



# PEPFAR

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

# Optimizing Results in PEPFAR

Every Partner Every Site  
Impact on the Global Pandemic

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AMB Deborah L. Birx, MD | April, 2017

# PEPFAR's 3 Guiding Pillars

Delivering an AIDS-Free Generation with Sustainable Results

AIDS-free Generation

## Accountability

Demonstrate cost-effective programming that maximizes the impact of every dollar invested

## Transparency

Demonstrate increased transparency with validation and sharing of all levels of program data

## Impact

Demonstrate sustained control of the epidemic; save lives and avert new infections

# What we know now

Thanks to the PHIAAs we know:

Retention, adherence and durability of first line ART is much better than expected

From program data and PHIAAs we know:

More than half of men <35 yo do not know their status and are not on treatment – this is fueling the epidemic in the 15-24 yo women

From program data we know:

Increased funding alone is not adequate to accelerate VMMC progress

# Gaps that need to be addressed

**Geography** – vast difference in HIV prevalence within each country; investments must continue to be targeted for impact

**Populations** – significant age gap in those we have reached and not reached impacting epidemic control: we have successfully reached women > 25 and men > 35

**Epidemic continues unchecked in men <35 and women < 25**

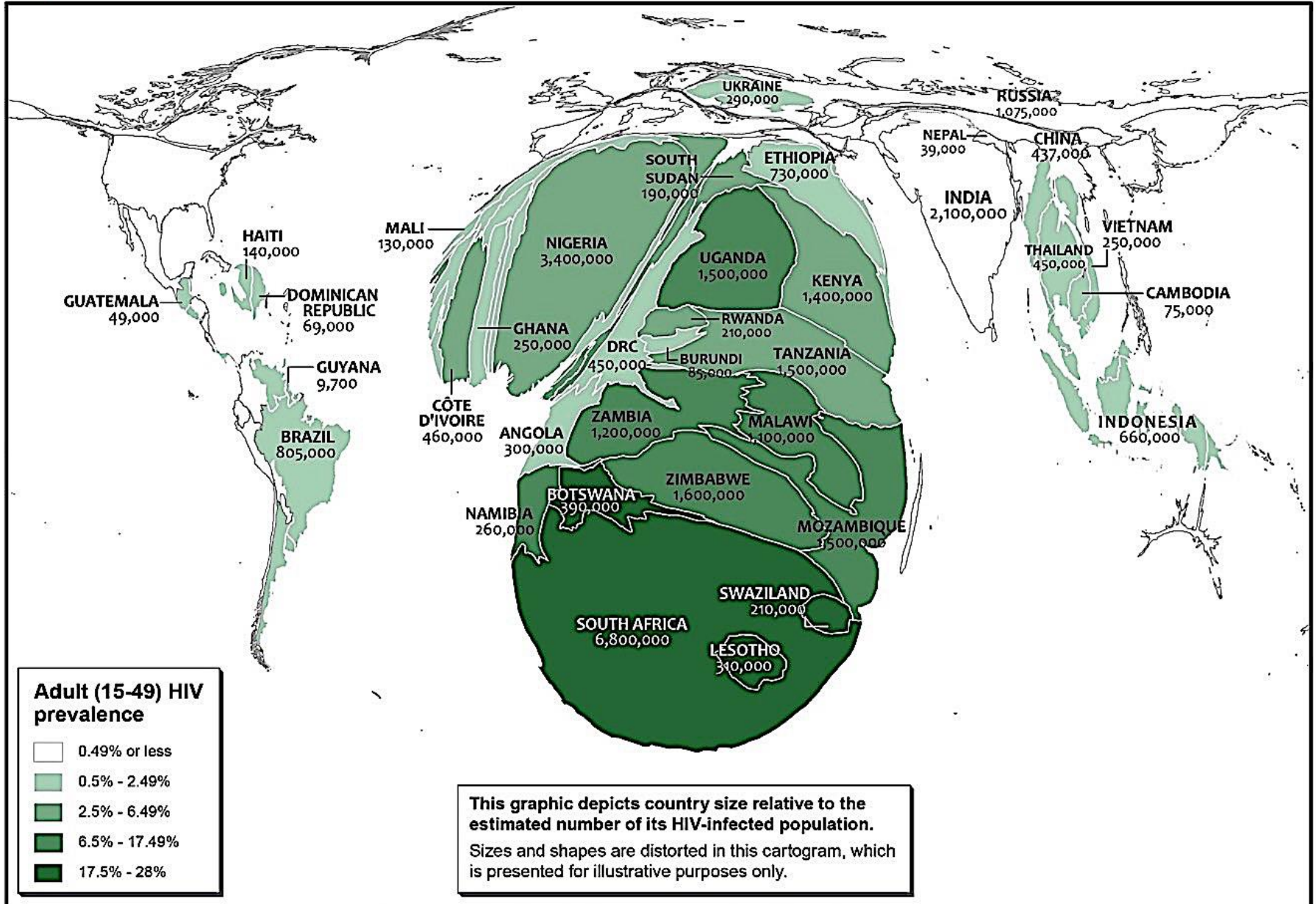
# 1

## The HIV epidemic today

Great Success in Reducing New Infections in Children  
Through PMTCT

Less Progress in Reducing New Infections in Adults

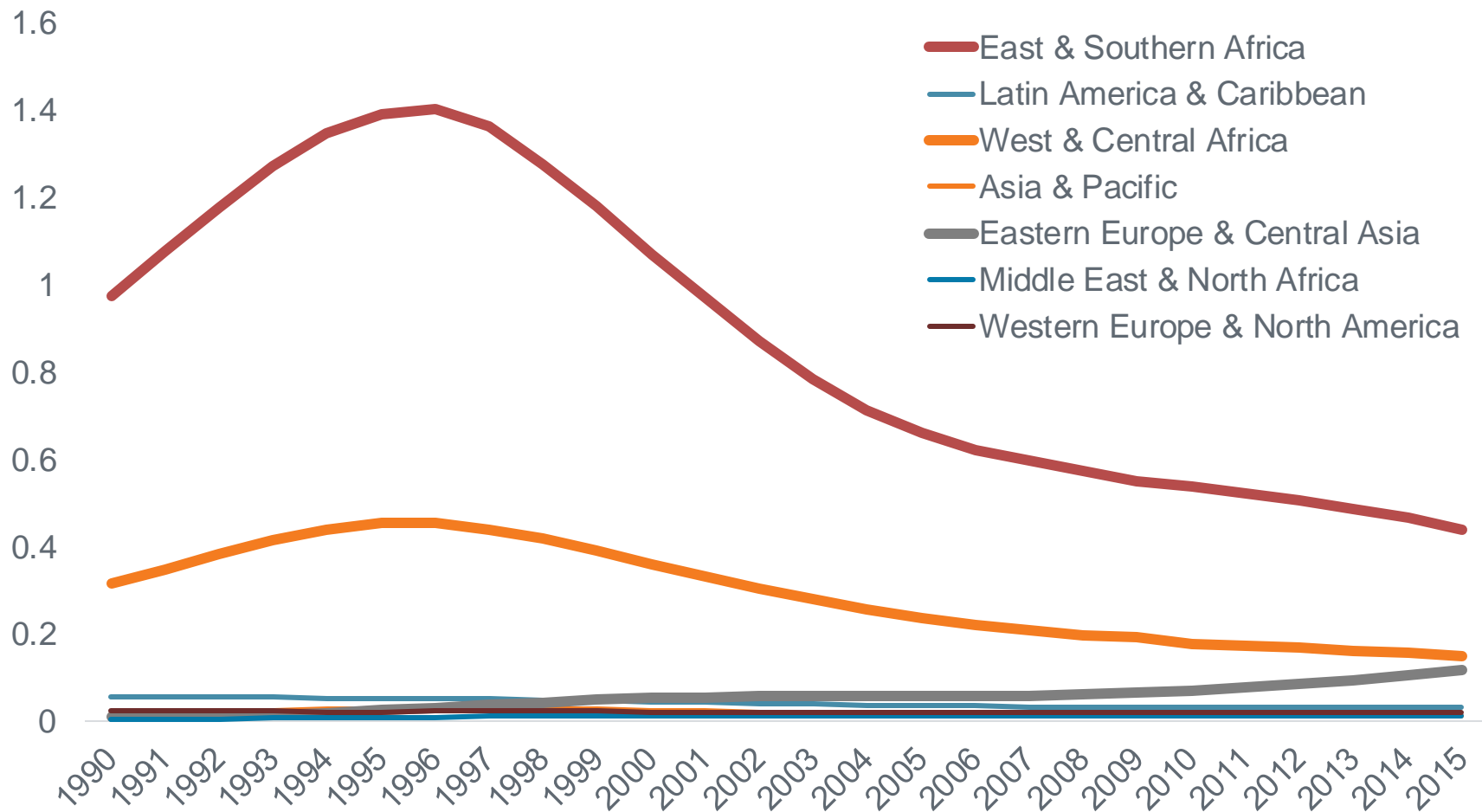
# HIV Prevalence and Estimated Number of Adults and Children Infected with HIV, 2014



# Dramatic reductions in HIV Incidence Rates

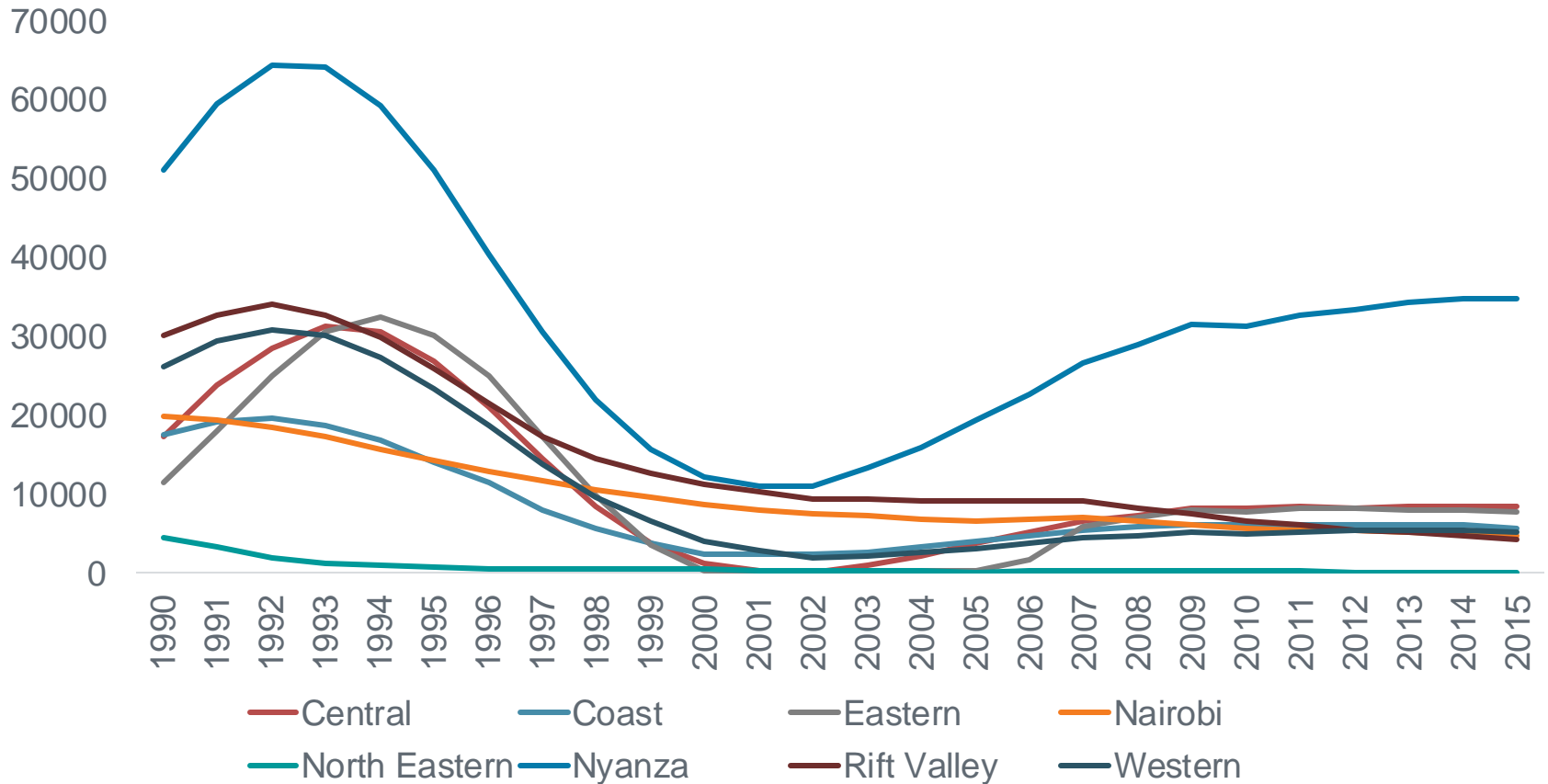
Maintaining momentum is key to achieving epidemic control

HIV Incidence Rate by Region & Year, 1990-2015



# Number of New Adult (15+) HIV Infections in Kenya by Province

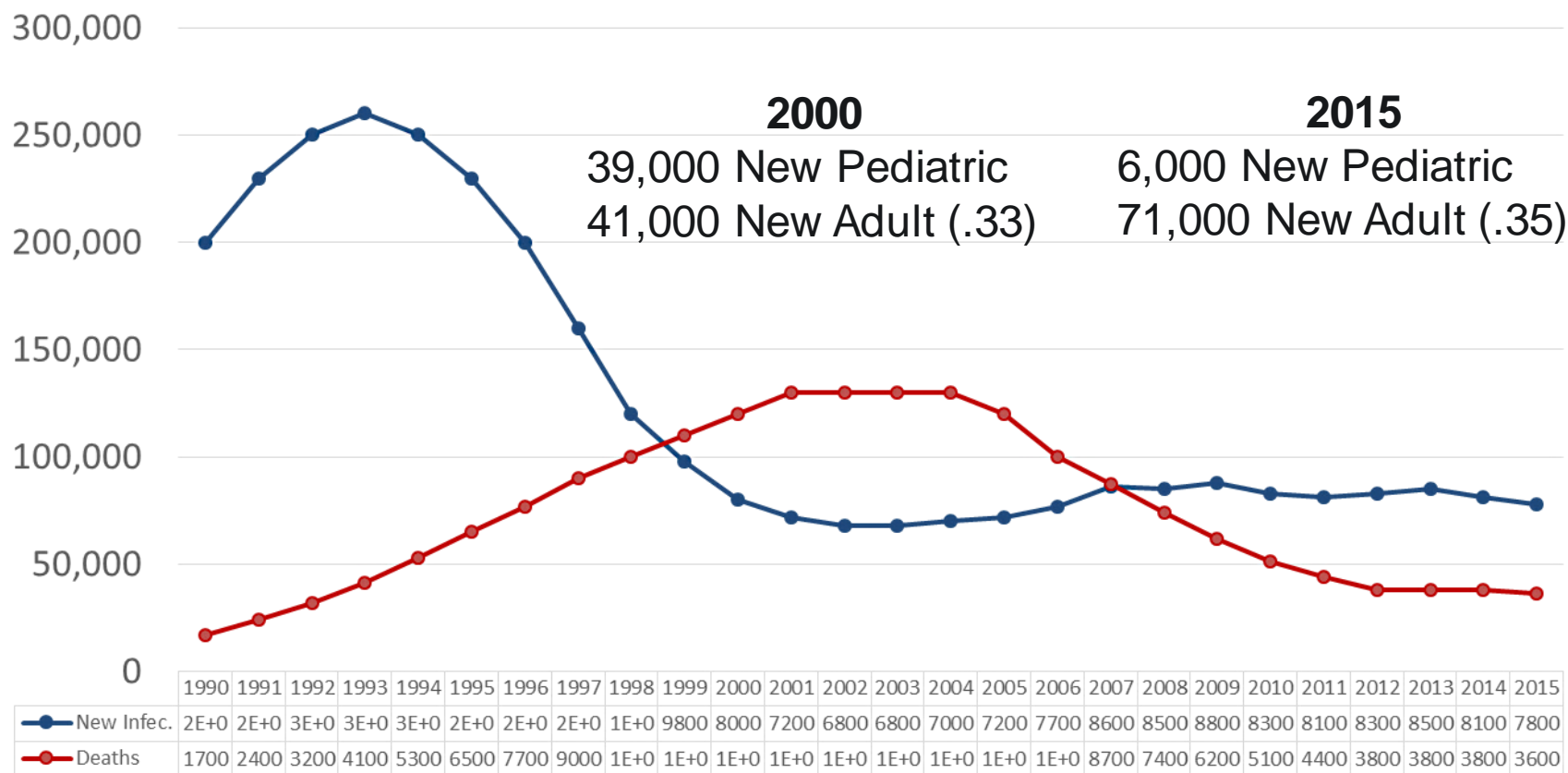
(1990-2015)





