

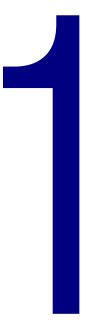
PEPFAR 3.0

Progress in and Outcomes of Data-Driven Reorientation of HIV Services

AMB Deborah Birx, MD

11th International Conference on HIV Treatment and Prevention Adherence

May 2016



THE HIV EPIDEMIC TODAY

And what we need to do to control it

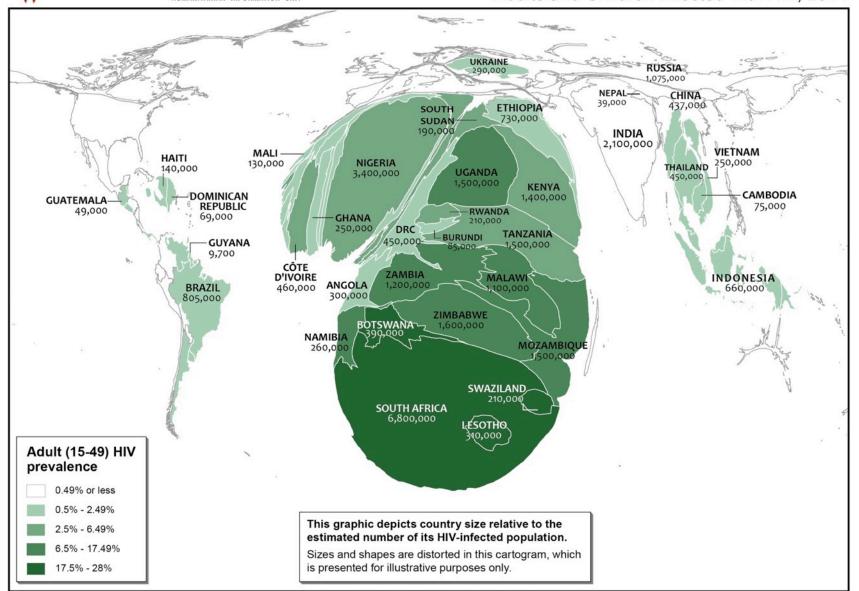




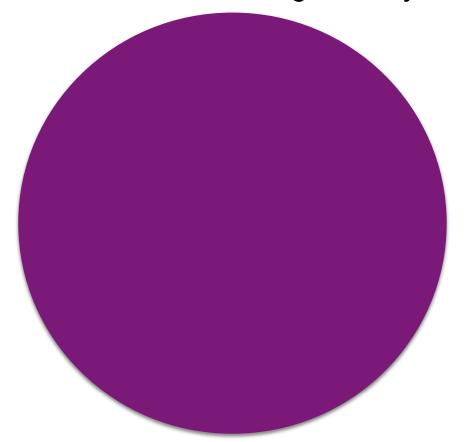
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HIV Prevalence and Estimated Number of Adults and Children Infected with HIV, 2014



Business as usual: escalating costs year after year



2.5 MILLION

NEW ADULT HIV INFECTIONS PER YEAR



Source: UNAIDS, 2015

Fast Track Strategy: Program costs decline in out years

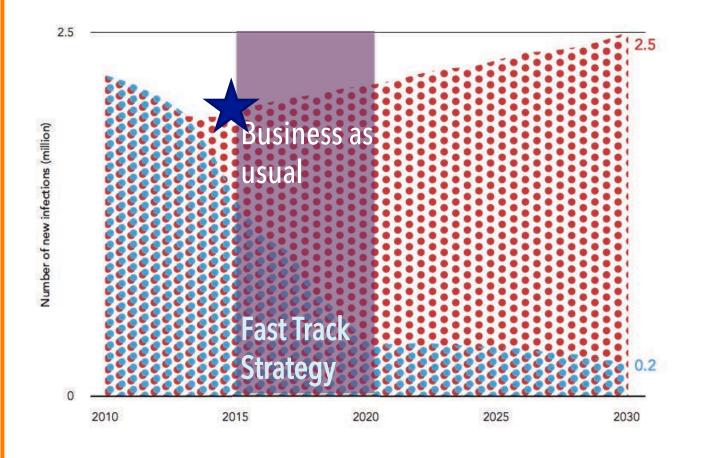
0.2 MILLION

NEW ADULT HIV INFECTIONS PER YEAR



Source: UNAIDS 2015

We have a 5-YEAR WINDOW



28 MILLION

Total HIV infections averted 2015–2030

- Ambitious targets
- Constant coverage



Source: UNAIDS 2015

Defining "A Sustainable HIV Response"

Sustainability is *not* only about funding.

A sustainable response can only be achieved when the epidemic is under control and no longer expanding



Achieving epidemic control with the current global budget will require delivering the

Right Things
in the Right Places Right Way Right Now





New PEPFAR Targets for 2017

12.9 million

women, men, and children on ART

40% reduction in new HIV infections in young women in 10 countries

Total of 13 million voluntary medical male circumcisions

Source: pepfar.gov

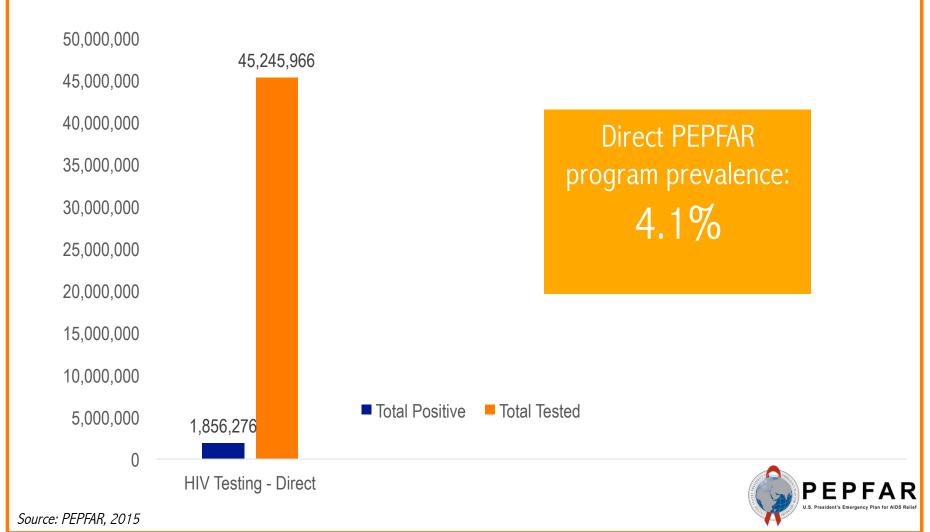


And the steps needed to reach those in need of services

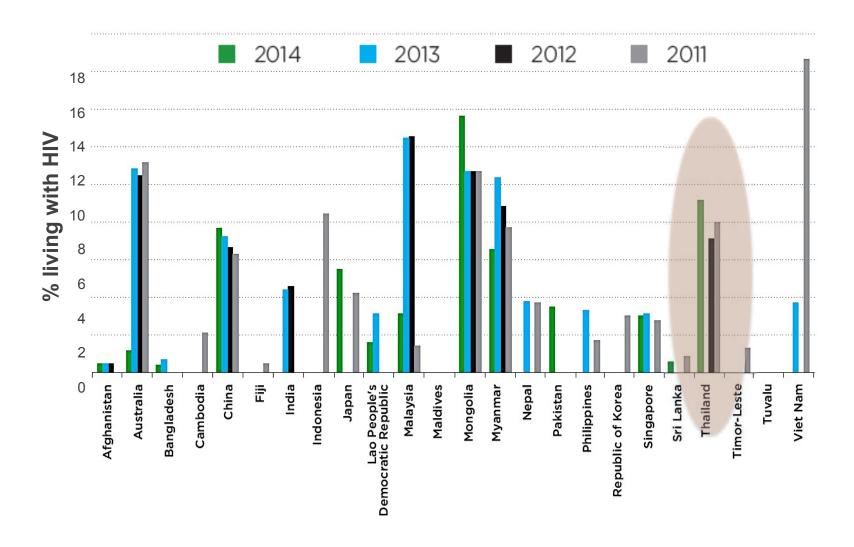


HIV Positive People Identified & Number Tested

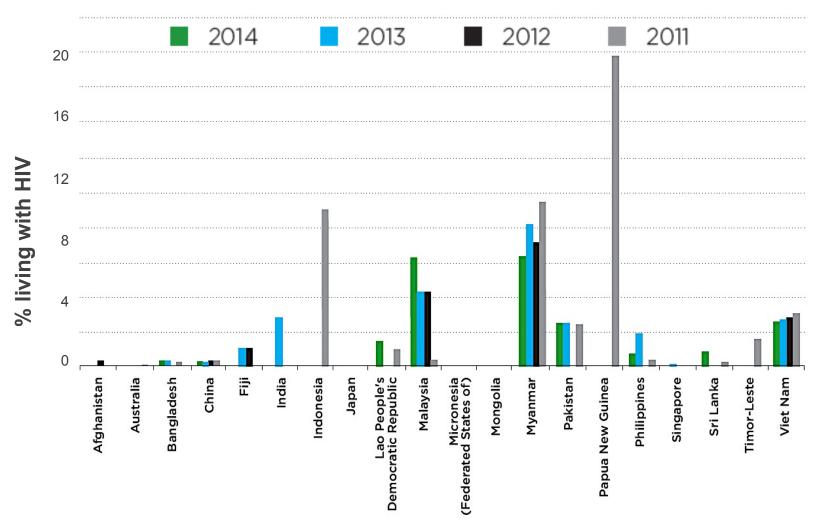
PEPFAR Direct Service Delivery Results, FY 2015



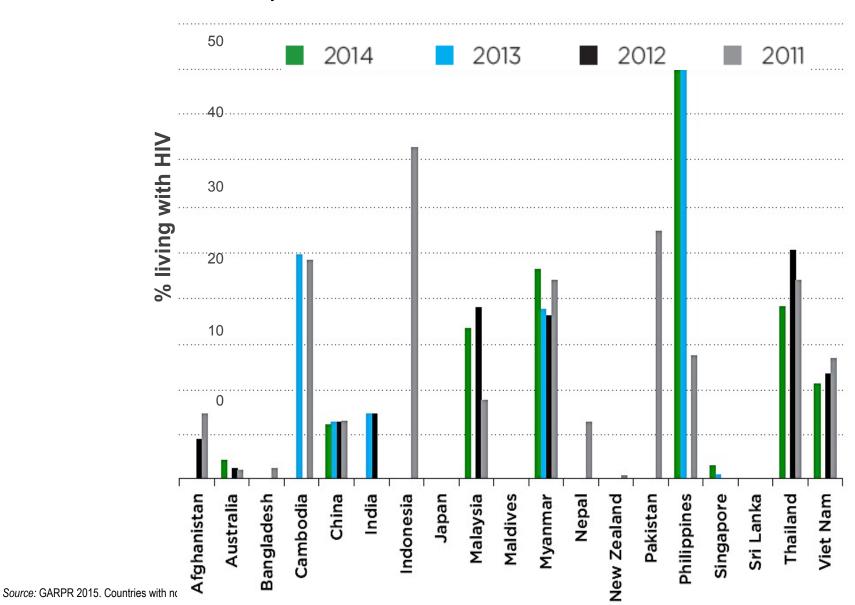
HIV prevalence among gay men and other men who have sex with men in Asia and the Pacific, 2011—2014



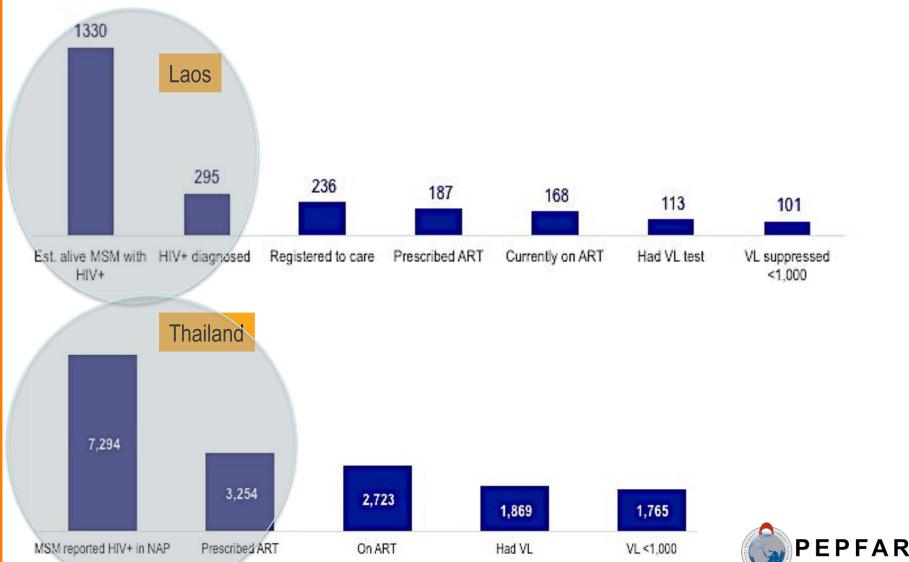
HIV prevalence among sex workers in Asia and the Pacific, 2011–2014



