and contribute to the population that is unsuppressed and may contribute to onward transmission of the HIV virus. Another contributor to IIT and viral load non-suppression is sub-optimal regimens.

To close these gaps, PEPFAR/E will provide technical assistance (TA) and Human Resources for Health (HRH) support at the national level to the Eswatini National AIDS Program (ENAP), Sexual and Reproductive Health Unit (SRHU) and the National Tuberculosis Control Program (NTCP) to strengthen coordination and evidence-based decision making to guide facilities as they shift towards improving

treatment continuity, VLS and reducing mortality by providing patient-centered services targeting sub-populations and geographies that are lagging behind in terms of ART coverage, treatment continuity, and VLS. Other program areas detailed elsewhere that support care and treatment outcomes include supply chain as PEPFAR supports the procurement of pediatric ARVs, laboratory reagents for viral load and Tuberculosis preventive therapy (TPT) medicines and PEPFAR support to laboratory services to ensure 100% viral load testing access for all PLHIV on ART.

5.4 VMMC

There remains a need for PEPFAR/E to support national TA to increase the pace of implementing VMMC services in-country. In COP21, PEPFAR will provide national-level support in the scale-up of VMMC demand creation to increase the number of males accessing VMMC services. VMMC partners will use various evidence-based demand creation activities to increase uptake and performance, ensure quality through Continuous Quality Improvement (CQI) and EQA, and closely monitor performance to tailor strategies in real-time. Additionally, task-shifting will allow nurses to perform circumcisions.

5.5 PMTCT and Pediatrics2

Although significant progress has been made toward the elimination of mother-to-child HIV transmission and across the pediatric HIV clinical cascade, there remains a definitive need for PEPFAR/E to support national TA to accelerate the pace toward optimal maternal and pediatric HIV outcomes, including the elimination of mother-to-child HIV transmission. In COP21, PEPFAR will continue to provide national-level support to the Sexual and Reproductive Health Unit (SRHU) and the ENAP's pediatric care and treatment programs.

The Ministry of Health's ENAP and SRHU programs are responsible for the coordination of investments across stakeholders to ensure that Eswatini implements standards of practice aligned with current WHO PMTCT and pediatric HIV guidance. For example, through PEPFAR support, ENAP is spearheading the optimization of pediatric ART regimens (introduction of DTG 10mg Dispersible Tablet in COP20 and full transition of all eligible CLHIV to DTG-based regimens in COP21). In addition, the Ministry of Health's SRHU program has also tirelessly advocated for the integration of FP services within ART clinics, as an essential component of client-centered care. The COP21 above- site activities remain focused on enhancing clinical mentorship and supportive supervision to PMTCT and pediatric programs to ensure the implementation of comprehensive and quality services throughout the continuum of HIV care at health facilities.

5.6 Cervical cancer

PEPFAR/E will continue to provide technical support to the MOH's cervical cancer program in planning, coordination, data collection, analysis and utilization. PEPFAR/E will support the procurement of equipment, provision of additional health care workers, and the revision, operationalization and printing of guidelines, job aids and SOPs. PEPFAR will prioritize procurement of thermocoagulation machines in place of cryotherapy machines where such equipment is required. PEPFAR will also support laboratory systems strengthening to expedite the transportation and testing of LEEP samples and return of LEEP

results to guide patient care and support. Expert clients will integrate screening services into their patient booking, tracking and return to care activities. M&E tools and the CMIS electronic platform were revised to capture data elements for cervical cancer screening and treatment.

In COP21, PEPFAR/E will complete the implementation and disseminate the results of the HPV vaccine trial study among females (9-24 years old) living with HIV and stable on ART. This study is to determine participant immunological response to two vs three doses of the 9-valent HPV vaccine.

5.7 HIV/TB Program

Above site support to National TB Program (NTP) will include training, mentorship, workshops, commodities procurement, and development of job aides, SOPs and guidelines in order to reach full TPT coverage with 90% completion by end of COP21.

PEPFAR/E through its partners will support NTP and ENAP to coordinate the TB/HIV response through supporting national TB/HIV coordinating committees (NCC) both at national and regional levels. In COP20, four NCC meetings will be done with PEPFAR support. In addition, PEPFAR/E will support the following key elements:

- Implementation of all four key components of TB infection control as well as the provision of condoms and PrEP to prevent HIV transmission.
- Printing of monitoring and evaluation tools and registers to facilitate monitoring of key indicators.
- Revision and updating of TB modules and indicators in electronic medical records (CMIS).
- Training of clinicians and laboratory technicians on revised guidelines, updated TB diagnostic algorithms, and the use of TB LAM and GeneXpert Ultra testing technology.