# New HIV Infections & AIDS Deaths by Year in Kenya

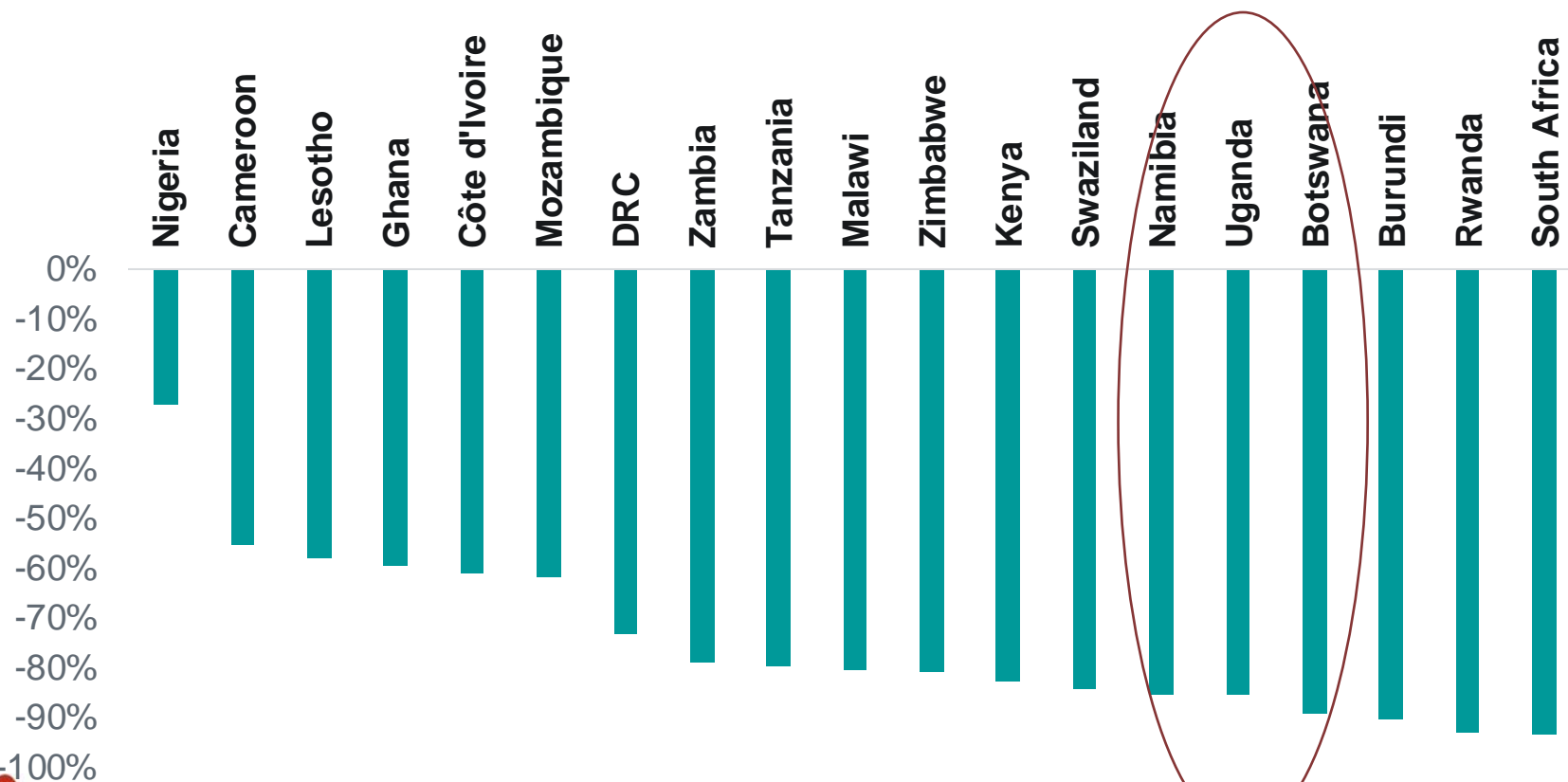
Kenya



Source: UNAIDS Global AIDS Update 2016– <http://aidsinfo.unaids.org/>

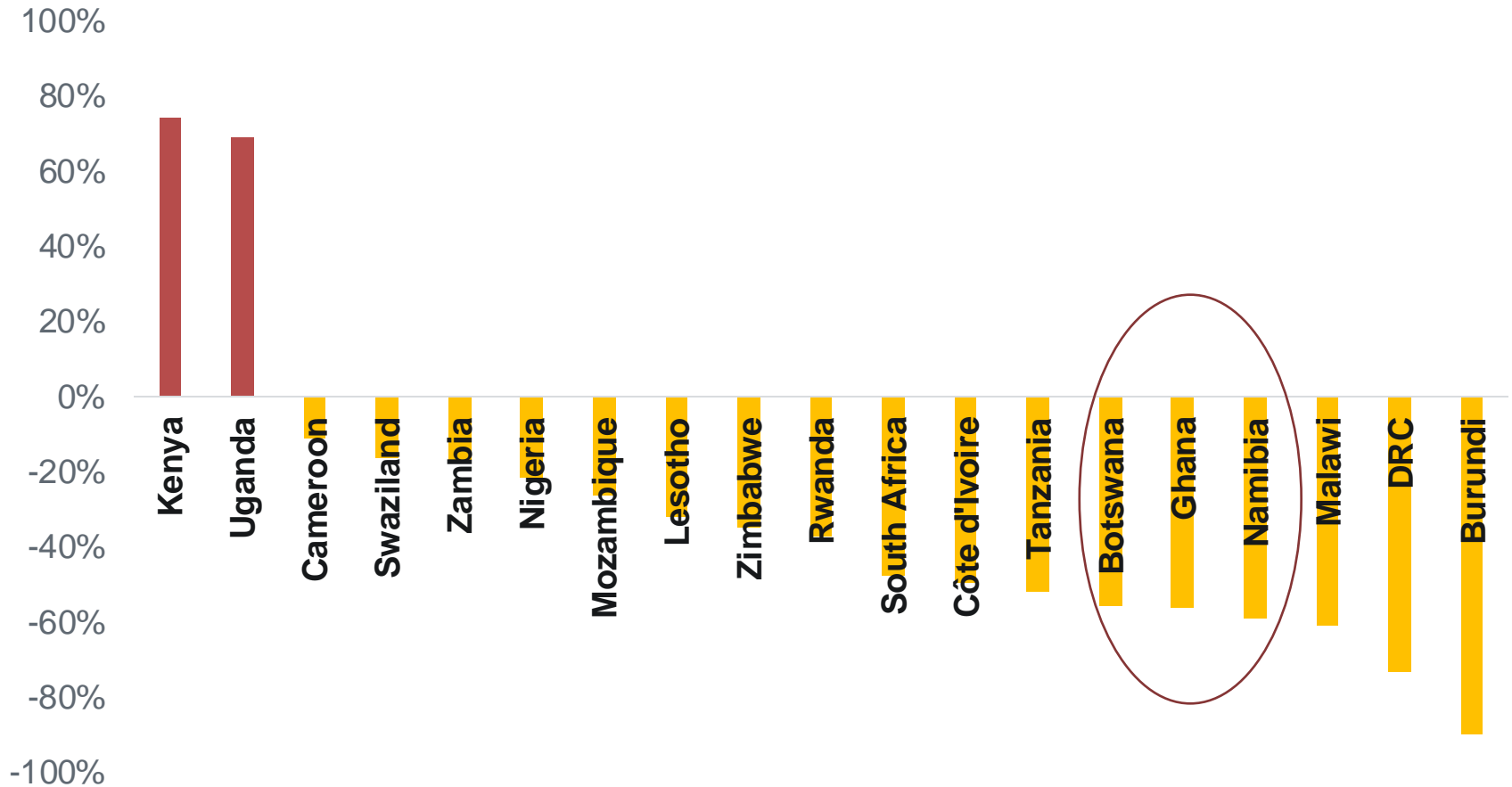
# Percent declines in new pediatric HIV infections (2000 – 2015)

Percent change in number of new pediatric HIV infections  
(2000 - 2015)



# Percent change in new adult HIV infections (2000 – 2015)

Percent Change in New Adult HIV Infections (2000 - 2015)

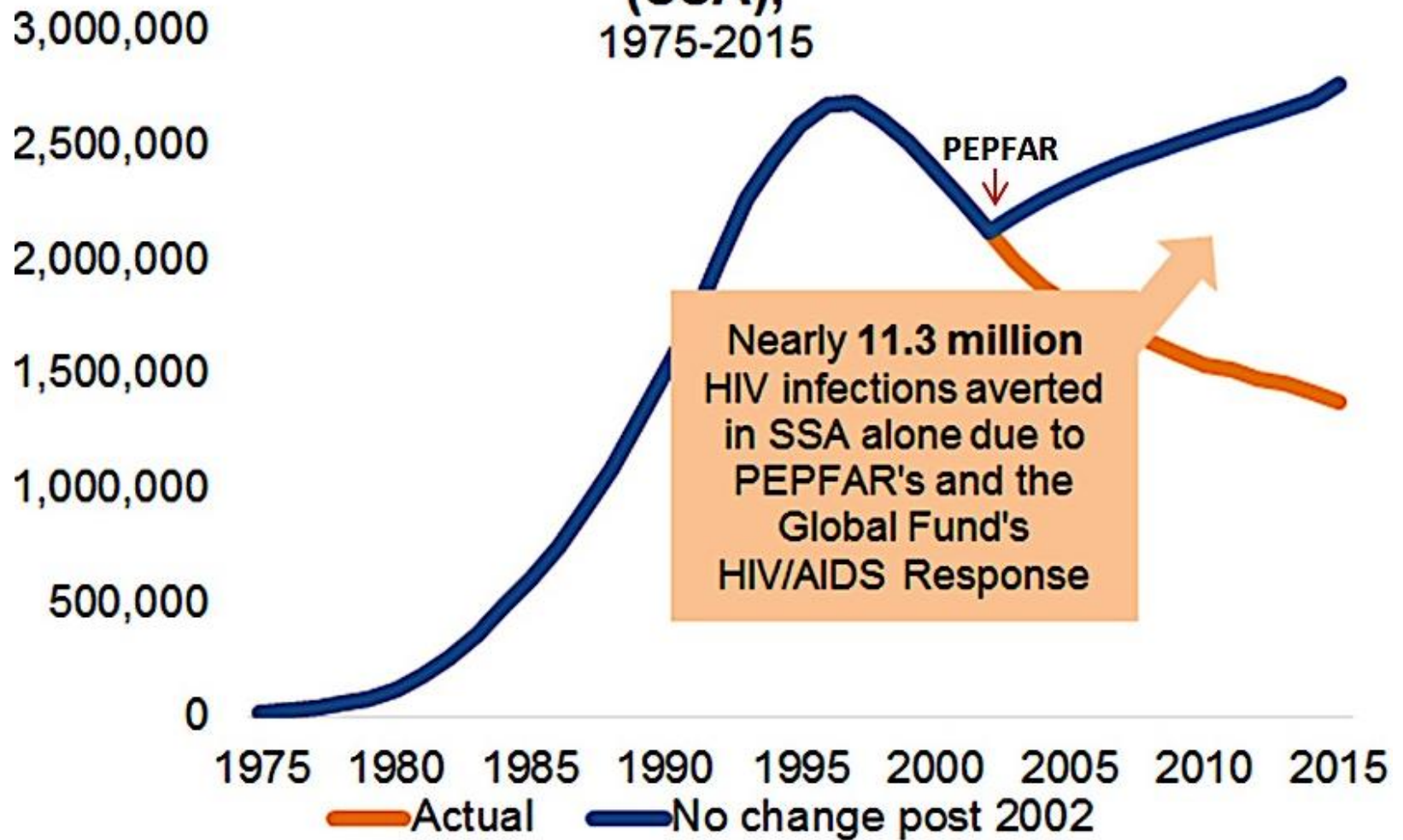


# 2

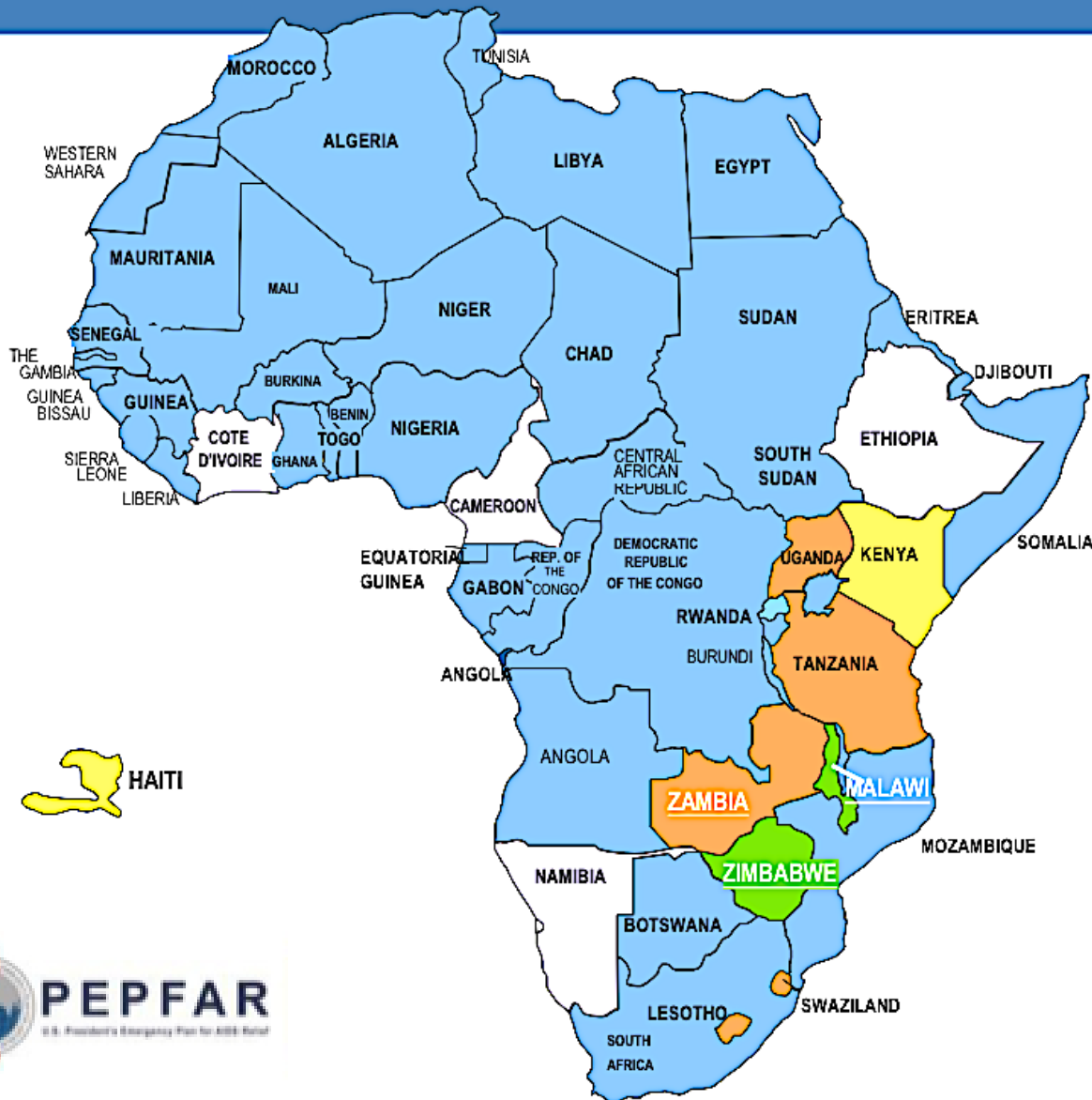
## Population-based HIV Impact Assessments (PHIAs)

Documenting the Amazing Impact of PEPFAR

# New HIV Infections in Sub-Saharan Africa (SSA), 1975-2015



# Rollout of 13 PHIA Surveys



## Year of Survey Implementation



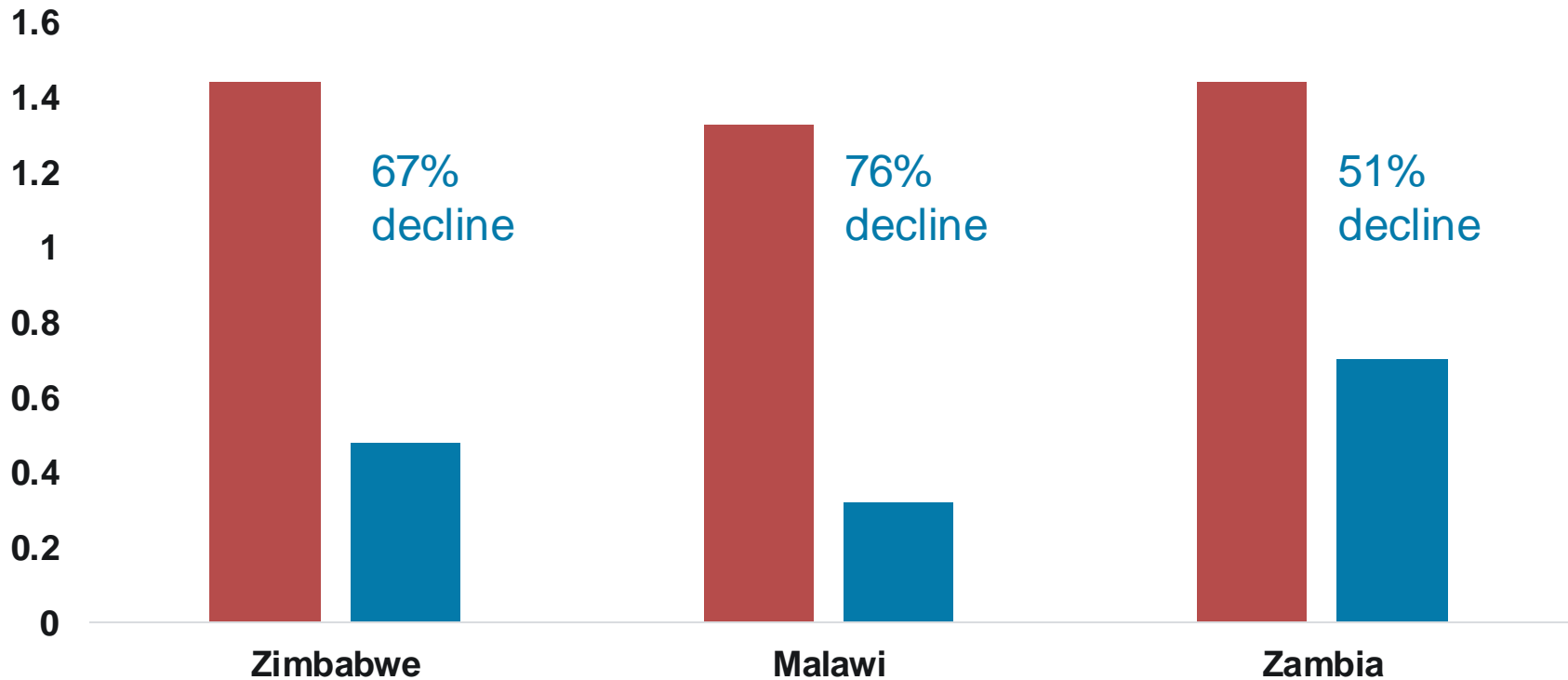


# PHIA Results:

Validating the UNAIDS modeled data and showing we are impacting the epidemic

# Since the Start of PEPFAR, New HIV Infections Have Declined 51-76%

Reduction in rate of new HIV infections (incidence rate) during 12 years of PEPFAR implementation