HIV prevalence among people who inject drugs in Asia and the Pacific, 2011–2014



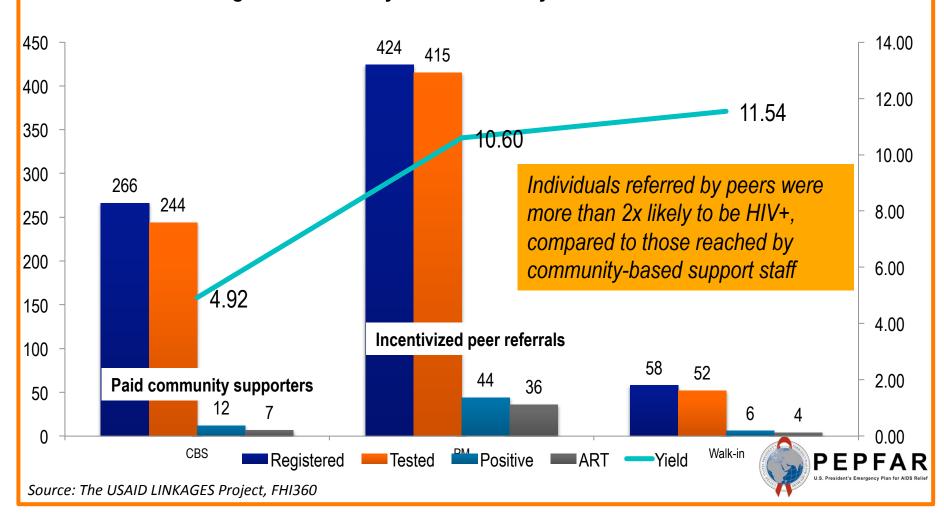
MSM Clinical Cascades in Laos & Thailand



Source: PEPFAR, Asia Regional Program, 2016

Promising Innovations to improve 90-90-90 outcomes And reduce unit costs

Chiang Mai Community Performance by Recruitment Channel

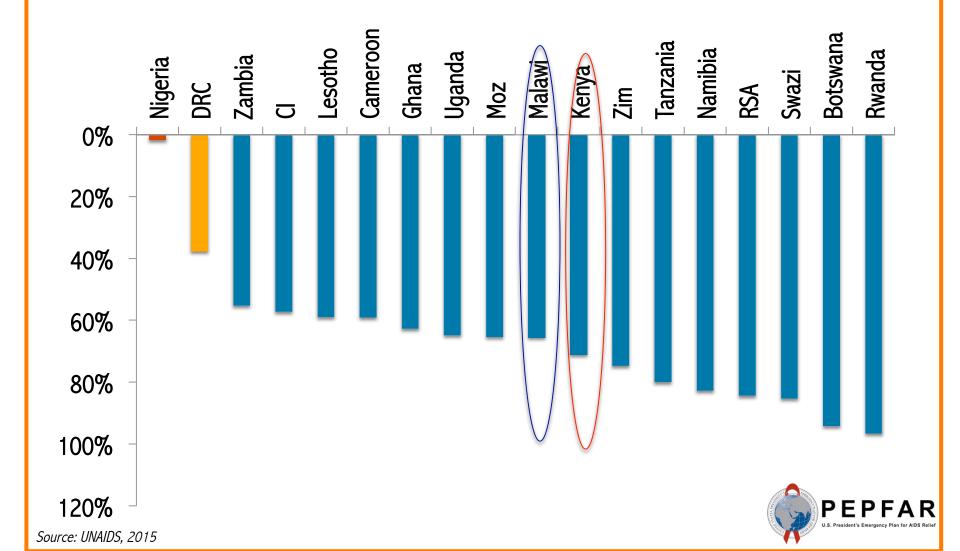




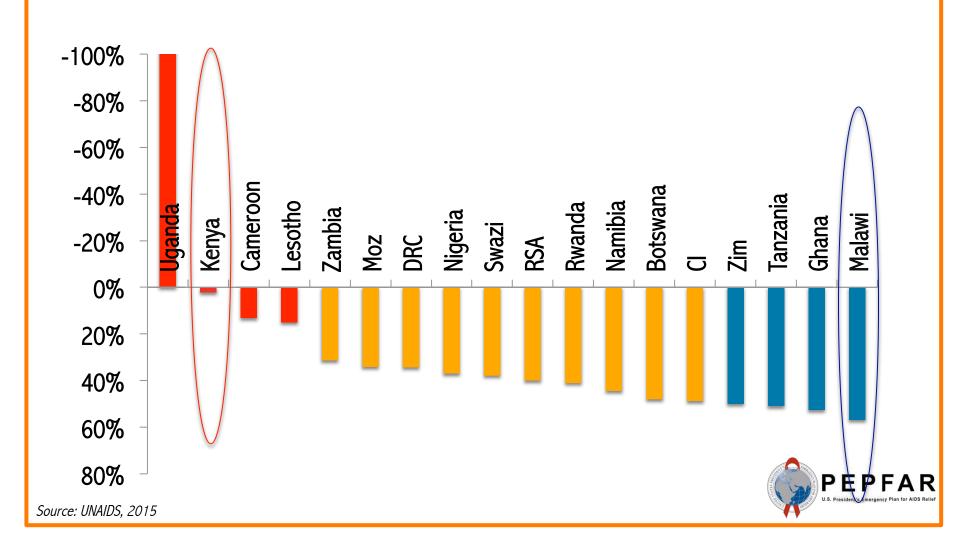
And the steps needed to achieve epidemic control



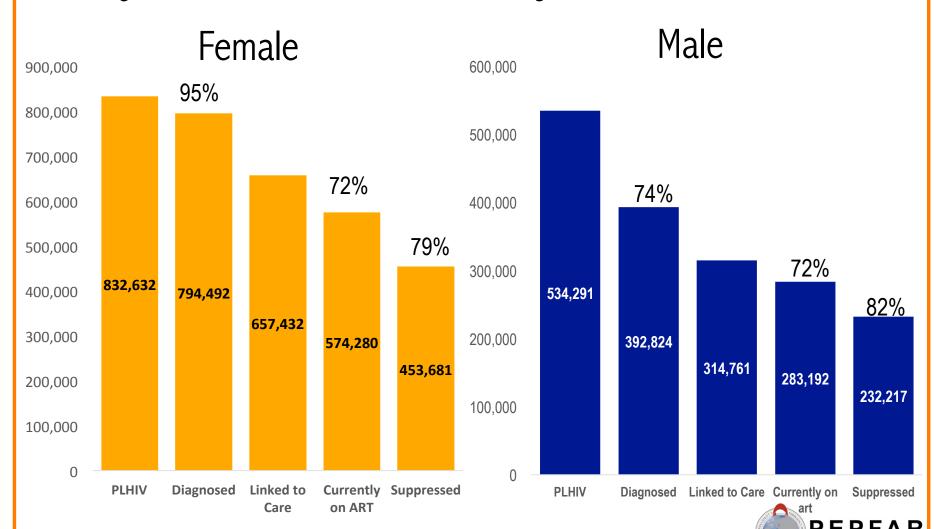
% Change in New Pediatric HIV Infections (2000-2014)



% Change In Adult New HIV/AIDS Infections (2000-2014)

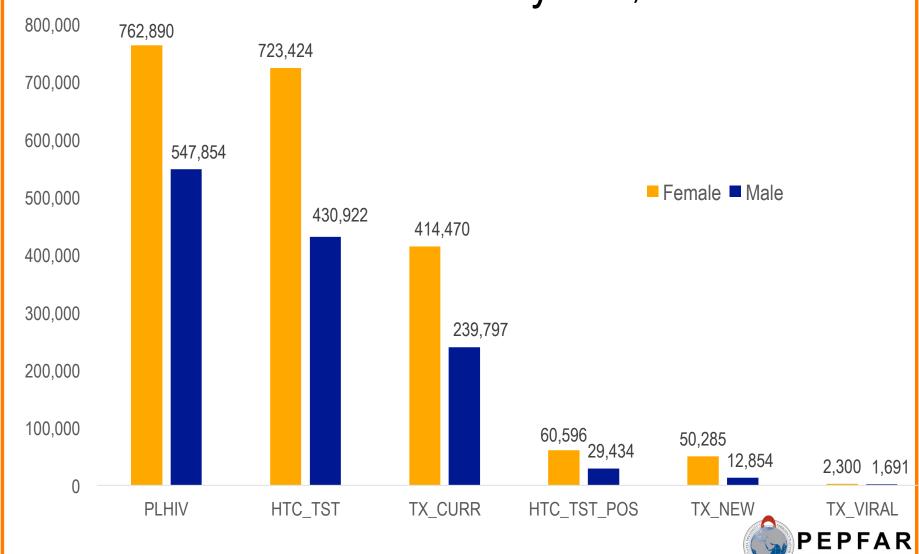


Kenya Clinical Cascade, by Gender, FY15



Source: PEPFAR, Kenya, 2015





Source: PEPFAR Zimbabwe, FY 2015





PEPFAR & the Millennium Development Goals

The 8 Millennium Development Goals













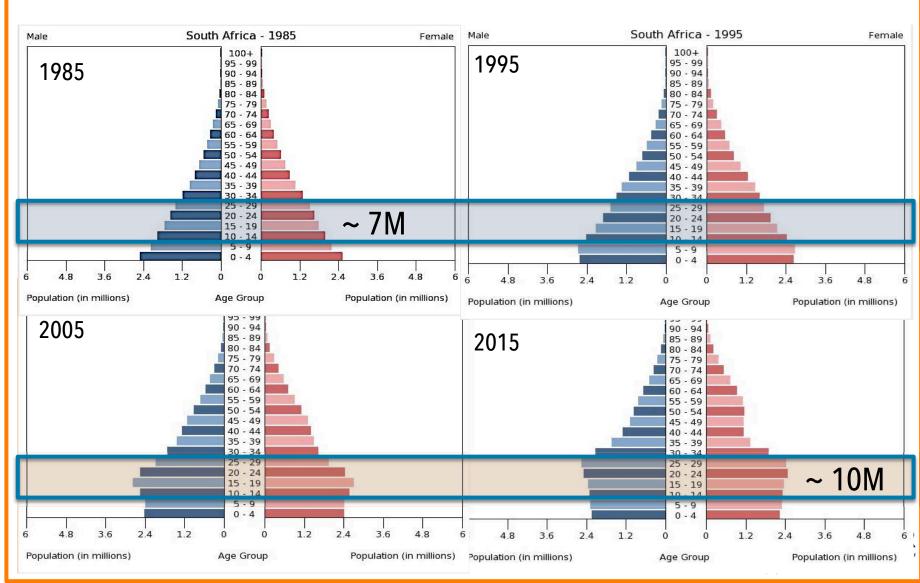






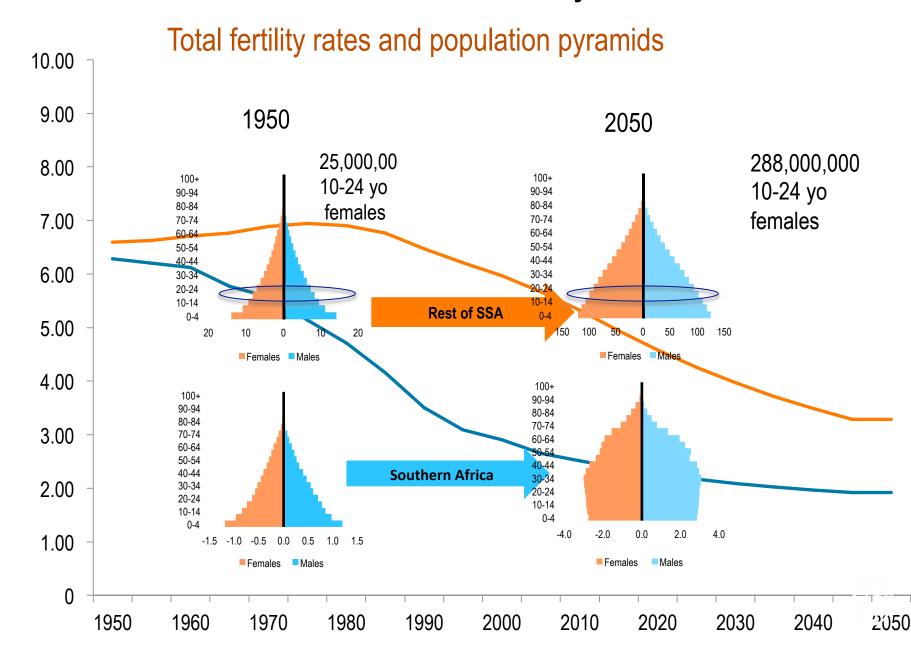
Demographic shift in SSA: 10-29 year olds

30% more girls and young women since beginning of the epidemic



Source: US Bureau of Census, 2015

Southern Africa differs substantially from SSA



THE SOLUTION: DREAMS FOR YOUNG WOMEN & GIRLS

Preventing infections in girls and young women



Why DREAMS?

GIRLS AND YOUNG WOMEN ACCOUNT FOR

71%

OF NEW HIV INFECTIONS

AMONG ADOLESCENTS

IN SUB-SAHARAN AFRICA

MORE THAN

1000

NEW INFECTIONS

A DAY

This must change.