Above site support to the National TB Program (NTP) will include capacity building by providing technical staff to improve coordination and implementation TB/HIV response activities, training, mentorship and capacity building workshops. NTP will be supported to implement the revised TB guidelines and national strategic plan 2020-2023. PEPFAR/E will support NTP to update job aids, SOPs and TB/HIV collaborative policies. Both HIV and TB programs will be supported to achieve full TPT coverage by the end of COP21.

PEPFAR/E through its partners will support NTP and ENAP to coordinate the TB/HIV response through supporting TB/HIV coordinating committees (NCC) both at national and regional levels. In addition, PEPFAR/E will support the following key elements:

- Implementation of all four key components of TB infection control as well as the provision of condoms and PrEP to prevent HIV transmission.
- Tailored scale down of printing and use of paper-based TB/HIV monitoring and evaluation tools and integration of TB indicators in routine electronic medical records (CMIS).
- Training of clinicians and laboratory technicians on revised guidelines, updated TB diagnostic algorithms, the use of TB LAM and GeneXpert Ultra testing and sequencing technology.

5.8 Key Population Program

PEPFAR will continue to provide technical assistance to the national KP unit in MOH for strategic, operational planning, coordination and program performance monitoring of the KP program. Continued support will be provided to ensure the utilization of the IBBS and tracking of the treatment cascade to ensure 95 95 95 for key populations, KP friendly services in health facilities with some certified as Centers of Excellence for KP services, strengthening of online programming including an online booking system for KP services developed in COP19 and expansion of service packages in the program and in KP community centers (drop-in centers). Training and sensitization for health care workers and law enforcement cadre will be conducted to address stigma and protect KP's human rights.

5.9 PrEP

At the national level, PEPFAR will continue to support the MOH to coordinate and manage the implementation of the PrEP operational plan, including updating of PrEP tools, training materials, implementation of demand creation and communication strategy and inclusion of PrEP in training curricula of all health cadres. In COP21, PEPFAR/E will support the interoperability of tools between CMIS and the PrEP-IT tool. This will facilitate importing data from CMIS into the PrEP-IT tool to be used to assess PrEP capacity in facilities. MOH will also be supported in stock monitoring, forecasting and ordering of drugs as well as lab commodities.

5.10 Laboratory Systems

PEPFAR/E continues to work with the government of Eswatini to build laboratory capacity in-country. Although major advances have been made in lab systems strengthening, there is a need to increase lab capacity to build on and maintain these improvements. The PEPFAR/E lab implementing partner will work with the government to improve quality management systems (QMS) in-country. In COP19, through PEPFAR/E support, the Eswatini Health Laboratory Services (EHLS) was able to get the National Molecular Reference and the National TB Reference laboratories internationally accredited. PEPFAR/E through the lab partner will continue supporting QMS for accreditation, the focus in COP21 will be to get all the three remaining Molecular laboratories in the country accredited. The lab partner will continue to provide supportive supervision & mentorship, EQA proficiency testing (PT) material production, procurement some of reagents and supplies, LIS support, VL Task Force meetings, lab managers and lab technical working group (TWG) meetings, and mentorship to EHLS senior management to ensure that indicators towards achieving benchmarks are closely monitored. PEPFAR/E initiated the interoperability of the Lab Information System (LIS) with the Client Management Information System (CMIS). This support will continue in COP21.

In addition to LIS/CMIS interoperability, in COP21, PEPFAR/E will support the scale up of the SMS system to inform clients of the availability of their high VL results. The second benchmark achieved in COP19 was the development of the database of in-country registered lab professionals. In COP21, PEPFAR will continue to facilitate the implementation of the Continued Professional Development (CPD) program which was initiated in COP19. PEPFAR/E will continue to support training on CPD points acquisition and the Medical and Dental Council (MDC) support to sustain laboratory staff skills. In COP21, PEPFAR/E aims to have at least 80% of laboratory professionals trained on the implementation of Strengthening Laboratory

Management Towards Accreditation (SLMTA) to be able to sustain QMS and accreditation activities and implement Strengthening Laboratory Improvement Program Towards Accreditation (SLIPTA) to track and monitor the proper implementation of the ISO 15189 elements. In COP21, PEPFAR/E will also support the development of the Laboratory Strategic Plan.

5.11 Effective Case-Based Surveillance System

In COP19 and COP20, PEPFAR/E has been supporting the scale up of recent infection surveillance from 38 health facilities towards a target of 165. In COP21, PEPFAR/E will support maintenance of recency surveillance activities at these 165 sites with more focus on programmatic and epidemic response actions to limit the spread of HIV. Data from recency surveillance will assist Eswatini to describe the epidemic, identify areas and populations with high rates and increasing numbers of recent infections, and use the data to prioritize resources and interventions. Enhanced data use from recency surveillance will enable programs to refine and timely implement targeted prevention interventions for cluster groups where increased number of recent infections are seen including interventions targeting AGYW such as DREAMS and prevention of new infections among pregnant and breastfeeding women. Other supported activities include procurement of Asante test kits, data collection tablets, training and mentorship, recency dashboard maintenance, staffing in critical areas, panel preparations, QA/QC and data plans for electronic data transmission.