■ 2003 New Infections (UNAIDS) ■ 2016 New Infections (PHIA)



Source: UNAIDS & PHIA IMPACT Studies, 2016



# Celebrating the remarkable success of PEPFAR, GFATM, and the global HIV/AIDS response

Since the beginning of the epidemic, **HIV prevalence has declined** by

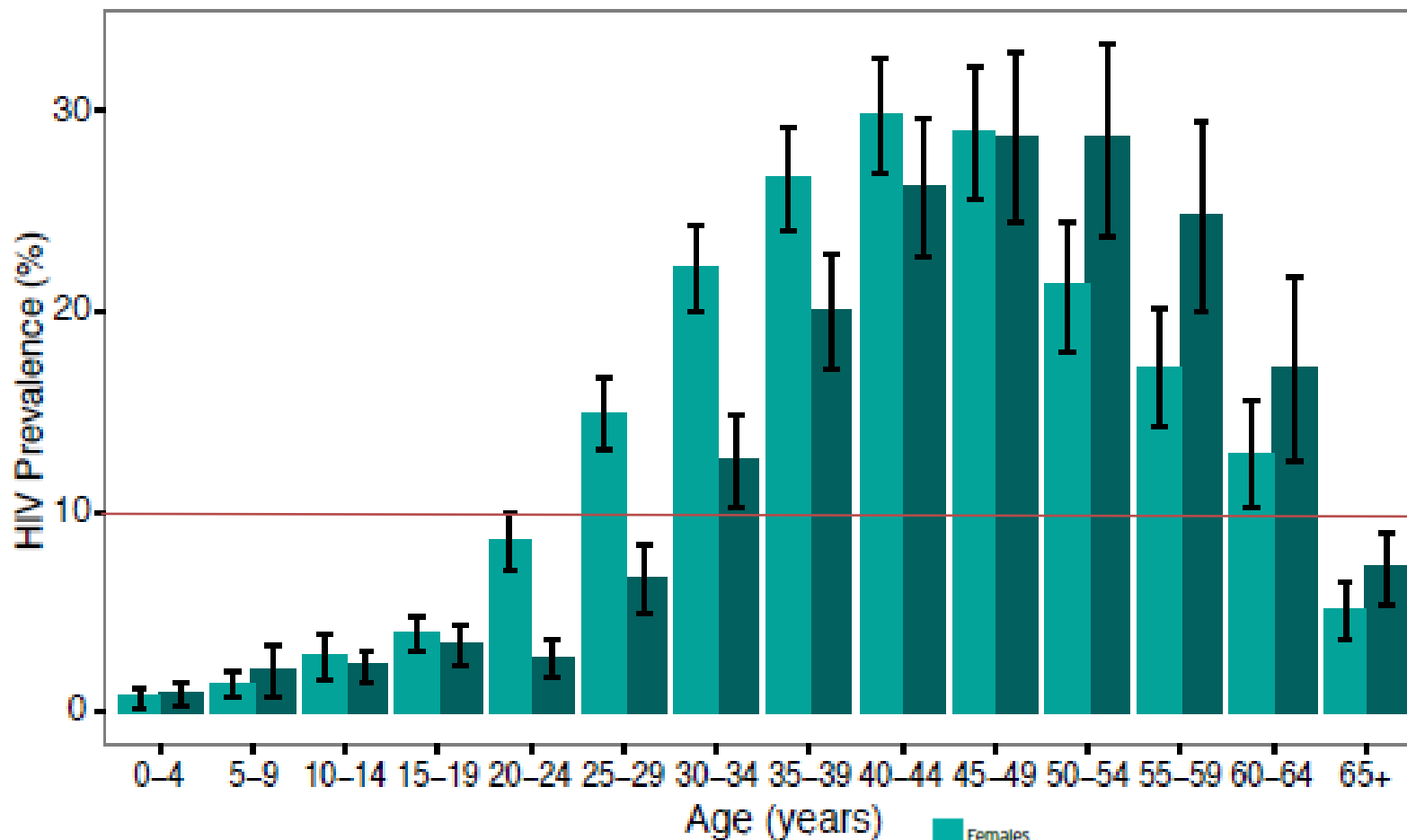
31% in Zimbabwe

34% in Malawi

21% in Zambia

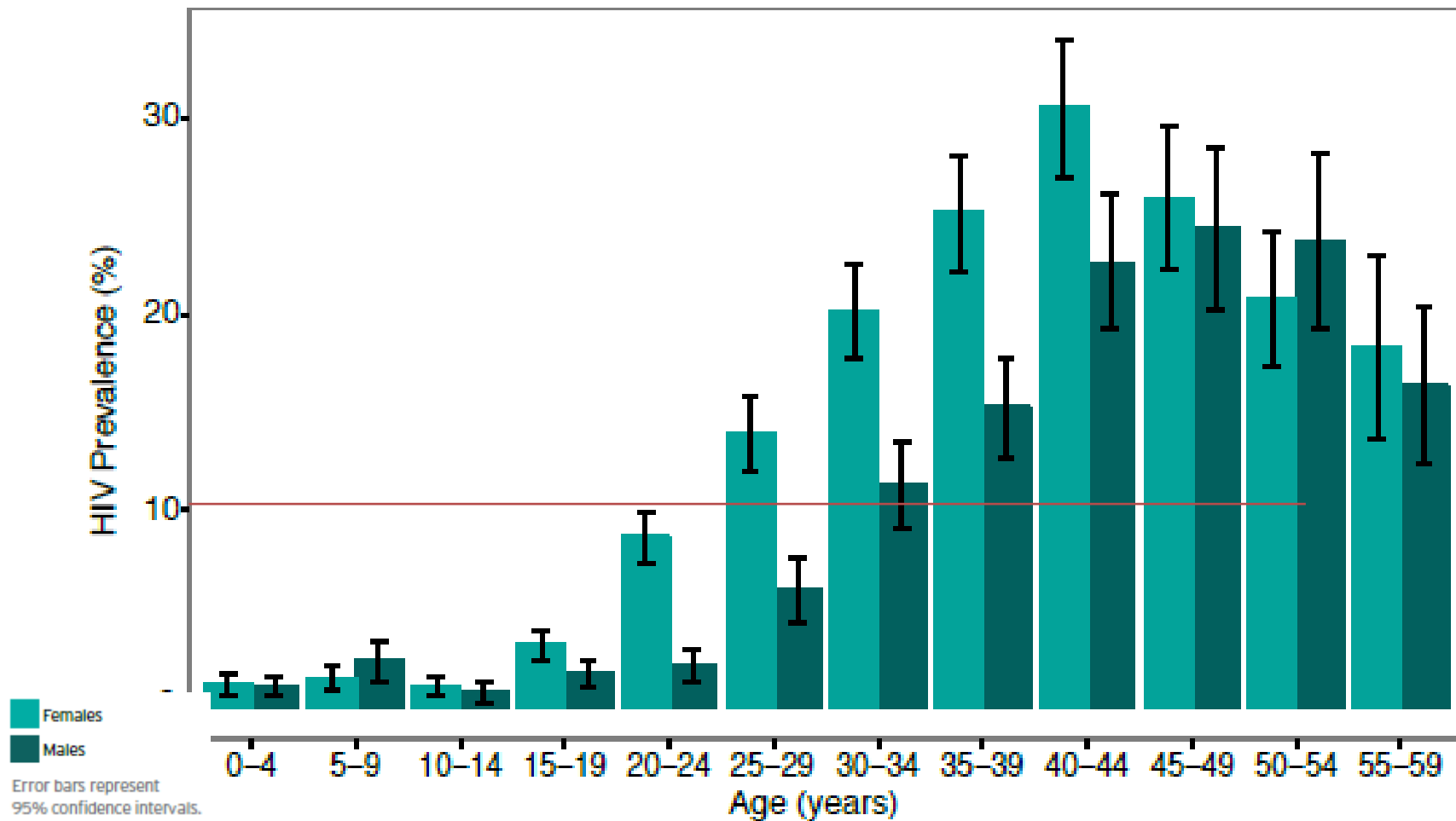
# HIV Prevalence by Age & Sex

## Zimbabwe



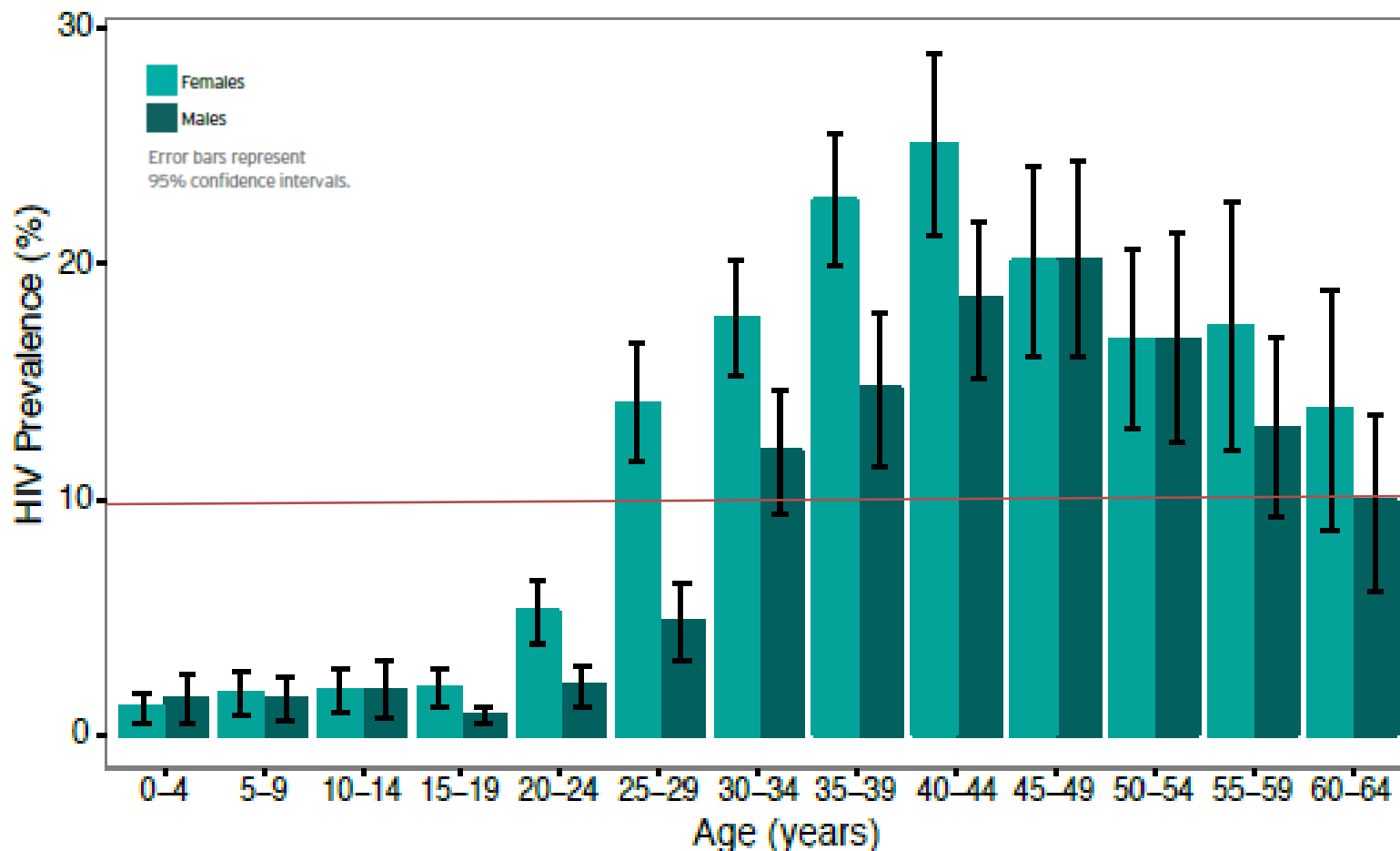
# HIV Prevalence by Age & Sex

## Zambia



# HIV Prevalence by age and sex

Malawi : Significant new infections in young women between age 19 and 29, men between 24 and 34



# Young women are at elevated risk for HIV infection

Compared to young men,  
the rate of new HIV infections  
in young women is

**5 times greater\*** in Zimbabwe

**8 times greater\*** in Malawi

**14 times greater\*** in Zambia

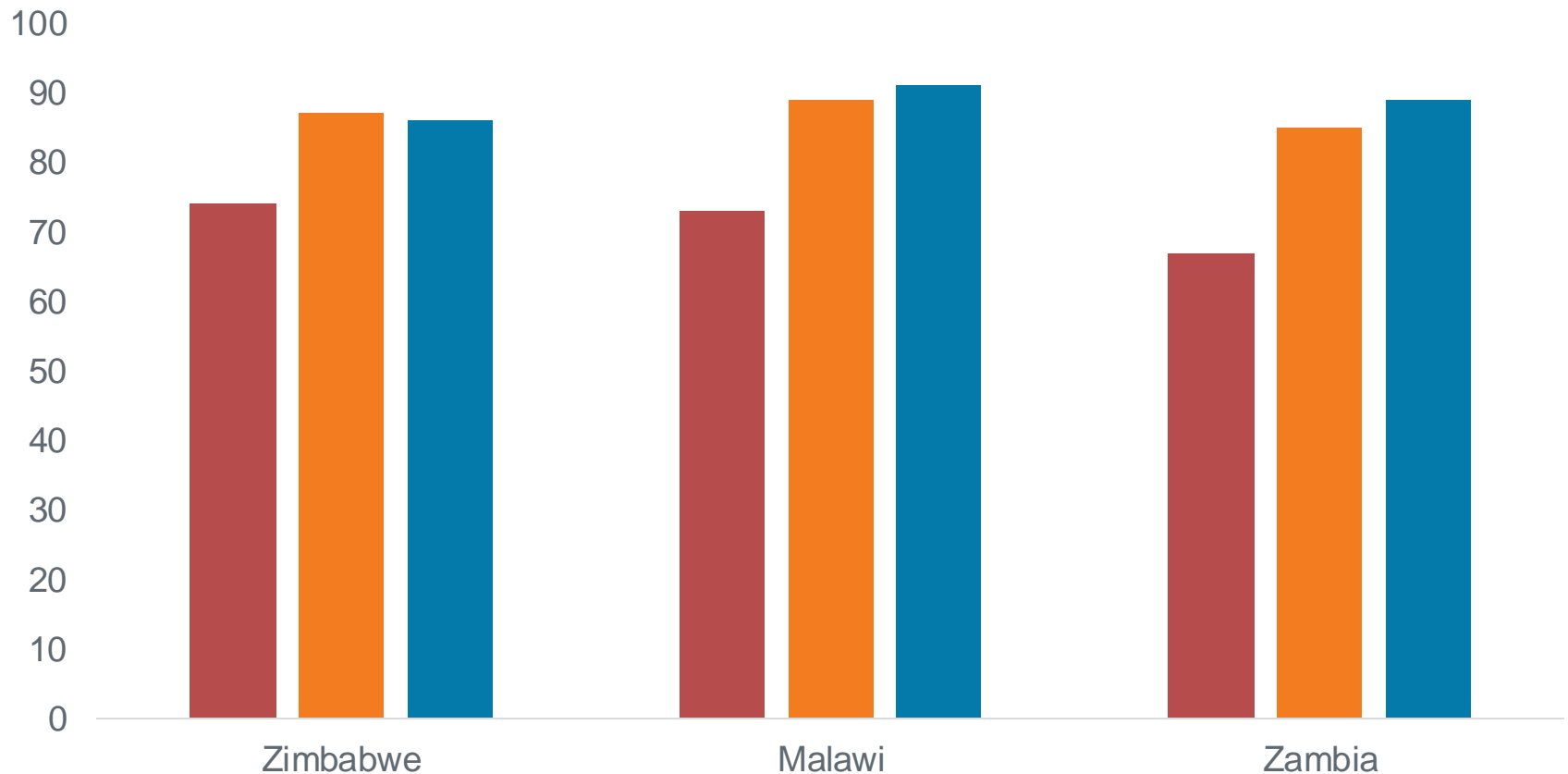


*N under 25 are limited. PHIA, 2016. EMBARGOED UNTIL DEC 1, 2016*

# Achieving Epidemic Control

Astounding Results from Zimbabwe, Malawi, and Zambia

Progress to 90-90-90 in Adults (%)



