



BOTSWANA

Country Operational Plan

2016

Strategic Direction Summary

May 16, 2016

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Goal Statement

This year, as Botswana celebrates 50 years of independence, it will also make a bold move towards epidemic control and reclaim its place as a leader in the response to HIV/AIDS. Botswana plans to launch a new policy of “Test and Start” (T&S) and expand treatment for people living with HIV (PLHIV). The new policy will help avert more than 120,000 new infections and 55,400 deaths over the next 15 years, significantly decrease new TB cases and usher Botswana into a more sustainable era in the response to HIV/AIDS.

The USG PEPFAR partnership is poised to support Botswana’s move to T&S with the goal of helping the country reach epidemic control by 2018. PEPFAR Botswana (PEPFAR/B) has shifted its program strategy and geographic focus to support the roll-out of T&S by prioritizing HIV care and treatment activities and scaling-up assistance geared towards meeting the 90-90-90 global targets. PEPFAR has worked in partnership with Botswana to help determine the cost and benefits of T&S, and to develop new treatment guidelines. Using lessons learned from the Botswana Combination Prevention Program (BCPP), innovative testing strategies are being scaled-up to help identify positives and reach more men. PEPFAR/B will support a more streamlined and cost effective service delivery model which includes the adoption of serial testing, reduced lab tests and reduced frequency of pharmacy refills. Finally, in response to a funding gap identified by the Government of Botswana (GoB), PEPFAR has pledged plus-up funds for anti-retroviral therapy (ART) and to support the medical supply chain to ensure timely delivery of those drugs.

The PEPFAR pivot undertaken last year is still the best roadmap for helping Botswana achieve its goals. In FY17, PEPFAR/B will again focus resources in 11 high-burden health districts to significantly reduce new infections and save lives. PEPFAR/B goals will include:

- Increasing the proportion of PLHIV who are initiated and retained on ART to 75% in Greater Gaborone, and 80% in other priority areas;
- Conducting community-based HTC through mobile and outreach to identify first time testers and undiagnosed PLHIV, particularly males, and targeting hotspots such as bars, construction sites and farms;
- Aligning community-based interventions with facility-based support and rolling-out evidence-based interventions to enhance adherence and retention in both ART and TB treatment for PLHIV;
- Improving program strategies based on information and lessons learned from BCPP;
- Focusing services in select sites for female sex workers (FSWs), men who have sex with men (MSM) and adolescent girls and young women (AGYW).

PEPFAR/B will continue to engage with the GoB as part of an advocacy agenda for the treatment of non-citizens, who are currently excluded under the government's policy. During COP16, PEPFAR/B will conduct a size estimation activity to determine impact of not providing treatment for this population.

The COP16 strategy, developed in partnership with Botswana's government, development partners and civil society, includes the right things, in the right places, and the right ways to put Botswana on the path to an AIDS-free generation.

1.0 Epidemic, Response, and Program Context

1.1 Summary statistics, disease-burden and country profile

Botswana has a population of approximately two million people and the highest gross national income (GNI) in sub-Saharan Africa at \$7,700.¹ Despite a classification as an upper middle-income country, 18.4% of the population lives below the poverty line and there still exists a high-income inequality, as demonstrated by a Gini Index of 61.² Botswana continues to confront a prolonged and severe HIV epidemic resulting in the second highest HIV prevalence in the world.³ The *2013 Botswana AIDS Impact Survey (BAIS IV)* estimated 18.5 % of the population was living with HIV (Table 1.1.1), an increase from 17.6 % in the previous national survey conducted in 2008. TB remains the leading cause of death in PLHIV, and is responsible for 13% of adult deaths and 40% of deaths among PLHIV.⁴

Botswana females are disproportionately affected by HIV, and prevalence is higher among females (20.8%) than males (15.6%). The highest HIV prevalence in the general population is among females aged 35-39 years at 50.5%. AGYW aged 15-19 years are twice as likely to be infected with HIV as boys of the same age.⁵ More than 80% of PLHIV are found in 12 of the 24 health districts having the highest unmet need for ART and the highest prevalence in the country. UNAIDS estimates 392,435 PLHIV in Botswana in 2015, of which 273,904 were on ART representing 70% national ART coverage with ART initiated at CD4 350 (Table 1.1.2).

¹ World Bank

² AFDB, OECD, UNDP. 2014. African Economic Outlook: Botswana. URL: http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2014/PDF/CN_Long_EN/Botswana_EN.pdf

³ UNAIDS

⁴ WHO Global TB Report, 2014

⁵ BAIS IV

Botswana was the first sub-Saharan African country to provide universal free ART to PLHIV in 2002, paving the way for other countries to follow. However, Botswana does not offer free ART to non-citizens, therefore many foreigners go untreated including the high-risk FSW population. Botswana has not yet officially updated its treatment eligibility criteria by adopting a T&S strategy, but the process is progressing with active leadership and technical assistance (TA) from PEPFAR/B. It is anticipated the transition from the current guidelines to T&S will occur in June 2016, and that the shift will increase the number of those eligible for treatment by approximately 118,528 nationwide. The shift is also projected to reduce new infections by 51% by the end of 2018.⁶

At the request of the GoB, PEPFAR/B collaborated with UNAIDS and the Ministry of Health (MoH) on a costing analysis for T&S in January 2016. Current estimates suggest adopting T&S will increase the annual program cost by approximately 35% over the next three years, but should be cost-saving in the long run by preventing new HIV infections, opportunistic infections and hospitalizations due to associated illnesses.

The USG-GoB health partnership has resulted in a clear record of success through remarkable advances in preventing HIV in the last decade. Variations in life expectancy are a good indicator of this: After dropping from 64 years in 1990 to 49 years in 2002, life expectancy rose to 53 years in 2012, according to the World Bank. Incidence decreased by 71% between 2001 and 2011, though key issues are now undermining present prevention efforts. Newly revised annual infections are estimated at 14,000 cases⁷ and approximately 5,100 AIDS-related deaths in 2014,⁸ which leaves Botswana short of epidemic control. Continued strategic investments are necessary to reach this critical milestone for an AIDS-free generation.

One of Botswana's key prevention accomplishments is the significant reduction of HIV transmission among newborns from HIV-positive mothers. The mother-to-child HIV transmission rate has dropped from a peak of around 40% to around 2%.⁹ In 2014, the MoH adopted Option B+ as part of its Prevention of Mother-to-Child Transmission (PMTCT) program and the USG supported its nation-wide roll-out in 2015 with ART, training and mentoring. Access to HIV testing and counseling (HTC) continues to increase in Botswana. BAIS IV reports that 70% of the population aged 10-64 had tested for HIV in their lifetime and 63.7% reported testing in the last 12 months.

⁶ COP16 Data Pack

⁷ UNAIDS, 2014

⁸ UNAIDS, 2014

⁹ MOH program data A result comparable to most Western countries

BCPP,¹⁰ a randomized controlled study in 30 paired communities, is providing valuable data and insights for HIV epidemic control in Botswana. The study's baseline household survey suggests Botswana is close to achieving the UNAIDS 90-90-90 targets in rural and peri-urban communities. Out of the 3,590 individuals who tested HIV positive, the BCPP study reported that 83% of them knew their HIV status, 87% of those with known HIV-positive status had initiated treatment, and 96% of those on ART had achieved viral suppression.¹¹ While encouraging, these results may not be representative of the entire country. It is anticipated that data from the project will continue to provide insight into HIV epidemiology and effective implementation methods.

Despite Botswana's significant achievements and successful collaborations, many challenges remain. According to the National AIDS Coordinating Agency (NACA), key drivers of the epidemic are multiple and concurrent sexual partnerships, adolescent and intergenerational sex, alcohol and high-risk sex, stigma and discrimination, gender-based violence (GBV), and low uptake of male circumcision.

Persistently high infection rates among females are partly attributed to gender inequality, which puts women and girls at risk for domestic and sexual violence and compromises their ability to negotiate safer sex. According to the *Gender-Based Violence Indicators Study Botswana*,¹² 67% of women in Botswana have experienced some form of gender violence in their lifetime and 44% of men admit to perpetrating violence against women.

Effectively accessing and engaging key populations (KPs), FSWs and MSMs, in mainstream HTC and treatment programs is another key challenge in achieving epidemic control. The need for targeted HIV testing of KPs was highlighted by the 2012 *Behavioral and Biological Surveillance Survey* (BBSS), which found an overall HIV prevalence among FSW at 61.9%, with an estimated incidence rate of 12.5%.¹³ The BBSS also estimated HIV prevalence of MSM to be 13.1%, higher than the prevalence of 7.5% in a comparable age group of 20-24 year old males. The incidence among MSM is 3.6%, which is higher than the national incidence rate of 1.35%.

¹⁰ The PEPFAR centrally funded study has completed the first full phase of combination prevention implementation in the 15 intervention communities. The intervention community clinics plan to introduce a rapid ART start and streamline clinic visit schedules both to reduce barriers to ART initiation and reduce facility patient burden. By the end of November 2016, the first annual household survey and follow-up of the HIV Incidence Cohort will be completed in all 30 study communities and by May 2017, the study will complete the second round of combination prevention activities in the 15 intervention communities.

¹¹ Botswana's progress toward achieving the 2020 UNAIDS 90-90-90 ART and virological suppression goals: a population-based survey, Gaolathe, Tendani et al. *The Lancet HIV*, March 23, 2016

¹² Published March 2012

¹³ BBSS, 2012

The limited uptake of voluntary medical male circumcision (VMMC) is a challenge to reducing new infections. The estimated coverage of VMMC was 11% in 2008,¹⁴ doubled to 24.3% in 2013.¹⁵ The GoB established a target of circumcising 385,000 males by 2016 to achieve 80% coverage of this important intervention.¹⁶ As of February 2016, just 42.6% of the national target (163,911 circumcisions) had been met.¹⁷ In COP15, PEPFAR/B redirected GOB pipeline to provide \$5 million for a six-month “acceleration campaign” to circumcise 35,000 males. With the campaign completed at the end of March 2016, 18,493 circumcisions have been performed or 52.8% of the goal. Challenges experienced during the campaign and with routine service delivery include the difficulty of providing VMMC services in more remote and scarcely populated areas and lower demand for VMMC in this traditionally non-circumcising country. Strategies to address these challenges have been implemented with limited success.

An additional programmatic challenge emerging during the last fiscal year was the shortage of high standard rapid test kits (RTKs) at testing sites around Botswana. The RTK issue was first identified in August 2015 when partners reported shortages in all scale-up SNUs, which compromised their ability to achieve targets. Initially, shortages were connected to faulty pipettes in new RTKs rendering them unusable, but subsequent shortages are related to distribution – a symptom of Botswana’s troubled supply chain.¹⁸ IPs purchased RTKs as a short-term fix. To address the issue, PEPFAR/B has ordered an emergency supply of 450,000 RTKs through S/GAC.

PEPFAR/B has been documenting Botswana’s poorly performing supply chain through a series of cables starting in February 2015. In 2012, the MoH turned over the warehousing and distribution functions of its Central Medical Stores (CMS) to a sole-source contractor. Audits of this contract have revealed issues of non-performance and, consequently, the USG withdrew direct monetary support to the supply chain system opting instead for limited TA. In August 2015, the MoH ratcheted up the pressure on the delinquent CMS contractor and posed hard questions and insisting on better performance.

The ongoing procurement problems with CMS continue to be exacerbated by the subcontractor’s poorly functioning information technology (IT) system. This system negatively impacts distribution, planning, forecasting and reporting abilities, which has led to a deteriorating supply chain system unable to meet national demand. The MoH is planning to re-bid the contract and issue an open tender beginning May 1, 2017. MOH has pledged to implement an open and transparent process adhering to international standards of public sector procurement. During

¹⁴ BAIS III, 2008

¹⁵ BAIS VI, 2013

¹⁶ VMMC National Operational Plan

¹⁷ *Safe Male Circumcision (SMC) Weekly Reports*, MoH

¹⁸ The first of these RTKs will arrive in-country in July 2016 and the remainder in September. They will be utilized by PEPFAR/B IPs in the scale-up districts.

COP16, PEPFAR/B will provide TA during this re-tendering process as requested by the MoH. Any further disintegration of the supply chain raises concerns about the ability of Botswana to successfully scale-up to T&S.

Table 1.1.1 Key National Demographic and Epidemiological Data

	Total		<15				15+				Source, Year
			Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	
Total Population	2,185,903	100	343,855	15.7	349,044	16.0	770,711	35.3	722,293	33.0	Census 2015 Proj.
HIV Prevalence (%)		18.6		3.8		3.7		26.6		20.4	BAIS IV, 2013
AIDS Deaths (per year)	5,140		181		187		1,529		3,243		UNAIDS, 2015
# PLHIV	392,432		8,009		8,127		213,444		162,852		UNAIDS, 2015
Incidence Rate (Yr)		1.35		NA		NA		NA		NA	BAIS IV, 2013
New Infections (Yr)	13,582										UNAIDS, 2015
Annual births	47,326										PMTCT, FY2015
% of Pregnant Women with ≥ ANC visit	44,534	94.1	NA	NA			NA	NA			BFHS, 2007
Pregnant women needing ARVs	5,331	11.3									PMTCT, FY2015
Orphans (maternal, paternal, double)	112,323		40,461		42,251		12,992		16,619		BAIS IV, 2013 Census 2015 Proj
Notified TB cases (Yr)	6,542		219		245		2,536		3,542		BNTP, 2014
% of TB cases that are HIV infected	3,599	59.2 ¹	47	1.3	55	1.5	1,612	44.8	1,885	52.4	BNTP, 2014
% of Males Circumcised	191,920 ²	24.3			12,775	11.9			179,145	24.8	BAIS IV, 2013 Census 2015 Proj
Estimated Population Size of MSM	LG	LG									Limited General.
MSM HIV Prevalence		13.1									BBSS, 2012
Estimated Population Size of FSW	18,235	3.0									Census 2015 Proj; Vandepitte et al ³
FSW HIV Prevalence	11,288	61.9									BBSS, 2012
Estimated Population Size of PWID	NA	NA									Not Available
PWID HIV Prevalence	NA	NA									Not Available
Estimated Size of AGYW	208,594	9.5									Census 2015 Proj

NA = not available; LG = limited generalizability

¹ Denominator is those with known HIV status. A total of 465 had unknown HIV status.

² Estimates for male ages 10-64 only (per BAIS IV), applied to 2015 population projections.

³ Vandepitte J, Lyerla R, Dallabetta G, et al. Estimates of the number of FSWs in different regions of the world. Sex Transm Infect 2006; 82: iii18–iii25

Table 1.1.2 Cascade of HIV diagnosis, treatment and viral suppression (12 months)

				HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART		
	Total Population Size Estimate (#)	HIV Prevalence (%)	Total PLHIV (#)	On ART (#)	Retained on ART 12 Months (#)	Viral Suppression 12 Months	Tested for HIV (#)	Diagnosed HIV Positive (#)	Initiated on ART (#)
Total population	2,185,903	18.6	392,435	273,904	NA	NA	210,387	14,762	14,872 ¹
Population < 15 years	694,899	3.8	16,090	10,956	NA	NA	21,276	316	595 ¹
Pregnant Women	47,326	24.0	11,575	9,055	NA	NA	31,356	2,768	2,811 ²
<i>Sources</i>	<i>Census '15 PMTCT</i>	<i>BAIS IV</i>	<i>UNAIDS '15</i>	<i>Nat'l Data, Sept'15</i>			<i>Nat'l Data, Sept'15</i>	<i>Nat'l Data, Sept'15</i>	<i>Nat'l Data, Sept'15</i>
MSM	LG	13.1	LG	NA	NA	NA	NA	NA	NA
FSW	18,235	61.9	11,142	NA	NA	NA	NA	NA	NA
Priority Pop (AGYW 15-24 yo)	208,594	10.4	21,694	NA	NA	NA	NA	NA	NA
<i>Sources</i>	<i>BBSS'12 Census '15</i>	<i>BBSS'12 BAIS IV</i>	<i>BBSS'12</i>	<i>Nat'l Data, Sept'15</i>					

NA = not available; LG = limited generalizability

National level reliable data not available for PWID; dropped from table

¹ Estimate based on one month initiation data applied to 12 months

² Includes women newly tested, identified, and initiated, plus those who knew status and initiated treatment.

1.2 Investment Profile

According to the 2012 *National AIDS Spending Assessment*²⁴ (NASA), the GoB is the primary funder of HIV/AIDS programs, contributing almost 70% of funding for HIV/AIDS programs in 2011/12, while external donors contributed about 30%. Public funding has gradually increased over a three-year period, from \$186.8 million in 2009/10 to \$253.5 million in 2011/12; while external sources of funding peaked in 2010/11 at \$113 million before declining in 2011/12 to \$105 million. PEPFAR, one of the few external donors, has seen funding decline to \$43.2 million in COP16 from its highest level of about \$90 million just six years ago.

Since 2004, PEPFAR has committed more than \$700 million to Botswana's response to the HIV/AIDS epidemic. Historically, another major external donor was African Comprehensive HIV/AIDS Partnership (ACHAP), a public-private sector initiative between GoB, MSD/Merck Company Foundation and the Bill and Melinda Gates Foundation, which invested \$152 million in HIV/AIDS support over the last 14 years.²⁵ Merck and Gates investments have ceased, but ACHAP has survived by seeking out other donors and was identified as a Global Fund (GF) Principal Recipient (PR)²⁶ in 2015 and as a PEPFAR/B IP for VMMC. Other development partners in Botswana include the EU, SIDA, and UN agencies.

Table 1.2.A Sources of Financing for HIV/AIDS Programs (2011-12)²⁷

Source of finance	Percentage of total financing provided
GoB Public Funds	69.6%
Private Funds	1.9%
External Funds bilateral/multilateral)	28.5%

Source: NASA, 2012

Over half (56%) of the GoB's HIV/AIDS money is spent on care and treatment, 16% on OVC activities and 14% on prevention activities. Prevention spending decreased by 35% from \$52.8 million in 2009 to \$34.2 million in 2011/12. An examination of the total health expenditures also found 53% of the spending goes to hospital-based care, the most costly type of health care.²⁸ As this data is four years old it is likely that it does not provide the current picture of HIV/AIDS

²⁴The NASA continues to be the most detailed source of information regarding HIV/AIDS funding in Botswana. NASA used data from a three year period: 2009/10, 2010/11, and 2011/12. Throughout the report, data are presented by year as well as a three year average or summary/total. The newest version will not be available until June 2016.

²⁵ From Adapting Through Crisis: Lessons from ACHAP's Contributions to the Fight Against HIV/AIDS in Botswana, October 2014.

²⁶ ACHAP and MoH are both principal recipients for the Global Fund.

²⁷ Public Funds: Domestic public funds include central government funds (government revenue), the World Bank reimbursable loan and the GoB's contribution to the medical scheme. Private Funds: Does not include out of pocket expenses directly paid by individuals. External Funds: Include international sources of financing with PEPFAR and ACHAP making up the major part of the contribution.

²⁸ National Health Account, 2012

funding in Botswana. The data does reveal a costly physician-based system of care, placing Botswana among the most expensive HIV care and treatment programs in low or middle-income countries.²⁹ GOB has started to look at the more cost effective methods of providing services and MOH will provide an action plan (mainly for Test and Start) on how the government will address the high cost of treatment. Any increases in HIV/AIDS program costs in the face of declining donor funding may pose a challenge for the country, which is struggling to reduce its dependence on diamonds and generate private sector led economic growth. One study published in *The Lancet*, concluded Botswana should be able to finance its entire HIV/AIDS program without external aid.³⁰

Table 1.2.1 Investment Profile by Program Area (2012)³¹

	Total Expenditure ³²	% GoB Public Funds	% Private Funds	% External Funds	Total
Treatment & Care	\$220,898,390.58	83%	3%	14%	100%
Prevention	\$20,153,735.28	43%	1%	57%	100%
PMTCT	\$5,069,794.75	93%	0%	7%	100%
VCT	\$4,908,319.32	22%	0%	78%	100%
VMMC	\$4,231,723.91	9%	0%	91%	100%
Priority population prevention	NA	NA	NA	NA	NA
Key population prevention	NA	NA	NA	NA	NA
OVC	\$53,001,307.81	98%	0%	2%	100%
Laboratory	NA	NA	NA	NA	NA
Research & surveillance	\$15,374,863.21	0%	0%	100%	100%
HSS	\$1,483,972.56	1%	0%	99%	100%
Program management & administration	\$35,441,855.49	17%	0%	83%	100%
Human resources	\$7,816,211.59	0%	0%	100%	100%
Enabling environments	\$675,260.89	15%	0%	85%	100%
Total	\$369,055,435.39	70%	2%	28%	100%

²⁹ According to Michael Ruffner, the PEPFAR Director of Financial Sustainability, treatment in Botswana is one of the most expensive in the world, with direct spending per patient living with HIV ranging from \$800 to \$1,200 annually. Comparatively, South Africa spends about \$300 per person living with HIV (PLHIV) and Malawi spends about \$183 per PLHIV annually. Botswana has a very expensive and clinical approach to HIV because the GoB uses top-of-the-line drugs; both CD4 and viral load testing; and physician care for initiation and follow-ups. The government also maintains HIV treatment clinics separate from general care clinics and dispensaries.

³⁰ Resch, Stephen; Ryckman, Theresa; and Hecht, Robert. "Funding AIDS programmes in the era of shared responsibility: an analysis of domestic spending in 12 low-income and middle income countries" *The Lancet*, Vol3. January 2015.

³¹ Available data does not disaggregate data beyond "Public Funds", "Private Funds" and "External Funds" nor does it provide some details requested in the program area. Even though there are no available figures for funds from the private sector towards the OVC program, the private sector has been actively engaged primarily in the support of OVC residing under institutional care. The support includes a donation of Mpule Kwelagobe Children's Centre in Jwaneng donated by Debswana. Other child care institutions in Botswana continue to benefit from the private sector contributions through various donations toward interventions such as life skills, psychological support and utilities payment exemptions.

³² Amounts in 2012 USD. Average annual conversion rate of 7.4934 used per OANDA.

Table 1.2.2 Procurement Profile for Key Commodities

	Total Expenditure ⁷	% GoB	% Private Funds	% External Funds	Total
ARTs ³³	\$51,274,455	34%	12%	55%	100%
Rapid test kits	NA	NA	NA	NA	0%
Other drugs: PEP	\$69,394	100%	0%	0%	100%
Lab reagents	NA	NA	NA	NA	0%
VMMC kits	NA	NA	NA	NA	0%
Male condoms	\$1,342,515	0%	0%	100%	100%
Other commodities	NA	NA	NA	NA	0%
Total	\$52,686,364	33%	11%	56%	100%

Data source: NASA, 2012

In 2015, the GoB adopted the PMTCT Option B+ strategy and PEPFAR procured 50% of the initial projected requirements. This coupled with Botswana's interest in adopting T&S in 2016 will significantly increase expenditure for ARVs and test kits.³⁴ The further disintegration of the supply chain increases the cost of doing business in Botswana and raises concerns about the ability of Botswana to successfully scale-up to T&S.

In an era of declining donor dollars, Botswana needs to ensure the maximum impact of external funding for HIV/AIDS programs. PEPFAR/B has concerns regarding the best use of resources as the GF starts work in many of the same districts and communities in which PEPFAR/B operates. The GF Concept Note was similar to the COP15 process, resulting in many of the same districts and activities being targeted. PEPFAR/B has met with GF recipients at many points and agreements were reached to avoid duplication and overlap of services.

³³ ART spending includes ARV drugs, outsourcing of ART services from the private sector, Medial Aid Scheme's payments for private clients and payment for Norwegian personnel and health care auxiliaries by the government. The cost of most of the health care personnel and related infrastructure support has not been included.

³⁴ Beginning in August 2015, many areas of Botswana experienced shortages of HIV RTKs. At first, shortages were connected to a quality issue with faulty pipettes in new RTKs, but subsequent shortages have been related to inadequate availability of RTKs for distribution downstream to lower levels of the supply chain. In an attempt to maintain the supply of RTKs, IPs have redirected programmatic funds to purchase their own RTKs and PEPFAR/B will receive Emergency PEPFAR Commodity Funds for RTKs.

Table 1.2.3 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 (PC)	575,000	N/A	4	N/A	Care, OVC, Prevention, Gender
Total	575.000		4		

All data projected for implementation during COP16 unless otherwise noted.

Table 1.2.4 PEPFAR Non-COP Resources, Central Initiatives, PPP, HOP

Funding Source	Total PEPFAR Non-COP Resources	Total Non-PEPFAR Resources	Total Non-COP Co-funding PEPFAR IMs	# Co-Funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
ACT						
DREAMS						
DREAMS Innovation						
DREAMS Test & Start-Men						
VMMC	\$1,038,000*					
Viral Load						

	\$749,882 ³⁵ (LCI)	N/A	N/A	N/A	N/A	N/A	1.Create an enabling environment to improve access to and use of quality services for KPs 2.Address legal and policy barriers at the national level to create an enabling environment for KP to access services 3.Reduce stigma and discrimination at local levels through social mobilization, empowerment, education and advocacy around human rights and legal issues to increase access to services
Other PEPFAR Central Initiatives	\$3,975,000 (BCPP)		4	0	N/A	N/A	1. To implement the combination prevention (CP) intervention package in combination prevention communities (CPC) and determine uptake of interventions in CPCs HTC, Male Circumcision, strengthened and expanded HIV Care and Treatment, and strengthened PMTCT.
	\$250,000 (PRRR)	\$250,000	1	0	N/A	N/A	1. Scale-up See and Treat sites 2. Provide TA for HPV vaccination efforts 3. Enhance pathology services, mainly related to LEEP specimens
	\$185,980 (NPHI)	\$185,980	1	1			1. Establish a National Public Health Institute (NPHI)
Other Public Private Partnership							
Total							

All data projected for implementation during COP16 unless otherwise noted.