Determined

Resilient

Empowered

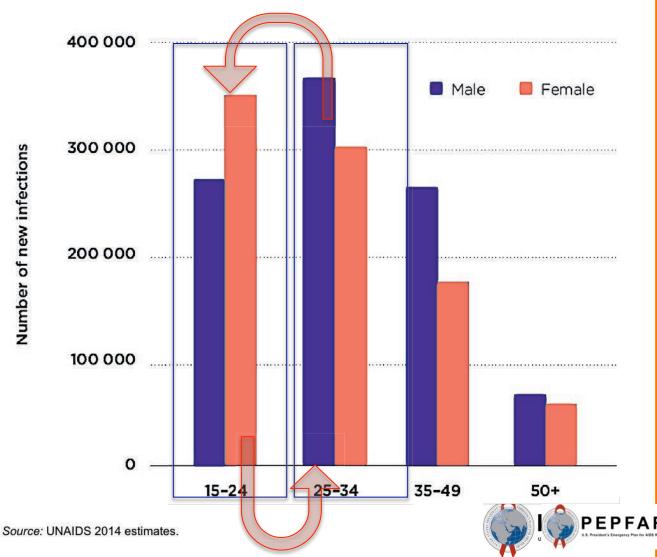
AIDS-Free

Mentored

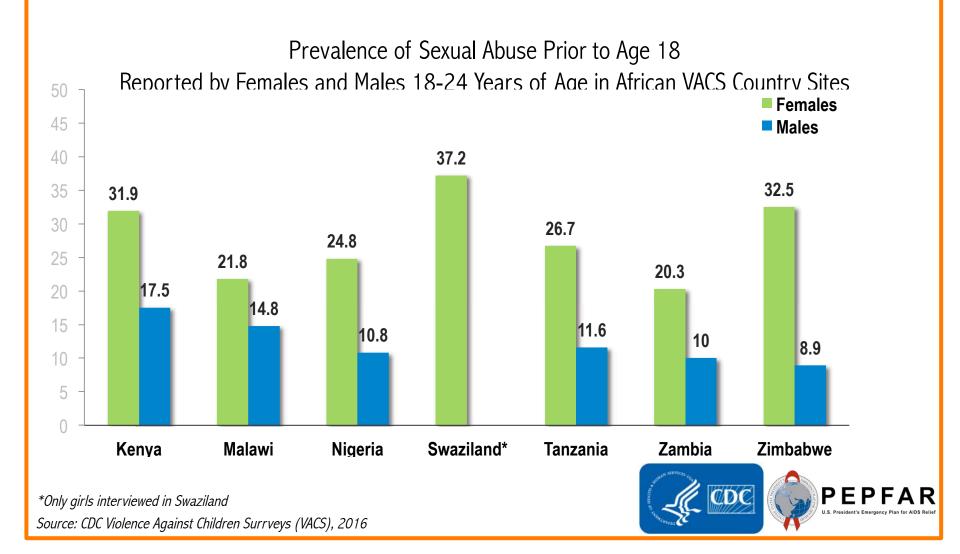
Safe

Age-Gender Disparity in New HIV Infections Globally, 2014: Example from South Africa

720,000 new infections primarily driven by infection of young women



Violence Against Children Surveys (VACS)



The DREAMS Partnership

- Launched on WAD 2014
- Goal: to reduce new HIV
 infections in adolescent girls & young women
- Ensure that girls have an opportunity to live <u>Determined</u>, <u>Resilient</u>, <u>Empowered</u>, <u>AIDS-free</u>, <u>Mentored</u> and <u>Safe lives</u>.
- \$385 million partnership with Bill & Melinda Gates Foundation, Girl Effect, Johnson and Johnson, ViiV Healthcare & Gilead
- 2015 WAD: Launched the Innovation Challenge \$85 million (including \$80 from PEPFAR) to attract and support new thinking and approaches



DREAMS

COUNTRIES

Solutions must be ready for rapid implementation in one or more of the 10 DREAMS countries



Kenya



Lesotho



Malawi



Mozambique



South Africa



Swaziland



Tanzania



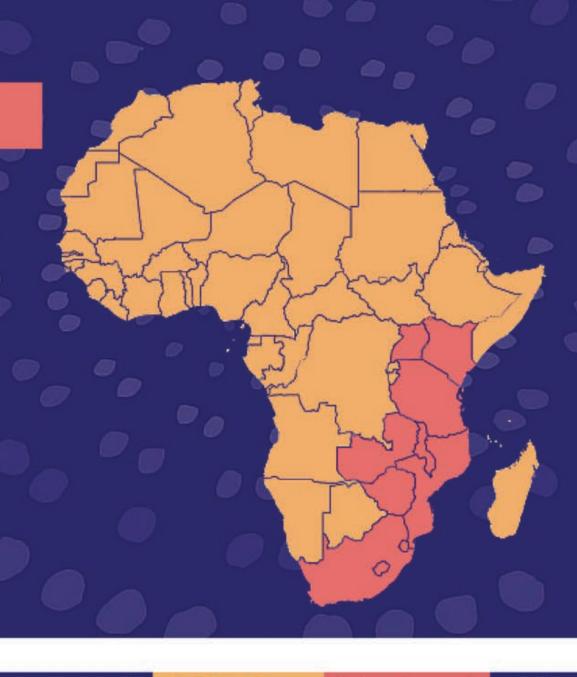
Uganda



Zambia



Zimbabwe



DREAMS Interventions

- Management & Coordination
- Strategic Information

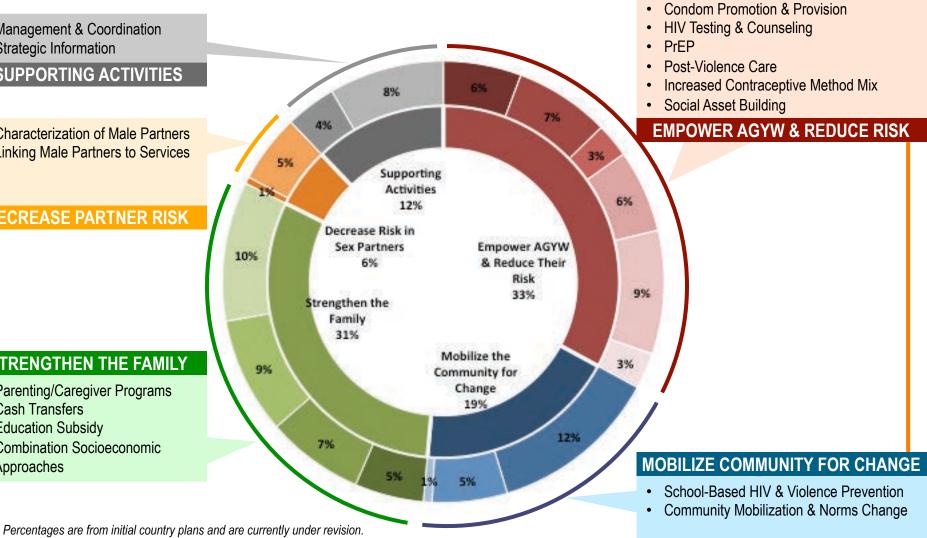
SUPPORTING ACTIVITIES

- Characterization of Male Partners
- Linking Male Partners to Services

DECREASE PARTNER RISK

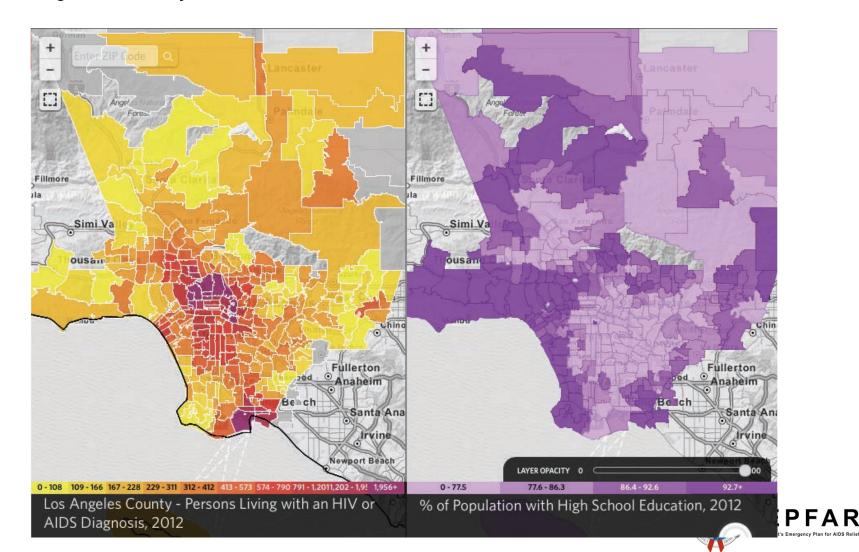
STRENGTHEN THE FAMILY

- Parenting/Caregiver Programs
- **Cash Transfers**
- **Education Subsidy**
- Combination Socioeconomic Approaches



HIV prevalence vs high school education

Los Angeles County, 2012





Education reduces risk of HIV acquisition



Study in Botswana compared young women and men completing 9 versus 10 years of education

One additional year of education for adolescents can reduce HIV acquisition before age 32 by one third

 The protective effect of education is even stronger among young women — risk of HIV acquisition was cut nearly in half





DREAMS INNOVATION CHALLENGE

Innovating for an AIDS-free future for girls and women



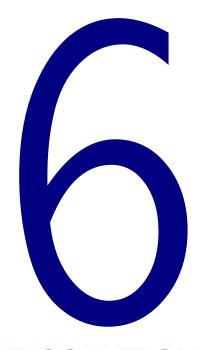












THE SOLUTION: VOLUNTARY MEDICAL MALE CIRCUMCISION

Preventing HIV Infection in young men



PEPFAR Results for 2015

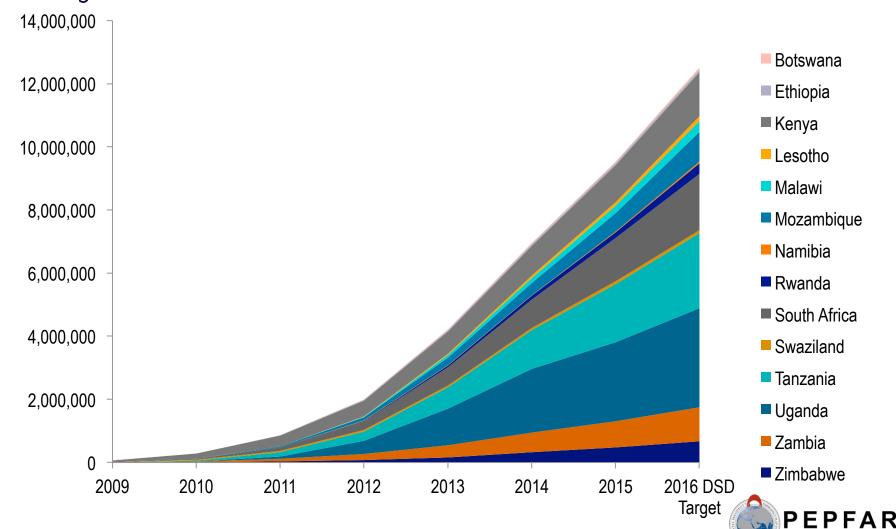
8.9 Million

Voluntary Medical Male Circumcisions

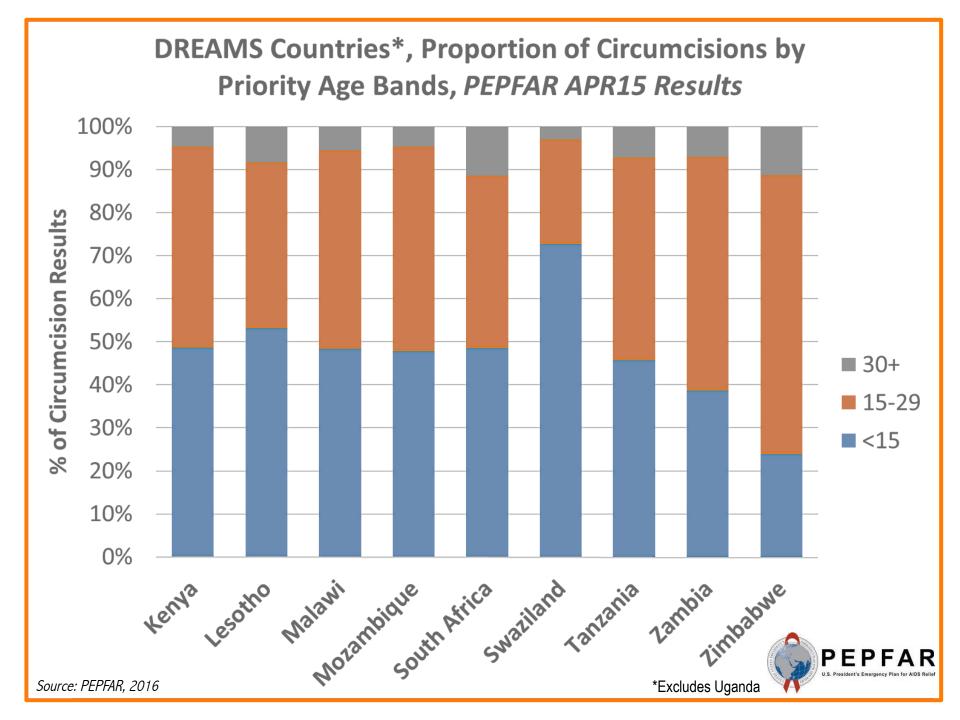


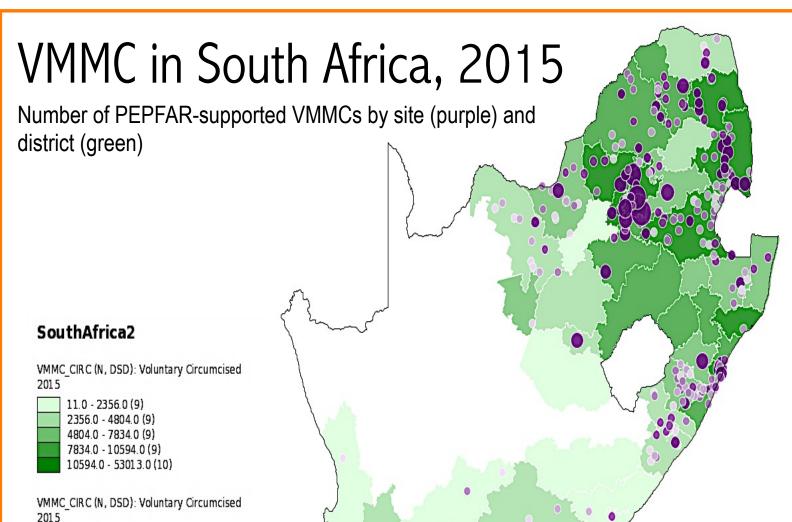
Cumulative PEPFAR-Supported VMMCs

through FY 2016



Source: PEPFAR, 2016





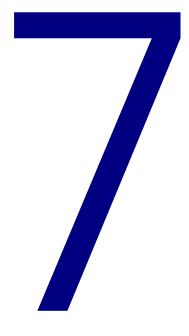
0.0 - 22.0 (67)