■ Aware of HIV Status ■ Treated ■ Virally Suppressed

Source: Population-Based HIV Impact Assessments (PHIA) IMPACT Studies, 2016

# Acknowledgments for Impact Surveys

**OGAC**

**CDC – Atlanta**

**ICAP – New York**

**Ministry of Health and Child  
Care, Zimbabwe**

**CDC – Zimbabwe**

**ICAP in Zimbabwe**

**Ministry of Health, Malawi**

**CDC – Malawi**

**ICAP in Malawi**

**Ministry of Health, Zambia**

**CDC – Zambia**

**ICAP in Zambia**

*This project is supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through CDC under the terms of cooperative agreement #U2GGH001226. The contents are the responsibility of ICAP and do not necessarily reflect the views of the United States Government.*



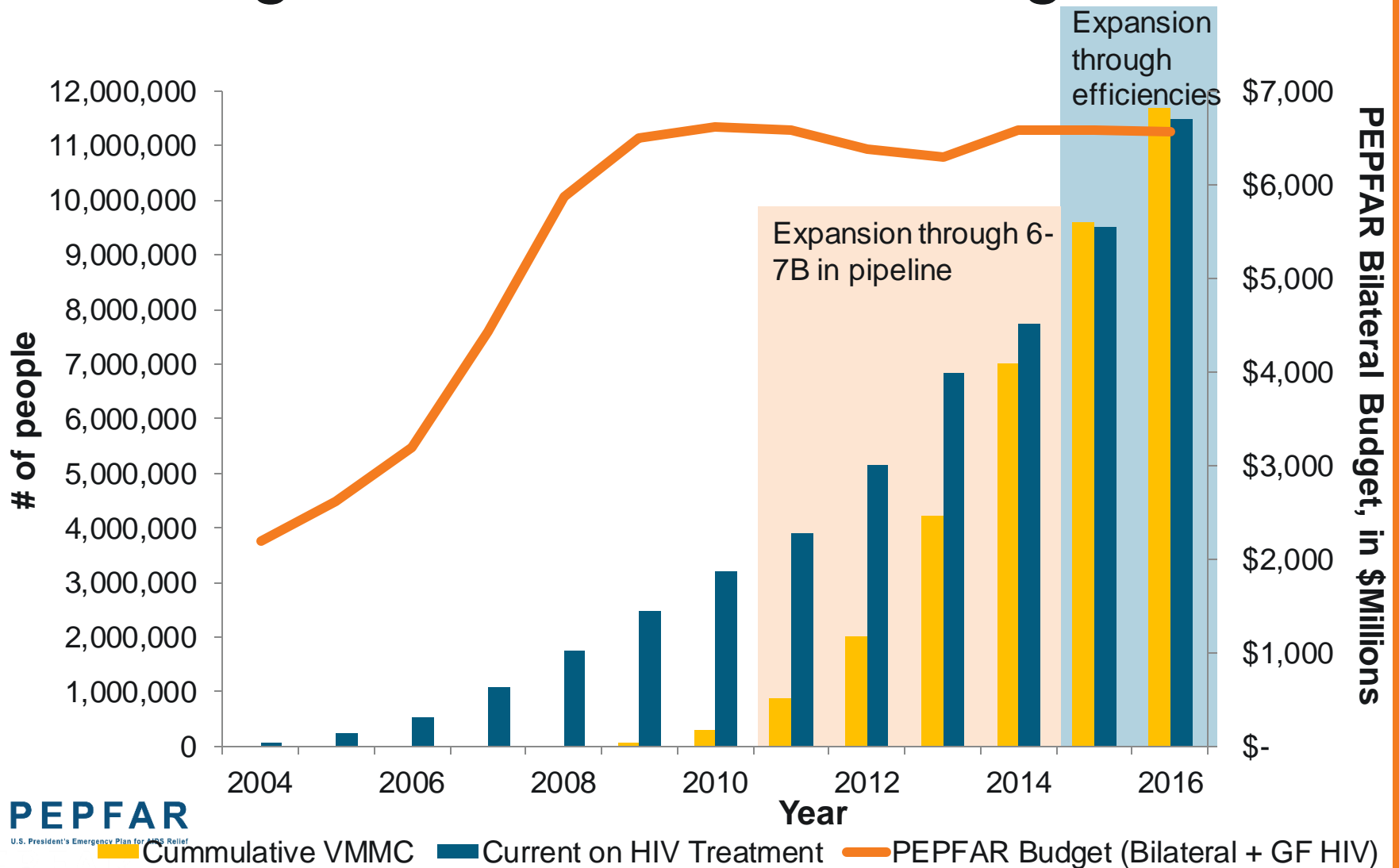
# 3

## Transparency and accountability

Using data to achieve more with flat budgets



# PEPFAR: Remarkable Expansion of lifesaving services with flat budgets



# PEPFAR Results for 2016

# 74.3 Million

People were tested  
& counseled for HIV

# PEPFAR Results for 2016

# 11.5 Million

Men, Women, & Children on  
Treatment

# 1.1 Million

Children on Treatment – a 97% increase in 2 years

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# PEPFAR Results for 2016

11.7 Million

VMMC

(voluntary medical male circumcisions)

# PEPFAR Results for 2016

Nearly **250,000**

Babies born HIV Free in 2016

Cumulative total of **nearly 2 million** since the start of PEPFAR

# PEPFAR Results for 2016

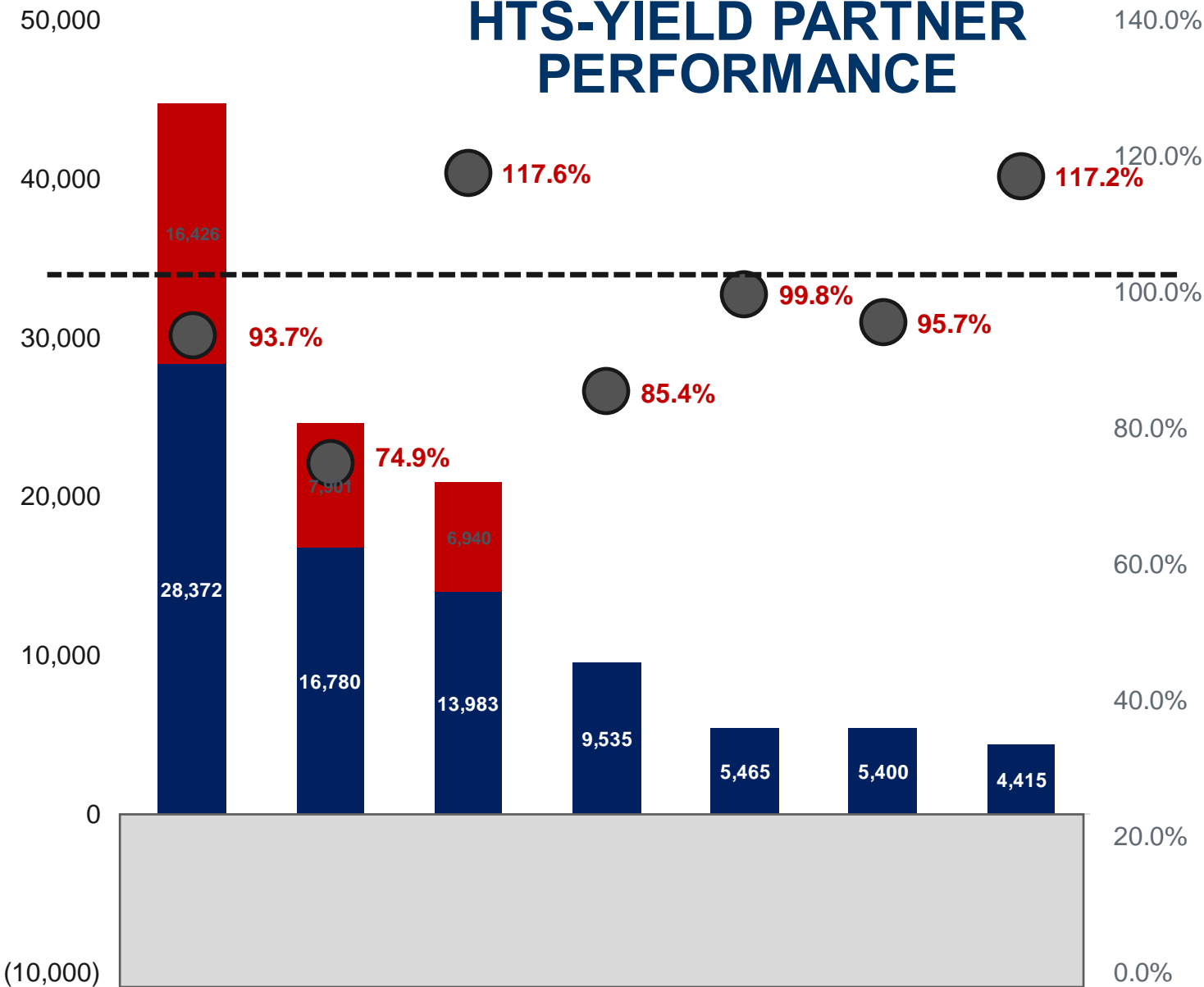
**6.2 Million** Orphan  
and Vulnerable Children  
received care and support



# Country-Specific Partner Management

# Partner Monitoring Strategy

## HTS-YIELD PARTNER PERFORMANCE

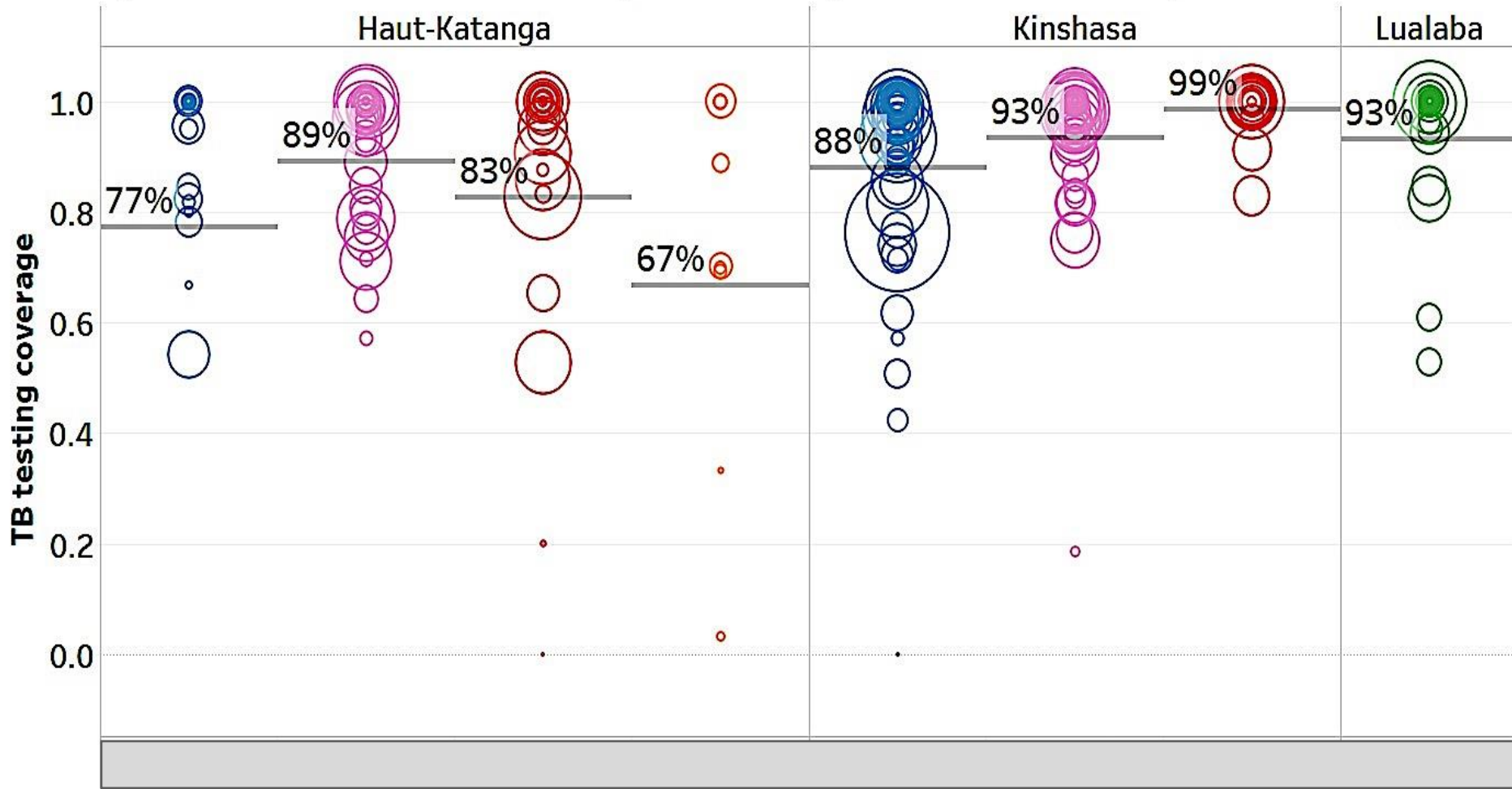


IM	FY 16 HTC-TST % PERFORMANCE	HTC YIELD
Columbia University Mailman School of Public Health	63%	1.8%
University of California at San Francisco	68%	2.0%
Kenya Episcopal Conference	113%	2.5%
Elizabeth Glaser Pediatric AIDS Foundation PAMOJA	67%	1.6%
Christian Health Association of Kenya	244%	1.8%
CENTERS FOR HEALTH SOLUTIONS	122%	1.2%
Eastern Deanery AIDS Relief Program	118%	1.8%

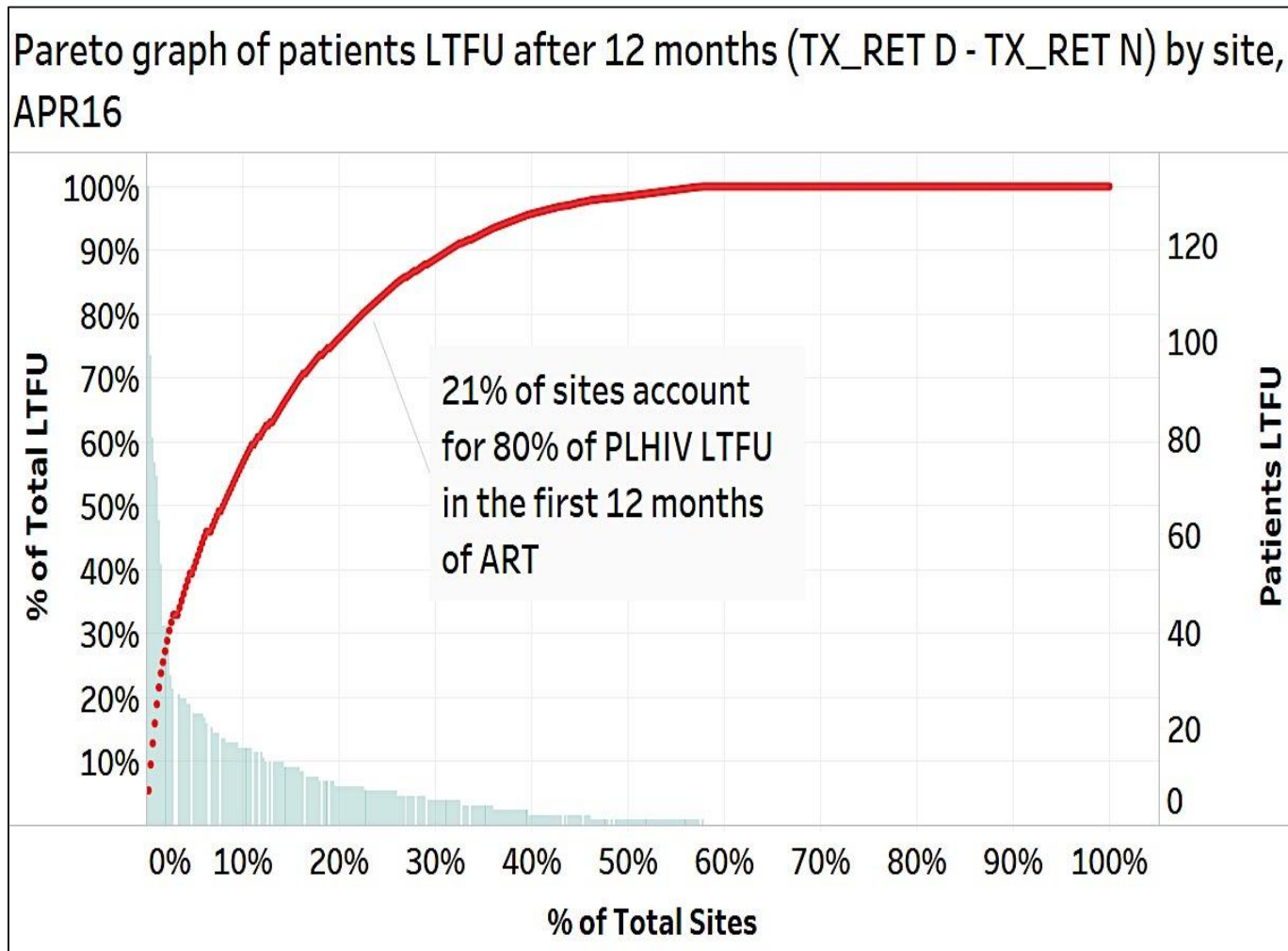


# Examining distribution of site performance to find under-performing sites hidden within good overall results

Coverage of HIV known status among TB cases, by site, Province and partner, APR16