In COP21, PEPFAR/E will support MOH to implement HIV case-based surveillance (CBS) system through linking existing electronic patient-level databases and data from recency surveillance. The CBS will enable unique tracking of PLHIV from diagnosis, identify and address HIV retesting among those previously diagnosed who are initiating or returning to ART, and allow for cohort tracking of key sentinel events that are key to epidemic control monitoring.

5.12 Strengthening Government Systems for Research and Training

PEPFAR/E will support activities to strengthen government systems related to surveillance and research. These activities are strategically directed towards providing technical assistance in key areas to the Epidemiology and Disease Control Unit (EDCU), the National Health Research and Innovation Department (NHRID), the Eswatini Health and Human Research Review Board (EHHRRB), and the national Civil Registration and Vital Statistics System. COP21 aims to continue to support activities that strengthen the capacity of EDCU to strategically implement HIV/TB surveillance systems. This includes ensuring policies and strategic plans are updated and operational; providing TA to update and maintain sustainable HIV surveillance and response systems, including HIV case-based surveillance and HIV recency; and providing TA for timely analysis, dissemination, and use of surveillance data.

The capacity of NHRID will continue to be advanced such that the department will be able to successfully lead and implement population-based HIV surveys and utilize data coming out of those surveys and health research to inform epidemic control. Further, technical support will advance the existing foundation of the EHHRRB to improve the ethical review of research protocols in a sustainable manner and increase the board's capacity in reviewing a greater breadth of research protocols with limited external support. Finally, in order to advance the quality of data reporting for cause of death among PLHIV, technical assistance will be provided to CRVS systems strengthening efforts, responding to existing gaps through an enhanced multi-stakeholder collaborative approach.

5.13 Coordination, Planning, Data Review

Oversight, coordination and tracking of the HIV response is the mandate of the Prime Minister through NERCHA. The coordination of the multi-sector response at national, regional, tinkhundla, chiefdom/municipality level requires engagement by various line ministries, and the different sectors including the private sector, faith sector, and civil society. In COP 20, PEPFAR/E transitioned the support to NERCHA from an international organization, integrating it to NERCHA. The focus in COP 20 was TA support to NERCHA to assume greater responsibility in leading the community coordination and engagement of multi-stakeholders in the response.

In COP 21, PEPFAR/E will support NERCHA to strengthen community data collection, analysis, interpretation and use for programing on a quarterly basis, including the use of spatial analysis to better understand gaps in a specific population and/or program coverage as well as to assure the tracking of the NSF indicators. As a part of quarterly data analysis, PEPFAR/E will also assist NERCHA in gathering and optimizing best practices in combination prevention programming, community-led approaches and communication strategies.

At the regional level, the multi-sector response is coordinated and led by the Regional Administrators (RA) working with the Regional AIDS Coordinators and the Regional Development Teams including Regional Health Management Teams, and Regional Education Officers and others. PEPFAR/E will provide support to the RA and Regional AIDS Coordinators to strengthen and assure active multi-sector engagement in, and coordination of the HIV response. This will assist the regions to better understand the combined community and clinical data, to visualize gaps in program and population coverage, and to address these through coordinated programming. PEPFAR/E will support the Regions in quarterly data reviews.

5.14 Umbufto Eswatini Defense Force

Through the Department of Defense (DOD) Program, PEPFAR has continued to support the Umbutfo Eswatini Defense Force (UEDF). DOD has adopted a health system strengthening approach with an emphasis on sustainability. Key activities have included: assistance with the development of an HIV Health and Wellness Policy; completion of a Seroprevalence and Behavioral Epidemiology Survey (SABERS) that will provide programming direction; development of a management system that has led to the UEDF clinic at Phocweni being awarded ISO 9001:2015 certification; expansion of program services especially decentralization of HIV services, TB, Cervical Cancer, and VMMC; capacity building of senior military staff tracked through the Military Sustainability Index (MILSID); continuation of a phased upgrade of military facilities- 3 sites upgraded over the past year; institutionalization of the management of hazardous and non-hazardous waste, with the incinerator procured through DOD refurbished and fully functional; COVID-19 support has also been provided to military facilities, base camps, forward bases and informal crossing through the implementing partner and the Pretoria DOD office.

6.0 USG Operations and Staffing Plan to Achieve Stated Goals

6.1 Staffing

PEPFAR/E has reviewed its staffing footprint and interagency organizational structure to be fully positioned to achieve program pivots and ensure that technical roles are defined in the interagency space. Special consideration was given to the USG staffing needs for ensuring effective partner management, including oversight and support to the transition to local prime partnerships.

