PEPFAR

January 27, 2020

PEPFAR Uganda COP2020 Strategic Planning Retreat:
Updated PLHIV Estimates &
FY19 PEPFAR Results Summary

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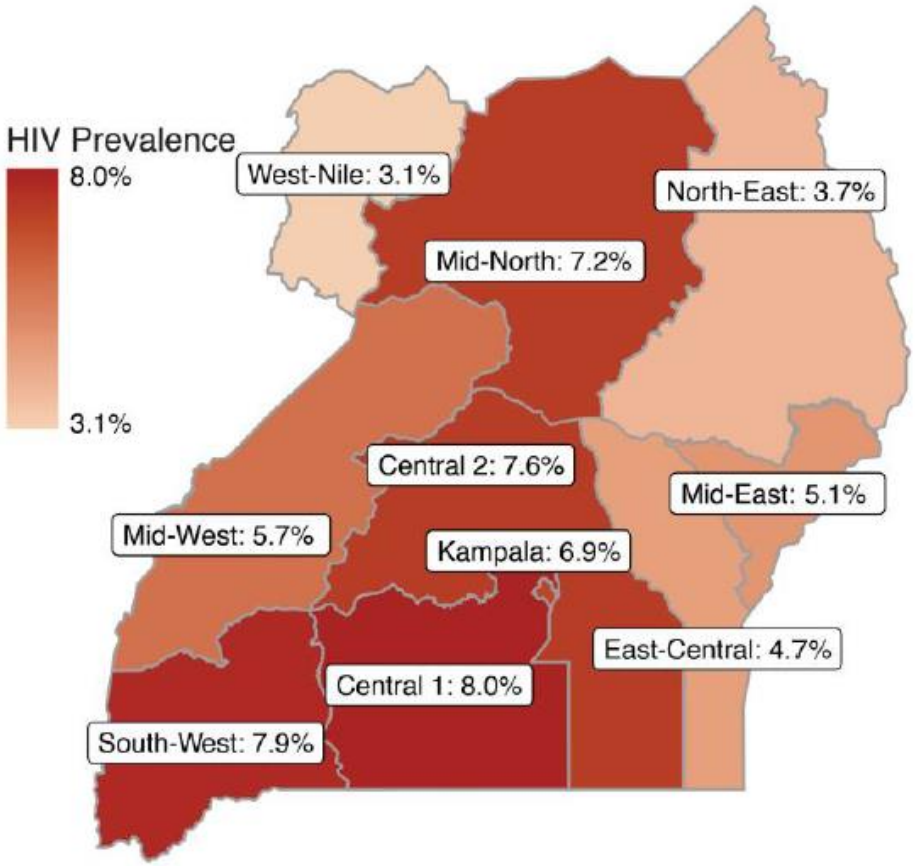
UGANDA HIV EPI CONTEXT:

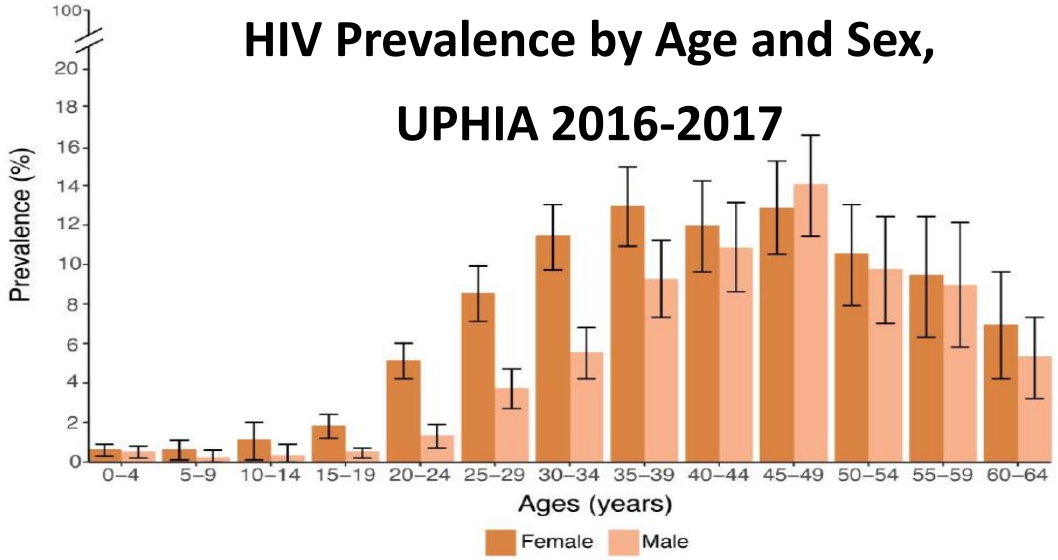
PREVALENCE, PLHIV, INCIDENCE, MORTALITY

UPHIA 2016-2017 Survey Estimates of Prevalence: 6.2% for 15-64 Years Nationally, with Heterogeneity by Covariates

HIV Prevalence among Adults Aged 15-64 Years, by Region, UPHIA 2016-2017



HIV Prevalence by Age and Sex, UPHIA 2016-2017



6.1 Key Findings

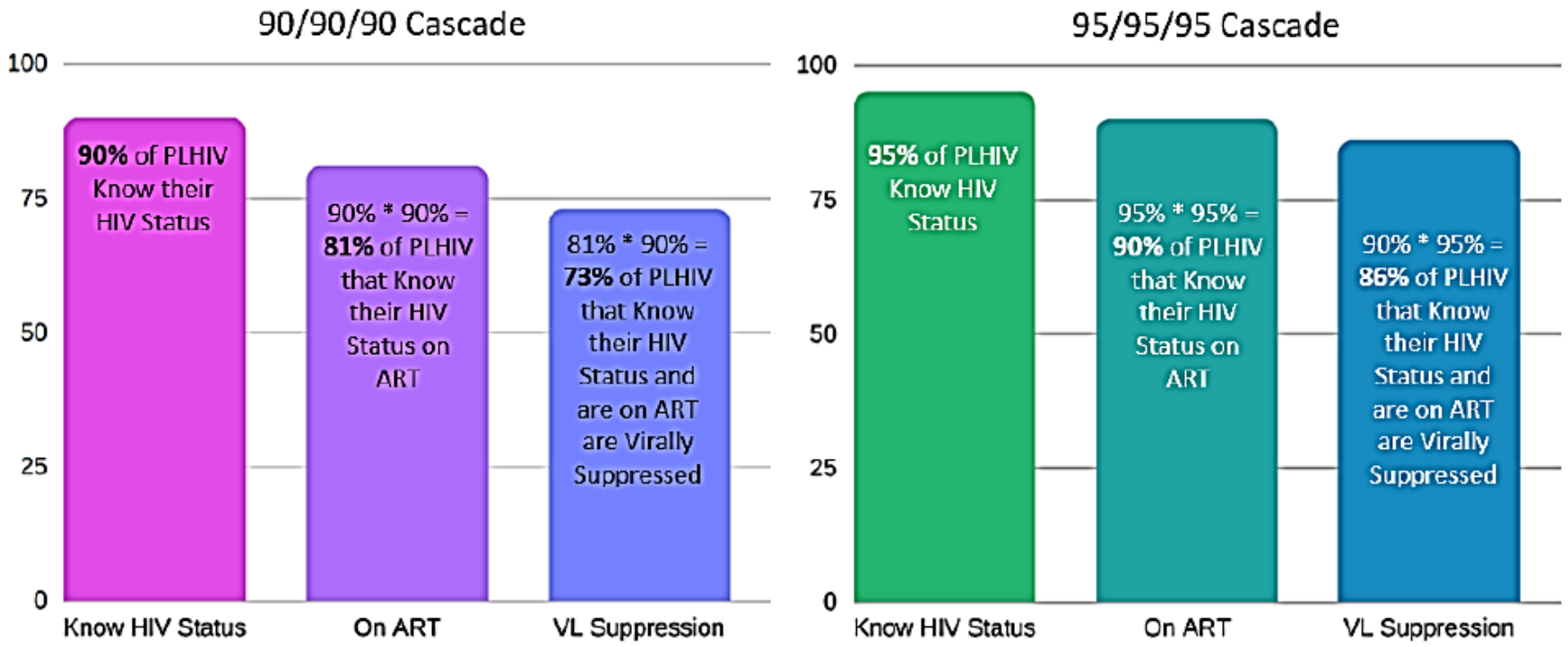
- HIV prevalence among adults (those aged 15-64 years) in Uganda was 6.2%: 7.6% among women and 4.7% among men. This corresponded to approximately 1.2 million adults living with HIV in Uganda.
- HIV prevalence among adults aged 15-49 years was 6.0%: 4.3% among men and 7.5% among women.
- The burden of HIV infection varied across the country. Among adults, HIV prevalence was 7.5% in urban areas and 5.8% in rural areas. Urban women had the highest prevalence at 9.8%.
- HIV prevalence among young people (those aged 15-24 years) was four times higher among women (3.3%) than among men (0.8%).
- HIV prevalence varied across the ten regions, ranging from 3.1% in the West Nile region to 8.0% in the Central 1 region.

Source: *UPHIA 2016-2017 Final Report*

PEPFAR Guidance: Requires Increased Granularity to Target Priority Locations & Populations for Epidemic Control

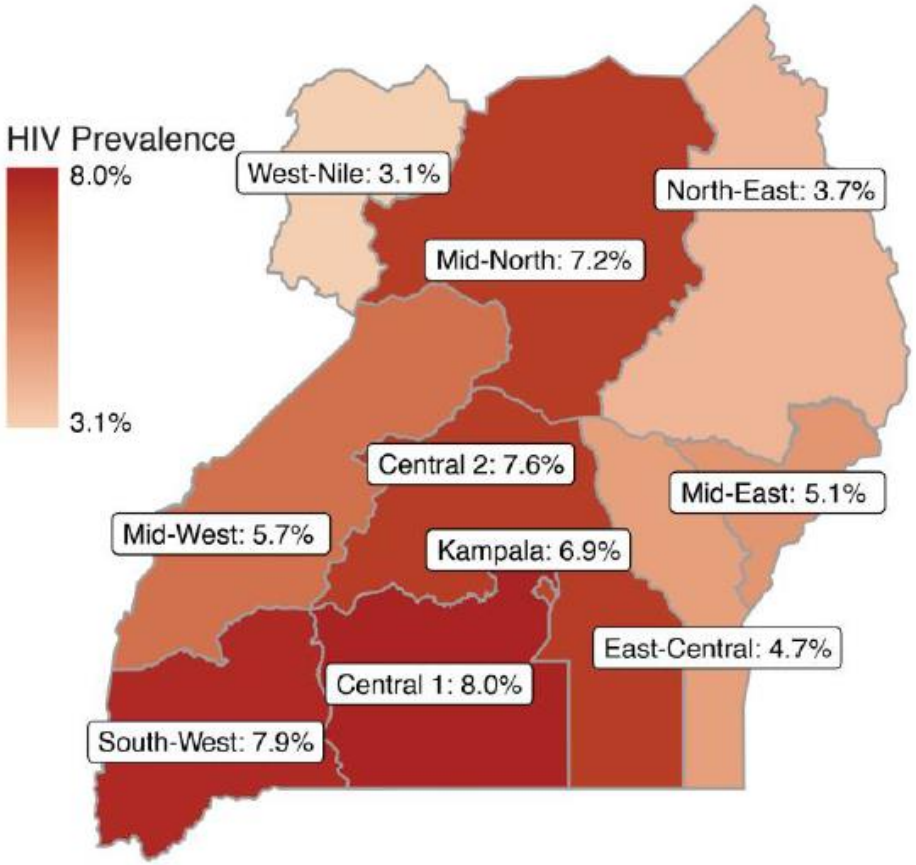
- Spatial targeting of interventions → higher impact
- Reaching the right people, in the right places, at the right time
- More efficient use of resources
- Increased granularity of and nuance in understanding of data

Figure 7.3.2.1: Reaching 95/95/95 at the country level **(Page 452 COP20 Guidance)**

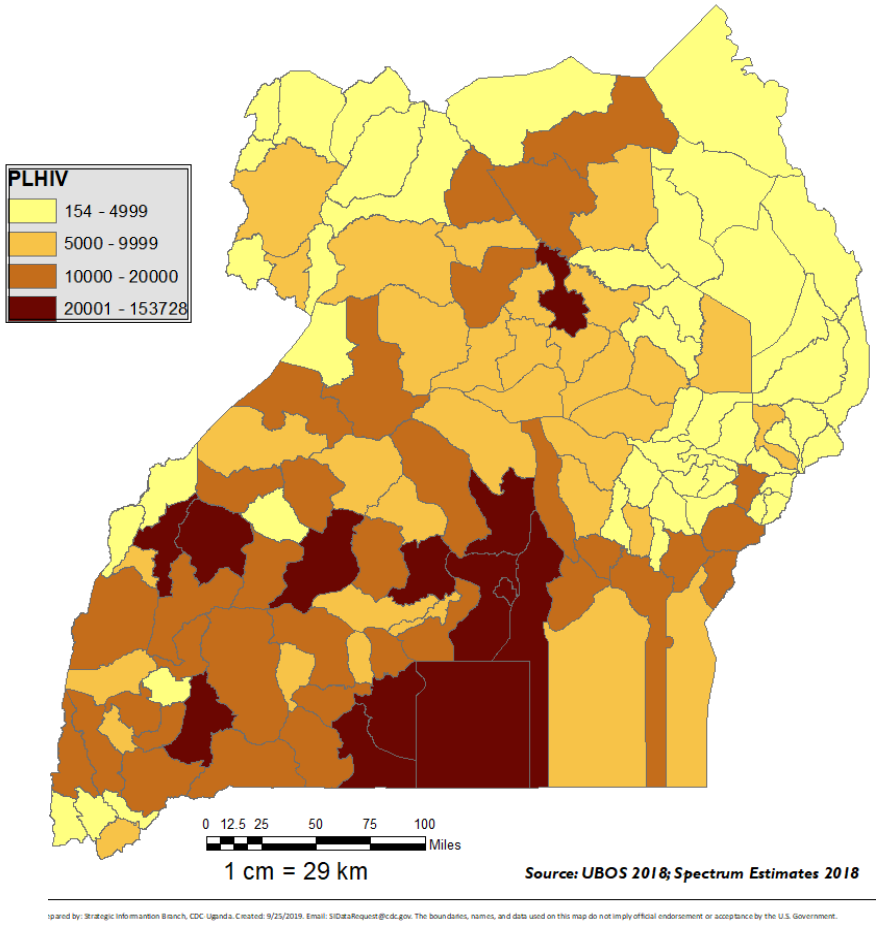


Moving from Population Based Survey Estimates to Subnational Estimates of People Living with HIV (PLHIV)

UPHIA 2017 HIV Prevalence Among Adults 15-64, by Region



District Prevalence/PLHIV? Subnational Estimations!