22.0 - 91.0 (67) 91.0 - 238.0 (67) 238.0 - 872.0 (67) 872.0 - 9693.0 (68)

200 km

Source: PEPFAR, 2015





THE SOLUTION: TEST & START: EXPANDING TREATMENT

Translation of the science into guidelines and adoption, rapid expansion of VL



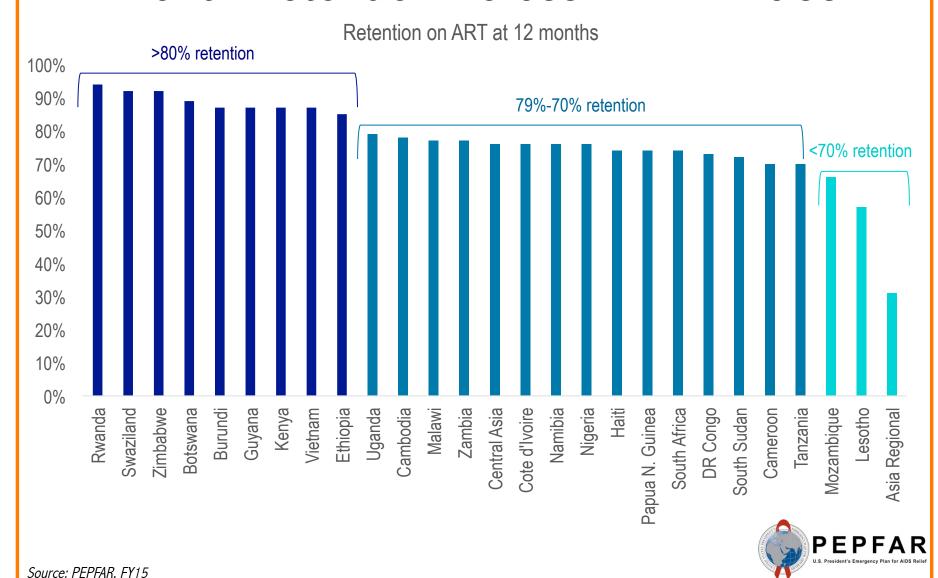
PEPFAR Results for 2015

9.5 Million

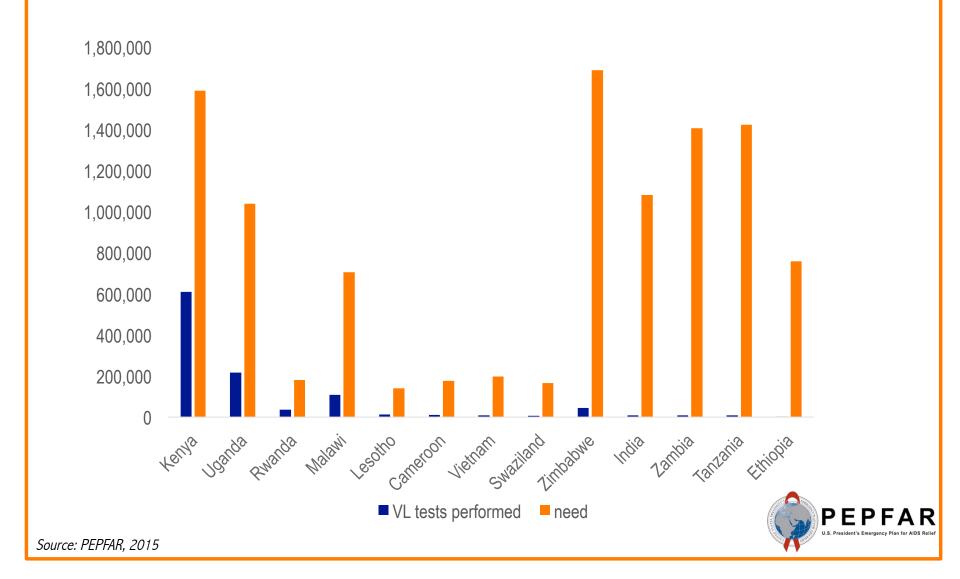
Men, Women, & Children on Treatment



12 Month Retention Across PEPFAR OUs



Actual Viral Load Tests versus Need 2015



What if we could

double

the number of people

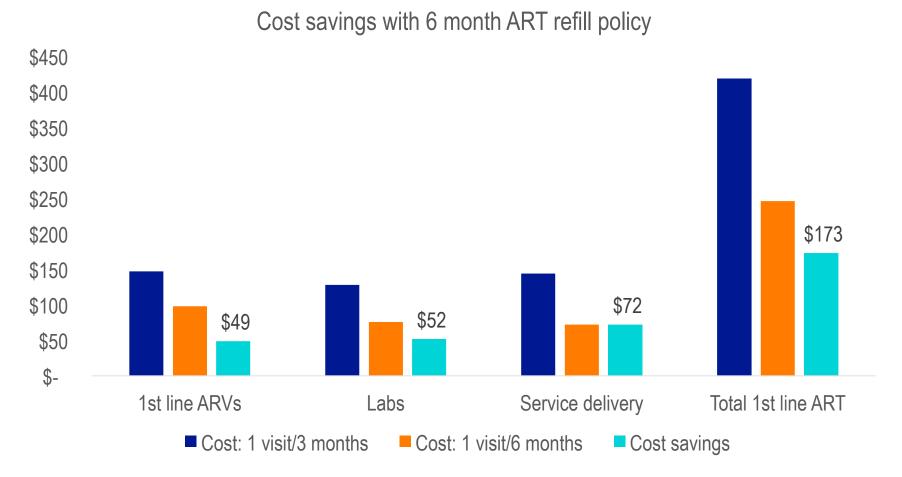
on lifesaving treatment

over the next 5 years?



We can support 2 ART clients for the price of 1

Smart policy and service delivery choices yield tremendous cost savings





Source: John Stover, 2016

ARV refill policies affect treatment cost and adherence

ARV refill policy for stable patients, select high burden countries 1 month ARV refills 2 month ARV refills 3+ month ARV refills Source: GFATM. 2015

1 month ARV refills
Mozambique

2 month ARV refills

Nigeria Kenya

Tanzania

Uganda

Ethiopia

South Africa

Zimbabwe

3+ month ARV refills

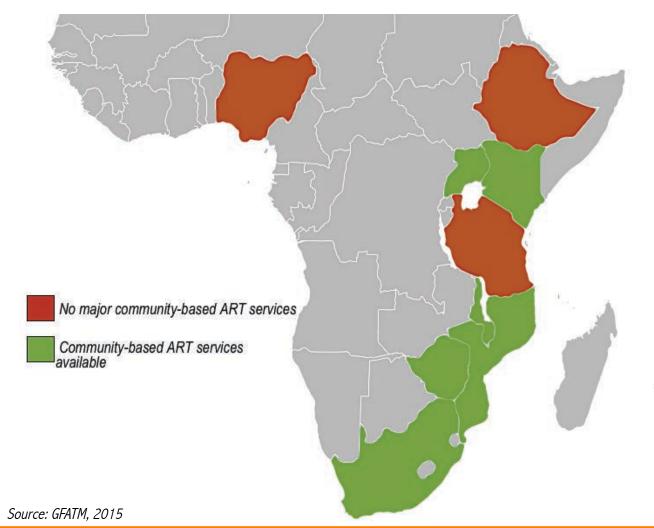
Malawi

Zambia



Decentralizing ART services

Countries with policies to decentralize ART offer more cost effective services



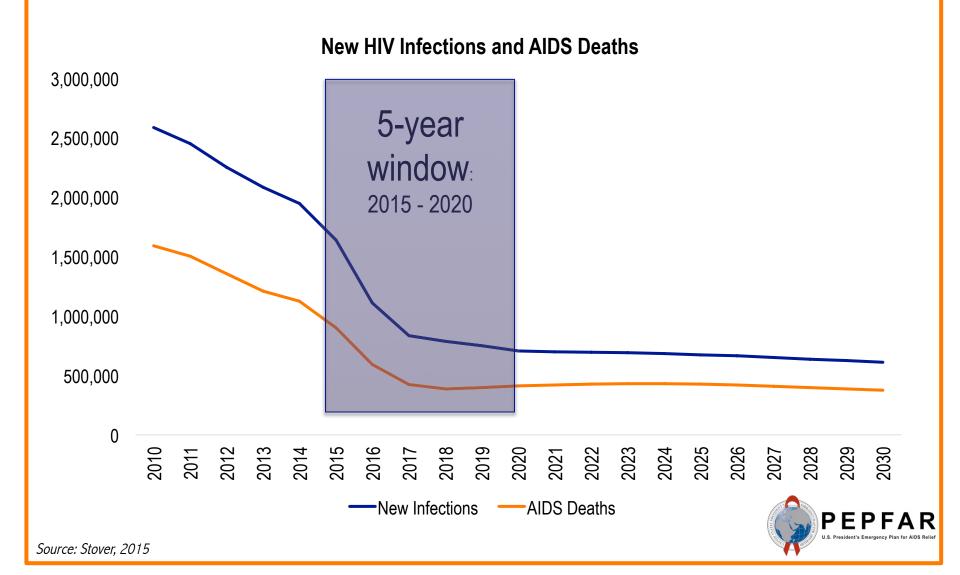
No Community-based ART service

Ethiopia Nigeria Tanzania

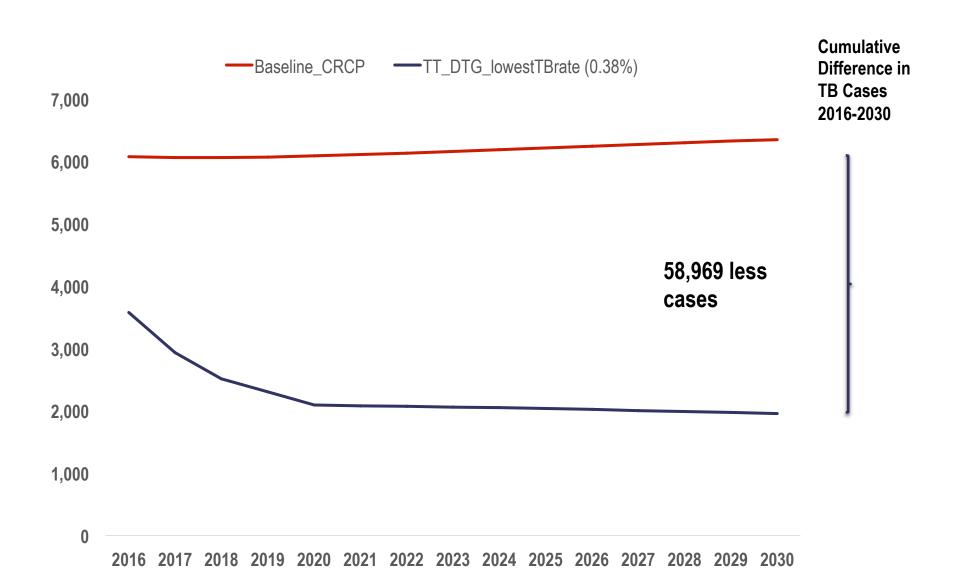
Some communitybased ART services

Kenya Malawi Mozambique South Africa Uganda Zimbabwe

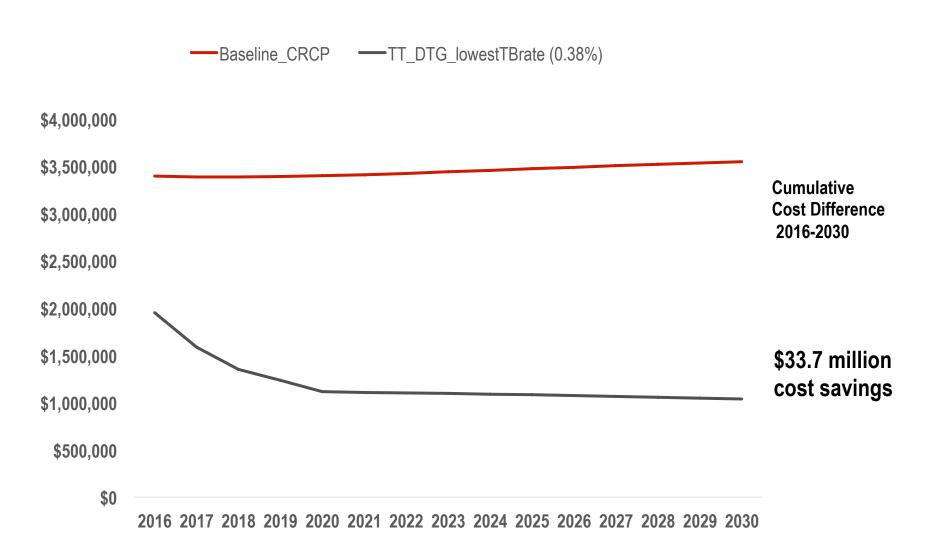
Treatment for All: 28M on ART by 2020



Annual Total TB HIV Cases by ART Treatment



Annual Costs of TB Treatment by ART Scenario





ENDING MTCT, KEEPING MOTHERS HEALTHY, AND TREATING CHILDREN

Virtual elimination of new pediatric infections & accelerating children's treatment (ACT)