# Integrating performance and volume analysis to target remediation to have most impact



# 4

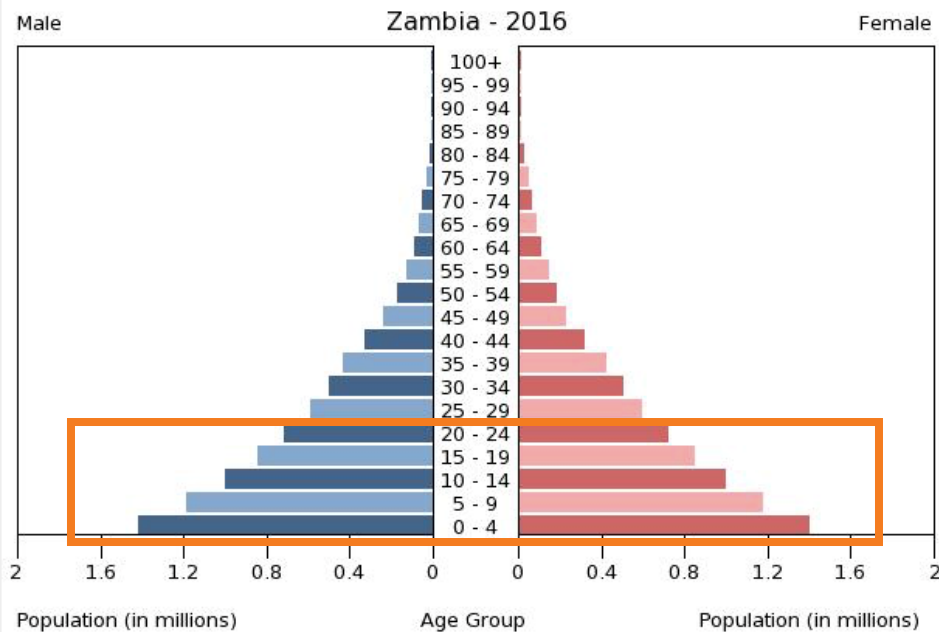
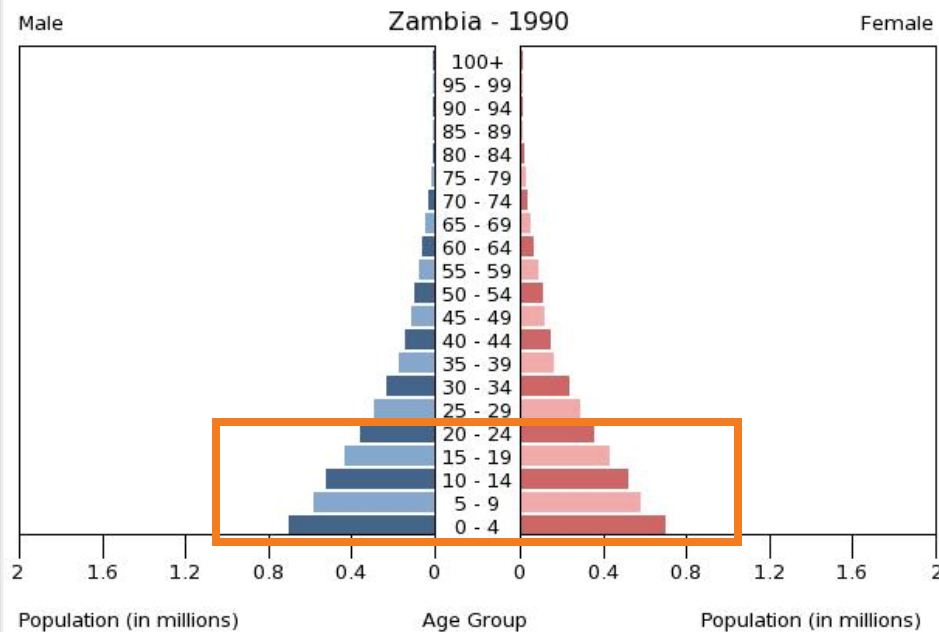
## Youth Bulge

Overview of demographic shifts and the need to adjust our response accordingly

# Youth Bulge in Zambia

## At the beginning of the Epidemic

## Today



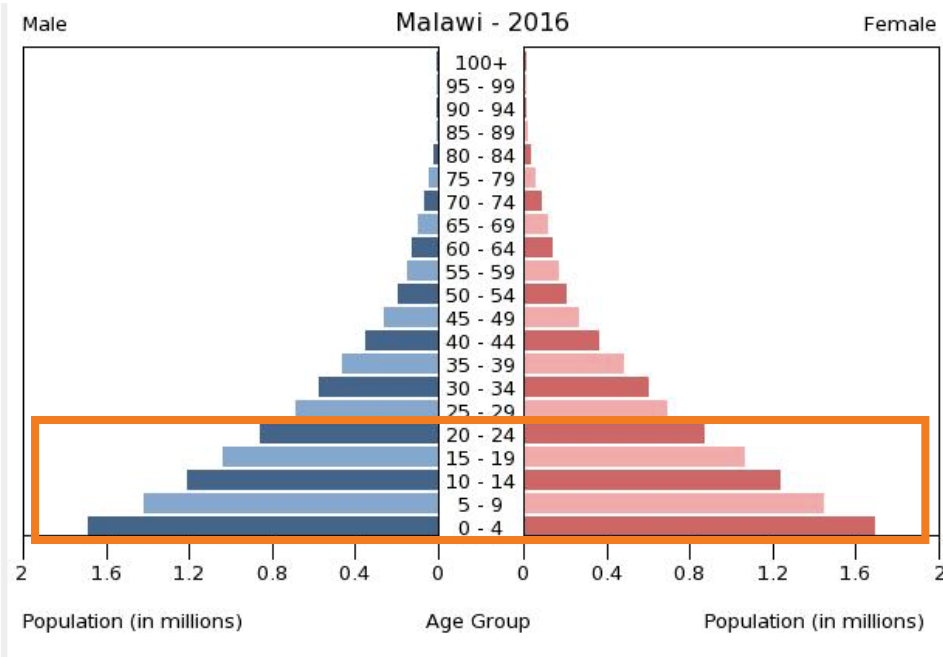
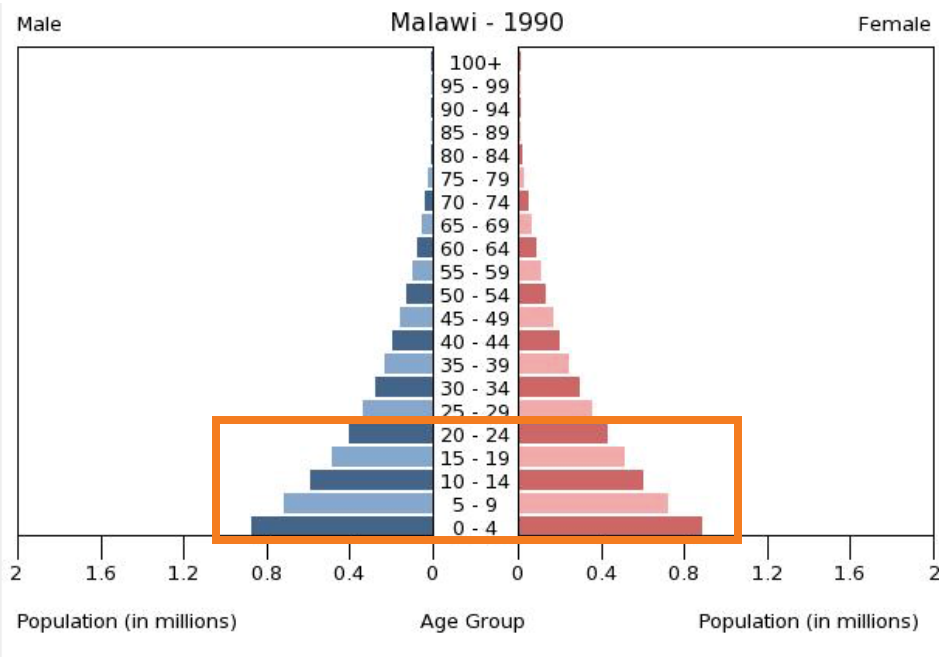
Young Men Population: 781,000  
 Young Men PLHIV: 38,000  
 Young Women Population: 772,000  
 Young Women PLHIV: 66,000

Young Men Population: 1.6 million  
 Young Men PLHIV: 48,000  
 Young Women Population: 1.6 million  
 Young Women PLHIV: 77,000

# Youth Bulge in Malawi

## At the beginning of the Epidemic

## Today



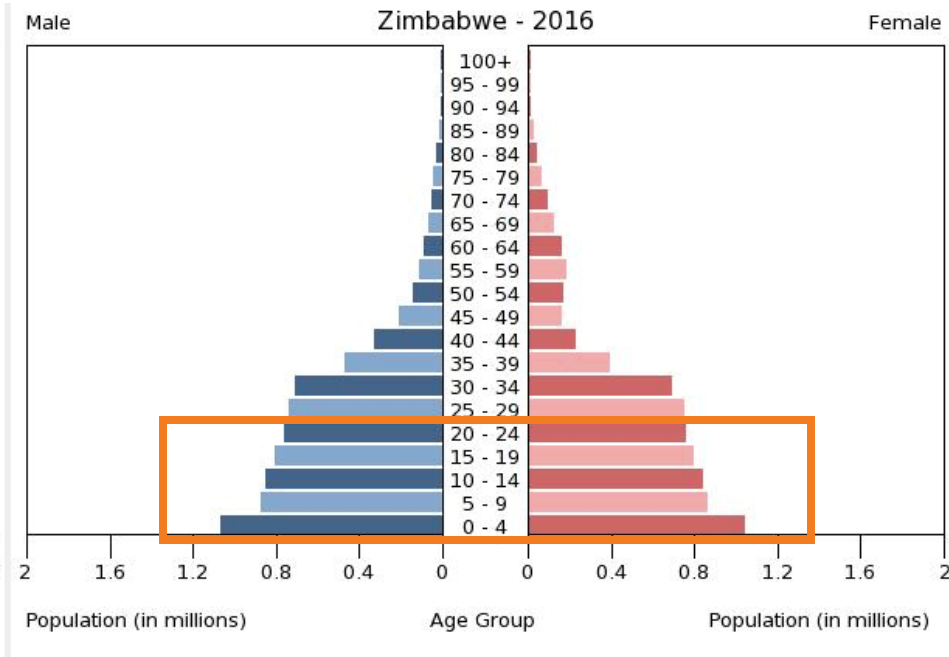
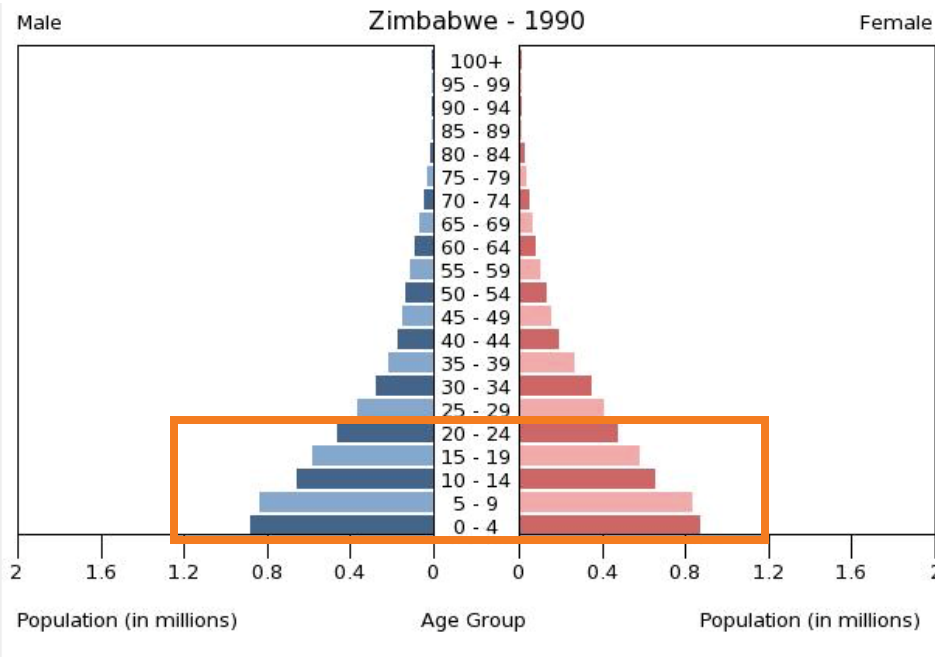
Young Men Population: 880,000  
 Young Men PLHIV: 23,000  
 Young Women Population: 922,000  
 Young Women PLHIV: 62,000

Young Men Population: 1.9 million  
 Young Men PLHIV: 34,000  
 Young Women Population: 1.9 million  
 Young Women PLHIV: 61,000

# Youth Bulge in Zimbabwe

## At the beginning of the Epidemic

## Today

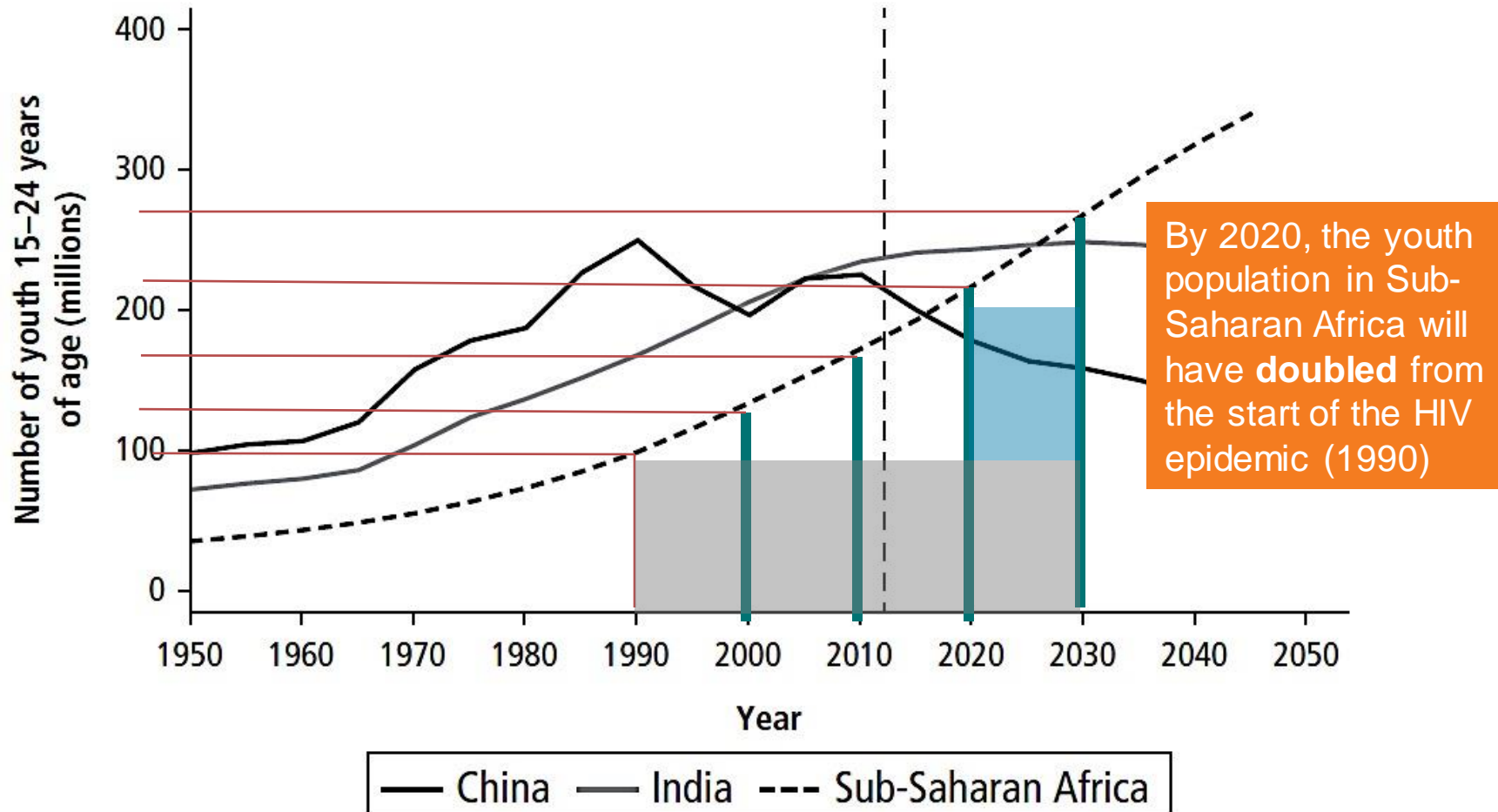


Young Men Population: 1 million  
 Young Men PLHIV: 72,000  
 Young Women Population: 1 million  
 Young Women PLHIV: 119,000

Young Men Population: 1.6 million  
 Young Men PLHIV: 59,000  
 Young Women Population: 1.5 million  
 Young Women PLHIV: 91,000

# Youth Bulge in Sub-Saharan Africa: Larger than in China and India, with double the number of 15-24 youth compared the start of the epidemic

**Figure 4.9** Projected Growth of Youth Population 15–24 Years of Age in Sub-Saharan Africa, China, and India, 1950–2050





# Evolving the Program to end the epidemic



**Young adult men (23-35)**

**INFECT**

**adolescent girls & young**

**women (16-23)**

**who then grow up to**

**infect**

**their male peers (24-29)**

**AND THE CYCLE  
CONTINUES...**



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# 5

## The Solutions:

Risk Avoidance, risk reduction and sexual violence prevention through DREAMS

Young women and girls  
account for

75%

of new HIV infections  
among adolescents in sub-Saharan  
Africa



1 in 3 girls  
in the developing world are  
married  
before age 18

# 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



**Determined**

**Resilient**

**Empowered**

**AIDS-Free**

**Mentored**

**Safe**



# DREAMS-like countries

5 new countries will receive funding through their Country Operational Plans (pending the COP review) for **DREAMS** like activities for FY18  
With a focus on risk avoidance  
In 10-14 year old girls.