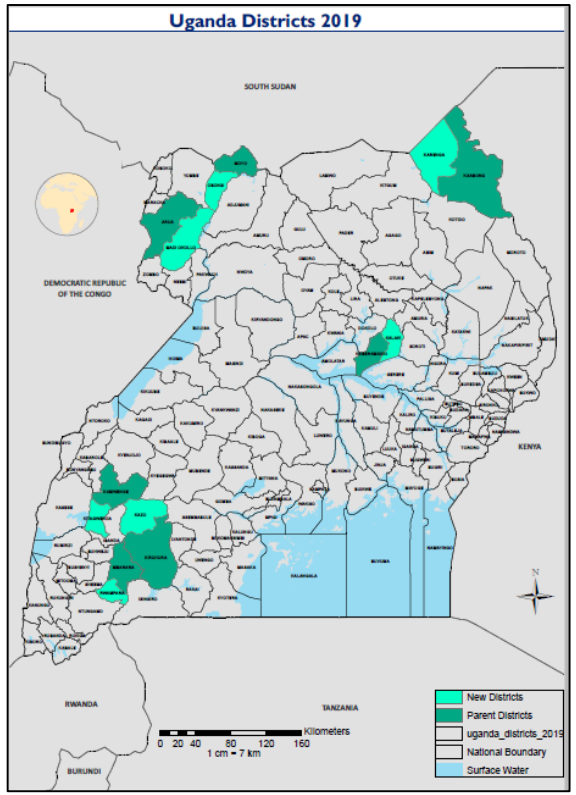


PEPFAR Guidance: Requires Increased Granularity to Target Priority Locations & Populations for Epidemic Control

Age	Sex
<01	Female
<01	Male
01-04	Female
01-04	Male
05-09	Female
05-09	Male
10-14	Female
10-14	Male
15-19	Female
15-19	Male
20-24	Female
20-24	Male
25-29	Female
25-29	Male
30-34	Female
30-34	Male
35-39	Female
35-39	Male
40-44	Female
40-44	Male
45-49	Female
45-49	Male
50+	Female
50+	Male

Current Focus:

- Second level geopolitical units (SNU2)
  N = 135 (increase from 128 in COP19)
- Age and sex groups within SNU2
  N = 24 (5-year finer age/sex bands)



District	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+
Wakiso	132	1,067	1,259	1,384	1,118	1,920	3,636	5,079	5,539	5,245	3,882	7,126
Kalangala	36	169	243	312	269	392	575	614	608	741	642	1,422
Mubende	9	129	141	222	193	180	307	346	412	510	403	876
Lwengo	9	64	108	167	129	169	262	389	445	469	364	766
Mityana	10	99	93	155	146	207	316	379	479	332	258	490
Kassanda	9	71	79	129	136	199	245	360	385	388	283	597
Luwero	2	120	41	141	112	243	405	424	418	331	152	473
Kyenjojo	9	140	52	125	189	242	279	206	174	264	220	702
Rakai	8	99	94	132	113	191	310	369	367	298	232	379
Mpigi	2	93	72	110	94	180	256	331	345	318	249	469
Sembabule	11	46	66	135	112	156	238	266	267	246	223	321
Nakaseke	1	66	50	98	90	149	232	303	267	268	152	323
Hoima	19	67	85	120	108	149	239	137	181	155	175	477
Bukomansimbi	12	40	32	70	55	95	157	224	223	230	203	392
Kyankwanzi	11	43	50	98	92	123	139	161	205	224	189	337
Kyotera	20	132	157	172	99	89	165	249	10	72	79	413
Kakumiro	6	63	55	114	104	83	114	139	180	186	152	247
Gomba	14	36	47	81	77	106	118	190	187	147	114	173
Kagadi	5	56	71	114	69	80	(3)	(44)	175	103	164	412
Kiboga	14	54	38	69	80	92	113	116	149	145	119	175
Masindi	8	62	104	65	(60)	(62)	77	166	189	98	47	429
Bunyangabu	-	71	28	49	66	97	122	3	73	122	122	297
Nakasongola	2	48	33	65	56	93	90	109	77	106	86	235
Kamwenge	8	55	80	93	101	90	45	54	32	23	53	352
Kasese	2	47	6	51	43	86	125	95	67	88	56	253
Kyegegwa	8	45	6	82	101	98	97	(6)	39	118	46	288
Kalungu	13	46	(5)	43	42	115	165	118	131	108	101	(9)
Kiryandongo	3	32	44	16	(87)	(73)	(49)	100	133	99	50	440
Kikuube	6	43	36	41	56	54	64	22	41	52	75	180
Kabarole	27	158	74	57	36	85	139	(145)	(143)	(94)	(13)	378
Masaka	8	187	78	116	102	158	270	(31)	(75)	(187)	(116)	41
Ngora	4	1	16	32	3	8	69	86	104	82	58	38
Serere	4	25	18	13	24	71	100	69	35	37	(13)	70
Yumbe	4	5	5	13	19	32	55	30	50	59	52	115
Butambala	(1)	24	3	1	29	23	88	110	74	27	8	38
Ntoroko	8	12	0	27	18	27	44	20	25	56	45	139

Methods to estimate district level HIV variables (ordered from least rigorous and complex to most rigorous and complex)

Method	Strengths	Limitations	Data required	District level outputs *Time period available*
National Spectrum file with urban/rural prevalence trends + Excel workbook disaggregation	Easy to produce	No estimates of uncertainty at district level	Urban / rural – HIV prevalence data from surveillance SNU1 – HIV prevalence from household survey, population size by age band of interest (e.g., <15, 15-49, 15+, etc.) SNU2 – HIV prevalence from routine ANC or recent household survey, population size by age band of interest (e.g., <15, 15-49, 15+, etc.) Optional: SNU2 ART and PMTCT program data	Prevalence New infections AIDS deaths PMTCT need/coverage ART coverage *Year: 2017*
National Spectrum file with sub-national prevalence trends + Excel workbook disaggregation	Trends in prevalence, incidence and AIDS deaths for SNU1	Demographic data is not specific to sub-national areas (i.e., SNU1) No estimates of uncertainty at district level	SNU1 – HIV prevalence from surveillance, adult population SNU2 – HIV prevalence from routine ANC or recent household survey, population size by age band of interest (e.g., <15, 15-49, 15+, etc.) Optional: SNU2 ART and PMTCT program data	SNU1 - adult prevalence, adult deaths, adult incidence *Years: 1990-2017* SNU2 – Above plus any additional variables based on workbook *Year: 2017*
Sub-national Spectrum files + Excel workbook disaggregation	Trends in prevalence incidence and AIDS deaths, accurate demographics for SNU1 Uncertainty ranges available for SNU1	Data available for trends must be reviewed carefully No estimates of uncertainty at SNU2	SNU1 – demographic data, ART/PMTCT program data, surveillance data SNU2 – HIV prevalence from routine ANC or recent household survey, population size by age band of interest (e.g., <15, 15-49, 15+, etc.) Optional: SNU2 ART and PMTCT program data	SNU1 - all variables from Spectrum *Years: 1990-2017* SNU2 – any additional variables based on workbook *Year: 2017*
Small Area Estimates	Comprehensive support from CDC-Atlanta, uses statistics methods and additional covariates Uncertainty ranges available	Limited to the timing of the last survey (though estimates can be benchmarked to 2017 UNAIDS estimate), and target population, typically limited to adults 15-49. No trends are available	SNU2 – HIV prevalence from routine ANC or ANC sentinel surveillance, HIV prevalence and standard errors from household survey, populations size by age and sex band of interest (e.g., 15-24, 15-49, etc.), shapefile Optional: dependency ratio, socio-economic data, and/or additional predictors of HIV prevalence	SNU2 - adult prevalence and PLHIV *Year of the survey, or benchmarked to 2017 UNAIDS estimate for age band of interest*
HIVE geospatial model	Incorporates the largest amount of data (from surveys, facilities, surveys and additional covariate data). Time-updated and consistent with Spectrum estimates Uncertainty ranges available at any level of aggregation	Model is run at Global level upon request (Inclusion of PHIA data is pending)	Based on national or sub-national Spectrum file Individual-level HH survey – age, sex, HIV status, cluster coordinates, ART / viral suppression if available; Multi-year, facility-level (age-specific, if available): ANC sentinel surveillance or ANC routine data, ART; Spectrum	HIV prevalence / PLHIV, relative incidence risk and new infections at 5km x 5km areas (aggregated to any level) Additional variables can be created using workbook disaggregation *Recent years*

Newer Methods: Spectrum District Estimates Tool; Naomi Model

Source: UNAIDS Reference Group on Subnational Estimations, 2017

COP 20 Method: Naomi Model- Integrated in Spectrum Work Flow

Spectrum - AIM

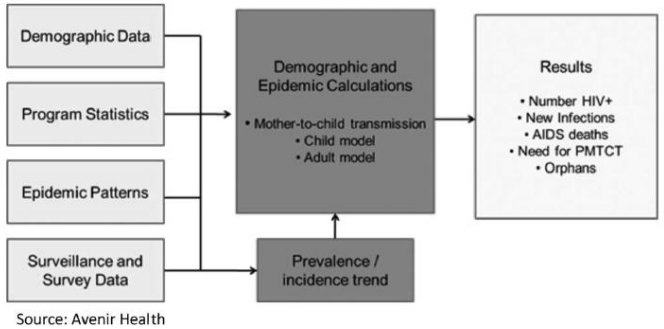
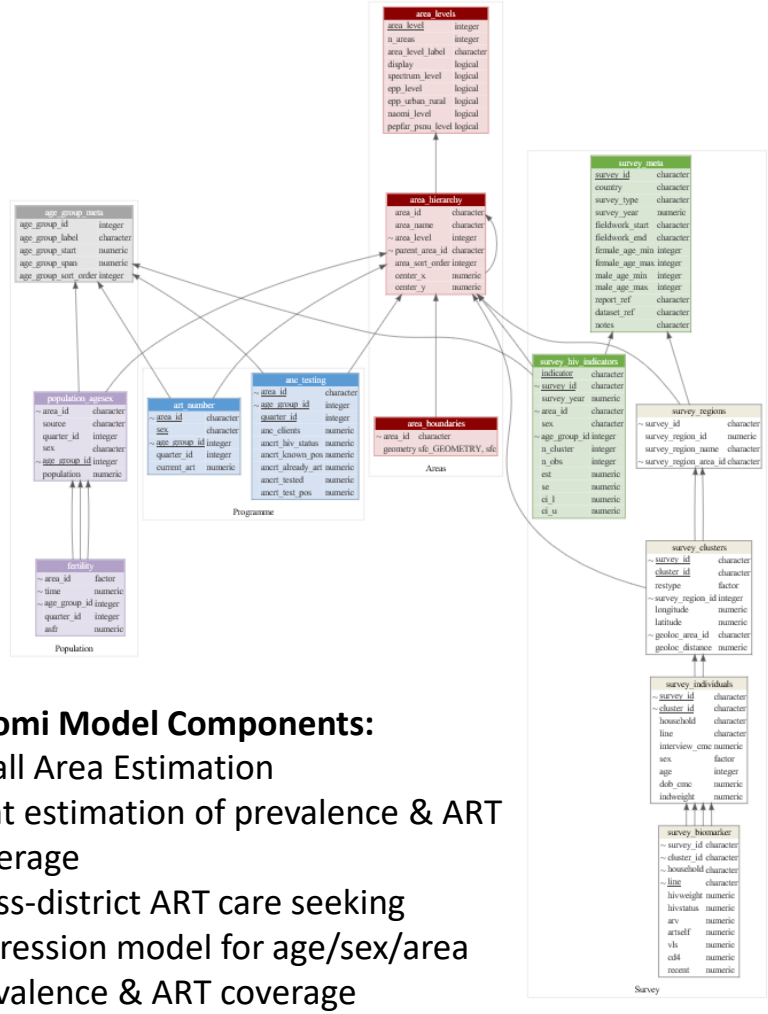


Fig. 1. Model structure of AIDS impact module in Spectrum.

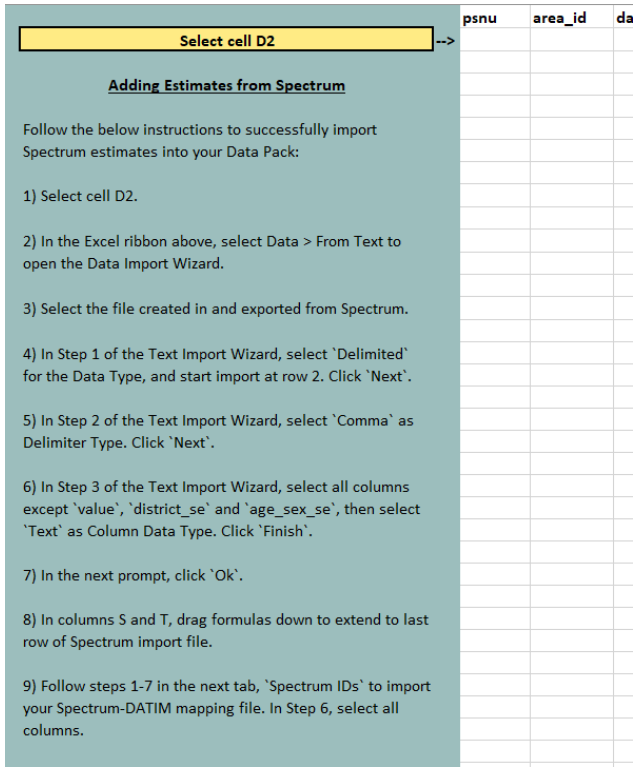
Web-based Naomi



Key Naomi Model Components:

- Small Area Estimation
- Joint estimation of prevalence & ART coverage
- Cross-district ART care seeking
- Regression model for age/sex/area prevalence & ART coverage

Spectrum - Data Pack Output



Source: *UNAIDS, Imperial College London*

Preliminary COP20 PLHIV Regional Summary, Peds and Adults

Regional Trends in PLHIV Burden, 2016-2020

Region	2016	2017	2018	2019	*2020	Absolute Difference, 2018 to 2019	Relative Difference, 2018 to 2019	TX_CURR National, FY19Q4	% ART Coverage, 2019 Denom	*% ART Coverage, 2020 Denom
Total	**1,299,391**	**1,318,736**	**1,385,653**	**1,393,460**	**1,423,985**	30,525	2%	**1,223,894**	**88%**	**86%**
Central 1	220,029	218,896	323,475	307,901	227,497	-80,404	-26%	198,451	64%	87%
South Western	179,078	183,608	183,185	180,986	221,487	40,501	22%	166,598	92%	75%
Mid western	164,988	165,545	176,130	174,825	188,314	13,489	8%	155,497	89%	83%
Mid Northern	147,124	148,606	158,699	156,698	176,537	19,839	13%	155,651	99%	88%
Kampala	83,437	86,787	109,516	101,609	176,328	74,719	74%	172,819	170%	98%
Central 2	165,172	170,332	184,894	177,678	160,886	-16,792	-9%	138,190	78%	86%
East Central	97,696	99,442	91,002	103,872	89,028	-14,844	-14%	75,632	73%	85%
Mid Eastern	110,744	112,948	72,916	78,439	75,193	-3,246	-4%	66,882	85%	89%
North Eastern	71,624	72,904	51,042	62,116	60,968	-1,148	-2%	52,657	85%	86%
West Nile	59,499	59,668	34,794	49,336	47,745	-1,591	-3%	41,517	84%	87%