PEPFAR Results for 2015

14.7 Million

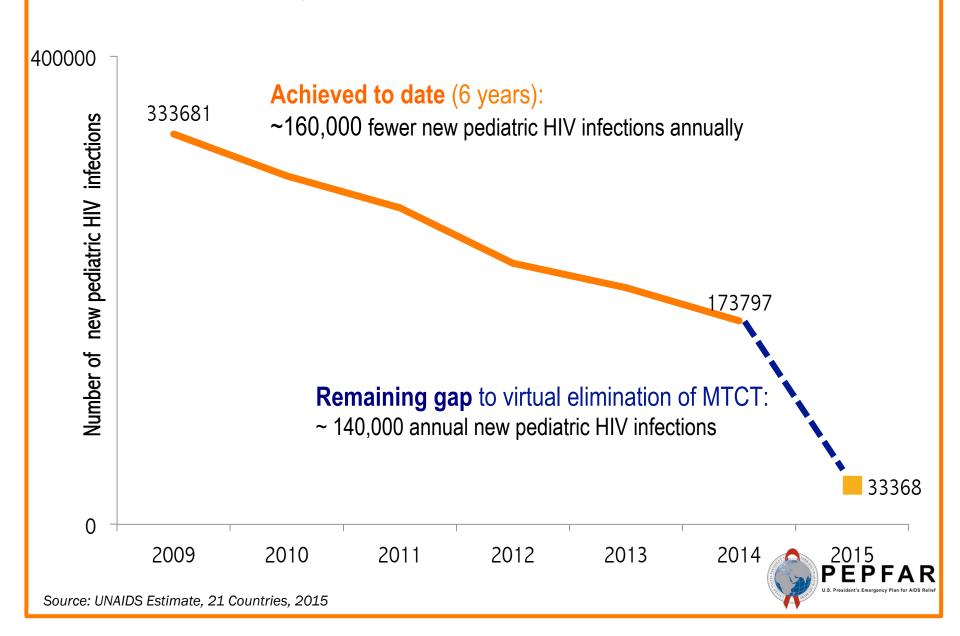
Pregnant women tested for HIV

831,500

HIV+ pregnant women started ART to protect their babies & improve maternal health



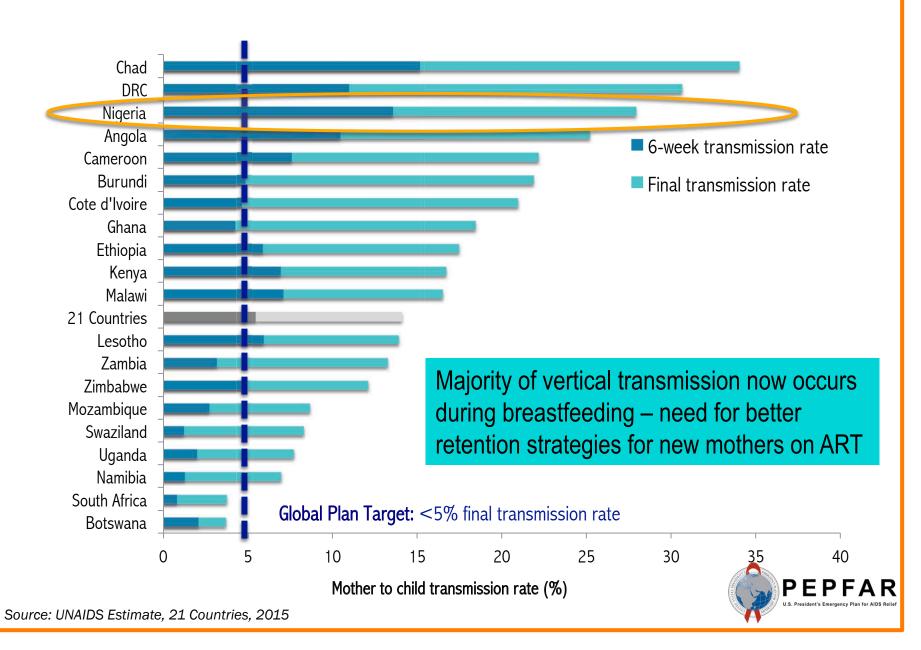




% Change in New Pediatric HIV Infections (2000-2014)



Mother-to-Child Transmission Rates at 6 weeks and final status





PEPFAR Results for 2015

5.5 Million

Orphans & vulnerable children received care and support services

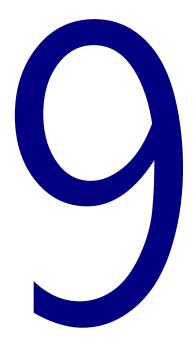
Critical for identifying and ensuring all medical needs are address and a key platform of DREAMS outside of the DREAMS districts

ACT Results, 2015

PEPFAR is supporting

489,000 children with life-saving antiretroviral treatment in the ACT countries up from 300,000 just 12 months, 189,000 additional children on treatment and lives saved due to ACT

PEPFAR has more than doubled HIV testing for children during the first year of ACT to 4.3 million in 2015.



RIGHT PLACES: COUNTRY EXAMPLES

Using Data to Understand micro-epidemics and refine our response



The Right Places for epidemic control

- Focusing limited resources on the highest burden areas
 - Strategic scale-up
 - "Catching up" on coverage of prevention and treatment services in high burden areas
 - High burden area access to services both between and within countries lags substantially behind low burden areas
 - Collect & use facility-level data
 - Refine approach to targeting interventions to populations



New HIV infections & PLHIV by zip code: LA

Figure 12. New HIV Diagnoses in 2010-2012 by ZIP Code and Service Planning Area (SPA) in Los Angeles County (N = 5,958)

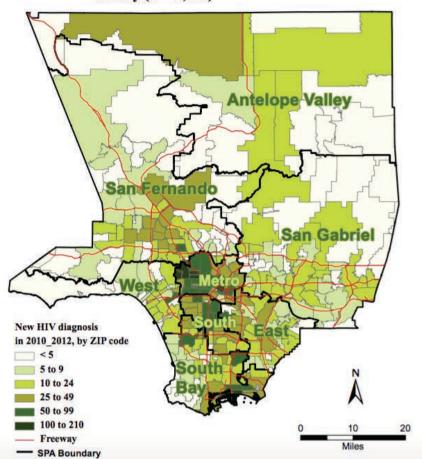
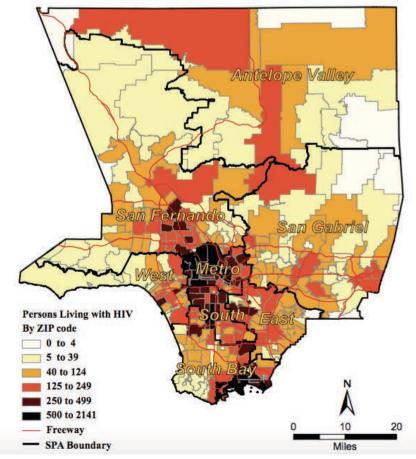


Figure 13. Persons Living with a Diagnosis of HIV Infection as of 12/31/2013 by ZIP Code and Service Planning Area (SPA) in Los Angeles County (N=47,148)

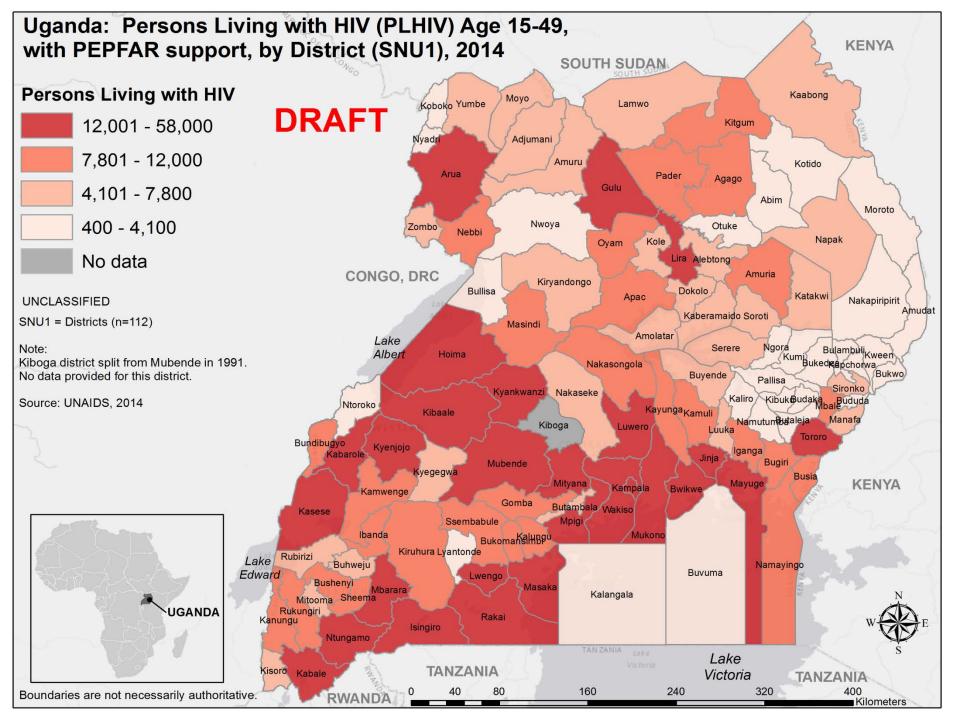






Uganda

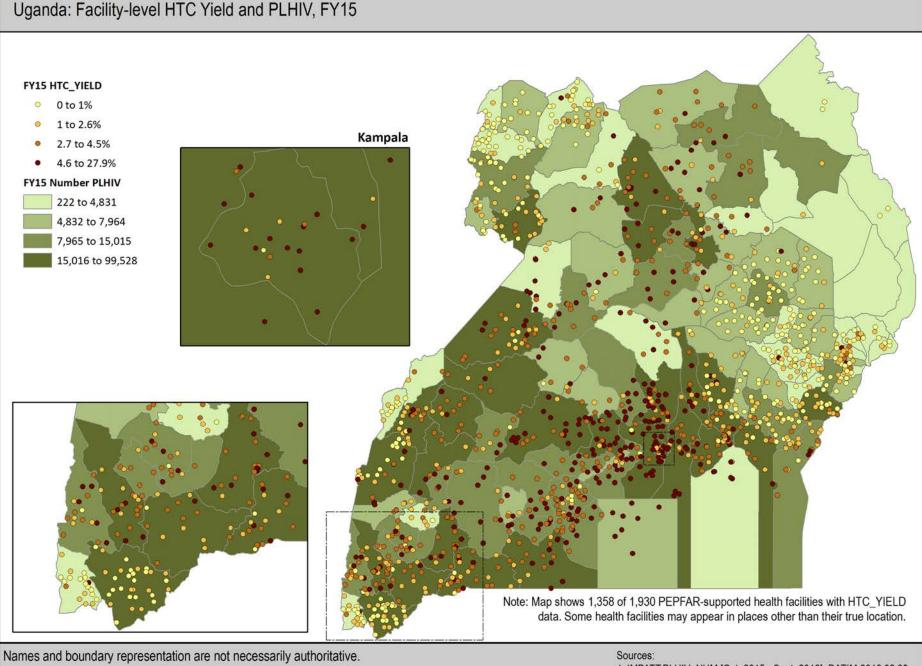




Uganda: Priority Districts and Facilities, FY16 **Priority Districts Priority Facilities** Scale-Up: Saturation Scale-Up Scale-Up: Aggressive Sustained Sustained Centrally Supported Kampala **Centrally Supported** Note: Map shows 3,614 of 6,009 PEPFAR-supported health facilities with IMPATT.PRIORITY_FACILITY data. Some health facilities may appear in places other than their true location. Names and boundary representation are not necessarily authoritative. Sources:

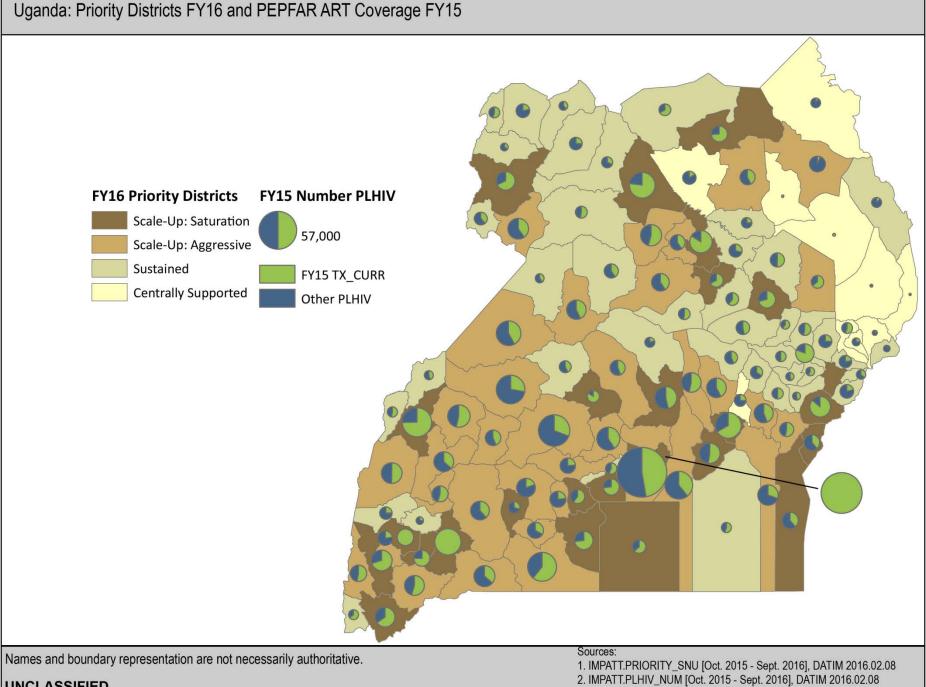
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- 1. IMPATT.PRIORITY_SNU [Oct. 2015 Sept. 2016], DATIM 2016.02.08
- 2. IMPATT.PRIORITY_FACILITY [Oct. 2015 Sept. 2016], DATIM 2016.02.08