6.1.1 Staffing Footprint

PEPFAR/E has reviewed its staffing footprint and interagency organizational structure to be fully positioned to achieve program pivots and ensure that technical roles are defined in the interagency space.

6.1.2 Missing Staff Skillsets

All agencies continue to invest in staff training, based on identified training needs during performance evaluations. Agencies are encouraged to budget adequate funds in the COBD for staff training and explore south to south TA for capacity building to address identified gaps in current program knowledge. DOD plans to focus on DC2 and DATIM training.

6.2 Long term vacant positions

USAID currently has 3 open vacancies. An offer has been extended for one of the positions and it is anticipated that the person will start in August 2021. A second position is awaiting security clearances. The third position is under recruitment. Two other USAID positions are being converted from institutional contract to local hire mechanisms. These two positions are currently being classified and will be converted before the end of FY21. USAID anticipates that all positions will be filled by the end of FY21, except for possibly the senior SI-HSS position, which is currently pending re-advertisement. The DREAMS Coordinator position with State Department is expected to be filled before the start of FY22.

6.3 Justify New Positions

CDC has gained consensus to hire an additional Laboratory Advisor.

6.4 Explain major CODB Changes

No major changes to CODBs. Agencies' CODBs were flat lined however ICASS costs contributed to a slight decrease for USAID and increase for State Department.

7.0 American Rescue Plan Act (ARPA) COVID19 Programming

Eswatini has achieved significant milestones in its HIV epidemic control efforts, remarkably shouldering one of the world's worst burdens of HIV and TB. Now, the COVID-19 pandemic has added a deadly and destabilizing factor to the Kingdom's public health and its economy. Eswatini faced a devastating second wave of COVID-19, during which healthcare staffing, commodities, hospital bed and oxygen shortages resulted in high mortality. Data gathered in case reviews suggest that HIV ranked high among co-morbidities in severe COVID-19 cases, particularly among unstable ART clients. Eswatini is now in a sprint to blunt future waves by rapidly deploying COVID-19 vaccines as they become available, while reinforcing facility preparedness, medical oxygen supply, and data systems to avoid the crisis wrought by the second wave. Because development assistance centers on HIV in Eswatini, PEPFAR investments and implementing partners are uniquely positioned to reinforce Eswatini's COVID-19 response while protecting the hard-fought achievements of its HIV program. During COP20 and COP21 Eswatini will implement programming funded through the ARPA in order to support Eswatini in prevention of new COVID19 infections, care and treatment, lab and systems preparedness for additional waves, enabling efficient vaccine rollout in-country, ensuring sufficient HIV-related commodity stock and mitigating the impact of the pandemic on the delivery of PEPFAR HIV prevention programming.

7.1 Infection Prevention and Control

PEPFAR clinical partners will support strengthening program leadership and capacity at the national level, enabling optimal stakeholder, resource and activity coordination in supporting the national plan, while supporting implementation at the regional and facility levels through dedicated personnel, training quality improvement and mentorship. Robust priority interventions include:

- Filling current underfunded gaps in IPC practices and reducing infections among patients and HCWs and in the process reduce disruptions of operations at health facilities due to staff absenteeism.
- Enabling functionality of IPC teams at all levels to implement and deliver on IPC workplans.
- Ensuring safety of IP staff through provision of appropriate PPE.

IPC will concurrently be strengthened to reduce risk of infection from both COVID19 and TB. Successful reduction of the number of clients contracting COVID19 at facilities while seeking other services protects beneficiaries and reduces the burden that may be placed on already stretched resources. PEPFAR IPC support will target 90% of supported ART sites across all four regions of Eswatini.

7.2 Case Management Support: Oxygen

A severe medical oxygen shortage was a root cause of Eswatini's second wave COVID-19 case management crisis. Commercial medical oxygen supply was severely limited due to high regional demand, and the logistics of moving oxygen cylinders around Southern Africa and across borders. At times, Eswatini had less than one-third the oxygen needed to treat COVID-19 cases. At The Luke Commission's (TLC) Miracle Campus, over 35 percent of COVID-19 admissions were people living with HIV. Like other COVID-19 referral centers in the country, the lack of medical oxygen led to unnecessarily poor and sometimes tragic

outcomes for patients. TLC's medical oxygen demands were among the highest in the country during the second wave, requiring significant expenditures by GKoE to provide commercial oxygen as it was available. To remedy this situation for future COVID-19 treatment needs - with a recognition of the importance of providing care for PLHIV and PLTB - PEPFAR is partnering with the Kirsh Foundation to support the operation of a new oxygen pressure swing adsorption (PSA) plant at TLC's campus. The Kirsh Foundation's matching contribution will help offset the plants installation and up-front operating costs, while PEPFAR will provide assistance to TLC to use the plant's excess medical oxygen generation capacity to provide 40,000 delivered cylinder oxygen refills (up to 285 cylinders per day) to nearby public ART facilities. The plant should be fully functional in May 2021 and, combined with future oxygen generation and bulk storage solutions be supported through GKoE, the Kirsh Foundation, Global Fund, and the World Bank, should position Eswatini to have a more robust, diversified, and dependable medical oxygen supply for future COVID-19 waves.