2020 estimates are preliminary/draft

Significant Reductions in New HIV Infections and AIDS Related Deaths over Time

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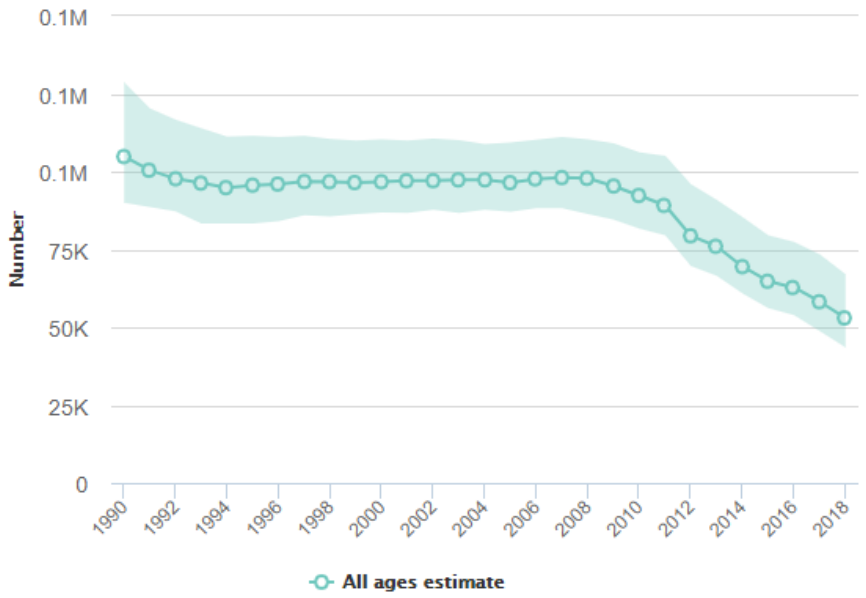
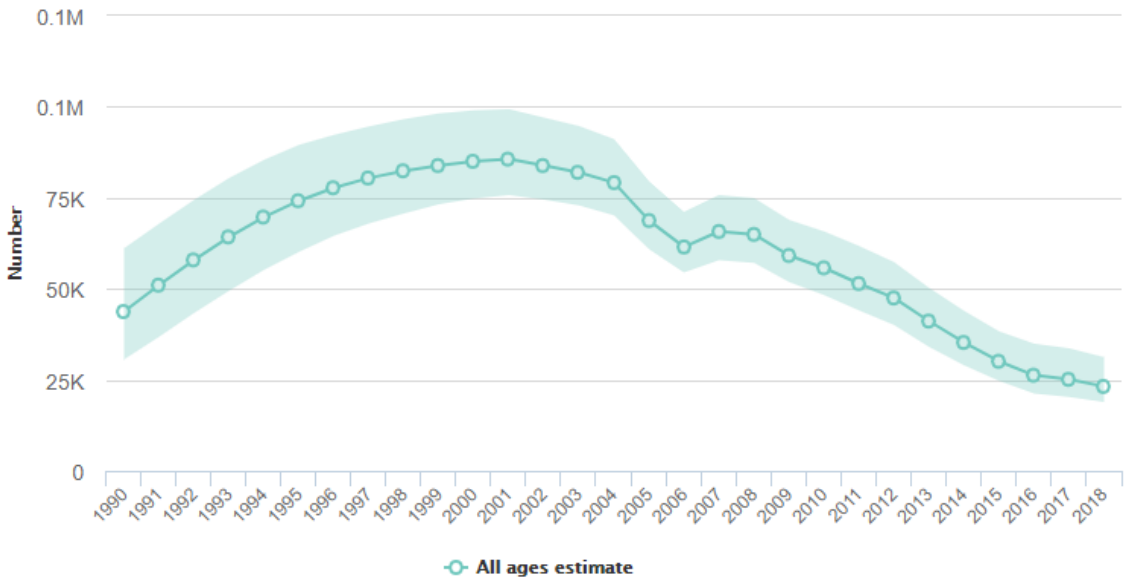


Source: UNAIDS 2019 estimates



Source: UNAIDS 2019 estimates

Change in new HIV infections since 2010

-43 %

Change in AIDS-related deaths since 2010

-58 %

PEPFAR
U.S. President's Emergency Plan for AIDS Relief

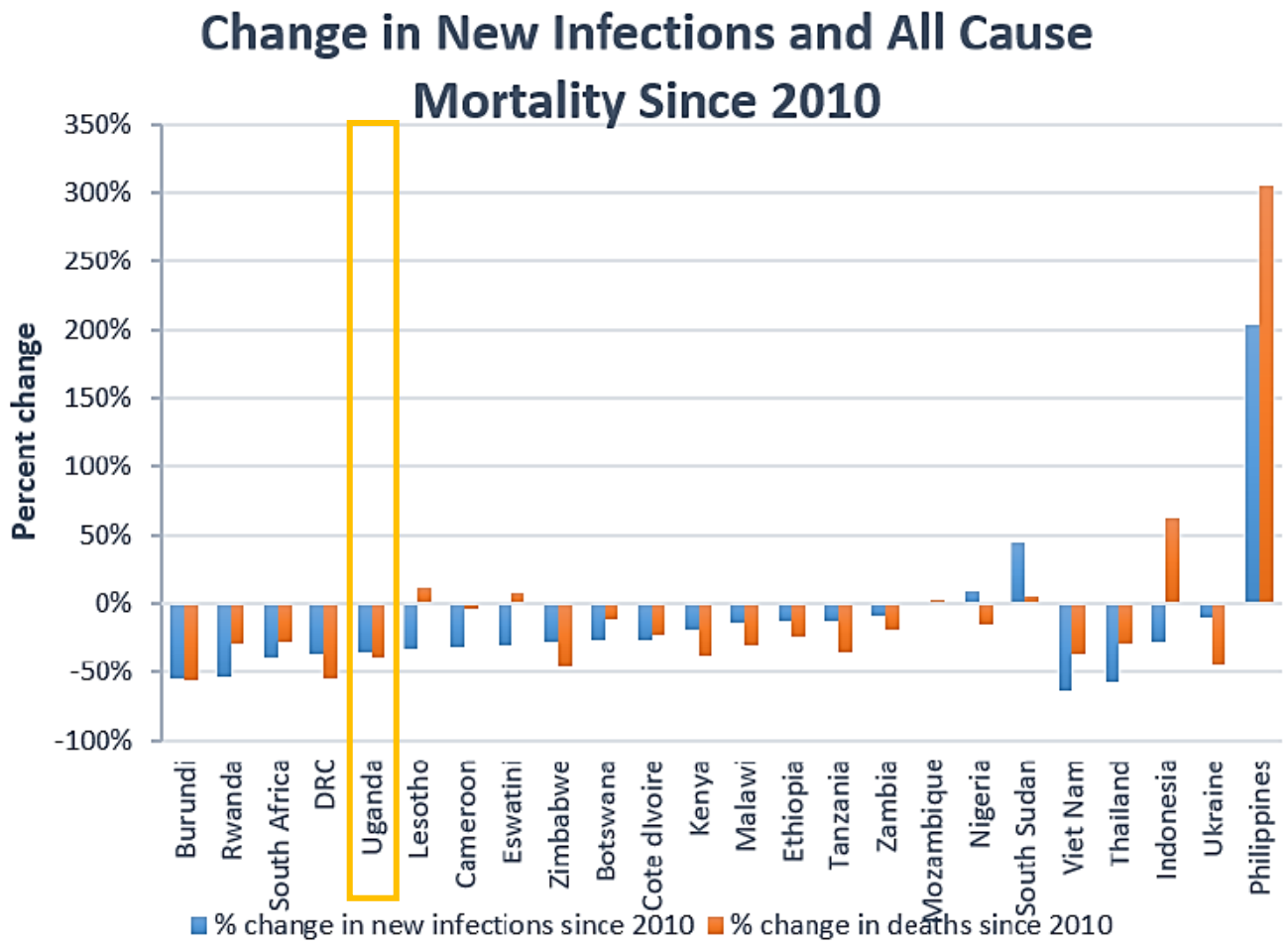
SENSITIVE BUT UNCLASSIFIED

Source: UNAIDS, 2019

PEPFAR Programmatic National Epidemic Control Definition

Page 27 COP20 Guidance:

Figure 2.1.1.4: Change in new infections and all cause mortality among Individuals 15 years of age and older across PEPFAR-supported countries



Page 24 COP20 Guidance:

"PEPFAR defines national HIV epidemic control as the point at which the total number of new HIV infections falls below the total number of deaths from all chases among HIV-infected individuals"

Page 452 COP20 Guidance:

Attained SNUs: Geographic areas that have achieved ≥90% treatment coverage in both males and females within the following age bands: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, and 50+. Getting to >90% treatment coverage by both males in females within the finer age bands at sub-national levels will ensure that the country gets to 95/95/95 overall.

UPHIA 2016-2017 Survey Estimates of Incidence: 0.40% for 15-64 Years Nationally

5.1 Key Findings

- Annual incidence of HIV among adults (those aged 15-64 years) in Uganda was 0.40%: 0.46% among women and 0.35% among men.
- This incidence corresponded to approximately 73,000 new cases of HIV annually in 2016-2017 among adults in Uganda.

HIV INDICATOR	Female	95% CI	Male	95% CI	Total	95% CI
Incidence (%)						
15-49 years	0.47	0.27-0.67	0.31	0.12-0.50	0.39	0.24-0.54
15-64 years	0.46	0.27-0.64	0.35	0.15-0.55	0.40	0.25-0.56

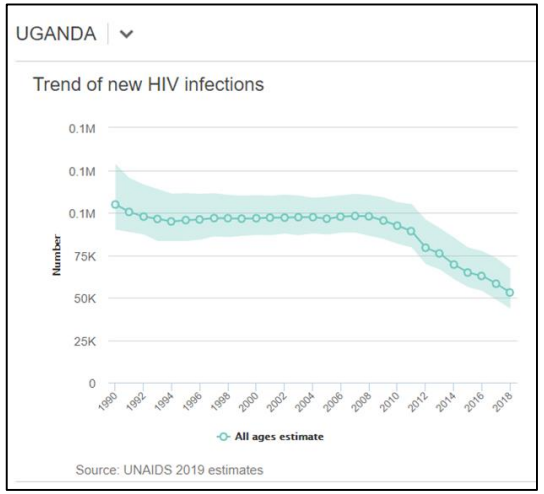
Table 5.3.A Annual HIV incidence using LAg/VL/ARV testing algorithm

Annual incidence of HIV among adults aged 15-49 and 15-64 years, by sex and age, using the limiting antigen (LAg) + viral load (VL) + antiretrovirals (ARVs) algorithm, UPHIA 2016-2017

	Male		Female		Total	
Age	Percentage annual incidence[1]	95% CI[2]	Percentage annual incidence[1]	95% CI[2]	Percentage annual incidence[1]	95% CI[2]
15-24	0.22	(0.01, 0.43)	0.46	(0.17, 0.76)	0.34	(0.16, 0.53)
25-34	0.35	(0.00, 0.70)	0.63	(0.20, 1.05)	0.50	(0.23, 0.76)
35-49	0.47	(0.00, 0.95)	0.26	(0.00, 0.57)	0.36	(0.08, 0.65)
15-49	0.31	(0.12, 0.50)	0.47	(0.27, 0.67)	0.39	(0.24, 0.54)
15-64	0.35	(0.15, 0.55)	0.46	(0.27, 0.64)	0.40	(0.25, 0.56)

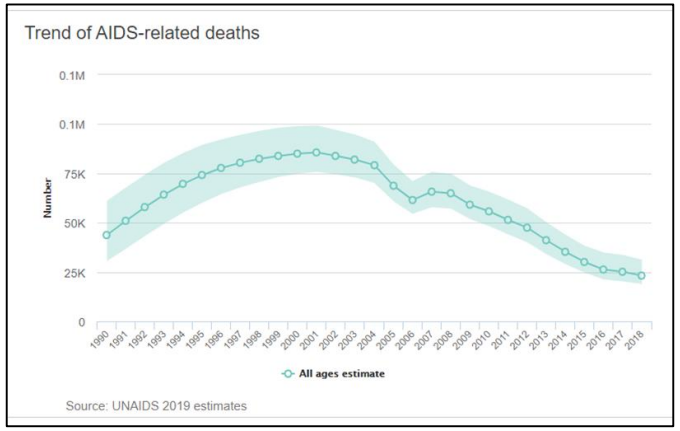
[1]Relates to Global AIDS Monitoring Indicator 3.1: HIV incidence.
[2]CI (confidence interval) indicates the interval that is expected to include the true population parameter 95% of the time.