*Central funding for COP15

³⁵ LCI project through BOFWA, an IP.

1.3 National Sustainability Profile

PEPFAR/B and UNAIDS Botswana co-convened the SID process³⁶ and hosted four SID Domain meetings with stakeholders from various GoB ministries, UN development partners, CSOs, private sector organizations and USG agencies. During the domain meetings, participants discussed each question and arrived at a collective answer with supporting data. Drafts of each domain were circulated to all of the invitees for further vetting and collection of data sources. Finally, the SID draft was presented to higher-level external partners.

Sustainable strengths were identified as *Planning and Coordination*, *Public Access to Information*, and *Financial/Expenditure Data*, all scoring light green. Sustainability vulnerabilities include *Commodity Security and Supply Chain* and *Quality Management (QM)* both scoring yellow and *Private Sector Engagement*, the only element scoring red. The first two are regarded as priorities, while the latter is not a core activity for PEPFAR/B and is addressed through the U.S. Mission in Botswana as part of the Integrated Country Strategy (ICS).

Though yellow, *Commodity Security and Supply Chain* is one of the areas of greatest concern. The GoB controls/finances the supply chain system and funds ARV/RTK procurements.³⁷ They have a supply chain plan and conduct supply chain assessments; however, the real problem – the functionality of the supply chain, or lack thereof – is not adequately captured by the SID questions. Most supply chain troubles are linked back to the poor performance of a contractor, who received the award through a sole source bid.³⁸ Since 2009, PEPFAR/B, has made a substantial investment in the supply chain system with \$44 million to improve the medical supply chain; of which, \$6.7 million was spent on direct support to the CMS in the form of TA and systems strengthening.³⁹ On February 5, Ambassador Miller received a letter from the MoH

³⁶ For more details regarding the SID, please review our 2016 Sustainability Index and Dashboard Summary submitted as a supplemental document.

³⁷ In February 2016, GF signed their award to Botswana, which includes just under \$800,000 over three years for procurement and supply chain management. Key activities include establishing the Logistics Management Information System (LMIS), IT assistance, and TA to strengthen functions of CMS including inventory management, stock management, forecasting, basic quantification, recording and reporting. The near-term objective of USG investments in supply chain will be to ensure the GoB has the TA necessary to enhance the national supply chain and simultaneously ensure PEPFAR programming is supported with the commodities necessary to achieve epidemic control.

³⁸ The contractor was supposed to sub-contract in areas where it lacked expertise, like information systems. The contractor did, but dropped the sub-contractors once they received the award. The MoH continues to pay the contract in full, despite their poor performance.

³⁹ In 2009, at the request of the GoB, a USG team, through USAID's Supply Chain Management System (SCMS), assumed responsibility for managing the MoH's Central Medical Stores (CMS). Over the next three years, SCMS made major improvements and then returned an upgraded system to the GoB in June 2012 that, for the first time, met international operational standards. At that time, the MoH decided to make a major change to CMS operations, specifically to sole-source the warehousing and distribution functions of the CMS to a contractor while retaining procurement responsibilities. The USG agreed to a request from the MoH to provide TA in order to protect gains made between 2009 and 2012 and mitigate supply chain risks associated with the GoB's abrupt change of course.

acknowledging problems with the contractor and ensuring that the re-tendering process would adhere to international standards.

Quality Management (QM), a low yellow score, is an area of weakness and COP15 resources worked to address this. There has been improvement with QM and more growth in this area is expected as PEPFAR/B continues to provide support and resources during COP16. Currently there is no quality improvement (QI) strategy for HIV within MoH; however, there is a QI framework in the developmental stage that will guide the development of other documents.⁴⁰ Beginning in February 2016, GF is providing some support for external quality assurance for the laboratory system. PEPFAR/B will work with the GoB health financing TWG to examine efficiencies.⁴¹

1.4 Alignment of PEPFAR Investments Geographically to Disease-Burden

In order to fully analyze PEPFAR investment in Botswana, it should be noted that for HIV the GoB equitably distributes resources across the country. The largely urban health districts, such as Gaborone and Francistown, have low GoB expenditures per PLHIV and high health care access coverage. This is in the face of comparatively high disease-burden due to economies of scale in their program operations and a high proportion of patients accessing service at the referral hospitals from outside the districts. In contrast, low-burden health districts⁴² have high patient expenditures.

The alignment analysis of the 2015 PEPFAR investment in Botswana, which closely examined PEPFAR economic expenditure and HIV prevalence data, revealed wide variability between areas of high disease-burden and low disease-burden.⁴³ This analysis is quite similar to COP15 because the pivot is not yet represented in these data. As seen below, Figure 1.4.1 shows an overall inverse relationship between PEPFAR per-PLHIV-unit expenditures and disease-burden by health districts.⁴⁴

⁴⁰ Documentation of QI activities has been a challenge, but programs are working closely with partners to inculcate the culture of documentation of QI activities. For QI in labs, COP15 activities supported the rolling out of Strengthening Laboratory Management Towards Accreditation (SLMTA) to labs in the priority areas and TA towards preparation for lab proficiency testing (PT) by the Botswana National Quality Assurance Laboratory (BNQAL). PEPFAR/B has been and remains the primary external provider of support in the QM/QI area.

⁴¹ Refer to the SBOR in Section 6

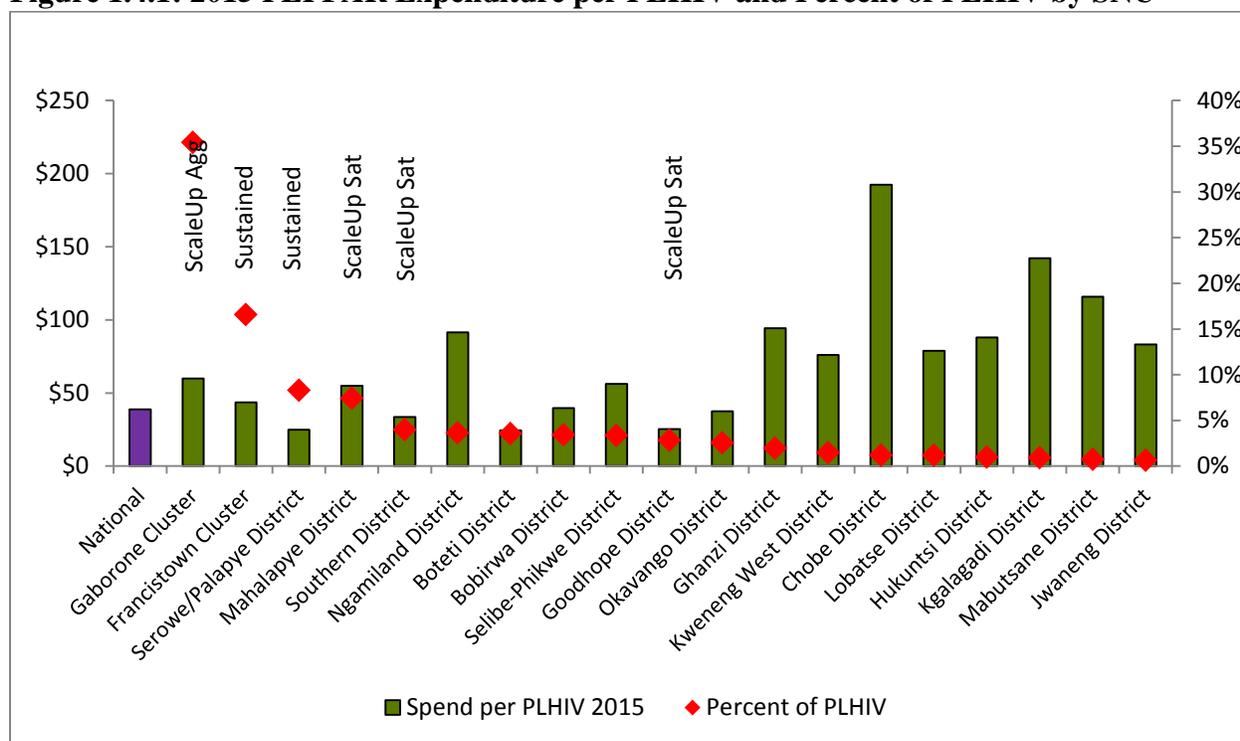
⁴² I.e, Jwaneng, Mabutsane, Kgalagadi, Okavango, and Chobe

⁴³ Expenditure per PLHIV ranges from \$23 to \$225.

⁴⁴ The existence of different laws/authorities (Administrative District Act, Census Act, Ministry of Finance and Development Planning Ministry of Local Government) has led to various definitions for districts in Botswana for different purposes (planning, local governance, enumeration areas, land use, development etc.). The delivery of health services has also led to another district definition based on coverage of services. Administrative districts are defined slightly differently from census districts as well as health districts. The choice of 24 districts for PEPFAR COP16 Planning was based on the health districts largely because of the availability of health services data reported by health districts, and the existence of shape files (for mapping) defined based on the health districts. Where data (in this case HIV prevalence) is available based on census districts (as is the case with BAIS IV) it is possible to map census

Based on PEPFAR/B analysis, facility-based programs will continue to receive TA focus rather than DSD, while community-based programs will combine both TA and DSD. Both community and facility approaches will focus on high-burden/prevalence health districts in order to diversify the service delivery model and improve HIV/AIDS program operations, data collection, analyses, reporting, general surveillance and M&E activities. The GoB maintains efforts across all health districts, helping to continue practices which have resulted in good outcomes, as well as sharing “best practices” from other health districts (See Figure 1.4.2). PEPFAR/B’s DSD support for KPs and refugees will continue as part of the agreement with GoB.

Figure 1.4.1: 2015 PEPFAR Expenditure per PLHIV and Percent of PLHIV by SNU



districts to health districts, although the mapping is not 100% exact. We do not anticipate these discrepancies constitute any drastic differences.

Figure 1.4.2: HIV prevalence by SNU, Current on treatment and Unmet ART need

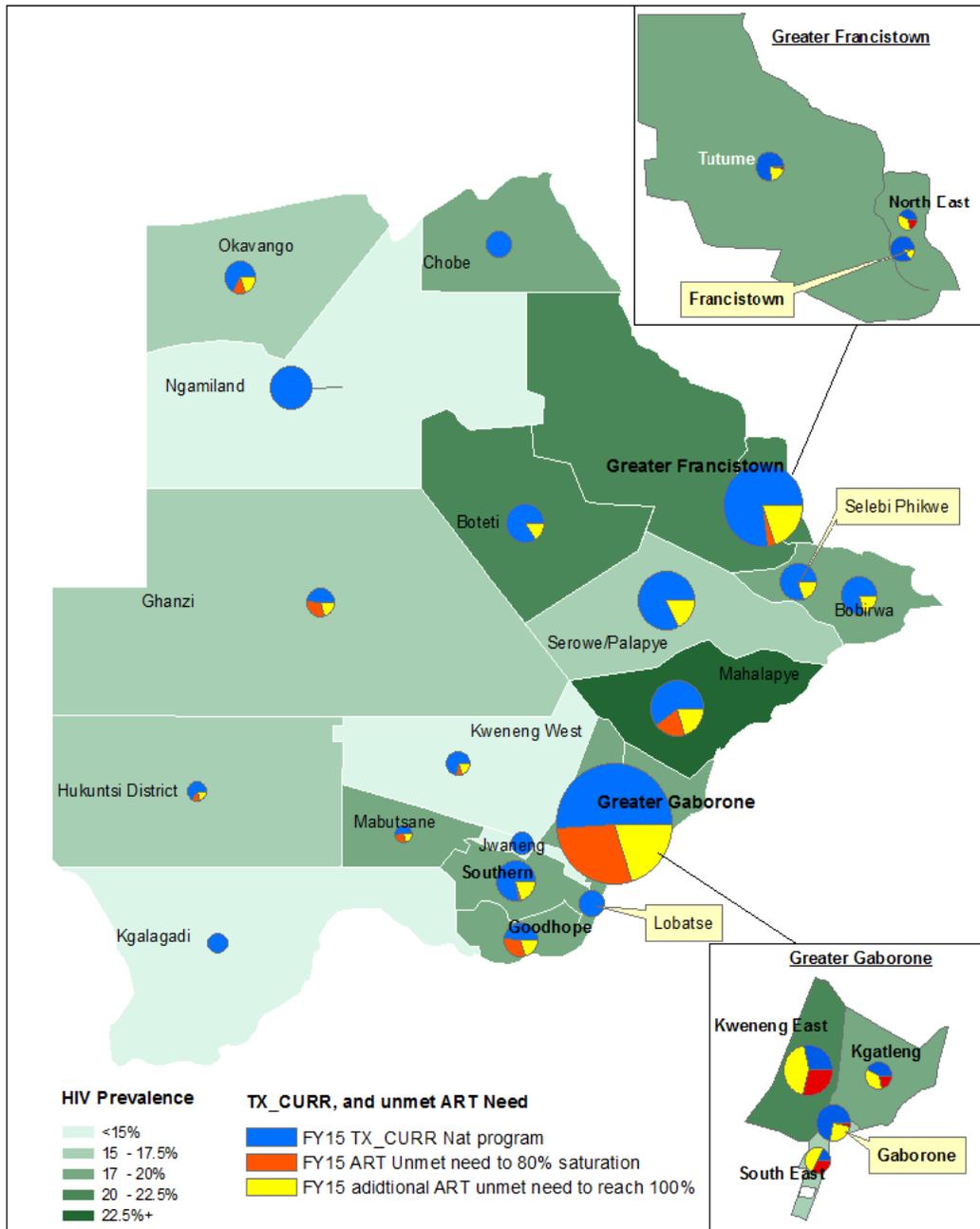
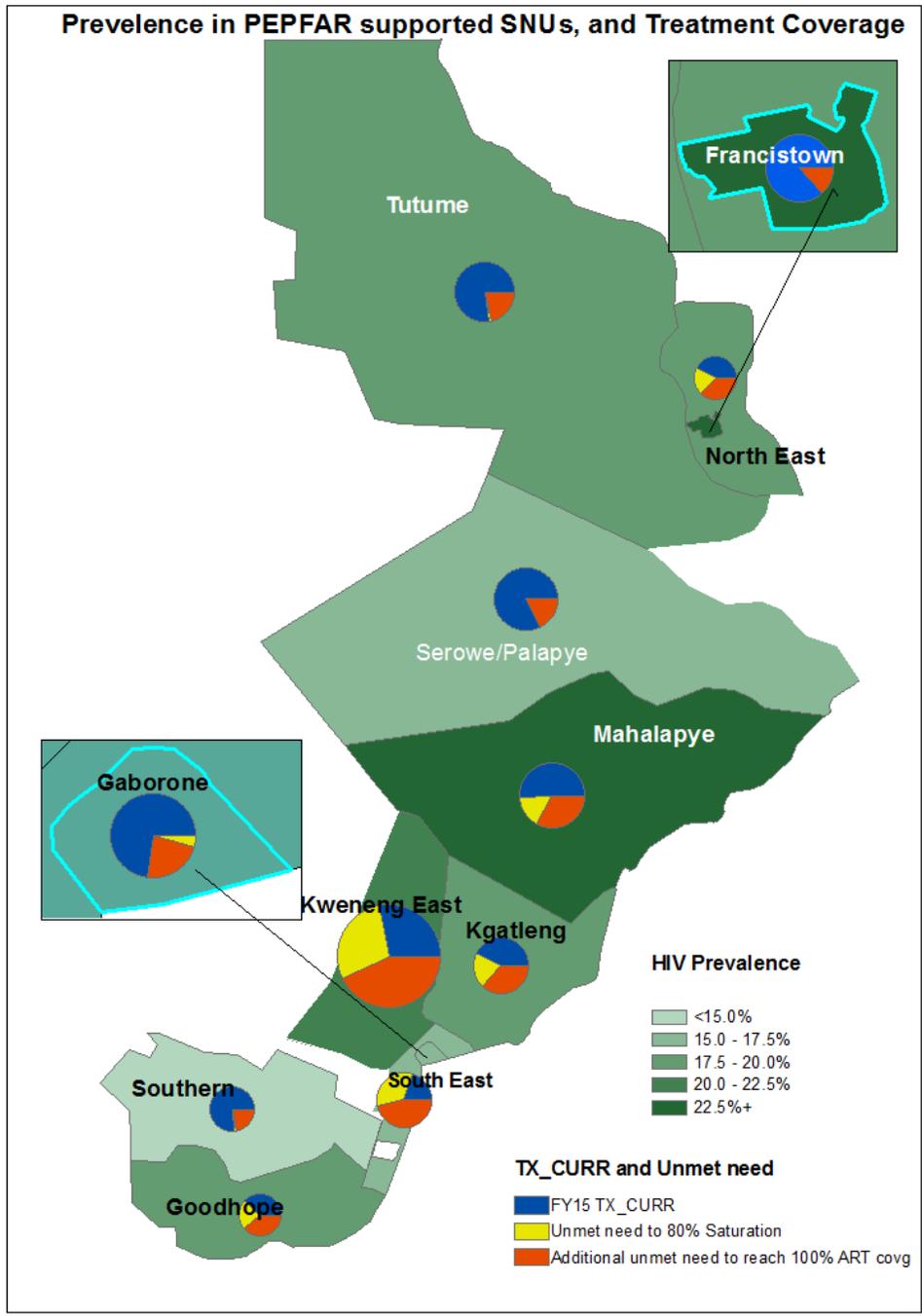


Figure 1.4.3: Prevalence in PEPFAR Supported SNUs and Treatment Coverage



1.5 Stakeholder Engagement

In order to achieve sustained control of the HIV/AIDS epidemic in Botswana, it is essential our PEPFAR/B team routinely coordinates and communicates with external partners. These partners include host country governments, multilateral organizations, the private sector, faith-based and CSOs. During the COP16 process, PEPFAR/B has made external partner engagement one of its highest priorities.

The management team has conducted monthly meetings with the PS at MoH to discuss a common agenda of topics ranging from the PEPFAR pivot to challenges with implementation to plans for the country's move to T&S. Feedback from these meetings has led to a series of quarterly engagements between PEPFAR/B IPs, the PS and other MoH department heads. These are important interactions to help MoH understand and guide the work of partners in districts, communities and at the facility level. Interaction with other development partners has increased over the last six months.⁴⁵ The PEPFAR Coordinator is a voting member of the Country Coordinating Mechanism (CCM) and is regular communication with the GF Portfolio Manager in Geneva.

Finally, PEPFAR/B continues to engage with civil society and district-level stakeholders through a series of roadshow seminars called "New Directions in Global Health." The goal is to discuss the latest research and evidence-based programs with stakeholders outside of the capital city, and to build capacity in the media for reporting on these issues.⁴⁶

Earlier this year, external partner engagement began anew in a series of meetings in late January to discuss quarterly POART results, the implementation of COP15 and development of COP16. Verbal and written feedback was collected from all the meetings. Civil society and private sector stakeholders were also convened on more than one occasion to educate them on the PEPFAR pivot and to gather feedback on SID and the new focus on seven scale-up SNU's. Much of this feedback around Botswana's challenges was discussed at the DC Management Meeting (DCMM).⁴⁷ Further engagement took place at follow-up meetings with external stakeholders in

⁴⁵ PEPFAR/B team members met several times with UNAIDS and other UN organizations both individually and through development partner meetings to discuss the COP15 pivot, development of the Investment Case, and plans for GF to return to Botswana after a multi-year hiatus.

⁴⁶ These seminars target district-level HIV/AIDS stakeholders and members of the media with interesting presentations, panel discussions and two-way conversations about PEPFAR/B priority areas, including GBV, responses to KPs, VMMC campaigns, and important information about breastfeeding and HIV treatment. These two-day seminars are held once per quarter with inter-agency participation, and they are usually opened with a message from the U.S. Ambassador. Three New Directions seminars were held, including one in Serowe, one in Kasane and another in Ghanzi

⁴⁷ External partners raised concerns with downward trending of the PEPFAR budget and sustainability of the response. Other comments from stakeholders centered on supply chain, lack of important commodities such as RTKs, expansion of treatment to

late March where feedback from DCMM was shared.⁴⁸ PEPFAR/B is committed to continually improving the consultative process with these critical stakeholders, and with the framework built over the last year, expanding our inclusion of key constituents, including PLHIV, stigmatized and marginalized populations.

2.0 Core, Near-Core and Non-Core Activities

For COP16, an inter-agency exercise was held to review assumptions from COP15 and progress made. Most non-core activities were transitioned off the list.⁴⁹ Specific details are outlined in Appendix A.

3.0 Geographic and Population Prioritization

Few geographic changes were considered for COP16, however, the designation of the Greater Gaborone cluster was changed to “scale-up aggressive” with the goal of achieving 75% saturation in FY17.⁵⁰ The criteria for geographic prioritization continues to include total PLHIV in the districts, ART coverage, and net new needed for ART saturation. In 2015, the estimated number of PLHIV in Botswana increased to 392,435,⁵¹ representing an increase of more than 70,000 cases. This jump is largely due to SPECTRUM model changes.

As in COP15, district-level PLHIV estimates were proportionally distributed based on BAIS IV HIV prevalence estimates and projected district population estimates. These data show the Greater Gaborone cluster⁵² and the three additional health districts⁵³ account for 49% of the country’s HIV disease-burden. In addition, these areas had some of the highest numbers in the net new needed for ART saturation.

The Greater Francistown cluster and Serowe-Palapye continue to be sustained SNU to focus on viral suppression. These SNUs account for an additional 25% of PLHIV but have fairly high ART coverage at around 80%. Five specific sites remain designated for KPs based on high HIV

all populations (including non-citizens and KPs) and targeting of men as areas they would like to see PEPFAR/B address in COP16.

⁴⁸ During these meetings, partners nominated participants to attend the COP16 Review Meeting in Johannesburg from May 18-20.

⁴⁹ Including TA for civil society organizations and support for low yield VMMC and HTC sites at the site level. At the national level, broad-based behavioral change communication (BCC) messaging for general population prevention, TA for palliative care, TA support for the human resource information systems (IRIS), TA support to assist GoB in outsourcing non-clinical services, TA support for QI for maternal mortality, and paying for laboratory accreditation fees transitioned off the list from the national level.

⁵⁰ as agreed upon during the DCMM

⁵¹ UNAIDS, June 2015

⁵² Gaborone, Kweneng East, Kgatleng, and South East

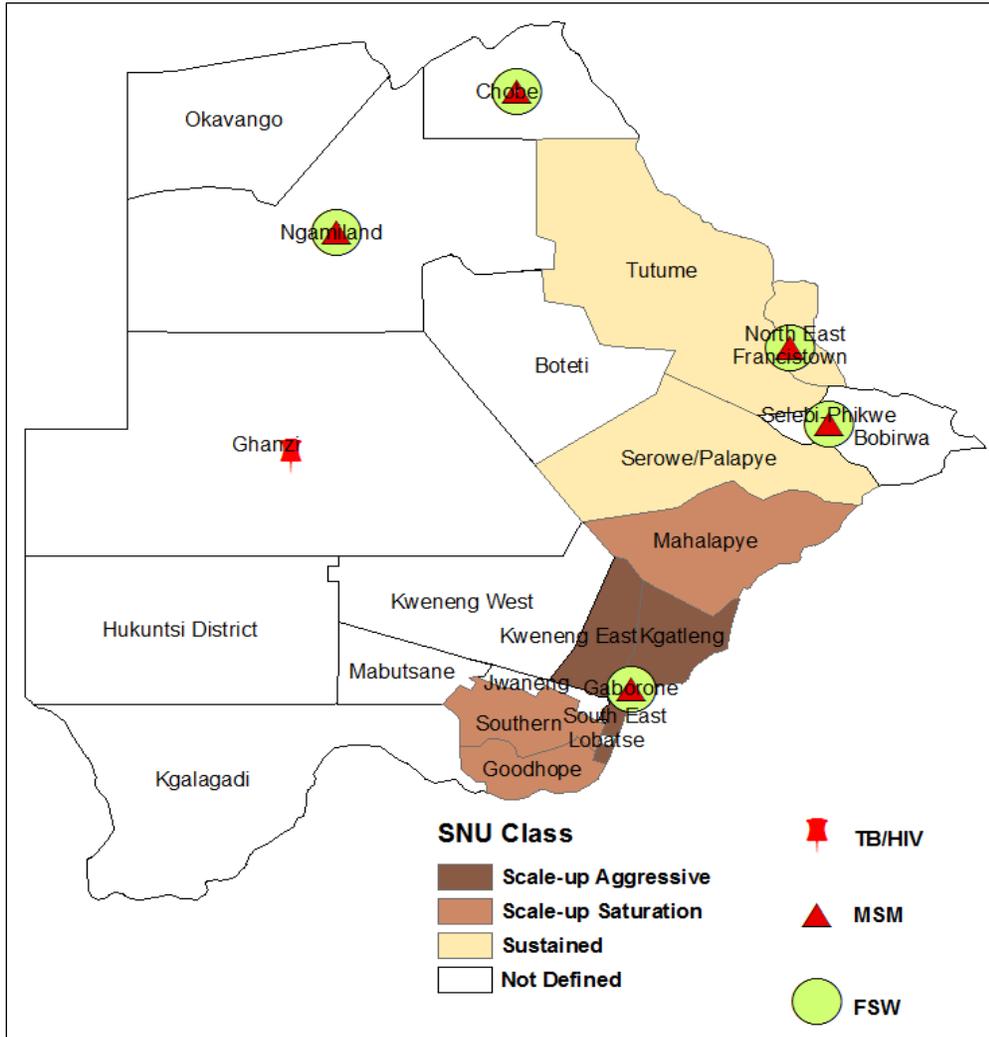
⁵³ Mahalape, Southern and Goodhope

prevalence and a high estimated population of KPs. One additional site, Ghanzi continues to target a specific area with TB prevalence 2.5 times the national average. Figure 3.1 highlights the scale-up and saturation districts along with identifying the locations of KP hot spots and TB/HIV intervention sites.