7.3 Laboratory Strengthening

Laboratory strengthening support includes the expansion of laboratory space for SARS-CoV-2 testing, SMS reporting of COVID results, improvement of the laboratory transport system and personnel and reagents to expand the TB sequencing lab to also sequence SARS-CoV-2. Since SARS-Cov-2 testing requires a BSC level 3 environment and due to the urgency to fast-track testing, the only available BSC3 level was the National TB Reference laboratory (NTRL) and due to lack of lab space, PCR platforms were housed in another laboratory. In order to ensure that other laboratory services like HIV/TB are not disturbed, in COP21, the COVID funds will be used to support the expansion of laboratory space for SARS-CoV-2 testing to increase infection control measures and minimize interfering with the functions of the other lab processes where SARS-Cov-2 testing is currently housed.

To ensure that patients timely receive their results, an SMS results reporting system will be scaled up to integrate COVID results communication to reduce turn-around-time. In order to strengthen and improve the existing sample transport system, a cost-effective transport system will be implemented to ensure timely transportation of both sample and results, especially to remote PEPFAR supported sites that do not have a laboratory information system. As the country moves towards making SARS-Cov-2 testing routine, there are plans to decentralize testing. As the country continues to monitor circulating virus variants, there is need to support sequencing, this will be done by integrating the SARS-Cov-2 to the TB sequencing by supporting improvement of the TB sequencing lab to also include SARS-CoV-2 sequencing.

7.4 Surveillance

Eswatini is currently in the process of establishing a sentinel surveillance system for COVID-19 and other similar illnesses with support from CDC COVID19 funding during a portion of FY20 and through FY21. Building on the experience of other surveillance efforts, such as HIV recency and the Integrated Disease Surveillance and Response (IDSR) platforms, this sentinel surveillance system will serve as an early warning system, using real time data to detect future waves of COVID19 and other similar illnesses, the information from which can be used to prepare and protect the health care system, staff and PEPFAR beneficiaries.

Due to delays in the activation of the four initial regional sentinel surveillance sites in FY21, these sites will only have been operational for a few months before the current budget period expires. Additional funding will support salaries for key human resources, including surveillance officers, as well as lab supplies and

other operational aspects of the surveillance system, including technical assistance for data collection, management, visualization, analysis, and reporting. The continuation of USG technical assistance for another year would help ensure all these various aspects of the system are stabilized, functional, and can be sustained in future years.

7.5 Electronic Medical Records Systems

While the significant balance of PEPFAR investments in the Client Management Information System (CMIS) are supported through 'core' COP funding, PEPFAR/E will fast-track several activities in order to mitigate COVID-19 impact on PEPFAR programs, as well as to support the COVID-19 vaccine efforts, including: (1) developing an enterprise commercial cellular (APN) backup and mobile data solution for CMIS; (2) sprinting the CMIS mobile platform (or "CMIS Lite") development and deployment; and (3) and cross-walking other COVID-19 vaccine data systems (ESWAVAX and/or a new Royal Science and Technology Park (RSTP) application with CMIS.

Paring CMIS Lite with an APN backup and mobile data solution will serve several key functions, such as creating a mobile platform to support DDD (CCD) service delivery, reducing the need to send staff to facilities to capture offline forms, aiding HIV ART program recovery with more up-to-date patient files, and providing a backup vaccine system in the event that ESWAVAX or a new RSTP app are not viable long-term options. Pending finalization of discussions with a commercial ISP, the new network could provide sufficient data and bandwidth to support remote and virtual engagement with facilities during COVID-19 waves, using online training and video conferencing platforms.

7.6 Vaccine Implementation

Health care worker infections significantly affected facility operations during the first and second COVID-19 waves due to staff absenteeism and the need to fumigate workplaces following HCW infections. In addition, an ever-increasing number of COVID-19 patients resulted in disruptions of HIV services at health facilities across the country. It is also important to highlight the fact that HIV infection was a leading co-morbidity in the country's COVID-19 case fatalities. To mitigate the impact of COVID-19, PEPFAR/E is proposing to contribute towards the national vaccine deployment plan through making use of the PEPFAR service delivery platform. This investment has a potential of reducing the number of COVID-19 cases in Eswatini through increasing the proportion of vaccinated individuals (herd immunity). Low COVID-19 cases will allow the Eswatini health system to focus on its core function, including PEPFAR supported activities.