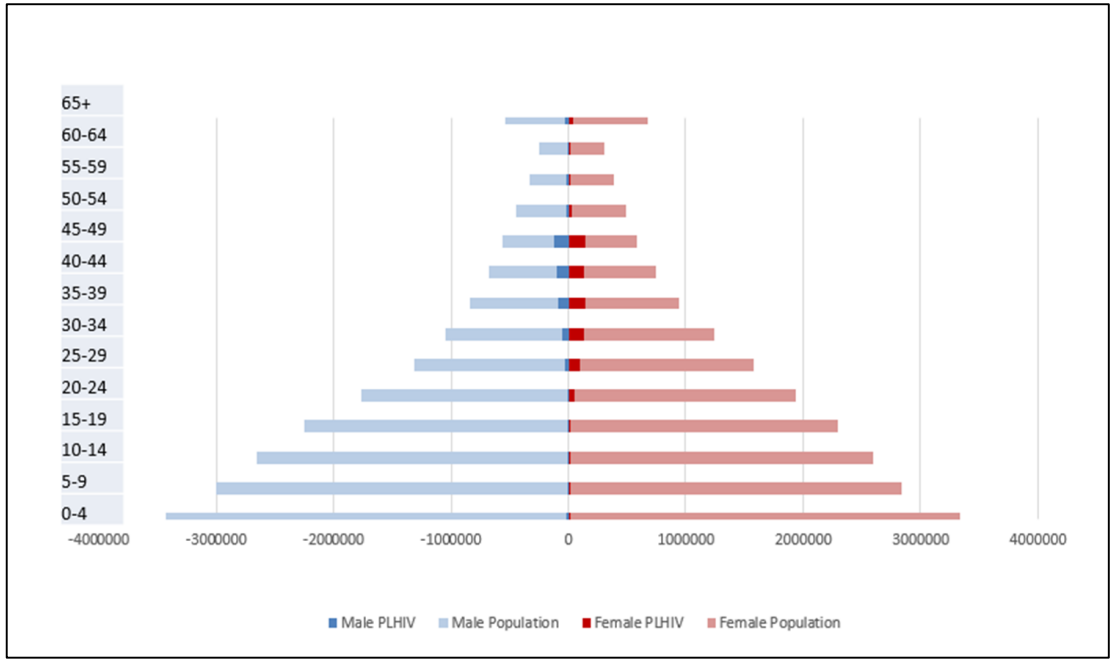
Epidemiologic Context as Uganda Nears HIV Epidemic Control



To achieve and maintain HIV epidemic control, Uganda must:

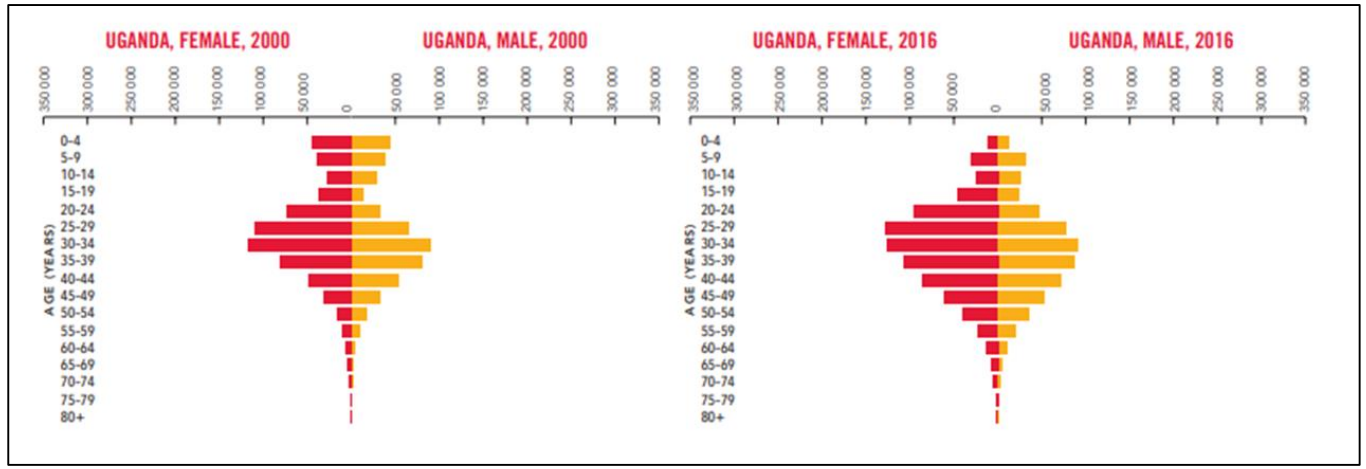
1. Reduce new infections further
2. Reduce mortality
3. Address HIV risk in AGYW and find children and adolescents already living with HIV





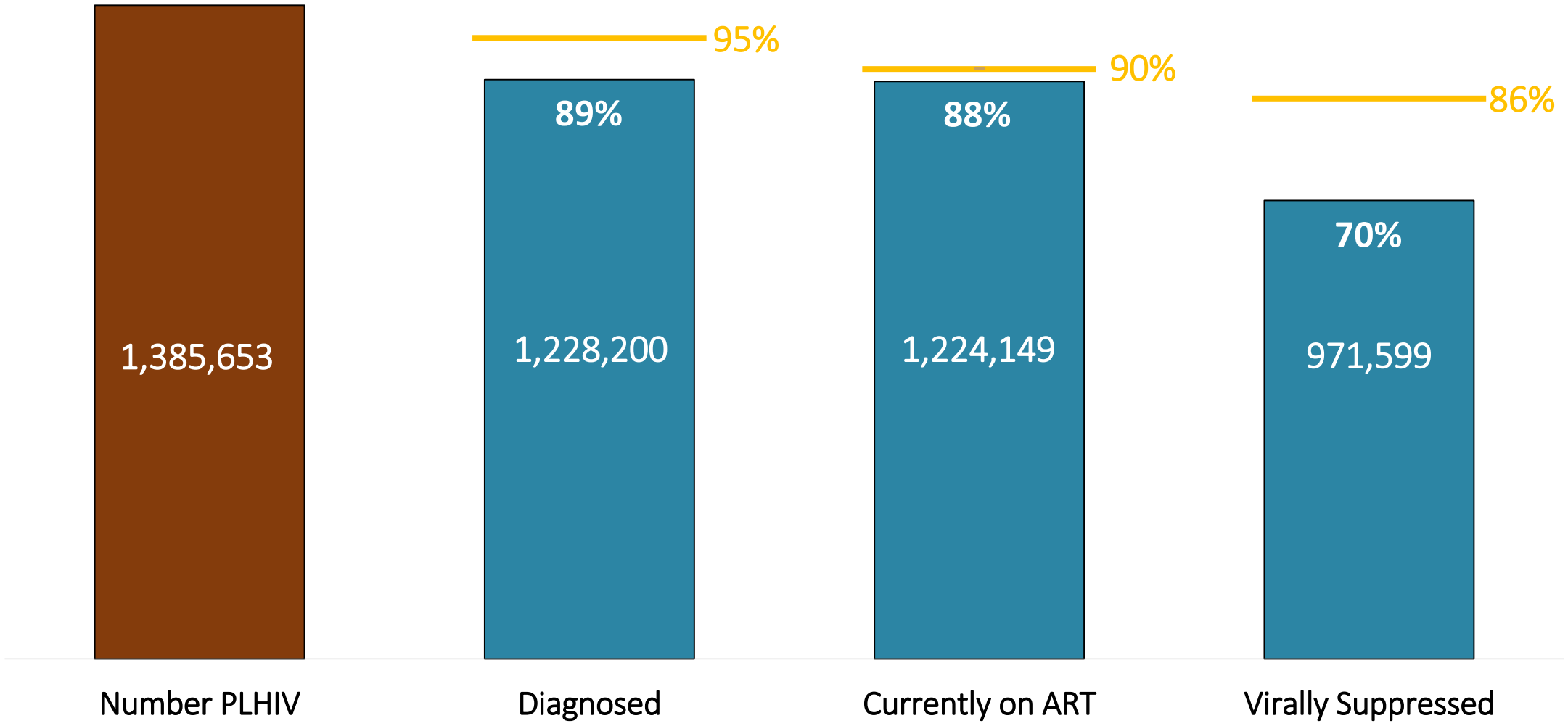
Population/ Data Source	UPHIA 2016	Spectrum 2019*
CLHIV 0-14	96,000	96,742
PLHIV 15-64	1,200,000	1,296,000

Youth bulge from 2010-2017 in Uganda resulted in an additional 18,000 new infections among youth 15-24 years



Source: UNAIDS

Progress to Epidemic Control: Uganda National 95-95-95 Cascade, FY19Q4



Data Source: Uganda DHIS, September 2019

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FY2019 PEPFAR ANNUAL RESULTS SUMMARY

COP18 (FY19) PEPFAR Uganda Performance

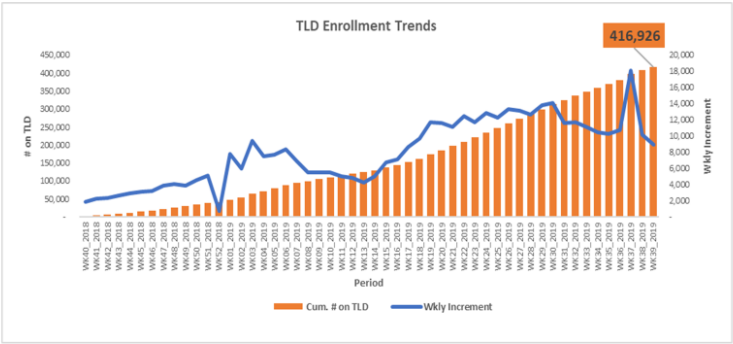
- **Good collaboration at interagency, government, CSO and stakeholder level**
  - Key populations still face difficult environment
- **Adoption and implementation of new policies (TLD, TPT)**
  - Success in TLD enrolment at 416,926; pediatric optimization slower due to global shortage of peds ARVs
  - TB Prevention major success with 519,710 PLHIV initiated on TPT
- **Maintenance of surge efforts with new additions**
  - Using dashboard to track TLD, TPT, TB, pediatric ARV optimization
- **Achieved most targets across the cascade and for VMMC, DREAMS, and PMTCT**
  - Index testing is scaling but still need refinement in case finding approaches
  - Intensive back to care and quality improvement retention interventions are working. From a net new of 0% at Q2, we have doubled our net new each quarter to 36% in Q3 and 75% in Q4.
  - VL coverage > 85% for those on ART, among whom VL suppression > over 90%

Summary of FY2019 Key Indicators by Agency

Funding Agency	Indicator	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FY18 Cum. Results	FY18 Target	FY18 %	FY19 Q1	FY19 Q2	FY19Q3	FY19Q4	FY19 Cum. Results	FY19 Target	FY19 %
CDC	HTS_TST	1,152,484	1,266,529	1,267,327	1,484,325	5,170,665	**3,941,606**	131%	1,245,772	1,267,732	996,338	1,017,280	4,527,122	**2,190,418**	207%
	HTS_TST_POS	32,117	35,935	37,949	44,922	150,923	**175,737**	86%	38,049	42,321	31,616	31,215	143,201	**74,400**	192%
	TX_NEW	22,682	25,539	31,163	39,325	118,709	**165,844**	72%	28,429	28,691	25,546	25,987	108,653	**69,533**	156%
	TX_CURR	554,106	568,748	593,055	625,813	625,813	**674,098**	90%	627,664	616,326	624,035	647,945	647,945	**695,474**	93%
	VMMC_CIRC	71,677	91,795	84,517	92,179	340,168	**339,746**	100%	70,816	105,327	83,979	73,901	334,023	**343,431**	97%
USAID	HTS_TST	855,471	937,469	1,048,112	936,629	3,777,681	**2,946,159**	128%	773,411	754,422	689,747	661,101	2,878,681	**1,662,374**	173%
	HTS_TST_POS	19,241	23,511	34,233	34,268	111,253	**133,892**	83%	19,514	20,398	17,911	18,210	76,033	**50,578**	150%
	TX_NEW	14,111	17,687	31,585	32,633	96,016	**123,446**	78%	15,712	16,284	15,415	15,052	62,463	**46,431**	135%
	TX_CURR	380,416	392,377	409,954	420,997	420,997	**443,999**	95%	399,737	408,832	415,233	423,975	423,975	**477,126**	89%
	VMMC_CIRC	49,715	63,165	44,583	37,257	194,720	**292,632**	67%	62,014	74,092	99,761	75,099	310,966	**342,199**	91%
DOD	HTS_TST	162,081	138,826	159,005	135,350	595,262	**422,617**	141%	130,823	142,264	125,675	117,035	515,797	**283,726**	182%
	HTS_TST_POS	4,785	4,637	4,821	4,846	19,089	**30,893**	62%	4,150	5,119	4,074	3,728	17,071	**9,870**	173%
	TX_NEW	3,032	3,480	3,851	3,834	14,197	**28,877**	49%	2,680	3,097	3,043	3,042	11,862	**9,167**	129%
	TX_CURR	63,477	65,561	67,859	68,102	68,102	**82,687**	82%	63,854	65,923	68,327	72,899	72,899	**87,574**	83%
	VMMC_CIRC	13,567	18,605	9,866	7,033	49,071	**51,524**	95%	11,373	10,071	28,155	22,647	72,246	**70,826**	102%
STATE	HTS_TST	15,352	25,506	18,710	16,496	76,064	**39,689**	192%	19,985	10,471	14,773	15,330	60,559	**29,352**	206%
	HTS_TST_POS	312	317	327	368	1,324	**1,693**	78%	265	254	325	322	1,166	**990**	118%
	TX_NEW	237	263	336	356	1,192	**1,898**	63%	268	285	281	199	1,033	**1,259**	82%
	TX_CURR	6,163	5,941	6,294	6,640	6,640	**6,953**	95%	6,524	6,285	6,806	3,923	3,923	**8,149**	48%
	VMMC_CIRC	18	2	1	2,187	2,208	**13,022**	17%	4,975	0	530	65	5,570	**0**	

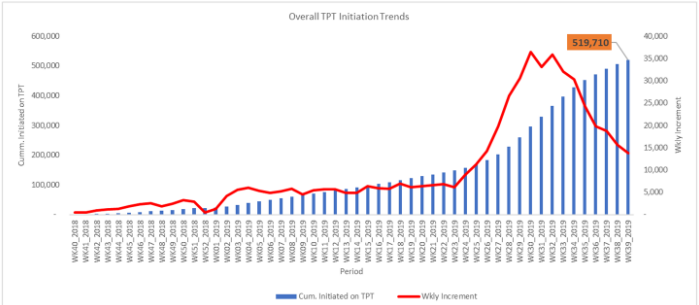
Division of Global HIV & TB 5

TLD Enrollment Trend Over FY19



Division of Global HIV & TB 9

TB Prevention: IPT Initiation Trend – FY19



Improved performance across key indicators in FY19 compared to FY18

Funding Agency	Indicator	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FY18 Cum. Results	FY18 Target	FY18 %	FY19 Q1	FY19 Q2	FY19Q3	FY19Q4	FY19 Cum. Results	FY19 Target	FY19 %
CDC	HTS_TST	1,152,484	1,266,529	1,267,327	1,484,325	5,170,665	**3,941,606**	131%	1,245,772	1,267,732	996,338	1,017,280	4,527,122	**2,190,418**	207%
	HTS_TST_POS	32,117	35,935	37,949	44,922	150,923	**175,737**	86%	38,049	42,321	31,616	31,215	143,201	**74,400**	192%
	TX_NEW	22,682	25,539	31,163	39,325	118,709	**165,844**	72%	28,429	28,691	25,546	25,987	108,653	**69,533**	156%
	TX_CURR	554,106	568,748	593,055	625,813	625,813	**674,098**	90%	627,664	616,326	624,035	647,945	647,945	**695,474**	93%
	VMMC_CIRC	71,677	91,795	84,517	92,179	340,168	**339,746**	100%	70,816	105,327	83,979	73,901	334,023	**343,431**	97%
USAID	HTS_TST	855,471	937,469	1,048,112	936,629	3,777,681	**2,946,159**	128%	773,411	754,422	689,747	661,101	2,878,681	**1,662,374**	173%
	HTS_TST_POS	19,241	23,511	34,233	34,268	111,253	**133,892**	83%	19,514	20,398	17,911	18,210	76,033	**50,578**	150%
	TX_NEW	14,111	17,687	31,585	32,633	96,016	**123,446**	78%	15,712	16,284	15,415	15,052	62,463	**46,431**	135%
	TX_CURR	380,416	392,377	409,954	420,997	420,997	**443,999**	95%	399,737	408,832	415,233	423,975	423,975	**477,126**	89%
	VMMC_CIRC	49,715	63,165	44,583	37,257	194,720	**292,632**	67%	62,014	74,092	99,761	75,099	310,966	**342,199**	91%
DOD	HTS_TST	162,081	138,826	159,005	135,350	595,262	**422,617**	141%	130,823	142,264	125,675	117,035	515,797	**283,726**	182%
	HTS_TST_POS	4,785	4,637	4,821	4,846	19,089	**30,893**	62%	4,150	5,119	4,074	3,728	17,071	**9,870**	173%
	TX_NEW	3,032	3,480	3,851	3,834	14,197	**28,877**	49%	2,680	3,097	3,043	3,042	11,862	**9,167**	129%
	TX_CURR	63,477	65,561	67,859	68,102	68,102	**82,687**	82%	63,854	65,923	68,327	72,899	72,899	**87,574**	83%
	VMMC_CIRC	13,567	18,605	9,866	7,033	49,071	**51,524**	95%	11,373	10,071	28,155	22,647	72,246	**70,826**	102%
STATE	HTS_TST	15,352	25,506	18,710	16,496	76,064	**39,689**	192%	19,985	10,471	14,773	15,330	60,559	**29,352**	206%
	HTS_TST_POS	312	317	327	368	1,324	**1,693**	78%	265	254	325	322	1,166	**990**	118%
	TX_NEW	237	263	336	356	1,192	**1,898**	63%	268	285	281	199	1,033	**1,259**	82%
	TX_CURR	6,163	5,941	6,294	6,640	6,640	**6,953**	95%	6,524	6,285	6,806	3,923	3,923	**8,149**	48%
	VMMC_CIRC	18	2	1	2,187	2,208	**13,022**	17%	4,975	0	530	65	5,570	**0**	