**Botswana**

**Cote D'Ivoire**

**Haiti**

**Namibia**

**Rwanda**



**Determined**

**Resilient**

**Empowered**

**AIDS-Free**

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# DREAMS Programming

## STRENGTHEN THE FAMILY

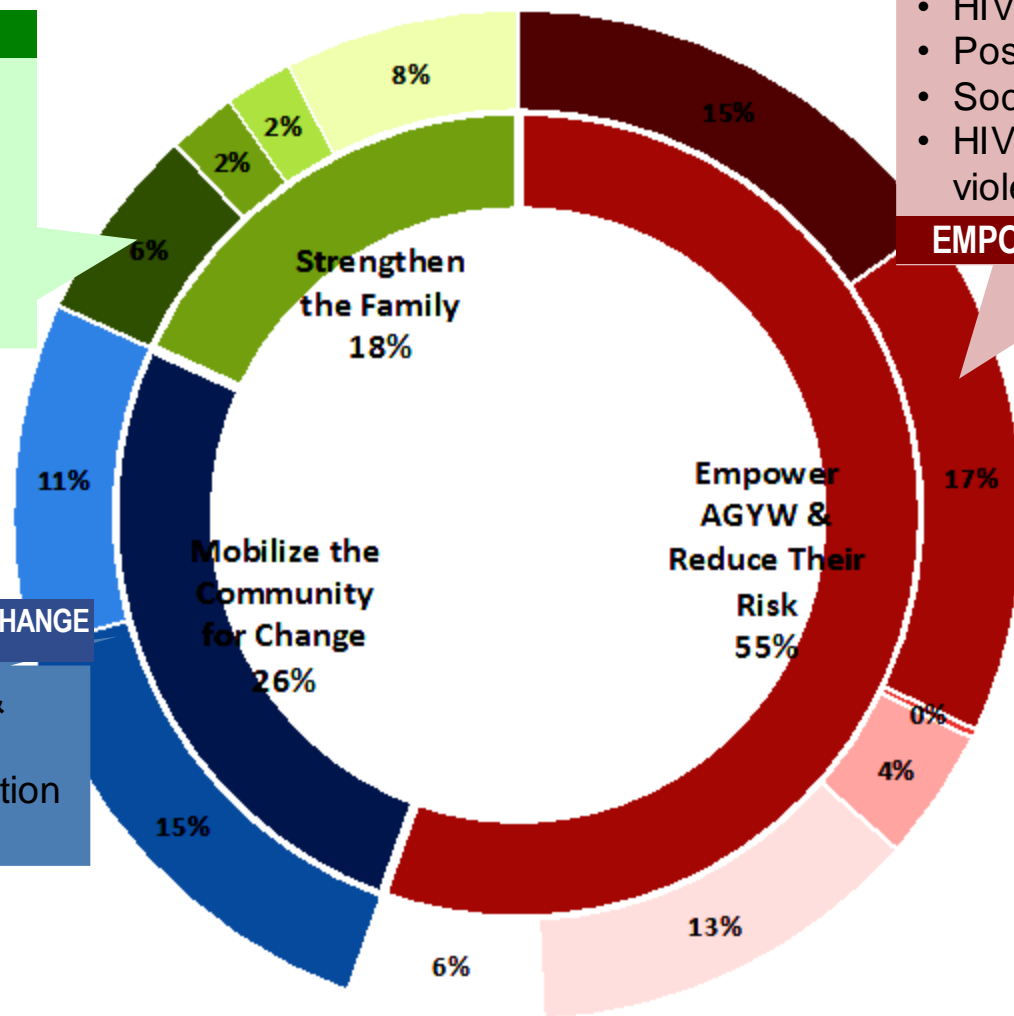
- Parenting/Caregiver Programs
- Cash Transfers
- Education Subsidy
- Socioeconomic Approaches

## MOBILIZE COMMUNITY FOR CHANGE

- School-Based HIV & Violence Prevention
- Community Mobilization & Norms Change

- Condom Promotion & Provision
- HIV Testing & Counseling
- Post-Violence Care
- Social Asset Building
- HIV risk reduction and sexual violence prevention

## EMPOWER AGYW & REDUCE RISK





In its first year, the **DREAMS**  
Partnership reached more than

# 1 million

**ADOLESCENT GIRLS  
AND YOUNG WOMEN**

with critical comprehensive HIV  
prevention interventions



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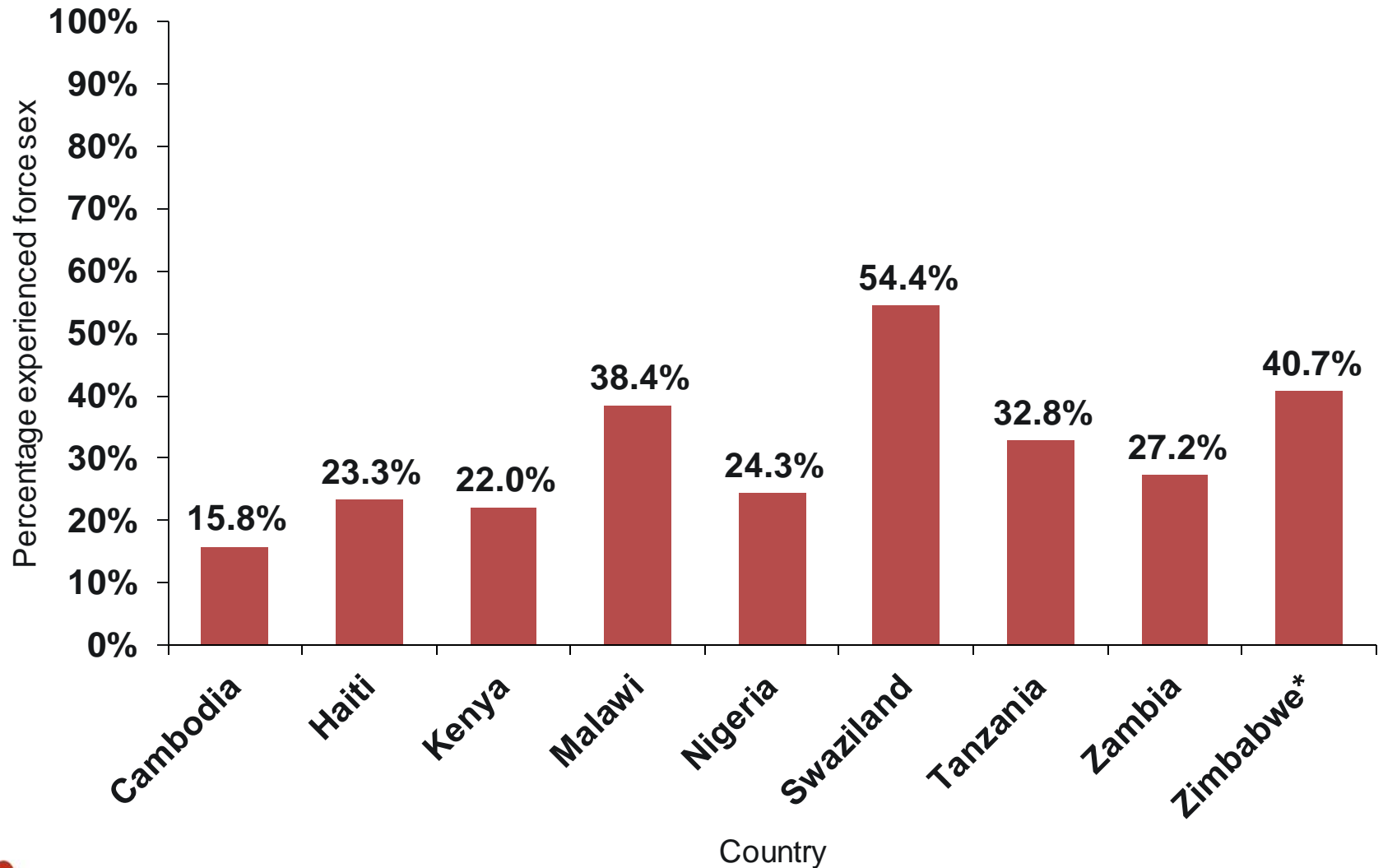


**PEPFAR**

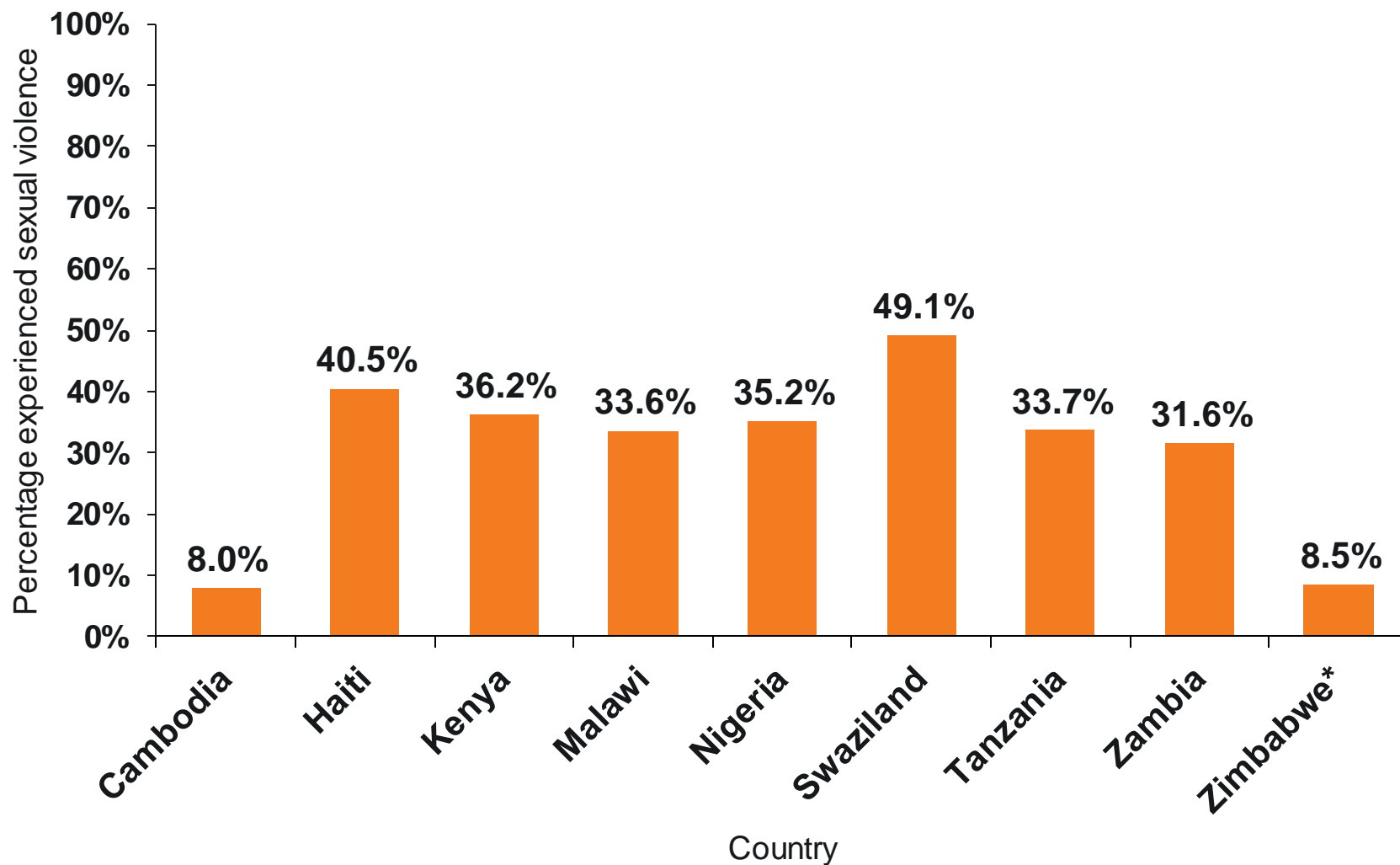
U.S. President's Emergency Plan for AIDS Relief



## Percentage of 13-24 Year Old Female Respondents Who Reported First Sex as Forced/Coerced -RAPE



## Sexual Violence among 13-24 Year Old Female Respondents Within the Past 12 Months



# Swaziland Priority Populations for Prevention

## OVC

primarily 10-17, and a focus on 9-14 y/o for risk avoidance and sexual violence preventions

*Population:*  
353,178  
71% are OVC†

## Adolescent Girls

15 – 19

Risk avoidance and reduction

*Prevalence: 10.1\**

## Young Women

20 – 29

Risk reduction

*Prevalence: 32-47%\*\**

## Young Men

VMMC, Condoms, PrEP

20 – 39

*Prevalence: 7-47%*

20-24: 7%

25-29: 21%

30-34: 37%

35-39:

*47%\*\**

Increased focus on identifying the most vulnerable age/sex segments (e.g. out-of-school rural adolescent girls, remote poor, mobile males with money)



