

**Rwanda**

**Country Operational Plan**

**(COP/ROP) 2018**

**Strategic Direction Summary**

April 6, 2018



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## 1.0 Goal Statement

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In the Country Operational Plan for 2018 (COP18), the PEPFAR team worked closely with the Government of Rwanda (GOR), especially with the Ministry of Health (MOH), to develop strategic initiatives to support the country toward the achievement of UNAIDS 95-95-95 goals and sustainable epidemic control by the end of 2020. All stakeholders – PEPFAR, implementing partners, other donors, local NGOs, civil society organizations and all sectors of the GOR (especially MOH) – will work together to reach epidemic control in Rwanda.

To understand, analyze and respond to the epidemiology of HIV/AIDS in Rwanda, PEPFAR is supporting a Rwanda Population-Based HIV Impact Assessment (RPHIA), which will begin implementation in COP17/FY18. Preliminary RPHIA results will become available during early COP18/FY19 implementation, and data from the RPHIA will be used to rapidly analyze and adjust programs in order to achieve the overarching goals of COP18 within FY19. The amount of \$3,805,966 are being held to fund programmatic changes and shifts based on RPHIA preliminary results during the COP18/FY19 year. Critical changes and strategic improvements to COP18 will be based on results from the PHIA, PEPFAR-supported 2018 men-who-have-sex-with-men (MSM) and female sex worker (FSW) size estimation surveys and MOH-supported 2018 MSM and FSW Integrated HIV Bio-Behavioral Surveys (IBBSs).

The overarching goals of COP18 focus primarily on refinements to targeted testing of those at highest risk for HIV; the transition in the national HIV commodities program to tenofovir/lamivudine/dolutegravir (TLD); the provision of pre-exposure prophylaxis (PrEP) to the populations at highest risk of infection; voluntary medical male circumcision (VMMC); and close monitoring and improvement of partner expenditures and achievements on an annual, quarterly and monthly basis. PEPFAR, working with MOH, will expand targeted testing with fidelity through improved and scaled index partner and family testing for all PLHIV, routine screening of STI clients and those with suspected tuberculosis, community outreach to sexually transmitted infection (STI) clients for testing, improved access to targeted voluntary counseling and testing (VCT), enhanced routine HIV testing criteria for all clients through all services in all facilities for specific high risk indicators of HIV exposure (including tuberculosis presumptive patients), recency testing for all newly identified HIV positives, PrEP for high risk individuals, self-testing for high risk individuals less likely to come directly to facilities for testing and community-based moonlight testing in FSW hotspots.

Above-site and systems investments have been streamlined in COP18/FY19 to focus on building central-level capacity and strength within the GOR in the areas of HIV supply chain and commodities procurement, as well as in the development of case-based surveillance (CBS) and national unique patient identifiers (N-UPID).

PEPFAR has found efficiencies across all COP18 program areas in order to streamline investment in these strategies. Furthermore, in COP18/FY19, the GOR (at both the MOH and Ministry of Economics and Finance [MINECOFIN] levels) will work closely with the U.S. Government (through PEPFAR agencies and Treasury) to develop a roadmap to increase domestic investment in the national HIV/AIDS response that is responsive to ongoing reductions in foreign assistance

for HIV/AIDS.<sup>1</sup> Significantly, during COP18 planning MOH absorbed the responsibility for a portion of the fees associated with the Medical Products Procurement Division (MPPD) and MOH staff salary support for training and travel. Furthermore, COP18 has 57% of its funding with local organizations and the MOH, up from 53% in COP17, which will help in the eventual transition of the national HIV/AIDS program to the GOR. The PEPFAR program is planning to find additional ways to increase funding to indigenous partners with demonstrated capacity, including the use of preferential funding opportunities for new awards.

## 2.0 Epidemic, Response and Program Context

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### 2.1 Summary Statistics, Disease Burden and Country Profile

Rwanda's 2012 census reported a population of 10,513,973, with 41% under the age of 15 and an annual population growth rate of 2.6%. Projection from the 2012 census estimates the 2017 population at 11,809,295. HIV prevalence has remained stable at 3% for adults and in FY17 there were an estimated 224,663 people living with HIV (PLHIV) which is projected to increase to 227,879 by FY18.<sup>2</sup> The 2010 Demographic and Health Survey (DHS) showed that 77% of women and 73% of men reported having ever had an HIV test, which increased to 86% of women and 81% of men in the 2015 DHS, although the proportion of PLHIV who knew their current positive status at that time was unknown.

Rwanda's HIV epidemic is generalized, with higher key population (KP) infection rates, and an urban prevalence of 6.2%, compared to a 2.2% rural prevalence. Women have a higher HIV prevalence than men (3.6% vs. 2.2% nationally, 8.0% vs. 4.4% in Kigali) and young women aged 20-24 have nearly twice the rate of infection males the same age (1.8% vs. 1.0%).<sup>3</sup> Sixty-five percent of transmission is estimated to be in stable heterosexual relationships, while 20% of new infections are attributed to sex workers, their clients and their partners.<sup>4</sup> FSWs have an estimated HIV prevalence of 45.8%,<sup>5</sup> while MSM are estimated to have a 4% prevalence.<sup>6</sup>

Results from the Rwanda AIDS Indicator and HIV Incidence Survey of 2013-2014 (RAIHIS) measured an incidence of 0.27 HIV infections per 100 adults, while the estimated rate for 2018 from the most recent UNAIDS EPP Spectrum model is .105 per 100 adults. Initial results from RPHIA are expected to be available in mid-2019 and will give the most recent data on the current HIV epidemic in Rwanda.

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<sup>1</sup> In FY16, the Global Fund (GF) allocated \$59m for HIV, down from \$100m annually in 2013 and 2014.<sup>1</sup> For the 2018-2020 GF funding cycle, Rwanda has been allocated \$154m for HIV, which represents an average of \$51.3m per year. PEPFAR total funding (base and central funds) has fluctuated from \$78.5m in FY17 to \$80.9m in FY18 to \$76m in FY19. While GOR percent contribution to total HIV expenditures increased from 10 to 13 percent from FY15 to FY16 and remained at 13 percent in FY17, GOR's budget allocation to HIV decreased from \$24.3m in FY16 to \$22m in FY17.

<sup>2</sup> Adult HIV prevalence was 3.0% for the 2005, 2010 and 2015 DHS surveys. National PLHIV estimates are from the 2018 EPP Spectrum population.

<sup>3</sup> Rwanda DHS 2015

<sup>4</sup> UNAIDS Modes of Transmission Study (MOT) 2013.

<sup>5</sup> Female Sex Worker Behavioral Sentinel Survey (IBBS) 2015. Preliminary findings from the IBBS report ~51% FSW national HIV prevalence.

<sup>6</sup> MSM Behavior Surveillance Survey 2015. Previous MOT MSM estimated prevalence is 5%.

By the end of FY17, Rwanda had 183,507 PLHIV on anti-retroviral therapy (ART), an increase from the 175,398 on ART the previous year. At the end of FY17, ART coverage for all estimated PLHIV nationally was 82%.

With the expansion of Treat All, measuring viral suppression became of increasing importance in Rwanda's efforts to control the epidemic by ensuring that clients are less likely to experience HIV-related morbidity or mortality and are less likely to infect others with the virus. Two studies conducted in 2009 and 2013 assessed the proportion of those on ART with an undetectable viral load (VL) (less than 40 copies/ml) at 83% and 82% respectively and these results did not vary by time on ART.<sup>7</sup> These studies were prior to full rollout of routine VL testing.<sup>8</sup> PEPFAR monitoring and evaluation data from all supported Rwandan health facilities in FY17 showed viral suppression to be 91%, compared to 92% in FY16 among those tested, with 86% of all eligible ART patients having a recorded annual result, up from 76% in FY16.

Donor funding to the national HIV program has decreased in the past years, a five-year trend that is expected to continue. Rwanda's gross national income is \$700 per capita.<sup>9</sup> Rwanda ranks 159 in UNDP's Human Development Index 2016.<sup>10</sup> Significant financial barriers remain to achieve a sustained domestically-funded HIV response in the near future. However, the GOR has committed (through MOH and MINECOFIN) to develop a roadmap with the USG (through PEPFAR agencies and Treasury) to increase domestic investment in the national HIV/AIDS response, which will be a priority in COP18. Rwanda faces challenges to attain epidemic control and an AIDS-free generation, including the need to strengthen above-site systems and address financial issues, develop and implement cost-effective and sustainable service delivery models, improve supply chain management, use data-driven approaches to identify new infections and shift to a financially sustainable wellness model to manage HIV-positive patients.

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<sup>7</sup> The following two studies: Elul B et al. High Levels of Adherence and Viral Suppression in a Nationally Representative Sample of HIV-Infected Adults on Antiretroviral Therapy for 6, 12 and 18 Months in Rwanda. PLOS ONE 2013 DOI: 10.1371/journal.pone.0053586, Nsanzimana S et al. HIV care continuum in Rwanda: A cross-sectional analysis of the national programme. Lancet HIV Mar 2015

<sup>8</sup> Rwanda currently has nine viral load testing sites.

<sup>9</sup> 2016, World Bank.

<sup>10</sup> United National Development Programme, Human Development Report, 2016.

**Table 2.1.1 Host Country Government Results**

	Total		<15				15-24				25+				Source, Year
			Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total Population	11,809,301	100%	2,316,860	19.6%	2,316,961	19.6%	1,195,049	10.1%	1,154,073	9.8%	2,575,133	21.8%	2,251,225	19.1%	NISR Census Projections 2017
HIV Prevalence (%)		1.9%		0.2%		0.2%		2.5%		1.3%		4.7%		3.2%	EPP Spectrum 2018
AIDS Deaths (per year)	2,944		147		154		148		118		1,325		1,052		EPP Spectrum 2018
# PLHIV (2018)	227,896		5,080		5,147		12,817		6,401		123,523		74,927		EPP Spectrum 2018
Incidence Rate (Yr)/100 PYO		0.061		-		-		0.14		0.05		0.11*		0.08*	EPP Spectrum 2018
New Infections (Yr)	7,537														EPP Spectrum 2018
Annual births	352,052	3%													NISR 2012 Projections for 2017
% of Pregnant Women with at least one ANC visit	99.2%		N/A				N/A				N/A				DHS2015 (Table 9.2)
Pregnant women needing ARVs	8,930														EPP Spectrum 2018
Orphans (maternal, paternal, double)	674,556		75,728		75,157		262,810*		260,861*						NISR (DHS 2010, Table 2.12 (<15, 15+)*
Notified TB cases (Yr)	5,760		197		183		383		520		1,359		3,118		HMIS, 2017 (TB & ORD Division, RBC)

% of TB cases that are HIV infected	1,248	21.7%	16	8.1%	29	15.8%	Females 15+ = 476 (27.3%) Males 15+ = 727 (20.0%)							HMIS, 2017 (TB & ORD Division, RBC) <15 and 15+
% of Males Circumcised	N/A				N/A				34.2%				26.4%	DHS 2015 (Table 13.22)
Estimated Population Size of MSM*	N/A													Population Size Estimation results by Emory due 2018
MSM HIV Prevalence	N/A						4.0%							Rwanda MSM IBBS 2015
Estimated Population Size of FSW	12,500	100%												IBBS FSW, Rwanda 2010
FSW HIV Prevalence	1967 (45.8%)						33.6%				53.9%			IBBS Female Sex Workers, Rwanda 2015
Estimated Population Size of PWID	N/A	N/A												
PWID HIV Prevalence	N/A	N/A												
Estimated Size of Priority Populations (specify)	N/A	N/A												
Estimated Size of Priority Populations Prevalence (specify)	N/A	N/A												
<p><i>If presenting size estimate data would compromise the safety of this population, please do not enter it in this table.</i></p> <p><i>N/A: Not Available</i></p> <p><b>Source:</b> Based on the 2018 UNAIDS approved EPP Spectrum Estimates</p>														

Table 2.1.2 90-90-90 2017 Cascade: HIV Diagnosis, Treatment and Viral Suppression\*

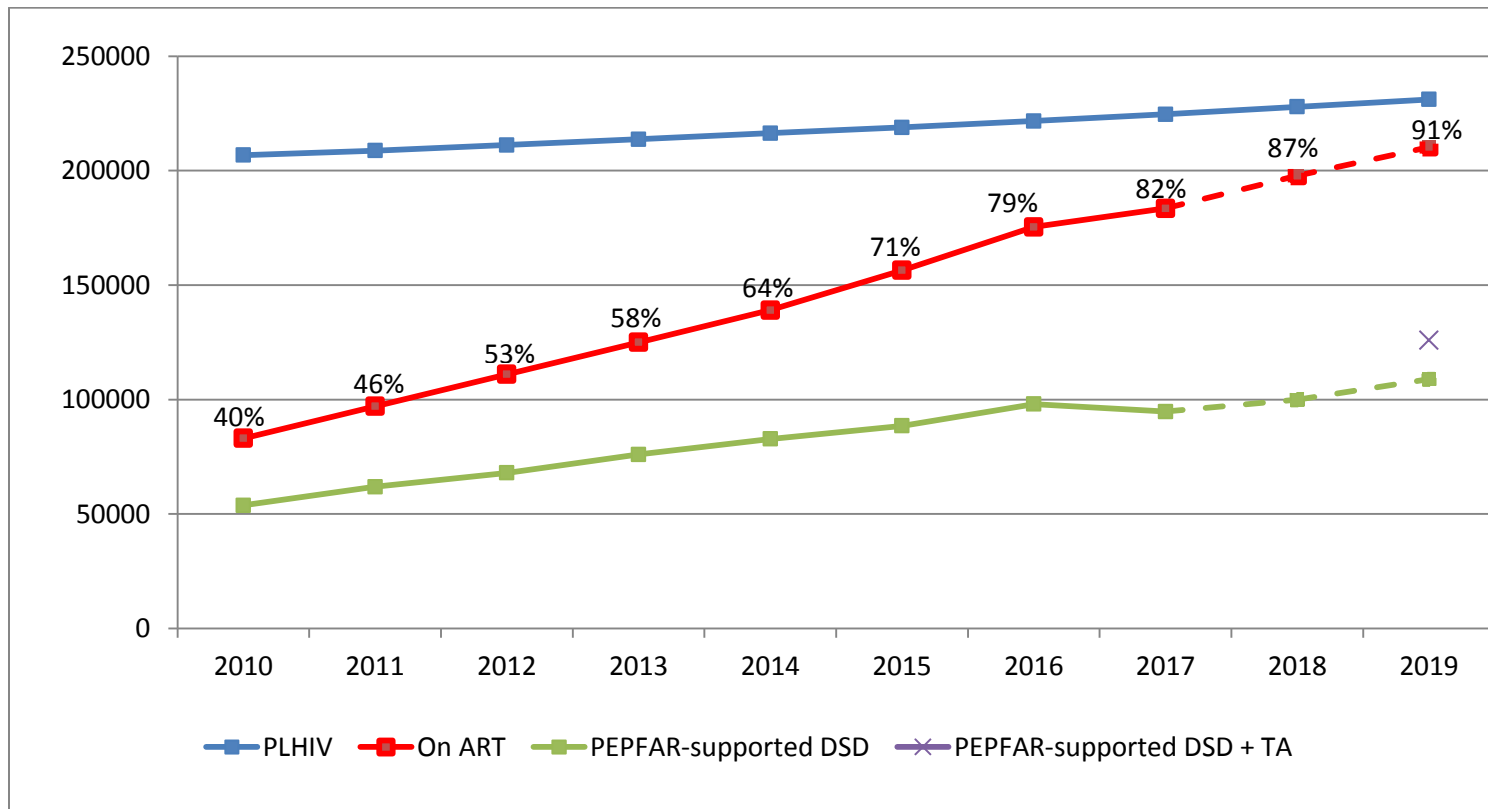
Table 2.1.2 90-90-90 2017 Cascade: HIV Diagnosis, Treatment and Viral Suppression*										
Epidemiologic Data					HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART Within the Last Year		
	Total Population Size Estimate (#)	HIV Prevalence (%)	Estimated Total PLHIV (#)	Estimated PLHIV diagnosed (#)	On ART (#)	ART Coverage (%)	Viral Suppression (%)	Tested for HIV (#)	HIV Positive tests (#) <sup>+</sup>	Initiated on ART (#)
Source	2012 Census projections	2015 DHS	Spectrum 2018 estimates for 2017	Midpoint of DHS2015 'ever tested' and HMIS # on ART	HMIS	HMIS and Spectrum 2018	PEPFAR APR17	HMIS	HMIS	HMIS
Total population	11,809,295	-	224,663	198,714	183,507	82%	91%	2,271,974	14,592	9,731
Population <15 years	4,633,822	.2%	10,647	9,450	8,148	77%	70%	228,088	479	396
Population 15+	7,175,477	3.0%	214,017	189,264	175,359	82%	92%	2,042,886	14,113	9,335
Men 15-24 years	1,154,073	0.6%	6,411	5,691	5,497*	86%	82%	-	-	-
Men 25+ years	2,251,225	-	73,650	63,128	58,645*	80%	92%	-	-	-
Women 15-24 years	1,195,049	1.3%	12,851	11,447	10,368*	81%	85%	-	-	-
Women 25+ years	2,575,133	-	121,105	108,494	100,849*	83%	93%	-	-	-

\*estimated from PEPFAR on treatment data age breakdowns

<sup>+</sup> Lack of unique identifier allows reporting only on positive tests, not newly identified positive individuals



Figure 2.1.3 National and PEPFAR Trend for Individuals Currently on Treatment



## 2.2 Investment Profile

In FY17, Rwanda's HIV response was funded primarily by three sources – PEPFAR (43%), the Global Fund (GF) (44%) and the GOR (13%).<sup>11</sup> Overall donor funding for Rwanda's HIV program continues to decrease. In FY16, GF allocated \$59m for HIV, down from \$100m annually in FY13 and FY14.<sup>12</sup> For the 2018-2020 GF funding cycle, Rwanda has been allocated \$154m for HIV, which represents an average of \$51.3m per year. PEPFAR total funding (base and central funds) has fluctuated from \$78.5m in FY17 to \$80.9m in FY18 to \$76m in FY19.<sup>13</sup> While the GOR contribution to total HIV expenditures increased from 10% to 13% from FY15 to FY16<sup>14</sup> and remained at 13% in FY17, the GOR's budget allocation to HIV decreased from \$24.3m<sup>15</sup> in FY16 to \$22m<sup>16</sup> in FY17. Anticipated decreases in GF and PEPFAR funding will create particular challenges for Rwanda's HIV program and will place pressure on Rwanda's health system, especially in light of limited domestic resources to fill the donor funding gap.

Total expenditures for FY17 do not reflect overall expenditures for the HIV response in Rwanda due to differences in fiscal cycles (PEPFAR's FY17 was October 1, 2016 to September 30, 2017; GF's FY17 was January 1, 2017 to December 31, 2017; and the GOR's FY17 was July 1, 2016 to June 30, 2017) and expenditure reporting. MOH reports the GF and GOR expenditures not by program area as shown in Table 2.2.1 but by HIV National Strategic Plan (NSP) cost categories: human resources, technical assistance, training, health products and equipment, medicines and pharmaceuticals, procurement and supply management, infrastructure and equipment, communication materials, monitoring and evaluation, living support to clients, planning and administration and overhead. Therefore, examination of expenditures toward the national HIV response in Rwanda by program area may not represent an accurate account of the proportion of support from PEPFAR, the GF and GOR for these areas.

The MOH's ability to continue to reduce inefficiencies to realize cost savings, as well as to secure additional domestic funding for human resources and other system costs no longer funded by GF or PEPFAR in the long-term, is still being assessed. Significant financial barriers remain to achieve a sustained domestically-funded HIV response in the near future. PEPFAR and GF are coordinating with the GOR to maximize USG and GF investment and strategically align with domestic and other available resources to achieve epidemic control.

Rwanda is the first country to participate in GF's Results-Based Financing (RBF) model and is the largest non-commodities PEPFAR implementing partner through cooperative agreement (CoAg), providing direct services to 98% of PEPFAR-supported patients on ART. Furthermore, COP18 has 37% of its funding with local organizations and the MOH, up from 35% in COP17, which will help in the eventual transition of the national HIV/AIDS program to the GOR.

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<sup>11</sup> PEPFAR 2016 Expenditure Analysis; Rwanda HIV Consolidated Operational Plan, 2013-2015; National HIV Annual Report, 2015-2016. Note that various sources with non-aligned time frames are used for the investment profile analysis.

<sup>12</sup> GOR fiscal year 2015/16, July 2015 to June 2016.

<sup>13</sup> PEPFAR COP16, COP17 and COP18 funding letters

<sup>14</sup> COP16 SDS Table 1.2.1 compared to COP17 SDS Table 2.2.1

<sup>15</sup> Rwanda HIV Annual Report 2015-2016

<sup>16</sup> Email from RBC Corporate Services Division

Table 2.2.1 Annual Investment Profile by Program Area~				
Program Area	Total Expenditure	% PEPFAR	% Global Fund	% Government of Rwanda
Clinical care, treatment and support	\$ 68,875,496	46%	40%	14%
Community-based care, treatment and support	\$ 9,848,098	24%	68%	8%
PMTCT	\$ 12,428,904	44%	40%	16%
HTS	\$ 7,160,460	100%	0%*	0%
VMMC	\$ 5,458,063	98%	2%	0%
Key & Priority population prevention	\$ 9,684,100	77%	23%	0%
OVC	\$ 7,555,857	71%	29%	0%
Laboratory	\$ 15,073,283	41%	59%	0%
SI, Surveys and Surveillance	\$ 1,845,848	1%	80%	19%
HSS	\$ 28,499,728	4%	68%	28%
<b>Total</b>	<b>\$ 168,672,929</b>	<b>43%</b>	<b>44%</b>	<b>13%</b>

\* Global Fund support to the HTS program area is included in Clinical Care, Treatment and Support program area.  
 ~One UN developed several flagship programs to fund HIV activities implemented from July 2016 to June 2017 with a planned budget of \$1,893,018, which is not captured in this table 2.2.1.

Commodity Category	Total Projected National FY19 Costs	% PEPFAR	% GF	% Host Country <sup>^</sup>	% Other
ARVs	\$21,186,935	55%	45%	0%	0%
Rapid test kits	\$4,384,626	37%	63%	0%	0%
Self-test kits	\$625,957	33%	67%	0%	0%
Recency tests	\$374,400	30%	70%	0%	0%
EID	\$144,004	100%	0%	0%	0%
OIs	\$178,924	85%	15%	0%	0%
Lab reagents	\$4,936,727	21%	79%	0%	0%
Condoms	\$512,862	75%*	25%	0%	0%
Viral Load commodities	\$4,353,163	65%	35%	0%	0%
VMMC kits	\$3,825,316	50%	50%	0%	0%
<b>Total</b>	<b>\$40,522,914</b>	<b>50%</b>	<b>50%</b>	<b>0%</b>	<b>0%</b>

<sup>+</sup> Total projected national costs are taken from the national quantification (revised March 13, 2018). Percentage of PEPFAR contribution is the dollar amount from the FAST as a percentage of the total national quantification dollar amount, not a percentage of national quantity.

\* In COP18/FY19, PEPFAR will provide 24,455,368 unbranded condoms to Rwanda through the central USAID Condom Fund. Using separate COP18 funding, PEPFAR will brand 14,771,368 in its social marketing of condoms program.

<sup>^</sup> Government of Rwanda does not contribute to the budget categories listed; however, it procures general commodities for the HIV program and the latest available total spending on drugs and medical supplies is reported in the 2014-2015 budget execution report at 19.9 billion Rwandan Francs, approximately \$27.5 million at the 2015 exchange rate. ([http://www.minecofin.gov.rw/fileadmin/templates/documents/Budget\\_Unit/Budget\\_Execution\\_Reports/2014-2015\\_Annual\\_Budget\\_Execution\\_Report.pdf](http://www.minecofin.gov.rw/fileadmin/templates/documents/Budget_Unit/Budget_Execution_Reports/2014-2015_Annual_Budget_Execution_Report.pdf))

Funding Source	Total PEPFAR Non-COP Resources	Total Non-PEPFAR Resources	Total Non-COP Co-funding PEPFAR IMs	# Co-Funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
USAID Non-HIV		\$19,500,000	\$1,613,000	6	\$35,007,708	USAID non-PEPFAR resources are focused on MCH, Malaria, Nutrition and Health Promotion, Health Systems Strengthening. When combined with PEPFAR funds, the focus is on improving access to service delivery in Nutrition, Water, MCH, FP activities and commodities availability.
USAID Condom Fund		24,455,368 unbranded condoms			\$377,338	PEPFAR COP funding for socially marketed, branded condoms.
CDC Influenza						Sustaining influenza surveillance networks and

		\$50,000				response to seasonal and pandemic influenza by national health authorities.
<b>Total</b>		<b>\$19,550,000</b>	<b>\$1,613,000</b>	<b>6</b>	<b>\$35,385,046</b>	

Table 2.2.4 Annual PEPFAR Non-COP Resources, Central Initiatives, PPP, HOP						
Funding Source	Total PEPFAR Non-COP Resources	Total Non-PEPFAR Resources	Total Non-COP Co-funding PEPFAR IMs	# Co-Funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
Other PEPFAR Central Initiatives	\$384,647					Value of condom procurement planned using the Central Commodity Fund (non-COP).
Rwanda PHIA			1			Conduct national HIV focused survey that describes the status of HIV epidemic. Results measure important national and provincial HIV related parameters including progress toward 90 90 90 goals. And will guide policy and funding priorities.
HRH Evaluation	\$3,000,000		1			To understand HRH investment through PEPFAR and how they contributed to improving in HIV outcomes.
<b>Total</b>	<b>\$3,384,647</b>		<b>2</b>			

Table 2.2.5 Annual PEPFAR Non-COP Resources, Central Initiatives, PPP, HOP						
Agency	COP17 Total Planned Funding (\$)	COP17 Total Planned Funding to Indigenous Organizations (\$)	COP17 Total Planned Funding Allocated to Indigenous Organizations (%)	COP18 Total Planned Funding (\$)	COP18 Total Planned Funding to Indigenous Organizations (\$)	COP18 Total Planned Funding Allocated to Indigenous Organizations (%)
USAID*	\$13,169,132	\$4,267,185	32%	\$12,710,876	\$3,915,011	31%
CDC	\$36,910,952	\$23,829,825	65%	\$30,993,261	\$21,400,440	69%
DoD	\$3,363,558	\$563,158	17%	\$2,705,234	\$1,469,836	54%
State	\$571,867	\$0	0%	\$476,717	\$0	0%
<b>Total</b>	<b>\$54,015,509</b>	<b>\$28,660,168</b>	<b>53%</b>	<b>\$46,886,088</b>	<b>\$26,785,287</b>	<b>57%</b>

\* The calculation for USAID funding does not include funding for commodities. If commodities figures are included, the percentage of USAID funding in COP17 allocated to indigenous organizations would be 11% (\$4,267,185 out of \$40,065,831, where \$26,896,699 was allocated toward the procurement of commodities). In COP18, if commodities figures are included, the percentage of USAID funding allocated to indigenous organizations would be 10% (\$3,915, 011 out of \$38,138,148, where \$25,427,272 is allocated toward the procurement of commodities).