PEPFAR met targets across the cascade. Linkage, retention, & progress towards 90% viral suppression require ongoing attention

FY2019Q1_Q4 HIV Clinical Cascade

Agency	IM Name	HTS_TST (FY2019)	% HTS_TST Achieved by FY2019Q4	HTS_TST_POS (FY2019)	% HTS_TST_POS Achieved by FY2019Q4	Linkage	Linkage Adjusted for Repeat Tests	TX_NEW (FY2019)	% TX_NEW Achieved by FY2019Q4	TX_CURR (FY2019Q4)	% TX_CURR Achieved by FY2019Q4	Proxy Retention	TX_NET_NEW (FY2019Q4-FY2018Q4)	VL Coverage (Using FY2019Q2 TX_CURR)	% VL suppressed
CDC	UPS	123,442	1494%	4,721	1061%	43%	90%	2,020	401%	5,971	99%	71%	-367	76%	89%
	IDI W & WN	1,234,243	241%	27,591	180%	78%	91%	21,547	151%	100,908	84%	84%	2,920	93%	88%
	Kampala Region	975,984	185%	40,359	199%	76%	85%	30,835	161%	210,745	95%	89%	3,845	98%	94%
	Masaka Region	644,784	165%	27,780	177%	70%	72%	19,467	134%	121,288	97%	103%	22,831	98%	92%
	Mubende Region	580,616	178%	21,255	179%	78%	85%	16,488	150%	73,902	87%	83%	1,628	103%	91%
	Soroti Region	395,077	250%	6,170	163%	83%	88%	5,139	146%	43,428	100%	94%	2,508	93%	88%
	Fort Portal Region	572,976	215%	15,325	220%	88%	89%	13,559	207%	85,340	92%	87%	533	95%	93%
	CDC Overall	**4,527,122**	207%	**143,201**	**192%**	**76%**	**86%**	**109,055**	157%	**641,582**	92%	90%	**33,898**	**97%**	**92%**
USAID	HHIWA	201,218	1031%	958	408%	76%	81%	730	390%	2,367	120%	84%	283	89%	90%
	URC/RHITES EC	673,387	180%	14,564	139%	86%	89%	12,513	130%	77,770	81%	85%	-1,626	84%	88%
	Intra Health/RHITES E	469,544	179%	9,454	137%	74%	76%	6,981	109%	53,946	91%	90%	1,234	92%	88%
	EGPAF/RHITES - SW	723,397	120%	25,769	127%	82%	88%	21,221	115%	155,073	92%	89%	1,914	94%	93%
	RHITES-Acholi	454,292	278%	10,390	184%	77%	87%	7,993	153%	60,219	94%	90%	1,399	88%	89%
	RHITES-Lango	356,843	148%	14,898	211%	91%	100%	13,510	207%	80,388	92%	91%	5,832	89%	86%
	USAID Overall	**2,878,681**	**173%**	**76,033**	**150%**	**83%**	**89%**	**62,948**	**136%**	**429,763**	**90%**	**89%**	**9,036**	**90%**	**90%**
DOD	WALTER REED/MUWR	405,402	177%	13,911	181%	71%	84%	9,819	137%	50,881	79%	86%	1,368	93%	91%
	URC/UPDF	110,395	203%	3,160	144%	65%	77%	2,046	103%	20,001	86%	97%	1,412	98%	90%
	DOD Overall	**515,797**	**182%**	**17,071**	**173%**	**70%**	**83%**	**11,865**	**129%**	**70,882**	**81%**	**89%**	**2,780**	**95%**	**90%**
STATE	State/UNHCR	60,559	206%	1,166	118%	95%	106%	1,103	88%	6,031	74%	78%	-609	82%	90%
	PEPFAR Overall	**7,982,159**	**192%**	**237,471**	**175%**	**78%**	**87%**	**184,971**	**146%**	**1,148,258**	**91%**	**89%**	**45,105**	**94%**	**91%**

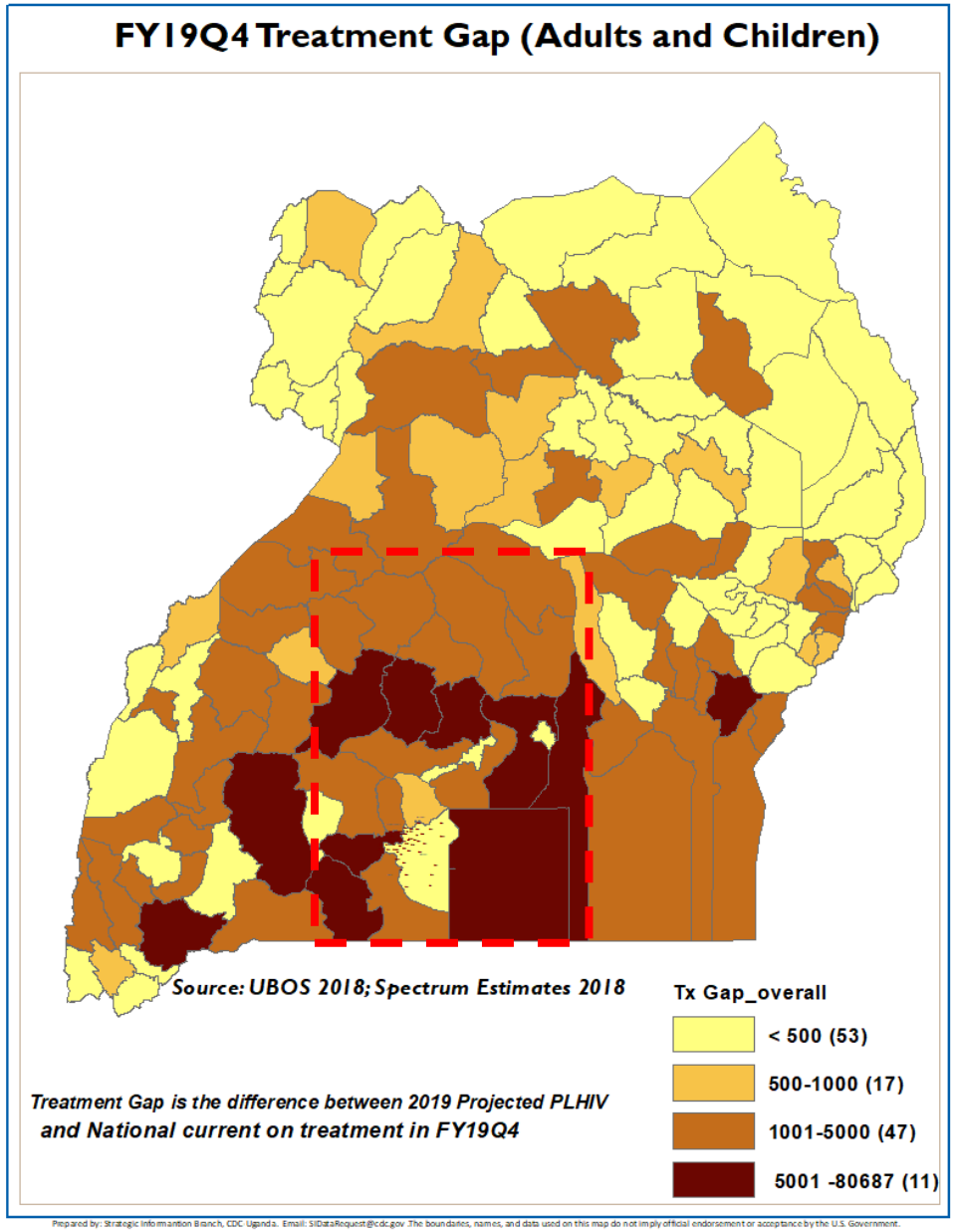
Children, adolescents and men remain with the largest gaps in ART and viral suppression. AGYW and men 20-29 require more retention support.

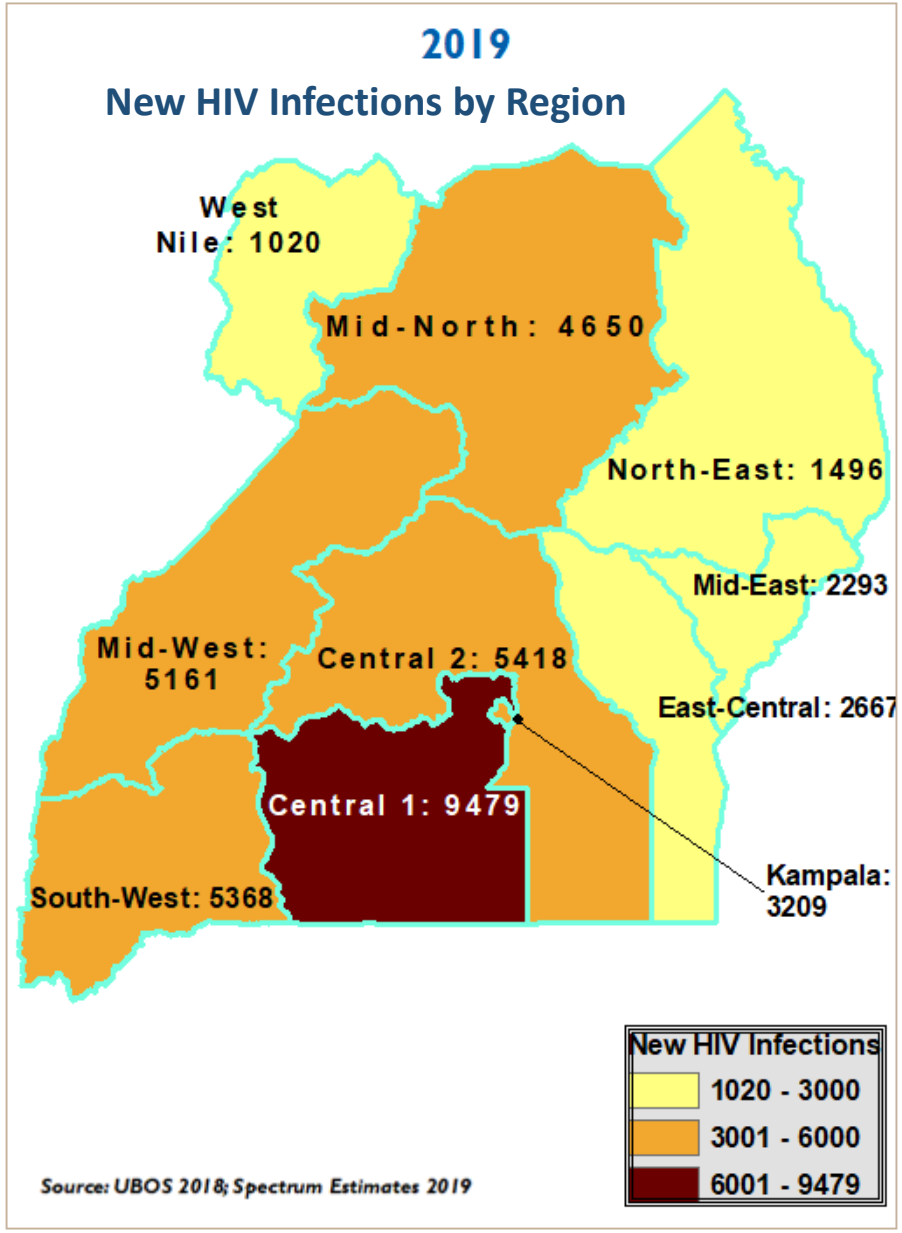
Uganda National 95-95-95 Cascade by Age/Sex, FY19Q4

Age	Sex	PLHIV	Diagnosed	On Treatment	VL Suppressed	Diagnosed	On Treatment	Retention Proxy	VL Suppressed
<10	Female	30,364	19,641	19,629	13,863	65%	65%	84%	46%
	Male	31,343	18,041	18,028	11,638	58%	58%	83%	37%
10-19	Female	54,151	37,429	37,206	26,580	69%	69%	78%	49%
	Male	38,390	24,085	24,050	17,611	63%	63%	96%	46%
20-29	Female	182,944	188,450	187,140	144,143	103%	102%	78%	79%
	Male	79,678	51,669	51,253	30,650	65%	64%	68%	38%
30-39	Female	247,351	257,660	256,972	212,282	104%	104%	92%	86%
	Male	154,937	125,240	124,639	92,243	81%	80%	83%	60%
40-49	Female	181,444	181,717	181,499	147,933	100%	100%	101%	82%
	Male	141,448	119,518	119,223	96,802	84%	84%	95%	68%
50+	Female	129,471	115,542	115,438	101,256	89%	89%	109%	78%
	Male	114,132	89,208	89,072	76,598	78%	78%	105%	67%
Overall		**1,385,653**	**1,228,200**	**1,224,149**	**971,599**	**89%**	**88%**	**90%**	**70%**