Table 3.1: COP16 SNU Classification

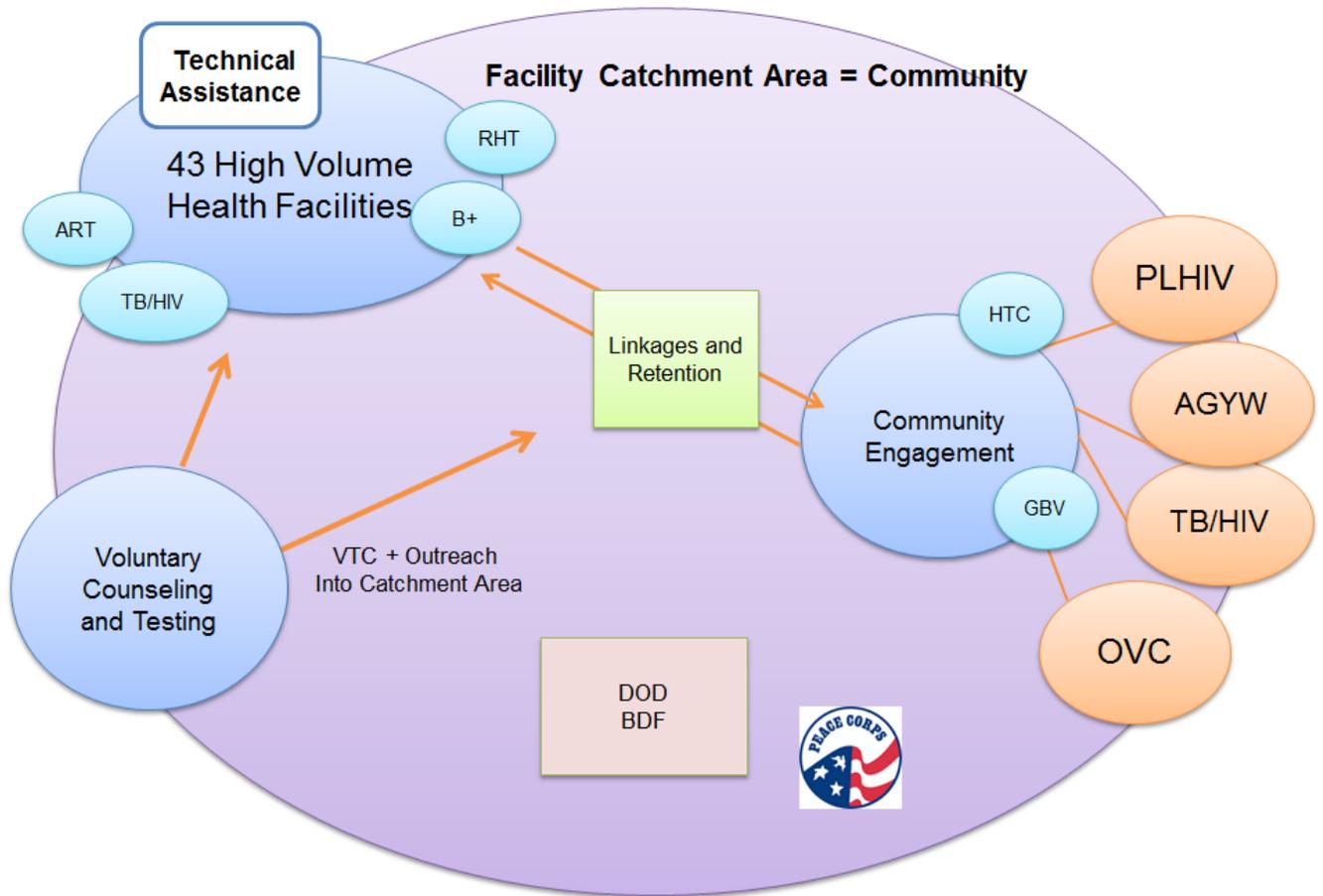
SNU	SNU Classification	Total PLHIV (UNAIDS 2015)	Total on ART (Sept'15)	Percent of PLHIV	ART Coverage FY15
Gr Gaborone	Scale-Up Agg	138,985	71,180	35%	51%
Mahalapye	Scale-Up Sat	29,149	17,709	7%	61%
Goodhope	Scale-Up Sat	11,127	5,502	3%	49%
Southern	Scale-Up Sat	15,614	12,121	4%	78%
Gr Francistown	Sustained	65,015	49,985	17%	77%
Serowe/Palapye	Sustained	32,532	26,761	8%	82%
Ghanzi	Other	7,711	3,740	2%	49%
Selibe-Phikwe	Other	13,132	10,527	3%	80%
Ngamiland	Other	14,249	17,848	4%	125%
Chobe	Other	4,707	6,726	1%	143%
Mabutsane	Non-Priority	2,883	1,459	1%	51%
Hukuntsi	Non-Priority	3,783	2,450	1%	65%
Okavango	Non-Priority	9,986	6,680	3%	67%
Kweneng West	Non-Priority	5,688	4,137	1%	73%
Bobirwa	Non-Priority	13,426	10,594	3%	79%
Boteti	Non-Priority	13,908	11,645	4%	84%
Kgalagadi	Non-Priority	3,566	3,664	1%	103%
Lobatse	Non-Priority	4,585	6,555	1%	143%
Jwaneng	Non-Priority	2,390	4,622	1%	193%
National		392,435	273,904	100%	70%

Figure 3.1: COP16 Priority SNUs



PEPFAR/B supports program services at 43 high-volume facilities including TA as appropriate per location. Figure 3.2 below represents the continuum of care model in scale-up areas. Sustained districts will receive targeted TA focused on viral suppression activities at 30 high-volume facilities.

Figure 3.2 PEPFAR Supported Continuum of Care Model for Scale-Up Districts



PEPFAR/B focuses on KPs (FSW and MSM) and AGYW as well as military personnel, OVC,⁵⁴ TB/HIV co-infected patients and refugees in an effort to meet the needs of these groups as outlined in SDS section 1⁵⁵ and on the path to reaching epidemic control.⁵⁶

⁵⁴ Operario D, Underhill K, Chuong C, Cluver L. (2011). HIV Infection and Sexual Risk Behavior Among Youth who have Experienced Orphanhood: Systematic Review and Meta-Analysis. *International Aids Society*. 14:25.

⁵⁵ KP needs are largely unaddressed by other partners and they are high-risk populations with a higher incidence than the general population (see section 1.0). Furthermore, as documented in section 1.0, AGYW aged 15-24 are a priority population since they are twice as likely to acquire HIV as their male counterparts and more likely to become victims of gender inequality and GBV, key drivers of the epidemic. While AGYWs will receive prioritized attention in all scale-up SNU to Reach 90-90-90, FSW and MSM interventions will occur at five specific sites. AGYW are a priority population for Peace Corps Volunteers (PCV) HIV prevention, life skills and gender interventions.

⁵⁶ Military personnel are believed to have high HIV prevalence rates, with more disposable income and greater mobility than the general population. Military personnel will be targeted with a specific VMMC campaign, unique to the needs of their mostly all-male population. Given the mobility and disbursement of military personnel, services implemented in collaboration with the defense forces include established barracks that do not fall into the priority areas. According to BAIS IV, OVC have a higher HIV prevalence than the general population under the age of 18 (5.2% vs. 3.5%). They are also far more likely than other children to move from being “affected” by the virus to becoming infected, as well as facing other risks, making them an important focus population in order to prevent new infections. This is especially true for adolescent girls who have lost a mother

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

4.1 Targets for Priority Locations and Populations

Targeting for COP16 was built on expectations for FY16 results, the anticipated move to T&S in mid-2016, and the availability of commodities. PEPFAR/B results in the four scale-up SNUs in the first quarter fell behind expectations due to RTK shortages and the efforts dedicated to start-up activities for new partners. Given these field realities, the first step was to examine FY16 expected results for ART treatment prior to setting FY17 ART targets (table 4.1.1). This was done using the latest data on PLHIV and FY15 National ART program results. Assumptions informing the FY17 ART targets include:

- 80% of newly tested PLHIV will be linked to care in FY16, 90% linked to care in FY17;
- 15% loss-to-follow-up (LTFU) in FY16; 10% LTFU in FY17
- 40% of FY16 ART treatment targets will be met; remainder will be included in FY17 targets;
- 25% of pre-ART patients will be enrolled in FY16 with the remaining 75% enrolled in FY17;

Table 4.1.1. ART Targets in Scale-up Sub-national Units for Epidemic Control

SNU	Total PLHIV	PEPFAR Contribution in SNU	Expected current on ART (APR 16)	Additional patients required for 80% ART coverage	Target current on ART (APR 17) TX_CURR	Newly initiated (APR 17) TX_NEW	ART Coverage (APR 17)
Gr. Gaborone	138,985	77%	57,227	27,755	85,313	27,790	75%
Mahalapye	29,149	60%	11,006	2,611	14,872	3,711	80%
Goodhope	11,127	80%	4,696	2,490	7,569	2,960	80%
Southern	15,614	52%	6,534	0	8,149	653	80%
Total	194,875	66%	79,463	32,856	115,903	35,115	

and who are then more likely to engage in risky sexual behavior. People with TB are a high-yield population for HIV testing and new ART initiations given the high co-infection rate in Botswana (61% of TB patients are PLHIV) and the immediate eligibility for ART of TB/HIV co-infected patients. Current facility and community-based care and treatment programs have and will continue to appropriately prioritize integrated TB/HIV programming in scale-up SNUs in order to reach this population. Given the high rate of TB transmission and increasing rate of TB/HIV co-infection in the Ghanzi district, on-going programs targeting TB/HIV patients will be sustained. According to the WHO Global TB Report, 2015, in Ghanzi TB prevalence is two and a half times the national average: over 1000 per 100,000 compared to 385 per 100,000. Given that TB remains the cause of 40% of AIDS-related deaths in Botswana, the uncontrolled TB epidemic in this part of the country is a threat to the efforts to prevent TB/HIV co-infection in the rest of the country, particularly given the mobility of the population. Finally, refugees will remain an important population to support as non-citizens do not have access to ART, except through PEPFAR support. The refugees live in Duwki Refugee Camp in Tutume District.

Targets by SNU were based on the SNU’s unmet need. Targets by site were set proportionate to the current ART volume by site within the SNU (see table 4.1.6 for site list). Strategies to meet the ART initiation targets are noted in Table 4.1.2 and described in sections 4.4, 4.6-4.10.

Working backwards from the number of new on treatment, HTC targets were set according to testing modalities, anticipated yields (see 4.5 for details) and expectations of additional pipeline funds being made available. Sufficient testing is one of the key limiting factors for realizing 80% treatment saturation, particularly in Greater Gaborone where the volume of new patients needed is three times higher than the other three SNUs combined.

Table 4.1.2. Entry Streams for Newly Initiating ART Patients* in scale-up SNUs

Entry Streams for ART Enrollment	Tested for HIV (APR 17)	Identified Positive (APR 17)	Newly initiated (APR 17) TX_NEW
Clinical care patients not on ART (Pre-ART)		9,097	9,097
HIV-positive Pregnant Women	12,108	3,677	1,404
HTC (All programs except PMTCT)	344,473	27,438	24,614
Total	356,581**	40,194	35,115

*Adults, pediatrics and TB/HIV patients combined

**Includes KPs from other sites

To maintain treatment adherence, PEPFAR/B will focus on building strong linkages between facilities, communities and individuals to assure the continuum of care (see section 4.6 for details). Strategies for HTC, treatment initiation, and treatment retention and adherence were built on the country’s move to T&S and informed by evidence-based best practices and unit expenditure analyses. With these retention and treatment adherence strategies, viral suppression is projected to reach 90% in each of the PEPFAR supported SNUs by end of FY17.

Planned prevention targets include 20,910 circumcisions (VMMC) in Greater Gaborone, Goodhope, Southern and Mahalapye SNUs and for DOD’s efforts at BDF military camps; prevention messaging, testing and counseling for 13,384 AGYW in scale-up SNUs; and outreach to 4,338 FSW and 743 MSM in hotspots⁵⁷ (Tables 4.1.3 and 4.1.4). Finally, 10,939 OVC will receive care and support services, including linkages to HIV prevention, testing and treatment in FY17 (Table 4.1.5).

⁵⁷ Hotspots for FSW and MSM include Francistown, Gaborone, Maun, Selibe-Phikwe, and Kasane.

Table 4.1.3. VMMC Coverage and Targets for 15-29 year olds in scale-up SNU

SNU	Population Size Estimate	Current Coverage (FY15)	VMMC_CIRC (APR 17)	Expected Coverage (APR 17)
Greater Gaborone	126,319	30%	3,594	39%
Mahalapye	19,671	38%	935	63%
Southern	19,215	27%	5,180	54%
Goodhope	7,832	22%	996	35%
Total	173,037	27%	10,705*	43%

*This only applies to 15-29 year olds and does not include DOD's targets at BDF sites

Table 4.1.4. Target Populations for Prevention Interventions to Facilitate Epidemic Control

Target Populations	Population Size Estimate (Priority SNU)	Coverage Goal (APR 17)	FY17 Target
FSW	6,195 ^a	70%	4,338
MSM	1,062 ^b	70%	743
AGYW (15-24 year olds)	114,756 ^c	12%	13,384
Total	122,013		18,465

^aSource: 2012 Mapping, Size Estimation and Behavioral Biological Surveillance Survey (BBSS 2012) and Botswana Population Projections 2011-2026 were used to projection FSW size in 2015. An additional 300 FSW were included based on increased sex work in Chobe related to a major construction project.

^bSource: 2012 Mapping, Size Estimation and Behavioral Biological Surveillance Survey (BBSS 2012); used original 2012 estimates.

^cSource: Botswana Population Projections 2011-2026.

Table 4.1.5. Targets for OVC and Linkages to HIV Services

Target SNU	Estimated # of OVC	Target # of active OVC (APR 17) OVC_SERV
Greater Gaborone	30,143	7,218
Mahalapye	9,825	2,297
Southern	6,943	1,051
Goodhope	3,275	373
Total	50,186	10,939

These targets are ambitious and built on a few over-arching assumptions. A robust supply chain is required to maintain stock for testing and treatment at the point of service delivery. The targets assume T&S initiation in May 2016 with projected ARVs available for up to 50,000 new

patients nationwide in 2016. Actual implementation details for T&S are still under development and ARV procurement and distribution remains a concern.⁵⁸

Targets for the most vulnerable populations – FSW, MSM, OVC and TB/HIV patients – are based on outdated or incomplete estimates. In FY16, a new size estimation mapping exercise is planned to produce new estimates for FSW and MSM. A new OVC situation analysis for FY16-17 will produce OVC size estimates as well as information on services needed and used. The national TB program plans to launch a nationwide TB survey in FY17 and the next AIDS Indicator Survey in 2018. Data on costing efficiency gains along the facility-community continuum will be collected in FY17 to support the case for task shifting and facility decongestion. These new surveys and data sources will provide timely data to inform future programming and targeting.

PEPFAR/B high-level targets for all SNUs are listed below with program strategies:

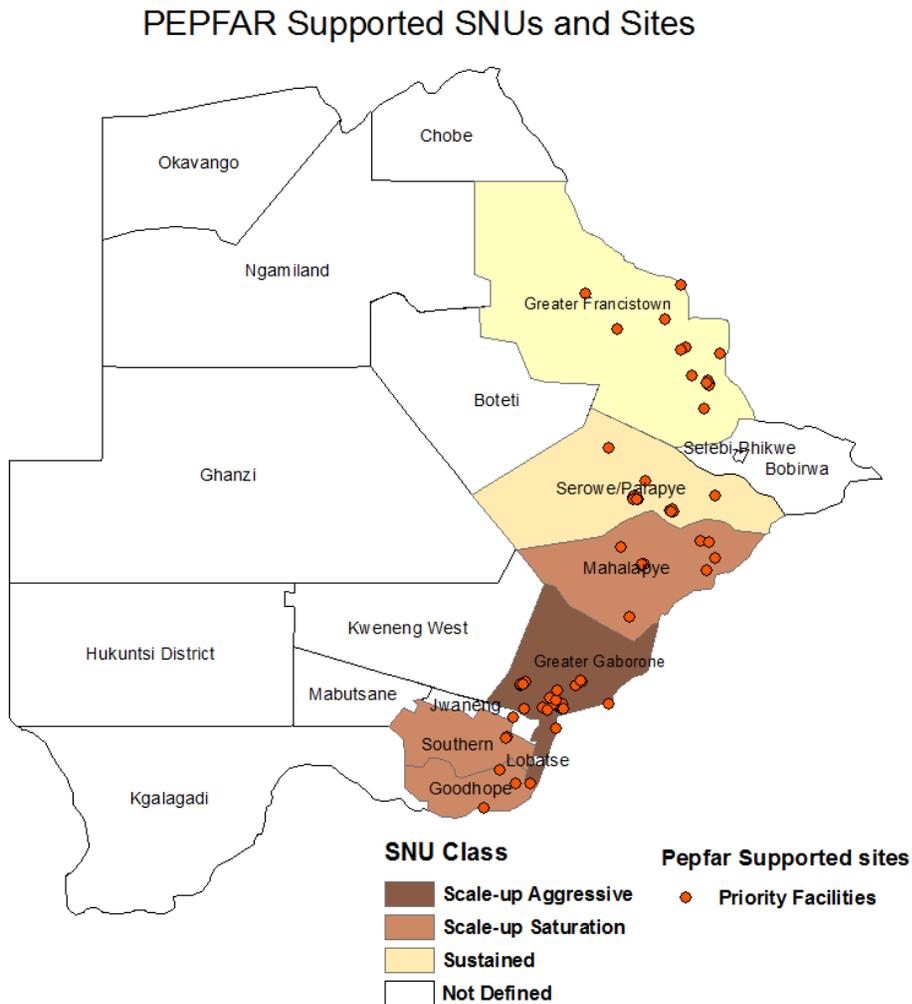
- **HTC** – 358,698 persons to receive testing by providing DSD in community-based HTC settings and TA in facility-based, government-supported routing HIV testing (RHT) sites in the scale-up SNUs.
- **ART** – 35,315 newly initiated on ART in the scale-up SNUs to reach the target of 179,895 for current on treatment by end of FY17.
- **PMTCT** – 1,404 HIV-infected pregnant/breastfeeding women will be identified and initiated on ART with a focus on testing and treating 90% of HIV-exposed infants by eight weeks of age.
- **TB/HIV** – 1,961 of TB/HIV co-infected patients will be initiated on ART by end of FY17.
- **Linkages** – 29,160 PLHIV will receive services outside of the health facility, including linkages to care, adherence and retention.
- **VMMC** – 20,910 males will receive VMMC services.
- **Prevention** – 19,149 AGYW and 5,081 FSW and MSM reached with prevention activities.
- **OVC** – 11,605 OVC provided care and support services.

⁵⁸ PEPFAR/B and development partners continue to assist the GoB with implementation plans.

Table 4.1.6: PEPFAR Supported High-Volume ART Facilities (73)

SNU	Facility	SNU	Facility	
Scale-Up SNUs		Scale-Up SNUs		
Greater Gaborone	Gaborone West Clinic	Goodhope	Goodhope PH	
	Princess Marina Hospital		Mmathethe Clinic	
	Phase II Clinic		Pitsane Clinic	
	Bontleng Clinic		Phitshane Molopo	
	Baylor	Southern	Kanye SDA Hospital	
	Village Clinic		Moshupa Clinic	
	Broadhurst Clinic		Kanye Main Clinic	
	Broadhurst Clinic 3	Sustained SNUs		
	Old Naledi Clinic	Greater Francistown	Nyangabgwe RH	
	Tlokweng Main Clinic		Area W Clinic	
	Bamalete Lutheran Hosp.		Botswelole Clinic	
	Deborah Retief Memorial Hosp.		Jubilee Clinic	
	Morwa Clinic		Gerald Estate Clinic	
	Makakatlela		Masego Clinic	
	Artesia		Botshelo Clinic	
	Mmathubudukwane		Tatitown Clinic	
	Nkoyaphiri Clinic		Tutume Primary Hospital	
	Scottish Livingstone Hospital		Tonota Clinic	
	Thamaga Primary Hospital		Nata Clinic	
	Phuthadikobo Clinic		Sebina Clinic	
	Mogoditshane Clinic		Borolong Clinic	
	Gabane Clinic		Mokgoro Clinic	
	Metsimotlhabe Clinic		Maitengwe	
	Borakalalo		Tsamaya Clinic	
	Mmopani		Makaleng	
	Kgosing		Serowe/Palapye	Sekgoma MH
Kopong	Palapye PH			
Mahalapye	Mahalapye DH			Serowe Clinic
	Airstrip Clinic			Kediretswe Clinic
	Xhosa			Kadimo Clinic
	Mookane Clinic			Nutrition Clinic
	Machaneng			Ext 3 Clinic
	Chadibe			Newtown Clinic
	Kalamare			Lotsane Clinic
	Ramokgonami Clinic	Mmashoro Clinic		
	Seleka/Tumasera Clinic	Maokatumo Clinic		
		Khurumela Clinic		
	Mabeleopudi Clinic			

Figure 4.1.6: PEPFAR Supported Sites



4.2 Key Population Prevention

PEPFAR/B will prioritize prevention activities among KP in select areas. In the coming year, emphasis will be placed on the following core KP package: peer education and enhanced community outreach services;⁵⁹ sexually transmitted infection (STI) prevention, screening and treatment; condoms and condom-compatible lubricants distribution; HTC; T&S for HIV positive KPs; and pre-exposure prophylaxis⁶⁰ (PrEP). These services will be offered through IPs with government support for ART. These interventions will continue in defined areas with known

⁵⁹ To increase access to, and retention in, the continuum of HIV prevention to care and treatment for KP: MSM and FSW

⁶⁰ Offered on a pilot basis.

high concentrations of KPs⁶¹ Significant efforts will be made through public diplomacy to address gender, stigma and discrimination and facilitate an enabling environment which is a major finding in relation to KPs.

PEPFAR/B's focus on KPs is based on HIV prevalence and incidence by geographic regions and districts. BAIS IV and BBSS data within the national and district levels were used to prioritize high impact, evidence-based interventions addressing current coverage gaps in the continuum of care cascade for KPs and for the core/near-core analysis. Prevention interventions include facility and community-based approaches supported where possible by QI interventions to increase the ability to achieve targets. South-to-South partnerships with community organizations in South Africa have been established to enable IPs to learn innovative approaches for KPs. PEPFAR/B will work with the GOB to advocate for PREP pilot activities in COP 16. The past SIMS results reflected a weakness in the area of referrals. IPs will work closely to ensure referrals are completed and the agreed protocols are followed at all SNUs.

PEPFAR/B is also providing advocacy and TA to develop policy for KPs through the Local Capacity Initiative (LCI). In order to address capacity gaps identified through gender analysis, PEPFAR/B will provide gender and human rights training for KP IPs and service providers in PEPFAR districts. This training will also include stigma and discrimination to help clinical service providers to be sensitive and provide friendly services to KP. PEPFAR/B believes TA in these key policy areas will foster improved and expanded service delivery. It is funded with domestic or other donor resources. All KP interventions will be supported with in-country funds, excluding funds through LCI to support KP advocacy.

4.3 Voluntary Medical Male Circumcision (VMMC)

In FY15, PEPFAR/B approved a pipeline redirection of \$5 million from the GoB cooperative agreement to support a 6-month VMMC acceleration campaign. During campaign implementation, 18,493 males⁶² were circumcised and there were several noteworthy accomplishments that will strengthen future VMMC efforts in Botswana. The GoB trained 54 nurses to perform complete circumcision procedures under the first task-shifting. Botswana completed PrePex active surveillance and GoB, with TA from PEPFAR/B, developed a protocol for PrePex passive surveillance increasing the number of trained PrePex providers and expanding the number of sites performing device circumcision. Ten thousand males will be circumcised during passive surveillance, providing greater access to what many men may find to be a more acceptable circumcision option.

⁶¹ Including Gaborone, Francistown, Maun, Selibe-Phikwe and Kasane.

⁶² 51.8% of the 35,000 campaign goal

The outcome of the VMMC campaign at 52% achievement was not optimal in part due to capacity issues at MoH, overly ambitious targets, and a cultural reluctance in some areas to undergo circumcision. As a result, PEPFAR/B is recalibrating its approach and funding for VMMC.

In COP16, PEPFAR/B will continue to work with the MoH to increase VMMC coverage among males 15–29 years in four scale-up SNUs, Greater Gaborone Goodhope, Southern and Mahalapye. Greater Gaborone has a substantial proportion of unmet circumcision need, a high HIV disease-burden, and represents 34% of the total male population between 15–29 years old. Within the Greater Gaborone, there are two static sites from which PEPFAR/B will provide DSD and mobile outreach to communities surrounding the clinics. TA will be given in additional facilities throughout Greater Gaborone to help the SNU reach 39% coverage in FY17. Ongoing support for Mahalapye will also be a priority for PEPFAR/B in COP16 after the country received central funding to reinvest in VMMC services during COP'15 in this strategic SNU. Mahalapye is an SNU with a high HIV-burden, which is very close to achieving saturation following PEPFAR/B support. As the IP prepares to re-engage in Mahalapye activities, it will partner with a greatly strengthened district team and will provide focused TA to help MoH achieve 63% coverage in FY17.

PEPFAR/B will also work with the Botswana Defence Force (BDF) High Command to expand access to VMMC with the goal of reaching 80% of the military population with services. COP16 represents a strategic shift in our partnership with BDF as support transitions from TA to DSD.