## 2.3 National Sustainability Profile Update

COP18 planning incorporates the results of the Sustainability Index and Dashboard (SID) 3.0 into the assessment of systems investments to overcome barriers to achieve targets, as well as to assist in defining investment activities, budgets and progressive benchmarks. These systems investments are outlined in Section 6.0 (*see below*). Based on responses to 89 questions, the SID assesses the current state of sustainability of national HIV/AIDS responses across 15 critical elements. Scores for these elements are displayed on a color-coded dashboard, together with contextual charts and information. As the SID is completed over time, it will allow stakeholders to track progress and gaps across these key components of sustainability.

<b>Dark Green Score (8.50-10 points)</b> <b>(sustainable and requires no additional investment at this time)</b>
<b>Light Green Score (7.00-8.49 points)</b> <b>(approaching sustainability and requires little or no investment)</b>
<b>Yellow Score (3.50-6.99 points)</b> <b>(emerging sustainability and needs some investment)</b>
<b>Red Score (&lt;3.50 points)</b> <b>(unsustainable and requires significant investment)</b>

**Rwanda Overview:** Rwanda has made remarkable progress in reaching the UNAIDS Fast Track 95-95-95 Goals following the 1994 genocide. The GOR has demonstrated strong leadership and vision in crafting a national HIV/AIDS strategy and coordinating the response. However, Rwanda still remains highly dependent on donors to fund its HIV response, particularly PEPFAR and GF. Those donor contributions are declining, which poses a significant risk to the long-term sustainability of the national HIV program and to the great successes Rwanda has achieved. The GOR is taking strides to find and treat remaining positives through targeted outreach and testing models focusing on key and priority populations and key geographic areas, to provide immediate treatment for PLHIV under the fully implemented Treat All program, optimize service delivery models and identify ways to absorb the costs of administering the national HIV program, even though Rwanda is a low income country.

**SID Process:** SID 3.0's day-long workshop was co-convened in October 2017 with UNAIDS Rwanda and organized jointly with the GOR and was attended by more than 50 participants from more than 25 organizations working in the national HIV program. Participants included representatives from the MOH, Rwanda Biomedical Center (RBC), UNAIDS, WHO, UNICEF, local civil society organizations and PEPFAR implementing partners. After opening remarks by the U.S. Embassy's Deputy Chief of Mission and the UNAIDS Country Representative for Rwanda, the participants broke into four groups around each of the domains and jointly answered the questions and provided source data and notes for the final SID 3.0. The SID 3.0 was then circulated among participants and further feedback was incorporated into the final SID 3.0.

**Sustainability Strengths:** All SID 3.0 domains were identified as sustainable, approaching, or emerging sustainability with notable strength in the domain “Governance, Leadership and Accountability.”

- i. **Public Access to Information (9.0, dark green):** This score reduced from 10.00 to 9.00 from SID 2.0 to SID 3.0 due to the finer disaggregation of the time periods for dissemination, although this is still considered a sustainable strength. The GOR widely disseminates timely and reliable information on the implementation of HIV/AIDS policies and programs, including goals, progress and challenges toward achieving HIV/AIDS targets, as well as fiscal information (public revenues, budgets, expenditures, etc.) related to HIV/AIDS. Information is readily available on GOR websites.
- ii. **Quality Management (8.05, light green):** Because quality improvement (QI) and quality management (QM) is integrated in the national health budget and significant improvements in QI/QM has occurred since SID 2.0, SID 3.0 shows a much stronger quality management system in Rwanda.
- iii. **Financial/Expenditure Data (9.17, dark green):** Significant improvements in this element resulted from the implementation of the Health Resources Tracking Tool (HRTT) in Rwanda. During SID 2.0, data had been collected for HRTT but had not yet been reported.

#### **Sustainability Vulnerabilities:**

- iv. **Domestic Resource Mobilization (8.25, light green):** Due to the revisions made to SID 2.0, this element appears to have “improved.” However, it remains a significant vulnerability to the sustainability of Rwanda’s HIV response. There is limited domestic budget to fund the HIV program, and donor funding, including from PEPFAR, is reducing. Both PEPFAR and GF have invested substantially in Rwanda’s HIV response and both funding sources are reducing at a significant rate. Nearly 50% of PEPFAR funding and all GF support are delivered through the government, which demonstrates the high capacity of the GOR’s systems. However, the low level of domestic resources continues to pose a challenge to the long-term sustainability of the national HIV response when donor funding is reduced.

#### **2.4 Alignment of PEPFAR Investments Geographically to Disease Burden**

HIV care is widely available across Rwanda, predominantly delivered through the public system network of district hospitals and health centers. In FY17, 51% of ART patients received treatment in PEPFAR-supported facilities, with the proportion of facilities and patients on ART, as well as HIV services supported by PEPFAR, varying widely by district and province. In addition to direct clinical support, PEPFAR funds other programs, such as Orphans and Vulnerable Children (OVC) as well as key and priority population prevention services that do not correlate with the proportion of funded clinical support. PEPFAR expenditures may not reflect overall spending per PLHIV in the province because higher proportional expenditures can be due to PEPFAR supporting the majority of facilities or patients in the province, and lower expenditure per PLHIV may indicate that few or no facilities are supported by PEPFAR. Therefore, examination of PEPFAR expenditures alone does not account for the full picture of support for PLHIV in Rwanda.

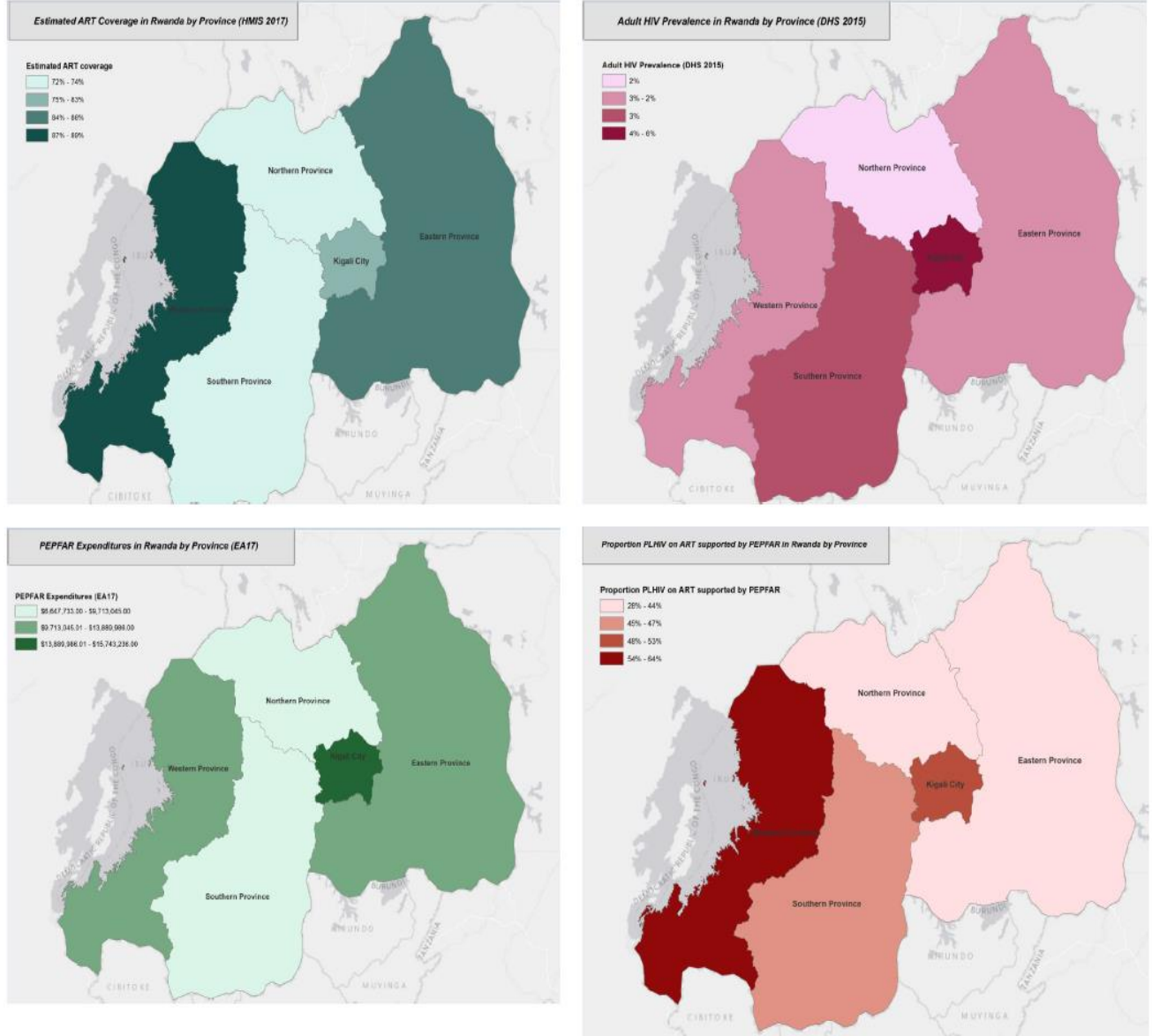
Adult HIV prevalence is highest (6.3%) in the province of Kigali, where estimated ART coverage is 83%, and where 21.8% of PEPFAR resources were spent in FY17. When comparing FY17 PEPFAR expenditures by province (Figure 2.4.1), PEPFAR expenditures align closely with the proportion of PLHIV on ART supported by PEPFAR. For estimated ART coverage, the Western province is an outlier, which may be due to cross-border movements. The weighting of the UNAIDS EPP Spectrum estimates to distribute them to the provinces involves both the population estimates and prevalence for the province. In particular the population estimates will not have taken into account recent migration and, therefore, may over or underestimate the number of PLHIV in the province, depending on the direction of the migration. COP18 concentrates additional resources in the province of Kigali to address its 6.3% prevalence and to fund the intensive index/family testing and scale-up of prevention activities among key and priority populations.

**Data for Figure 2.4.1, below**

Province	Adult HIV Prevalence (DHS 2015)	Estimates PLHIV (Spectrum 2018)	National PLHIV on ART (HMIS 2017)	Estimated ART coverage	Proportion PLHIV on ART supported by PEPFAR	PEPFAR Expenditures (EA17)	% Spend (EA17)
<b>ABOVE NATIONAL</b>	--	--	--	--		<b>\$ 3,106,284</b>	<b>4.3%</b>
<b>NATIONAL</b>	<b>3.0%</b>	<b>224,663</b>	<b>183,507</b>	<b>82%</b>	<b>51%</b>	<b>\$ 9,493,748</b>	<b>13.2%</b>
Kigali	6.3%	56,777	47,400	83%	53%	\$ 15,743,236	21.8%
Eastern	2.4%	44,514	38,359	86%	44%	\$ 9,871,337	13.7%
Southern	2.6%	50,235	37,252	74%	47%	\$ 9,713,045	13.5%
Western	2.4%	44,310	39,621	89%	64%	\$ 13,889,986	19.3%
Northern	2.3%	28,827	20,875	72%	28%	\$ 6,647,733	9.2%
Military					100%	\$ 3,602,371	5.0%



Figure 2.4.1



## 2.5 Stakeholder Engagement

COP18 was jointly developed, including data/epidemiology analysis and target/budget discussion, with the GOR/MOH from the technical working group (TWG) level to the senior leadership level within MOH (including the Minister, Minister of State and PS).

Civil society, private sector, PEPFAR Implementing Partners (IPs) and other stakeholders provided input for the COP18 working groups through participation in a strategic planning retreat held at the U.S. Embassy in Kigali in January 2018. These stakeholders joined the PEPFAR team on January 31 to discuss the priorities of COP18 from the TWGs, review PEPFAR Oversight Accountability and Response Team (POART) data and offer feedback. The meeting engaged numerous community partners and their constituencies, including UNAIDS, civil society organization (CSO) umbrella groups working in HIV and the GF Country Coordinating Mechanism (CCM) Secretariat. CSO umbrella groups, UNAIDS, PEPFAR and the GF CCM Secretariat meet regularly to discuss the HIV response at all phases: implementation, planning and reporting. Stakeholders were also invited to take part in the COP18 RPM, held at the U.S. Embassy in Rwanda from February 27 through March 3, and will continue to be engaged through the COP18 planning and implementation process, including having an opportunity to comment on the SDS for COP18.

Joint COP18 development, adaptation and analysis of planning tools, emphasis on epidemic control and the required increased efficiencies in resource deployment will help engage stakeholders in the POART quarterly review process. Given the anticipated decline in donor funding, strengthening Rwanda's HIV program's sustainability plan remains critical.

## 3.0 Geographic and Population Prioritization

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PEPFAR and the GOR are focused on reaching and surpassing the UNAIDS 95-95-95 targets with sights on attaining 95-95-95 and epidemic control in Rwanda. According to current UNAIDS Spectrum models and estimates, Rwanda has not yet met the first 90, but has met the second and third, with 88% of all PLHIV identified, 93% of those identified on treatment, and 91% of those on treatment virally suppressed. Epidemiological estimations and program performance data suggest that with more focused planning and resource allocation, reaching these goals in all provinces for all age and sex groups is possible. With gains from a strong HIV program, but in the context of declining donor resources and a potentially increasing number of PLHIV, Rwanda is in a position where prompt and focused action is needed to break the epidemic cycle, which is critical and achievable.

The PEPFAR and MOH planning teams jointly set geographic priority areas during COP15 development, which remained in effect for COP16. Unmet need for ART was the most important determinant of prioritization and resource allocation because Rwanda's shift to achieve epidemic control relies heavily on ART saturation. Districts are relatively small geographically, with an average of 844 square kilometers and a range of 134-1,937 square kilometers, having an average population of 350,532. Given the small size and inter-district movement of people within Rwanda, as the country moved toward saturation, many districts showed ART coverage greater than 100%. Additionally the DHS prevalence estimates are powered only to the provincial level, and no accurate district prevalence figures are available. Given the limitations with the accuracy of the estimations, the district coverage greater than 100%, the small geographic areas and the mobility of the population, the sub-national unit (SNU) of prioritization for Rwanda was changed to the provincial (between national and district) level in COP17. This change allows a more accurate regional assessment of where additional resources are needed to ensure that all PLHIV know their HIV status and have access to ART, as well as the flexibility to target hotspots, facilities or other sub-SNU regions where improvements are needed. COP18 continues with the provincial level as the SNU of prioritization, with programming targeting specific populations based on their presence and risk for HIV. All provinces are designated scale-up to saturation.

Provincial ART coverage at the end of FY17 was 83% for Kigali, 86% for Eastern, 74% for Southern, 89% for Western and 72% for Northern. FY18 targets have adult ART coverage above 80% in all provinces for the total population, and FY18 targets are for ART saturation in all provincial sex and adult age bands except for males over age 25 in the Northern province and females over age 25 in the Southern province. Pediatric PLHIV estimations have varied greatly from year to year in the Spectrum models, and current pediatric ART coverage is estimated at 80% according to the most recent Spectrum estimates, and targeted to reach 81%, with only the Eastern province targeted at higher than 80% coverage.

While the level of prioritization is the province, targets are set at the site and sector levels. Provincial treatment targets were set based on estimated ART coverage and program data. Targets and strategies will be further refined based on newly available data, including preliminary PHIA results. In particular for key and priority populations, planning began at sector-level hotspots and at-risk communities, based on the location and need of the identified populations. Size estimations for some KPs are available at the sector level in areas with hotspots, and these

data were used to inform prioritization decisions for targets, resources and service-delivery package planning.

Given the strength of Rwanda’s screening program for HIV through couples testing for marriage and pregnancy,<sup>17</sup> COP18 focuses on strategies that would reach PLHIV with unknown status who were less likely to be or have been reached through antenatal care (ANC) or marriage testing. These strategies include approaches for reaching and testing KPs (FSW and MSM) and priority populations (PPs), FSW clients, STI symptomatic individuals, out-of-school youth and adolescent girls and young women (AGYW).<sup>18</sup> Targeted provider initiated testing and counseling (PITC) and VCT and will be implemented in all health facilities. Index, recency and family testing will be offered to all newly identified positives in all PEPFAR-supported health facilities. In addition, medical records for all PLHIV enrolled in PEPFAR-supported facilities will be reviewed, and index/family testing will be offered to those whose records do not indicate this has been done previously.

Due to the near universal ANC HIV testing coverage during pregnancy, there are opportunities to use this data in Rwanda to better understand unmet need for HIV services more broadly. Analysis of ART coverage by age and sex was used to determine where the gaps were greatest. Through this analysis, in combination with the current understanding of modes of transmission in Rwanda, the city of Kigali was identified as a focus area due to its much higher HIV prevalence and its young and growing population, due largely to the fact that Rwanda is one of the fastest urbanizing countries in the world.<sup>19</sup> Allocation of resources to maximally identify and treat PLHIV in Kigali will effectively interrupt transmission at an accelerated pace and is critical to epidemic control in Rwanda and achieving an AIDS-free generation. Additionally, HIV testing data from the national ANC program was used to identify where there may be gaps in case identification. Observation over time of ANC data shows a decline in the number of pregnancies, HIV positive pregnant women, and in the number of new HIV cases diagnosed during pregnancy. ANC data show a small proportion of pregnancies occurring in younger women, with women under the age of 20 representing only 5% of women attending PEPFAR-supported ANC clinics in FY17. The proportion of women newly diagnosed at ANC is similar to other countries approaching epidemic control (see Appendix F). PEPFAR began reporting PMTCT age disaggregations in FY17 so trends in age and positivity are not yet available, but these will be closely monitored moving forward to better understand epidemic dynamics, identify shifting risk behaviors, and target program interventions effectively.

**Table 3.1 Current Status of ART Saturation**

<sup>17</sup> Rwanda DHS 2015

<sup>18</sup> A 2010 census of Persons with Disabilities (PWD) in Rwanda found 522,856 PWDs (263,928 female and 258,928 male). A 2014 study in Rwanda (“Prevalence of HIV among People with Physical Disabilities in Rwanda,” <https://www.ncbi.nlm.nih.gov/pubmed/26867257>) found that HIV prevalence among PWDs to be 5.73%. The national HIV response works to include PWDs in prevention programming and in the quality of services provided to PWDs.

<sup>19</sup> ‘2014 Revision of World Urbanization Prospects’ United Nations, Department of Economic and Social Affairs, Population Division.

<b>Prioritization Area</b>	<b>Total PLHIV/% of all PLHIV for COP18</b>	<b># Current on ART (FY17)</b>	<b># of SNU COP17 (FY18)</b>	<b># of SNU COP18 (FY19)</b>
Attained	--	--	--	--
Scale-up Saturation	100%	183,507	5	5
Scale-up Aggressive	--	--	--	--
Sustained	--	--	--	--
Central Support	--	--	--	--

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

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### 4.1 Finding the Missing PLHIV, Getting PLHIV on Treatment and Retaining PLHIV

#### 4.1.a Finding the Missing PLHIV

Rwanda's most significant challenge in reaching HIV epidemic control remains identifying new HIV positive individuals. Overall, the testing gap for the first 95 reaches across genders, ages, groups and SNUs. As a result, Rwanda will focus on strategies that increase numbers of PLHIV diagnosed within the general population while increasing testing yields through focused facility testing (VCT and PITC) and community testing (mobile and community outreach), coupled with targeted KP and PP testing. Simultaneously, Rwanda will continue to reduce unnecessary testing in PITC, VCT and VMMC. PEPFAR supports MOH integration all HIV testing, counseling and treatment services, as well as clinical mentorship, to Ndera Hospital, the psychiatric referral hospital and Districts Hospitals for patients with mental health disabilities. In addition, PEPFAR will support the increase of equitable access to HIV/AIDS testing service for PWDs through training of health care providers on PWD-friendly services and the availability of HIV self-testing kits.

In COP18, PEPFAR will identify 16,804 new HIV positive individuals, including 434 children. This represents a testing yield of 1.5%. Following implementation of methods improving targeted testing, FY18 Q1 PEPFAR HTS\_POS increased by 24% over FY17 Q4, with an increase in testing yield from 0.77% to 0.98%. The majority of increases occurred within "Facility Index," "Facility Inpatient," "Facility Other" (including outpatient department (OPD) and male partners of women tested through ANC), "Facility VCT" and "Community Mobile" modalities. The COP18 enhanced general population testing strategy builds on FY18 Q1 results and includes four components: 1) nationally scaled and efficient implementation of index partner notification and family testing for both newly identified HIV positive individuals and patients already enrolled in the care and treatment program, 2) scaled targeted VCT and PITC, 3) expanded high-yield community testing and 4) reduced unnecessary facility-based testing. Group-specific testing strategies include testing for AGYW, OVC, children, adult females, adult males and key populations.

FY18 Q2 HTS\_POS and TX\_NEW data will be reported disaggregated by gender and five-year age bands and will allow a more detailed analysis of the characteristics of both newly diagnosed and those new on treatment. Recency testing will be rolled out in phase 1 for all newly identified HIV positive clients across 23 PEPFAR-supported sites in Kigali in COP17 starting in May 2018 (see Section 6) and continue to all PEPFAR supported sites in COP18/FY19. Recency testing will measure frequency of new infections and provide information on how to focus testing strategies by identifying transmission networks. With the implementation of CBS in COP17, clinical, demographic and risk behavior indicators will be collected for all individuals tested for HIV. This data collected through CBS with an integrated N-UPID, coupled with recency test results, will define newly infected individuals, allow for analysis of demographic, clinical and behavioral correlates of recent infections, define social networks associated with transmission of virus and estimate rates of infection. In addition, CBS will provide central and site-level support to active case identification and improve the ability to monitor linkage to treatment. RPHIA preliminary

results are expected for Kigali by February 2019 and nationally by May 2019. These results will be used immediately to inform and strengthen testing strategies across gender, age, geography and sub-populations.

In COP18, building on achievements in the implementation of Rapid Testing Continuous Quality Improvement (RTCQI), laboratory activities will focus on the implementation of strategies that ensure prompt and accurate identification of PLHIV who come to test at various HIV testing entry points. To date 100% of PEPFAR-supported HIV testing and counseling (HTS) have their HTS health care workers trained on RTCQI; 77% of whom received PT panels in the last three rounds and passed at 98% achievement. An auditing and certification program will be instituted to reinforce these achievements.

#### *4.1.a.i Enhanced Index Testing*

Index testing was rolled out nationally in July 2017; however, while all facilities received national guidelines and reporting tools on implementation of index testing, 23 Phase I high volume sites in Kigali received intensive joint CDC/MOH monthly site-level monitoring, mentoring and data review for four months. Two monthly meetings were held, bringing health care providers (HCPs) and facility managers together to review outcomes and discuss challenges and successes. In FY17, 360 new positives were found through index testing (partner and family), which increased slightly to 142 in FY18 Q1, reported from all PEPFAR-supported sites, with a testing yield of 2.3%. However testing yields in the top ten of the 23 Phase I sites in Kigali receiving intensive monthly site-level mentorship had an average yield of 19% when reported separately for the pilot. In COP18, PEPFAR will find 3,646 new positives through index testing, or 911 per quarter, representing 22% of total HTS\_POS targets, with an adult testing yield of 20% and a quarterly linkage rate of at least 90%. New on treatment quarterly goals overall are 3,550 on average.

Rwanda initiated couples testing for partners of pregnant women through prevention of mother to child transmission (PMTCT) and pre-nuptial couples in 2012. In FY17, 85% of male partners of pregnant women were tested, although test results were reported for females through PMTCT and males through "PITC Other." By FY18 Q3, PEPFAR Rwanda will work with interagency subject matter experts (ISMEs) to report couples' testing results regardless of testing modality (PMTCT, VCT, PITC).

Analysis of index testing results from the Phase I top ten/bottom ten performing sites identified challenges and best practices for improving index testing performance. Major challenges to meeting index testing targets included low patient/partner ratios, low percentage of partners notified, high number of HIV positive partners already knowing their status, low numbers of new positives identified, low yields and the lack of a referral system of index case partners resulting in underreporting of index test results across testing modalities. In addition, analysis of the source of index cases among top ten/bottom ten identified a 2.3 fold higher testing yield among new HIV positive index cases compared to index cases currently on treatment. Overall, low patient acceptance or willingness to engage in index testing was observed across all sites. Two monthly workshops with HCPs and site managers were carried out to review monthly data and identify challenges and best practices. Stronger patient engagement and greater rates of partner disclosure resulted when a high degree of trust existed between patients and HCPs and when partner notification counseling was included in the HIV pre-counseling of clients. In addition,

HCPs requested clearer guidance and stronger work aids to standardize and facilitate implementation.