Working through clinical partners, PEPFAR/E will use the already existing PEPFAR structures to support vaccination efforts at supported facilities and communities across all four regions. The already established and close working relationships between PEPFAR implementing partners and the national and regional MOH structures will allow implementing partners to quickly address needs/gaps in scaling and adapting the COVID-19 mass immunization effort as new consignments of vaccines arrive. In this regard, PEPFAR/E will support ongoing clinical mentorship, support supervision, HCW training and direct service provision at health facilities and communities. PEPFAR/E will closely work with all stakeholders supporting the national vaccination and deployment plan to ensure that PEPFAR support is complimentary and not duplicative.

7.7 HIV Prevention Among Adolescent Girls and Young Women

HIV prevention for AGYW was one of PEPFAR Eswatini's programs most severely disrupted by COVID-19 restrictions which resulted in a pause to face-to-face engagements for almost four months in FY21. While virtual contact with most DREAMS beneficiaries and mentoring continued, the suspension of the delivery of DREAMS curricula and facilitation of safe spaces led to very low program completion rates of the DREAMS primary package. To accelerate program delivery after the second COVID-19 wave, AGYW will benefit from intensive make-up sessions delivered through weekend sessions or camps.

To mitigate the sharp economic fall-out of the COVID-19 epidemic and its impacts on AGYW and their families, the OU will increase the reach of DREAMS economic strengthening activities by providing additional support to prepare beneficiaries to acquire skills to access employment or self-employment.

7.8 HIV Emergency Commodities

Due to COVID-19 related freight constraints and shortages of active ingredient for some drug formulations, several commodity deliveries have been delayed to Eswatini, which in turn depleted the buffer stock, caused stock rationing and artificially reduced the anticipated monthly consumption of certain commodities. Additional stock will be provided to replenish the buffer and cover clients that were transitioned to optimized alternative drug regiments. In addition, short-term reinforcement of VL reagents and consumables stock is needed in Eswatini to bring in clients early for their next regular VL test to decongest facilities and enable HCWs to be able to assist during a 3rd COVID-19 wave. An anticipated increased stock needs for multi month dispensing are evident in Eswatini for Adult care and treatment, and there are stock gaps to expand PrEP and reinvigorate HIV testing. The emergency commodity order will boost multi month dispensing and lessen the risk of exposure to COVID-19 for clients by reducing the frequency of clinical visits to maintain social distancing in Eswatini.

Table 7.0 Eswatini ARPA Programming Summary: Protection of PEPFAR Beneficiaries from the impacts of COVID19

Category	Activity	Target	FY21 Budget	FY22 Budget	Total Budget
Infection Prevention and Control	Support national IPC guidelines and SOPs and training, monitoring, evaluation mentorship. Support HIV facilities in all four regions to implement IPC measures.	Support 140 HIV facilities to implement IPC measures	$233,118	$451,798	$684,916
Case Management: Oxygen	Enable The Luke Commission to use their	Secure 40,000 delivered	$600,000	-	$600,000

	oxygen plant's excess medical oxygen generation capacity to provide delivered cylinder oxygen refills to nearby public ART facilities	cylinder oxygen refills (up to 285 cylinders/day) for public health facilities			
Laboratory	Expand space for COVID19 testing. Allow SMS reporting of COVID19 results. Improve laboratory transport system. Expand TB sequencing lab for COVID19		$323,900	$150,000	$473,900
Surveillance	Provide continued technical assistance to the Eswatini COVID19 sentinel surveillance system into FY22	Four sentinel surveillance sites supported and fully operational through FY22		$175,000	$175,000
Electronic Medical Records	Develop an enterprise commercial cellular (APN) backup and mobile data solution for CMIS; sprint the CMIS mobile platform (or "CMIS Lite") development and deployment; and cross walking other COVID-19 vaccine data systems		$210,000	$50,000	$260,000
Vaccine Implementation	National campaign support, and also facility and outreach support through regional clinical partners, commodity management support	Support 140 facilities and mobile sites as directed by national vaccine rollout plan	$526,724	$419,540	$946,264
HIV prevention	Accelerate DREAMS service delivery to reach COP20 targets. Provide economic strengthening support for additional AGYW	Reach COP20 DREAMS targets. Enroll an additional 295 AGWY in economic	$434,920	-	$434,920

		strengthening			
HIV Commodities	Purchase of ARVs, Viral Load reagent, PrEP, and HIV test kits to fill COVID19-related gaps		$2,015,000	-	$2,015,000
TOTAL			**$4,317,318**	**$1,272,652**	**$5,590,000**

APPENDIX A – Minimum Program Requirements

Green activity has been met the Minimum Program Requirements. Yellow activity is on-going during COP21.