UNCLASSIFIED

1. IMPATT.PLHIV_NUM [Oct. 2015 - Sept. 2016], DATIM 2016.02.08 2. HTC_TST_POS, HTC_TST_NEG [APR15], DATIM 2016.02.08



UNCLASSIFIED

- 3 TX CURR [APR15] DATIM 2016 02 08

Uganda: Voluntary Medical Male Circumcisions Performed by District, FY15 Results and FY16 Targets ID District ID District District Kalangala District **Dokolo District** 97 Ngora District Kampala District Maracha District 98 Kamuli District Masaka District 51 **Kaabong District** 99 Buyende District **FY16 VMMC_CIRC TARGETS** Kiboga District 52 Koboko District 100 Bulambuli District 51 Lyantonde District 53 **Oyam District** 101 Kween District 42 81 46 534 to 1,256 Luwero District 54 **Bundibugyo District** 102 Ntoroko District 55 Jinja District **Hoima District** 103 Namayingo District 40 1,257 to 2,174 **Mubende District** 56 Kisoro District 104 Mpigi District 50 Mukono District 57 Kabale District 105 Gomba District 2,175 to 3,872 48 41 Mbale District 58 **Bushenyi District** 106 Otuke District 45 Nakasongola District 59 Kabarole District 85 107 Amolatar District 39 3,873 to 9,304 Rakai District 60 **Kasese District** 108 Apac District **Bugiri District** 61 Buhweju District 109 Buliisa District FY15 VMMC_CIRC 82 83 Sembabule District Kibaale District 110 Masindi District 106 **Busia District** 63 Mbarara District 111 Kiryandongo District 43 8 to 873 53 Kayunga District 64 Luuka District 112 Sironko District 17 Tororo District 65 Ntungamo District 874 to 3,342 29 Wakiso District 66 **Bukomansimbi District** 111 (109) 67 Mityana District Rukungiri District 49 23 3,343 to 6,132 108 Iganga District 68 **Butambala District** 27 26 Nakaseke District Kamwenge District 6,133 to 28,438 **Bududa District** 70 Kanungu District 107 96 97 23 Katakwi District 71 **Buvuma District** 24 55 Kumi District 72 **Kyegegwa District** 11 Pallisa District 73 Rubirizi District 25 Soroti District 74 Ibanda District 21 Kaberamaido District 75 Mitooma District 62 Mayuge District Isingiro District **Amuria District** 77 Sheema District **Budaka District** 78 Kiruhura District 88 31 Bukedea District 79 **Amudat District** 72 **Bukwo District** 80 Kalungu District 33 Butaleja District Lamwo District 86 Kaliro District Nwoya District 105 60 Manafwa District **Moroto District** Namutumba District 84 Lwengo District 80 Adjumani District 85 Pader District Arua District **Buikwe District** 103 Gulu District Napak District 71 84 40 Kitgum District Kyenjojo District **Kotido District** 89 Kibuku District 42 Moyo District 90 **Alebtong District** 12 91 Nebbi District Kapchorwa District 92 Nakapiripirit District Lira District Agago District 93 Kole District Yumbe District Zombo District 95 Abim District Kyankwanzi District 48 Amuru District 96 Serere District

Names and boundary representation are not necessarily authoritative.

UNCLASSIFIED

Sources:

- 1. VMMC CIRC [APR15], DATIM 2016.02.08
- 1. VMMC_CIRC TARGET [Oct. 2015 Sept. 2016], DATIM 2016.02.08

Uganda: Expected Location of Orphans and Vulnerable Children Served in FY16

97 Ngora District
98 Kamuli District
99 Buyende District
100 Bulambuli District

101 Kween District

102 Ntoroko District103 Namayingo District

104 Mpigi District

105 Gomba District

106 Otuke District

108 Apac District

109 Buliisa District

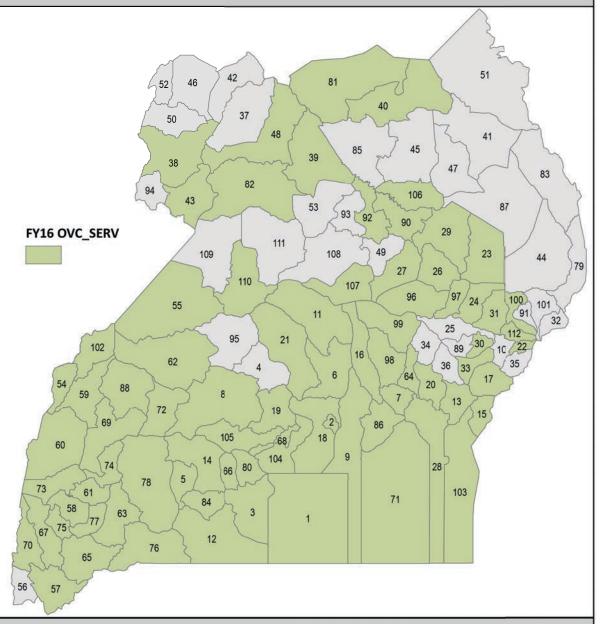
110 Masindi District

112 Sironko District

111 Kiryandongo District

107 Amolatar District

ID	District	ID	District
1	Kalangala District	49	Dokolo District
2	Kampala District	50	Maracha District
3	Masaka District	51	Kaabong District
4	Kiboga District	52	Koboko District
5	Lyantonde District	53	Ovam District
6	Luwero District	54	Bundibugyo District
7	Jinja District	55	Hoima District
8	Mubende District	56	Kisoro District
9	Mukono District	57	Kabale District
10	Mbale District	58	Bushenyi District
11	Nakasongola District	59	Kabarole District
12	Rakai District	60	Kasese District
13			
	Bugiri District	61	Buhweju District
14	Sembabule District	62	Kibaale District
15	Busia District	63	Mbarara District
16	Kayunga District	64	Luuka District
17	Tororo District	65	Ntungamo District
18	Wakiso District	66	Bukomansimbi District
19	Mityana District	67	Rukungiri District
20	Iganga District	68	Butambala District
21	Nakaseke District	69	Kamwenge District
22	Bududa District	70	Kanungu District
23	Katakwi District	71	Buvuma District
24	Kumi District	72	Kyegegwa District
25	Pallisa District	73	Rubirizi District
26	Soroti District	74	Ibanda District
27	Kaberamaido District	75	Mitooma District
28	Mayuge District	76	Isingiro District
29	Amuria District	77	Sheema District
30	Budaka District	78	Kiruhura District
31	Bukedea District	79	Amudat District
32	Bukwo District	80	Kalungu District
33	Butaleja District	81	Lamwo District
34	Kaliro District	82	Nwoya District
35	Manafwa District	83	Moroto District
36	Namutumba District	84	Lwengo District
37	Adjumani District	85	Pader District
38	Arua District	86	Buikwe District
39	Gulu District	87	Napak District
40	Kitgum District	88	Kyenjojo District
41	Kotido District	89	Kibuku District
42	Moyo District	90	Alebtong District
43	Nebbi District	91	Kapchorwa District
44	Nakapiripirit District	92	Lira District
45	Agago District	93	Kole District
46	Yumbe District	94	Zombo District
47	Abim District	95	Kyankwanzi District
48	Amuru District	96	Serere District
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Names and boundary representation are not necessarily authoritative.

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Uganda: DREAMS Districts

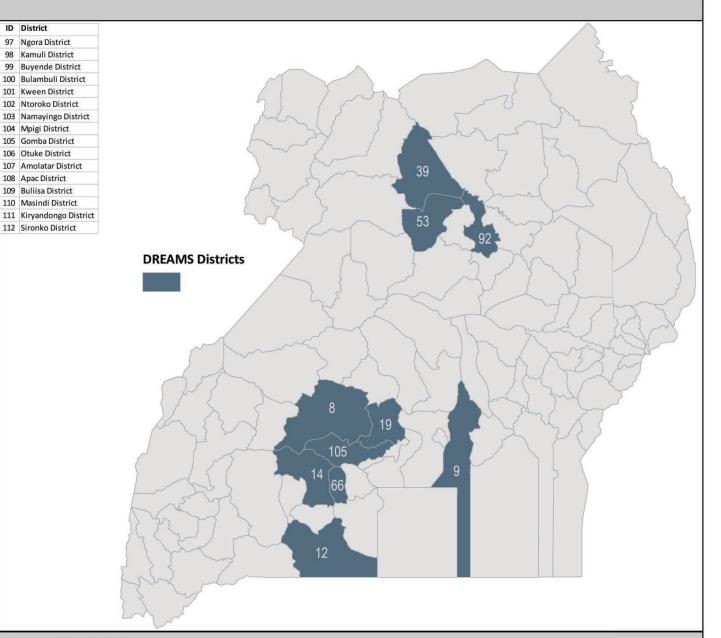
ID District 97 Ngora District 98 Kamuli District 99 Buyende District

101 Kween District 102 Ntoroko District

104 Mpigi District 105 Gomba District 106 Otuke District 107 Amolatar District 108 Apac District 109 Buliisa District 110 Masindi District

112 Sironko District

ID	District	ID	District
1	Kalangala District	49	Dokolo District
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3	Masaka District	51	Kaabong District
4	Kiboga District	52	Koboko District
5	Lyantonde District	53	Oyam District
6	Luwero District	54	Bundibugyo District
7	Jinja District	55	Hoima District
8	Mubende District	56	Kisoro District
9	Mukono District	57	Kabale District
10	Mbale District	58	Bushenyi District
11	Nakasongola District	59	Kabarole District
12	Rakai District	60	Kasese District
13	Bugiri District	61	Buhweju District
14	Sembabule District	62	Kibaale District
15	Busia District	63	Mbarara District
16	Kayunga District	64	Luuka District
17	Tororo District	65	Ntungamo District
18	Wakiso District	66	Bukomansimbi Distric
19	Mityana District	67	Rukungiri District
20	Iganga District	68	Butambala District
21	Nakaseke District	69	Kamwenge District
22	Bududa District	70	Kanungu District
23	Katakwi District	71	Buvuma District
24	Kumi District	72	Kyegegwa District
25	Pallisa District	73	Rubirizi District
26	Soroti District	74	Ibanda District
27	Kaberamaido District	75	Mitooma District
28	Mayuge District	76	Isingiro District
29	Amuria District	77	Sheema District
30	Budaka District	78	Kiruhura District
31	Bukedea District	79	Amudat District
32	Bukwo District	80	Kalungu District
33	Butaleja District	81	Lamwo District
34	Kaliro District	82	Nwoya District
35	Manafwa District	83	Moroto District
36	Namutumba District	84	Lwengo District
37	Adjumani District	85	Pader District
38	Arua District	86	Buikwe District
39	Gulu District	87	Napak District
40	Kitgum District	88	Kyenjojo District
41	Kotido District	89	Kibuku District
42	Moyo District	90	Alebtong District
43	Nebbi District	91	Kapchorwa District
	and the control of th	0,792,004	



Names and boundary representation are not necessarily authoritative.

92 Lira District

Kole District

94 Zombo District 95 Kyankwanzi District

96 Serere District

44 Nakapiripirit District

45 Agago District

46 Yumbe District

47 Abim District 48 Amuru District

Rwanda

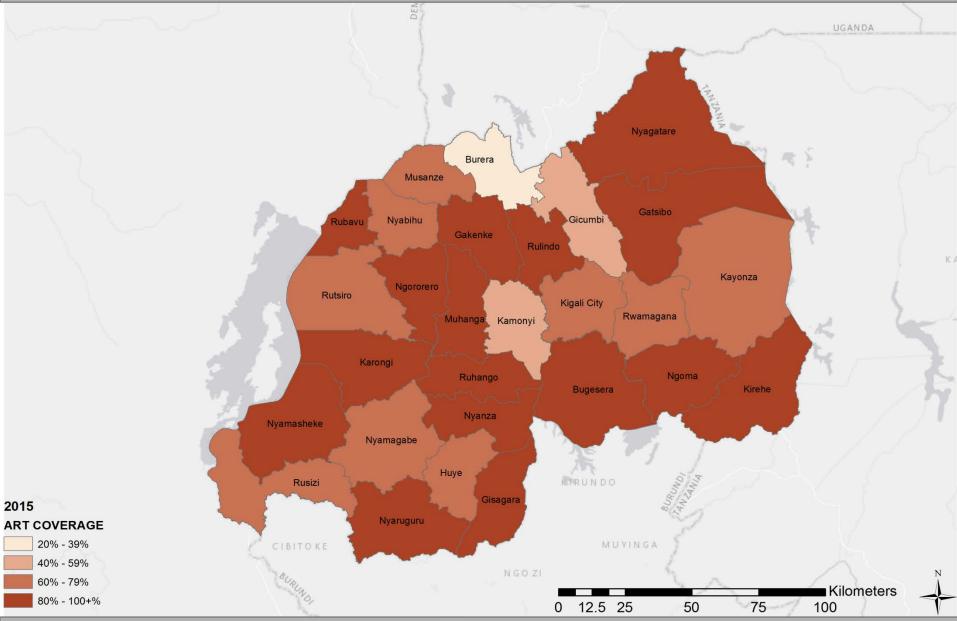


FY15 Rwanda National and PEPFAR Clinical Cascade Results

Clinical Cascade & 90-90-90 Targets 250000 90% 200000 81% 150000 73% 100000 50000 # Current on ART # PLHIV # Diagnosed # Linked to care # Virally suppressed ■ PEPFAR Non-PEPFAR Population Total



RWANDA: ART Coverage FY15 Results

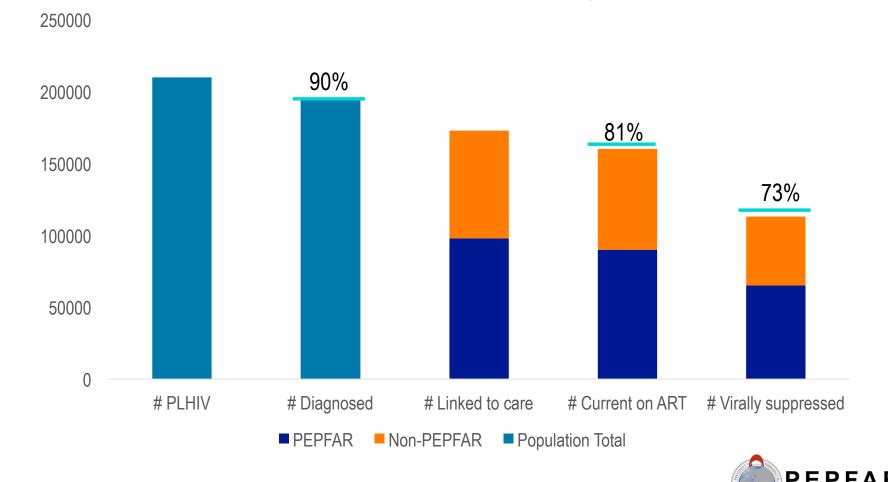


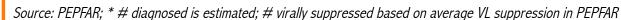
Names and boundary representation are not necessarily authoritative.