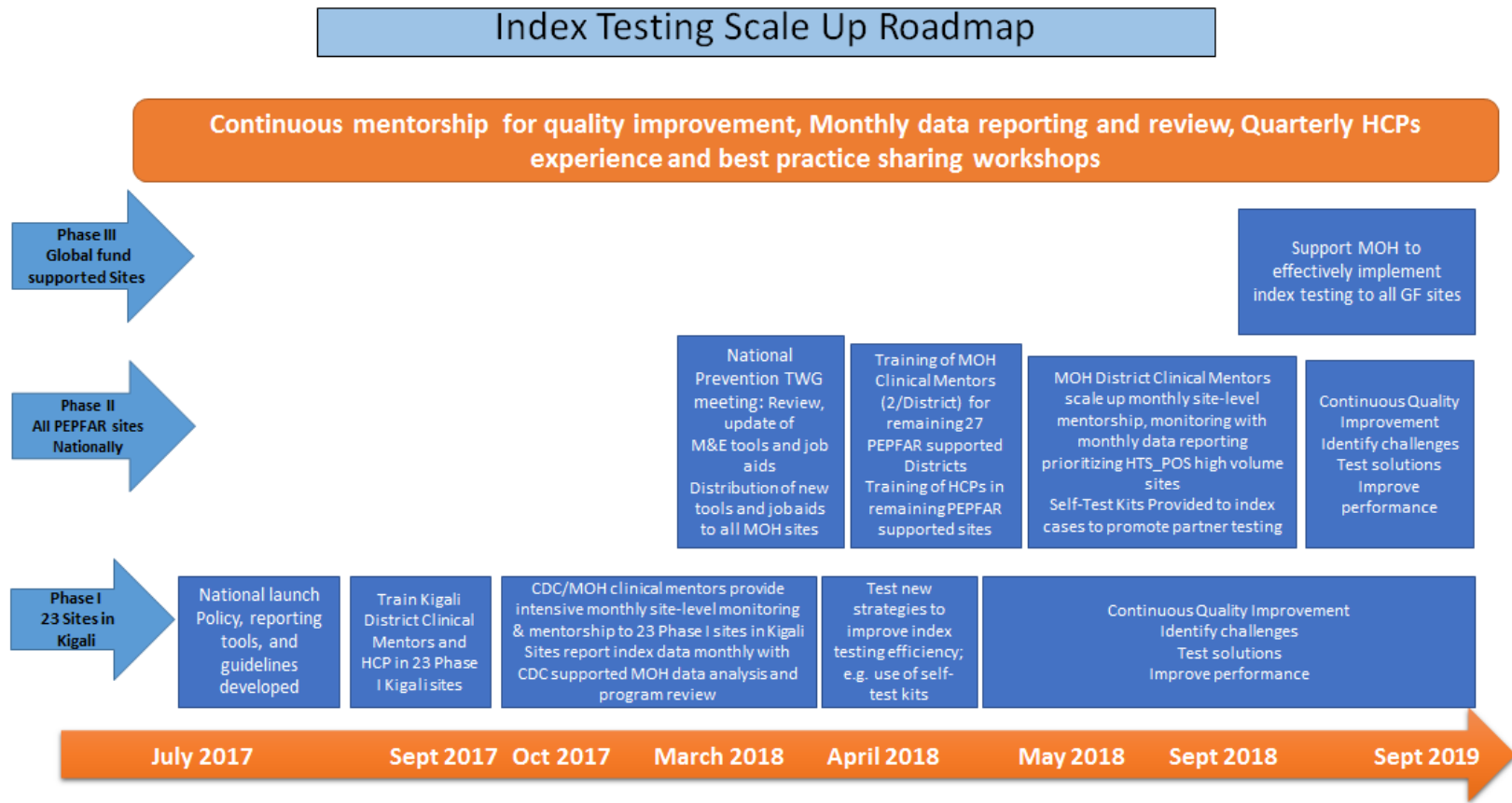
COP18 index testing strategies will include scale up of monthly MOH site-level mentorship beyond the Phase I sites to all PEPFAR supported sites, with an initial focus on facilities with high HTS\_POS and in high prevalence areas (*see figure 4.1.a.i, below*). This will also include distribution of improved reporting tools, guidelines and job aids and review and frequent workshops with HCPs involved in index testing to further identify challenges and best practices. To ensure that partners are achieving their quarterly targets, PEPFAR will continue to enhance partner performance management through continued monthly data reporting to inform the program and adjust strategies.

A strong referral system for index partners seeing HIV testing will be developed to allow sites to accurately report index test results. The following will be tested to improve partner notification: 1) adding joint partner counseling to the list of partner notification options, 2) changing third party partner notification to focus on health promotion, 3) initiating counseling on sexual partner disclosure during pre-test counselling, 4) offering self-test kits to clients not willing to disclose partner contacts, 5) allowing flexible testing (e.g., during weekends, after working hours and outreach/home-testing) and 6) using peer education programs to sensitize ART clients on the benefits of disclosure and testing of partners. Additional strategies will be explored with MOH, such as 1) finding methods of anonymous posting of partner contacts (e.g., facility drop box and website posting), 2) changing third party partner notification to focus on STI testing instead of HIV testing and 3) offering clients tickets to give to partners inviting recipients to come in for STI testing, which would include but not stipulate HIV testing. It is also expected that recency test results indicating a new infection will increase client participation and improve partner notification rates. Public communication around partner notification engaging community and religious leaders will help achieve a shift around cultural norms to increase acceptability of partner notification. These initiatives will be rolled out first in the 23 Phase I PEPFAR sites in Kigali, in FY18 Q3, with intensive site level support and monthly data reporting.

Family testing of HIV positive mothers has been implemented in Rwanda since 2012. Effective index family testing in accordance with existing MOH/PEPFAR guidelines will be monitored to ensure testing of all children up to 15 years of all HIV positive mothers or HIV positive fathers when the mother is not present.



Figure 4.1.a.i



#### *4.1.a.ii Self-Testing*

In COP18, self-testing will be used to reach individuals and groups who do not come in to clinics and are not widely reached through community testing initiatives. This service is also expected to reach persons who have physical barriers in reaching a facility, such as PWDs. Ninety thousand self-test kits will be distributed through PLHIV who do not want to engage in index testing, or to disclose partner contacts or whose partners do not want to come to health care facilities. Self-tests will also be distributed through community testing in hotspots targeting high risk individuals, such as FSWs, MSM and clients of sex workers who may not be willing to test. In addition to the distribution of PEPFAR funded self-test kits, MOH plans to develop public-private partnerships (PPPs) with private pharmacies for distribution of additional self-test kits. MOH is developing guidelines on reporting indicators for partners to enable follow up and evaluation of the cost efficacy of both approaches. The laboratory will perform lot-to-lot validation and post market surveillance to ensure the quality of the self-test kits.

#### *4.1.a.iii Increased Targeted Facility and Community Testing*

While MOH tests STI and tuberculosis (TB) positive individuals for HIV, Phase I PEPFAR results indicate that community radio outreach to STI symptomatic individuals to seek facility-based HIV testing and routine screening of all clients entering OPD for STI symptoms significantly increases HIV identification with testing yields greater than 1%. Community-based testing in high prevalence areas around FSW hotspots using moonlight testing resulted in the identification of a significant number of non-KP PLHIV with high HIV testing yields in FY18 Q1. National data indicating an HIV prevalence of 9-11% among TB presumptive clients supports enhanced targeted testing of this group. DHS 2015 and RAIHIS 2015 both document multiple sexual partners as one of the greatest correlates of HIV prevalence in the general population. These results indicate screening for these risk factors should increase case identification and test yields.

In COP18, PEPFAR will continue supporting targeted PITC testing according to national HTS guidelines. PITC is offered in public and private facilities, in both outpatient and inpatient departments. PITC is recommended in the following groups: adults, adolescents or children who present in clinical settings with signs and symptoms or medical conditions that could indicate HIV infection, including TB, STI, hepatitis malnutrition; and HIV-exposed infants. In addition, MOH, with PEPFAR support, will strengthen targeted PITC by nationally scaling up routine screening of all patients through all entry points in all facilities for the following high risk indicators for facility-based HIV testing: a) presumptive TB based on the national guidelines, b) STI symptoms in the last 12 months with no HIV test in the last 6 months, c) unprotected sex with multiple sexual partners in the last 12 months with no HIV test in the last 6 months and d) unprotected sex with an HIV positive partner with no HIV test in the last 6 months.

To boost routine screening effectiveness, community outreach will be used to sensitize people to seek facility testing if they are positive for any of the four high risk indicators used in routine screening. PEPFAR funded FY17 and FY18 outreach activities using community based radio messaging was shown to be an effective method to bring STI symptomatic individuals into clinics for testing. MOH has historically used both broad population-based SMS texting and Umuganda<sup>20</sup> in support of immunization campaigns, HIV testing campaigns and the recent FY 17,

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<sup>20</sup> Umuganda is Rwanda's national monthly Saturday community service and meeting

PEPFAR funded VMMC campaign. In addition, community testing methods, such as moonlight testing, which identifies large numbers of HIV positive males and females who do not self-identify as FSWs or MSM, will be scaled up nationally in hotspot areas. Demographic and behavioral data will be collected for clients tested through moonlight testing to characterize non-KP high risk groups identified through this method. Health facilities will increase access to VCT testing services by assuring VCT services are available to clients 40 hours per week. In addition, flexible VCT after-hours will be coupled with community outreach initiatives in high prevalence areas to bring in high risk individuals who may not be able to access services during work hours.

#### *4.1.a.iv AGYW and OVC*

In addition to index testing, high risk AGYW will be tested through referral of all AGYW Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe (DREAMS) beneficiaries (28,000) by linking them to one of three testing partners. DREAMS partners will ensure that all enrolled AGYW are screened for HIV through the use of the HIV risk assessment tool. After mentors have established trust with beneficiaries and provided HIV prevention messaging, DREAMS beneficiaries will be referred for HIV testing at facilities or other partner sites. There will also be an option of referral for testing and community volunteers will ensure those cases are accompanied to the health facilities or HIV testing sites. HIV testing began in COP17 and beneficiaries will be re-tested every six months to track seroconversion among beneficiaries. Thus, the first HIV results recorded during COP 17 will serve as a starting point to measure HIV seroconversions in this cohort for COP18. While the goal is to maximize reach and have all AGYW retested after six months, this will be conducted on a voluntary, opt-in basis to avoid doing harm to the beneficiaries. Preference is given to direct linkage to MOH testing facilities in the appropriate health catchment area with DREAMS partners' use of referral and counter referral registers to confirm testing and linkage of HIV positives to treatment. High risk AGYWs will be reached through moonlight testing in hotspots and FSW testing programs. OVCs at high risk for HIV, identified using an HIV risk screening tool, will be referred to testing partners for HIV testing and follow up. Results from clinical, demographic and behavioral analysis of HIV positive AGYW completed in FY18 will be used to strengthen and optimize AGYW testing strategies. To ensure effective testing and linkage to care, the AGYW and OVC cascade of care will be monitored and reported quarterly.

#### *4.1.a.v Adult Males*

In addition to index testing, adult males will continue to be tested through PITC, VCT, VMMC services, and couples will be testing through ANC and the MOH pre-nuptial couples testing program. VCT after-hours testing will be piloted in the 23 Phase I sites in Kigali, coupled with outreach to high risk individuals to measure the efficacy of case identification rates and testing yields among adult males and females. If successful, this will be scaled up in high prevalence areas. Male- and female-only testing hours are in a subset of facilities to determine the impact on case identification among adult males. Testing of clients of FSWs through established methods of identification by retired and active sex workers will be expanded. Additional methods, such as moonlight testing and STI linked HIV testing, which identify HIV positive males, will be scaled nationally in FSW hotspots.

#### *4.1.a.vi Adult Females*

In addition to index testing, adult females will continue to be tested through the ANC program with positivity rates and rates of recent infections reviewed to identify possible increases in infection rates among young women. Women are also tested through the MOH prenatal couples testing program, as well as VCT and PITC. Initiatives such as moonlight testing in hotspots, community outreach, and routine screening for high risk indicators will reach women of all ages. After-hours testing will assist women unable to reach services during working hours. In addition, adult FSWs will be identified through KP testing strategies.

#### *4.1.a.vii Children*

Improved early infant diagnosis (EID) turn-around time from greater than 60 days to less than 14 days coupled with the introduction of point of care testing and testing through PMTCT services, as well as improved index family testing, will increase HIV testing coverage for children. In addition, children will be reached through DREAMS and OVC linked testing services. High-risk youth will be identified through DREAMS and KP testing strategies. VMMC testing will reach sexually active young males ages 10-15. The potential for improving access to HIV testing services for “street children” with reportedly higher HIV, STI and TB prevalence, 8%, 7% and 9%, respectively, will be explored with MOH and the National Commission for Children (NCC).

#### *4.1.a.viii Key Populations*

In COP18, KPs include FSWs and MSM. In FY17, in PEPFAR 7,934 FSWs and 249 MSM were reached and 279 HIV positive FSWs were identified. In FY18 Q1, KP testing partners were at 15% of the annual target for HTS\_POS. Based on the 2012 FSW size estimate, there are an estimated 12,978 FSWs in Rwanda in 1,843 hotspots in 1,146 sites across all 30 districts in Rwanda. A 2018 PEPFAR funded FSW size estimate will be completed by September 2018, alongside a GF funded FSW IBBS expected to be complete by December 2018. Results from both studies will update results from the 2012 size estimate and the 2015 FSW IBBS and be used to inform FSW program strategies. The first Rwanda MSM size estimate (funded by PEPFAR), coupled with a new MSM IBBS (funded by GF) will be carried out in FY18, with results expected in September 2018 to update the 2015 MSM IBBS results. Results from these studies will have a major impact on the national testing strategies for FSW across the country. In FY17, GF- and PEPFAR-funded KP testing partners mapped out services across hotspots to ensure all hotspots with greater than 50 FSW (according to the last FSW size estimate of 2012) are covered without overlap between partners. The MOH National TWG issued instructions to all implementing mechanisms (IMs) working with FSWs to apply a 3 digit and 5 letters unique patient identifier code and a standardized reporting tool for all FSW testing programs across Rwanda. In addition, all partners that implement FSW programs are requested to follow up with all FWS identified who tested negative or positive, using the nationally approved KP booklet, to provide a complete package of prevention services and testing every 12 months, or sooner if there is a high risk exposure.

In COP18, the PEPFAR team will work crossly with MOH and other stakeholders to establish a national KP Strategy and KP database. This will be informed by results from 2018 size estimates and behavioral surveys for both FSWs and MSM. The KP strategy will provide a framework for MOH to align all partners to a national strategic plan, avoid duplication of services geographically, and standardize a minimum package of services and reporting tools. The national KP database will optimize strategic planning for MOH and all partners. In COP18, FSWs will continue to be reached in all districts of Rwanda with PEPFAR supporting 18 districts and the

Global Fund supporting the remaining 12 districts through scaled-up testing methodologies with proven results. These include health care facility referrals, active peer educator referrals, retired and active FSW referrals and moonlight testing in hotspots with greater than 50 FSW. Through PEPFAR support, 16,200 FSW will be reached and be provided with prevention services including testing, peer education, linkage to care and treatment as well as condom promotion and distribution and STI screening and treatment. Furthermore, high risk HIV negative FSW in Kigali will be provided with PrEP services. In addition, effort will be made to reach additional FSW, such as “VIP” FSWs (those working with more affluent clients) and high-risk AGYW. In FY17, 249 MSM were reached and a low number of new MSM HIV positives were identified. Incidental information indicates there may be a significant population of older MSM who are difficult to reach who may be married and do not self-identify as MSM. In FY18, efforts are being made to reach this group through MSM networks and associations, in addition to partner notification. It is expected that results from the 2018 MSM size estimate and IBSS will significantly inform new strategies to more effectively reach MSM in Rwanda. In addition, effort will be made to reach additional KPs, such as “VIP” FSWs (those working with more affluent clients), older MSM and male sex workers.

#### *4.1.a.ix Decreasing Unnecessary Testing in VCT, PITC and VMMC*

Current MOH guidelines for targeted PITC are in alignment with PEPFAR guidelines with high risk individuals tested every 12 months or more frequently if exposed to HIV. PEPFAR Rwanda supports re-testing HIV negative KPs (FSW and MSM) every 6 months. Patients in OPD or inpatient should be tested for HIV if they are TB presumptive or TB positive, are STI positive, present with symptoms of malnutrition or exhibit clinical symptoms indicative of AIDS. Likewise, MOH index family testing guidelines recommend HIV testing of children up to 15 years old if the mother is HIV positive or if the father is HIV positive and the mother is absent. Compliance with these guidelines will be monitored through site-level mentorship visits. In addition, site-level analysis of the basis for HIV testing through PITC will be carried out in a subset of sites with a high proportion of HIV tests through PITC. Finally, MOH will advise providers at VMMC sites to counsel and recommend HIV testing only for sexually active males to reduce unnecessary testing among 10-15 years old.

#### **4.1.b Getting PLHIV on Treatment**

By the end of FY17, Rwanda had 183,507 PLHIV on anti-retroviral therapy (ART), an increase from the 175,398 on ART the previous year. At the end of FY17, ART coverage for all estimated PLHIV nationally was 81%. In FY18 Q1, PEPFAR saw an increase in TX\_NEW (TX\_NEW DSD and TX\_NEW TA) by 10%, as a result of increases in HTS\_POS. Monthly detailed site-level HTS\_POS to TX\_NEW linkage data documents high levels of transfer of patients between PEPFAR and GF supported MOH facilities and an average of 2.2% lost to follow up with an average of 70% return to treatment. In spite of the increase in TX\_NEW in FY18 Q1, PEPFAR achieved 57% of the FY18 Q1 target with the largest gaps for males and females in Kigali. Given the reported high linkage rate of more than 95% in FY17 and FY18 Q1, this under-achievement is largely driven by challenges in finding positives, as opposed to loss to follow up between testing positive and linkage to treatment for the general population. Age, gender and geographic analysis of ART coverage based on EPP Spectrum estimates of PLHIV was done to identify gaps in coverage for children, adolescents and young adults ages 15-24 across provinces. In addition, analysis of cascades of care

for KPs indicates that both FSWs and MSM have lower linkage to care than the general population.

In COP18, PEPFAR is targeting to start 3,690 new HIV positive clients on treatment per quarter with 121,209 adults and 5,412 children on treatment by the end of FY19. The target for this indicator is based on previous achievement trends, EPP Spectrum estimates of PLHIV and unmet need for ART at the provincial level. PEPFAR will continue supporting Treat All and implementation of the differentiated HIV service delivery model (DSDM). In addition, MOH will complete policy and guideline changes to support transition of all patients from tenofovir/lamivudine/efavirenz (TLE) to TLD.

MOH guidelines recommend same day enrollment of new HIV positives and access to same day treatment. Ensuring linkage to treatment of every newly identified HIV positive case from different entry points is an important step toward attaining the second 95 with the ultimate goal of reaching epidemic control. Recognizing this importance, PEPFAR supports GOR strategies that improve linkage to treatment and ART coverage, including site-level monitoring to ensure effective implementation of same-day treatment to all newly identified HIV positives, including PWDs, through clinical mentorship of health care providers. In addition, PEPFAR will strongly advocate with MOH using evidence-based logic for a plan to implement the use of same-day ARV starter packs, especially for key populations. Site-level monitoring will strengthen the use of linkage registers to follow up with patients who do not initiate ART within the recommended seven-day period, including the use of phone calls and home visits, coupled with KP, age and gender-specific peer educator support groups. PEPFAR will also ensure that facilities have child and adolescent friendly services to promote knowledge of HIV and same day initiation with flexible hours for ART initiation. Linkage referral and counter referral systems will be strengthened to ensure children, OVC, FSW and MSM link to ART services. KP networks and KP associations will be used to help MSM and FSW effectively link to treatment.

FY 18 Q1 data indicated relatively low linkage (73%) among FSWs across the PEPFAR-supported KP program. In COP18, PEPFAR will mentor prevention IPs to improve linkage to treatment for KPs tested in the community using following approaches: enhancing the linkage between community and nearby health facility by assigning a counselor who will act as client navigator to ensure same day enrollment and ART initiation and ensure active follow-up of KPs identified in community and not enrolled the same day. The counselor will serve as the liaison between the health facility and the community and collaborate with ART nurses to ensure same day ART initiation. In this regard, KPs will also benefit from support structures at the facility level, including home visits and flexible schedules that meet their needs. At the community level, newly HIV positive KPs will be linked to the existing KP peer support group for easy follow up, tracking and linkage to facility for ART initiation.

#### **4.1.c Retaining PLHIV**

PEPFAR has maintained strong retention for PLHIV 15 years and older for the last three fiscal years with an average of 94% in females and 93% in males. In addition, retention in under 15 year old PLHIV increased stepwise from 90% - 92% - 95% from FY15-FY17. Likewise, retention improved in pregnant women increasing from 86% in FY16 to 90% in FY17. Overall, PEPFAR retention levels have been maintained at rates greater than the national average of 92.6%. Site-level analysis of total retention among PEPFAR-supported sites indicates that 91% of sites had

treatment retention rates at or above 90% in FY17, with 17 PEPFAR-supported sites below 90% retention.

Further analyses of PEPFAR FY17 retention data using gender and age disaggregation across provinces indicate that men 20-24 years old had significantly lower retention rates than other age groups across all provinces. Site-level analysis for retention among males 20-24 years old identified 16 sites with retention below 90%.

Analysis of PEPFAR site-level data of the total number of patients on treatment (TX\_CURR) at the end of FY18 Q1, taking into account numbers of patients transferring in and transferring out, lost to follow up and restarting treatment, indicated TX\_CURR increased from 92,246 in FY17 Q4 to 93,751 in FY18 Q1. The high numbers of patients who transferred in (1,586) and out (1,326) reflect the extremely high mobility of patients between PEPFAR- and GF-funded MOH facilities. During this period, 544 patients were lost to follow up and 372 returned to ART services, with a net loss of 172 or 0.2% of TX\_CURR in FY17 Q4. COP18 targets for 12 month retention are 95% of all of those that are newly enrolled, and 96% retention for those who have been enrolled for longer than a year.

Rwanda has adequate capacity and quality of testing to meet the viral load assessment requirements for monitoring treatment. Viral load suppression rates among PEPFAR-supported patients remain high with an overall 91%, with four provinces and the military program attaining more than 90% and Kigali at 89%. Following strong partner management, PEPFAR-supported sites significantly improved availability of viral load results from 76% in FY16 to 86% in FY17, while maintaining an average viral load suppression rate of 91%. Site-level analyses indicate that 77% of PEPFAR sites had viral load suppression rates greater than 90%, with 44 sites at less than 90%. Age, gender and specific population analyses indicate that children under 15 have a viral load suppression rate of 70%, with 82% in routine testing and 61% in targeted testing. Further analyses indicate 59% of sites report pediatric viral load suppression rates greater than 90%.

In addition, viral load suppression rate analysis across age, gender and province identifies gaps in viral load suppression in young men and women 20-24 years old across all provinces, with 55% of sites reporting viral load suppression rates greater than 90% in this age group. Mapping of the top ten/bottom ten viral load suppression sites by <15, AGYW, adult males and adult females (see *Appendix D, below*) indicates a clustering of low viral load suppression among AGYW sites in Kigali and low pediatric viral load suppression sites in the Western province, with no geographical clustering observed for adult males or females. The clustering of AGYW in Kigali may reflect a higher number of FSWs, a population which historically has challenges effectively accessing HIV services. In addition, geographic distribution of viral load suppression for all sites for the total population identifies overall lower viral load suppression in Kigali.

Site-level visits identified a series of weaknesses contributing to low viral load suppression, including lack of age specific support groups to enhance adherence, inadequate monitoring for support groups activities and absence of flexible hours that suit age and gender specific categories. In addition, students in boarding schools and children with no parents or born to non-adhering parents, including FSWs, have low viral load suppression. Certain ARV drug regimens may also be a cause for lower viral load suppression and will be analyzed prior to COP18 implementation.

In COP18, PEPFAR will continue supporting the implementation of the DSDM.<sup>21</sup> In addition, MOH will complete policy and guideline changes to support transition of all patients from TLE to TLD. MOH is currently positioned to start TLD transition for all newly identified HIV positive clients starting July 2018, with all currently on TLE transitioning to TLD by June 2019.

MOH, with PEPFAR support, will carry out a patient chart analysis of specific drug regimes in sites with the lowest viral load suppression rates to determine if there is a correlation between poor viral load suppression rates and specific ARV regimens. Mapping of viral load suppression by top and bottom 10 sites by age and gender indicates a geographic clustering of low pediatric viral load suppression in western provinces, and AGYW in Kigali, with no clustering for adult males and females (Appendix D). Preliminary analyses at a limited number of sites did not show correlation between the use of nevirapine and viral load suppression. This pattern will be investigated further to understand underlying factors contributing to clustering. The top ten/bottom ten site analyses for retention and suppression in adolescents and young adults, including AGYW, identified correlates to strong performance, including the extent and quality of adolescent friendly services, implementation of DSDM and peer specific support groups and the use of flexible hours for drug pick up. The community component of DSDM will allow providers to focus on the lower performing areas along the clinical cascade, including low retention among the 20-24 year olds. Nurses and social workers will closely work with age specific peer educators to ensure retention of all PLHIV with special focus on 20-24 year olds.

Site-level analyses identified sites that may benefit from site-level monitoring and mentorship to strengthen these practices. In addition, use of the lab information system will strengthen performance in lab quality and reduced turnaround times. Finally, the clinical monitoring and mentorship program will strengthen site-level use of HIV patient appointment registers, recovery of loss to follow up processes and provision of intensive adherence support for patients with low viral load suppression rates.

Top ten/bottom ten analysis of sites with poor pediatric viral load suppression rates identified correlates to strong viral load suppression rates including the extent and quality of pediatric and adolescent friendly services, use of peer specific support groups, enhanced disclosure of HIV status to children and retention and support for children in boarding schools. The IPs will work closely with boarding school matrons and house masters trained on adherence support to improve adherence and retention of HIV-infected children and adolescents in boarding school. Retention and adherence among FSW and MSM will be strengthened through effective use of KP specific peer groups and engagement of FSW and MSM specific networks in Rwanda. Moreover, ART adherence will be strengthened through clinical mentorship and supervision. PEPFAR will also support the increased equitable access to HIV/AIDS care and treatment services for PWDs through training of health care providers on PWD-friendly services.

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<sup>21</sup> The DSDM aims to increase capacity to provide HIV care and treatment to all patients, focusing more intensive services toward higher-risk unstable patients and reducing the frequency of routine clinical visits and drug pickups for stable, low-risk patients. Therefore, under DSDM, stable patients attend clinical visits every six months, instead of every three months; stable patients pick up ARVs every three months, rather than monthly, under MMP. Unstable patients continue to have monthly ARV pickups and quarterly clinical follow-ups combined with community support services.