Data Source: Uganda DHIS, September 2019

Targeting Geographies with High Unmet Need for ART & New Infections



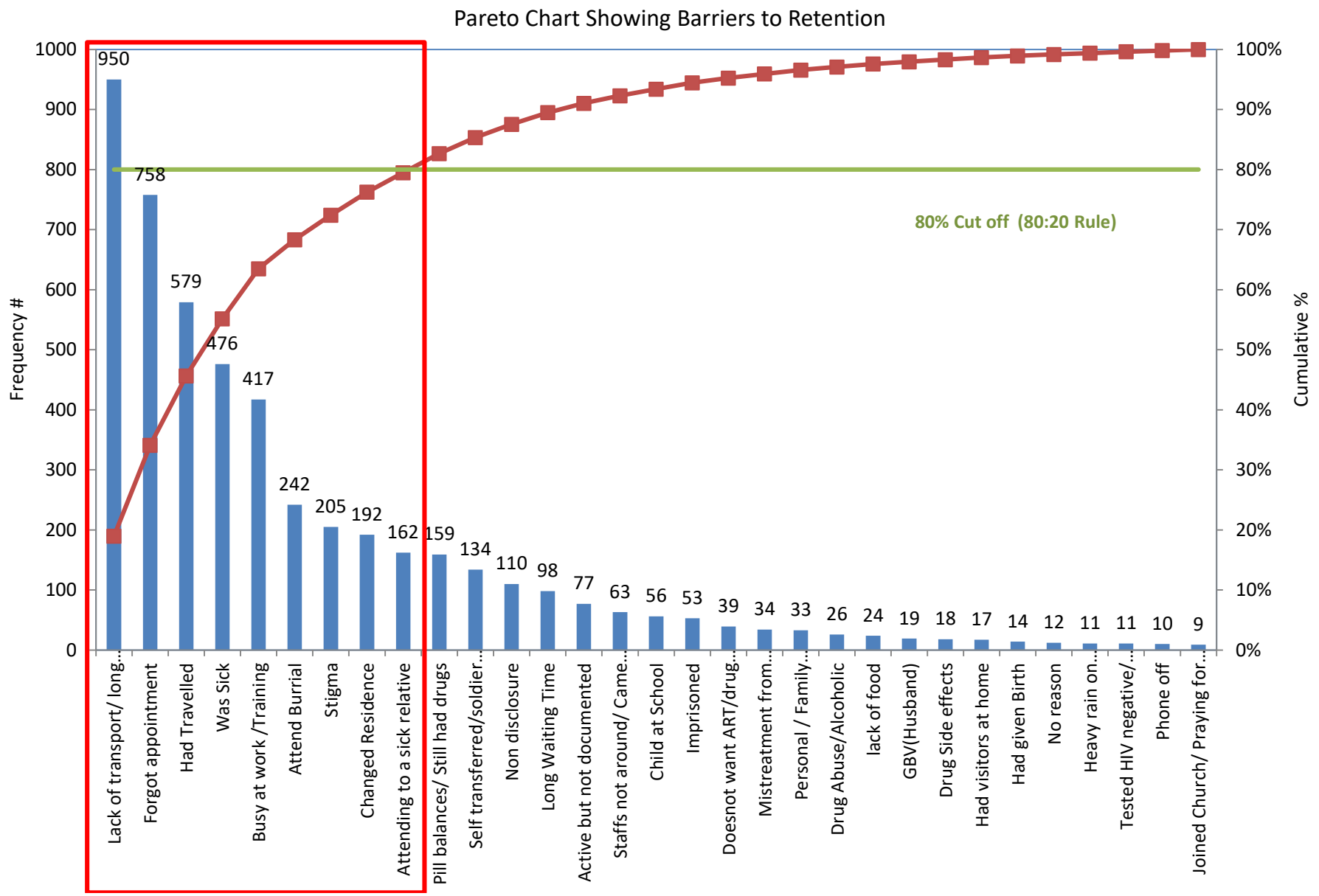


Intensified case finding and prevention efforts in these districts will be needed in COP19/20 to reach epidemic control

Concerted effort to scale APN has resulted in 14% of positives coming from index testing, although scaling of coverage and HTS_POS contribution needed

Partner	Number of sites supported	%sites with index testing services	Offered Index testing services	%index accepted	Ratio of contacts to index	Newly identified HIV+	Yield (excluding known positives)	Index testing contribution to positives (%)	Total positives identified (Q1-Q4)
Fort Portal	146	71.9%	9,006	92%	2.1	3,391	21%	36.0%	15,325
IDI W & WN	252	78.6%	32,192	92%	2.4	5,649	11%	30.7%	27,591
Kampala	147	57.8%	39,308	80%	1.6	5,240	22%	26.5%	40,359
Masaka	197	78.2%	17,858	79%	1.6	3,687	26%	26.1%	27,780
Mubende	138	75.4%	22,728	88%	1.8	4,624	13%	29.0%	21,255
Soroti	104	64.4%	2,041	89%	2.8	514	10%	11.4%	6,170
UPS	53	69.8%	1,139	81%	1.8	155	17%	10.1%	4,721
Overall CDC	**1,037**	**72.3%**	**124,272**	**85%**	**1.9**	**23,260**	**16%**	**27.4%**	**143,201**
URC/UPDF			527	95%	1.8	35	5%	1.6%	3,131
WALTER REED	116	36.2%	3,228	76%	2.1	800	14%	6.2%	13,911
Overall DOD	**116**	**36.2%**	**3,755**	**78%**	**2.0**	**835**	**13%**	**5.4%**	**17,042**
State/UNHCR	**13**	**38.5%**	**307**	**92%**	**1.4**	**33**	**9%**	**2.8%**	**1,166**
HHIWA	20	80.0%	416	48%	1.3	40	22%	6.3%	958
RHITES E	181	26.5%	1,245	87%	1.1	157	22%	3.1%	9,454
RHITES EC	151	64.2%	8,052	91%	1.7	1,157	12%	9.6%	14,564
RHITES -SW	271	44.3%	10,355	86%	1.8	3,402	27%	16.4%	25,771
RHITES-Acholi	69	82.6%	2,517	92%	1.8	683	18%	9.5%	10,417
RHITES-Lango	72	87.5%	19,975	89%	1.5	3,658	16%	31.0%	14,898
Overall USAID	**764**	**52.5%**	**42,560**	**89%**	**1.6**	**9,097**	**18%**	**15.2%**	**76,062**

IPs Introduced Systematic Root Cause Analyses to Understand Reasons for Attrition; In COP19 Refining Change Package to Address Major Barriers



4 Interventions to address primary root causes

Transport/distance, busy/working:

Expand and diversify DSDM

Forgot appointment:

Refine appointment reminder systems

Ill/bedridden:

Strengthen advanced disease management

Fear to be associated with HIV treatment:

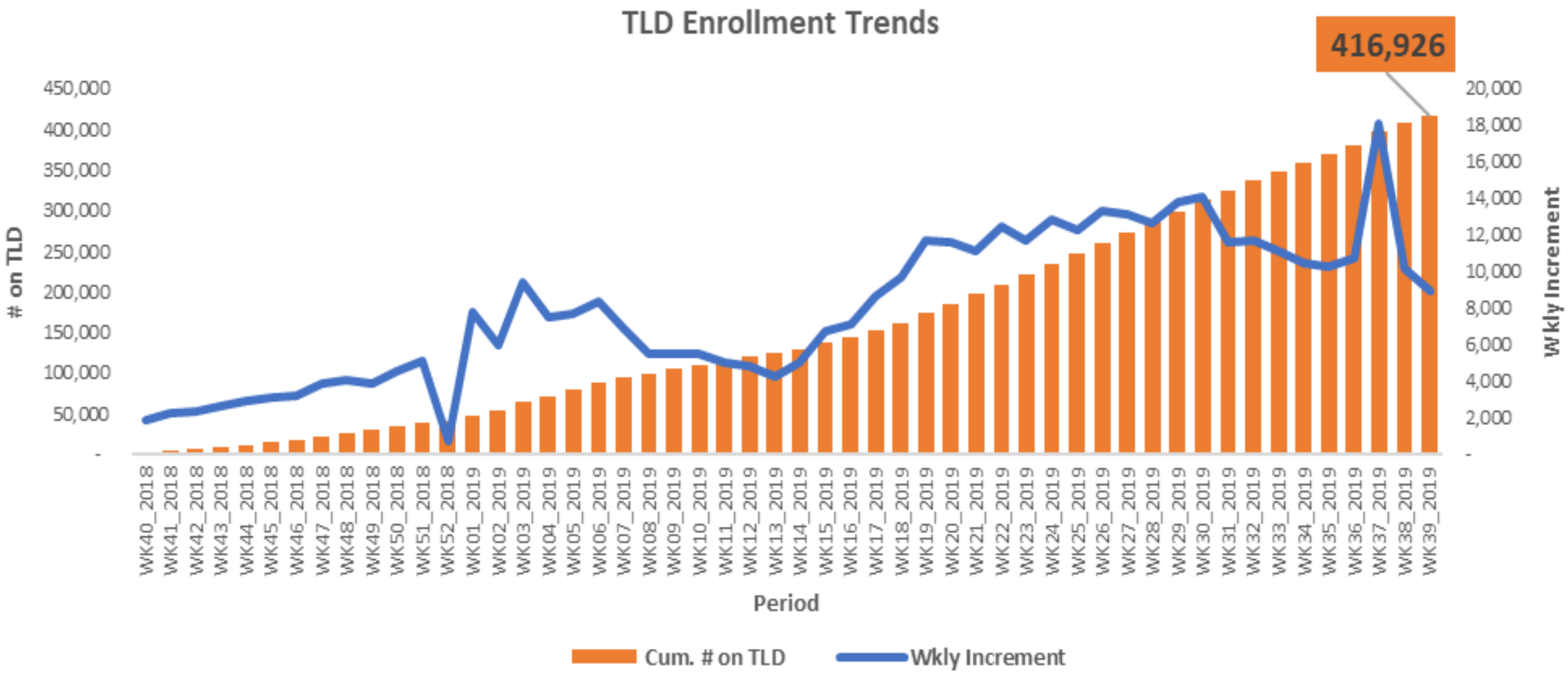
Psychosocial support through facilities and CSOs/peers

PMTCT Cascade by IM / FY19Q4

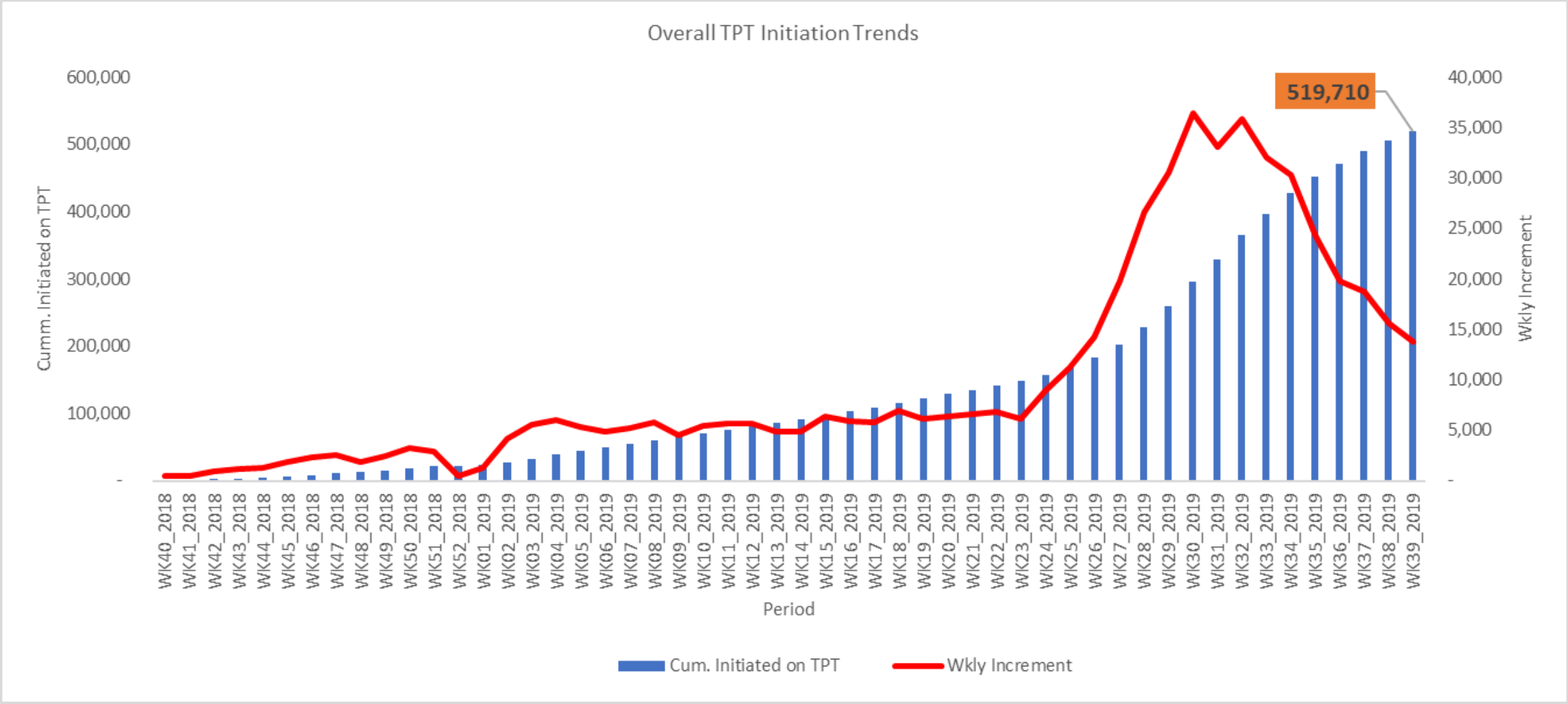
Agency	IM Name	PMTCT STAT (D)	PMTCT STAT (N)	PMTCT STAT (% with known status)	PMTCT STAT POS	% of PMTCT STAT POS	PMTCT ART (N)	%age of HIV+ Preg women on ARVs	PMTCT EID (D) (including Post ANC1)	PMTCT EID (N)	%age PMTCT EID	PMTCT_ HEI_POS	MTCT rates (%PMTCT_ HEI_POS)
	Overall	**364,210**	**353,693**	**97%**	**21,646**	6.1%	**21,299**	**98%**	**22,848**	**18,138**	79%	**359**	2.0%
CDC	Fort Portal Region	27,800	26,712	96%	1,748	6.5%	1,717	98%	1,783	1,622	91%	14	0.9%
	IDI W & WN	54,985	53,462	97%	2,072	3.9%	2,003	97%	2,204	1,979	90%	37	1.9%
	Kampala Region	40,269	39,708	99%	3,635	9.2%	3,596	99%	3,736	3,123	84%	70	2.2%
	Mubende Region	24,550	23,732	97%	1,892	8.0%	1,895	100%	1,980	1,680	85%	40	2.4%
	Masaka Region	24,943	24,436	98%	2,797	11.4%	2,739	98%	2,989	1,912	64%	37	1.9%
	Soroti Region	21,611	21,042	97%	643	3.1%	651	101%	761	537	71%	13	2.4%
	UPS	825	821	100%	73	8.9%	72	99%	75	15	20%	1	6.7%
CDC Overall		194,983	189,913	97%	12,860	6.8%	12,673	99%	13,528	10,868	80%	212	2.0%
DOD	URC/UPDF	2,243	2,123	95%	245	11.5%	228	93%	287	178	62%	2	1.1%
	WALTER REED/MUWRP	19,813	19,290	97%	1,320	6.8%	1,226	93%	1,376	1,008	73%	22	2.2%
DOD Overall		22,056	21,413	97%	1,565	7.3%	1,454	93%	1,663	1,186	71%	24	
STATE	State/UNHCR	4,274	3,909	91%	117	3.0%	117	100%	131	118	90%	-	0.0%
USAID	URC/RHITES EC	37,903	36,761	97%	1,336	3.6%	1,346	101%	1,412	1,127	80%	21	1.9%
	EGPAF/RHITES - SW	38,803	37,536	97%	2,877	7.7%	2,856	99%	3,016	2,280	76%	65	2.9%
	RHITES-Acholi	11,741	11,684	100%	760	6.5%	754	99%	798	795	100%	10	1.3%
	Intra Health/RHITES E	32,636	31,174	96%	887	2.8%	863	97%	1,011	679	67%	17	2.5%
	RHITES-Lango	20,285	19,786	98%	1,153	5.8%	1,145	99%	1,195	1,040	87%	9	0.9%
	HHIWA	1,529	1,517	99%	91	6.0%	91	100%	94	45	48%	1	2.2%
USAID Overall		142,897	138,458	97%	7,104	5.1%	7,055	99%	7,526	5,966	79%	123	2.1%