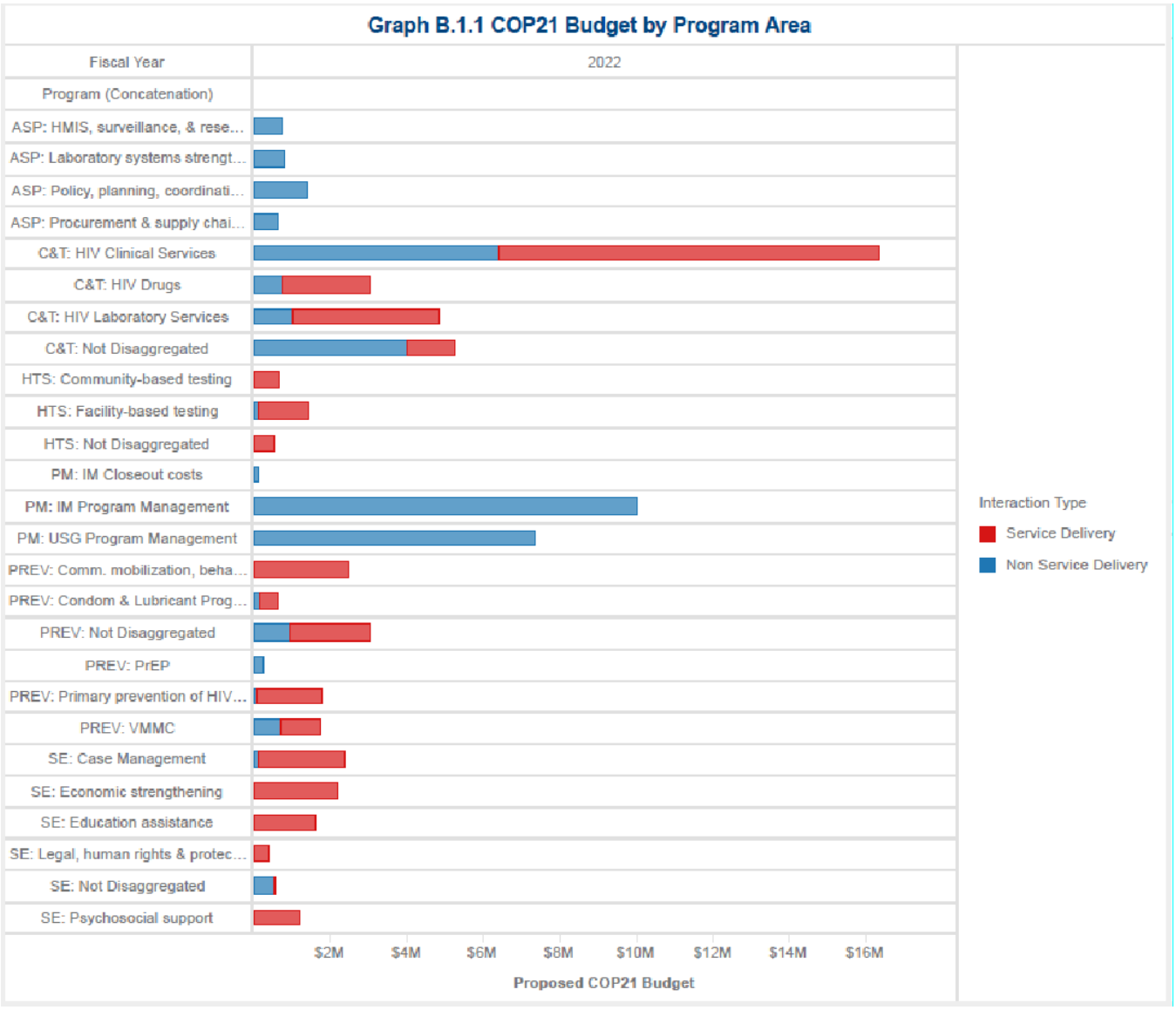
Issue	Policy or implementation status change
Test and start with direct and immediate linkage to treatment	Ongoing implementation
Differentiated service delivery models	Maintenance of full-scale implementation
Optimization of ART: TLD	Maintenance of ART optimization
Scale up of index testing and self-testing, ensuring consent procedures and confidentiality	Train index HCWs on confidentiality issues around index testing. Scale up HIVST distribution to priority population
TPT scale-up	All supported sites will be implementing TPT at scale.
Completion of Diagnostic Network Optimization: 100% EID and VL	Maintenance of existing and increasing number of sites that are fully accredited.
Elimination of all formal and informal user fees	No fees
Offer prevention services, including PrEP	National scale up on track for completion Sept 2021
Evidence of host government assuming greater responsibility of the HIV response	Continued commitment of government to fund increasing numbers of adults on first line treatment in addition to the majority of facility and HRH costs
Scale-up of case-based surveillance and unique identifies for patients across all sites	Continue to improve access to patient IDs. Not funded to implement roll out of biometrics.
Alignment of OVC packages of services and enrollment to provide comprehensive prevention and treatment services	Increased enrolment of C/ALHIV; new preventative of OVC services
Clear evidence of agency progress toward local, indigenous partner prime funding.	Increasing progress towards local, indigenous partner prime funding.