In addition, PEPFAR/B will provide above-site TA, including monitoring VMMC site adherence to the WHO minimum package⁶³ and active referral of clients testing HIV positive at VMMC sites (~1.2 – 2% of all clients) to HIV care and treatment. TA designed to generate data for decision-making and improve service quality will be provided by conducting SIMS, data quality assessments (DQA), external quality assurance (EQA), and continuous quality improvement (CQI) on a quarterly basis. TA will be provided to BDF High Command to facilitate data flow from the military sites.

4.4 Preventing Mother-to-Child Transmission (PMTCT)

The Botswana PMTCT program, almost exclusively GoB funded and implemented countrywide, achieved high coverage of HIV-infected pregnant women and low HIV-positivity rates among tested HIV-exposed infants earlier than most other PEPFAR-supported countries. Despite this, overall coverage for testing of HIV-exposed infants at 4–6 weeks remains low. In April 2015, Botswana started the implementation of Option B+ and received support from PEPFAR through

⁶³ This includes counseling on risk reduction and safer sex, HCT, STI screening and treatment, provision of male and female condoms, quality circumcision, post-operative follow-up and systematic assessment of adverse events.

a new IP. Quarter 1 FY16 results show, 6,327 pregnant women tested for HIV/know their results against a target of 17,195.⁶⁴ SIMS visits were conducted in the priority areas and the findings confirmed inadequacy in patient tracking of mother-infant pairs (MIP), EID and enrollment of HIV infected infants into ART Services.

PEPFAR/B will implement efforts to improve clinical outcomes through optimizing access to care and treatment services for pregnant and breastfeeding women by supporting the following strategic objectives: initiating 90% of HIV-infected pregnant and breast feeding women on ART (Option B+); optimize ART adherence and retention by delivering HIV services to MIPs; and strengthening of EID to ensure 90% of HIV-exposed infants receive DNA PCR tests by 8 weeks after birth and a final HIV diagnosis at 18 months or after weaning.

Reaching the set target will be achieved through TA for PMTCT on Option B+ including continued training of eligible HCWs, especially the nurse prescribers countrywide and supporting strategies to optimize ART retention/adherence among HIV-positive pregnant and breast-feeding women.

PEPFAR/B will support the GoB to develop and deliver integrated HIV service package to MIP at mother and child health (MCH) clinics or at infectious disease control centers (IDCC) and use innovative ways for improving access to and retention in PMTCT care. Site specific TA for high volume sites and DSD for refugees in Dukwi refugee camp will continue. Near-core activities will include TA support for District Health Management Teams (DHMT) and targeted site-level QA and QI interventions including strengthening of M&E systems and implementation of a robust tracking system to report on Option B+ initiation and MIP using longitudinal registers and cohort monitoring for up to 24-months. This is aimed at strengthening retention/adherence for viral suppression. PEPFAR/B will strengthen EID services to address gaps in coverage and turn-around-time (TAT) of results at facility level for children less than 18 months of age, and promptly link the infected children to treatment. Concurrently, community interventions will be implemented to follow-up on this important target group.

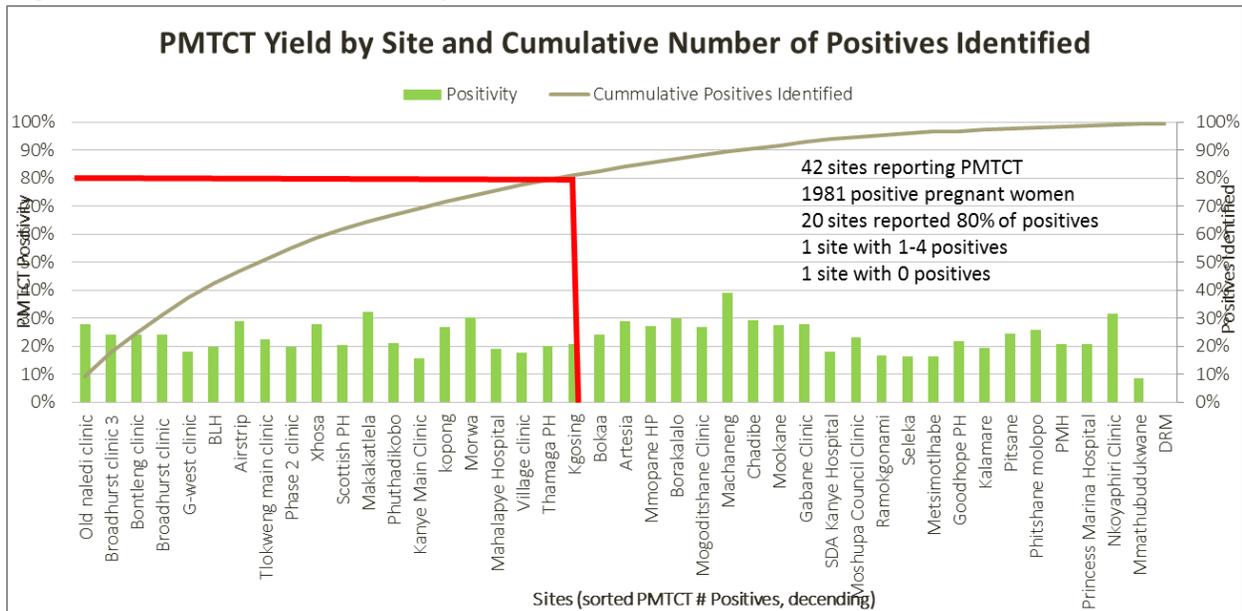
SIMS and SIMS+ for PMTCT will be conducted for program performance and remediation at the identified 43 high-volume sites providing PMTCT services at least once per quarter and Dukwi refugee camp once a year. The majority of clients (80%) are from the 20 out of 42 sites as shown on Figure 4.4.1; hence appropriation of TA support will be effective.⁶⁵

⁶⁴ 36.8% achievement

⁶⁵ All these sites started reporting selected clinical service quality indicators through the newly established SMS based reporting system. In order to reduce HIV incidence among pregnant and breastfeeding women, PEPFAR/B through TA will further support the re-testing of HIV negative pregnant women at second and third trimesters, as well as during postnatal period. TA will also be provided to strengthen referral networks for EID and VL. PEPFAR/B will continue to lobby for breastfeeding policy change to maximize HIV free survival rates, and will join the UN family in providing TA to the GoB in the pre-validation exercise. Activities will include the formation of a National Validation Team to audit and compile country reports on the status of the elimination of mother to child transmission of HIV.

OVC and community programs will link to PMTCT to support services at household or Child Welfare Clinics (CWC).⁶⁶ To address gender gaps within the PMTCT program PEPFAR/B is supporting the process of developing integrated sexual and reproductive health (SRH)/HIV curriculum and a whole module on gender, GBV and male involvement. This is intended to build capacity of service providers in gender issues and improve male partner support for both PMTCT and family planning.

Figure 4.4.1. PMTCT Yield Analysis



4.5 HIV Testing Counseling (HTC)

Based on the estimated number of PLHIV with unknown diagnosis needed to be put on ART and HIV positivity yield from what is currently observed from the program and the BCPPP study, a target of 27,348 PLHIV would need to be identified in FY17 by testing 339,968 clients. Scale-up SNUs were selected based on those with the highest unmet need for ART and the need to support the planned transition to T&S. In the scale-up SNUs, PEPFAR/B plans to identify HIV positive patients and actively link them into treatment and care (see Table 3.1). HTC services will target older males, TB/HIV clients, STI clinics, OVC and families, AGYW and KPs using a variety of HTC modalities.

The adopted service strategies and approach in the scale-up SNUs, including the Greater Gaborone aggressive scale-up SNU include DSD services like combined home-based and mobile

⁶⁶ These include: 1) identifying families with HIV exposed babies to go for EID test; 2) identifying HEI who do not have results, support these families to take their babies back to the health facility to receive their PCR results; 3) supporting babies to be started on treatment as appropriate; and 4) targeting HIV positive mothers with HIV exposed babies for care and support interventions to ensure adherence for viral suppression.

HTC,⁶⁷ implementing testing at static VCT facilities,⁶⁸ linkage to care,⁶⁹ and targeted services for KP⁷⁰ as well as TA including Routine Facility-Based HIV testing (PITC).⁷¹ In areas where PEPFAR/B already has or will be scaling back testing services, the GoB's RHT program will continue to identify newly diagnosed PLHIV.

The SIMS assessments have highlighted weakness in testing quality. PEPFAR/B will support strengthening the capacity of the BNQAL to assure the quality of rapid testing. Additional support will be directed to addressing supply chain and procurement of commodities in an effort to address the recent RTK shortages. In FY15, 128,476 tests were performed in the PEPFAR priority areas while 339,968 tests are targeted for FY17. Department of State pipeline funds have been approved to be reprogrammed to meet this target.

⁶⁷ Current program data reveal a gendered dimension to accessing HTC services with more women than men accessing services. Support for community-based testing and counseling through mobile and outreach will help identify first time testers and undiagnosed PLHIV; particularly males aged 25-40. Mobile testing activities will target hotspots such as bars, construction sites and farms among others as BCPP data show more men accessing mobile testing. Home-based testing will take place largely in greater Gaborone, targeting high-prevalence and high-density neighborhoods identified through spatial mapping by the Kopanyo study. Attempts will be made to target these and others to be identified to support Greater Gaborone saturation during FY17. Similar methods will be used to map Kweneng East to identify micro-epidemics for targeting in FY17. Outreach services will also include activities aimed at addressing gender norms which affects communities' access to HTC services as identified through the gender analysis.

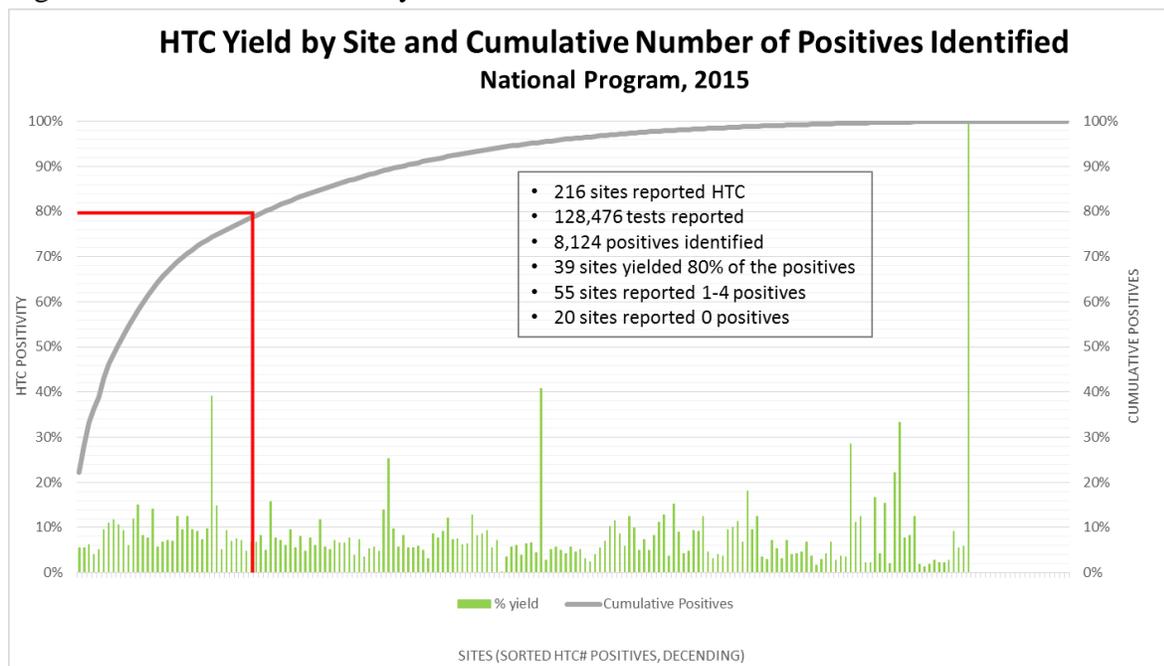
⁶⁸ Continued implementation of HIV testing at high volume and high yield stand-alone VCT testing facilities will target youth and men.

⁶⁹ Effective tracking and tracing will be essential to find clients when universal T&S is implemented. PEPFAR/B will prioritize implementation of activities to ensure HIV-positive persons are successfully linked to care and treatment, and these efforts are effectively documented. Phone calls and sending reminders are cost-effective ways of increasing linkage to care and will be continued.

⁷⁰ PEPFAR/B will support the provision of targeted specialized services including HTC for hard to reach populations including KPs in priority hotspots and in Gaborone, Francistown, Selebe-Phikwe, Maun and Kasane.

⁷¹ Facility baseline assessment for COP15 implementation revealed five-times the difference between current testing rates and COP15 targets. Human resource shortages within facilities also presented a major challenge. To achieve COP16 targets, intensified TA support will be provided to strengthen the PITC program. Support will include strategic redeployment and placement of additional lay counselors to provide HIV tests especially in greater Gaborone. The assessment report shows multiple health workers providing HIV tests are correlated with higher testing rates. Additional TA support to optimize PITC to achieve a higher HIV-seropositive yield will involve strengthening PITC using evidence-based, structural interventions (e.g., re-directing how lay counselors are used in facility settings). For Greater Gaborone, in addition to PEPFAR high volume sites, RHT TA support will be extended to feeder sites with units within the facility with the highest-yield prioritized, such as inpatient wards. Additionally, PEPFAR/B will support the review of HTC registers for the last 2 years and compare them with records to identify those known positives not yet linked to treatment.

Figure 4.5.1. HTC Yield Analysis



Additional notes: Data is from the National Program as of Sept 2015, includes sites in our Scale-up SNUs. The red line marks the 39 sites that yield 80% of the positive test results; 30 of the 39 sites that yielded 80% of positives are PEPFAR sites, 5 TCVT, 25 HV sites; 90,835 (71%) of the total tests performed were from PEPFAR sites; 7,272 (90%) of the positives identified were from PEPFAR sites

4.6 Facility and community-based care and support

PEPFAR/B is providing support at the national level, in four priority SNUs, and in Ghanzi to increase new patients enrolled in care, and optimize linkage to and retention across the HIV treatment and care cascade. In the scale-up SNUs there will be an estimated 205,444 PLHIV by the end of 2016.

PEPFAR/B has created an innovative community-based model addressing the three pillars of access: linkage, retention and adherence. A key component of the model is linking PLHIV to facilities for treatment to ensure enrollment of diagnosed PLHIV into care and rapid initiation of ART. SIMS visits identified gaps in linkages across facility-based partners, and among service providers, thus facility and community programming will focus on building strong linkages between facilities and communities to ensure a continuum of care for all health services along the three pillars of the clinical cascade.

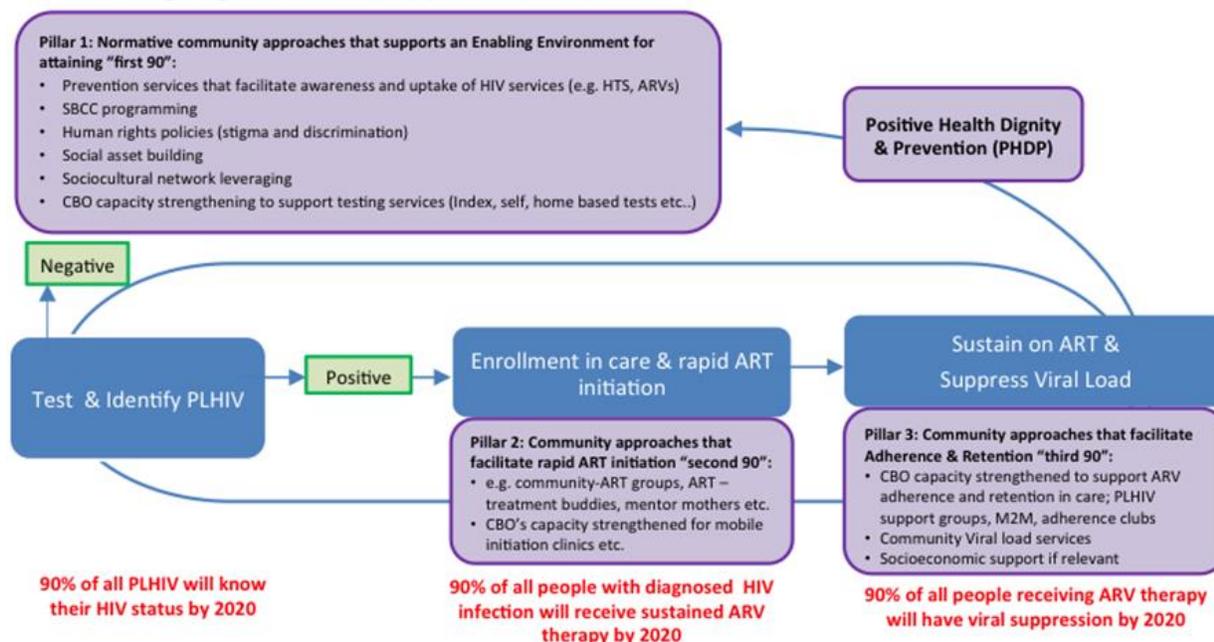
The PEPFAR/B package of care and support site level services in the scale-up SNU includes activities at the facility⁷² and community⁷³ levels. Community services will be carried out by local civil society organizations through the use of CTSs and CHWs. The organizations will also have staff working in the local health facilities to ensure work in the community is effectively linked to facilities.

At the community level, adult care and treatment activities build upon the targeted, mobile, and index case HTC in high-burden communities. To facilitate getting 90% of HIV+ individuals enrolled into care and initiated on ART, PEPFAR/B uses appropriate community-based interventions, including the use of community-based PLHIV support groups and networks, adherence clubs, and psychosocial support.

⁷² Cervical Cancer “See and Treat” Services (at select sites within the priority SNU); STI screening and management; improved linkages to care support along the care delivery processes e.g lab, pharmacy, child welfare clinics, clinical care etc.; CD4 count; ART initiate and refills; blood specimen transport to MoH labs for viral load check; Contrimoxazole provision; data on ART patient retention at facility and community levels improved by collaborating with IDCCs to generate lists of clients who are late for ARV initiation or refill appointments, and assigning these clients for tracing and referral to clinical care; and counseling for adherence and retention.

⁷³ Engagement of community members, facility staff and PLHIV in QI at the community-level to build the Botswana-specific evidence-base for locally-relevant community-based linkage and retention models; facilitation by CHWs of information sharing and risk reduction planning sessions to help participants evaluate their individual risk in relation to HIV infection; integration of TB/HIV activities; provision of systems and tools to facilitate active linkage to care and active case finding; support to communities in the implementation of differentiated models of care so the health system can efficiently refocus resources to those most in need; support for patients for ART readiness; positive health, dignity, and prevention (PHDP) minimum package of services at the community level involvement of community treatment supporters (CTS) to track pre-ART clients through home visits and mobile reminder platforms to ensure they undertake timely CD4 counts; adherence counseling and support through peers and CTS; mobilize and support for community involvement in linkage, adherence and retention through different interventions such as: adherence support, tracking LTFU, follow-ups for VL testing; support for community treatment pilot of community led models of ART provision such as: adherence clubs, support groups and community drug distribution groups; assessment and documentation of clinical and psychosocial needs with linkage to other facility and community-based services as appropriate; and community education to ensure the patient understands of the importance and benefits of maintaining undetectable viral load.

Box 1. Aligning Community Approaches to the Clinical Cascade and 90-90-90



Care and support targeted TA at the facilities ensures linkage and retention in the scale-up SNU's for patients in care with timely initiation of ART. The care and support targeted TA entails training of HCWs through the ART nurse prescriber training and the AIDS clinical care fundamentals. The HCWs are mentored at a minimum once a quarter. Sustaining districts⁷⁴ will be provided TA to retain patients on treatment so they are virally suppressed. This will be done through enhanced facility-based ongoing treatment adherence counselling at the various supported sites within the sustaining SNU's. PEPFAR/B will provide DSD facility-based care and support services at the Dukwi refugee camp. HIV infected refugees are offered Cotrimoxazole, pre-ART care, STI care and therapeutic food when indicated.

For T&S, PEPFAR/B works closely with the GoB to operationalize a national vision for a diversified HIV service delivery model to support T&S and to understand the costs associated with community-based care and support services. PEPFAR/B will work with the GoB to support task-shifting to the community-based cadres/HWs to effectively provide patient support,⁷⁵ health services,⁷⁶ and linkages between community members and clinical providers. PEPFAR/B will also train cadres of community-based workers to eventually be absorbed by MoH, to sustain community-based HTC, increase RHT, and strengthen linkage to care. It is expected shifting to

⁷⁴ Francistown and Serowe/Palapye

⁷⁵ counseling, home-based care, health education, adherence, and livelihood support.

⁷⁶ screening, testing, treatment, referrals, and surveillance.

the communities will reduce service delivery costs, congestion at facilities, and overall burden on facilities.

PEPFAR/B collaborates with NACA and other GoB ministries and UNAIDS on the development and implementation of the GoB's Community Acting Together to Control HIV (CATCH). This initiative focuses on expanding grass-roots HIV response under local leadership and will link closely with the community service delivery and community QI initiatives to identify local challenges with regards to HIV service delivery and devise solutions through the QI teams.

4.7 TB/HIV

Botswana has an estimated TB incidence of 385/100,000 making it a high TB risk country.⁷⁷ This is supported by the recent NIH funded Kopanyo study which showed 49%-69% clustering of cases indicating high rates of TB transmission.⁷⁸ In Botswana, 60% of TB patients are HIV-positive⁷⁹ and TB is responsible for 40% of deaths in this group, making TB the leading cause of death in PLHIV.

Early access to ART and isoniazid prevention therapy (IPT) prevents TB. However, the potential benefits from this dual prevention are not being realized at present in Botswana, as only 83% of PLHIV know their HIV status, 78% of diagnosed TB/HIV patients are on ART, and IPT is currently not implemented here.

District-level TB/HIV programming will continue among PLHIV in the scale-up SNU and in Ghanzi, specifically for community TB/HIV. Botswana has the highest rate of TB patients (49%) being referred by the community with 65% of TB patients enrolled in community TB care (CTBC).⁸⁰ This strategy reduces the financial and technical strain on both the health system and the patient. The goal of CTBC is to improve diagnosis of TB, improve treatment outcomes, enhance HIV testing of TB patients and improve access to HIV care, treatment and support services in the community. This approach allows patients to receive personalized care with CHWs and encourages treatment adherence due to proximity of treatment.

The GoB engages a wide range of stakeholders, including civil society organizations, to implement TB activities at community level. While diagnostic tests for TB continue to be performed in clinical settings, community-based TB activities are conducted outside the premises of formal health facilities in community-based structures such as schools, work places and homes. Through CTBC/HIV, referral networks are established to help community-based directly

⁷⁷ Enarson 2004, WHO Global TB report 2015

⁷⁸ Presentation from on-going Kopanyo Study given to PEPFAR/B team by UPENN

⁷⁹ BNTF 2014

⁸⁰ National TB Program Report, 2012

observed treatment (DOT) supporters ensure suspected TB cases reach a TB diagnostic and treatment center.

Strategies for improving identification of TB/HIV patients and increasing ART uptake among this population will continue and expand upon the activities proposed in FY16 are continuing to scale-up improved TB case findings⁸¹, supporting to the roll-out of Gx-Alert,⁸² and improving case management to increase ART initiation.⁸³

Further PEPFAR support to Community TB/HIV entails integrating TB/HIV through HTC for TB patients and their families,⁸⁴ administering DOT to confirmed TB patients,⁸⁵ performing intensified case finding,⁸⁶ and providing TB/HIV Health education.⁸⁷

PEPFAR/B continues coordination and TA support for the national TB program at the MoH level, including integration of M&E for TB and HIV and a specific focus on aligning PEPFAR and potential GF-financed TB-HIV activities to leverage and best utilize both investments. PEPFAR/B is actively involved in supporting the National Tuberculosis Reference Library (NTRL), providing TA and analyzing new intervention strategies for TB patients.⁸⁸

⁸¹ Including community referrals and effective use of GeneXpert platforms and lab quality assurance activities which ensure accurate and rapid TB diagnoses, especially among PLHIV.

⁸² This will centralize results, monitor capacity and use of machines, and allowing for improved tracking of patients with confirmed bacteriological diagnoses, including rifampin-resistance.

⁸³ This is done through linkages between TB and ART sites, training of HCW, intensifying mentoring, and supporting supervisory activities (including SIMS). Providing TA for the implementation of the National TB prevalence survey and coordination with the AIDS Indicator Survey.

⁸⁴ This involves screening for TB among PLHIV, contact tracing for family members, linking patients to HIV and TB treatment and care services, and promotion of adherence and retention in TB/HIV care. Adherence counseling to both treatments is key and the supporter provides daily support to the patient until completion of TB treatment which ultimately improves outcomes of treatment completion and cure rate.

⁸⁵ Patients start TB medication at a health facility and continue visiting the facility on a daily basis taking their medication under the supervision of a HCW for at least two weeks. At the end of this period, patients who have chosen CTBC are transferred to a CBTC volunteer. The volunteer supports and supervises the swallowing of the TB treatment at community level throughout the treatment period until cure.

⁸⁶ This is done through contact tracing to identify TB cases and interrupt TB transmission within the community. When a new case of smear positive pulmonary TB (PTB) or multi drug resistant TB (MDR-TB) has been diagnosed, the health facility informs the CTBC CHW who in turn identifies all close contacts. All close contacts with current cough, weight loss, fever and night sweats are referred to the health facility for further evaluation.

⁸⁷ This empowers clients, family members and the community to understand and cooperate in TB/HIV control efforts. Through Health Education clients receive clear and accurate information about TB/HIV and its management and community infection control measures. The activities also include community mobilization to promote effective communication and participation among community members to generate demand for TB services.

⁸⁸ The NTRL shut down two years ago because the containment facility failed to maintain negative pressure. It is the only DST culture facility in the country capable of identifying MDRTB and XDRTB strains.