Source: PEPFAR, Swaziland 2017

†MICS 2014 and population projection

\*\*DHS 2007 \*\*SHIMS 2011

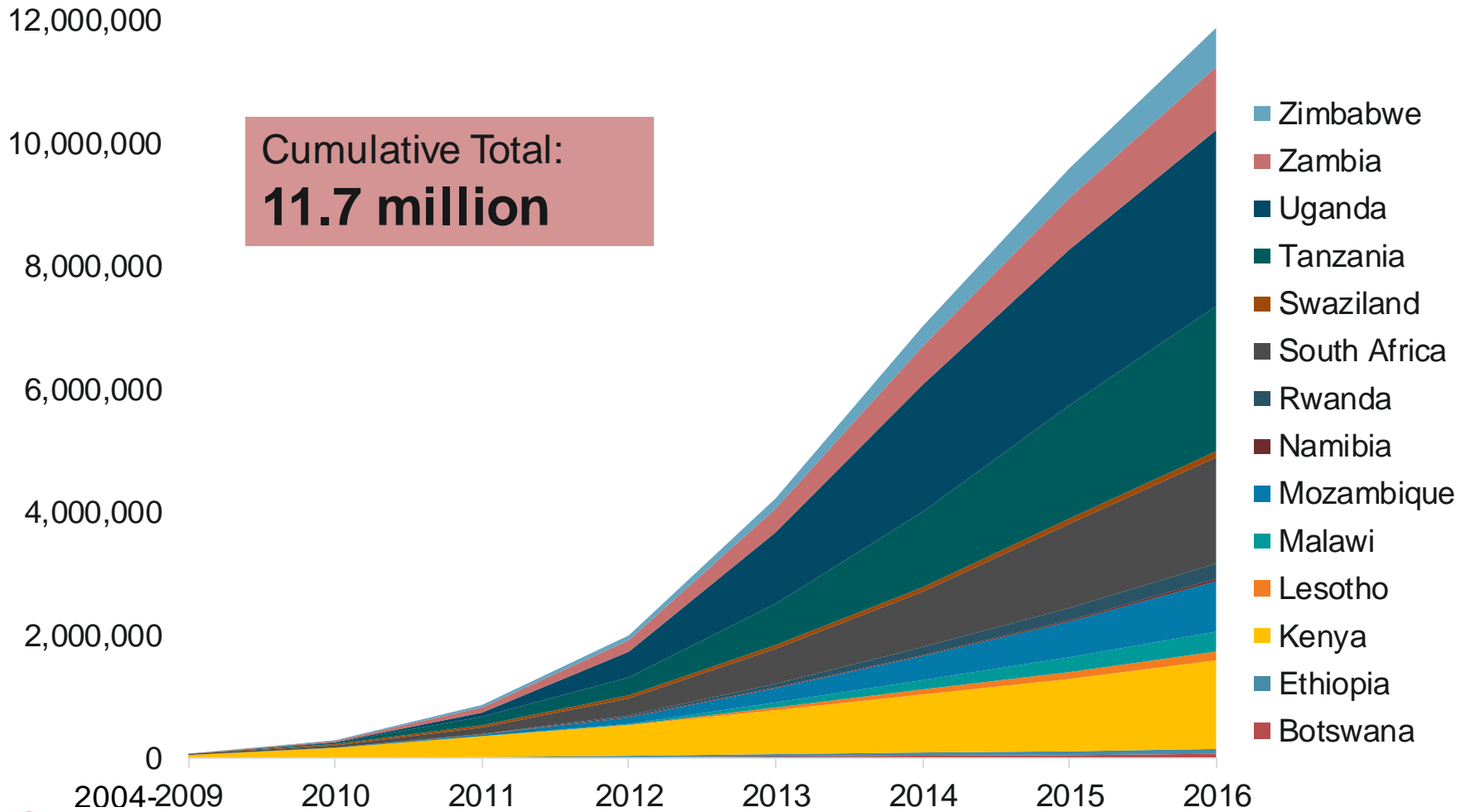


# 6

## VMMC

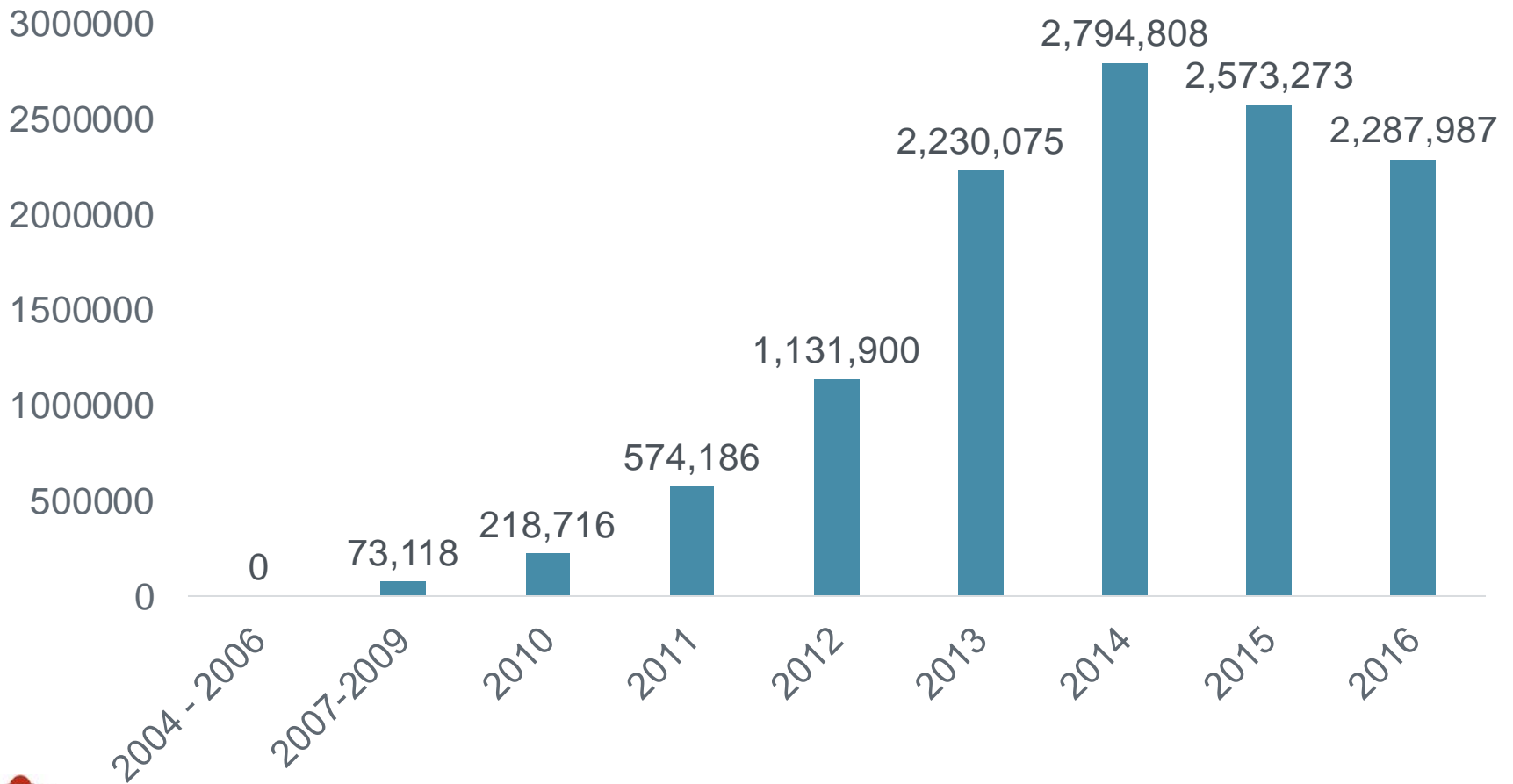
Challenge: need to accelerate progress and improve linkages

# Cumulative Number of PEPFAR-Supported Voluntary Medical Male Circumcisions, through 2016



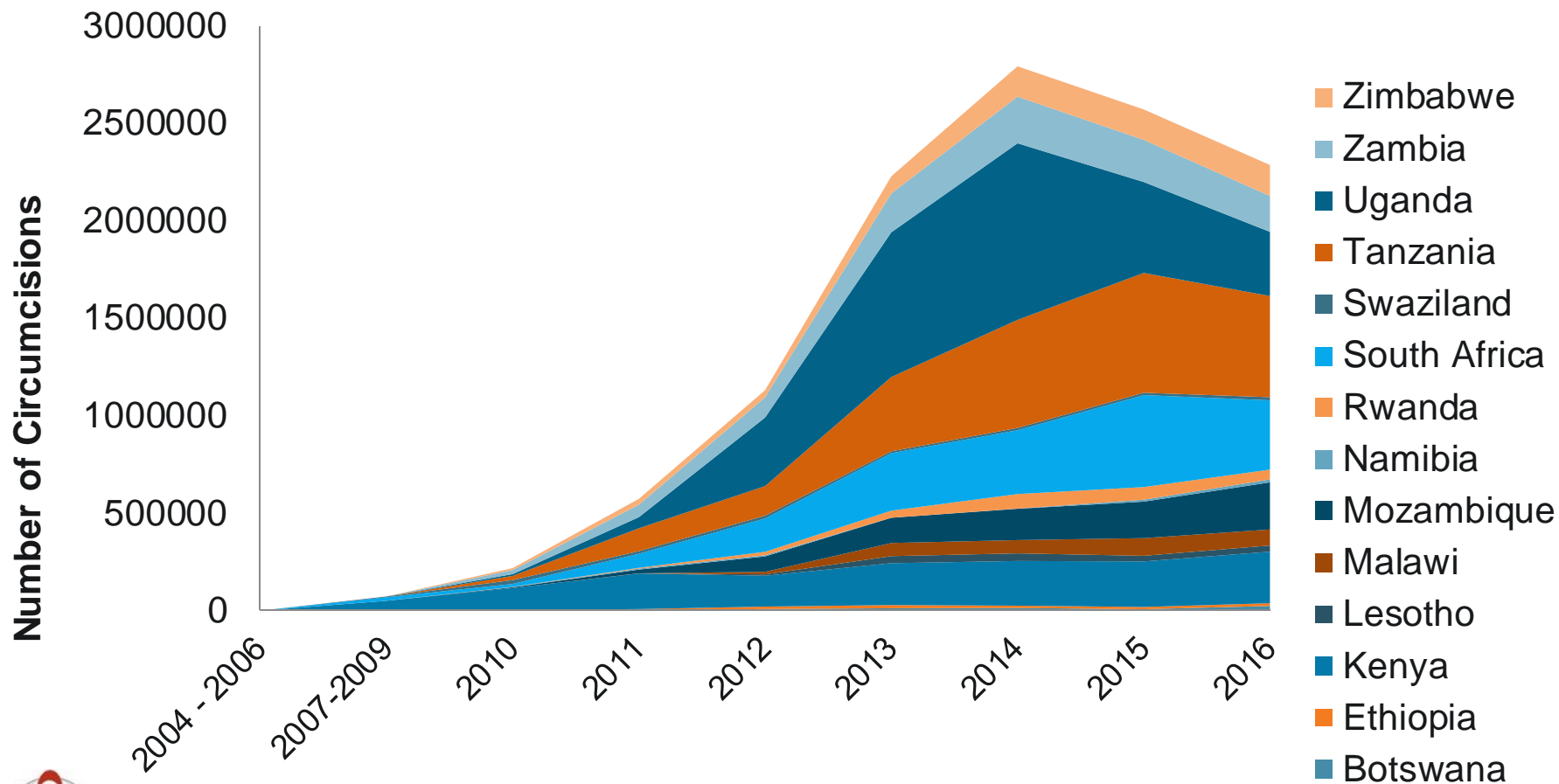
# Annual VMMC Results (2009 – 2016)

Annual Number of PEPFAR-Supported Voluntary Medical Male Circumcisions, through 2016



# Annual VMMC Results (2009 – 2016)

## PEPFAR-Supported Voluntary Medical Male Circumcisions, Annual Results FY2004-2016



# 7

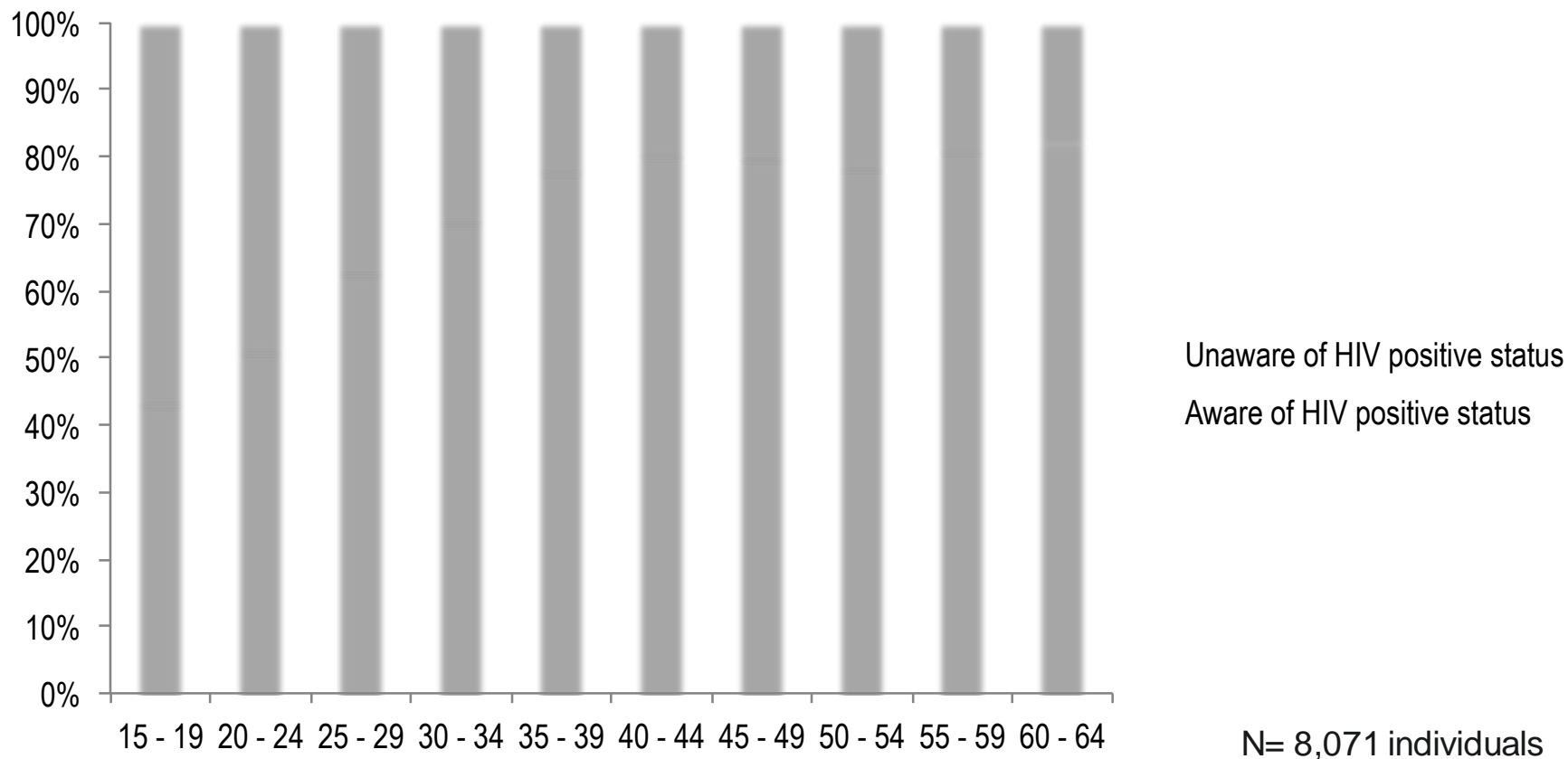
## Using data to identify the gaps in programming

Failure to identify young people under 35 and link them to treatment

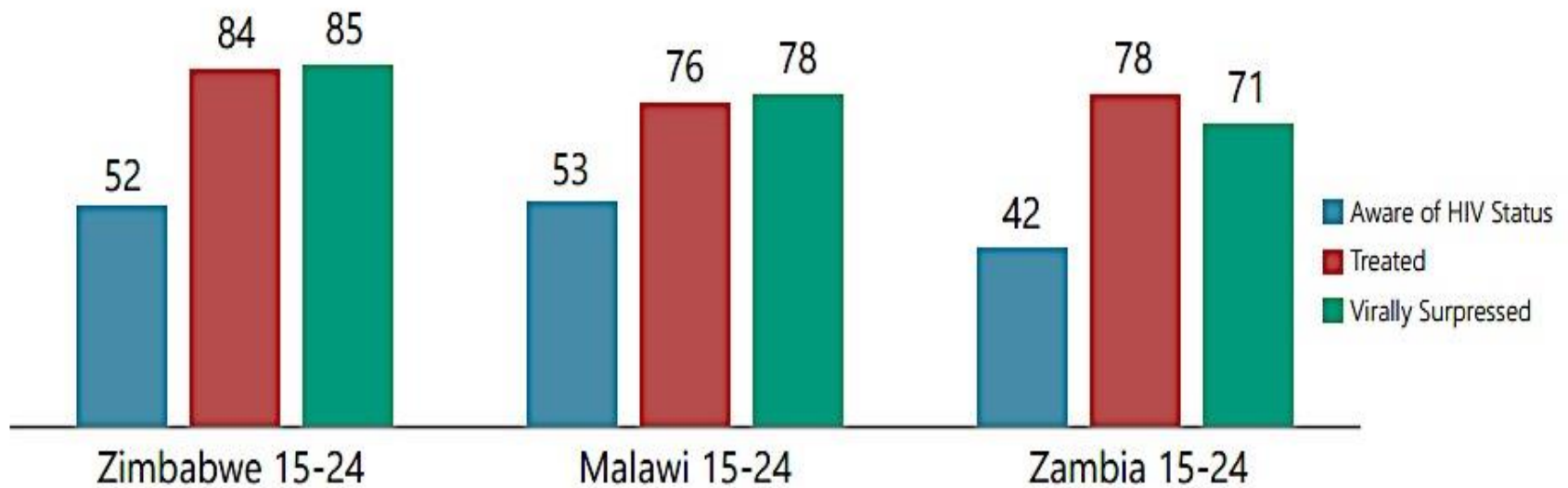


# Awareness of HIV positive status by age – those under 30 unaware they are HIV positive

Percent of HIV positive individuals aware of their HIV status, by age, Pooled data from Malawi, Zambia, and Zimbabwe, 2016