## 4.2 Prevention

### 4.2.a HIV Prevention and Risk Avoidance for AGYW and OVC

#### *OVC Programming*

The policies and objectives related to the wellbeing of OVC are captured in two national documents: the 2011 Integrated Child Rights Policy (ICRP) and National Strategic Plan (NSP) of 2013-18. The ICRP serves as the comprehensive child policy framework that addresses the rights and needs of children in the country.<sup>22</sup> This document also ensures coordination and consistency in interventions across various thematic areas and ministerial mandates. Rwanda's HIV NSP outlines social mitigation objectives that are important to OVC and their families: 1) ensure economic opportunity and security of PLHIV, 2) protect OVC targeting school attendance greater than 85% in the 10-14 year old age group and 3) reduce stigma and discrimination.

The OVC program reflects collaboration between the USG, Ministry of Gender and Family Promotion (MIGEPROF) through the NCC, MOH and OVC partners, including international NGOs and local CSOs. For example, prior Site Improvement through Monitoring System (SIMS) assessments and other monitoring field visits have identified the need to strengthen the link between facility and community services. Through the collaboration described above, these organizations developed an identification protocol to guide the enrollment process for new beneficiaries, with special emphasis on covering the gap between community and health facility-based linkages and referrals. The Rwanda Biomedical Center (RBC), which operates under MOH, led the development of other tools to better systematize the linkages between community and facility services. The tools are designed to ensure cross communication and coordination between the two levels of service. Additionally, OVC partners have begun entering formal, non-binding collaborations with local health facilities to establish integration of processes, including periodic communication, that link community and facility services in their daily operations.

The OVC program in Rwanda is implemented by four partners: one international NGO, Global Communities (implementing Twiyubake), and three local CSOs, African Evangelistic Enterprise (AEE) (implementing Ubaka Ejo), FXB (implementing Turengere Abana) and Caritas Rwanda (implementing Gimbuka). In FY17, the IPs met their targets, serving a total of 121,237 OVC against the target of 121,229 (100%). In FY17, the OVC program reached 48,270 OVC under the OVC\_HIVSTAT indicator, including 29,984 self-reported negative (62.2%), 16,950 unknown (35.2%) and 1,257 positive (2.6%). Out of those 16,950 unknown, a total of 11,558 were OVC with test not indicated (i.e, they were not at risk and no HIV test was required) and 5,389 with other reasons (31.8%). For the latter category, the implementing partners encouraged parents/guardians to have their children tested and the students to take an HIV test during school vacations. The partners with lower performance on this indicator learn from the more successful partners. They hold regular learning/exchange sessions to ensure the HIV risk assessment is conducted, the HIV testing is done for the right OVC and the referral/linkage

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<sup>22</sup> The policy aims to strengthen families, provide a family environment for all children and ensure universal access to education and health services. It emphasizes children's participation; protection from abuse, violence and exploitation; priority for children without discrimination; and accountability of GOR and non-State actors to ensure the respect and human rights of children.

system is strengthened. OVC found HIV positive and not on ART were immediately linked to treatment.

In September 2017, OVC partners/local CSOs managed to successfully shift away from 12 districts with low HIV prevalence. Starting in October 2017, the OVC program has been implementing in 13 districts with the highest HIV prevalence rate and highest number of most vulnerable children (MVC). In COP18, the OVC program in Rwanda will continue its implementation in all five provinces in those 13 districts that were identified as having the highest HIV prevalence and highest number of MVC. IPs will utilize community platforms and disabled people's organizations (DPOs) to ensure that enrollment of new beneficiaries includes vulnerable children with disabilities and children of vulnerable caregivers with disabilities.

In COP17, the OVC program is reaching 90,948 OVC beneficiaries in all five provinces, 13 districts and 123 sectors. In COP18, the program will continue implementing in those districts targeting 92,600 OVC beneficiaries. For cost efficiency purposes and in response to Kigali strategy, there was an increase of targets for two local organizations (AEE and Caritas) operating in Kigali and districts neighboring Kigali. Historically, these two organizations have been implementing OVC programs at lower costs compared to FXB and Global Communities. Thus, there will be a slight decrease in targets for FXB and Global Communities as their OVC targets will be kept constant upon the graduation of some OVC. The enrollment of new OVC beneficiaries in Kigali will also include boys and HIV positive adolescent girls. In addition to OVC\_SERV, the OVC program in COP18 is targeting 100% coverage of all OVC\_SERV under 18 (73,621) for OVC\_HIVSTAT and 100% linkage to treatment for those self-reporting positive.

Continuing in COP18, the OVC partners will closely track and monitor the results of OVC beneficiaries through the OVC\_HIVSTAT indicator. Beneficiaries who self-report an "unknown" status for "other reasons" will be followed-up to ensure the HIV status of all beneficiaries is known among those potentially at risk for HIV. Seroconversion among OVC beneficiaries under age 18 will be monitored by observing the number of beneficiaries moving from a negative or unknown status to a positive self-reported status in SAPR 19 and APR 19.

The OVC program will continue implementing a case management approach, and the services provided will continue to include access to health services, child protection, HIV and violence prevention and response, household economic strengthening, food security and nutrition, water sanitation and hygiene (WASH), education support, parenting and psychosocial support. Similar to DREAMS, the OVC program will integrate the sexual risk avoidance (SRA) programming, especially among 9-14 year olds. With the COP 17 DREAMS support, USAID is supporting the Violence against Children /Youth data-to-action workshop. It is expected that OVC and DREAMS implementing partners will develop concrete actions and discuss ways those actions will be well coordinated. DREAMS partners will use S/GAC guidance on SRA programming, especially regarding the benefits of delaying sexual debut and addressing consent.

To achieve results toward epidemic control and HIV impact mitigation, the strategic approach in COP18 will be 1) continue conducting HIV risk assessment among children and adolescents under 18; 2) targeted testing referrals for specific OVC sub-populations considered to be at risk of HIV infection (e.g., children who are malnourished, offspring of HIV-positive parents, in child-headed households and adolescents with disabilities); 3) continue integrating prevention programs, with emphasis on the unique needs of AGYW; 4) continue using community volunteers to better link

with clinical services, support adherence and facilitate access to services for hard to reach populations; 5) changing community mobilization/norms and 6) focusing on Kigali districts and districts neighboring Kigali.

### *DREAMS-Like Programming*

In COP18, Rwanda will continue to implement the DREAMS-like program, with the aim of preventing HIV transmission among AGYW by empowering them to make informed decisions about their sexual health and wellbeing through a holistic and layering of services approach. There are no plans for geographic expansion or increasing targets. The DREAMS-like program will target 28,000 AGYW in five districts, including the three districts of Kigali (Gasabo, Kicukiro and Nyarugenge), Nyanza in the Southern province and Rwamagana in the Eastern province. The geographic prioritization is based upon districts with the highest HIV prevalence among young women, highest teen pregnancy and sexual violence rates and the highest number of MVCs. The DREAMS IPs will cover 38 sectors, but, for adolescent girls who are FSWs or children of FSWs, the geographic coverage will be open to the entire district to account for the mobility of FSWs. The DREAMS-like program will target 1,000 male sexual partners of AGYW in COP18. The male partners will be identified through different community platforms and referred for HTS services and VMMC. The number of male sexual partners is derived from an estimated 10% of 10,000 AGYW, which includes 10% of the 15-17 year olds and all the 18-24 year olds.

A growing body of evidence suggests that people with disabilities are more likely to experience factors that put them at higher risk of HIV infection than people who are not disabled. In addition, there is a misconception that people with disabilities are sexually inactive or unlikely to use drugs or alcohol, which means they have been left out of HIV programming.<sup>23</sup> The evidence clearly demonstrates that adolescent and young girls with disabilities face greater discrimination, have less access to education and health services, enjoy a lower degree of independence and have less developed communication skills and lower self-esteem.<sup>24</sup> These factors combine to make them significantly more vulnerable to the risk of HIV infection. Living with a disability is one of the criteria for enrollment in the Rwanda DREAMS program. In COP18, implementing partners will establish a partnership with DPOs to ensure that outreach workers are educated on PWDs, and that necessary modifications are made (disability-sensitive programming) to ensure that layered services are accessible to AGYW with disabilities.

DREAMS-like program beneficiaries will include 3,000 eligible adolescents that will be drawn from the OVC program in the four DREAMS-like districts (excluding Nyanza district because there is no OVC program). These, plus 25,000 AGYW from outside the OVC program, will receive an enhanced needs-based and age appropriate package of services consistent with the DREAMS-like program. The package of services will be tailored to three AGYW age bands (10-14, 15-19 and 20-24) and include violence prevention and post-violence care, HIV and STI prevention, youth-friendly sexual and reproductive health care, household economic strengthening, social asset building, community mobilization/norms change and retention of girls in school. The majority of the DREAMS-like target beneficiaries (80%) will be adolescents aged 10-19. In Rwanda, sexual violence and HIV prevalence are highest among young women aged 20-24. Targeting adolescent girls under 20 years old, therefore, is intended to provide them with the necessary support and

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<sup>23</sup> UNAIDS 2014, "The Gap Report: People with Disabilities."

<sup>24</sup> United Nations, 2011.

equip them with knowledge and skills before they reach the most vulnerable stage of their life. The program will also support AGYW who have survived sexual and gender-based violence.

In COP17 implementation, Rwanda, through Global Communities and Caritas, used the Girl Roster tool to make sure that we were reaching and enrolling the most at risk AGYW within the DREAMS districts. The results of the Girl Roster assessment confirmed that the AGYW criteria outlined by Rwanda in identifying the most at risk AGYW, especially the school dropout, teen mothers and early pregnancies, exist on the ground. Since the initial findings of the Girl Roster tool did not identify any additional AGYW at risk groups not captured in Rwanda's original at-risk criteria, there is no need for the other two implementing partners (FXB and AEE) to use the Girl Roster tool. All lessons learned and results will be shared with the other implementing partners and the PEPFAR team as applicable.

In COP18, the DREAMS-like program will continue to address AGYW's HIV risk by layering evidence-based interventions implemented by the four OVC/DREAMSIPs Global Communities, AEE, Caritas and FXB in the five target districts. The four IPs will carry out the same set of interventions except condom distribution, which will be done by FXB and Global Communities (its local partners DUHAMIC ADRI and YWCA). In sites where faith-based organizations are unable to distribute condoms, local social marketing organization SFH will coordinate with them in order to ensure the availability of free condoms to AGYW. As previously mentioned the DREAMS-like program will not expand geographically, but Rwanda has reviewed the DREAMS Efficiency Questions to determine if and where efficiencies can be gained in COP18 and to ensure that Rwanda's DREAMS-like program is in alignment with COP18 DREAMS Guidance. At this time, there are no plans to cease any specific interventions within the DREAMS core package; however, shifts have been made within specific core package interventions.

Rwanda plans to increase programming for preventing sexual violence and HIV transmission through risk avoidance among 9-14 year olds. Since preventing sexual violence is already a focus, PEPFAR will work within the established channels to coordinate services and avoid duplication. Through the provision of sexual and reproductive health and rights (SRHR) and life skills education, IPs respond to sexual violence prevention and response using the GOR approved curriculum and training manuals. The GOR has made progress to include oral PrEP in the national guidelines for specific populations. Since AGYW are not one of the populations included, the DREAMS-like program plans to advocate further with the GOR to include AGYW in the national policy and operational guidelines going forward. Initial conversations around expanding populations eligible for PrEP will start within the national prevention TWG and progress to the MOH.

Overall, between the OVC and DREAMS-like programs, Rwanda will reach 117,600 beneficiaries, including 92,600 who will receive OVC services and 25,000 DREAMS-like services across 14 districts (overlapping in four). Both programs will continue to coordinate with PEPFAR counterparts in order to ensure the availability of age appropriate and friendly clinical services.

Finally, for sustainability purposes, the OVC/DREAMS program has already begun moving investments to indigenous partners. There are five DREAMS implementing partners in Rwanda, and only one is an international organization, which is responsible for building the capacity of local organizations and is also establishing the new DREAMS monitoring and evaluation system.

There will be a transition plan to ensure the local partners can implement the OVC/DREAMS program independently in the future.

#### 4.2.b Children

Rwanda continues to make remarkable progress in PMTCT and ART coverage among the general population. With the implementation of the Option B+ strategy and Treat All, HIV mother-to-child transmission (MTCT) has continued to drop significantly and has remained below 2% for the last three years. From 2016-2017, the MTCT rate fell by 0.25, from 1.76% in 2016 to 1.51% in 2017, with 98.49% of infants born to HIV-infected mothers remaining free of HIV at 18 months. The Rwanda 2015 DHS provided the first national measure of pediatric prevalence, estimated at 0.2%. There is currently no program data measuring the percent of pediatric PLHIV who know their HIV status. The 2018 UNAIDS EPP Spectrum, using a prevalence of 0.2%, estimated pediatric ART coverage in Rwanda to be 85%.

In COP18, PEPFAR will continue to support HIV case finding and linkage strategies including index testing of women living with HIV, early infant diagnosis and screening among OVC and implementing same day treatment to increase pediatric coverage of care and treatment. In COP18 99% of pregnant women at ANC are targeted to know their HIV status, expecting approximately 3242 total positive pregnant women, of whom 727 are expected to be newly identified. Of all positive pregnant women, 99% are targeted to be on ART. Ninety nine percent of exposed infants are targeted to be tested in the first 12 months of life, 95% of those within the first 2 months, and 99% of positive infants are targeted to be linked to ART.

Rwanda's COP18 strategy will take into account program data, 2015 DHS prevalence data, 2014 RAIHIS incidence data and 2018 EPP Spectrum estimates to revise pediatric targets and strategies. Preliminary RPHIA results are expected for Kigali by February 2019 and nationally by May 2019. These results will be used immediately to inform and strengthen prevention strategies among children. Although pediatric PITC is implemented across all sites, PEPFAR will focus on improving the efficiency of HIV case finding among children through targeted pediatric PITC at all relevant entry points, testing all children presenting with symptoms of HIV, TB or malnourishment and screening all children receiving OVC/DREAMS-like services using the HIV risk assessment tool. In addition, targeted pediatric testing will be implemented through comprehensive index testing for children of women living with HIV. HIV-exposed infants are tested within the first six weeks of life so that those already infected with HIV can initiate ART. All children born to HIV positive mothers, whether the mothers breastfeed or not, will be followed up until 18 months and receive Nevirapine (NVP) syrup from birth for the first six weeks of life. A baby starts Cotrimoxazole syrup at the age of six weeks and stops after final confirmation of HIV negative status at 24 months after weaning.

Routine family testing for all adults testing HIV positive is part of screening in health clinics nationally but not fully implemented in ANC. In COP18, PEPFAR will support MOH to strengthen index testing in all ANC services nationally. In addition, medical records of all PLHIV in treatment, including FSWs, will be reviewed to identify HIV positive adults whose children have not been tested. At all sites, the program will strengthen EID for HIV-exposed infants by strengthening deoxyribonucleic acid polymerase chain reaction capacity and sample referral systems for laboratory services.

In addition, PEPFAR will work with its implementing partners to utilize data from site-level assessments including SIMS to address any identified gaps. Sites with gaps will receive follow up SIMS visits and mentorship activities to strengthen the quality of services and increase partner performance.

#### 4.2.c Key Populations

Key populations in Rwanda include FSWs and MSM. Results from recent studies have informed KP and PP strategies.<sup>25</sup> Two IBBSs on FSWs and MSM carried out in 2015 indicate that FSWs and MSM engaged in transactional sex or commercial sex work represent the primary KPs in Rwanda. The 2015 FSW IBBS show FSWs have a 46% national HIV prevalence (51% in Kigali) compared to a national adult prevalence of 3%. While more than 90% of FSWs report having been tested for HIV, only 78% report being on ART. Only 47% of FSWs reported using condoms consistently with both paying and non-paying sexual partners. The 2015 MSM IBBS in Rwanda reported MSM having a prevalence of 4%, not statistically significantly different from that of the general age matched male population. However, 42% of MSM reported transactional sex, and those engaged in commercial sex for more than two years had prevalence almost three times greater than those engaging in commercial sex for less than two years (4.4% vs. 1.4%, respectively). Multiple factors such as stigma, high mobility and limited sources of stable income provide challenges to effective prevention and treatment interventions.

In FY17, 7,934 FSWs and 249 MSM were reached, and 279 HIV positive FSWs were identified. Based on the 2012 FSW size estimate, there are an estimated 12,978 FSWs in Rwanda in 1,843 hotspots in 1,146 sites across all 30 districts in Rwanda. A 2018 FSW size estimate and IBBS will update results from the 2012 size estimate and the 2015 FSW IBBS. Likewise, the first Rwanda MSM size estimate, coupled with a new MSM IBBS will be implemented in FY18 to update the 2015 MSM IBBS results. Results from both studies will have a major impact on the national testing strategies for KPs.

The MOH has significantly strengthened its central role in coordination of all prevention partners to ensure activities are aligned to and support the NSP (NSP 2013-2018 extended to 2020). In FY17, MOH, in collaboration with IPs, mapped out partner services across hotspots to ensure all hotspots with greater than 50 FSW are covered without overlap between partners, with PEPFAR providing services in 18 districts, including Kigali and GF partners in the remaining 12 districts. In addition, the MOH national TWG issued instructions to all IPs working with FSWs to use a unique patient identifier and standardized reporting tool for all FSW testing programs across Rwanda. In addition, all partners will be requested to follow up all KPs who tested negative using the nationally approved KP booklet to provide a complete standardized package of prevention services and testing, with testing every 12 months or sooner if there is high risk exposure.

The package of services for KPs includes community and facility-based HIV testing, home based testing (self-testing), index/partner and family testing, PITC, risk reduction counselling (retesting every 12 months or following any risk of exposure), linkage to peer education services, linkage to care and treatment services, STI education, screening and treatment, VMMC, condom and lubricant distribution and promotion, family planning counselling, TB screening and treatment and referral for hepatitis screening and vaccination. Health care providers will receive training

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<sup>25</sup> FSW IBBS 2015, MSM IBBS 2015, DHS 2015 and RAIHIS 2014

and mentorship on provision of KP friendly services to reduce KP barriers to HIV prevention and treatment services.

PEPFAR will align COP18 activities with both MER 3.0 indicators and Rwanda's NSP to support the GOR goal of a three-fold reduction in new infections and achieve epidemic control. During COP18, to maximally interrupt HIV transmission, PEPFAR will reach 17,779 KPs, including 16,339 FSWs and 1,440 MSM with testing, prevention, retention and adherence services. To achieve this, PEPFAR will scale up proven methods of high yield community- and facility-based testing strategies targeting KPs in hotspots, combined with increased efficiency of linking HIV positive KPs to treatment in hotspots in 18 districts of Rwanda as well as in military locations. Testing strategies include index/partner and family testing, recency testing, self-testing, community-based moonlight testing in hotspots, referrals from active and retired KP peer educators, as well as referrals by private and public health facility serving hotspots. The remaining districts will be covered through support from the GF in collaboration with CSOs. Prevention partners will be required to develop MOUs with local health facilities to strengthen linkage of HIV positives to treatment, as well as to coordinate increased support and follow up for retention and drug adherence.

In FY17, a low number of new MSM HIV positives were identified. Incidental information indicates there may be a significant population of older MSM who are challenging to reach as they may be married and do not self-identify as MSM. In FY18, efforts are being made to reach this group through MSM networks and associations, in addition to partner notification. It is expected that results from the 2018 MSM size estimate and IBBS will significantly inform new strategies to more effectively reach MSM in Rwanda. In addition, effort will be made to reach additional KPs, such as "VIP" FSWs, older MSM and male sex workers.

In COP18, MOH with PEPFAR and GF support will launch a PrEP program targeting 1,450 FSWs at high risk of HIV acquisition and 350 sero-discordant couples of which the HIV positive partner is not virally suppressed by all three PEPFAR prevention partners. High risk FSWs will be identified using a standardized screening tool measuring partner numbers and condom use. Eligible FSWs will be recruited through all the PEPFAR partners working with KPs, as well as through DREAMS and OVC partners. Eligible partners of discordant couples will be recruited by PEPFAR-supported MOH clinics in Kigali through the PMTCT and ART services. PrEP will be administered to KP beneficiaries and followed up by non-MOH PEPFAR KP partners and by MOH for discordant couples. KP prevention partners will work closely with health facilities to make sure that the FSWs initiating PrEP adhere to treatment and are re-tested every three months.

MOH central level prevention data will be tracked through monthly, joint prevention/treatment data review meetings identifying challenges and best practices to inform program strategies. National program implementation will be measured through monthly and quarterly data review and coordination meetings with MOH, Ministry of Defense (MOD) and all PEPFAR and GF prevention and treatment partners involved in KP services. New hotspot identification will be crucial to continue informing the program directions. Results from the 2018 MSM and FSW size estimates, IBBS and the 2018 RPHIA will be essential to refine and strengthen program strategies. Current international partners will continue to provide capacity building to local entities, including MOH to ensure transition of KP program activities and facilitate the transfer of effective prevention methodologies. PEPFAR partners as well as other IPs will use the N-UPID code with

the KP booklet in order to maximize data collection procedures while ensuring the quality of the data collected.

PEPFAR will strengthen partner management through monthly data reporting and partner meetings to review achievements, identify challenges and problem solve. Quarterly partner meetings will be held with partners to review projected and achieved expenditures against achievements, measured against work plans, program indicators and targets. Semi-annual data quality assessments (DQAs) and site visits will be carried out for all PEPFAR- partners supporting KP services to ensure quality of services and data collection and reporting. Corrective action plans will be developed as needed.

#### 4.2.d Voluntary Medical Male Circumcision

During FY17, PEPFAR-supported 175,902 VMMC procedures against the FY17 target of 95,936 at PEPFAR-supported sites. VMMC FY17 results combined FY 17 targets as well as missed FY 16 targets. Total FY16 and FY17 achievement was 95% (226,106 against target of 236,936). At the end of May 2016 when two cases of death by tetanus post-circumcision were reported (one in a PEPFAR-supported site), MOH recommended two tetanus vaccination (TTCV) doses before VMMC if a patient had not previously received tetanus immunizations. The break in service delivery due to the development of the new recommendations, as well as the additional required vaccine, which increased lost-to-follow-up rates, contributed to the underachievement of FY16 targets.

During FY17 Q4, the MOH recommended changing the requirement for surgical VMMC and removing a barrier to VMMC, allowing for one tetanus vaccination dose the same day of surgical male circumcision provision, per WHO recommendations. The requirement for tetanus vaccination for PrePex device currently remains the same: two TTCV doses four weeks apart, with the second dose 7-14 days before the non-surgical (PrePex) procedure.

With external funding support to Rwanda declining and since PEPFAR resources alone are insufficient to meet the need for VMMC, the NSP objective of 66% national coverage of males aged 15-59 is unlikely to be achieved by the end of 2018. However, with PEPFAR investment for VMMC in COP18, PEPFAR will prioritize investments in VMMC by focusing the 107,235 targets on males aged 15-29. VMMC targets were developed using new data on geographic distribution of unmet need as well as consideration of the anticipated unmet need within the “youth bulge.” Various strategies will be used to help achieve COP18 targets, including targeting high HIV prevalence and low MC coverage areas, targeting high-risk individuals, continuing VMMC service delivery in Kigali due to high HIV prevalence, shifting services to 70% for surgical versus 30% for PrePex; strengthening VMMC demand creation (specifically for surgical MC) for ages 15-29 and strengthening linkage of PLHIV to care and treatment.

There is growing evidence that people with disabilities are at increased risk of HIV infection. Working with disabled people’s organizations (DPOs), DoD, in partnership with MOD, will increase demand creation for VMMC targeting PWDs aged 15-29 years of age through focused radio campaigns and outreach campaigns through MOD’s “Army Week” program. In collaboration with PEPFAR prevention and OVC partners, HIV negative PWDs will be linked to DoD VMMC services.



To limit high numbers of young boys age 10–14 coming for VMMC services as reported in Q1 FY18, demand creation for VMMC carried out through focused radio campaigns and sensitization targeting primary school aged boys has been discontinued. The VMMC program will target military populations and new recruits and reach men aged 15-29 at highest risk, including those linked from DREAMS-like programming, clients of FSWs, males in discordant relationships with HIV-positive partners and males attending STI clinics.

### **4.3 Additional country-specific priorities**

Prior to COP18 implementation, a number of key policy and/or guideline changes have been put into effect by the GOR, which will support the smooth implementation of COP18. There is a lack of HIV prevalence data among PWD in Rwanda; however, PWDs may be at higher risk of HIV due to lack of appropriate prevention and support services, sexual violence and barriers to accessing HIV education and prevention services, in part due to stigma and discrimination. To assist all PLHIV in Rwanda (including KPs and PPs as well as PWD who might face barriers in accessing HIV services), the GOR integrated same-day ART initiation into national HIV guidelines and offers same-day ART implementation at the site-level. Further support at the site-level to ART providers will continue to ensure that no incidental barriers to the provision of same-day ART occur due to providers' resistance to change or misunderstanding of the guidelines.

Further aiding all PLHIV in Rwanda to expand access to DSDM and multi-month prescription pick-ups (MMP), the GOR has revised the definition of “stable patient” to include those who have a viral load at 200 copies/ml (rather than the higher threshold of 20 copies/ml) and will now include children under two. With the definition change, Rwanda will provide the option of six-month clinical visits (rather than quarterly) and three-month ART pick-ups (rather than monthly) to a greater number of “stable patients.” DSDM and MMP are useful to PWD who might have physical barriers in reaching a facility.

During COP17 implementation, Rwanda will move toward full TLD transition, which was agreed to by the GOR at the COP18 RPM. Changes in procurements and revisions to the national supply plan will ensure that the TLD transition occurs during COP18/FY19 and will begin before COP18/FY19 implementation.

In COP18/FY19, PEPFAR will work closely with the GOR to create a more favorable policy environment by supporting data review and programmatic implementation challenges to accelerate national planning and guidance in the provision of TB preventive therapy for PLHIV. MOH has requested TA from WHO and CDC to review the outcome of the pilot study of provision of IPT to HIV positive adults, followed by a workshop disseminating results and with recommendations to the TWG on next steps. PEPFAR will request ISME TA TDY to support the ongoing discussion addressing barriers and concerns in implementing adult TPT.

National scale up of key programs to support epidemic control in Rwanda will continue in COP17/FY18 implementation to support the full, national scale up of self-testing and index testing. In February 2017, the GOR approved and adopted the HIV self-testing guideline and inaugurated the self-testing program during World AIDS Day 2017. The GOR has directed all facilities to implement index partner testing for all PLHIV.