4.8 Adult Treatment

PEPFAR/B is supporting 43 high volume sites and communities in four scale-up SNUs, and an additional 30 sites in sustained SNUs. The majority of adult treatment activities are targeted TA at the facility level and DSD at community level. Treatment for KPs and refugees will also remain part of the core interventions in COP16. PEPFAR/B plans to support the achievement of 75% ART coverage in one scale-up aggressive SNU, 80% saturation in three scale-up saturation SNUs, and sustain two SNUs at or close to 80% coverage. This requires supporting the initiation of 35,115 PLHIV on treatment through a combination of DSD and TA.

PEPFAR/B national-level support includes involving all hospitals in TA efforts; supporting a national treatment literacy campaign to educate the general public on T&S; disseminating guidelines through training platforms; rolling-out Project ECHO, including the sustained response districts; and accelerating the roll-out of the Nurse Prescriber and Dispenser (NPD) training to 250 trained NPDs within the year. Cross-cutting support for ART will focus on strengthening laboratory testing and continued support will be provided for the T&S program for citizen FSWs. Facility support includes T&S TA,⁸⁹ training,⁹⁰ SIMS,⁹¹ refugee care,⁹² and retrospective case findings.⁹³ At the community level PEPFAR is supporting: stronger linkages,⁹⁴ differentiated models of care,⁹⁵ T&S implementation,⁹⁶ community involvement in linkage, adherence and retention,⁹⁷ retention of PLHIV in care,⁹⁸ and SIMS.⁹⁹

⁸⁹ Supporting the GoB implementation of T&S through TA.

⁹⁰ Conducting national trainings to ensure a competent workforce exists and can implement care and treatment programs, including Option B+ and new guidelines for T&S. Training healthcare professionals on HIV service delivery improvement. These strategies are all intended to achieve the HIV treatment and retention targets leading to epidemic control.

⁹¹ SIMS: Mentoring, conducting SIMS, SIMS+, and providing remediation at the 73 high-volume sites (see table 4.1.6) and 4 KP sites to optimize ART coverage and ensure high quality services are provided to all PLHIV.

⁹² At Dukwi Refugee Camp includes continue providing HIV clinical care and treatment for refugees.

⁹³ Includes support sites to actively find cases among cohorts in facilities; use of HTC registers (at both high volume and feeder sites); use of CD4 Test Folders containing old CD4 test results for those who have tested HIV+ to enroll clients in pre-ART; review inpatient records in all hospitals by the health care auxiliary (HCA) cadre to identify HIV patients not on treatment; review Tebelopele records to identify patients for enrollment into pre-ART system in high volume clinics, feeder sites, and hospitals; eliminate redundancies by piloting a system where HCA cadres review all inpatient records to determine if they are eligible for ART (PEPFAR/B is also working with a testing IP to achieve this same outcome); recruitment of treatment as prevention (TAP) (Options B) a data quality audit is currently underway and will look at every patient file in high-volume sites by mid-April 2016. During this exercise, records of all patients who were enrolled on Option B who are not currently on treatment are being put aside for enrolment into pre-ART. Additional funding is required to extend this exercise to feeder sites and the 26 national hospitals (where many deliveries occur).

⁹⁴ Between facility and community sites to ensure patients receive a comprehensive package of services.

⁹⁵ Support communities in the implementation of differentiated models of care so the health system can efficiently refocus resources to those most in need.

⁹⁶ Support for T&S implementation geared towards all PLHIV supported outside of the health facilities.

⁹⁷ Support through different interventions such as: adherence support; tracking LTFU; follow-ups for viral load testing; community led models of ART provision such as: adherence clubs, support groups and community drug distribution groups; community education to ensure the patient's understanding of the benefits of maintaining undetectable viral load; assessment of

PEPFAR/B intends to work closely with both facility and community-based partners to develop standard operating procedures (SOPs) and improve collaboration in order to increase uptake of services and retention in care based on some of the weaknesses identified during the SIMS visits.

Targeted TA will be provided to support HCW in communities and facilities to ensure there are standard procedures for identifying and tracking ART patients who have defaulted on their appointments. This will enable patients on treatment to achieve viral suppression. To incorporate gender analysis results, PEPFAR/B is supporting the process of developing integrated SRH/HIV curriculum with a module on Gender, GBV and male involvement to enrich the training content and overall programming. PEPFAR/B will integrate gender norms in the care and support activities to transform the community's perceptions to illness and disease and the importance of adhering to treatment and participating in psychosocial support activities particularly for men. The team will implement strategies to address adherence among youth, particularly AGYW.

PEPFAR/B will support task-shifting to community-based cadres/community health workers to effectively provide patient support,¹⁰⁰ health services,¹⁰¹ and linkages between community members and clinical providers. PEPFAR/B will also continue to train cadres of community-based workers to eventually be absorbed by MoH, to sustain community-based HTC, increase RHT, and strengthened linkage to care.

QI improvement interventions geared towards identifying and strengthening processes that improve linkages to facility-based HIV services will also be implemented. Community-based QI interventions are managed by a team of representatives from each community, health facility, and delegates from the local government who come together to serve as the Community QI Team. Community QI teams are being trained to undertake a needs assessment to identify local challenges affecting linkages to facility-based HIV care and treatment services (i.e. retention and

clinical and psychosocial needs, with linkage/referral to other services as appropriate; PHDP minimum package (includes risk reduction counseling e.g. condom use and other safer sex practices, alcohol and other drug reduction, HIV serostatus disclosure, condom provision, partner HTC, STI screening/ diagnosis/treatment, contraception/safer pregnancy counseling).

⁹⁸ Ensuring PLHIV are retained in care by continuing community-based support for retention in care, through peer and community-provider home-based support. Also included will be activities such as adherence clubs, which help sustain adherence among virally suppressed individuals. PEPFAR/B will be providing tailored services to different cohorts of patients to support clients at various points within the continuum of care. The package of services will vary by the frequency and intensity of services to differentiate care based on the clinical characteristics as well as differentiate care based on the subpopulation under consideration and their specific needs (e.g. pregnant and breastfeeding women, children and adolescents, KPs). Additionally, PEPFAR/B will estimate potential cost savings if such models with less frequent visits are implemented.

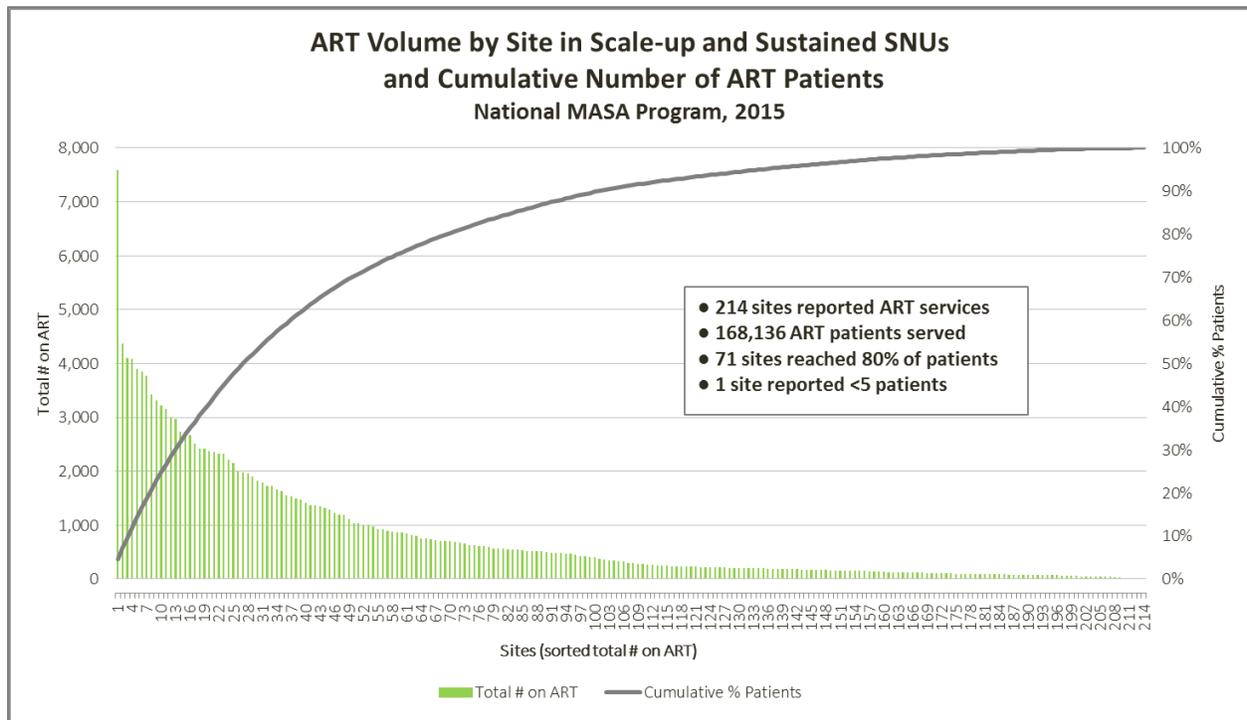
⁹⁹ Mentoring, conducting SIMS, SIMS+, and providing remediation to community sites to optimize ART coverage, retention and linkage to care and to ensure high quality services are provided to all PLHIV.

¹⁰⁰ counseling, home-based care, health education, adherence, and livelihood support.

¹⁰¹ screening, testing, treatment, referrals, and surveillance.

adherence). Support will be provided for establishing simple tools at the community-level for data collection that can interface with existing facility data systems. Inter-linkage of clients between community and treatment facilities is done through CTS who are placed at health facilities. For retention, reminder systems will be implemented using separate platforms for youth friendly approaches and for post-PMTCT women.

Figure 4.8.1. ART Volume Analysis



Additional notes: Data is from the National MASA Program as of Sept 2015, includes public health sites in our Scale-up and Sustained SNUs; 73 of the 214 (34%) sites are PEPFAR High-Volume (HV) sites; The red line marks the 71 sites reaching 80% of the total ART population. Out of these 71 sites reaching 80% of the pop:55 are PEPFAR HV sites; 7 are BCPP Intervention sites; 9 are not targeted by PEPFAR.

4.9 Pediatric Treatment

Thanks to the success of the PMTCT program, few Batswana children are identified as HIV-positive. Currently 16,136 children under the age of 15 are living with HIV.¹⁰² By the end of FY14, there were 10,956 children on ART, representing 68% of the PLHIV in the age group.¹⁰³

PEPFAR/B will continue pediatric treatment activities including targeted TA at the facility level, DSD for pediatric care and support at the community level, and treatment for refugees. At the community level, pediatric T&S interventions are supported by one IP in the priority area.

¹⁰² UNAIDS, 2015

¹⁰³ MASA, 2015

PEPFAR/B will work to increase the coverage of ART for children and adolescents living with HIV in PEPFAR scale-up areas. PEPFAR/B will use appropriate community-based interventions including maximizing the use of community-based PLHIV support groups and networks. Focus will also be on providing community-based support for linkage/enrollment into care and treatment, with a focus on the utilization of CTS.

PEPFAR/B will improve case finding strategies for children and adolescents with a high risk of HIV. PEPFAR/B will foster engagement of the community, and in particular adolescents living with HIV, through peer-support approaches,¹⁰⁴ tracking LTFU, follow-up for viral load testing and assessment of clinical and psychosocial needs, with linkage/referral to other services which include cotrimoxazole prophylaxis, routine TB screening and IPT. As children and adolescents on ART are less likely to achieve virologic suppression, focus will be placed on adherence and retention. PEPFAR/B will support adolescent peer-based programs and services providing a transition plan to adult services. At the community-level, PEPFAR/B will support efforts to improve linkages between pediatric care and treatment, PMTCT and OVC programs ensuring few children diagnosed HIV-positive are linked to and retained in care, and those who need OVC interventions benefit.

As identified during SIMS visits, PEPFAR/B will work towards development of SOPs and improvement in documentation as well as use of program data to improve services. Targeted TA will provide support to HCW to ensure there is a timely drug switch for patients failing their current treatment regimen. This will lead to virologic suppression and therefore addresses the third-90. PEPFAR/B is supporting the process of developing integrated SRH/HIV curriculum and has a whole Module on gender, GBV and male involvement to enrich the training content and programming across board.

4.10 - Orphans and Vulnerable Children

According to BAIS IV, 14.4% of children aged 0-17 years are orphans. Orphans aged less than 15 years make up 11.9% while those aged 15-17 years make up 23.8%.¹⁰⁵ This shows the majority of the orphans are in a vulnerable age group of adolescents. OVC programs are identifying and linking them to relevant services including HIV testing, care and treatment services and ensuring those who are on treatment are receiving the necessary adherence support. The programs are monitoring educational progression of all OVC from when they start through their secondary education.

Various platforms are used to identify potential clients for services including home visits, school home-work support groups, ART adherence clubs, economic strengthening groups and early

¹⁰⁴ Such as: teen clubs, and adherence support groups.

¹⁰⁵ 13.1% are females and 14.2% are males

child development (ECD) groups. Some of the strategies OVC partners use includes partnering with HTS providers to organize wellness days for beneficiaries and identifying potential clients for HTS during family assessments and initiating referrals and making follow-ups to ensure service has been received. In the past, home visits and doing intense family assessments have helped the OVC providers identify people who already know their HIV status and have not been going for follow-ups as well as those who had been on treatment before and defaulted. The programs have assisted in returning them to the health facility for continued monitoring and re-introduction into the ART program.

The OVC program will continue to use a mix of TA and DSD approaches to serve HIV affected OVC and families.¹⁰⁶ The program has established close relationships with health facilities in the areas of operation to enable referrals between health and community service providers. This model of doing business will be adapted in the new areas of operation as the program continues to align to the pivot.

OVC programs work very closely with existing community platforms such as District Child Protection Committees, Village Development Committees, Multi Sectoral AIDS Committees and the local traditional leadership. These platforms are used to enable referrals between community members and the OVC programs.¹⁰⁷ However, clinical platforms do not always link clinically identified HIV affected children and families to needed, comprehensive socio-economic services. This is an area continuing to evolve as community-based providers engage with clinical-based providers to be recognized for the work they do. This will be a strategic focus of the new OVC project.

PCV reports on TA as volunteers work to build capacity in OVC-serving organizations and in S&CD offices, as well as with OVC in their schools and communities. PCVs and their counterparts work to improve the well-being of OVC in eligible households, as well as to strengthen primary care-givers through activities such as trainings for parents and caregivers on parental skills, initiation of referrals for social and clinical services, building capacity for running support groups, facilitation of STEPS films screenings and training OVC center staff on how to implement OVC interventions.

By end of FY15, OVC DSD was transitioned out of five non-scale-up locations. The plan had been to transition the remaining OVC sites in the five non-scale-up locations by March 2016;

¹⁰⁶ The program will address existing critical gaps in the scale-up SNUs which include linking OVC and families to child and social protection, health and HIV/AIDS services (HTC, PMTCT, ART, VMMC, post GBV care and SRH), providing psychosocial support, providing educational support to OVC with a particular focus on adolescent girls, facilitating group-based household economic strengthening and providing integrated early childhood development services. Some of the platforms the program uses to identify clients for different services include health clinics, home visits for assessments, ART adherence clubs for kids, ECD centers and economic strengthening and financial literacy groups.

¹⁰⁷ The community platforms make the environment conducive for community-based IPs to effectively serve the needs of HIV affected children and families. IPs identify children and family members and refer them to receive clinical services.

however, the IPs in these sites recently received a no-cost extension thereby extending implementation in these sites to April and July 2016.¹⁰⁸ The follow-on project for OVC will provide services in the scale-up locations only. This project will be geographically aligned with the pediatric care and treatment and prevention programs for AGYW.

One of the objectives of the OVC TBD project is to “improve policy implementation for delivery of coordinated quality social services”. One of the sub-goals is to improve community-level child protection and response activities, and referrals to other services including health/HIV services. The activities envisioned include provision of TA to the Department of Social Protection to plan and implement responses to the Violence Against Children survey, findings of the national situation analysis on OVC and support for the implementation of the Botswana Child Protection Protocol, a protocol whose main focus is on issues of neglect, violence and exploitation of children.

¹⁰⁸ Refer to Botswana OVC Transition Plan Worksheet for a detailed transition plan.

OVC Transition Plans in the SDS Narrative – Supplementary to the SDS Narrative¹⁰⁹

QUESTIONS	RESPONSES BY SNU			
	Selibe-Phikwe	Serowe/Palapye	Greater Francistown	Ngamiland
Consultations with government, CSOs, local committees, other donors and private sectors held	<p>Meetings were held with Social and Community Development (S&CD), District Health Management Team (DHMT) and District AIDS Coordinator (DAC) on the 03/03/16 and 03/09/16</p> <p>Phikwe staff have been highlighting closeout and are still discussing with schools on continuation of activities</p> <p>Project has been actively notifying case managed clients about closeout since January 2016</p> <p>More discussions and plans on closeout and handover of activities with clinics and other stakeholders will be made in April-May 2016.</p>	<p>Clients’ sensitization on project closure commenced FY16Q1</p> <p>Home visits for final re-assessments commenced in January 2016. Beneficiaries were informed on closeout. Clients were provided with contact details for S&CD and other service providers.</p> <p>Meeting conducted with DMSAC members to notify them about the end of project and discuss continuation of services and takeover of project beneficiaries on 10/19/2015</p>	<p>Client sensitization on project closure commenced in FY16Q1</p> <p>Beneficiaries were informed on closeout. Clients were provided with contact details for S&CD and other service providers.</p> <p>Meeting held on 02/25/2016 with Tebelopele, BOCAIP and local clinics through the DHMT regarding project close-out and transition from district</p> <p>Meetings held with the DAC and S&CD 02/16/2016. Final meeting with Village Development Committee (VDC) was conducted on 03/16/2016</p> <p>Close out/transition meetings held with S&CD on</p>	<p>Client sensitization on project closure commenced in FY16Q1</p> <p>Beneficiaries were informed on closeout. Clients were provided with contact details for S&CD and other service providers.</p> <p>Meetings commenced with Parish Pastoral Council Meetings in December 2015 and then continued 02/20/2016 and 02/24/2016. The Catholic parish will continue to act as an initial contact point for clients and will also provide limited support in other areas.</p> <p>Close out/transition meetings commenced with S&CD on 01/26/2016 and 02/08/2016.</p>

¹⁰⁹ **Is there a reasonable plan for phasing out of sustained and centrally supported SNUs to scale up SNUs?** Describe how the OVC portfolio plans to meet the following milestones established in the OVC Transition Plan. Description should include milestones for both FY16 and FY17.

			<p>03/01/2016 and 03/09/2016</p> <p>Discussions continued with Parish Pastoral Council regarding project closure with the last meeting held 03/10/2016. The parish will continue to act as an initial contact point for clients.</p> <p>Another stakeholder close out meeting was held on 03/24/2016. Attendance comprised representative from Ministry of Education and Skills Development (MOESD), NGOs, volunteers and beneficiaries</p>	<p>Maun Counseling Center and local clinics were informed of project close out through the DHMT during the week of 02/25/2016.</p> <p>A stakeholder close out meeting was held on 03/21/2016. Attendance comprised 32 participants - two Guidance and Counseling Teachers, representatives from GeAD, WAR and other district offices, beneficiaries and volunteers.</p>
Dates the transition was discussed and agreed upon	<p>GOB and CSOs during meetings held in March 2016</p> <p>Project transitions out of the district July 31st 2016</p>	<p>GOB and CSOs during meetings held in March 2016</p> <p>Project transitions out of the district July 31st 2016</p>	<p>GOB and CSOs during meetings held in February and March 2016</p> <p>Project transitions out of the district April 30th 2016</p>	<p>GOB and CSOs during meetings held in February and March 2016</p> <p>Project transitions out of the district April 30th 2016</p>
Describe the package of services that will be provided, and by whom, to OVC in Sustained and Central Support SNU:	<p>Limited ECD and some school based programs done by CSOs</p> <p>GOB S&CD to provide food, school material and other support to beneficiaries meetings their eligibility criteria</p>	<p>Psychosocial support and community mobilization on OVC issues by a local NGO group and Youth Centre Group through District Multi-sectoral AIDS Committee (DMSAC)</p> <p>GOB S&CD to provide food, school material and other support to beneficiaries meetings</p>	<p>Limited psychosocial and ECD services by CSOs</p> <p>GOB S&CD to provide food, school material and other support to beneficiaries meetings their eligibility criteria</p>	<p>Limited psychosocial and ECD services by CSOs</p> <p>GOB S&CD to provide food, school material and other support to beneficiaries meetings their eligibility criteria</p>

		their eligibility criteria		
Joint action planning with the appropriate GOB and CSO in order to successfully transition OVC to the responsibility of government or other local support services was completed	Will be completed June-July 2016	Will be completed June-July 2016	Will be completed March-April 2016	Will be completed March-April 2016
Casefiles and other documents for transitioned children will be handed over in [date]	GOB is the only other provider who can absorb clients/beneficiaries who meet GOB eligibility criteria for direct service delivery and who may need information in case files. GOB officials are required to conduct own assessment and to not rely solely on information received from other providers hence case files will not be handed over but written referrals are made and client information shared through that system. Case files are retained by the local CSO provider	GOB is the only other provider who can absorb clients/beneficiaries who meet GOB eligibility criteria for direct service delivery and who may need information in case files. GOB officials are required to conduct own assessment and to not rely solely on information received from other providers hence case files will not be handed over but written referrals are made and client information shared through that system. Case files are retained by the local CSO provider	GOB is the only other provider who can absorb clients/beneficiaries who meet GOB eligibility criteria for direct service delivery and who may need information in case files. GOB officials are required to conduct own assessment and to not rely solely on information received from other providers hence case files will not be handed over but written referrals are made and client information shared through that system. Case files are retained by the local CSO provider	GOB is the only other provider who can absorb clients/beneficiaries who meet GOB eligibility criteria for direct service delivery and who may need information in case files. GOB officials are required to conduct own assessment and to not rely solely on information received from other providers hence case files will not be handed over but written referrals are made and client information shared through that system. Case files are retained by the local CSO provider

4.11 Gender and Gender-based Violence

PEPFAR/B's decision to implement gender and GBV activities was based on data from the BAIS IV, BYRBSS, GBV indicator study, GBV situational analysis, and the BBSS. The recent UNAIDS gender assessment and the PEPFAR gender analysis provided information on existing gaps and areas where the current gender program needs to be strengthened.

PEPFAR/B will continue implementing gender programming, focused on building the capacity of GoB, IPs and communities to prevent and respond to GBV in various settings and service delivery points. PEPFAR/B will prioritize post-GBV care, prevention activities for AGYW and service provider trainings. The integration of gender-related activities throughout the portfolio is the foundation of PEPFAR/B's approach and the team is committed to strengthening these efforts. As GoB prepares to transition to T&S, PEPFAR/B recognizes it is critical to address gender norms imposing barriers to the uptake of services.

Services include post-GBV care services¹¹⁰ and the AGYW program package.¹¹¹

The program will address key findings of the gender analysis, such as teenage pregnancy, intergenerational partnerships and transactional relationships. The analysis also highlighted a lack of knowledge and skills among service providers to address gender inequalities and GBV. Significant efforts will be made to provide training on gender, GBV and human rights to service providers in PEPFAR priority areas.

PCVs implement HIV prevention activities, with a strong focus on gender and GBV prevention. Volunteers receive extensive gender training and are given tools/methodologies to use in their communities.¹¹² Volunteers educate communities on the importance of gender equality in building safe and healthy spaces for women and children through the use of awareness campaigns, sensitivity training of service providers, life skills education in schools and camps.

In addition PEPFAR/B continues support for the implementation of the Violence against Children Survey, the pilot of the GBV referral system, as well as the development of the SRH curriculum. The PEPFAR/B team believes by addressing gender inequalities and GBV in health

¹¹⁰ Includes counseling, shelter, legal aid, and therapy for young survivors. Active referrals for clinical services, such as HIV/AIDS testing, STI screening, and PEP, also will be provided.

¹¹¹The AGYW program package includes the following: targeted risk assessment, risk information/skills/counseling, condom promotion and negotiations, addressing sociocultural factors which increase vulnerability of girls to HIV (including harmful gender norms), increasing the uptake of HIV prevention, treatment and care services (including HTC, PMTCT, post-GBV care, STI & cervical cancer screening), TB testing and family planning. The program emphasizes linkages to care and adherence and retention. Interventions primarily target AGYW with families and communities as secondary beneficiaries of the program. Community leaders and families will be actively engaged to address harmful gender norms and ensure the protection of girls and women, and reduce stigma.

¹¹² Including SASA!, STEPS films, *In Her Shoes*

programs, will result in a marked improvement in the uptake in services and therefore facilitate Botswana's ability to reach epidemic control¹¹³.

5.0 Program Activities in Sustained Support Locations and Populations

5.1 Package of services in sustained support locations and populations

The services PEPFAR/B intends to maintain outside priority SNU target KPs in Kasane, Maun, and Selibe-Phikwe, and people living with TB/HIV in Ghanzi. These are aggressive scale-up sites. Both KPs and TB/HIV patients receive service packages.¹¹⁴

TA service packages in sustained districts are provided.¹¹⁵ Under T&S, expanded treatment eligibility criteria will see an influx of newly initiated patients on treatment who will need to be closely followed-up for viral suppression.

The newly established system to identify and track patients LTFU has just started. The PEPFAR/B supported position of Senior QI Technical Advisor in the Department of HIV/AIDS Prevention and Care (DHAPC) of the MoH started a QI initiative to achieve epidemic control of HIV by 2017. Through this initiative, which brings together the DHAPC programs, funding partners, IPs, and the DHMT/Facilities, the MoH has been able to strengthen the QI infrastructure by activating and engaging teams across the PEPFAR/B priority areas including the sustained districts. The DHAPC working together with IT and M&E units has developed a real-time reporting (RTR) system-based on DHIS2 Mobile to track key programmatic indicators for continuous QI based on current data. Healthcare workers were trained on RTR.¹¹⁶

¹¹³ Gender and development policy has been recently passed, which provides a framework for mainstreaming gender in all ministries. The PEPFAR/B team is supporting the dissemination of this policy as well as the implementation of the Domestic Violence Act of 2008 and its regulations, and the Children's Act of 2009. These policies are crucial to addressing GBV and enhancing child protection.