PMTCT STAT & ART	PMTCT EID	**HEI_POS**
>=95%	>=70%	**< 3.0%**
94% - 80%	50% -70%	**3.0% -4.9%**
< 80%	<50%	**>=5%**

TLD Enrollment Trend Over FY19



TB Prevention: IPT Initiation Trend – FY19



VMMC by Agency and IM: FY2019

US Agency	Implementing Mechanism	Annual target	Achievement: VMMC Output					Performance (Percent (%) Expected=100%
			Q1	Q2	Q3	Q4	Overall	
PEPFAR Overall		756,456	149,178	189,490	212,425	176,455	727,548	96%
CDC	Fort Portal Region	51,009	8,716	16,570	15,295	10,286	50,867	100%
	IDI W & WN	67,981	19,393	19,502	12,811	17,720	69,426	102%
	Kampala Region	83,739	15,351	24,603	17,309	17,486	74,749	89%
	Masaka Region	63,402	3,888	15,491	21,422	18,747	59,548	94%
	Mubende Region	53,887	16,192	21,779	8,992	9,932	56,895	106%
	Soroti Region	23,413	7,276	7,382	8,150	2,654	25,462	109%
CDC Overall		343,431	70,816	105,327	83,979	76,825	336,947	98%
DOD	URC/UPDF	17,700	548	1,613	12,660	9,325	24,146	136%
	WALTER REED/MUWRP	53,126	10,825	8,458	15,495	15,311	50,089	94%
DOD Overall		70,826	11,373	10,071	28,155	24,636	74,235	105%
STATE	STATE/UNHCR	No target	4,975		530	65	5,570	
USAID	EGPAF/RHITES - SW	136,971	8,822	29,052	40,277	34,337	112,488	82%
	HHIWA	13,550	2,460	3,460	5,420	3,025	14,365	106%
	Intra Health/RHITES E	26,453	6,968	5,299	10,226	4,796	27,289	103%
	RHITES-Acholi	30,005	7,192	5,676	6,001	6,999	25,868	86%
	RHITES-Lango	78,921	23,516	19,225	22,175	17,020	81,936	104%
	URC/RHITES EC	56,299	13,056	11,380	15,662	8,752	48,850	87%
USAID Overall		342,199	62,014	74,092	99,761	74,929	310,796	91%

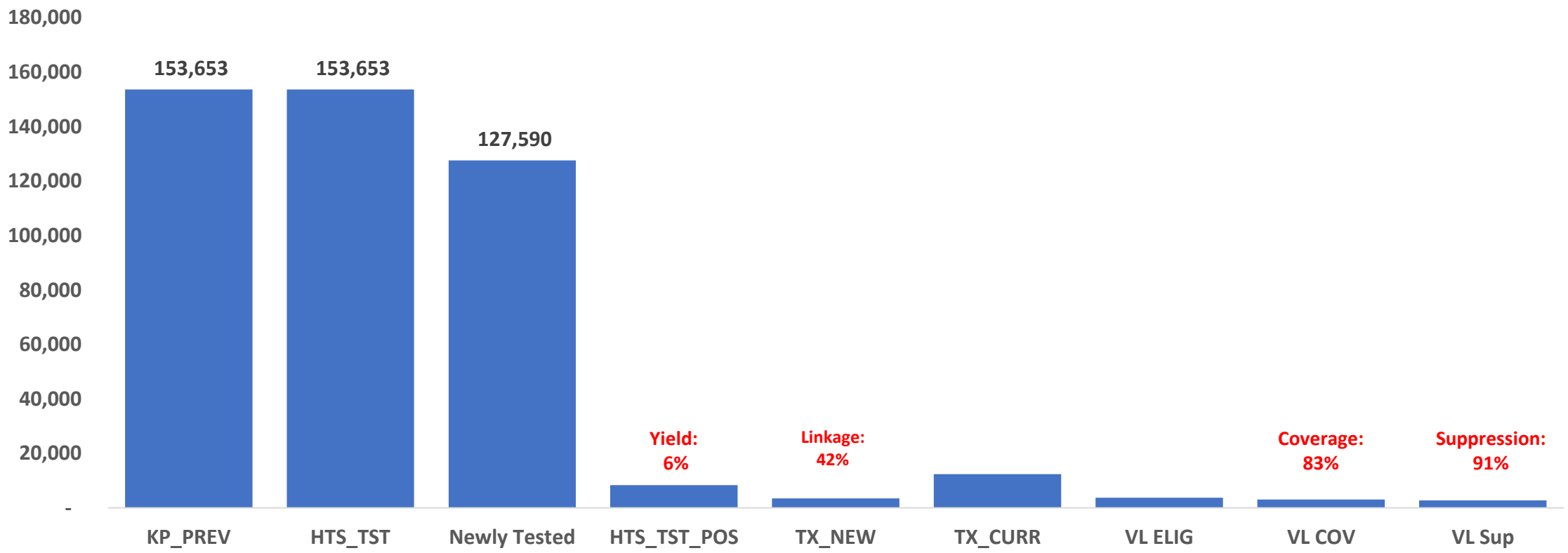
Red	Yellow	Light Green	Dark green	No target
0<75%	75<90%	90<100%	100%+	

VMMC by Agency and IM (15-29 years)

US Agency	Implementing Mechanism	Annual target	Achievement: VMMC Output					Performance (Percent (%) Expected=100%
			Q1	Q2	Q3	Q4	Overall	
PEPFAR Overall		605,253	75,997	95,976	120,626	101,782	394,381	65%
CDC	Fort Portal Region	40,808	4,471	8,017	8,479	5,454	26,421	65%
	IDI W & WN	54,390	5,097	6,112	9,778	11,924	32,911	61%
	Kampala Region	66,993	8,311	12,460	10,294	10,375	41,440	62%
	Masaka Region	50,729	1,521	3,868	4,566	3,655	13,610	27%
	Mubende Region	43,113	10,550	11,844	5,134	8,375	35,903	83%
	Soroti Region	18,730	4,858	5,093	6,241	1,982	18,174	97%
CDC Overall		274,763	34,808	47,394	44,492	41,765	168,459	61%
DOD	URC/UPDF	14,160	375	906	8,227	7,046	16,554	117%
	WALTER REED/MUWRP	42,515	7,447	6,095	11,698	10,900	36,140	85%
DOD Overall		56,675	7,822	7,001	19,925	17,946	52,694	93%
STATE	STATE/UNHCR	No target	175	-	348	33	556	
USAID	EGPAF/RHITES - SW	109,605	5,596	17,226	22,875	18,148	63,845	58%
	HHIWA	10,841	838	1,678	3,998	2,483	8,997	83%
	Intra Health/RHITES E	21,170	2,071	2,658	4,481	2,694	11,904	56%
	RHITES-Acholi	24,010	4,106	2,892	2,893	3,416	13,307	55%
	RHITES-Lango	63,138	13,428	11,114	13,240	10,434	48,216	76%
	URC/RHITES EC	45,051	7,153	6,013	8,374	4,863	26,403	59%
USAID Overall		273,815	33,192	41,581	55,861	42,038	172,672	63%

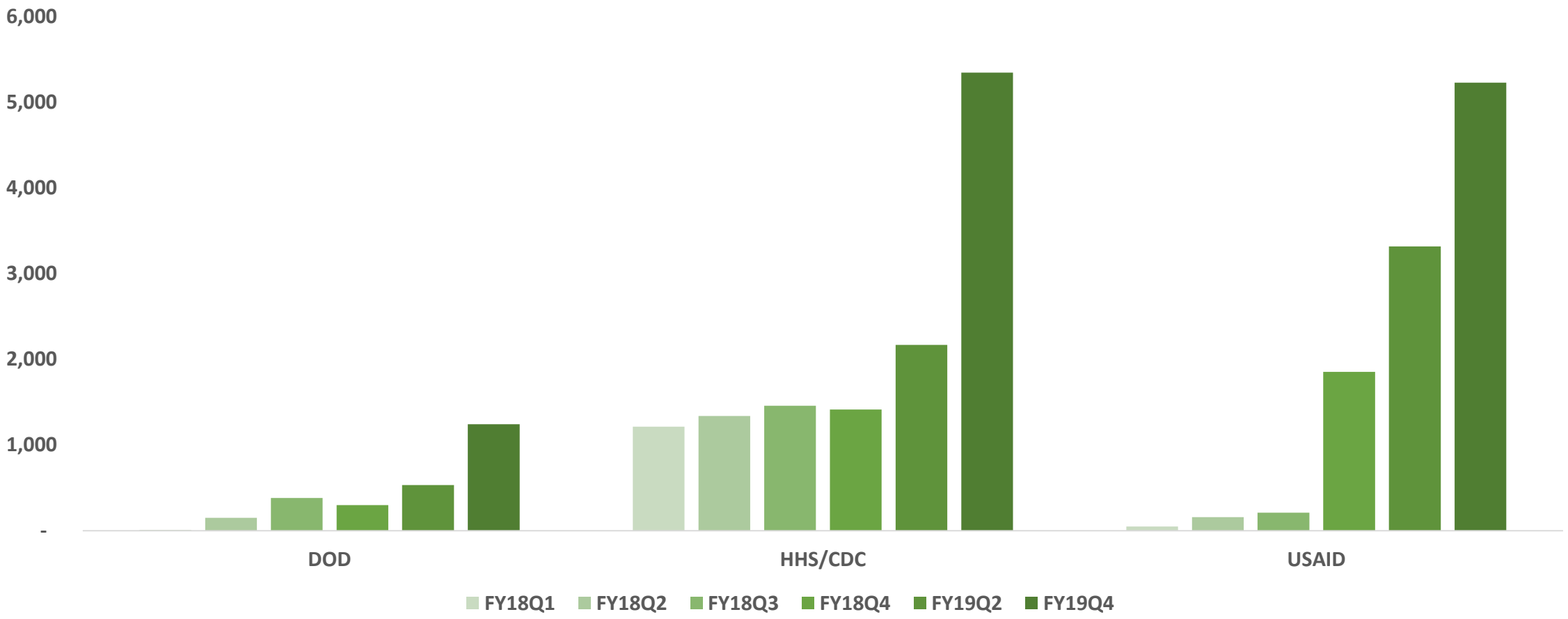
Red	Yellow	Light Green	Dark green	No target
<75%	75-<90%	90-<100%	100%+	

KP Cascade Gaps in Linkage, Viral Load Coverage



	KP_PREV	HTS_TST	Newly Tested	HTS_TST_POS	Yield	TX_NEW	Linkage	TX_CURR	VL ELIG	VL COV	%VL C0V	VL SUP	%VL SUP
KP_PREV reached	153,653	153,653	127,590	8,390	7%	3,511	42%	12,398	3,697	3,068	83%	2,777	91%
PWID	1,682	1,682	1,175	59	5%	25	42%	22	4	4	100%	4	100%
FSW	73,183	73,183	62,864	2,712	4%	2,408	89%	6,280	2,187	1,658	76%	1,513	91%
MSM	6,781	6,781	4,830	3,236	67%	38	1%	267	53	41	77%	33	80%
TG	638	638	478	10	2%	9	90%	29	12	11	92%	10	91%
PRISONERS	71,369	71,369	58,243	2,373	4%	1,031	43%	5,800	1,441	1,354	94%	1,217	90%

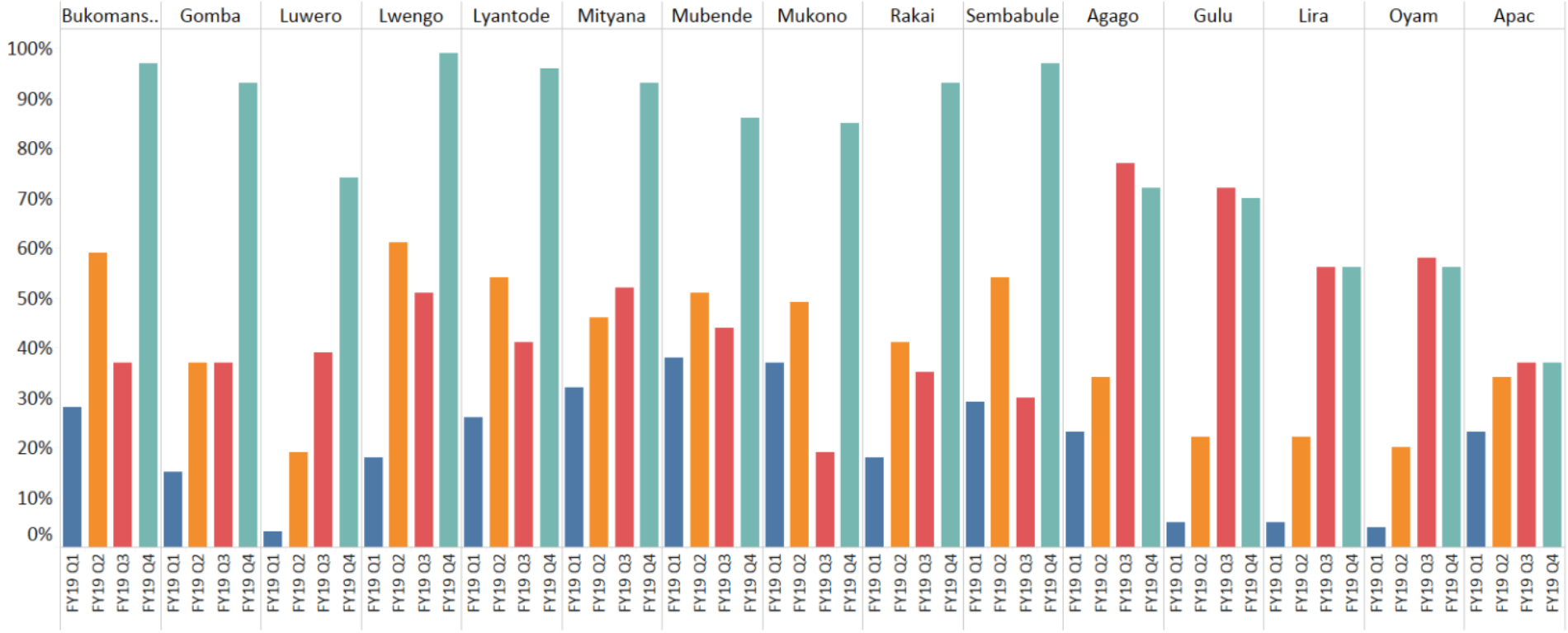
PrEP_NEW Scale-up, FY18Q1 - FY19Q4



	FY18				FY19		
Funding Agency	FY18Q1	FY18Q2	FY18Q3	FY18Q4	FY19Q2	FY19Q4	Trendline
DOD	9	149	381	297	531	1,242	
HHS/CDC	1,214	1,337	1,458	1,413	2,166	5,343	
USAID	49	157	211	1,852	3,317	5,226	
PEPFAR	**1,272**	**1,643**	**2,050**	**3,562**	**6,014**	**11,811**	