Partners are managed and informed of key programmatic directives and quarterly data through monthly IM meetings during which PEPFAR reviews strategies and shows the challenges through data. During quarterly partner meetings, budget execution rates are reviewed against work plan objectives and MER indicators. Throughout the year, SIMS visits occur to ensure successful remediation of any low performing SIMS scores. Annually, partners review their programmatic and financial progress reports and re-align IM work plans to support COP priorities.

During the COP 2018 RPM, the MOH committed to forming a sustainability TWG under the GOR's established Health Sector Working Group donor coordination body. GOR's existing coordination mechanism ensures that all stakeholders are included and take a unified approach. The sustainability TWG will be tasked with developing a roadmap that increases domestic investment in the HIV program to achieve epidemic control and that responds to ongoing reductions in foreign assistance for HIV. Rwanda is currently developing a new health financing strategy, offering a timely opportunity to codify the roadmap in a national document. The sustainability plan will include determining increased funding opportunities for indigenous organizations with demonstrated capacity.

Since FY16, PEPFAR has worked with GOR implementing partners to address strategies to increase host country financial ownership of the PEPFAR program. CDC has worked with its IPs through the MOH clinical services cooperative agreement to review staffing support from PEPFAR. Through a review of PEPFAR-supported staff at both site and above-site levels, PEPFAR has transitioned approximately 7% of staff from the HIV program to GOR. CDC is also interested in understanding the costs associated with delivering services through the HIV care continuum and pilot routine cost measures to be able to monitor program efficiency. Furthermore, COP18 has 37% of its funding with local organizations and the MOH, up from 35% in COP17, which will help in the eventual transition of the national HIV/AIDS program to the GOR.

The PEPFAR interagency team has also begun discussions with the Treasury and USAID headquarters economists to provide technical assistance. The Rwanda team has requested that Treasury support the flow and monitoring of donor resources through country financial systems and advise the GOR on revenue generating taxes and that USAID economists provide support to cost HIV services at the health post level. The latter could result in adding HIV services to a PPP, non-HIV USG investment in sustainable health posts that increase Rwandans' geographic access to care.

#### **4.4 Commodities**

PEPFAR, in collaboration with the GOR and GF, has identified four critical priorities for PEPFAR commodity procurement in COP18: (1) accelerate the introduction of better, less expensive ART regimens for HIV patients in Rwanda; (2) monitor treatment efficacy through the use of viral load commodities; (3) prevent transmission through the use of specific commodities; and (4) improve the integration of commodity procurement, inventory and distribution data into program planning.

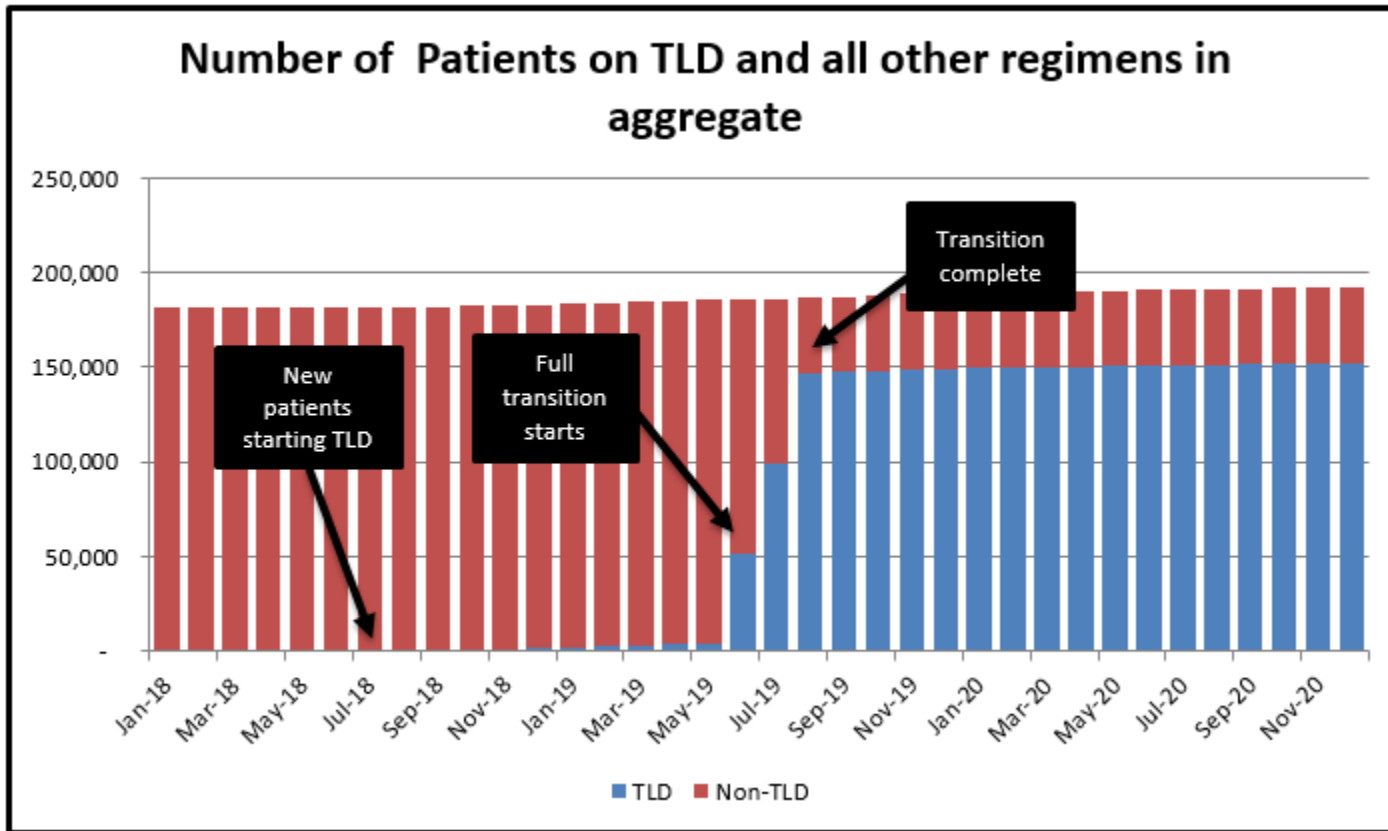
#### 4.4.1 Better, Less Expensive ART Regimens

To accelerate the introduction of better, less expensive ART for HIV patients in Rwanda, the GOR is leading a national transition to the fixed-dose combination of tenofovir 300mg /lamivudine 300mg/dolutegravir 50mg, or TLD. In COP18, PEPFAR will support the GOR to transition new and existing patients to the TLD regimen in two phases. Phase one of the transition will commence in July 2018 when all new ART patients start receiving TLD. Phase two of the transition will commence in June 2019 when all existing eligible patients on legacy ARVs will switch to TLD. The transition is expected to be completed by August 2019. As a result, the proportion of patients - both new and those on legacy ARVs (i.e., TLE, NVP, etc.) - using TLD will be 95% and the remaining 5% will be on efavirenz (EFV) plus two nucleosides.

Planning for the TLD transition has included a comprehensive review of consumption trends for ARVs and laboratory supplies, current national stock status (of legacy ARVs in particular), supply plans, quantities currently on order and ART regimen mix and proportions. The review used Rwanda's national program minimum and maximum stock levels and the COP18 timeline to determine resources required. The national program inventory maximum for ARVs (and other HIV medicines) is 14 months, while the minimum is 9 months. For laboratory commodities, the inventory maximum is 12 months, while and the minimum is 7 months. The supply plan and quantities on order (of legacy ARVs) for both MPPD (GF) and PEPFAR were also reviewed. As a result, both MPPD and GHSC-PSM have canceled shipments of legacy ARVs totaling \$199,965 and \$2,976,748, respectively. To reduce any wastage of existing legacy ARVs, the timing of the transition is a critical factor. The review included an analysis of existing legacy stock that would be wasted were phase two to occur earlier than June 2019. For example, it was estimated that initiating the phase two of the transition earlier than June 2019 would result in an estimate loss of more than \$1.2 M in legacy ARVs which was considered to be an unacceptable amount.

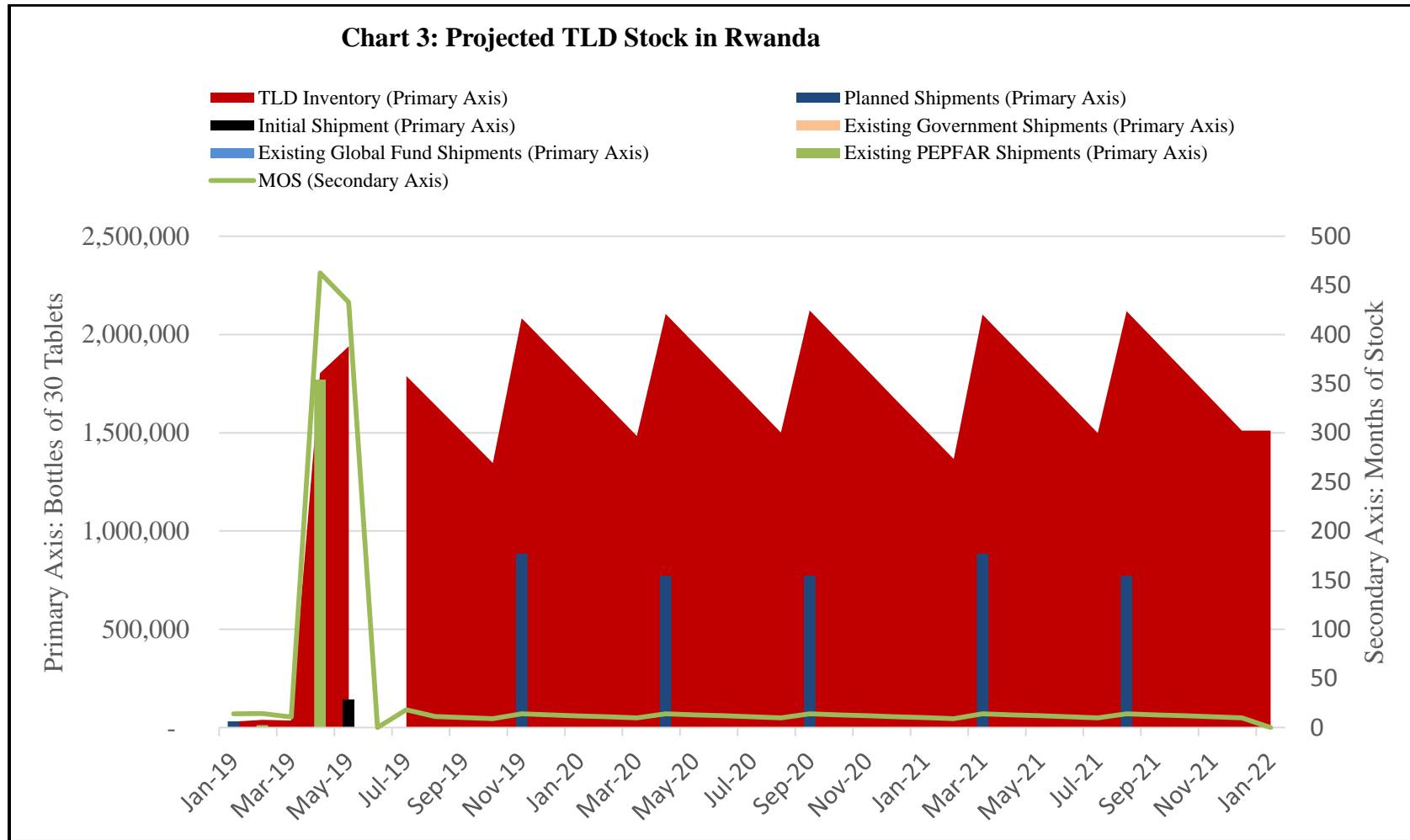
To support the management of the TLD transition in Rwanda, a comprehensive forecasting tool has been developed for the monitoring and tracking of ARV inventory levels and service demand. This tool will be considered a "dynamic document" as it will be continually edited and updated. The tool will allow USG to provide regular monthly updates of the transition's progress, the drawdown of legacy stock, and identify when, how and why a new procurement of TLE would be needed (between the transition start and the point at which TLD is fully available for Rwanda).

Figure 4.1



Note: Patients from legacy regimen transition to the TLD starting from June 2019 and will be completed in August 2019.

Figure 4.2



Note: The transition of TLD and its stocks is taken from the TLD transition tool to commence the full transition of legacy regimen to TLD from June-August, 2019

Complementary to the TLD transition planning, PEPFAR is collaborating with the Rwanda Biomedical Centre (RBC) to review the proportion of patients on various regimens. Specifically, PEPFAR and RBC are evaluating the number of patients that are using ABC in lieu of tenofovir. During the RPM, the proportion of patients using ABC was observed to be higher than expected with ABC at 14% versus tenofovir (TDF) at 86%. A preliminary examination of two high-volume treatment facilities showed that, among patients using ABC, more than 90% had tried TDF prior to switching to ABC. Patients that had switched to ABC had experienced a high creatinine clearance with TDF and therefore warranted a switch to ABC. This level of analysis will be conducted through-out the country and decisions regarding future use of ABC will be held with relevant stakeholders. The reason this is an important analysis is due to the cost effectiveness of ABC and a desire by PEPFAR and RBC to ensure that Rwanda is fully optimizing the use of most recently available ARVs.

As a result of the TLD transition planning and the wider-national supply planning efforts for the HIV program, PEPFAR will provide 55% of ARVs, 100% of EID needs and 65% viral load needs through the COP18 commodities budget. The GF will fund the remaining need. In addition, PEPFAR will also provide medicines for opportunistic infections (OIs), since the GOR encountered sourcing concerns when procuring OIs during FY17. As a result of Treat All, the number of PLHIV requiring OIs has been significantly reduced and suppliers were not willing to bid for the smaller MOH OI request. PEPFAR plans to procure OIs only in COP18 and provide TA that aims to ensure successful future procurement through the GOR.

#### **4.4.2 Laboratory Commodities**

In COP18, PEPFAR is significantly reducing its contribution to ART laboratory monitoring supplies (limited CD4 reagents, chemistry, hematology and consumables), procuring 21% of the national need. The key assumption is that PEPFAR will invest more in commodities for viral load which is the main clinical monitoring and treatment guide for HIV. Given that full TLD transition is happening during COP18 implementation, PEPFAR will support VL so that Rwanda can reach the third 95. The GOR will cover the basic other lab needs when PEPFAR support is reduced so there will be no gaps.

In COP18, PEPFAR will also procure 37% of the national need of Rapid Test kits (RTKs) and the remaining quantities will be bought through GF. Further, PEPFAR will collaborate with the GOR to review historical RTK forecasts as compared to consumption rates in order to improve the regular and consistent availability of RTKs within the national program. PEPFAR will also work with GOR to review clinical testing protocols and RTK consumption versus targets to ensure targeted testing is adequate to meet the Rwandan national RTK needs.

#### **4.4.3 Prevention Commodities**

In COP18, PEPFAR will procure the following prevention commodities: condoms, PrEP and VMMC kits. PEPFAR will procure about 50% of the VMMC kits needed and will contribute to its PrEP-related ARV needs. Additionally, PEPFAR will procure and provide an estimated 24,455,368 male condoms to Rwanda through the central USAID Condom Fund for the public sector and social marketing program.

#### **4.4.4 Utilization of Commodities Data**

In COP18, PEPFAR will work to better integrate commodity procurement, inventory and distribution data into program planning. The sharing of national inventory data – particularly that of product consumption rates - and planned shipments of product across the relevant stakeholders is a key to program effectiveness and long-term sustainability. For example, a regular review of consumption rates for RTKs as compared to the original forecast can demonstrate not only how the national RTK inventory is managed, but also how effectively RTK use is monitored and planned within individual facilities. Reviewing this data both within the supply chain planning forums as well as within the national care and treatment forums will provide another view of the program to ensure positive patient outcomes. This is particularly important for COP18 and the TLD transition as all patients within the national program will be directly impacted.

#### **4.5 Collaboration, Integration and Monitoring**

COP18 is building on the vision of Rwanda’s Extended NSP of 2013-2020. PEPFAR’s COP18 priority is to continue to strengthen the HIV cascade of care in Rwanda with a focus on all three objectives of the UNAIDS 95-95-95 goals. With overall strong linkage, retention and viral suppression, the greatest challenge facing both the National HIV and PEPFAR programs is finding the remaining HIV positives. Development and implementation of PEPFAR strategies will be coordinated through the national prevention TWG.

The TWGs will coordinate and standardize implementation guideline and reporting tools for all partners (PEFAR and GF). In addition, MOH will coordinate joint partner and reporting and data review through monthly and quarterly partner/stakeholder workshops to review results, identify challenges and share best practices. The MOH clinical mentorship program supported by PEPFAR at both the central- and site-levels will be a critical cornerstone to effective implementation, monitoring and continuous improvement of initiatives through 23 PEPFAR-supported Phase I sites in Kigali, followed by national scale up to all PEPFAR- and GF-supported MOH facilities.

In COP18, all USG agencies will continue to strengthen partner management, building on FY18 processes. As part of Continuous Quality Improvement Plans (CQI) (Appendix E; Example of CQI), agencies will have regular monthly meetings with IMs to ensure continued alignment of implementation strategies with COP18 strategic objectives, review achievements against work plans and identify challenges and best practices. Partners implementing new or improved initiatives will receive monthly site-level monitoring and mentorship with monthly data reporting. All agencies will carry out quarterly partner meetings reviewing achievements against projected work plan achievements and program targets. Achievements will be measured against projected and actual expenditures as both a measure of progress and to prevent potential over-spending. In addition, partner progress will be tracked through SIMS visits and quarterly POART reviews.

CDC, USAID and DoD partners will continue to collaborate closely to ensure strong referral linkages between partners to ensure all key and priority populations, such as FSWs, MSM, AGYW and OVC receive a comprehensive package of prevention and treatment services across the cascade of prevention, testing, treatment, retention, drug adherence and viral load suppression services. In addition, CDC and DoD prevention partners will continue to collaborate with MOD and MOH to achieve VMMC targets.

Results from surveys such as the 2018 RPHIA, implemented in close collaboration with MOH, the two PEPFAR-supported 2018 MSM and FSW size estimates and the two MOH/GF-supported 2018 MSM and FSW IBBSs will provide critical HIV epidemiologic data to immediately improve optimize testing strategies to support 95-95-95 goals.

In addition, the prevention TWG will coordinate with partners to improve linkage of all positives to treatment with a focus on those most vulnerable to loss to follow up, such as FSW and MSM, through stronger coordination of MOH facilities with referring partners to strengthen referral/counter referral processes, stronger group specific peer/support groups and stronger follow up to those lost to treatment. The implementation of case-based surveillance (CBS) for active case finding coupled with the N-UPID will strengthen linkages between testing and treatment. Finally, PEPFAR with MOH will initiate semi-annual prevention data quality assessments across the seven PEPFAR-supported prevention (KP/PP/OVC/DREAMS) partners.

National treatment priorities supported by PEPFAR include policy and guideline modifications and site-level support to increase the number of patients eligible for services provided to “stable” patients through DSDM, the transition of all patients to TLD and implementation of TB preventive therapy. In addition, PEPFAR with MOH will review and address specific gaps identified in retention among pediatric (less than 15 years old) and young adult (15-24 years old) males and females, as well as low viral load suppression rates among less than 15 years old. Implementation of CBS and N-UPID will greatly facilitate site-level and individual patient-level analyses of retention, drug adherence and viral suppression.

Leveraging previous PEPFAR investments in information technology, the CBS system is integrating previously deployed e-health record systems (EMR), health information exchange systems and routine data collection systems (RHMIS) to develop an effective HIV active case finding and longitudinal case surveillance system. Human Resources for Health (HRH) initiatives continue to support central HRH cost-effective training systems for continuous HIV in-service training, building on the development of a USAID supported e-Learning platform. In addition, PEPFAR will continue to support the MOH centrally managed site-level monitoring and mentoring program to improve HIV clinical, laboratory and SI service delivery. COP18 supports continued improvements in lab quality and turn-around-time, with a focus on rapid test kit continuous quality improvement and reduced EID and viral load suppression turn-around time.

PEPFAR will continue to collaborate with the GOR and the World Health Organization in Rwanda, which is assisting in the accreditation of the National Reference Laboratory to implement point of care technologies for infant virologic testing. In addition, PEPFAR is coordinating with the GOR to provide technical assistance on the feasibility of public private partnerships (PPP). For example, Abbot Diagnostics is conducting a feasibility study on a cost recovery business model focused on long term sustainability of laboratory services, and Labs for Life is looking into a PPP with Becton Dickinson.



## 4.6 Targets for Scale-up Locations and Populations

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

Entry Streams for ART Enrollment	Tested for HIV (APR FY19) <i>HTS_TST</i>	Newly Identified Positive (APR FY19) <i>HTS_TST_POS</i>	Newly Initiated on ART* (APR FY 19) <i>TX_NEW</i>
Total Men	423,347	7,077	5,976
Total Women	553,248	9,040	8,159
Total Children (<15)	68,266	434	441
<b>Adults</b>			
TB Patients	1,314	138	138
Pregnant Women	102,651	727	720
VMMC clients	58,603	115	92
Key populations	22,276	1,000	345
Community-based testing for KPs and Priority Populations	157,836	5,018	4,516
Other Testing	0	0	0
Previously diagnosed and/or in care	0	0	0
<b>Pediatrics (&lt;15)</b>			
HIV Exposed Infants	3,225	50	50
Other pediatric testing	68,266	434	391
Previously diagnosed and/or in care	0	0	0

\*Linkage for testing was set at 90% of positives initiating treatment for children, men and women. Linkage for PMTCT and TB was set higher based on program priorities and historic achievement. This table under-targets linkage due to some partners testing clients and then referring them to enroll on treatment at facilities that they do not support.

**Table 4.6.2 VMMC Coverage and Targets by Age Bracket in Scale-up Districts**

SNU	Target Populations* (15-29 age band focus)	Population Size Estimate (2017)	Current Coverage (APR17)	VMMC_CIRC** (in FY18)	Expected Coverage** (in FY19)
Kigali	13,769	243,877	161,552 (83%)	175,488	189,257 (97%)
Eastern	27,078	401,415	183,239 (57%)	206,752	233,830 (73%)
Southern	15,246	381,774	109,309 (36%)	120,726	135,972 (45%)
Northern	29,356	275,125	84,236 (38%)	99,541	128,897 (59%)
Western	21,786	382,803	204,336 (67%)	221,509	234,295 (79%)
<b>Total</b>	<b>107,235</b>	<b>1,684,994</b>	<b>742,672</b>	<b>824,016</b>	<b>922,251</b>

\*Military targets are incorporated in the province they will occur.

\*\*Assumes targets for FY18 and FY19 are met.

<b>Target Populations</b>	<b>Population Size Estimate (scale-up SNUs)</b>	<b>Coverage Goal (in FY18)</b>	<b>FY19 Target</b>
Female sex workers	12,278	100%	16,339
Men who have sex with men	1,670	86%	1,440
AGYW (ages 15-24)			47,321
Clients of female sex workers			18,940
Persons with STI symptoms			3,500
<b>Total</b>			<b>87,540</b>

**Table 4.6.4 Targets for OVC/DREAMS and Linkages to HIV Services (FY19)**

<b>SNU</b>	<b>OVC/DREAMS-like OVC_SERV (All)</b>	<b>OVC/DREAMS_ OVC_SERV/ Active</b>	<b>OVC/DREAMS- like_HIVSTAT &lt;18</b>
Kigali	38,786	35,597	24,208
Eastern	17,171	15,902	10,817
Southern	17,881	16,215	11,464
Northern	21,044	18,322	13,047
Western	22,718	20,001	14,085
<b>Total</b>	<b>117,600</b>	<b>106,037</b>	<b>73,622</b>

Total OVC/DREAMS - OVC\_SERV include 25,000 DREAMS and 92,600 OVC  
OVC/DREAMS\_HIVSTAT (equal OVC\_SERV/DREAMS<18) includes 19,210 DREAMS and 54,412 OVC <18

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**Table 4.6.4.a COP18 DREAMS-like Targets**

Implementing Partner	Province	Outside OVC	From OVC	Total DREAMS
AEE & Global Communities	Kigali	14,074	2,500	16,574
Caritas	Eastern	5,926	500	6,426
FXB	Southern	5,000		5,000
<b>Total</b>		<b>25,000</b>	<b>3,000</b>	<b>28,000</b>

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**Table 4.6.4.b DREAMS-like Program Targets by Age Band**

IP/Mechanism	Province	District(s)	10-14 Yrs	15-19 Yrs	20-24 Yrs	Total targets
AEE/Ubaka Ejo	Kigali	Gasabo	1,937	2,252	1,226	5,415
Caritas/Gimbuka	Eastern	Rwamagana	2,182	3,244	1,000	6,426
FXB/Turengere Abana	Southern	Nyanza	1,777	2,551	672	5,000
GC/Twiubake	Kigali	Kicukiro; Nyarugenge	2,504	5,953	2,702	11,159
<b>Total</b>			<b>8,400</b>	<b>14,000</b>	<b>5,600</b>	<b>28,000</b>

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

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In COP18, PEPFAR will focus its program activities in the five provinces of Rwanda (Kigali, Northern, Southern, Eastern and Western) with each of these designated for scale-up saturation, implementing scale-up activities as described in Section 4 of the SDS (*see above*). Determination of pediatric saturation requires improved estimations for pediatric PLHIV.

## 6.0 Program Support Necessary to Achieve Sustained Epidemic Control

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### 6.1 Critical Systems Investments for Achieving Key Programmatic Gaps

Rwanda has made considerable progress in diagnosing, treating and achieving viral suppression in PLHIV. The improvements from SID 2.0 to 3.0 illustrate Rwanda's stable progress to achieve program sustainability and manage the country's HIV and AIDS response; however, challenges still remain. Results from SID 3.0 and SIMS suggest that quality assurance management is needed in service delivery, performing complex tests and improving community-facility linkage to HIV treatment. These challenges are also identified through analysis of program data.

An evidence-based understanding of the impact of prevention and service delivery models is also critical to ensure resources target activities that contribute to epidemic control.