¹¹⁴ The package for KP includes HTC, STI diagnosis and referral, condom distribution, peer education, community-based outreach, addressing stigma and discrimination, and ensuring linkage to HIV treatment and care. The TB/HIV maintenance package includes HTC for TB patients and families, screening for TB among PLHIV, contact tracing for family members and contacts, linking patients to HIV and TB treatment and care services, promotion of adherence and retention in TB/HIV care, administering DOT to confirmed TB patients, as well as Providing TB/HIV Health education to empower clients, family members and the community to understand and cooperate in TB/HIV control efforts.

¹¹⁵ This includes continued training of ARV nurse prescribers, mentoring HCWs on adherence and retention of adults, adolescents and pediatric patients, viral suppression, identifying and tracking patients LTFU. Training and mentoring at the facility level include PMTCT Option B+ services.

¹¹⁶ Currently the reporting rate is greater than 60%.

The HIV program data from the DHAPC at the national level was used to determine the number of people reached as well as unmet needs. This process informed the expected volume of beneficiaries. The required resources were calculated based upon the targets and the unit expenditure derived from the FY2015 expenditure analysis data. The National TB Program Reports provides data on national estimates for TB/HIV while the BBSS provides estimates for KP.

5.2 Transition plans for redirecting PEPFAR support to scale-up locations and populations

PEPFAR/B support for OVC and AGYW was transitioned out of five non-scale-up locations by the end of FY1. In preparing for the transition, IPs worked very closely with the different service providers from GoB and civil society organizations to determine best ways to transition beneficiaries from PEPFAR support. The limited number of civil society organizations in those areas resulted in some clients being transitioned out of services like ECD, economic strengthening, life skills, and support groups which the GoB does not provide.

The remaining OVC and AGYW sites are in the non-scale-up locations¹¹⁷ will be transitioned out of PEPFAR support in March 2016.¹¹⁸ As with the initial transition, the anticipated challenges include unavailability of service providers who provide services such as ECD, economic strengthening, life skills and support groups. The follow-on project for OVC will provide services in the scale-up locations only.

PC has aligned PEPFAR-supported volunteers to the scale-up locations and will continue to place new PEPFAR-funded volunteers first in the scale-up locations with the highest burden.¹¹⁹ PC will also continue to set nationwide targets and report at the “community site” SNU level.

PEPFAR/B made considerable progress implementing the transition plan for non-core activities and with one exception, all activities planned for transition have been transitioned, mostly to the GoB.¹²⁰ The main challenges experienced following the transition include the GoB’s inability to fully support the transitioned activities which has resulted in test kit and re-agent stock-outs, poor maintenance of lab equipment and inability to replace old lab equipment.

¹¹⁷ Serowe/Palapye, Selibe-Phikwe, Francistown, Tutume and North East

¹¹⁸ As stated in COP15, the project serving these population groups in these areas is closing out in June 2016 with plans to transition service delivery at the end of March 2016.

¹¹⁹ The next volunteer is then in the scale-up locations with the second highest burden, etc., until all PEPFAR-supported volunteers have been assigned sites. It is possible a small number of volunteers may continue to be placed outside of the scale-up locations once sites have been saturated in those districts, in which case PC will next place volunteers in non-scale-up locations with the highest disease burden. PC will continue to place volunteers nationwide, as there are more volunteers than PEPFAR-funding.

¹²⁰ The one activity remaining is TB/HIV Strengthening MDR-TB Management. The IP for the activity received a no-cost-extension until August 2016.

6.0 Program Support Necessary to Achieve Sustained Epidemic Control

6.1 Critical Systems Investments for Achieving Key Programmatic Gaps

PEPFAR/B has identified systems investments that are critical to addressing priority programmatic gaps in the clinical cascade with the implementation of the priority policies of T&S and new service delivery models. The top three key programmatic gaps in the clinical cascade are Human Resources for Health, Health Financing, and Supply chain.

Human Resources for Health (HRH)

Although PEPFAR is funding pre- and in-service training through support to GoB institutions, there remain serious concerns about HRH. Current GoB HRH policy planning and management is limited at best. The MoH is subject to a civil service-wide post freeze. The PEPFAR-funded HR information system has been slow to roll-out. Despite these continued investments, HRH remains a programmatic gap as it has in the past.

A critical HRH system barrier is the lack of a trained workforce and an inadequate supply of health professionals with the skills to identify and place people on treatment. Pre-service curriculum training for HCW cadres does not include integrated HIV/AIDS content. There are inequities in the geographical distribution of health service professionals. Often, recent MD graduates have resigned after being posted to rural areas. A potential solution is task-shifting at facilities. However, this practice is currently used inconsistently and without regulation or legislation. PEPFAR/B will oversee the creation of a task-shifting policy and SOPs for nurses. PEPFAR/B IPs will provide training for additional HIV prescribers and community-based providers and develop a transition plan to transfer these community providers to the GoB.

Table 6.1.1 Key Programmatic Gap #1 Human Resources for Health (HRH)						
Key Systems Barrier	Outcomes expected after 3 years of investment	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
Lack of a workforce trained and available to	- A task shifting policy allowing a variety of cadres, including at the community level,	CDC is providing training support for additional HIV nurse prescribers	HTXS	(part of larger training	IM: Capacity Building and Training -17274	Human Resources for Health (6.33)

<p>identify and put people on treatment</p>	<p>once trained to competency, to provide services along the clinical cascade continuum</p> <ul style="list-style-type: none"> -Updated treatment guidelines -Revised pre-service curricula for general nursing, midwifery, family nurse practice, and community health nursing cadres conforming to the national guidelines that includes integrated HIV/AIDS content -Trained 400 community-based providers of community-based HTC and strengthened linkage to care -MOH develops transition plan to absorb PEPFAR CHWs -80% of trained of PEPFAR CHWs are absorbed by MoH who can sustain community based HTC and strengthened linkage to care 	<p>USAID will continue to train cadres of community based workers to eventually be absorbed by MoH, to sustain community based HTC, increase RHT, and strengthened linkage to care. It is expected that shifting to the communities will reduce service delivery costs, congestion at facilities, and overall burden on facilities.</p>	<p>HBHC</p>	<p>package) Funding is a subset of APC total HBHC (\$1,631,821)</p>	<p>IP: University of MD IM: Advancing Partners and Communities Project (APC) - 17863 IP: Prime - John Snow, Inc., locally implemented by FHI 360</p>	<p>Service Delivery (6.11)</p>
<p>Lack of a workforce willing to identify and put people on treatment</p>	<ul style="list-style-type: none"> - Official SOPs that clarify responsibilities for all cadres involved in providing services along the clinical cascade continuum - Revised MoH guidelines for health facility clinical team make-up and type of responsibilities by level of service delivery (to include community-based services) - Facilities and CHW training modules reflect task-shifting practices to other cadres and the CHWs -MOH will develop human resource quality assurance mechanisms to support the task 	<p>USAID will work with the GoB to support task-shifting, community-based cadres/community health workers to effectively provide patient support (counseling, home-based care, health education, adherence, and livelihood support), health services (screening, testing, treatment, referrals, and surveillance). Additionally, USAID will assess the impact of task shifting to the communities and the community package on quality of services</p>	<p>HBHC</p>	<p>171,000</p>	<p>IM: Applying Science to Strengthen and Improve Systems (ASSIST) – 16731 IP: University Research Corporation, LLC</p>	<p>Human Resources for Health (6.33)</p>

	<p>shifting approach. These will include processes and activities that define, monitor and improve the quality of services provided by all cadres of health workers.</p> <p>-MOH defines the roles and the associated competency levels required for CHW cadres that are extending their scope of practice.</p> <p>- QI teams at focus sites in Gaborone SNU target technical efficiencies of the site's overall performance that also affect service quality.</p>				
TOTAL					

Health financing

The second critical systems barrier is the absence of a health financing strategy supporting the GoB's goal of universal health coverage, providing financial protection for poor and vulnerable populations, ensuring sustainability and efficiency of the health sector as a whole to ultimately achieve the goal of zero new HIV infections.

The GoB Health Financing Technical Working Group (HFTWG), has worked since 2012 on a Health Financing Strategy (HFS), but is not yet finalized. PEPFAR/B will support and mentor the HFTWG to finalize the HFS incorporating their guiding principles for health system financing policies. MOH has promised to provide a status update of the HFS to PEPFAR.

The HFTWG has identified four strategic objectives to guide the financing strategy: mobilizing resources; enhancing allocative and technical efficiencies; strengthening public-private partnerships; and developing an insurance-based system for Botswana. Within these four strategies, two key system barriers were recently put forward by the HFTWG as priority areas: poor allocative efficiencies of health resources and insufficient insurance-based system for all citizens.

Completion of a System of Health Accounts (SHA) in COP15 will provide timely expenditure tracking data and highlight opportunities for efficiencies. Additionally, PEPFAR/B will use the results of a USAID centrally-funded Botswana ART efficiency study to highlight variability in the cost of delivering HIV/AIDS services across sites and inform the GoB how to more efficiently deliver its decentralized HIV/AIDS services.

The second need identified by the HFTWG to attain universal health coverage is the development or expansion of an insurance-based system. Currently, the public-sector and private-sector insurance schemes are underused. This undermines risk pooling which raises premiums and co-pays, which in turn encourages those even with insurance to seek care in public facilities leaving the GoB to cover the entire cost of care. An overhauled system that requires enrollment, expands risk pooling to provide affordable coverage, and seeks reimbursement from insurance companies for services sought publicly would greatly improve the sustainability of the system.

A third barrier identified by the MoH is the shortfall in funding needed to cover the launch of T&S during the first few years of implementation. The GoB has requested \$14.8 from OGAC to help offset commodity costs associated with the launch of T&S. It is anticipated that other donors will also be asked to contribute financial support to fill funding shortfalls. PEPFAR staff and staff from HQ continue to work with the MoH to advocate to the Ministry of Finance to acknowledge the long-term cost savings from implementing a T&S approach -including productivity gains from healthier citizens.

Table 6.1.2 Key Programmatic Gap #2: Health Financing						
Key Systems Barrier	Outcomes expected after 3 years of investment	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
Absence of National Health Financing Strategy	<ul style="list-style-type: none"> Five year HF Strategy that provides blueprint for moving country forward on sustainable health financing. Work builds on current PEPFAR-funded activities, including: <ul style="list-style-type: none"> Landscape analysis of health financing for Botswana SHA 2013/14 expenditure findings incorporated in strategic plan Costed EHSP to support social insurance initiative 	Support the HFTWG to finalize a health financing strategy	OHSS Applied Pipeline	10,000	IM: Health Finance and Governance Project (HFG) – 16714 IP: Abt Associates	Domestic Resource Mobilization (5.56); Technical and Allocative Efficiencies (5.75) Financial/Expenditure Data (8.33)
Poor allocative efficiency	<ul style="list-style-type: none"> Economic evaluation report disseminated to inform GoB policies/practices for task shifting Adoption of service delivery models by MoH that improve allocative efficiencies 	Cost study and program evaluation of alternative HIV/AIDS service implementation at the community level, analysis of costs and outcomes to occur over 2 years.	HKID Applied pipeline	500,000 100,000	EQUIP Innovation for Health – 18221 IP: Right To Care, South Africa. Local implementing partner is HE ² RO	Technical and Allocative Efficiencies (5.75)
Inadequate insurance-based system	<ul style="list-style-type: none"> Approved social health insurance model with implementation plan, costs, and timeline 	Collaborate with GoB on a feasibility study to develop a blueprint for a financial platform for social health insurance including insured HIV services.	OHSS Applied pipeline	33,891	IM: Health Finance and Governance Project (HFG) – 16714 IP: Abt Associates	Domestic Resource Mobilization (5.56); Technical and Allocative Efficiencies (5.75)

Test and Treat Funding sustainability	<ul style="list-style-type: none"> • Cost savings from alternative service delivery options modelled • Continued dialogue and coordination among donors to reduce overlaps/duplication adding to both efficiency and equity. 	Health diplomacy efforts of PEPFAR staff, HQ and front office.	NA	NA		Domestic Resource Mobilization (5.56); Technical and Allocative Efficiencies (5.75)
TOTAL				643,891		

Supply Chain

PEPFAR made a substantial investment in Botswana to improve the medical supply chain assistance and systems strengthening.¹²¹ Concerns of corruption by the supply chain contractor and misuse of technical advisory services provided by PEPFAR influenced the decision to redesign the U.S. mission-provided support. USG will now only fund targeted TA to help the MoH re-tender this contract.

Critical barriers to the supply chain include the lack of an adequate forecasting system, poorly functioning procurement processes, and halting abilities to move items downstream. For planning and monitoring, the movement of commodities and essential drugs, CMS uses *PipeLine* inventory management software that does not input new patient data.¹²² System misuse and personnel lack of skills cause inadequate amounts to be ordered and purchased, leading to facility stock-outs and product wastage when future needs are different than past. This proxy method of forecasting is very vulnerable to human error, as the consumption averages are not regularly updated. With the shift to T&S, a long-term framework contract for Dolutegravir as a new drug will be needed to ensure adequate stock amounts and the forecasting will require data management for new patient consumption to determine the new drug's required

¹²¹ In 2009, USG partners assumed responsibility for managing MoH's CMS. Over the next three years, the IP, Supply Chain Management System (SCMS), made major improvements and then returned an upgraded system to the GoB in June 2012 that, for the first time, met international operational standards. The MoH made a major change to CMS operations by outsourcing warehousing and distribution functions through a sole-source contract.

¹²² This tool relies largely on past consumption, and is not integrated with the items sent out to facilities.

amounts. Another system barrier is the poor function of procurement processes. PEPFAR/B recommends the current CMS contract management be simplified, e.g. by creating separate budget lines for ARVs and HIV laboratory commodities, and managing the procurement processes of these drugs as part of the central TA. A final systems barrier is the distribution shortage. There are distribution delays of test kits from the DHMTs to facilities caused by delayed ordering, a reflection of poor supply management.

PC has partnered with USAID to address the supply chain challenges in districts and facilities in which volunteers work. In partnership with the MoH and with their counterparts, volunteers are trained in Logistics Management of Health Commodities. PC has also placed a third-year volunteer at USAID who works with MoH and CMS, as well as leads the PC Supply Chain Management Volunteer Committee.

Table 6.1.3 Key Programmatic Gap #3: Supply Chain						
Key Systems Barrier	Outcomes expected after 3 years of investment	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
Lack of an adequate forecasting system	Decrease in # of health facilities that experience stock-outs, expiries and overstock of HIV/AIDS commodities	Retendered outsourcing contract requirements will include a fully integrated and functional system for managing forecasting and logistics.	OHSS		IM: Global Health Supply Chain Program (GHSCP) - 18220 IP: Global Health Supply Chain Program	Commodity Security and Supply Chain (CSSC) (6.27)
		Assess/ scope out new service needs 04 April 2016 – 30 May 2016	OHSS	\$36,080	GHSCP	CSSC (6.27)
		Prepare and evaluate EOI, prepare ITT (including bid response lead time) 30 May 2016 – 31 October 2016	OHSS	199,760	GHSCP	CSSC (6.27)
Poor functioning procurement processes	Increase in # of GoB stakeholders committed to cooperation in the ITT process	Evaluate ITT 31 October 2016 – 16 January 2017	OHSS	95,040	GHSCP	CSSC (6.27)

		Mandatory high-level workshop(s) with GoB stakeholders will be conducted to emphasize terms of tenders. GOB buy-in consistent through each project phase of retendering.	OHSS		GHSCP	CSSC (6.27)
		Deep due diligence evaluations 16 January 2017 – 13 February 2017	OHSS	43,120	GHSCP	CSSC (6.27)
Distribution and Storage	Increase in % of orders filled by CMS/BC	Retendered outsourcing contract distribution components will highlight analysis and use of financial and service data for timely decision at district level	OHSS		GHSCP	CSSC (6.27)
		Contract commitment 13 February 2017 – 27 March 2017	OHSS	66,880	GHSCP	CSSC (6.27)
		Transition and transformation 27 March 2017 – 3 July 2017	OHSS	87,120	GHSCP	CSSC (6.27)
		Optimize & Improve new contract 3 July 2017 – 3 July 2017	OHSS		GHSCP	CSSC (6.27)

<p>Purchase of commodities to meet the forecasted commodities gap and targeted TA to Supply chain system management, reform and accountability and update service delivery models</p>	<ul style="list-style-type: none"> Improved Supply chain system management, reform and accountability Updated service delivery models that are efficient and effective, including allowing clients with undetectable viral loads to move to six month clinic visits, ARV pharmacy pick-ups every three to six months, and using community approaches to support and implement these changes. 	<p><i>The following outlines the activities supported by the \$20.9M total supplementary funds for T&S rollout over two years:</i></p> <p>COP 16:</p> <p>Procure \$6.4 M in ARVs (including Dolutegravir (DTG)) via the USAID/Supply Chain Management System (SCMS).</p> <p>Support technical assistance (with \$1M) to the current supply chain system to ensure procurement, storage, and distribution of ARVs proceeds smoothly prior to the re-tendering of the GoB warehousing and distribution partner.</p> <p>COP 17:</p> <p>ARV procurement totaling \$6.4 M. - Support technical assistance (\$1M) to the supply chain system, again, reassessing what needs are in the second year of Test & START implementation</p>	<p>OHSS</p>	<p>COP 16: \$7.4 Mil</p> <p>COP 17: \$7.4 Mil \$6.1 Mil</p>	<p>GHSCP</p>	<p>CSSC (6.27)</p>
<p>TOTAL</p>						

**The breakdown provided for the proposed retendering budget is according to USG LOE person hours per project phase of the retender. The components of the new logistics contract(s)—distribution, warehousing, and information management—will apply to each of the key systems barriers listed above. The composition of the tender will need to break down each portion separately; however, the projected LOEs and costs reflect the comprehensive effort required to meet these needs.*

6.2 Critical Systems Investments for Achieving Priority Policies

Test and Start

PEPFAR/B has identified three systems barriers that are most critical to address to support the successful implementation of T&S. The first system barrier is the need for strengthening testing and linkage to care. The second system barrier is the absence of ability by the

BNQAL to conduct PT. To support T&S, there is a need for quality audits at all points-of-contact (POC) and the need for support validation of new testing technologies, such as rapid test, VL, CD4, drug resistance, and EID. The third system barrier is the need for higher yield testing to identify newly diagnosed PLHIV.

Table 6.2.1 Test and Start						
Key Systems Barrier	Outcomes expected after 3 years of investment	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
Need for strengthening testing and linkage to care	<p>Cost-effective approaches for delivery of population-wide HIV testing and treatment services tailored to the contextual realities and needs of priority areas and population groups with higher or unknown rates of infection.</p> <p>At the community level:</p> <p>80% of HTC positives through community based support are linked to care.</p>	USAID provides community based support for linkage/enrollment into care and treatment at the facility, with a focus on the utilization of community peer support workers.	HVCT	770,005	<p>IM: Advancing Partners and Communities Project (APC) - 17863</p> <p>IP: John Snow, Inc.</p>	Service Delivery (6.11)
		CDC implements active linkage to care and treatment using lay counselors/navigators to coordinate with clinical/community staff	HVCT	600,000	IM: Technical assistance to strengthen government health systems 18163	Service Delivery (6.11)

					IP:TBD IM: Community HIV Testing and Counseling and KP Support 18253 IP:TBD	
Need to improve proficiency testing for key HIV-related tests	Finalized local preparation of PT testing materials for HIV, EID, VL, and provision of ICQ materials.	Technical assistance to the Botswana National Quality Assurance Laboratory responsible for implementing Proficiency Testing for laboratories and Routine HIV Testing.	HTXS	\$600,000	IM: Technical assistance to strengthen government health systems 18163 IP:TBD	Quality Management (4.76) 9.4 - Health worker capacity for QM/QI – 2.00 10.1 Strategic Plan – 1.25
	POCT policy developed, and ≥ 70% of POCT and Routine HIV Testing sites are enrolled in PT	Support HIV-related Point of Care Testing (POCT) technologies through development and rollout of POCT guidelines, provision of initial and refresher trainings and mentoring, and completion of audits which include internal and external Quality Control (IQC and EQC) assessments and competency certification.	HTXS	\$692,799	IM: Quality Support Programs via The Government Of Botswana 18252 IP: TBD	Human Resources for Health (6.33) Quality Management (4.76) Laboratory (5.69)

	80% of results will reach clients within specified Turn Around Time (TAT)	Develop Specimen Referral Network to support Test & Treat Strategy - Conduct gap analysis to understand needs for equipment, Referral Network, and Viral Load and Early Infant Diagnosis testing, and provide TA to facilitate implementation of testing program and monitoring to assess testing coverage and quality	HTXS	\$550,000	IM: Quality Support Programs via The Government Of Botswana 18252 IP: TBD	Quality Management (4.76) * 10.1 Strategic Plan – 1.25 * 10.4 Viral Load Infrastructure – 1.11 13.6 Comprehensiveness of Viral Load Data – 0.60
Need for higher yield testing to identify newly diagnosed PLHIV	Increased HTC yield to an average of 10% across all modalities and 90% of all newly diagnosed PLHIV linked to comprehensive care and treatment in clinical/community settings	Conduct targeted community HTC in geographic areas and sites with individuals at increased risk	HVCT	2,000,000	IM: Community HIV Testing and Counseling and KP Support 18253 IP:TBD	Service Delivery (6.11)
		Targeted, mobile, and index case HTC in high burden communities	HVCT	Funding is a subset of total of 770,005	IM: Advancing Partners and Communities Project (APC) - 17863 IP: John Snow, Inc.	Service Delivery (6.11)

		Targeted, mobile, and index case HTC for Key populations	HVCT	57,062	IM: Linkages Across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) Project - 17862 IP: FHI 360	Service Delivery (6.11)
TOTAL				5,269,866		

New and efficient service delivery models

PEPFAR/B is working with the GoB to develop new and efficient service delivery models. Three system barriers identified are a highly medicalized service delivery approach in Botswana; clinical assessment and adherence counseling is lengthy and time consuming; and the contribution of the community towards epidemic control has been under-valued.

In high volume facilities, HIV services are provided in stand-alone IDCCs; others services¹²³ are provided in other clinics. There is a need to integrate services in high-volume sites. In feeder clinics, testing is undertaken at every clinic/health post/outreach site. About 500 facilities are dispensing ARVs. PEPFAR/B is working to increase the role of communities to help reduce the burden at facilities through working with the GoB to identify the service delivery tasks that could be performed at the community level, especially for clinics with only one nurse. PEPFAR/B is exploring the possibility of expanding service delivery for stable patients to include follow-up of stable patients, community-based distribution and continued retention support.

The role of the Kgosi (traditional leader) in motivating community members to practice good health and health-seeking behaviors has been undermined by centrally controlled HIV/AIDS programs that were initially facility-based. Facility clinicians express distrust of CHW cadres to maintain confidentiality. Also, information systems are not designed to integrate community-based services.

¹²³ e.g., drugs, family planning, managing co-morbidities.

A community system approach supports a more sustainable epidemic response and facilitates reaching desired testing, treatment and adherence targets and goals. Linkages between communities and clinical services that are functional and operational are essential for providing efficient care, strengthening relationships and improving coordination. PEPFAR/B support in facility and community-based treatment support is critical to helping Botswana achieve epidemic control. PEPFAR/B has created an innovative community-based model that addresses the three pillars of access: linkage, retention and adherence as well as community norms.¹²⁴ It is expected that shifting to the communities will reduce service delivery costs, congestion at facilities, and overall burden on facilities. For COP 16, PEPFAR/B will conduct economic analysis of the community-based models and evaluate the effectiveness of community programs, such as OVC, to help improve the GoB and MoH understanding of the importance and effectiveness of community approaches in terms of service delivery. This activity is referred to in table 6.1.2.