UNCLASSIFIED March 9, 2016 ART coverage is total people on ART (Rwanda HMIS) over the total people living with HIV (PLHIV) estimated for that year. Annual national PLHIV estimates are from Epi Spectrum (2015 analysis), distributed to Districts by weighting population (Rwanda Housing and Population Census 2012) and adult HIV prevalence (Rwanda DHS 2010).

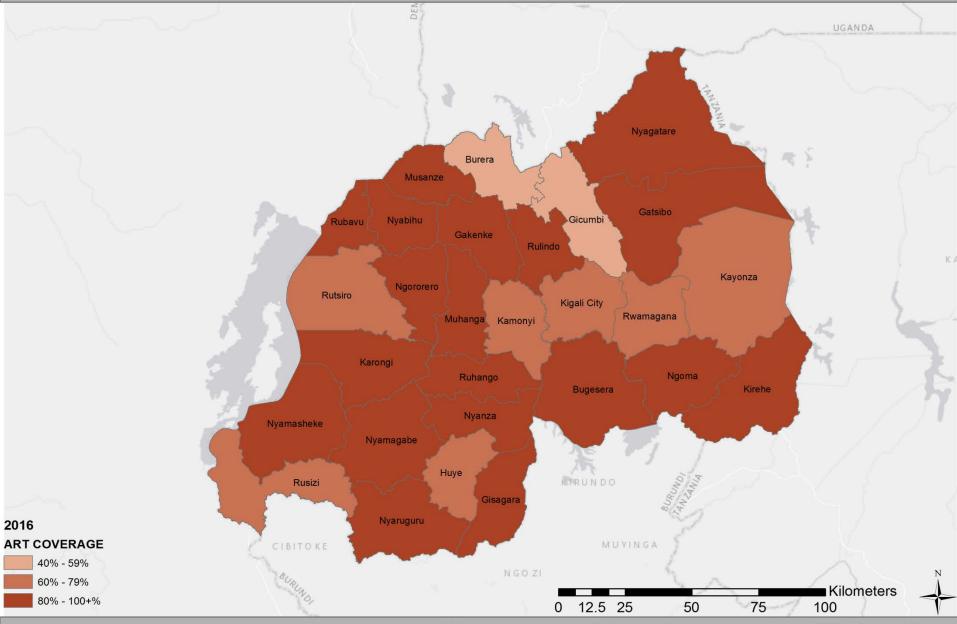
FY16 Rwanda National and PEPFAR Clinical Cascade Expected Results

Clinical Cascade & 90-90-90 Targets





RWANDA: ART Coverage FY16 Expected Results

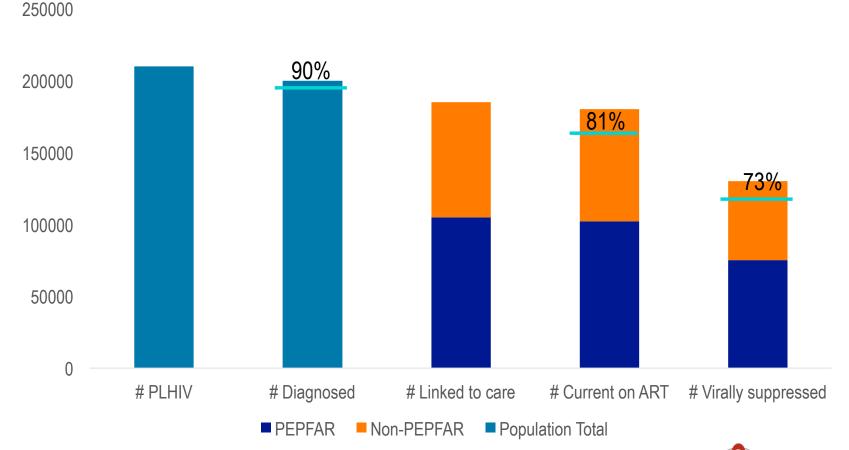


Names and boundary representation are not necessarily authoritative.

UNCLASSIFIED March 9, 2016 ART coverage is total people on ART (Rwanda HMIS) over the total people living with HIV (PLHIV) estimated for that year. Annual national PLHIV estimates are from Epi Spectrum (2015 analysis), distributed to Districts by weighting population (Rwanda Housing and Population Census 2012) and adult HIV prevalence (Rwanda DHS 2010).

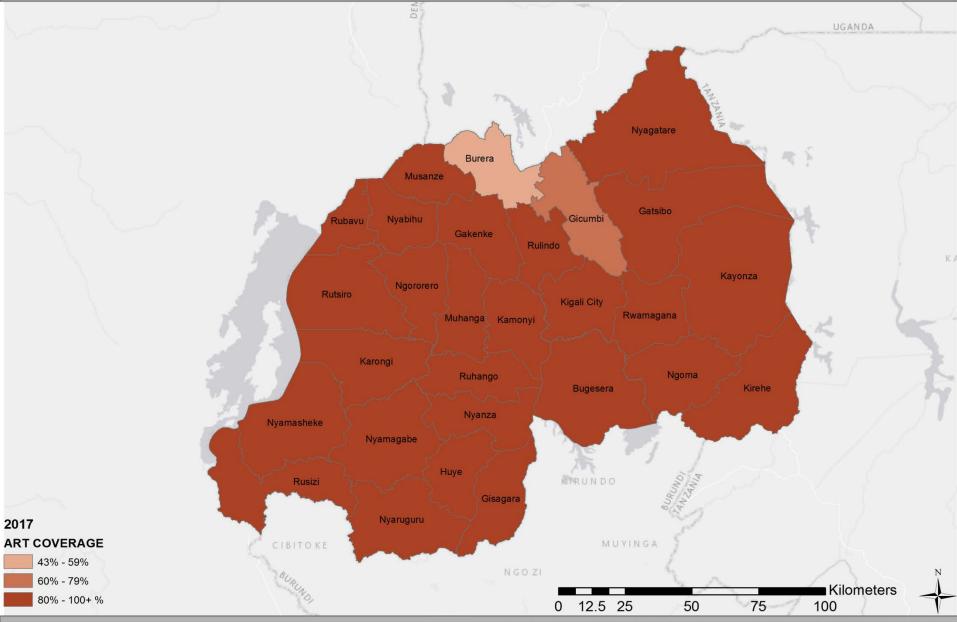
FY17 Rwanda National and PEPFAR Clinical Cascade Results and Targets

Clinical Cascade & 90-90-90 Targets





RWANDA: ART Coverage FY17 Proposed Targets



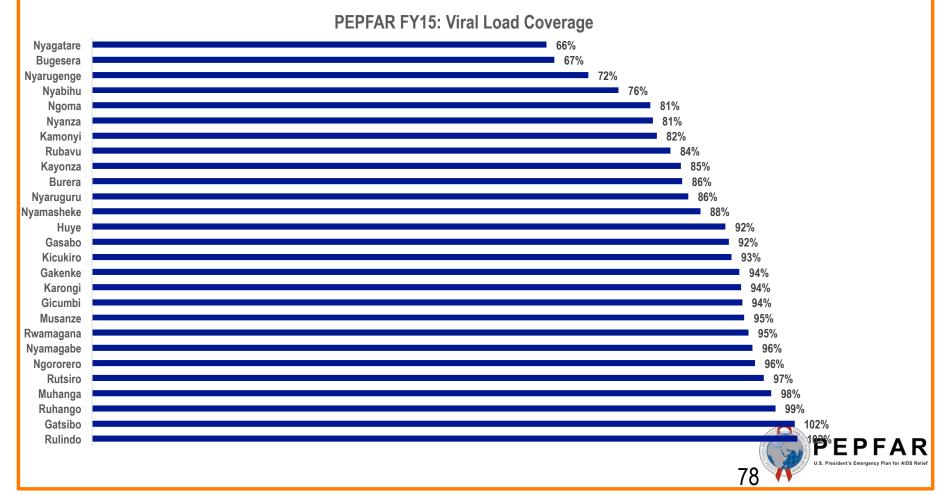
Names and boundary representation are not necessarily authoritative.

UNCLASSIFIED March 9, 2016 ART coverage is total people on ART (Rwanda HMIS) over the total people living with HIV (PLHIV) estimated for that year. Annual national PLHIV estimates are from Epi Spectrum (2015 analysis), distributed to Districts by weighting population (Rwanda Housing and Population Census 2012) and adult HIV prevalence (Rwanda DHS 2010).

VIRAL LOAD COVERAGE

BASED ON APR15 PEPFAR DATA ESTIMATED 88% OF PEOPLE ELIGIBLE HAD VIRAL LOAD TEST

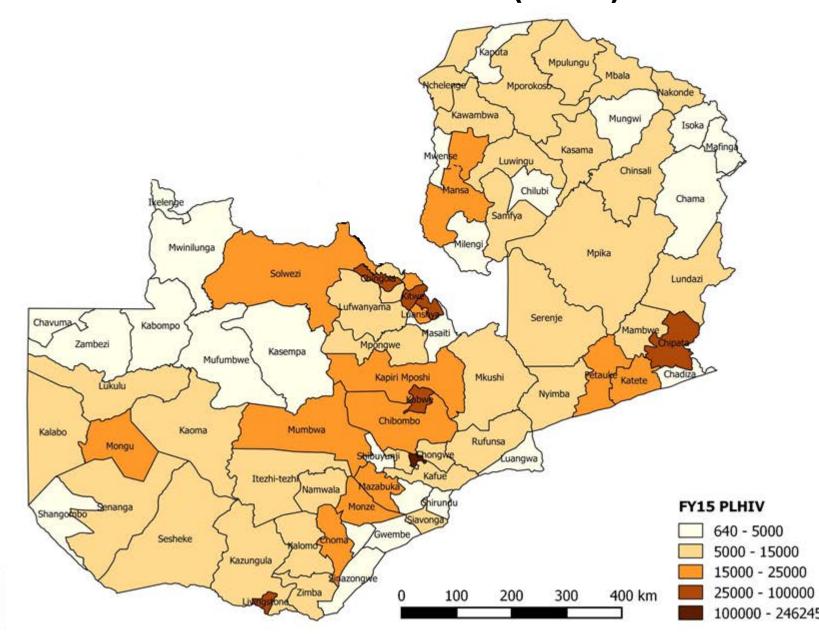
87% of VL ELIGIBLE HAVE VL SUPPRESSION



Zambia

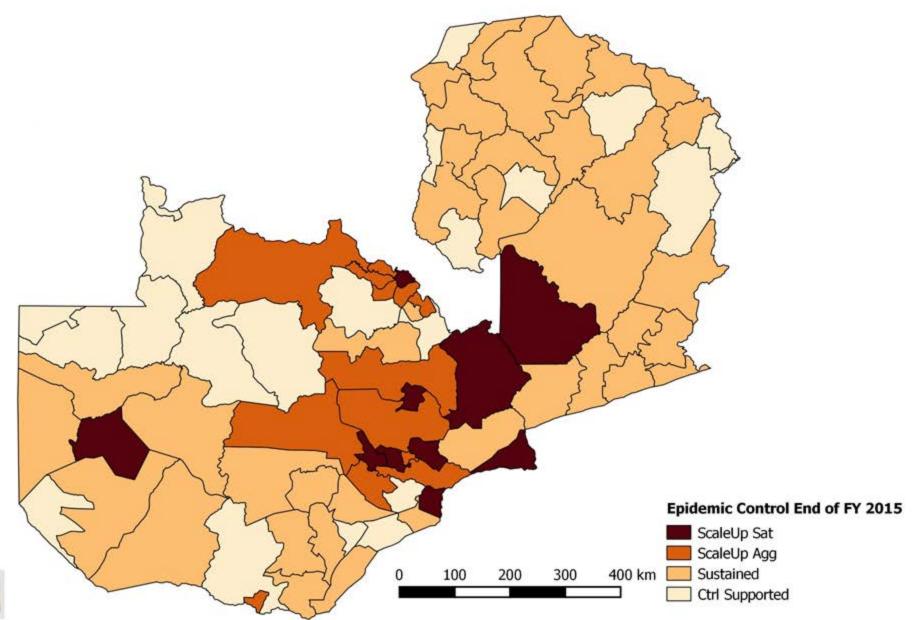


PLHIV Burden In Zambia (2015)