PEPFAR's above-service delivery investments continue to align with strategies designed to improve site-level programmatic challenges – particularly to identify new sources of infections, link them to treatment and bring the remaining undiagnosed PLHIV into the cascade. COP18's systems investments will focus on targeted approaches in commodity security and supply chain, service delivery, health care worker capacity improvement, health information systems, quality management and laboratory to reduce the incidence of new infections and achieve HIV epidemic control.

In COP18, PEPFAR will build on COP17 efforts that continue to present programmatic barriers to achieve sustained epidemic control:

1. Improve systems to ensure supply chain management capacity and commodities security.
2. Continue investments in the existing HIV workforce, service delivery systems, improve resource efficiencies as Rwanda adopts innovative approaches to find new sources of HIV infections, reach new positives, link positives to treatment, maintain retention and adherence while in care and increase PLHIV with viral load suppression.
3. Improve mechanisms to measure impact of PEPFAR investments.
4. Need to improve laboratory infrastructure, CQI, monitoring systems for transportation, specimen referral and test results between lab and sites.

The following sub-sections will describe targeted approaches to address programmatic gaps, outline benchmarks and outcomes and discuss leveraging systems by MOH where applicable.

### **6.1.1 Improve Systems to Ensure Supply Chain Management Capacity and Commodities Security**

In COP18, inadequate supply chain management capacity to ensure commodity security remains a key programmatic gap as revealed in the 2017 National Supply Chain Assessment (NSCA) especially with respect to supply chain mapping, capability maturity model and supply chain key performance indicators. Findings of the NSCA and routine program have shown that currently there is limited system capacity to: ensure proper phase-out of legacy regimens (containing NVP and AZT for adult first line) and successfully transition to TLD and DTG based regimens; incorporate new medicines, recency tests and self-testing kits in to the supply chain in a timely manner; bundle laboratory supplies; successfully transform MPPD into a parastatal organization (including the development of standard operating procedures); to increase informed decision making based on quality, real-time logistics data; and to improve the integrated quantification exercise with a special focus on HIV commodities.

Finding new PLHIV and linking them to treatment is only possible if the appropriate diagnostics, treatment and lab commodities are in the right place, at the right time and at the right price and quantity to the supply chain system. Despite progress toward reaching year one and year two benchmarks established in COP16 and COP17, significant work remains to be done to sustain the gains and improve the supply chain. Rwanda's in-country distribution system and supply chain design enables a high level of commodity availability in health facilities with donor support; however, national institutions and processes must continue to be strengthened in order to independently ensure sufficient and reliable supply of products.

PEPFAR will support the transformation of the MPPD to a parastatal organization. The transformation is anticipated to resolve structural and managerial relationship between MPPD and district pharmacies (DPs) and give more autonomy to the central medical store by elevating its top management position to a Director General level. It is also expected that management authority and structural changes in the current MPPD and DP system will improve efficiencies and streamline the country supply chain systems; and increase on-time product delivery to the health facilities. The MPPD transformation is starting in FY18 but the transformation processes may continue until FY20. This effort will improve sustainability and facilitate the transition of PEPFAR support while also increasing the procurement and distribution capacities and timely delivery of commodities to the patient level. PEPFAR will also improve logistics data for decision-making by institutionalizing and upgrading, the electronic logistics management information system; explore the GS1 standard for track and trace of commodities in the supply chain systems; increase capacity for MOH and RBC supply chain oversight through Quality Management Improvement Approach, a supervision and mentoring approach to improve quality in supply chain systems and inventory managements; design and implement laboratory bundling and strengthening network capacity to manage laboratory stock and maintain appropriate level of inventories for key lab supplies; ensure the proper national transition of TLD- and DTG-based regimens and provide technical assistance to a complete phase out NVP and AZT from adult 1st line regimens; and support the national integrated Coordinated Procurement and Distribution Systems budgeting and supply planning exercises.

### **6.1.2 Continue Investments in the Existing HIV workforce, Service Delivery Systems and Improve Resource Efficiencies as Rwanda Adopts Innovative Approaches to Find New**

## **Sources of HIV Infections, Reach New Positives, Link Positives to Treatment, Maintain Retention and Adherence While in Care and Increase PLHIV with Viral Load Suppression**

In COP18, PEPFAR's above service delivery efforts will continue to improve systems within MOH to maintain quality HIV service provision, identify new positives and link them to care and treatment. As Rwanda scales up Phase I initiatives in index testing, recency testing, targeted self-testing and develops policies around PrEP and preventive TB therapy, PEPFAR will support MOH to develop policies, design programmatic approaches, train health care workers and standardize systems necessary to sustain HIV services as well as revise existing guidelines and tools as needed based on the experience from Phase I implementation of these initiatives.

PEPFAR will support the development of policies, guidelines and implementation around key program directives for the national HIV program. These policies and guidelines will be focused on PrEP, TLD transition and preventive TB therapy. In addition, PEPFAR will support MOH to revise existing guidelines and standard operating procedures based on results and experience from the Phase I initiatives. Guideline and tool revisions will focus on index testing, self-testing, standardized national KP clinical and reporting tools, routine screening for high risk individuals and other strategies to improve HIV diagnosis, retention and viral load suppression. PEPFAR will also continue to support the Ministry's national clinical mentorship program and continuous quality improvement initiatives for health care workers to strengthen the Ministry-led HIV program monitoring and improvement process as national programs are formalized. PEPFAR will continue to strengthen cost-effective and sustainable systems to train health care worker in clinical, lab and SI to ensure quality of HIV services, especially as new modalities are implemented. PEPFAR will leverage MOH development of a central learning platform to support HIV training content through distance and remote learning so that health care workers can have timely resources to learn about emerging issues and nuances in HIV service delivery at PEPFAR-supported sites.

PEPFAR will also support the monitoring and evaluation of new initiatives. As with DSDM and Treat All introduced in COP16, enhanced monitoring of these new initiatives will be important to identify and call attention to issues that may interrupt or impede quality of services, such as patient adherence, retention in treatment and VL suppression.

The goals in the investments listed above are to institutionalize systems within MOH to better improve planning, boost efficiencies and increase ownership of the HIV program as funding declines over time. The outcome of these time-bound approaches is also to establish policies and mechanisms within MOH that are implemented, evaluated and refined to support evolving HIV initiatives; build the capacity of health care workers to identify, treat and manage HIV care; and promptly respond to challenges in HIV service delivery through evidence-based data collection.

### **6.1.3 Improve Mechanisms to Measure Impact of PEPFAR Investments, Focus on Identifying Key Populations and Support Data-Driven Decisions to Achieve Epidemic Control**

In COP17, the focus was on improved monitoring and surveillance activities with an emphasis on developing key foundational systems to support case-based surveillance. In COP18, PEPFAR will expand on last year's efforts to develop the integrated digital platform of health information systems to provide the data for monitoring programmatic activities. The focus will be to design a

platform to precisely identify individuals and provide quality data at the individual-level; conduct studies to better understand the size of key populations; and improve the capacity to conduct vital data analysis and synthesis required for HIV programmatic decisions at the central, district and facility levels.

PEPFAR's strategic information investments support the site-level approaches for epidemic control through supplying the data and information necessary to provide appropriate services effectively. Active CBS uses an N-UPID and patient-level clinical service data from HIV testing and treatment services to provide more immediate access to the data needed to understand important trends for newly diagnosed PLHIV. These data can inform practitioners of: 1) who is being infected; 2) where new diagnoses are concentrated; and 3) how new diagnoses were acquired on an aggregate level. PEPFAR will support the development of the digital platform for Active CBS. This initiative leverages previous investments by PEPFAR and the GOR through the adoption, adaptation and application of electronic health information systems, such as the EMR, currently used to support HIV treatment. The fundamental ability of electronic health information systems to exchange data increases the focus on the individual patient's health, regardless of which system has their health-related data. The joining of all the health-related data provides a more accurate view of the epidemic from an individual-level to national-level when the data are aggregated and analyzed. The extraction of the MER indicator data from the EMR to the RHMIS improves data quality and timeliness of the data collected. This allows for more detailed, rigorous and timely examination of the PEPFAR indicators regarding epidemic control. In FY17, the CBS/Recency Protocol was developed and submitted for review by the Rwanda and CDC human subject ethics boards. In FY18, CBS will be rolled out in a paper-based form to five high volume sites in Kigali. In COP18, PEPFAR will develop the digital platform with an integrated N-UPID, and the digital CBS will be rolled out to a total of 20 high volume sites (Figure 6.1.3.b). In FY18, PEPFAR will work with MOH to plan to expand CBS nationally and build long term management and sustainability of the system.

Building human capacity to conduct data quality assessments, continuous data quality improvement activities, data analysis and use data to make decisions regarding the HIV epidemic in Rwanda continues to be a key component of reaching epidemic control. PEPFAR will support health care providers to expand their epidemiological capacities in HIV surveillance and data collection. As the Field Epidemiology Training Program (FETP) is transitioning to MOH, PEPFAR will continue to provide support to train HIV epidemiologists as strategies for epidemic control require epidemiologic analysis and active case finding. This continued support ensures efficient collection, recording, synthesis and use of quality data from the national level to the sub-national level. This initiative will also strengthen MOH's ability to sustain HIV control efforts.

To monitor the progress of the data quality, health information systems, surveys, surveillance and capacity-building activities, measurable benchmarks have been developed to determine progress toward the achievement. Interim milestones have been incorporated into project and work plans as part of core partner management activities.



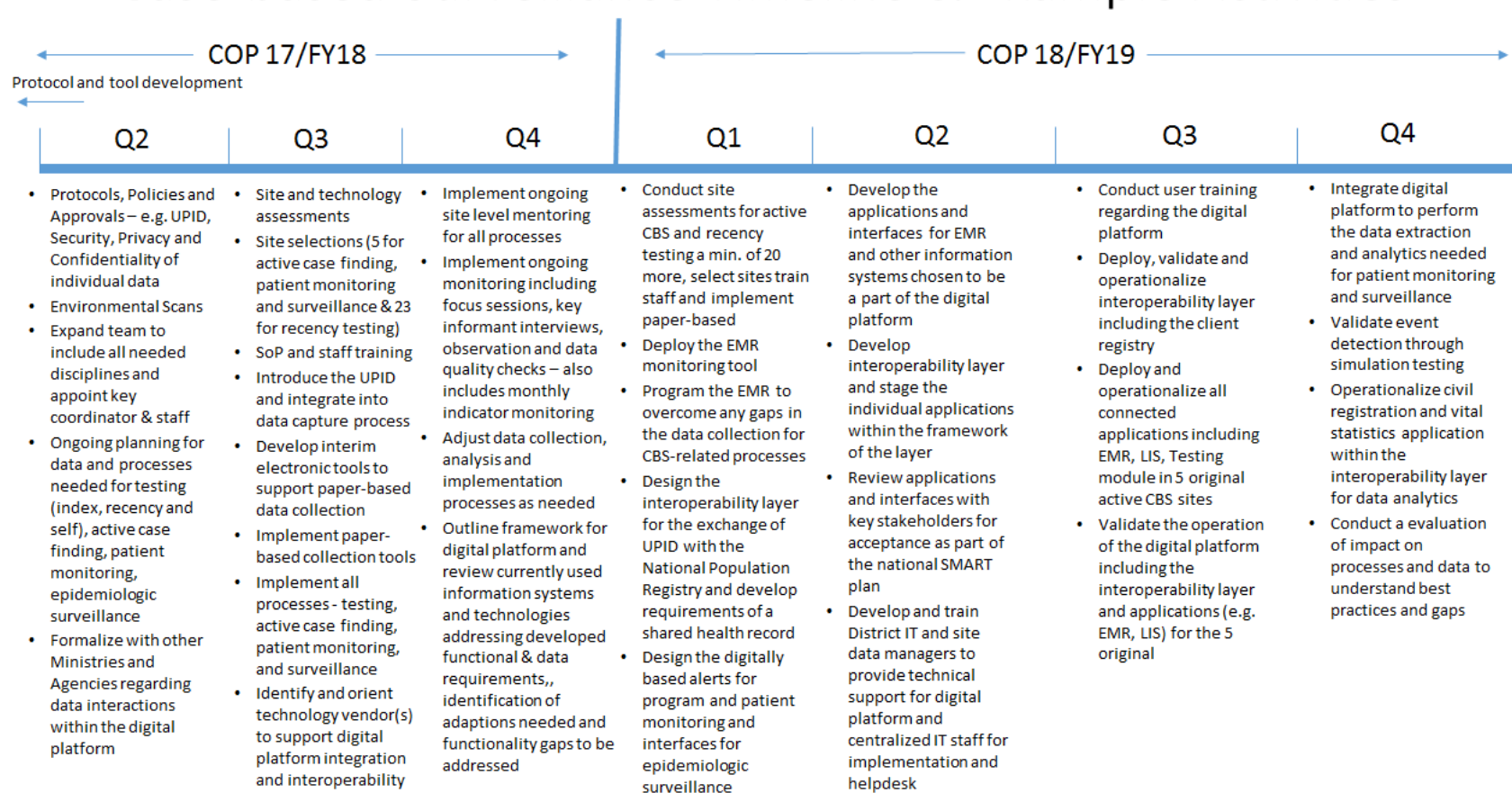




4.9. Scale up of recency testing to all PEPFAR and GF/MOH at sites	Recency testing will be conducted in 23 Kigali sites over a 6-month period with data collection and monthly review conducted, with report available and with recommendations to rollout national in the next 12 months	RBC, MOH and CDC teams	Number of sites conducting recency testing from other PEPFAR and GF/MOH sites in the next 12 months																
4.10. Continue continuous quality improvement and data collection/reporting at all PEPFAR and GF/MOH at sites	Recency testing will be rollout nationally with more HCP trainings, CQI and continued routine data collection and quarterly reviews conducted	RBC and MOH teams	Quarterly program reviews conducted and interventions planned to make policy/recommendations to interrupt transmission of recent HIV infections																

Figure 6.1.3.b

## Case-based Surveillance Timeline & Example Activities



#### **6.1.4 Need to Improve Laboratory Infrastructure, CQI, Monitoring Systems for Transportation, Specimen Referral and Test Results Between Lab and Sites**

As Rwanda further implements targeted testing (Treat All and DSDM) the country must continue its efforts to strengthen laboratory systems to correctly identify and promptly provide results that will be used to link all newly diagnosed and existing PLHIV to effective HIV treatment. These systems encompassing information, quality management systems and quality improvement initiatives remain critically important for interrupting new HIV infections, maintaining a high rate of linkage to treatment and VL suppression toward epidemic control.

In COP17, the emphasis was on the development of an integrated laboratory diagnostics and information systems and quality improvement initiatives (RTCQI) that builds on established and newly implemented systems to provide timely, reliable and accurate results for care and treatment of PLHIV. These were aimed at improving the quality of infrastructure, human resources, sample referral systems and testing services to reduce laboratory turn-around-time (TAT) and improved test results management. The planning, review, development and scale up of these activities are in progress.

In COP18, Rwanda will build on the FY17 achievements to strengthen these systems to provide timely, complete and accurate results for HIV case finding; monitoring treatment; disease surveillance; and ultimately epidemic control through improved quality of specimen management, testing services, laboratory data management and documentation of results for patient care. Having noted the challenges faced in COP17 with turnaround times for VL and EID, the lab will strengthen site-level mentorships, review, update and develop guidelines and standard operating procedures. A key activity in COP18 is the improvement and scale up of the Viral Load Specimen Monitoring and Tracking System and the basil laboratory information system from 5 to 26 health facilities, which will enable a more robust clinical/laboratory interface, reduce TAT for HIV test results and allow for prompt aggregate performance review to advise clinicians and the program. Moreover, PEPFAR will continue supporting sustainable sample transportation system in place for specimen referral and optimized testing services in the lab network as well as laboratory information system for monitoring quality of results including VL suppression and reducing TAT for EID and VL test results for all patients on ART.

The laboratory activities will also continue to sustain the attainment of national and internationally recognized standards in intermediate laboratories.

#### **PEPFAR COP18 Surveys, Evaluations and Research:**

##### **1. RPHIA**

- **Survey Description:** To estimate national HIV incidence and the provincial prevalence of HIV viral load suppression (defined as HIV RNA less than 1000 copies/mL).
- **Key Systems Barrier to Be Addressed:** Inefficient mechanisms to measure impact of PEPFAR investments on Treat All and new service delivery and testing models, identify key populations as drivers of the epidemic and support data-driven decisions to achieve epidemic control.
- **Study Time Frame:** Two years
- **Research Outcome:** Measure important national HIV-related parameters, including progress toward 95-95-95 goals, guide policy and funding priorities.

2. **Active Case-Based Surveillance for HIV in Rwanda (including recency testing)**
  - **Survey Description:** To increase understanding of HIV transmission modes through network analysis and recency test results, which will improve HIV targeted testing strategies.
  - **Key Systems Barrier to Be Addressed:** Limited data tracking and reporting systems to measure impact of PEPFAR investments to achieve epidemic control.
  - **Study Time Frame:** Three years
  - **Research Outcome:** Improved impact measures through the provision of electronic linkages and systems that support routine monitoring and specialized surveillance to provide quality data for decision-making.
  
3. **Behavioral Biological Assessment and Population Size Estimation for Female Sex Workers (FSW) in Rwanda**
  - **Survey Description:** To provide FY20/21 updated FSW size estimate and BBS following the FY18 studies in Rwanda. **Key Systems Barrier to Be Addressed:** Insufficient mechanisms to measure impact of PEPFAR investments on Treat All and new service delivery and testing models, identify populations that are drivers of the epidemic and support data-driven decisions to achieve epidemic control.
  - **Study Time Frame:** In COP18, PEPFAR will fund the development of the FSW protocol, with MOH/GF implementing the study in FY20.
  - **Research Outcome:** Improved reliability of Rwanda's HIV program subnational and local HIV epidemiologic data to identify key and focus populations, map KPs and establish denominators for KPs to inform the KP clinical cascade and monitor epidemic control in these populations.
  
4. **Behavioral Biological Assessment and Population Size Estimation for Men who have Sex with Men (MSM) in Rwanda.**
  - **Survey Description:** To provide FY20/21 updated MSM size estimate and BBS following the FY18 studies in Rwanda.
  - **Key Systems Barrier to Be Addressed:** Insufficient mechanisms to measure impact of PEPFAR investments on Treat All and new service delivery and testing models. Need to identify populations that are drivers of the epidemic and support data-driven decisions to achieve epidemic control.
  - **Study Time Frame:** In COP18, PEPFAR will fund the development of the MSM protocol, with MOH/GF implementing the study in FY20
  - **Research Outcome:** Improved reliability of Rwanda's HIV program subnational and local HIV epidemiologic data to identify key and focus populations, map KPs and establish denominators for KPs to inform the KP clinical cascade and monitor epidemic control in these populations.
  
5. **Effect of Differentiated New Service Delivery Model on HIV Drug Resistance in Rwanda Using Routinely Collected Program Data**
  - **Survey Description:** To monitor and evaluate the impact of DSDM on delivery of HIV treatment, particularly its effect on HIV drug resistance.
  - **Key Systems Barrier to Be Addressed:** Insufficient mechanisms to measure impact of PEPFAR investments on Treat All and new service delivery and testing

models. Need to identify populations that are drivers of the epidemic and support data-driven decisions to achieve epidemic control.

- **Study Time Frame:** One year
- **Research Outcome:** Improved understanding of the effect of Treat All and DSDM initiatives on HIV drug resistance.

#### 6. Evaluation of Human Resources for Health in Rwanda under PEPFAR

- **Survey Description:** To evaluate the effect on HIV outcomes through investments in the PEPFAR-funded HRH program from 2012-2017.
- **Key Systems Barrier to Be Addressed:** None stated.
- **Study Time Frame:** Two years
- **Research Outcome:** Increased understanding of the investments in HRH on HIV health outcomes.

#### 7. Improved Services for Vulnerable Populations Project Impact Evaluation

- **Survey Description:** To determine if HES activities alone lead to economic resilience and improvements in health and education among the most vulnerable households.
- **Key Systems Barrier to Be Addressed:** None stated.
- **Study Time Frame:** Four years
- **Research Outcome:** Increased understanding of the cost effectiveness of interventions in OVC programs and understand the impact of additional social support and referrals on improved economic well-being and better health outcomes for beneficiaries.

## 7.0 Staffing Plan

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PEPFAR Rwanda is comprised of staff from the PEPFAR Coordination Office through the State Department, Centers for Disease Control and Prevention (CDC), U.S. Agency for International Development (USAID) and Department of Defense (DoD). The PEPFAR team reviewed and assessed staff-to-program alignment within the context of sustained epidemic control. There is an emphasis on PEPFAR fulltime equivalent staff in technical areas key to the successful implementation of COP18, including clinical care and treatment, PMTCT, HTS, SI, OVC/DREAMS and Laboratory.

PEPFAR agencies managing site-level data have staff skills to conduct necessary data analysis and interpretation as well as data application for program improvement. Overall, the estimated cost of doing business (CODB) for PEPFAR implementing agency-level management and operations accounts for a variety of factors. Agencies have anticipated increased International Cooperative Administrative Support Services and Capital Sharing-Cost Sharing rates, as well as Mission-required staff salary increases. Agencies have found efficiencies to keep the overall CODB down to accommodate lower future PEPFAR planning levels; no increases to CODB have been included in COP18.

CDC currently has five vacant positions of which four are expected to be filled by COP18 implementation. All positions were vacated starting in June 2017. Filling these vacancies is

critical to carrying out CDC's expanded portfolio. One position is under recruitment and expected to be filled before the start of COP18, while the remaining positions will be filled during COP18 implementation. CDC will continue to reduce its staffing profile by eliminating positions and repurposing current staff to align with PEPFAR program priorities and maximize efficiencies. In COP18, CDC will abolish two existing positions and repurpose four others. CDC will not request any new positions in FY19.

USAID has rightsized its staffing footprint to its PEPFAR workload, with no increases in its staffing plan. USAID will be able to carry out the necessary SIMS visits and achieve COP18/FY19 priorities with its remaining team members. USAID does not have any long-term vacancies, new positions, or major changes to its staff. USAID's Supply Chain Advisor position, previously vacant during COP16/FY17 implementation, now has an incumbent.

In order to ensure adequate staffing and proper alignment of the DoD PEPFAR portfolio, DoD has now rightsized its staffing footprint (no change from COP17) and will be able to carry out the necessary SIMS visits.

## APPENDIX A -- PRIORITIZATION

Table A.1

2018 Projected ART Coverage					
	<15	15-24		25+	
	Total	Female	Male	Female	Male
Kigali City	73%	74%	80%	98%	90%
East	92%	85%	77%	95%	89%
South	78%	76%	86%	75%	79%
West	79%	106%	106%	90%	104%
North	80%	109%	102%	84%	61%
<b>Grand Total</b>	<b>80%</b>	<b>86%</b>	<b>87%</b>	<b>88%</b>	<b>85%</b>

2019 Targeted ART Coverage					
	<15	15-24		25+	
	Total	Female	Male	Female	Male
Kigali City	79%	84%	90%	108%	100%
East	93%	89%	81%	98%	92%
South	79%	81%	92%	78%	82%
West	78%	107%	108%	89%	104%
North	76%	116%	109%	88%	64%
<b>Grand Total</b>	<b>81%</b>	<b>91%</b>	<b>94%</b>	<b>92%</b>	<b>90%</b>

Table A.2 ART Targets by Prioritization for Epidemic Control						
Prioritization Area	Total PLHIV	Expected current on ART (APR FY 18)	Additional patients required for 80% ART coverage	Target current on ART (APR FY19) TX_CURR	Newly initiated (APR FY 19) TX_NEW	ART Coverage (APR 19)
Scale-Up Saturation	227,879	197,802 (126,621 PEPFAR)	0	210,243 (126,621 PEPFAR*)	(14,745 PEPFAR*)	87%
<b>Total</b>	<b>227,879</b>	<b>197,802</b>	<b>0</b>	<b>210,243</b>		<b>87%</b>