Table 6.2.2 New and efficient service delivery models						
Key Systems Barrier	Outcomes expected after 3 years of investment	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
The service delivery approach is still highly medicalized	<p>-MOH adopts a systematic approach to harmonized, standardized and competency based training that is needs-driven and accredited for CHWs to ensure appropriate competencies to undertake the tasks they are to perform.</p> <p>MOH and PEPFAR develop task shifting plan to communities that is appropriately costed and adequately financed so that the services</p>	<p>-Support to the communities in the implementation of differentiated models of care so that the health system can efficiently refocus resources to those most in need.</p> <p>-Support community involvement in linkage, adherence and retention</p> <p>- Provision of community based support/services for enrollment into care and treatment, adherence and retention</p>	HBHC & HVTB	Applied pipeline and COP 16: \$2,916,049	<p>IM: Advancing Partners and Communities Project (APC) - 17863</p> <p>IP: John Snow, Inc.</p>	Service Delivery (6.11)

¹²⁴ PEPFAR/B will work with the GoB to support task-shifting, community-based cadres/CHWs to effectively provide patient support (counseling, home-based care, health education, adherence, and livelihood support), health services (screening, testing, treatment, referrals, and surveillance), and linkages between community members and clinical providers. PEPFAR/B will also continue to train cadres of community-based workers to eventually be absorbed by the MoH, to sustain community-based HTC, increase RHT, and strengthened linkage to care.

	are sustainable. -Increase in time spent with each patient -Reduced waiting time at clinics					
Contribution of the community to epidemic control has been undervalued	MoH has incorporated community based models into national services and guidelines, including community based treatment counselors, adherence clubs, etc,	Evaluation of the impact of community activities on health, education, and labor outcomes among older adolescents following long-term OVC support	HKID	\$1,000,000	IM: MEASURE Evaluation Phase IV – 17322 IP: University of North Carolina at Chapel Hill, Carolina Population Center	Performance data(5.77)
		Engagement of community members, facility staff and PLHIV in QI at the community-level to build the Botswana-specific evidence-base for locally-relevant community-based linkage and retention models	HBHC	\$971,000	IM: Applying Science to Strengthen and Improve Systems (ASSIST) – 16731 IP: University Research Corporation, LLC	Performance data(5.77)
Clinical assessment & adherence counseling is lengthy/time consuming	Counseling, testing and other bloodwork, and initiation of treatment will begin even before lab results and/or presence of an adherence buddy are in place.	Implementation of 2016 Treatment Guidelines and new, streamlined service delivery model through mentoring and training of HCWs.	HTXS	(part of larger service delivery package)	IM: Capacity Building and Training – 17274 IP: University of Maryland (BUMMHI)	Human Resources for Health (6.33)

6.3 Proposed system investments outside of programmatic gaps and priority policies.

Laboratory:

Although the GoB supports a large proportion of the national response to the HIV/AIDS epidemics, gaps remain in the quality and monitoring of testing, procurement and availability of reagents and supplies, and institution of cost-savings measures; often resulting in disruptions in provision of testing. Addressing these gaps will improve efficiency in service delivery, continue to support the roll-out of Option B+, initiation of the T&S ART initiation strategy, ensure quality testing for HIV and TB testing, and ART initiation, compliance monitoring, and effect on viral load. PEPFAR/B will focus on lab-based interventions including the provision of TA to optimize and strengthen laboratory testing,¹²⁵ site monitoring and quality improvement activities,¹²⁶ and cost-saving measures.¹²⁷

Strategic information (SI):

Availability of representative and quality data is core in guiding Botswana's HIV program to prioritize geographic locations, populations, and interventions appropriately in order to achieve epidemic control. SI activities targeting availability of quality data that will better inform planning, and facilitate measurement of the impact of different HIV interventions towards reaching epidemic control. SI activities will focus on supporting national surveillance activities,¹²⁸ merging of data from the Patient Information

¹²⁵ This includes develop a Specimen Referral Network to support the T&S ART initiation strategy; perform and interpret genotypic assays for HIV drug resistance management; operationalization the NPHL; enhance the BNQAL; support HIV-related Point of Care Testing (POCT) technologies; and strive for optimal coverage of RHT, EID, CD4, and VL testing.

¹²⁶ This includes roll-out SLMTA; execute Quality Audits; use of Stepwise Laboratory Improvement Process Towards Accreditation (SLIPTA) and SIMS check lists to conduct assessments in priority areas; support QA for TB diagnostics and GeneXpert roll-out; train and mentor laboratory staff in priority areas; and strengthen PT and coverage for HIV Rapid Test, CD4, and VL.

¹²⁷ This includes provide TA to support equipment harmonization (i.e., decentralized versus centralized testing); review testing guidelines (i.e., parallel versus serial RHT); and foster ability of BNQAL to prepare PT material in-country for RHT, CD4,VL, and TB GeneXPRT.

¹²⁸ Such as planning for the *Mapping, Size Estimation & Behavioral and Biological Surveillance of HIV/STI among select High-Risk Sub-Populations*, TB prevalence survey, fifth *Botswana AIDS Indicator Survey* (BAIS V). The aforementioned surveillance activities will complement the Youth Risk Behavior Survey, in its final stages of data analysis and

Management System (PIMS II) and the Integrated Patient Management System (IPMS), and integration into the MoH's National Data Warehouse. This comprehensive data set will allow for assessments of linkage to care and initiation of the T&S ART initiation strategy. Real-time data reporting of selected quality indicators through the SMS-based reporting system will continue to be developed and expanded for various aspects of HTC and ARV Treatment, including those focused on PMTCT and TB programs, and pediatric, adolescent, and adult populations. Finally, further development of the TB Open Medical Record (OMR) will continue along with activities focused on assessing ART drug resistance.

TA will continue to support routine M&E activities to improve data availability and use along the continuum of care. This includes support to conduct data quality assessments, supporting the collection of data on strategic and program planning indicators on OVC and other key and priority populations. Linkages between community data collection systems and facility-based systems will be strengthened, including the GBV referral system.

Both site-level and above site-level activities focused on facility- and community-based SI programming will support activities to ensure availability of data to measure components of the SID, especially those that have low allocative efficiency, though the analysis of relevant HIV/AIDS epidemiological, health, health workforce, and economic data to inform HIV/AIDS investment decisions. For maximizing impact, data will be used to assess high impact program services and interventions and guide decisions concerning optimal resource allocations, and targeting of populations with the highest needs (i.e., continue to emphasize the right things, at the right places, at the right times). Technical efficiency will be supported through evaluation of enhanced processes, economies of scale and elimination of waste, and expenditure analyses for strategic targeting and technical improvements which will support improved HIV/AIDS outcomes within available resource envelopes. QM will be promoted through evaluation of HIV/AIDS service delivery and outcomes in relation to established national/global standards which effectively achieve positive health outcomes.

report writing, and the *National Survey on Life Experiences and Risk of HIV Infection Among 13-24 Year-Old Males and Females in Botswana* (internally referred to as the Violence Against Children Survey, VACS), anticipated to launch in Summer 2016.

Table 6.3 Other Proposed Systems Investments							
	Activity	1)First 90; 2) Second 90; 3) Third 90; or 4) Sustained Epi Control.	Outcomes expected after 3 years of investment	Budget Amount	Budget Code(s)	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
Laboratory							
	<p><u>SUPPORT OPERATIONALIZATION OF THE NATIONAL PUBLIC HEALTH LABORATORY (NPHL):</u></p> <p>TA will focus on strengthening NPHL capacity to coordinate laboratory programming throughout Botswana.</p>	First 90; Third 90; Sustained Epidemic Control	<p>2017: Dissemination of guidance documentation for public health laboratories on public health laboratory standards policies, and Quality Management System (QMS) standards.</p> <p>2018: Dissemination of guidance documentation at central and site level for conducting laboratory-based surveys, operational research, post-market surveillance of diagnostic test kits, and outbreak investigations and monitoring</p> <p>2019: Dissemination of training and mentorship program for public health labs at the NPHL.</p>	\$170,000	HLAB	<p>IM: Capacity Building Assistance for Global HIV/AIDS Labs – 9915</p> <p>IP: American Society for Microbiology (ASM)</p>	<p>Quality Management (4.76)</p> <p>Laboratory (5.69)</p>

<p><u>ROLL OUT STRENGTHENING LABORATORY MANAGEMENT TOWARDS ACCREDITATION (SLMTA) PROCESS AND CONDUCT QUALITY AUDITS IN IN PRIORITY DISTRICT LABS:</u></p> <ul style="list-style-type: none"> • Initiate labs in priority districts in SLMTA process • Strengthen labs already enrolled in SLMTA through mentoring support visits • Mentor and build capacity in local auditors to carry out accreditation evaluation process 	<p>First 90; Third 90; Sustained Epidemic Control</p>	<p><u>2016:</u> 23 labs in priority districts will be audited</p> <p><u>2017:</u> a) Remaining labs in priority districts will be audited b) 70% of labs in priority districts will perform tests according to Standard Operating Procedures (SOPs)</p> <p><u>2018:</u> 80% of labs in priority districts will perform tests according to Standard Operating Procedures (SOPs)</p>	<p>\$378,530</p>	<p>HTXS</p>	<p>IM: Development of Lab Network and Society – 17007</p> <p>IP: African Society for Laboratory Medicine (ASLM)</p>	<p>Human Resources for Health (6.33)</p> <p>Quality Management (4.76)</p>
<p><u>SUPPORT CONTINUOUS QUALITY IMPROVEMENT (CQI) OF AND PROVIDE REMEDIATION FOR HIV TESTING IN PRIORITY DISTRICT LABS:</u></p> <ul style="list-style-type: none"> • Assess and monitor sites for Quality Management System (QMS) implementation using the Stepwise Laboratory Process Towards Accreditation (SLIPTA) and Site Improvement through Monitoring System (SIMS) • Conduct remediation to support CQI 	<p>Second 90; Third 90; Sustained Epidemic Control</p>	<p><u>2016:</u> Conduct required annual SIMS assessment visits, and use SLIPTA checklist in priority district labs</p> <p><u>2017:</u> 80% of priority district labs attain a ≥ 2 star rating on the SLIPTA checklist</p> <p><u>2018:</u> 85% of priority district labs will be proficient (≥ 3 stars) according to SLIPTA checklists</p>	<p>\$200,000</p> <p>\$97,489 (carry-over)</p>	<p>HTXS</p>	<p>IM: Development of Lab Network and Society – 17007</p> <p>IP: African Society for Laboratory Medicine (ASLM)</p> <p>Botswana Institute of Clinical Laboratory Professionals</p>	<p>Human Resources for Health (6.33)</p> <p>Quality Management (4.76)</p>

						(BICLP)	
	<p><u>PERFORMING AND INTERPRETING GENOTYPIC ASSAYS FOR HIV DRUG RESISTANCE MANAGEMENT:</u></p> <p>Build capacity to conduct HIV drug resistance testing at labs in priority districts through:</p> <ul style="list-style-type: none"> • Training and mentoring of testing staff • Procurement of commodities for validation testing • Servicing and calibration of analytic equipment 	Second 90	<p><u>2016:</u> 80% of patients failing treatment will be tested for drug resistance to guide selection of next line of therapy</p> <p><u>2017:</u> 90% of patients failing treatment will be tested for drug resistance to guide selection of next line of therapy</p>	\$175,000	HTXS	<p>IM: Development of Lab Network and Society – 17007</p> <p>IP: African Society for Laboratory Medicine (ASLM)</p>	<p>Human Resources for Health (6.33)</p> <p>Quality Management (4.76)</p>
	<p><u>QUALITY ASSURANCE FOR TUBERCULOSIS (TB) DIAGNOSTICS AND GENEXPERT ROLL OUT:</u></p> <p>Prepare for use of GeneXpert in all presumptive TB cases to support quality assurance for TB diagnostics through:</p> <ul style="list-style-type: none"> • Placement of GeneXpert machines in high TB burden sites • Training and implementation of molecular technology for Drug Resistance identification • Provision of Bio-safety training and certification <p>Development of the National TB Reference Laboratory (NTRL) into a supra-national laboratory, and support from it for local mentors will facilitate these processes</p>	First 90; Second 90	<p><u>2016:</u> 80% TB sites passing their PT</p> <p><u>2017:</u> 90% TB testing sites passing TB</p>	\$450,000 \$300,000	HVTB	<p>IM: Development of Lab Network and Society – 17007</p> <p>IP: African Society for Laboratory Medicine (ASLM)</p> <p>IM: Capacity Building Assistance for Global HIV/AIDS Labs – 9915</p> <p>IP: American Society for Microbiology (ASM)</p>	Human Resources for Health (6.33)
Strategic Information							
	<u>Botswana AIDS Impact Survey (BAIS) V:</u>	First 90	Survey expected to be executed in FY2018, and	\$ 50,000	HVSI	IM: Quality Support	Public Access to Information

	Stakeholder engagement, planning, and protocol development for the 5 th round of the Botswana AIDS Impact Survey		potentially combined with TB prevalence survey. FY2017: Engage relevant stakeholder, hold consensus workshops, and develop protocol FY2018: Conduct survey FY 2019: Analyse data and disseminate results			Programs via The Government Of Botswana 18252 IP: TBD	(8.00) Epidemiological and Health Data (5.48)
	<u>PATIENT INFORMATION MANAGEMENT SYSTEM (PIMS):</u> Support is focused on strengthening data capture, quality, dissemination, and use for decision-making In priority facilities: <ul style="list-style-type: none"> • Train/mentor HCWs to use PIMS electronic system to collect HIV/AIDS data • Ensure HCWs use data to improve HIV service delivery through generation of descriptive statistics 	First 90; Second 90; Third 90; Sustained Epi Control	2016: The GoB MoH M&E and Informatics Departments will integrate patient data from PIMS with IPMS (Integrated Patient Management System)	\$385,000	HTXS	IM: Capacity Building through Training Mentoring for Informatics – 17845 IP: Botswana Harvard AIDS Institute Partnership (BHP)	Epidemiological and Health Data (5.48) Public Access to Information (8.00) Human Resources for Health (6.33) Quality Management (4.76)
	<u>MoH DATA WAREHOUSE:</u> Support MoH in adopting case-based surveillance through use of the Data Warehouse <ul style="list-style-type: none"> • Generate and maintain one national patient-level HIV data system using records from multiple data systems (e.g., PIMS II; IPMS; BOMAID; Tebelopele; community-based sources) 	First 90; Second 90; Third 90; Sustained Epi Control	2016: GoB MoH M&E and Informatics Departments will initiate case-based HIV/AIDS surveillance utilizing PIMS and IPMS data. 2017: GoB MoH will initiate data analyses which contribute to understanding clinical cascade and	\$200,000	HTXS	IM: Technical assistance to strengthen government health systems 18163 IP:TBD	Epidemiological and Health Data (5.48) Public Access to Information (8.00) Quality Management (4.76)

	<ul style="list-style-type: none"> • Use OCR technology to transform data captured on paper to electronic in sites without an electronic system • Establish capacity to conduct retrospective HIV case finding 		<p>outcomes for HIV+ patients as Test-and-Treat is implemented, and PEPFAR's contributions to Botswana achieving the "90.90.90" goals.</p> <p>2018: Case-based surveillance data will be used for COP and national HIV/AIDS</p>				
	<p><u>SMS-BASED REPORTING SYSTEM TO IMPROVE DATA QUALITY:</u></p> <p>Continue to support Quality Improvement Technical Advisor position at MoH and development of a real-time reporting system based on DHIS2 Mobile to track key programmatic indicators for continuous quality improvement based on current data</p> <ul style="list-style-type: none"> • Weekly tracking of quality indicators as part of an early warning system for HIV programming • Strengthening of district level QI teams and activities • Integration of CQI into HIV program service delivery • Part of Care and Treatment QI initiatives in priority facilities and districts 	First 90; Second 90; Third 90; Sustained Epi Control	<p>2015: SMS-based reporting system developed.</p> <p>2016: Over 90% of High volume ART sites reporting data weekly</p> <p>2017: Expand system to all districts to support provision of nationally representative data with support from other partners (e.g., WHO; Global Fund; Ministry of Health)</p>	\$810,000	HTXS	<p>IM: Technical assistance to strengthen government health systems 18163</p> <p>IP:TBD</p>	<p>Epidemiological and Health Data (5.48)</p> <p>Public Access to Information (8.00)</p> <p>Human Resources for Health (6.33)</p> <p>Quality Management (4.76)</p>
	<p><u>TB HEALTH INFORMATION SYSTEM:</u></p> <p>Migration of historical TB data from Electronic TB registers (ETR) to OpenMRS, development of TB health information system using OpenMRS, and interfacing of OpenMRS to IPMS to ensure M&E activities for TB/HIV from an operational system continue</p>	First 90; Second 90; Third 90	<p>2017: TB data will be migrated from Electronic TB Register (ETR) to OpenMRS for 100% (n=73) of the PEPFAR supported sites in 11 the districts.</p>	\$572,000	HVTB	<p>IM: Technical assistance to strengthen government health systems 18163</p> <p>IP:TBD</p>	<p>Epidemiological and Health Data (5.48)</p> <p>Public Access to Information (8.00)</p> <p>Human</p>

							Resources for Health (6.33) Quality Management (4.76)
	Mapping, Size Estimation & Behavioral and Biological Surveillance of HIV/STI among select High-Risk Sub-Populations (BBSS): Survey of key populations to estimate size, behaviors and risk factors.	Sustained Epi Control	Updated size estimates and final report to complement 2012 BBSS.	\$500,000 (Applied pipeline)	HVSI	IM: Linkages Across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) Project - 17862 IP: FHI 360	Epidemiological and Health Data (5.48)
	OVC Situation Analysis	Sustained Epi Control	Updated OVC size estimates and final report detailing OVC situation including engagement in continuum of care	\$450,000 \$37,500	HKID Applied	IM: 4Children – Coordinating Comprehensive Care for Children – 17321 IP: Catholic Relief Services	Epidemiological and Health Data (5.48)
	OVC MER 1.5 Indicators	Sustained Epi Control	Baseline data collection and report on MER 1.5 indicators	Funding is subset of \$487,500 and applied pipeline	HKID Applied	IM: 4Children – Coordinating Comprehensive Care for Children – 17321 IP: Catholic Relief Services	Performance data(5.77)

	GBV Referral System – Operations Research	Sustained Epi Control	Support of the district level GBV referral system and associated operational research to: <ul style="list-style-type: none"> • Increase in service points using the system (expanding the pilot) • Training of newly enrolled service providers • Increase in number of survivors served with post GBV care services 	\$500,000	Applied pipeline	IM: MEASURE Evaluation Phase IV – 17322 IP: University of North Carolina at Chapel Hill, Carolina Population Center	Service delivery (6.11)
TOTAL				5,383,019			

*Reference Appendix C for a list of activity types that fit in each category.

7.0 USG Management, Operations and Staffing Plan to Achieve Stated Goals

As part of the COP16 process, PEPFAR/B examined our interagency staffing footprint and organizational structure.¹²⁹ There is appropriate agency technical expertise with dedicated effort to lab, however a few staffing gaps emerged. None of the existing vacancies can be re-purposed for these positions. The level of effort in M&O is appropriate for the technical team with some CDC M&O associated with administrative staff whose work in procurement, human resources, facilities management, motor pool, and in support of a facility shared by CDC, USAID, PEPFAR and DoD, but not located inside the U.S. Embassy compound. Our CODB is proposed as a realistic estimate of operational costs.

Two CDC positions have been vacant for more than six months. The M&E officer¹³⁰ position is critical as the program moves ahead. The Botswana PEPFAR Coordinating Office (PCO) and all USG partners historically relied solely on CDC's strategic information (SI) team to conduct all necessary data analyses. As demands for data and use of OGAC-specific monitoring and evaluation and target-setting tools have rapidly escalated, additional SI support is required. A Continuous QI Specialist position had been put on hold by the Chargé de Affairs in COP15 but the position is now deemed essential with the emphasis on TA and QI. The recruitment for both vacancies will be initiated immediately upon receipt of COP16 approval.

Regarding staffing changes, CDC proposes re-purposing one janitor to a clerk assistant in the Facilities Management section to assist with the administrative tasks associated with the approved renovation and construction projects. USAID will transition three previously approved (and filled) positions from expat to local hire in order to maximize the declining M&O budget (see Table 7.1). The cost savings associated with this shift will allow USAID to reduce the overall M&O numbers while adding two crucial positions: M&E SIMS/DATIM Analyst and IT Program Manager. Both positions are needed to meet the increasing demands of OGAC reporting requirements and yearly COP preparations. CDC requests one new position – a Prevention Technical Advisor. This is an LES position that will respond to gaps within the prevention portfolio created as a result of the COP 15 pivot.¹³¹

¹²⁹ The staffing profile as originally defined reflects cross-cutting technical support to the priority budget codes. Level of effort of existing vacancies was included and projected for the budget code areas where the work will be supported.

¹³⁰ Duties include conducting expenditure and data analyses to inform the clinical cascade, achievement of 90-90-90 goals, and implementation of the T&S strategy; managing PEPFAR databases (e.g., DATIM, IPSL, PROMIS, SIMS) which inform implementation of the new PEPFAR QI strategy; and, establishing targets for COP planning and reporting quarterly, semi-annual and annual program achievements (POART/SAPR/APR).

¹³¹ The advisor will support comprehensive prevention approaches through the integration of gender and human rights for priority populations in prevention activities and provide TA/leadership for services to address the special needs of key populations and PLHIV. Specific tasks will include integrating gender into testing and counseling services to reduce barriers to testing access and partner disclosure, and strengthening VMMC activities with strategies for female partner involvement. Addressing these and

Table 7.1: USAID Staffing for COP16

Vacant – Previously Approved – Transition from Expat Hire to Local	56822	Health Systems Strengthening Advisor
Vacant - Previously Approved – Offer Made	56823	Supply Chain/Procurement Specialist
Vacant – Previously Approved – Transition from Expat Hire to Local	56802	Program Development & Prevention Specialist
Vacant – New – 100% PEPFAR		M&E SIMS/DATIM Analyst
Vacant – New – 100% PEPFAR		IT Program Manager

other programmatic gaps will strengthen the interagency response to gender and human rights as PEPFAR priorities in critical intervention areas. The technical advisor will also support key population activities by providing technical leadership on appropriate service delivery models, clinical care, community strengthening and mobilization/outreach to minimize HIV infection and transmission. Additionally, the advisor will have responsibility for supporting the PHDP package of services to promote treatment adherence and ultimately achieve viral suppression among PLHIV.

APPENDIX A

Table A.1 Program Core, Near-core, and Non-core Activities for COP16

Level of Implementation	Core Activities	Near-core Activities	Non-core Activities
Site level	<ul style="list-style-type: none"> ▪ PMTCT – site-specific TA in priority areas and DSD for FSWs and refugees ▪ HTC services in priority areas with linkage to prevention, care, and treatment services (including TB/HIV/OVC). ▪ OVC support - care and support in priority areas ▪ DSD VMMC services in four scale-up SNU among men 15-29 ▪ Prevention for AGYW and KPs ▪ Linkage to care, retention, and adherence - for enhanced uptake of services in priority areas ▪ Treatment - site-specific TA in priority areas and DSD for FSWs and refugees, and ARV purchase for adoption of progressive treatment policies. ▪ Care and support – site-specific TA in priority areas and DSD for FSWs, refugees, OVC, and TB/HIV populations ▪ TB/HIV - site-specific TA in priority areas and targeted community-based DSD for DOTS in priority sites ▪ GBV- link survivors to service delivery in priority areas ▪ Condom promotion and distribution for KPs and military populations 	<ul style="list-style-type: none"> ▪ Cervical cancer “see and treat” ▪ Provision of lab supplies for USG-supported service delivery sites ▪ Targeted site level quality assurance and QI interventions ▪ GBV – reducing the contextual factors contributing to the vulnerability of young girls to HIV and GBV ▪ M&E systems supported to strengthen linkages to care and patient tracking ▪ Family planning services for KP ▪ SMS-based information system to monitor and evaluate key treatment and quality indicators at high volume ART sites within the priority areas ▪ Condom promotion and distribution for PLHIV and men 25-34 	

Sub-national level		<ul style="list-style-type: none"> ▪ TA support for District Health Management Teams (DHMT) and district level Systems ▪ Support for M&E and CQI in priority districts ▪ VMMC demand creation ▪ HSS support includes QI TA ▪ Support MoH efforts to improve both technical and allocative efficiencies of HIV services and financing ▪ Strengthening collaboration between CBOs and DHMTs to improved linkages between facility and community-based services and improved data availability ▪ Engagement of community leaders at district level to influence gender norms and uptake of services ▪ Support of the district level GBV referral system and associated operational research 	
National level	<ul style="list-style-type: none"> ▪ TA for PMTCT regarding Option B+ and national roll-out of B+ ▪ TA to MoH on revision of HTC national guidelines ▪ TA to MoH on VMMC for roll-out of Prepex and demand creation at community-level ▪ TA for treatment and care, including task shifting, training and mentoring HCWs on national guidelines, adherence, and pre-ART ▪ TA to promote and support rollout of T&S ▪ GBV – advocacy for improved policies addressing gender inequality as a driver of the epidemic ▪ TB/HIV activities supporting the national TB program to improve case finding, testing and ART coverage ▪ Development of a package of services for KPs ▪ TA to MLGRD on OVC programming 	<ul style="list-style-type: none"> ▪ TA to MoH on cervical cancer ▪ TA to MoH for Supply Chain contract re-bid ▪ HSS support for supply chain governance management ▪ HSS TA for health financing to assist the MoH to transition from donor assistance ▪ QI TA to MoH to improve HIV outcomes. ▪ Continued support for strategic information surveillance surveys and national level information systems. ▪ TA for lab, including diagnostics, monitoring, and quality management/assurance/ improvement ▪ Teen clubs for PLHIV 	<ul style="list-style-type: none"> ▪ Roll-out of the MoH GBV protocols ▪ TA for quality (accreditation) of blood and injection safety
Table A.2 Program Area Specific Core, Near-core, and Non-core Activities for COP16			
HTC	Core Activities	Near-core Activities	Non-core Activities
	<ul style="list-style-type: none"> ▪ DSD support for high volume/high yield sites in geographic districts and areas with the highest unmet need for ART and support for a proposed transition to T&S. ▪ Scale-up of targeted outreach services in scale-up SNU ▪ Targeted mobile testing in high risk areas including farms, construction sites and 	<ul style="list-style-type: none"> ▪ Provide TA to the BDF to improve the quality and targeting of HTC services in priority sites. 	