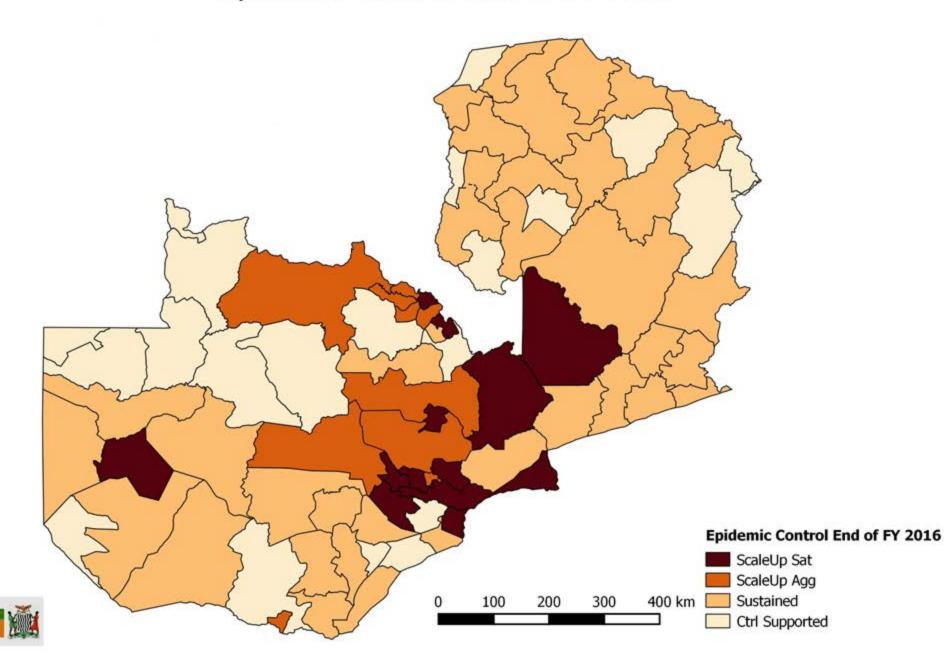


Epidemic Control End of FY 2015

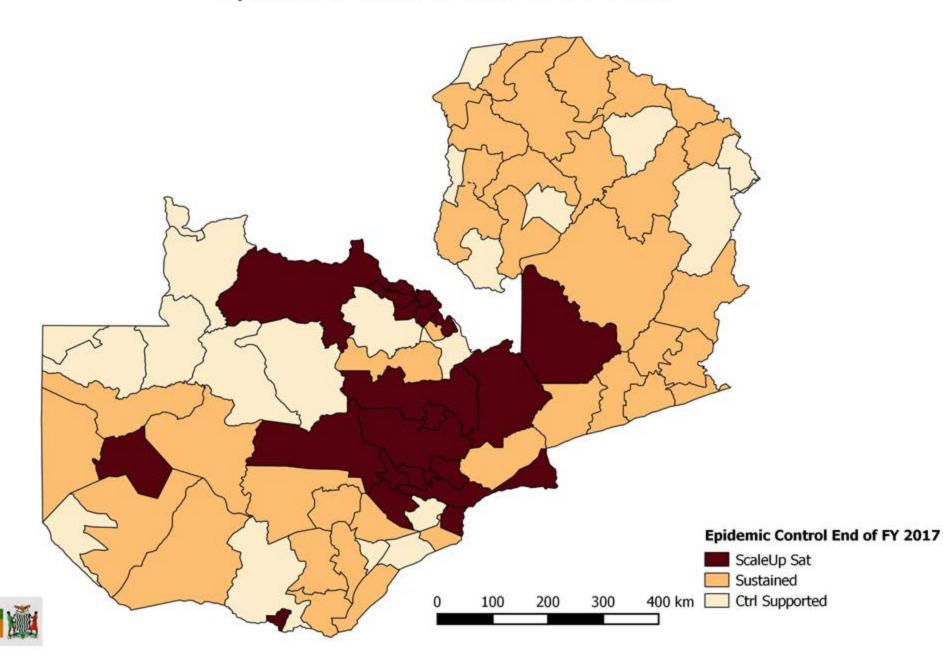




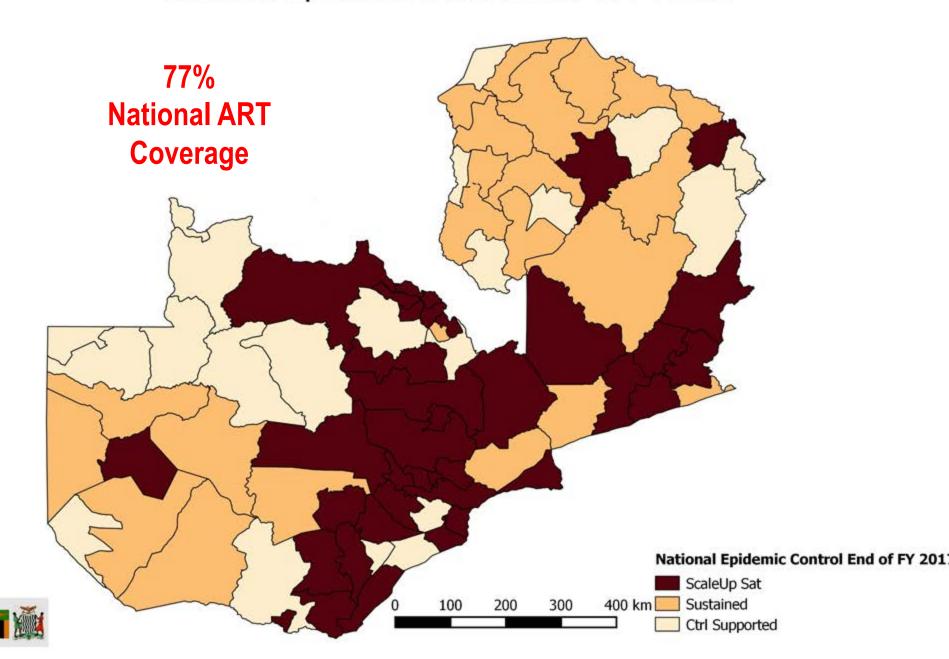
Epidemic Control End of FY 2016



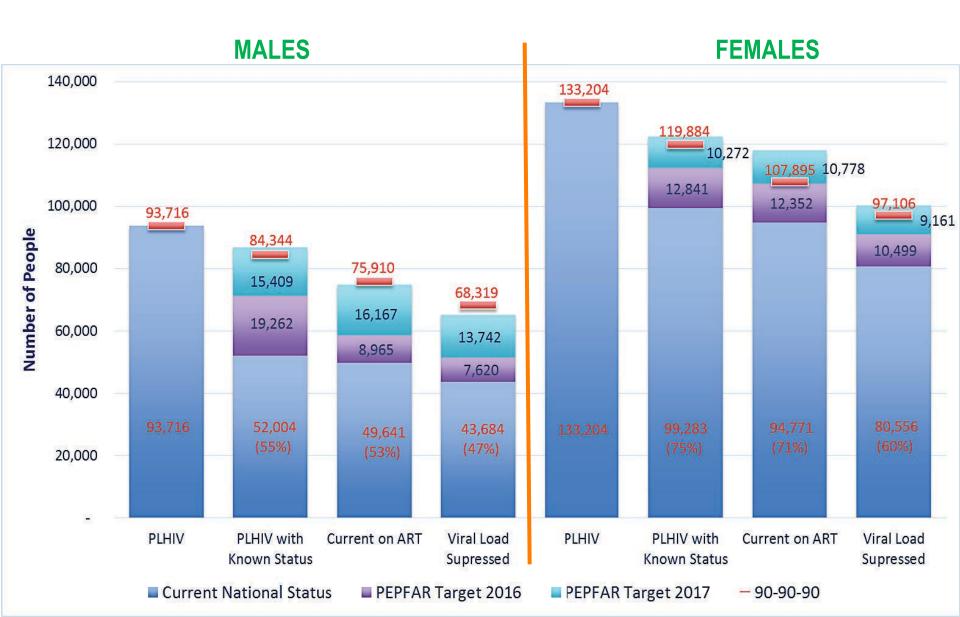
Epidemic Control End of FY 2017



National Epidemic Control End of FY 2017



Swaziland Clinical Cascade — Sex Disaggregated

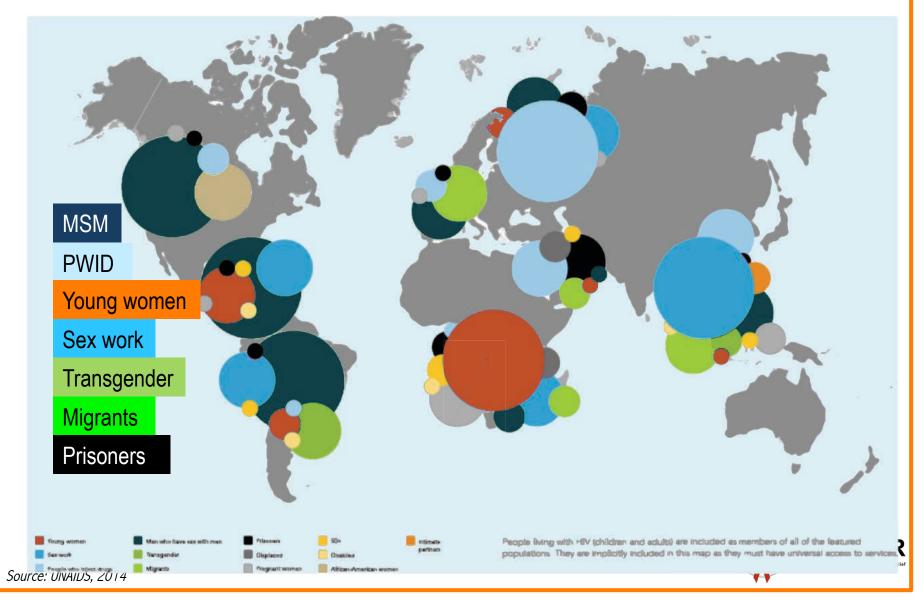


EMPOWERING CIVIL SOCIETY & PLHIV

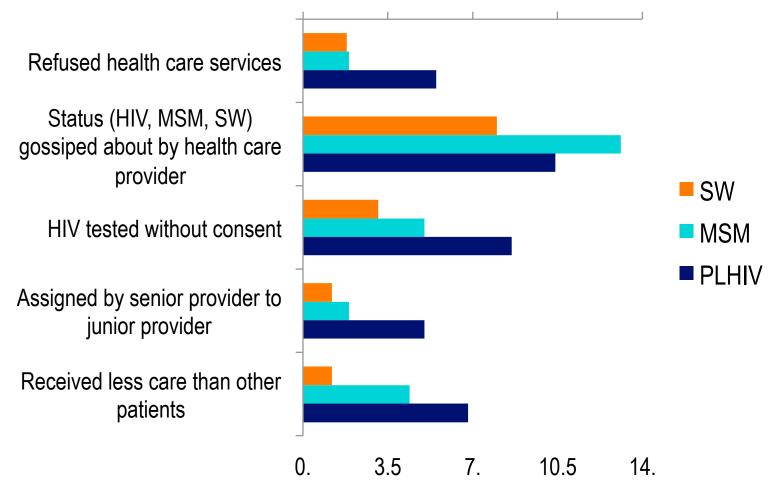
Supporting civil society groups is key



Key Populations Vary by Location : KNOWING LOCATION AND POPULATION is essential



Enacted Stigma in Jamaica — Reported by Health Care Staff





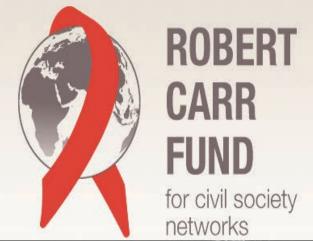
Source: PEPFAR & FHI360, 2015

Civil Society Plays Critical Role in HIV Response

- We would not have a global HIV response if not for civil society groups that demanded it
- People living with HIV must play a meaningful role in shaping HIV programs & have powerful voices within their countries
- Support from donors has been inadequate
- We can all do more to support efforts of networks of PLHIV and civil society groups
- Expanded the Country Operational Plan process to include community in the planning and the review of the plans

Strengthening Civil Society, including FBOs

- PEPFAR has committed \$10 million to the Robert Carr Civil Society
 Networks Fund over the next three years to build the capacity of civil society
- \$4 million two-year initiative PEPFAR/ UNAIDS faith initiative
- PEPFAR with the Elton John AIDS
 Funds has committed \$10 million to support key population advocacy
- DREAMS innovation Challenge Fund









Key take-aways & top priorities



PEPFAR & the Sustainable Development Goals







































We can prevent >50%

of new HIV infections

and reduce the number of

AIDS deaths by nearly 50%.

This is bold. This is extraordinary.

And it is possible.



Our work is far from done. How can we do better?



Over 4,230 babies were infected with HIV

Over 34,615 adults were infected of which more than 7000 were young women

Over 2880 children died this week from HIV

Over 20,000 adults died this week from HIV







THANK YOU