\*includes both DSD and TA



# APPENDIX B – Budget Profile and Resource Projections

## B1. COP18 Planned Spending

Table B.1.1 COP18 Budget by Approach and Program Area

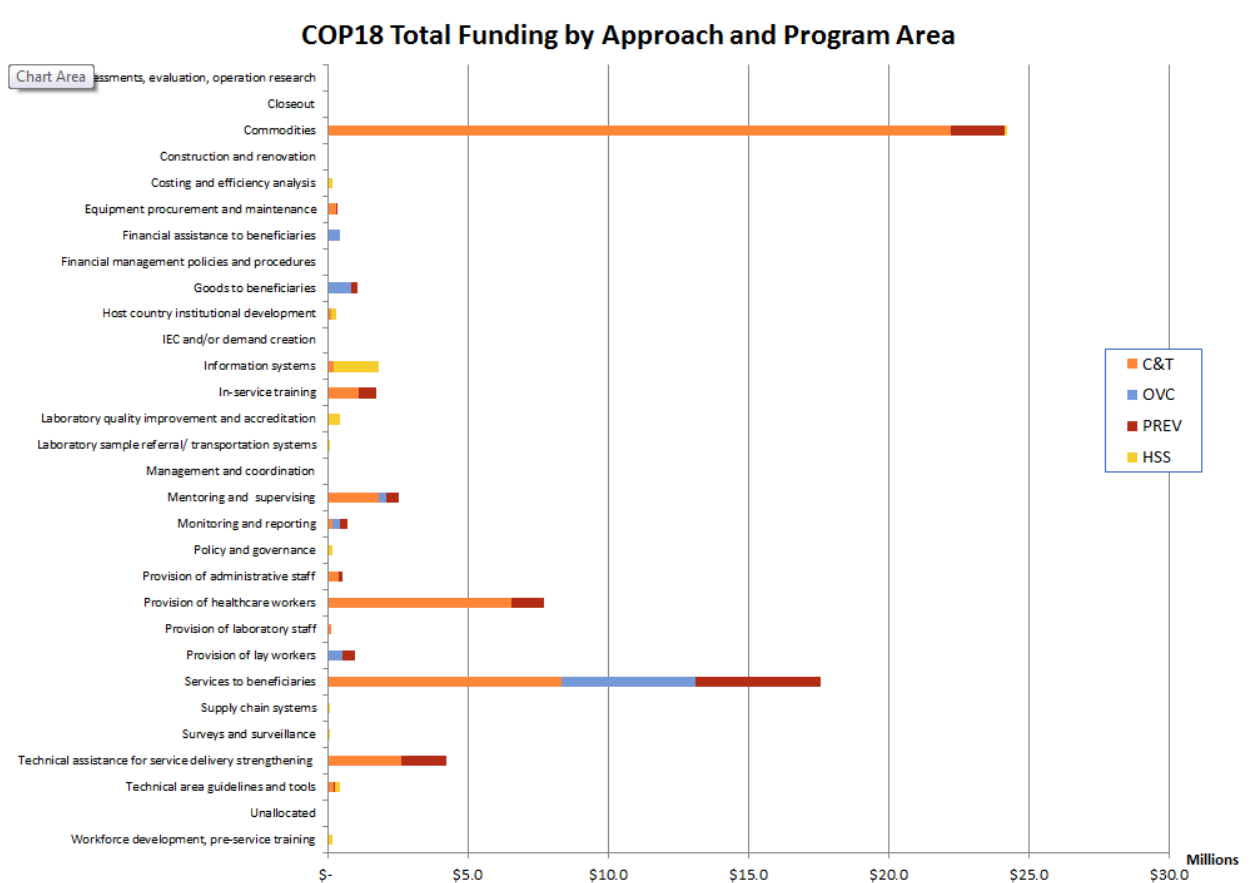


Table B.1.2 COP18 Total Planning Level

Applied Pipeline	New Funding	Total Spend
\$262,496	\$75,856,831	\$76,119,327

<b>Table B.1.3 Resource Allocation by PEPFAR Budget Code (new funds only)</b>		
<b>PEPFAR Budget Code</b>	<b>Budget Code Description</b>	<b>Amount Allocated</b>
MTCT	Mother to Child Transmission	\$2,142,435
HVAB/Y	Abstinence/Be Faithful Prevention/Youth	\$1,096,231
HVOP	Other Sexual Prevention	\$3,769,443
IDUP	Injecting and Non-Injecting Drug Use	\$0
HMBL	Blood Safety	\$0
HMIN	Injection Safety	\$0
CIRC	Male Circumcision	\$4,678,702
HVCT	Counseling and Testing	\$4,004,723
HBHC	Adult Care and Support	\$2,324,638
PDCS	Pediatric Care and Support	\$2,077,448
HKID	Orphans and Vulnerable Children	\$7,130,058
HTXS	Adult Treatment	\$20,853,802
HTXD	ARV Drugs	\$15,068,166
PDTX	Pediatric Treatment	\$1,501,825
HVTB	TB/HIV Care	\$1,396,115
HLAB	Lab	\$495,823
HVSI	Strategic Information	\$2,095,632
OHSS	Health Systems Strengthening	\$1,365,917
HVMS	Management and Operations	\$5,855,873
<b>TOTAL</b>		<b>\$75,856,831</b>

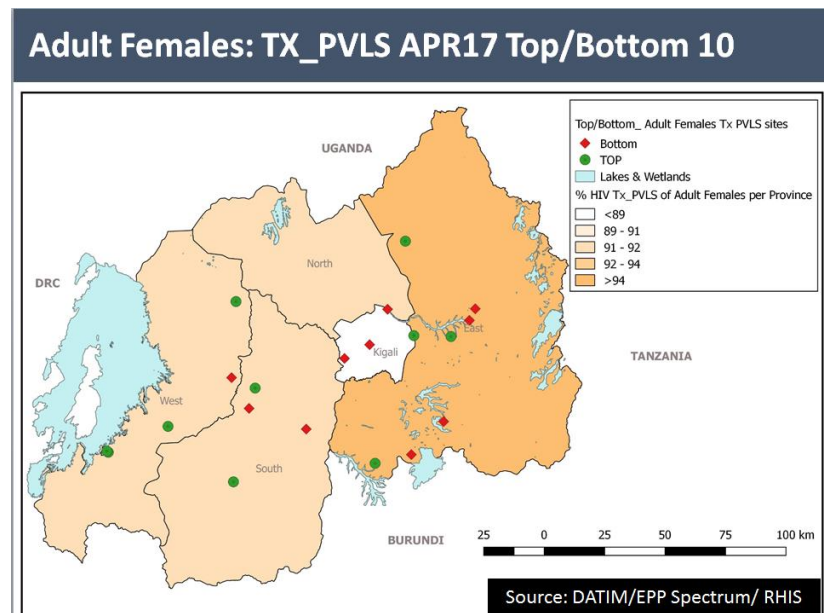
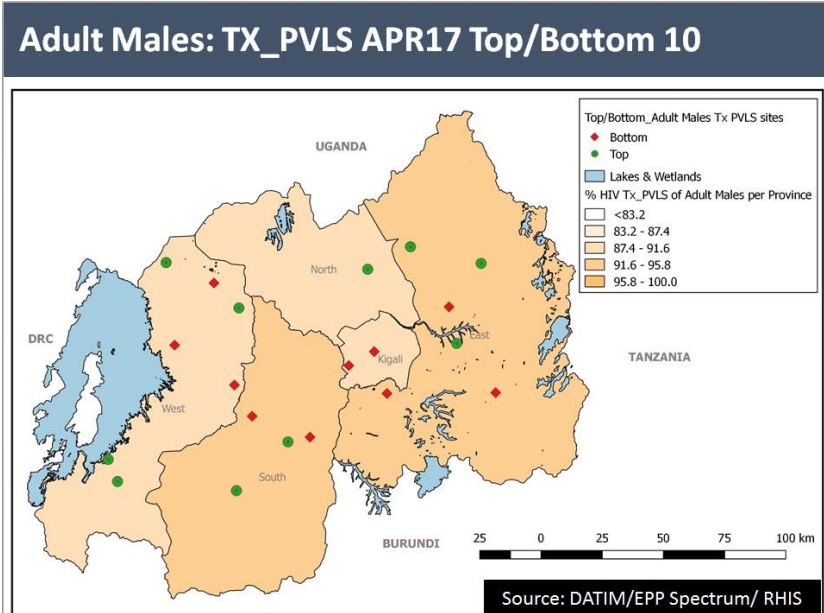
## **B.2 Resource Projections**

COP18 planning focused on program-based, incremental budgeting to determine the required resources to sustain program activities. PEPFAR implementing agencies used prior year budgeting as a starting point and highlighted year-over-year changes to programming to determine incremental increases or decreases to budgets. Implementing agencies provided work plans and categorized their strategic objectives into approaches to analyze if current funding and strategy were aligned and to allow for reallocation when not aligned.

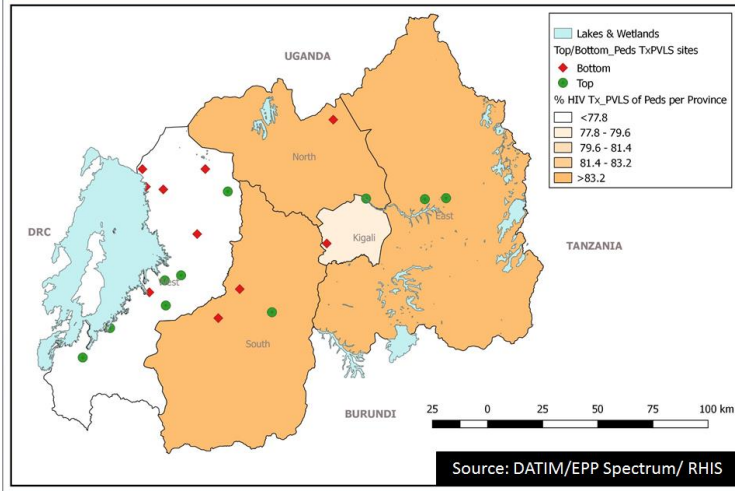
## APPENDIX C – Tables and Systems Investments for Section 6.o

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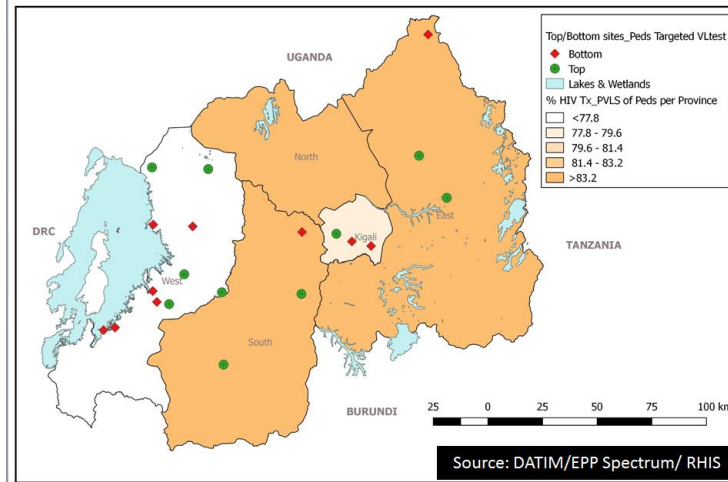
# APPENDIX D – Top Ten and Bottom Ten Viral Load Suppression Sites



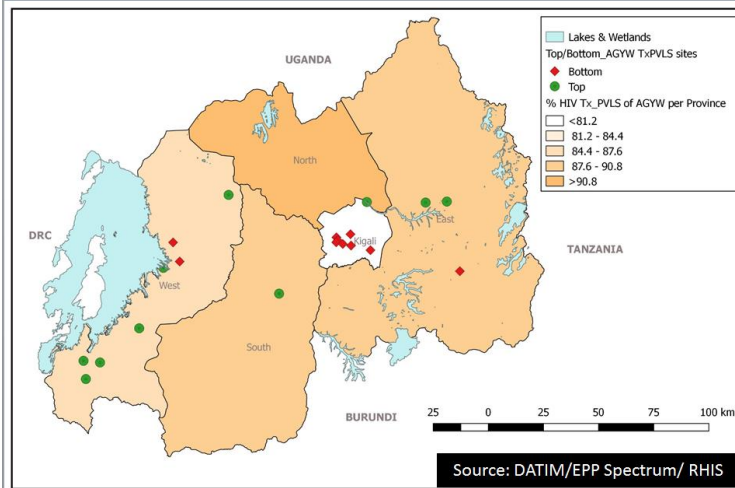
### Children <15: TX\_PVLS APR17 Top/Bottom 10



### Children <15: Targeted TX\_PVLS APR17 Top/Bottom 10

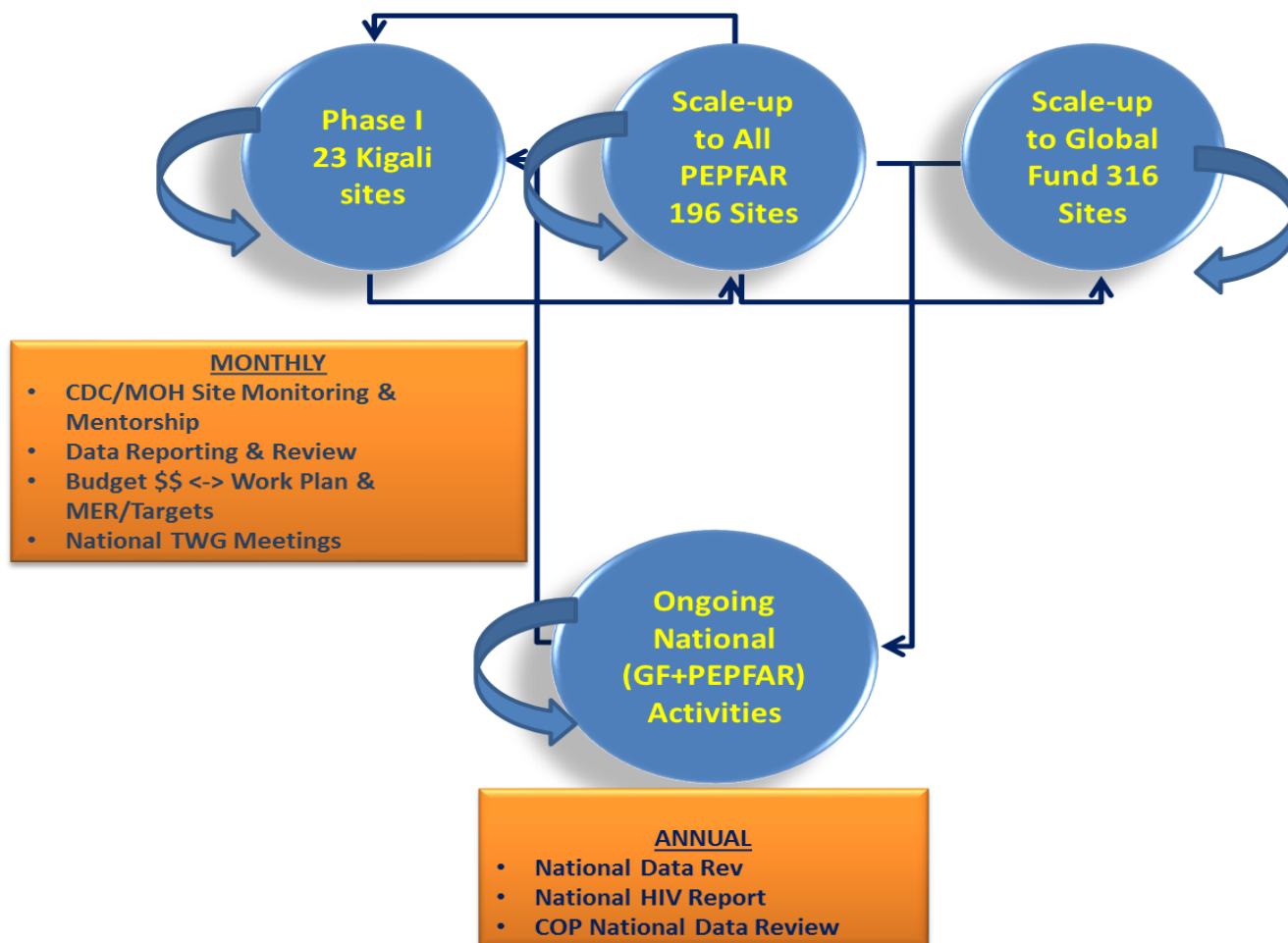


### AGYW: TX\_PVLS APR17 Top/Bottom 10

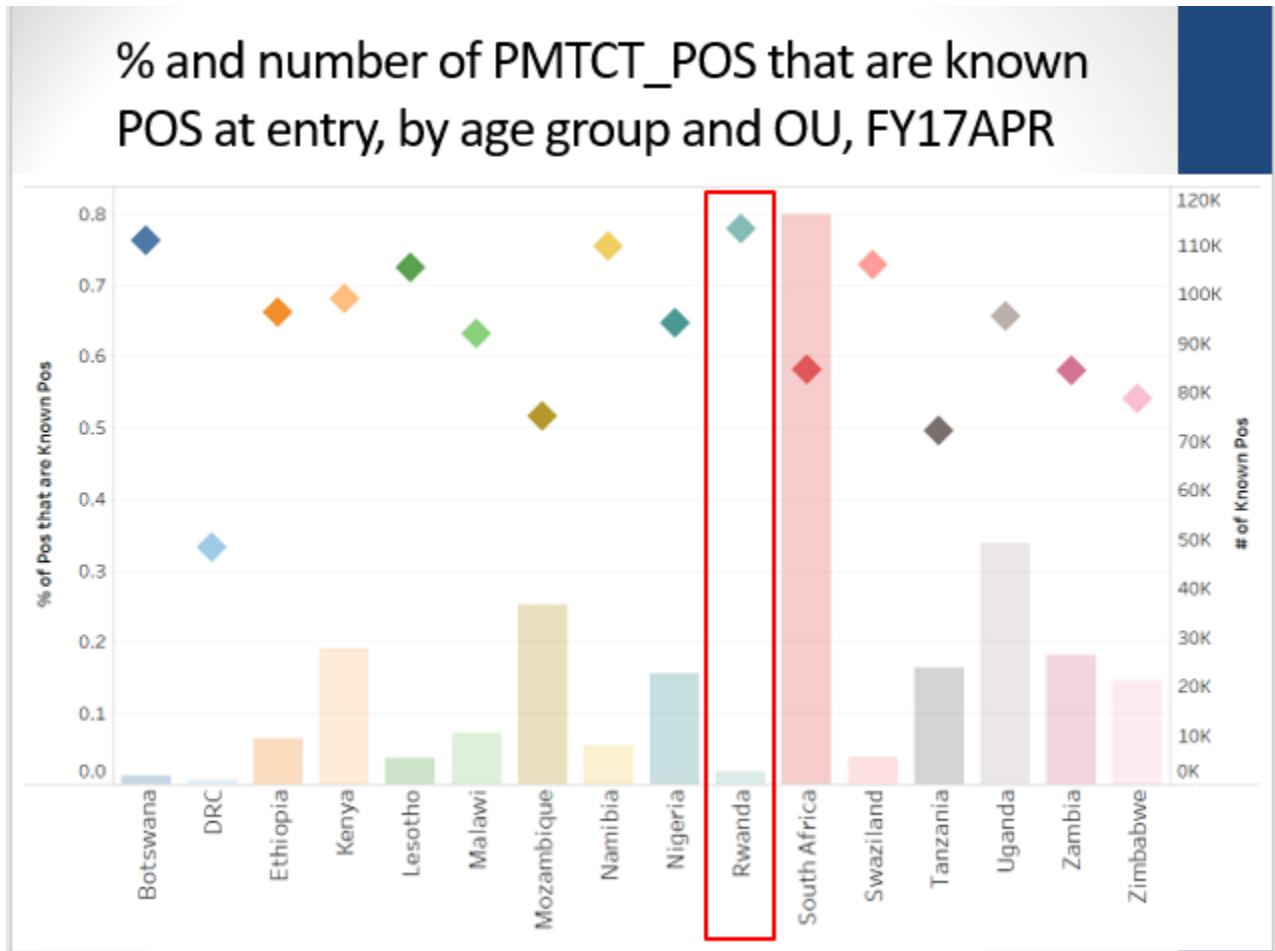


## APPENDIX E – QMEC Process and CQI Plan for MOH Implementation and Scale-up of Index Testing

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## APPENDIX F – ANC Data Comparisons



FY17 RW PMTCT_STAT_POS New v Known			
Age	Known at Entry	Newly Identified	% POS Newly Id'd by Age
<10	0	0	
10-14	2	1	
15-19	54	44	45%
20-24	258	178	41%
25-49	2374	548	19%
50+	1	1	
<b>Total</b>	<b>2689</b>	<b>772</b>	<b>22%</b>

# Table 6 Attachment

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Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
1	CDC	Enhancing Sustainable and Integrated Health, Strategic Information and Laboratory Systems for Quality Comprehensive HIV Services through Technical Assistance to the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity and quality of Rwanda's laboratory network to support HIV diagnosis, prevention, care and treatment, disease monitoring and surveillance	Laboratory quality improvement and accreditation	TA to NRL to support implementation and administration of VL LIS system for VL monitoring and CQI for HIV rapid testing	Inadequate infrastructure and human resources to improve return of test results between lab and sites, and insufficient mechanisms to monitor turnaround times (TAT) of VL/EID results to ensure that patients promptly receive test results and are referred for HIV care and treatment
2	CDC	Enhancing Sustainable and Integrated Health, Strategic Information and Laboratory Systems for Quality Comprehensive HIV Services through Technical Assistance to the Republic of Rwanda under PEPFAR	HSS	Provide technical assistance to Rwanda Biomedical Center to strengthen affordable and sustainable quality HIV services through mentorship, policy, and capacity development	Host country institutional development	Support RBC to expand eLearning central platform to address resource efficiencies by reducing site level training costs over time and complementing alternative forms of continuous professional development for HCWs as Rwanda adapts new HIV program priorities (formalized index testing, self-testing, IPT, PrEP, and recency testing). This activity will support the phased rollout of HIV training content in a distance learning format in PEPFAR supported sites. The rollout will include testing, evaluating and making recommendations to better inform the learning initiative.	Insufficient MOH systems to improve planning and increase resource efficiencies within the HIV program as PEPFAR support decreases and as Rwanda adopts innovative approaches to find new sources of HIV infections, reach new positives, link positives to treatment, maintain retention and adherence while in care, and increase PLHIV with viral load suppression

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
1	Laboratory	6.67	Mechanisms in place for laboratory health workers to improve TAT, timely HIV test results, and timely link to HIV care and through laboratory information systems	3 years	Tracking and results reports for VLISM, Recency, and ePT testing scores for RT-CQI	<ol style="list-style-type: none"> <li>1. Current assessment of VLISM implementation</li> <li>2. Established RT implementation system</li> <li>3. Current assessment of HIV RT CQI</li> </ol>	<ol style="list-style-type: none"> <li>1. Lab HCWs trained on VLISM system</li> <li>2. Lab HCWs trained on recency testing as linked to national surveillance activities</li> <li>3. eTools designed and implemented to support HIV RT CQI</li> </ol>
2	Service Delivery	6.67	Mechanisms in place (implemented, evaluated, and refined) for MOH to build capacity of health care workers to provide HIV service delivery through alternative training and learning modalities that are aligned with PEPFAR-supported priorities	3 years	Establishment of eLearning platform for HIV Trainings by RBC	<ol style="list-style-type: none"> <li>1. Concept note for eLearning platform</li> <li>2. Phased implementation plan for eLearning platform (with M&amp;E framework)</li> </ol>	Distance learning HIV training content offered at 50% of PEPFAR-supported district hospitals

Row	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP19) Annual Benchmark	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
1		<p>1. Improved functionality of VLSM system</p> <p>2. Improved HCW capacity implement recency testing</p> <p>3. Improved HCW capacity on RT CQI</p>		<p>1. HCWs capacitated to implement VL dashboard to understand treatment trends and analyze VL lab data for program improvement</p> <p>2. HCWs capacitated to implement recency testing, improve geolocation mapping to inform HIV prevention programming</p>	
2		<p>Distance learning HIV training content offered at 100% of PEPFAR-supported district hospitals and select health facilities</p>		<p>Distance learning HIV training content fully operational in 100% PEPFAR-supported district hospitals and select health facilities</p>	

Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
3	CDC	Enhancing Sustainable and Integrated Health, Strategic Information and Laboratory Systems for Quality Comprehensive HIV Services through Technical Assistance to the Republic of Rwanda under PEPFAR	HSS	Provide technical assistance to Rwanda Biomedical Center to strengthen affordable and sustainable quality HIV services through mentorship, policy, and capacity development	Host country institutional development	Support to RBC to design and implement HIV Quality Improvement framework to improve service delivery as Rwanda adapts new PEPFAR initiatives	Insufficient MOH systems to improve planning and increase resource efficiencies within the HIV program as PEPFAR support decreases and as Rwanda adopts innovative approaches to find new sources of HIV infections, reach new positives, link positives to treatment, maintain retention and adherence while in care, and increase PLHIV with viral load suppression
4	CDC	Enhancing Sustainable and Integrated Health, Strategic Information and Laboratory Systems for Quality Comprehensive HIV Services through Technical Assistance to the Republic of Rwanda under PEPFAR	HSS	Provide technical assistance to Rwanda Biomedical Center to strengthen affordable and sustainable quality HIV services through mentorship, policy, and capacity development	Policy and governance	Support to RBC to facilitate national policy and guideline development/revisions in alignment with PEPFAR-support HIV initiatives (including formalized index testing, recency testing, targeted self-testing, PrEP, TB preventive therapy) Will this actually take 3 years to accomplish?	Insufficient MOH systems to improve planning and increase resource efficiencies within the HIV program as PEPFAR support decreases and as Rwanda adopts innovative approaches to find new sources of HIV infections, reach new positives, link positives to treatment, maintain retention and adherence while in care, and increase PLHIV with viral load suppression

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
3	Service Delivery	6.67	Mechanisms in place (implemented, evaluated, and refined) for MOH to plan the national HIV program through development of a quality improvement program for the HIV program	3 years	Development of Quality Improvement framework for RBC HIV division	1. Developed QI framework developed and launched	An HIV focused quality improvement framework in place. Quality management and quality improvement integrated in the national clinical mentorship program.
4	Service Delivery	6.67	Policies in place (developed, implemented, and revised) for MOH to plan the national HIV program, using evidence-based interventions designed to target populations at greatest risk of HIV infection and in line with PEPFAR-supported priorities	3 years	Development of MOH's PEPFAR-supported HIV program policies	MOH's current PEPFAR-supported HIV program policies	Revisions to MOH's HIV policies in accordance with PEPFAR-supported HIV initiatives

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3		<p>1. 50% improvement in SIMS Scores in QI/QM related elements needing urgent remediation</p> <p>2. 50% improvement in SIMS Scores in QI/QM needing improvement</p>		<p>100% improvement in SIMS scores related QM/QA elements meeting or exceeding expectations</p>	
4		<p>Revisions to MOH's HIV policies in accordance with PEPFAR-supported HIV initiatives after first year of implementation and in alignment with new national HIV initiatives</p>		<p>Revisions to MOH's HIV policies in accordance with PEPFAR-supported HIV initiatives after subsequent year of implementation and in alignment with new national HIV initiatives</p>	

Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
5	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Information systems	<ol style="list-style-type: none"> <li>1) Scale up implementation of System Monitoring tool to PEPFAR sites with deployed EMR</li> <li>2) Analyze System Monitoring Tool data for needed EMR maintenance at previously deployed sites</li> <li>3) Conduct EMR maintenance, as needed</li> <li>4) Assess needed changes for MER, DSDM and other new initiative changes</li> <li>5) Distribute updates</li> </ol>	<p>Insufficient mechanisms to:</p> <ol style="list-style-type: none"> <li>1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models,</li> <li>2) Focus on identification of key populations, and</li> <li>3) Support data-driven decisions for achieving epidemic control</li> </ol>
6	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Information systems	<ol style="list-style-type: none"> <li>1) Update EMR and RHMIS software to meet requirements for exchange of MER 2.0 V2.2 indicators</li> <li>2) Expand the updated electronic indicator exchange program to all PEPFAR sites that meet data exchange standards (eligibility criteria)</li> </ol>	<p>Insufficient mechanisms to:</p> <ol style="list-style-type: none"> <li>1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models,</li> <li>2) Focus on identification of key populations, and</li> <li>3) Support data-driven decisions for achieving epidemic control</li> </ol>