	<ul style="list-style-type: none"> ▪ mining areas ▪ FSW - targeted for test and offer services in Kasane ▪ Linkage to care model ▪ TA to MoH to strengthen RHT as a strategy for increasing reach and yield 		
VMMC	Core Activities	Near-core Activities	Non-core Activities
	<ul style="list-style-type: none"> ▪ VMMC – support for increased uptake of services for HIV-negative men 15-29 years in scale-up SNU(s) through static, mobile/outreach services, and time-limited campaigns ▪ TA to support scale-up of PrePex device services through training-of-trainers and national roll-out in general and military populations ▪ TA to support quality of VMMC services at supported SNUs through SIMS, EQA, CQI, DQA 	<ul style="list-style-type: none"> ▪ Targeted demand creation through advocacy, community involvement, and mapping of priority SNUs 	<ul style="list-style-type: none"> ▪ TA for EIMC integration in MNCH program for sustainability ▪ TA for training nurses and midwives in adolescent/adult and EIMC services
Care and Treatment	Core Activities	Near-core Activities	Non-core Activities
	<ul style="list-style-type: none"> ▪ TA for training and mentoring health care workers in HIV and TB management and SIMS remediation ▪ Pre-ART care system established including PHDP implementation at the facilities and communities ▪ TA at the national level supporting TB program and TB survey ▪ Support to MoH for screening 90% of HIV positive patients for TB ▪ Support to MoH for enhancing ART coverage to TB/HIV patients ▪ Support for adopting Test & Treat for the national ART program progressive treatment policies ▪ Support for implementing Option B+ ▪ Paediatric and Adolescent HIV care HCW capacity building ▪ ART retention and adherence optimization including linkages with community-based interventions ▪ T&S for FSW ▪ DSD for PMTCT, Treatment, TB, and care and support for priority population (e.g. Refugees and FSW) ▪ Intensified case finding at the community and clinic level ▪ ART QA/QI Program 	<ul style="list-style-type: none"> ▪ Cervical cancer “See and Treat” ▪ HPV DNA testing demonstration for the support of cervical cancer ▪ Policy change promotion for implementation of “GeneExpert” ▪ M&E at the SNU level ▪ TB infection control strengthening ▪ TB/HIV integration at community level and strengthen referral systems ▪ Laboratory referral networks TA for EID, VL breastfeeding policy change and CD4 testing support promotion ▪ Capacity building for HCW for HIV resistance management including performing and interpreting genotypic assays ▪ TA for pre-validation of EMTCT 	
Prevention	Core Activities	Near-core Activities	Non-core Activities

	<ul style="list-style-type: none"> ▪ KP FSW - development and implementation of the minimum package of services using a community-integrated and clinic-based reach-test-treat-retain cascade in population focus sites ▪ AGYW - implement a comprehensive package of services to increase service uptake and reduce contextual factors contributing to vulnerability ▪ Standardized prevention interventions for priority populations and their partners ▪ Targeted condom promotion and distribution to priority populations (e.g. military) ▪ PLHIV - implement comprehensive PHDP services to prevent morbidity and HIV transmission to sexual partners and children ▪ GBV – TA to the GoB for the development and implementation of a site-level GBV referral system ▪ GBV survivors - support establishment of community-based safe spaces - including drop-in centres in KP districts ▪ Post-GBV care, referrals and linkages to appropriate clinical services 	<ul style="list-style-type: none"> ▪ Clients of sex workers – preventive services including condoms, test referrals. ▪ TA and advocacy to the GoB at the national and district level to develop policy and guidelines and build capacity for developing comprehensive services for KP ▪ Address stigma and discrimination ▪ Community competence building ▪ TA to GoB to develop a national KPs strategy and operational plan. ▪ Education and community mobilization standardization ▪ Adult-child communication ▪ Economic strengthening and support for policy implementation ▪ TA to service providers to create SOPs for post-GBV care. 	
OVC	Core Activities	Near-core Activities	Non-core Activities
	<ul style="list-style-type: none"> ▪ Identification and comprehensive assessment of children, adolescents and family members made vulnerable by or to HIV/AIDS ▪ Developing strengths based case management plans for children and families with monitoring of referral completion (including nutrition and food security services, TB/HIV services, and age-specific health care needs), service provision and stated case closure goals ▪ Promotion of HIV testing of OVC program participants, including EID, and confirmatory HIV testing ▪ Supporting targeted interventions and service referrals for adolescents, especially adolescent girls including supporting disclosure and ART adherence ▪ Integrating ART adherence assessment, counselling and support into routine household support for family members with HIV ▪ Integrating Early Childhood Development into HIV care 	<ul style="list-style-type: none"> ▪ Strengthen referral mechanisms for cross referrals ▪ Advocacy and policy efforts to improve safety and protection from violence ▪ Strengthen community structures for mediation of child abuse ▪ Support for community education councils and parent-teacher associations to provide support to OVC ▪ Support market linked vocational training and other individuals HES activities 	<ul style="list-style-type: none"> ▪ M&E systems for national child protection and social welfare efforts ▪ Carrying out market assessments for Income Generating Activities (IGAs)

	<p>and treatment for children under 5</p> <ul style="list-style-type: none"> ▪ Targeted interventions to address the socio-economic needs of HIV-infected and – affected children and families, including psychosocial health, positive parenting skills, and household economic strengthening (HES) ▪ Implementing special studies to identify gaps in programming impact: these include MER 1.5 and national situation analysis for OVC ▪ Supporting community and national level child protection/GBV prevention and response activities 		
Cross-cutting	Near-core Activities	Non-core Activities	
Laboratory	<ul style="list-style-type: none"> ▪ Roll-out SLMTA to remaining laboratories and do follow-up for priority labs ▪ Provide TA to Botswana National Quality Assurance Laboratory (BNQAL) for preparation of proficiency testing materials for HIV, CD₄, EID 		
	Near-Core Activities		
HSS	<p>HRH Supply chain:</p> <ul style="list-style-type: none"> ▪ Targeted TA support to MoH’s SCM system to strengthen both contract and commodities management <p>Health Financing</p> <ul style="list-style-type: none"> ▪ TA to MoH for improving allocative and technical efficiency of HIV services and analysis of financing options for increasing resources for quality HIV service delivery ▪ Support efforts to transition away from donor dependence <p>Quality Improvement</p> <ul style="list-style-type: none"> ▪ TA to MoH, community and facility level for improving HIV service delivery and patient health outcomes through a QI approach ▪ Site-level monitoring system of key indicators in high-volume sites in priority areas 		
	Near-core Activities		
Strategic Information	<p>Surveillance</p> <ul style="list-style-type: none"> ▪ ART drug resistance survey conducted ▪ Second round of BBSS among KPs in population focused sites <ul style="list-style-type: none"> ▪ TA to KP partners to conduct formative assessments. <p>Data availability and use</p> <ul style="list-style-type: none"> ▪ DQA activities at priority locations and among KP routinely conducted ▪ District-level mortality data collection systems strengthened ▪ Technical support to strengthen HIV monitoring through establishment of an early indicator warning system based on 2013 WHO indicators ▪ Technical support to retrospectively analyse data on linkage to care ▪ Technical support in applying the spectrum modelling technique and using it to guide planning at the district level ▪ Technical support for strengthening systems supporting linkages to care among PEPFAR-supported community-based organizations (CBOs) with health facilities, including systems to monitor retention in care, ART drug resistance, and loss to-follow-up on KP interventions. ▪ Technical support on gender analysis, GBV referral system and operations research to generate data on GBV ▪ Support to OVC program to generate evidence needed to inform evidence-based programming ▪ Data quality assessments & SIMS visits <p>Health information systems</p> <ul style="list-style-type: none"> ▪ Technical support to strengthen utilization of integrated aggregate data collection systems (DHIS) ▪ Support for training to promote collection, utilization, and storage of data in data warehouses from Patient Management Information System (PIMS II) and Integrated Patient Management System (IPMS) sites in priority areas ▪ Develop and implement SMS-based information system to monitor and evaluate key treatment and quality indicators at high volume ART sites within the priority areas 		

Table A.3 Transition Plans for Non-core Activities

Transitioning Activities	Type of Transition	Funding in COP15	Estimated Funding in COP16	# of IMs	Transition End Date (FY)	Notes
Construction	Completion of construction	\$0	\$0	1	August 2016	Planned construction of laboratories has been completed except for National Public Health which should be finished by August 2016. Security upgrades at PEPFAR facility have begun, and fully funded.
TB/HIV Strengthening MDR-TB Management	Transition MDR-TB case management to trained medical officers who will then be supervised by government physicians	\$0	\$0	1	August 2016	DRS has been defunded in COP14. Trained MoH medical officers will implement MDR-TB management activities in the districts and be back-stopped by government physicians. Partner operating under a No Cost Extension until August 2016
VMC - In-service Training of Providers in Surgical, PrePex Device and EIMC Procedures	Trained TOTs to cascade training to other providers	\$300,000	\$300,000	1	End-2017	Since the COP15 submission, MOH has decided to expand EIMC and to begin passive surveillance for PrePex (they completed active surveillance in FY15). By COP17 the ministry should be able to fully absorb the trainings.
Blood and Injection Safety	Provide TA towards stepwise accreditation for Botswana in six blood centers.	\$0	\$0	1	End - 2017	Transition to government after remediation activities and step 3 accreditation are completed. This is estimated to take 18-24 months.
Totals	---	\$300,000	\$300,000	4	---	---

APPENDIX B

B.1 Planned Spending in 2016

Applied Pipeline	New Funding	Total Spend
\$ 14,852,516	\$ 28,347,484	\$ 43,200,000

PEPFAR Budget Code	Budget Code Description	Amount Allocated
MTCT	Mother to Child Transmission	\$ 177,500
HVAB	Abstinence/Be Faithful Prevention	\$ 0
HVOP	Other Sexual Prevention	\$ 911,012
IDUP	Injecting and Non-Injecting Drug Use	\$ 0
HMBL	Blood Safety	\$ 0
HMIN	Injection Safety	\$ 0
CIRC	Male Circumcision	\$ 1,106,459
HVCT	Counseling and Testing	\$ 2,885,000
HBHC	Adult Care and Support	\$ 3,768,645
PDCS	Pediatric Care and Support	\$ 360,000
HKID	Orphans and Vulnerable Children	\$ 3,368,319
HTXS	Adult Treatment	\$ 6,762,813
HTXD	ARV Drugs	\$ 60,000
PDTX	Pediatric Treatment	\$ 400,000
HVTB	TB/HIV Care	\$ 3,144,920
HLAB	Lab	\$ 120,000
HVSI	Strategic Information	\$ 50,000
OHSS	Health Systems Strengthening	\$ 500,000
HVMS	Management and Operations	\$ 4,732,816

B.2 Resource Projections

The interagency team utilized various methods to calculate required resources including expenditure analysis (EA). EA was used in conjunction with unit expenditures and 90-90-90 gap analysis to determine what resources were needed, where they were needed, and how much funding would be required. Robust pipeline analysis took place amongst each Botswana agency and pipeline was applied in accordance with OGAC recommendations when available. New money calculations were based on the remainder needed after pipeline was applied. The PBAC calculator and financial supplement worksheet are available to assist in replicating these calculations.

APPENDIX C

Systems Investments for Section 6.0

Included Activities	Excluded Activities
Human Resources for Health (HRH): Systems/Institutional Investments	
Pre-service training; in-service training systems support and institutionalization; HRH performance support/quality; HRH policy planning and management; HR assessments and information systems; other HRH activities not classified as above	N/A
Human Resources for Health (HRH): Personnel Costs for Service Delivery	
In-service training; all HRH support at sites and community across all program areas	Other site-level investments such as purchase of vehicles, equipment and furniture, construction and renovation, and site-level recurrent categories such as ARVs, non-ARVs drugs and reagents, HIV test kits, condoms, travel and transport, building rental and utilities
Governance	
Technical area-specific guidelines, tools, and policy; general policy and other governance; other governance activities not classified as above	N/A
Finance	
Expenditure tracking; efficiency analysis and measurement; health financing; costing/cost modeling; other health financing activities not classified as above	N/A
Systems Development	
Supply chain systems; health information systems (HIS); laboratory strengthening; other systems development activities not classified above	ARVs, non-ARVs drugs and reagents, HIV test kits, condoms, travel and transport, freight for transport of commodities to sites and other supply chain costs incurred at the site-level
Institutional and Organizational Development	
Civil society and non-governmental organizations (NGOs); government institutions; social welfare systems strengthening; other institutional and organizational activities not classified above	N/A
Strategic Information	
Monitoring and evaluation; surveys; operations research; geographic mapping, spatial data, and geospatial tools; surveillance; other strategic information activities not classified above	N/A
Laboratory	
Quality management and biosafety systems; implementation and evaluation of diagnostics (POC and VL monitoring); laboratory information and data management systems; laboratory workforce; quality management system; sample referral systems; accreditations; TA to assure or improve quality of laboratory services	Vehicles, equipment and furniture, construction and renovation for site labs, and recurrent categories from site labs such as lab reagents and supplies, travel and transport, building rental and utilities will not be included

APPENDIX D

Acronym List

Abbreviation	Definition
ACHAP	African Comprehensive Hiv/Aids Partnership
AGYW	Adolescent Girls And Young Women
AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral Drugs
BAIS IV	2013 Botswana Aids Impact Survey
BBSS	Behavioral And Biological Surveillance Survey
BCC	Behavioral Change Communication
BCPP	Botswana Combination Prevention Program
BDF	Botswana Defense Force
BNQAL	Botswana National Quality Assurance Laboratory
BYRBSS	Botswana Youth Risk Behavior Surveillance Survey
CATCH	Community Acting Together To Control HIV
CCM	Country Coordinating Mechanism
CEE	Core Essential Element
CMS	Central Medical Stores
CQI	Continuous Quality Improvement
CTBC	Community TB Care
CTS	Community Treatment Supporters
CWC	Child Welfare Clinics
DCMM	Dc Management Meetings
DHAPC	Department Of HIV/AIDS Prevention And Care
DHMT	District Health Management Teams
DOT	Directly Observed Therapy
DQA	Data Quality Assessment
DSD	Direct Service Delivery
ECD	Early Child Development
EID	Early Infant Diagnosis
EIMC	Early Infant Male Circumcision
EMTCT	Elimination Of Mother-To-Child-Transmission Of HIV
EQA	External Quality Assurance
EU	European Union
FSW	Female Sex Worker
GBV	Gender-Based Violence
GF	Global Fund
GNI	Gross National Income
GoB	Government Of Botswana
HCA	Health Care Auxiliary (Worker)
HCW	Health Care Worker

HFS	Health Financing Strategy
HFTWG	Health Financing Technical Working Group
HIV	Human Immunodeficiency Virus
HRH	Human Resources For Health
HTC	HIV Testing And Counseling
HTS	HIV Testing Services
ICS	Integrated Country Strategy
IDCC	Infectious Disease Control Centers
IP	Implementing Partner
IPT	Isoniazid Preventive Therapy
IR3	Intermediate Results 3
IT	Information Technology
KP	Key Populations
LCI	Local Capacity Initiative
LMIS	Logistics Management Information System
LTFW	Loss-To-Follow-Up
M&E	Monitoring And Evaluation
MCH	Maternal And Child Health
MDR	Multi-Drug Resistant
MIP	Mother-Infant Pairs
MoH	Ministry Of Health
MSM	Men Who Have Sex With Men
NACA	National Aids Coordinating Agency
NASA	National Aids Spending Assessment
NIH	National Institutes Of Health
NPD	Nurse Prescriber And Dispenser
NTRL	National Tuberculosis Reference Library
OGAC	Office Of The Global AIDS Coordinator
OVC	Orphans And Vulnerable Children
PC	Peace Corps
PCR	Polymerase Chain Reaction
PCV	Peace Corps Volunteer
PEPFAR	President's Emergency Plan For AIDS Relief
PEPFAR/B	Pepfar Botswana
PHDP	Positive Health, Dignity, And Prevention
PITC	Routine Facility-Based HIV Testing
PLHIV	People Living With HIV
PMTCT	Prevention Of Mother-To-Child HIV Transmission
POART	PEPFAR Oversight And Accountability Results Team
POC	Point Of Contact
PR	Primary Recipient
PrEP	Pre-Exposure Prophylaxis
PS	Permanent Secretary
PT	Proficiency Testing
PTB	Pulmonary TB
QI	Quality Improvement

QM	Quality Management
RHT	Routine HIV Testing
RTK	Rapid Test Kits
RTR	Real-Time Reporting
SCM	Supply Chain Management
SCMS	Supply Chain Management System
SI	Strategic Information
SID	Sustainability Index And Dashboard
SIDA	Swedish International Development Cooperation Agency
SIMS	Site Improvement Monitoring System
SLMTA	Strengthening Laboratory Management Towards Accreditation
SMC	Safe Medical Circumcision
SMS	Short Message System
SNU	Sub-National Unit
SOP	Standard Operating Procedures
SRH	Sexual And Reproductive Health
STI	Sexually Transmitted Infection
T&S	Test And Start
TA	Technical Assistance
TAP	Treatment As Prevention
TAT	Turn-Around-Time
TB	Tuberculosis
TWG	Technical Working Group
UN	United Nations
UNAIDS	United Nations Programme On HIV/AIDS
USD	United States Dollars
USG	United States Government
VCT	Voluntary Counseling And Testing
VL	Viral Load
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization

APPENDIX E

Detailed Background Regarding the Botswana Supply Chain¹³²

In May 2009, the Ministry of Health (MoH) requested assistance from the USG to address long standing management and operational difficulties at the Central Medical Stores (CMS).¹³³ CMS is responsible for providing the Government of Botswana (GoB) operated hospitals and clinics throughout the country with pharmaceuticals and medical supplies, including anti-retrovirals (ARVs) needed for HIV/AIDS patients. From late 2009 to mid-2012 the USG team managed the MoH's CMS, with plans to turn over operations to the GoB in 2012. Supply Chain Management Systems (SCMS), a USAID global mechanism, was selected to implement this project. An interim management team comprised of six externally-recruited senior managers was in place by October 2009. The original plan was for the SCMS team to transition CMS out of the MoH and into a parastatal (as per an existing GoB policy and the initial MoH request), as well as build capacity within that new organization. However, in December 2009 the newly appointed Cabinet changed its policy on CMS and instructed the Minister to request USG support focusing on reforming CMS from within its current structure. This was the strategy utilized by the SCMS team until the handover to government managers in June 2012.

During the September 2009 to June 2012 timeframe, the SCMS team developed over 100 Standard Operating Procedures, conducted more than 1,000 training interventions and completed 25 procedural audits. A Quality Management System (QMS) was developed in accordance with the ISO 9001:2008 standard. Based on this system, in November 2012 CMS became the first Government Medical Stores in Africa to gain ISO Quality Systems certification. Also importantly, a new procurement strategy was put in place for CMS, which made procurements more flexible and responsive and eliminated long lead times that had previously resulted in drug shortages. The key changes were: 1) use of multi-year, flexible-quantity, framework-contracts; and 2) use of measures to determine a supplier's capacity to deliver against a particular requirement. The latter meant allowing foreign companies to participate more in procurement processes which, in the past, had been almost exclusively local. In just three years, product availability increased from 55% to 80% and product expiry decreased from 7% to just over 1%. At the time of the handover of the CMS back to the MoH in June 2012, the system was working and was even highlighted as an example of Alternative Management of the CMS in *Alternative Public Health Supply Chains: Reconsidering the Role of the Central Medical Store*, USAID, June 2013. While operations were turned over to MoH, two foreign advisors remained to provide technical support.

The changes, made while the USG led team was managing CMS made it possible for CMS to purchase drugs and other medical supplies from foreign sources. These changes did not exclude local suppliers and from April 2011 to March 2012, 72% of the CMS commodity budget was spent with local companies. In September and October 2012, articles in the independent media

¹³² Most information taken from three cables written in February, August and December, 2015. (15 Gaborone 188, 15 Gaborone 1088, 15 Gaborone 1614).

¹³³ The USG has been supporting the improvement of the public health supply chain in Botswana since 2007.

alleged CMS reliance on a foreign supplier had led to an ARV shortage in Botswana. Botswana did experience an ARV shortage during that time, but the shortage had nothing to do with CMS's decision to open up its procurement process to foreign suppliers.

In November 2012, the MoH leadership decided to sole-source the warehousing and distribution functions at CMS to a single contractor, and sought USG assistance with this process. Despite reservations regarding a non-competitive process for the contract, the Mission concluded that SCMS should assist with the transition in order to protect the 2009-2012 USG investment in CMS. The team wanted to mitigate the possible risks of the change in course by helping to define the scope of the service and to evaluate the competence of the contractor to deliver services against that scope. Throughout 2013, SCMS led the MoH through the evaluation and development of a comprehensive contract and service level agreement that contained a significant level of performance related payments/penalties. The first proposal by the contractor was inadequate and promptly rejected by the MoH because of insufficient capacity in some key areas of operation. In areas where they lacked expertise, the contractor then sub-contracted with more experienced companies based in South Africa. These companies assisted the contractor with writing their second proposal and helped the contractor meet the requirements to obtain the contract. The GoB/MoH awarded the contract in May 2014. Under this system, the GoB/MoH is responsible for all of the procurement, while the contractor takes over the warehousing and distribution functions.

After four months of operations, in September 2014, the SCMS team started a thorough review of the contractor's performance. This collaborative process took several weeks and involved all major stakeholders, including the CMS team and the contractor's team. This review revealed that only 14% of the contractual obligations were being met by the contractor. In addition, it was discovered that one of the two key South African subcontractors who provided valuable technical expertise to the contractor left shortly after the contract went into effect because it was not getting paid for services rendered.

After these findings, the MoH agreed to address these deficiencies in a timely manner; however, time passed without any clear improvement. In January 2015, the USG sent a letter to the Minister of Health voicing concerns over problems at CMS and urging the GoB to take action. In August 2015, the MoH ratcheted up the pressure on the contractor, posed hard questions and insisted on better performance.

Despite these contractual deficiencies, the MoH continued to pay the contractor in full even though the contract clearly provides for substantial penalties in the event of poor performance or breach of contract, both of which occurred. SCMS advised the MoH the appropriate penalties should be applied. A major concern is that payment in full to the contractor is tantamount to recognition of good performance by the contractor and an incentive to persist in the current style of management. Most importantly, payment in full removes a critical tool to exert pressure on the contractor to improve their performance.

In many areas of supply chain, human resources remain a challenge, from the lack of IT and technical expertise to a shortage of supply chain experienced clinic staff. In an effort to fill some gaps, Peace Corps Volunteers (PCVs) have been conducting Logistics Management of Health

Commodities training for other PCVs and MoH health care workers involved in supply chain management.

Since the contractor was awarded the contract, the IT system remains incomplete and does not deliver reports as promised.¹³⁴ Key reports are not being produced and this compromises the healthcare/medical supply chain in Botswana.

The MoH is planning to issue an open tender with the new contract beginning May 1, 2017 and has pledged to implement an open and transparent process adhering to international standards of public sector procurement. The MoH has requested USG TA during this re-tendering process, and with these assurances, PEPFAR/B plans to provide this assistance. Any further disintegration of the supply chain raises concerns about the ability of Botswana to successfully scale-up to T&S and could jeopardize Botswana's eventual control of its HIV/AIDS epidemic.

¹³⁴ To obtain the contract, the contractor sub-contracted with more experienced South African companies. One sub-contract was for the provision of the new IT system. The contractor terminated this subcontractor without informing the MoH prior to the start of their contract; in July 2014 the contractor dismissed its technical advisory team sub-contractor.

[REDACTED]

APPENDIX G

Botswana Combination Prevention Project: Implementation during COP16

The Botswana Combination Prevention Project (BCPP) is a randomized community trial to examine the impact of a combination of prevention interventions on HIV incidence in 15 intervention and 15 control peri-urban and rural communities throughout Botswana. The intervention component of the study involves implementation and evaluation of HIV testing, linkage to treatment for HIV positive persons, ART for all positive persons, and male circumcision services for eligible negative men. BCPP will continue study implementation through December 2017, with a scaled back program from June to December of 2017. The PEPFAR Botswana interagency leadership and the Government of Botswana MOH has endorsed the plan that post study programmatic transition will be primarily between MOH and BCPP in non PEPFAR priority districts. Programmatic transition will be primarily between BCPP and bilateral program in sites that are part of the overall PEPFAR strategy articulated in this SDS.

The primary objective of BCPP is to conduct research that will inform HIV policies and programming in Botswana but also in the global HIV community. Post COP15 efforts were made to coordinate BCPP with the bilateral programming as evidenced recently when study investigators shared real time data on the demographic profile of those who were newly diagnosed as HIV positive through BCPP and outcomes of new linkage and retention efforts in treatment programs. During the study, BCPP has pivoted its implementation to integrate the study activities related to provision of VMMC services with current MOH program based on results of the impact of its interventions in the early study years. Results from BCPP have helped to inform the bilateral strategy articulated in this SDS and will continue to be routinely shared with the USG PEPFAR team to maximize the impact of the USG bilateral investments to achieve epidemic control.

Funding for BCPP as implemented by CDC and partners, supports research objectives but also contributes to the improvement of service delivery. For FY17, \$8.9M of central initiative funding will go towards continued implementation of BCPP. Of that amount, \$5M is primarily to support data collection and oversight of the study. The remaining contributes to the HIV/AIDS response, specifically HTC linkage, quality improvement of ART, adherence and retention, and SMC linkage. It is estimated that these PEPFAR investments are an additional contribution to support expected achievements of approximately 43,000 persons tested and counseled for HIV (HTC_TST), an anticipated yield of 28% (HTC_POS 12,040); 2,092 persons initiated on ART (Tx_new); a total of 21,125 persons supported on ART (Tx_Curr); and 16,187 virally suppressed (Tx_PVLS). In addition, it is anticipated that 4,500 eligible men will be referred and linked to VMMC services.

Table 6.1.4 Key Programmatic Gap #4: Strategic Information

Key Systems Barrier	Outcomes expected after 3	Complementary funding to the bilateral funds during COP16	Budget Code	Activity Budget Amount	Associated Implementing	Relevant SID Element and Score

	years of investment	Period		t	Mechanism ID	(if applicable)
Lack of detailed, targeted real time programmatic information to inform the implementation of Test and Start and maximize the impact of investments to control the HIV/AIDS epidemic	Improved linkage and retention of HIV positive persons on treatment Improved linkage of HIV negative males to receive SMC services	Implementation of improved linkage, retention and adherence to ART, quality improvement of ART service delivery and linkage to SMC services.		\$3.9M		Performance Data (5.77)
	Improved information for a more targeted HIV/AIDS response	Implementation of randomized control trial to inform implementation of Test and Start		\$5M		