Continual Quality Improvement	Continued CQI at facility level, IP workplans and national policy
Health Promotion/health literacy activities	Treatment and VL literacy education actively integrated into community programming and facility service delivery.

APPENDIX B – Budget Profile and Resource Projections

B1. COP21 Planned Spending in alignment with planning level letter guidance

Table B.1.1 COP21 Budget by Program Area



Source: PEPFAR Eswatini COP21 FAST tool, 2021

Table B.1.2 COP21 Budget by Program Area

Table B.1.2 COP21 Budget by Program Area							
Program	Fiscal Year	2022					
	Metrics	Proposed COP21 Budget			Percent of COP 21 Proposed Budget		
	Subprogram	Non Service Delivery	Service Delivery	Total	Non Service Delivery	Service Delivery	Total
Total		$38,013,050	$47,619,795	$85,632,845	44.39%	55.61%	100.00%
C&T	Total	$8,748,566	$37,371,599	$46,120,165	18.97%	81.03%	100.00%
	HIV Clinical Services	$7,847,869	$29,406,096	$37,253,965	21.07%	78.93%	100.00%
	HIV Drugs	$74,348	$2,775,489	$2,849,837	2.61%	97.39%	100.00%
	HIV Laboratory Services	$723,576	$5,190,014	$5,913,590	12.24%	87.76%	100.00%
	Not Disaggregated	$102,773		$102,773	100.00%		100.00%
HTS	Total	$863,020	$4,812,797	$5,675,817	15.21%	84.79%	100.00%
	Community-based testing	$325,078	$403,154	$728,232	44.64%	55.36%	100.00%
	Facility-based testing	$355,613	$4,295,595	$4,651,208	7.65%	92.35%	100.00%
	Not Disaggregated	$182,329	$114,048	$296,377	61.52%	38.48%	100.00%
PREV	Total	$620,683	$2,471,167	$3,091,850	20.07%	79.93%	100.00%
	Comm. mobilization, behavior & norms change		$201,773	$201,773		100.00%	100.00%
	Condom & Lubricant Programming		$500,000	$500,000		100.00%	100.00%
	Not Disaggregated	$548,343	$862,060	$1,410,403	38.88%	61.12%	100.00%
	PrEP	$72,340	$907,334	$979,674	7.38%	92.62%	100.00%
SE	Total	$1,757,080	$2,964,232	$4,721,312	37.22%	62.78%	100.00%
	Legal, human rights &	$204,333		$204,333	100.00%		100.00%

Source: PEPFAR Eswatini COP21 FAST tool, 2021

Table B.1.3 COP21 Total Planning Level

Applied Pipeline	New Funding	Total Spend
$US 6,383,321	**$US 65,116,679**	**$US 71,500,000**

Source: PEPFAR Eswatini COP21 FAST tool, 2021

Table B.1.4 COP21 Resource Allocation by Program and Beneficiary

Table B.1.4: COP21 Resource Allocation by Program and Beneficiary								
Fiscal Year								
Program	C&T		HTS		PREV		SE	
Beneficiary	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total
Total	$2,204,044,593	100%	$298,454,146	100%	$582,875,604	100%	$277,382,493	100%
Females	$66,210,990	3%	$3,137,772	1%	$165,483,711	28%	$92,655,175	33%
Key Pops	$72,531,006	3%	$59,163,545	20%	$87,695,987	15%	$2,783,047	1%
Males	$24,554,863	1%	$9,040,679	3%	$152,731,651	26%	$1,500,000	1%
Non-Targeted Pop	$1,946,230,753	88%	$200,189,475	67%	$109,919,663	19%	$10,589,092	4%
Not Specified								
OVC	$5,772,333	0%	$5,282,993	2%	$15,998,466	3%	$167,957,198	61%
Pregnant & Breastfeeding Women	$57,792,840	3%	$9,377,561	3%	$11,912,319	2%		
Priority Pops	$30,951,808	1%	$12,262,121	4%	$39,133,807	7%	$1,897,981	1%

Source: PEPFAR Eswatini COP21 FAST tool, 2021

B.2 Resource Projections

The PEPFAR Funding Allocation to Strategy Tool (FAST) was used to calculate budget levels by mechanism, program area, beneficiaries and allocate these to budget codes. The FY19 PEPFAR Expenditure Reporting results were used as a baseline for setting the FY21 budget. In the absence of full year expenditure data, the FY20 budget was used as a baseline and adjusted for program variations whose implementation will continue in FY21. Estimates based on the country program's experience were used for new mechanisms that did not have historical data.