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5	Performance Data	8.11	Improved impact measures through the provision of electronic linkages and systems that support routine monitoring and specialized surveillance to provide quality data for decision-making	3 years	Improved impact measures (as indicated by MER indicators and specialized programmatic indicators) through the provision of electronic linkages and systems that support routine monitoring and specialized surveillance to provide quality data for decision-making	EMR versions 1.6.7 and 1.11.2 are deployed to most PEPFAR-supported sites. An assessment of EMR functionality at sites is planned, paper-based tools are being tested for initiatives, in conjunction with the eHealth Impact Study (CDC ADS Implementation Science Study funds) supported the deployment of version 1.0 of the Systems Monitoring Tool and EMR module to include patient-related alerts for LTFU and VL for health care providers (pilot stage)	Updated EMR to support dashboards, alerts and changes in MER, DSDM, index, recency and other new initiative indicators and implemented System Monitoring Tool at all eligible PEPFAR sites
6	Performance Data	8.11	Improved impact measures through the provision of electronic linkages and systems that support routine monitoring and specialized surveillance to provide quality data for decision-making	3 years	Internal monitoring and evaluation of EMR to RHMIS Indicator Exchange program and the review of quality of PEPFAR indicator data within DATIM	Completed the assessment of MER 2.0 v2.1 indicators between EMR and RHMIS to identify gaps and issues in mapping of indicators (paper-based report). Currently assessing the changes to meet MER 2.0 v2.2. Once completed will be mapping and creating data alignment protocols	Implementation of automated data exchange of MER indicators from the EMR from eligible PEPFAR supported sites to RHMIS



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5		Improved data visualizations and tailored alerts that support changes in PEPFAR programmatic initiatives and documented use of data visualizations and tailored alerts at the national and sub-national levels		Improved data visualizations and tailored alerts that support changes in PEPFAR programmatic initiatives and documented use of data visualizations and tailored alerts at the national and sub-national levels to assist in reaching HIV epidemic control in Rwanda	
6		Updated MER data exchange from sites to RHMIS from all MoH sites to facilitate the collection of data regarding the HIV epidemic in Rwanda		Updated MER data exchange from sites to RHMIS from all MoH sites to facilitate the collection of indicator data and has demonstrated use in decision-making for reaching HIV epidemic control in Rwanda	

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7	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Information systems	<ol style="list-style-type: none"> <li>1) Assess EMR linkage methods and processes</li> <li>2) Develop data exchange platform</li> <li>3) Upgrade all possible PEPFAR sites to be able to exchange electronic data</li> <li>4) Deploy in a minimum of 20 PEPFAR sites</li> </ol>	<p>Insufficient mechanisms to:</p> <ol style="list-style-type: none"> <li>1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models,</li> <li>2) Focus on identification of key populations, and</li> <li>3) Support data-driven decisions for achieving epidemic control</li> </ol>
8	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Information systems	<ol style="list-style-type: none"> <li>1) Expand implementation of UPIDs to all PEPFAR sites with patient-level electronic data collection systems (e.g. LIS)</li> <li>2) Develop a patient-level electronic registration system that supports the use of UPID to monitor patient appointment visits and pharmacy pickups</li> <li>3) Deploy patient-level electronic registration module in a minimum of 20 PEPFAR-supported sites</li> </ol>	<p>Insufficient mechanisms to:</p> <ol style="list-style-type: none"> <li>1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models,</li> <li>2) Focus on identification of key populations, and</li> <li>3) Support data-driven decisions for achieving epidemic control</li> </ol>

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7	Performance Data	8.11	GoR implementation of unique patient identifiers in all PEPFAR sites in 3 years	3 years	Internal monitoring of UPID updates to EMR and deployment of updated EMR to PEPFAR sites as outlined in the partner management plan	Held national-level workshop on UPID Oct. 2017 and reached agreement among seven (7) ministries and governmental agencies to propose the use of the National Unique Identifier (NID) for all above age 16 years and the unique application number for those below 16 year (this needs final approval)	Adaption of EMR to support data exchange between EMR systems and match against UPID and deployed in a minimum of 50 eligible PEPFAR supported sites
8	Performance Data	8.11	GoR implementation of unique patient identifiers in all PEPFAR sites in 3 years	3 years	Internal monitoring of UPID data integration into all data collection and upgrades to patient registration modules to include UPID into PEPFAR sites as outlined in the partner management plan	Review is underway to assess and develop functional requirements for patient registration module. Small taskforce for electronic Lab Systems was agreed upon by eHealth TWG	Integration of UPID into EMR and other patient-level electronic data collection systems (i.e. LIS), adapt and upgrade patient registration module within EMR to include UPID

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7		Adaption of EMR to support data exchange between EMR systems and match against UPID and deployed in all eligible PEPFAR supported sites		Seamless linking of data on unique patients who move from site to site and increased ability to locate transferred patients and a reduction in patient's who lost-to-follow-up	
8		Integration of UPID into EMR and other Patient-level electronic data collections systems and patient registration module deployed to all eligible PEPFAR-supported sites		Seamless linking of data on unique patients within multiple data systems to support patient care within all eligible PEPFAR-supported sites	

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9	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Information systems	<ol style="list-style-type: none"> <li>1) Develop digital platform (integrate system findings from system functionality assessment and develop new modules to complete gaps)</li> <li>2) Integrate digital platform onto existing data exchange technologies (develop pieces needed to complete the gaps)</li> <li>3) Update hardware, software and communication technology, as needed</li> <li>4) Train staff to use digital system (data collection, analysis and reporting) for Active Case finding and Routine Case Surveillance</li> <li>5) Implement digital platform for CBS in a minimum of 20 out of 71 PEPFAR sites in PEPFAR hotspots</li> <li>6) Monitor and evaluate the scale-up process and implementation at scale</li> </ol>	<p>Insufficient mechanisms to:</p> <ol style="list-style-type: none"> <li>1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models,</li> <li>2) Focus on identification of key populations, and</li> <li>3) Support data-driven decisions for achieving epidemic control</li> </ol>
10	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Surveys and surveillance	<ol style="list-style-type: none"> <li>1) Conduct year two of the survey</li> <li>2) Collect specimens and perform drug resistance testing</li> <li>3) Analyze complete dataset (2 years)</li> <li>4) Complete study report and provide recommendations to national program based on findings</li> </ol>	<p>Insufficient mechanisms to:</p> <ol style="list-style-type: none"> <li>1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models,</li> <li>2) Focus on identification of key populations, and</li> <li>3) Support data-driven decisions for achieving epidemic control</li> </ol>

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9	Epidemiological and Health Data	6.56	Improved impact measures through the provision of electronic linkages and systems that support routine monitoring and specialized surveillance to provide quality data for decision-making	3 years	Internal monitoring and evaluation of CBS program plan data as outlined in the CDC/CGH/DGHT protocol	Developed Active CBS protocol and the approval from the Rwanda National Ethics Committee (RNEC) (currently under final review by CDC-Atlanta Science Integrity Branch (SIB)). Paper-based tools have been developed for testing in five (5) pre-designated "hotspots"	Develop digital platform for Active Case Based Surveillance System and deploy to 20 (minimum) PEPFAR supported sites
10	Epidemiological and Health Data	6.56	Improve understanding of the effect of Treat All and DSDM initiatives on drug resistance in Rwanda	1 year	Acceptance of Drug Resistance Surveillance final report by GoR	Year One of Drug Resistance Surveillance Survey is underway	Completion of Drug Resistance Surveillance Survey follow-up and sample testing after introduction of Treat All and DSDM

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9		Use of Active CBS System at a minimum of 20 sites (the data are used from active CBS to identify new HIV cases, confirm linkage of new HIV+'s, monitor patient continuum of care and provide epidemiologic surveillance of HIV epidemic) and deployment of Active CBS System to a minimum of 50% of PEPFAR-supported sites		Use of Active CBS System at a minimum of 60 sites (the data are used from Active CBS to identify new HIV cases, confirm linkage of new HIV+'s, monitor patient continuum of care and provide epidemiologic surveillance of HIV epidemic) and deployment of Active CBS System to all PEPFAR-supported sites	
10					

Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
11	CDC	Implementing Evidence-Based Prevention Intervention for Key Populations in Republic of Rwanda under PEPFAR	HSS	To improve understanding in characteristics of MSM through routinely collecting reporting systems	Surveys and surveillance	Develop protocol for MSM BSS	Insufficient mechanisms to: 1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models, 2) Focus on identification of key populations, and 3) Support data-driven decisions for achieving epidemic control
12	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Surveys and surveillance	Protocol Development for FSW BSS	Insufficient mechanisms to: 1) Efficiently measure impact of PEPFAR investments on Treat All and new service delivery and testing models, 2) Focus on identification of key populations, and 3) Support data-driven decisions for achieving epidemic control
13	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity and quality of Rwanda's laboratory network to support HIV diagnosis, prevention, care and treatment, disease monitoring and surveillance.	Technical area guidelines and tools	1) Review guidelines, SOPs and tools for sample referral, transport, testing and results management 2) Develop/ review of laboratory protocol, SOPs, data management, analysis and dissemination of findings for action	Inadequate monitoring of specimen referral, rejections and return of laboratory results for clinical and remedial action Insufficient systems in place for post market surveillance of HIV self-testing kits



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11	Epidemiological and Health Data	6.56	Improve reliability of Rwanda's HIV program subnational and local HIV epidemiologic data to identify key and focus populations, map KPs and establish denominators for KPs to inform the KP clinical cascade and monitor epidemic control in these populations	2 years	Developed MSM BSS protocol and gained approval by Atlanta SIB and Rwanda National Ethics Committee (RNEC)	Nearing completion of the MSM population size estimation study conducted by Emory University	Development of protocol and protocol approval gained for the MSM BSS for 2020
12	Epidemiological and Health Data	6.56	Improve reliability of Rwanda's HIV program subnational and local HIV epidemiologic data to identify key and focus populations, map KPs and establish denominators for KPs to inform the KP clinical cascade and monitor epidemic control in these populations	2 years	Developed FSW population size estimation protocol and gained approval by Atlanta SIB and Rwanda National Ethics Committee (RNEC)	Nearing completion of the FSW population size estimation protocol ready for submission through Atlanta SIB and Rwanda National Ethics Committee (RNEC) clearance to be conducted in COP17 by province and district to map these KPs and establish denominators for these KPs to inform KP clinical cascade and monitor epidemic control in these populations	Development of protocol and protocol approval gained for the FSW BSS for 2020
13	Laboratory	6.67	Improved quality of specimen management, testing services, laboratory data management and documentation of results for patient care Reliable access and supply system for self testing HIV kits at designated distribution kiosks	3 years	Developed/reviewed guidelines, protocols, SOPs and tools for specimen referral, testing, and results management for improved quality of laboratory operations and testing services	Guidelines/protocols, SOPs and tools developed	Reviewed guidelines/protocols, SOPs and tools developed for specimen and results management and HIV self-testing kit validation

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11		Implementation and completion of the MSM BSS 2020			
12		Implementation and completion of the FSW BSS 2020			
13		Reviewed guidelines/protocols, SOPs and tools for laboratory quality management systems		Reviewed guidelines/protocols, SOPs and tools for laboratory quality management systems	

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14	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity and quality of Rwanda's laboratory network to support HIV diagnosis, prevention, care and treatment, disease monitoring and surveillance.	Laboratory quality improvement and accreditation	1) Support NRL to acquire international accreditation 2) Support implementation of improvement projects at 48 Laboratories to achieve accreditation 3) Support implementation of RTCQII activities including site audit and tester certification, implementation of HIV/PT panel program and HTS Logbook	Inadequate continuous quality improvement of HIV core and specialized tests to support epidemic control Lack of local accrediting body
15	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity and quality of Rwanda's laboratory network to support HIV diagnosis, prevention, care and treatment, disease monitoring and surveillance.	Laboratory sample referral/transportation systems	1) Support VL/EID sample transport system between NRL and VL testing 2) Implement and monitor alternate VL/EID sample transport system	Inadequate sample transport systems to support efficient specimen referral and test result transmission
16	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity and quality of Rwanda's laboratory network to support HIV diagnosis, prevention, care and treatment, disease monitoring and surveillance.	Information systems	1) Support LIS maintenance at NRL 2) Support to implementation of VLISM at 5 PEPFAR supported VL/EID testing sites for VL results delivery and cascade monitoring 3) Support for infrastructure and HR development at 21 additional DHs 4) Support extension of interoperability between EMR/HMIS and BLIS rollout to 26 DHs	Inadequate infrastructure and human resources to improve return of test results between lab and sites, and insufficient mechanisms to monitor turnaround times (TAT) of VL/EID results to ensure that patients promptly receive test results and referred for HIV care and treatment

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
14	Laboratory	6.67	NRL is internationally accredited and support intermediate lab level engaged in CQI activities to meet national/international quality and biosafety standards 100% of HIV/RT use standard HTS logbook, 95% of sites participate and pass successfully on EQA/PT and 100% certification of HIV testers and sites	3 years	NRL is internationally accredited and all intermediate lab level engaged in CQI activities to meet national/international quality and biosafety standards Percentage of HIV/RT use standard HTS logbook, testers participate and pass successfully on EQA/PT and HIV testers and sites certified	NRL applied for international accreditation and all intermediate lab level engaged in CQI activities to meet national/international quality and biosafety standards 100% of HIV/RT use standard HTS logbook, 80% of testers participate and pass successfully on EQA/PT and 60% certification of HIV testers and sites	NRL is internationally accredited and 80% intermediate lab level engaged in CQI activities meet national/international quality and biosafety standards 100% of HIV/RT use standard HTS logbook, 95% of testers participate and pass successfully on EQA/PT and 60% certification of HIV testers and sites
15	Laboratory	6.67	Sustainable sample transportation system in place for specimen referral and optimized testing services in the lab network	3 years	Alternate sample referral and transport system in the lab network for VL/EID testing	Centralized sample transport system for VL/EID testing	NRL implements optimized sample referral and transport systems in the lab network for VL/EID testing
16	Laboratory	6.67	LIS in place for monitoring quality of results including VL suppression and reducing TAT for EID and VL test results for all patients on ART	3 years	TAT of VL results of referred sample through VLSM Interoperable LIS/BLIS and other health info systems (EMR/ HMIS) are in place	85% of patients on ART with TAT is more 14 days of VL results among LIS installed being put in place but not yet interoperable with EMR for patient records and RHMIS for aggregated data reporting	85% of patients on ART have documented VL results using VLSM and dashboard for monitoring TAT and VL suppression rates

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14		<p>NRL maintains international accreditation status and 95% intermediate lab level engaged in CQI activities meet national/international quality and biosafety standards</p> <p>100% of HIV/RT use standard HTS logbook, 95% of testers participate and pass successfully on EQA/PT and 100% certification of HIV testers and sites</p>		<p>NRL maintains international accreditation status and 95% Intermediate lab level engaged in CQI activities meet national/international quality and biosafety standards</p> <p>100% of HIV/RT use standard HTS logbook, 95% of testers participate and pass successfully on EQA/PT and 100% certification of HIV testers and sites</p>	
15		<p>NRL implements optimized sample referral and transport systems in the lab network for VL/EID testing</p>		<p>NRL implements optimized sample referral and transport systems in the lab network for VL/EID testing</p>	
16		<p>90% of patients on ART have documented VL results using VLSM and dashboard for monitoring TAT and VL suppression rates</p>		<p>100% of patients on ART have documented VL results using VLSM, dashboard and EMR/RHMIS for monitoring TAT and VL suppression rates</p>	

Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
17	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	C&T	Strengthen capacity of Rwanda Biomedical Center to manage the HIV care and treatment program	Technical area guidelines and tools	1. Support Rwanda Biomedical Center (RBC) to conduct HIV treatment policy review, guideline and tool revisions and updates, as they apply treatment regimen and IPT policy implementation 2. Adaptation , distribution and multiplication of tools based on international and program level evidence and needs	Need for updated guidelines and tools to support implementation of new programmatic initiatives including new ARV regimens and TB prevention
18	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	HSS	Strengthen capacity of Rwanda Biomedical Center to improve strategic information for the HIV program, including surveillance, monitoring, and evaluation to inform evidence-based decision making to improve Rwanda's HIV program	Workforce development, pre-service training	Support capacity building through the Field Epidemiology training program to support Rwanda's HIV national program	Inadequate epidemiological competencies required for continuous data analysis and synthesis for HIV programmatic decision making
19	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	C&T	Strengthen capacity of Rwanda Biomedical Center to manage the HIV care and treatment program	Host country institutional development	1. Support RBC to implement e-learning initiative there by addressing efficiencies in site-level training costs for HCWs in HIV service delivery 2. Enhance RBC's efforts to leverage existing e-platforms including e-health initiatives. Is activity to develop system or implement e-learning at site level? If former, approach OK.	Insufficient MOH systems to improve planning and increase resource efficiencies within the HIV program as PEPFAR support decreases and as Rwanda adopts innovative approaches to find new sources of HIV infections, reach new positives, link positives to treatment, maintain retention and adherence while in care, and increase PLHIV with viral load suppression

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
17	Service Delivery	6.67	Guidelines available to support integrated HIV service delivery	2 years	Revised guidelines in place and tools updated to support new initiatives (TLD and IPT)	Guidelines available, need to be updated to include TLD transition and IPT	Updated guideline and tools available and providers trained
18	Service Delivery	6.67	Strengthened and sustainable epidemiological competencies to support programmatic data synthesis and inform service delivery at sub-national and national levels	3 years	Number of HIV focused epidemiologists; number of HIV program data synthesis projects conducted and disseminated to inform service delivery	Eight HIV epidemiology trainees in training	Enrollment into training of 8 HIV-focused trainees FELTP trainees
19	Service Delivery	6.67	Mechanisms in place (implemented, evaluated, and refined) for MOH to build capacity of health care workers to provide HIV service delivery through alternative training and learning modalities that are aligned with PEPFAR-supported priorities	3 years	Establishment of eLearning platform for HIV Trainings by RBC	1. Concept note for eLearning platform 2. Phased implementation plan for eLearning platform (with M&E framework)	Distance learning HIV training content offered at 50% of PEPFAR-supported district hospitals

Row	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP19) Annual Benchmark	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
17					
18		Eight HIV data analyses and synthesis projects conducted and used to inform service delivery		Eight HIV focused FELTP graduates deployed by MoH to support HIV epidemic control at subnational and national levels	
19		Distance learning HIV training content offered at least 100% of PEPFAR-supported district hospitals and select health facilities		Distance learning HIV training content fully operational in 100% PEPFAR-supported district hospitals and select health facilities	



Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
20	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	PREV	Strengthen capacity of Rwanda Biomedical Center to manage the HIV prevention program	Technical area guidelines and tools	<p>1. Support Rwanda Biomedical Center (RBC) to conduct HIV treatment policy review, guideline and tool revisions and updates, as they apply to prevention programs (PrEP)</p> <p>2. Adaptation, distribution and multiplication of tools based on international and program level evidence and needs</p>	Need for updated guidelines and tools to support implementation of PEPFAR-support HIV program initiatives including new PrEP
21	CDC	Implementing Technical and Science Support Services (TSSS) in the Republic of Rwanda under PEPFAR	PREV	Strengthen capacity of Rwanda Biomedical Center to manage the HIV prevention program	Host country institutional development	<p>1. Support RBC to implement e-learning initiative there by addressing efficiencies in site-level training costs for HCWs in HIV service delivery</p> <p>2. Enhance RBC's efforts to leverage existing e-platforms including e-health initiatives</p> <p>Matching line in FAST is \$7,057 - can this really be broken out into a separate program area from line 27?</p>	Institutionalize systems within MOH to better improve planning, efficiencies, and increased ownership of the HIV program in light of funding decreases

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
20	Service Delivery	6.67	Guidelines available to support integrated HIV service delivery, PMTCT, and VMMC	2 years	Revised guidelines in place and tools updated to support new initiatives (including PrEP)	Guideline available, need to be updated to include new prevention initiatives including PrEP	Updated guideline and tools available and providers trained
21	Service Delivery	6.67	Mechanisms in place (implemented, evaluated, and refined) for MOH to build capacity of health care workers to provide HIV service delivery through alternative training and learning modalities that are aligned with PEPFAR-supported priorities	3 years	Establishment of eLearning platform for HIV Trainings by RBC	1. Concept note for eLearning platform 2. Phased implementation plan for eLearning platform (with M&E framework)	Distance learning HIV training content offered at 50% of PEPFAR-supported district hospitals

Row	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP19) Annual Benchmark	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
20		Guidelines and tools being used, and able to provide routine data for program improvement			
21		Distance learning HIV training content offered at least 100% of PEPFAR-supported district hospitals and select health facilities		Distance learning HIV training content fully operational in 100% PEPFAR-supported district hospitals and select health facilities	

Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
22	USAID	Global Health Supply Chain Program	HSS	Provide technical assistance at central, district and high volume sites to increase efficiency to achieve 95-95-95 targets	Supply Chain Sysytems	<p>1) Laboratory bundling to improve supply chain management of Lab HIV commodities</p> <p>2) Enusre proper TLD transition and inclusion of new commodities in to the supply chain (TLD, self testing and recency testing)</p> <p>3) Scale up MMP/DSDM</p> <p>4) Provide technical assistance at central, district and health facility level using the QMIA which is onsite training and reviewing tool</p> <p>5) Support the continuous supply chain performance and inventory management of ARVs, OIs and lab commodities</p>	<p>1) Lack of tools and capability to avoid stock out of tracer commodities including laboratory supplies</p> <p>2) Lack of system capacity to ensure proper transition of new commodities</p>

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
22	Commodity Security and Supply Chain	6.06	1) Laboratory bundling system and implementation 2) Proper transition of TLD 3) Reduced stock out of tracer commodities	3 years	1) Bundling report 2) Stock out rate of tracer commodities 3) TLD transition completion report	Stock out rate less than 5%	1) Concept note for bundling 2) Tracer commodity stock out rate decreased to less than 5%

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22		1) Lab bundling manual and tools in place 2) Tracer commodity stock out rate decreased to less than 3%		1) Lab bundling manual and tools utilized 2) Tracer commodity stock out rate decreased to less than 2%	

Row	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier
23	USAID	Global Health Supply Chain Program	HSS	Provide technical assistance at central, district and high volume sites to increase efficiency and achieve 95-95-95 targets	Technical area guidelines	<ul style="list-style-type: none"> <li>1) Prepare tools to integrate new commodities in to the systems</li> <li>2) Establish a quality management system/tool to reinforce control, consistency, and accountability of MPPD processes and to improve efficiency and effectiveness of its operations</li> <li>3) Establish MPPD self and supplier performance monitoring system/tool</li> <li>4) Support MPPD and DPs to develop standard operating procedures to guide its organization vision/mission</li> </ul>	Availability of tools and SOP to guide MPPD and DPs operations
24	USAID	Global Health Supply Chain Program	HSS	Provide technical assistance at central, district and high volume sites to increase efficiency and achieve 95-95-95 targets	Information systems	<ul style="list-style-type: none"> <li>1) Design and build data control tower to integrate eLMIS with other health information systems</li> <li>2) Enhance data driven interventions in supply chain management/dashbaord</li> <li>3) Improve routine data quality improvement</li> <li>4) Introduce barcoding and GS1</li> </ul>	Lack of key functionalities and inteoperable coding challenges
25	USAID	Global Health Supply Chain Program	HSS	Manage and execute quantification, procurement and distribution of PEPFAR commodities	Costing and efficiency ana	<ul style="list-style-type: none"> <li>1) Support the execution of integrated quantification exercises</li> <li>2) provide capacity building on quantification tools and methods</li> </ul>	Lack of experience in integrated quantification exercise

Row	Related SID 3.0 Element	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data	Year One (COP18) Annual Benchmark (Planned)
23	Commodity Security and Supply Chain	6.06	1) Number of SOP and tools developed 2) Number of SOPs and tools printed and used	3 years	1) Procurement lead time reduced 2) Percentage of MPPD procurements done using framework contracts 3) Number of SOPs and tools developed	1) Lack of mechanisms to track lead time and On Time in Full Delivery (OTFD) for ABC products 2) 75% remaining shelf-life requirements for HIV commodities to be imported in Rwanda	1) List of MPPD prequalified suppliers with framework contract 2) Drug registration SOPs and tools available
24	Commodity Security and Supply Chain	6.06	End-to-end real time data visibility achieved leading to minimized stock out and expiries to less than 2%	3 years	1) Availability of robust ERP for supply chain management that met the central medical store needs 2) Percentage of eLMIS functionalities utilized 3) Availability of dashboard for program managers and stakeholders	1) Assessment report on key functionalities, barriers, and ERP options 2) Implementation of eLMIS replenishment engine 3) Implementation of eLMIS dashboard	1) Assessment report 2) 80% of facilities using all eLMIS functions 3) 80% of facilities with accurate data 4) 80% of facilities using eLMIS replenishment engine to estimate their needs 5) Number of decisions taken by senior leadership based on dashboard analytics
25	Commodity Security and Supply Chain	6.06	National Integrated Quantification Report	3 years	1) National Integrated Quantification Report 2) Accuracy of forecast vs implementation	Start first ever integrated quantification exercises	1) Integrated quantification report 2) Supply plan report available



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23		<ul style="list-style-type: none"> <li>1) List of MPPD prequalified suppliers with framework contract</li> <li>2) Drug registration SOPs and tools developed</li> </ul>		<ul style="list-style-type: none"> <li>1) Updated list of MPPD prequalified suppliers with framework contract</li> <li>2) Drug registration SOPs and tools implemented</li> </ul>	
24		<ul style="list-style-type: none"> <li>1) 90% of facilities using all eLMIS functions</li> <li>2) 85% of facilities with accurate data</li> <li>3) 85% of facilities using eLMIS replenishment engine to estimate their needs</li> <li>4) Number of decisions taken by senior leadership based on dashboard analytics</li> </ul>		<ul style="list-style-type: none"> <li>1) 95% of facilities using all eLMIS functions</li> <li>2) 90% of facilities with accurate data</li> <li>3) 90% of facilities using eLMIS replenishment engine to estimate their needs</li> <li>4) Number of decisions taken by senior leadership based on dashboard analytics</li> </ul>	
25		<ul style="list-style-type: none"> <li>1) 80% forecast accuracy</li> <li>2) 50% of facilities where commodities are stocked according to plan</li> <li>3) Stock out rate less than 3%</li> </ul>		<ul style="list-style-type: none"> <li>1) 85% forecast accuracy</li> <li>2) 55% of facilities where commodities are stocked according to plan</li> <li>3) Stock out rate less than 2%</li> </ul>	