Significant improvement in DREAMS primary package completion (FY19Q1– FY19Q4)

Percentage of AGYW Received Full Primary Package



	Bukoman..	Gomba	Luwero	Lwengo	Lyantode	Mityana	Mubende	Mukono	Rakai	Sembabule	Agago	Gulu	Lira	Oyam	Apac
FY19 Q1	28%	15%	3%	18%	26%	32%	38%	37%	18%	29%	23%	5%	5%	4%	23%
FY19 Q2	59%	37%	19%	61%	54%	46%	51%	49%	41%	54%	34%	22%	22%	20%	34%
FY19 Q3	37%	37%	39%	51%	41%	52%	44%	19%	35%	30%	77%	72%	56%	58%	37%
FY19 Q4	97%	93%	74%	99%	96%	93%	86%	85%	93%	97%	72%	70%	56%	56%	37%

USG Actions

Intensive partner management and DREAMS Surge for quality, improved performance, from below 15% at FY19Q1 to ~ 60% at FY19Q4

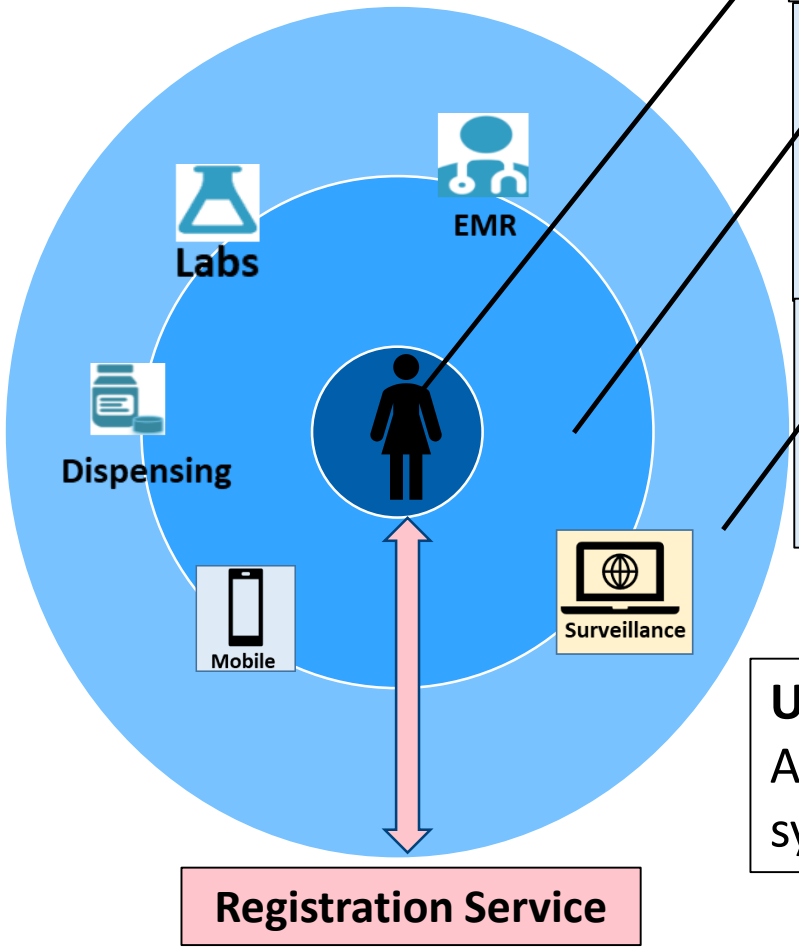
District level success varied across northern region; highest impact in Gulu district from 5% at FY19Q1 to 70% at FY19Q4

DQAs conducted to validate the data

Health Information Systems for Epidemic Control

Impact

- Monitoring across the HIV and TB care cascade
- Retention on treatment
- HIV Recency testing
- Monitoring VL suppression
- Clinical decision support
- Rapid lab results to client
- Client mobility
- HIV case reporting
- HIV and TB client registry
- Analytics for key populations and epidemic control
- Calculated and process indicator generation



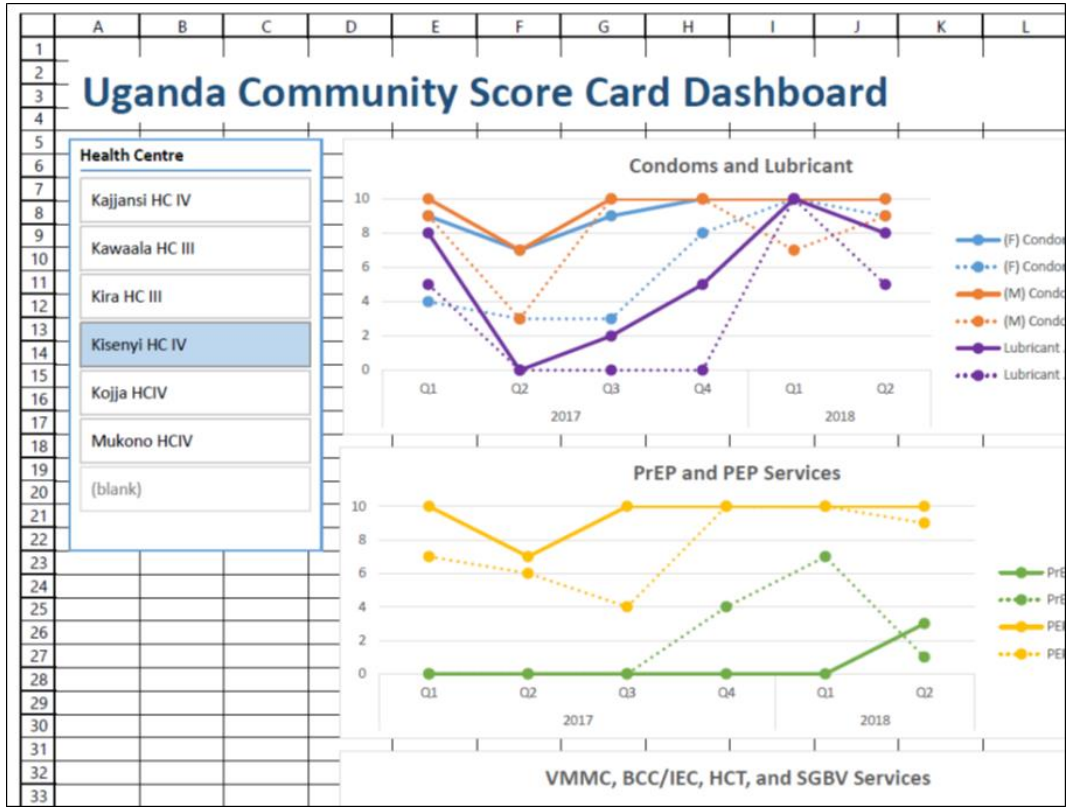
National: Client-centered health records

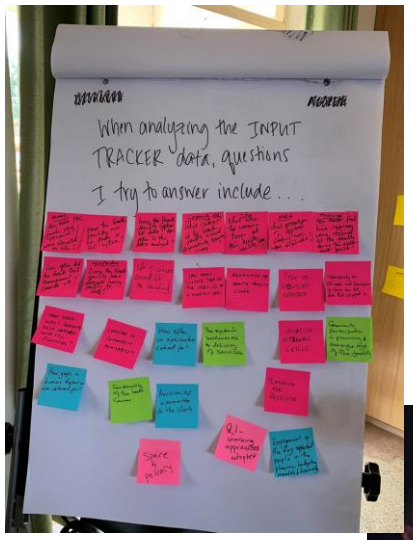
District: All facilities connected for client registration/deduplication, specimen tracking and data exchange

Community: Community services, hotspot, household and survey data capture using mobile apps

Unique client identification: Algorithmic: biometrics, national and system IDs, and demographics

USG Strengthens Community Systems and Client-Centered Approaches





U=U

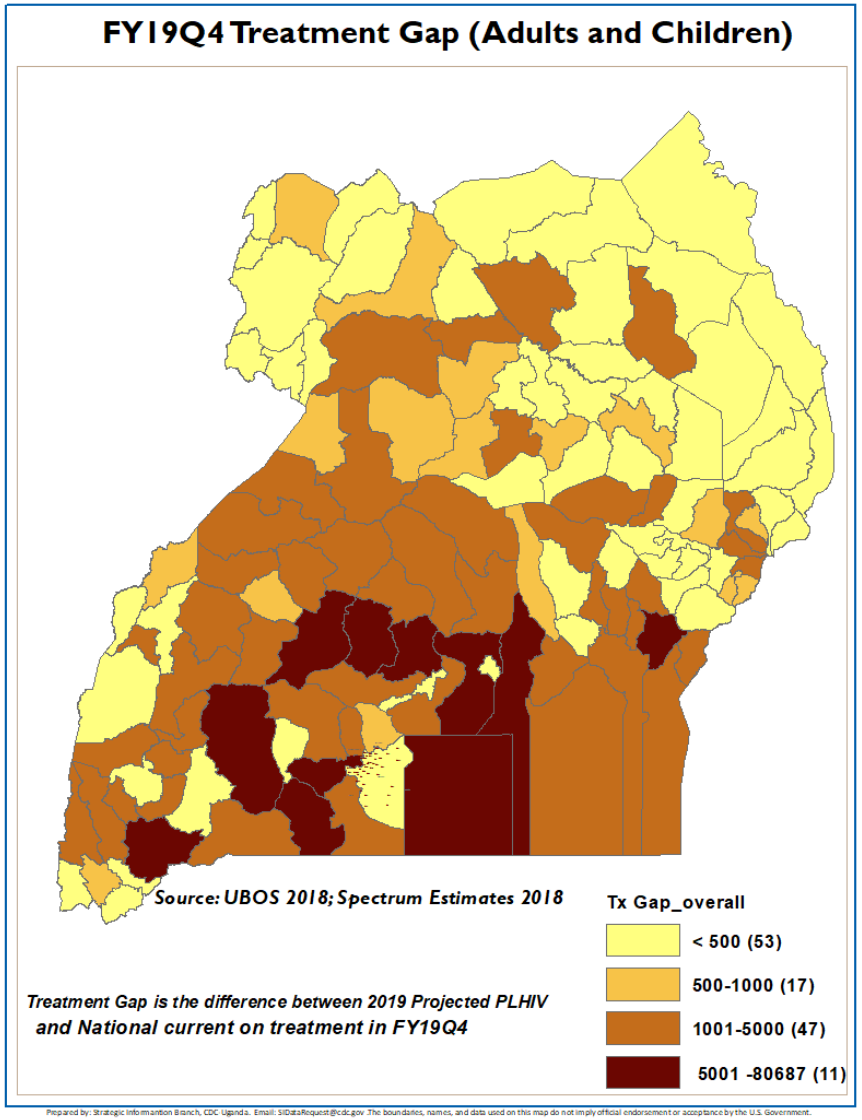
- Expanding digital use of community scorecard developed under Local Capacity Initiative (LCI)
  - ✓ Supported capacity training of CSOs for data use and visualization
  - ✓ Data Visualization Dashboard for community score card and MER data
- Regular interactions with KP-led CSOs to inform KP and KPIF programming
- Uganda has embraced U=U message by CSOs (LovetoLove Organization, Youth)
- New FBO cooperative agreement in COP19
- Expanding use of root cause analyses and qualitative surveys from retention to PrEP and other topics

PEPFAR COP18 Summary

- Most partners met or exceeded targets in case finding, treatment, PMTCT, TB, VMMC, and OVC
  - Need to reduce over-testing through even more strategic HIV case finding
  - Further work needed on linkage and retention and back to treatment efforts
  - Better case finding, treatment and retention needed for children and adolescents
  - Effort needed by many partners to focus on VMMC age pivot
- Success in rapid TLD and TPT scale up
- Some improvement in supporting and documenting KP cascade, but substantial work still needed
- Need to incorporate recent DREAMS guidance and align AGYW programming across donors

Recommendations for IPs: Differentiated Approach

- Concerted case finding, especially urban and mobile males
- Implementation and fidelity of linkage beyond surge sites
- Focus on girls 10-14 in DREAMS while exiting those aged 25+
- Viral load suppression
- Early retention
- Scale up key populations
- Learn from successes
- Gaps in 95-95-95 need to be addressed due to the unique context of prisons



Addressing gaps across the cascade based on regional epi and context

COP Minimum Requirements

Already Completed

- Test and Start
- Elimination of User Fees

COP18

- Increase Index Testing, Self-testing, and Enhance Pediatric and Adolescent Case Finding
- >95% Linkage
- TLD transition and ARV regimen optimization
- Differentiated Service Delivery and Multi-Month Scripting
- Alignment of OVC Program to CLHIV and 9-14 year olds
- TB Preventive Therapy scale-up
- VL/EID Optimization
- Unique identifier and EMR

COP19

- Increased Host Government Resources for ARVs
- Increased Funding to Indigenous Partners
- Monitoring morbidity/mortality outcomes

***COP20**

- U=U & updated HIV messaging to reduce stigma and encourage TX and Prevention
- PrEP scale-up
- Integrate QA & CQI into site management
- Scale-up of Case-Based Surveillance

***Page 41 COP20 Guidance**

PEPFAR
U.S. President's Emergency Plan for AIDS Relief

SENSITIVE BUT UNCLASSIFIED

PEPFAR

THANK YOU!

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DISCUSSION