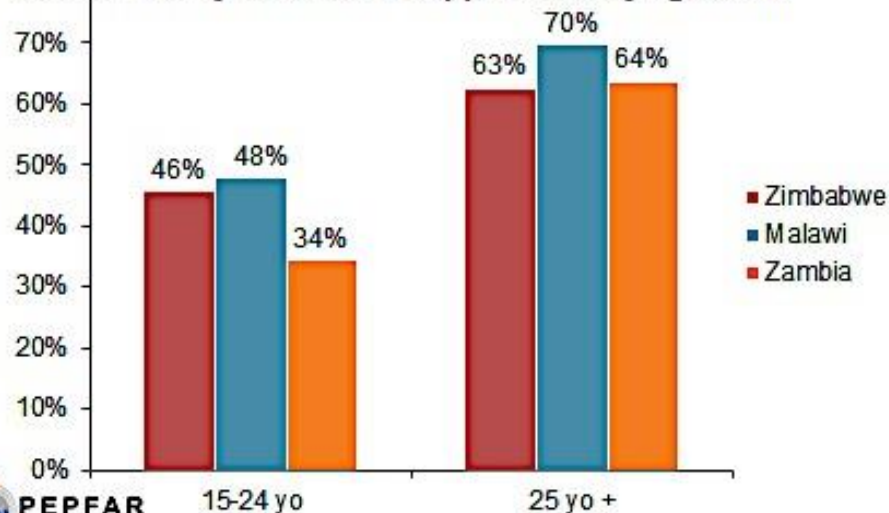


# Progress to 90/90/90 in adolescents and young adults (15-24 years old) (%)



## Viral Load Suppression in the community by age groups

Community Viral Load Suppression by Age, 2016



PEPFAR

PHIAs, 2016



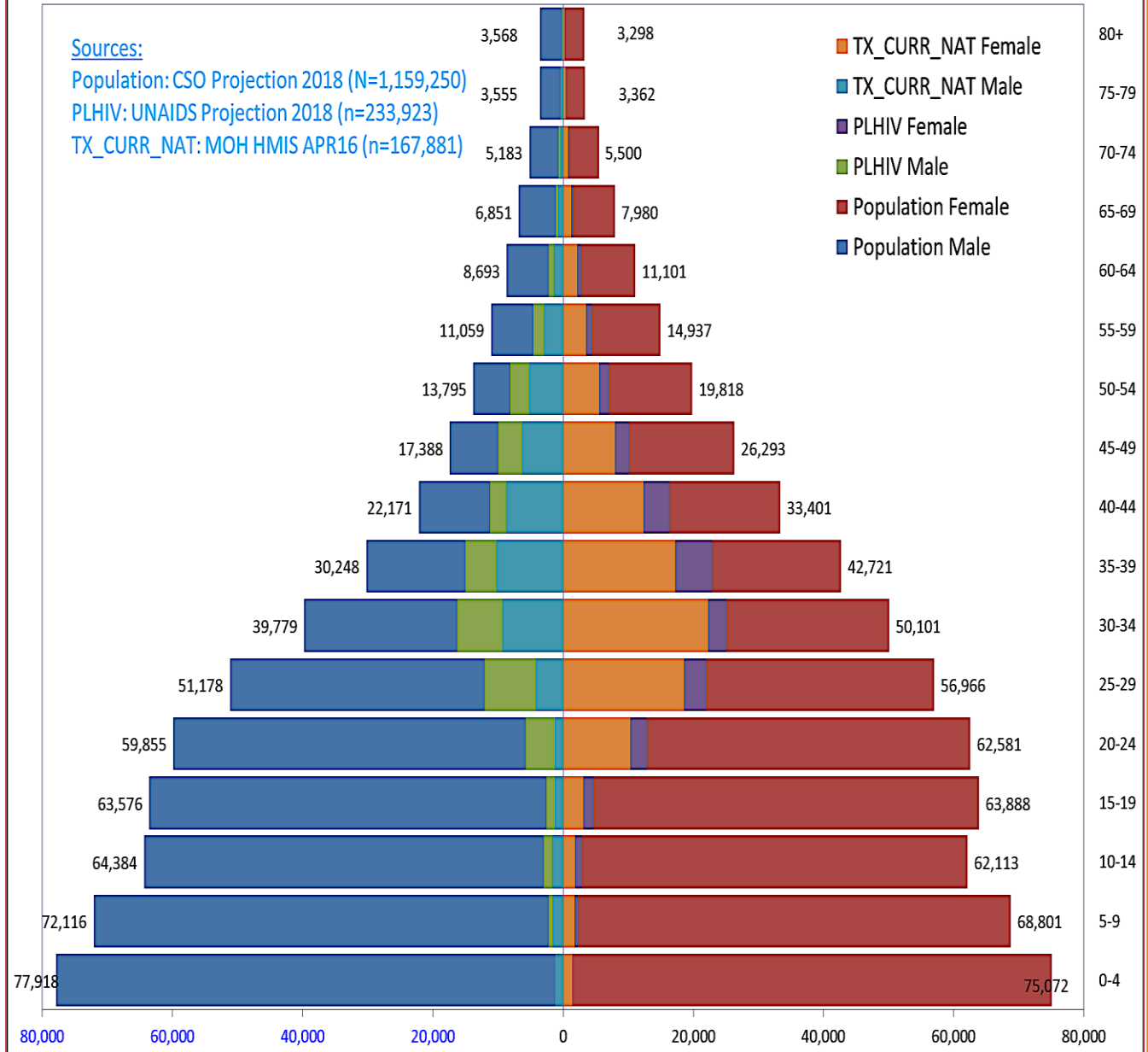
# Country-Specific Results:

Demonstrates the need to focus on case-finding  
and linkage to treatment

# Swaziland Population Pyramid

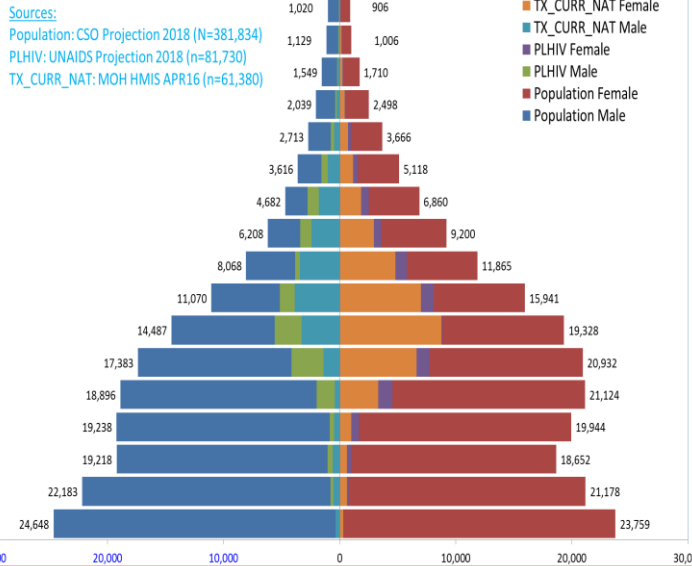
by sex, HIV  
positive status,  
and whether  
they are on  
treatment

Population, PLHIV, & TX\_CURR Pyramid, Swaziland

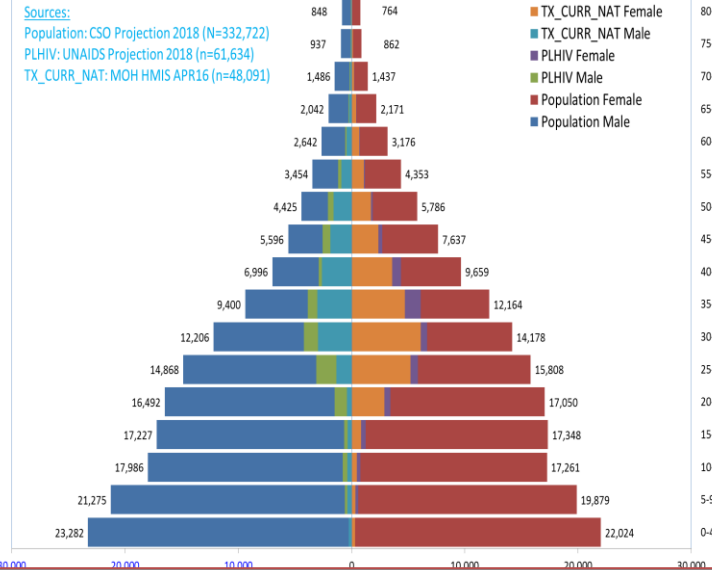


# Swaziland Population Pyramids – Regional

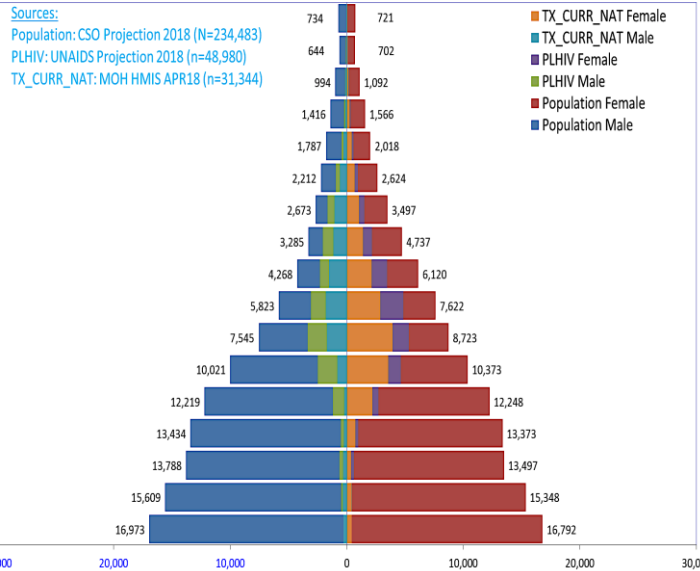
Population, PLHIV, & TX\_CURR Pyramid, Manzini



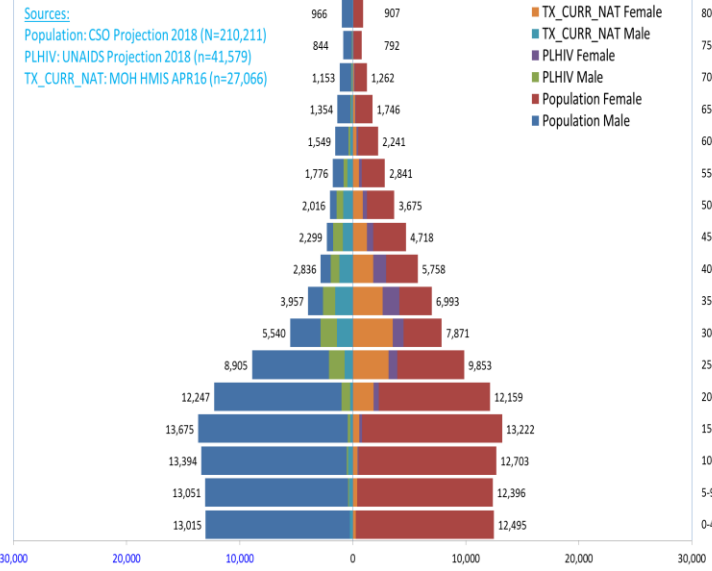
Population, PLHIV, & TX\_CURR Pyramid, Hhohho



Population, PLHIV, & TX\_CURR Pyramid, Lubombo

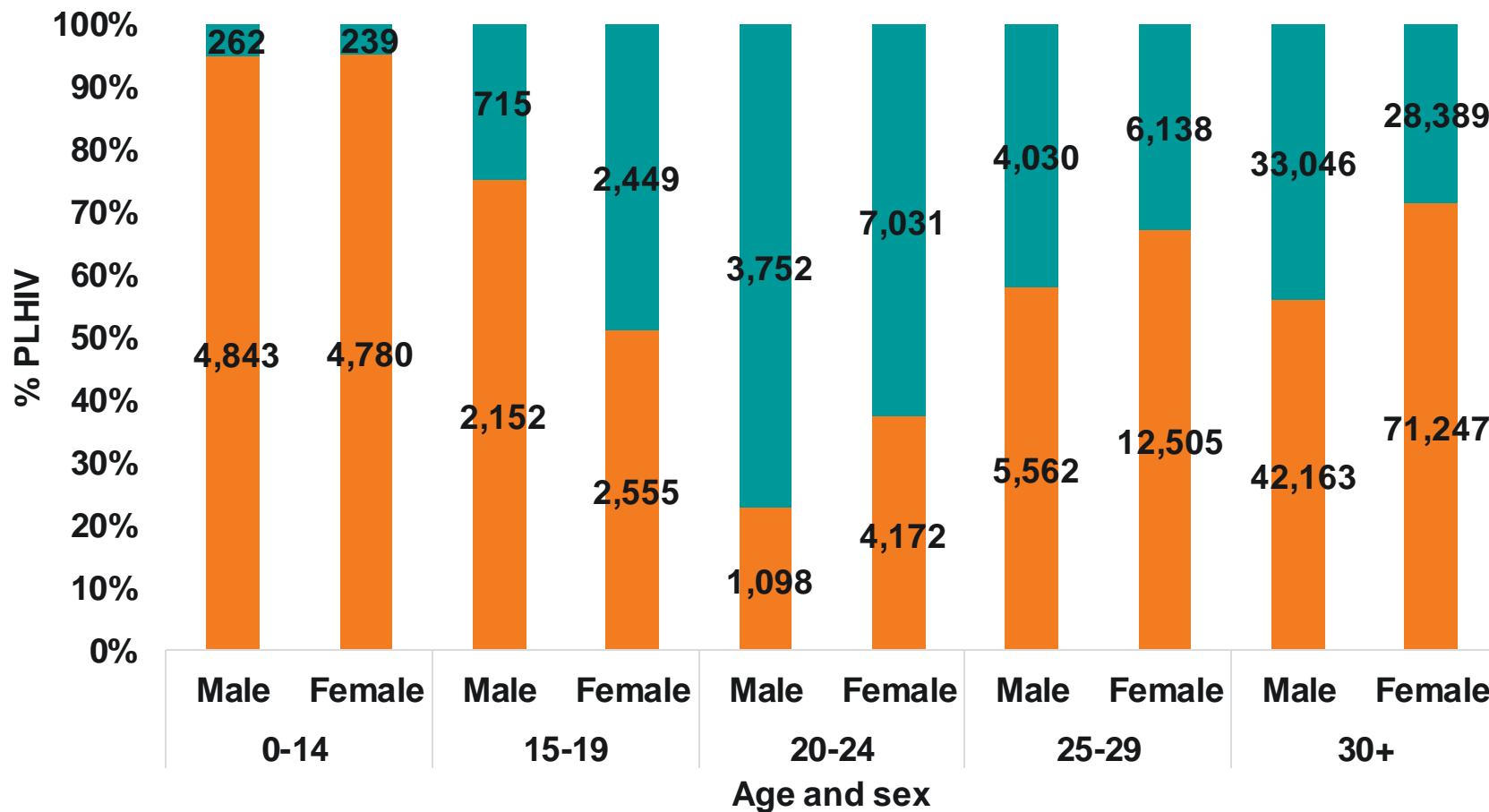


Population, PLHIV, & TX\_CURR Pyramid, Shiselweni



# Namibia: National ART Gap by Age and Sex

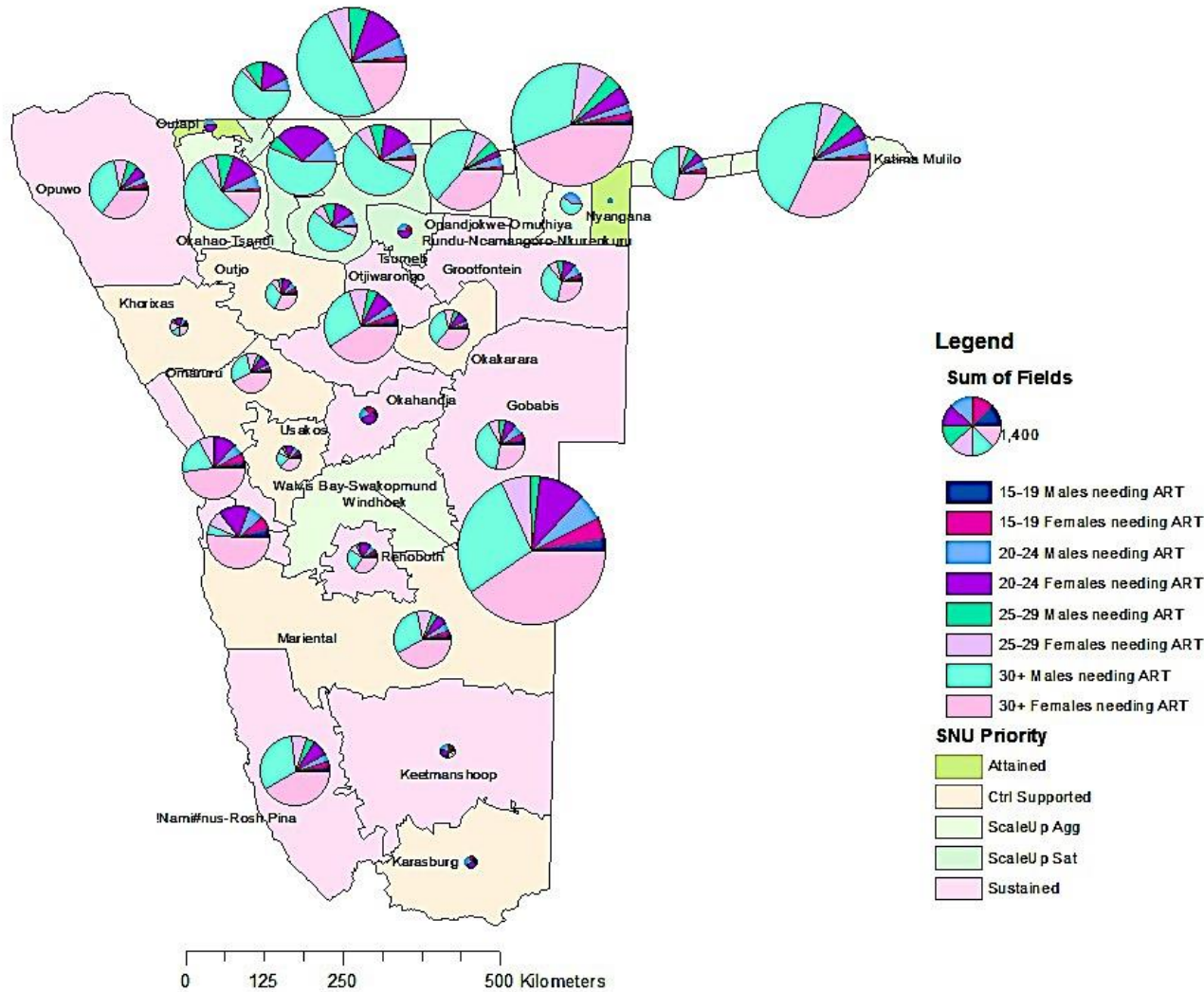
Young men and women aren't on treatment



■ On ART APR16 (%) ■ Rx Gap (%)

Source: PEPFAR Namibia & UNAIDS, 2017

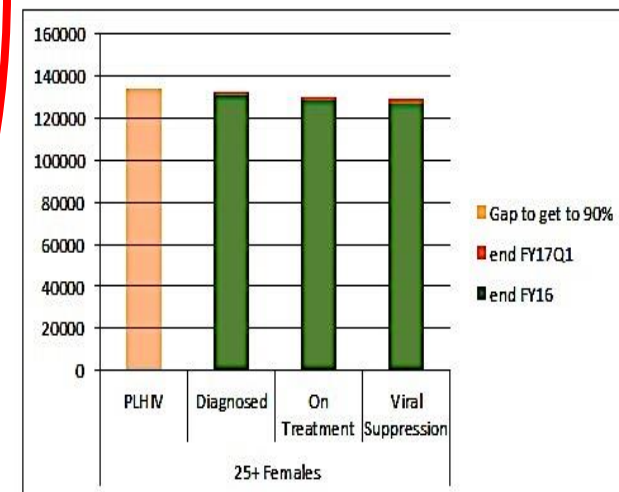
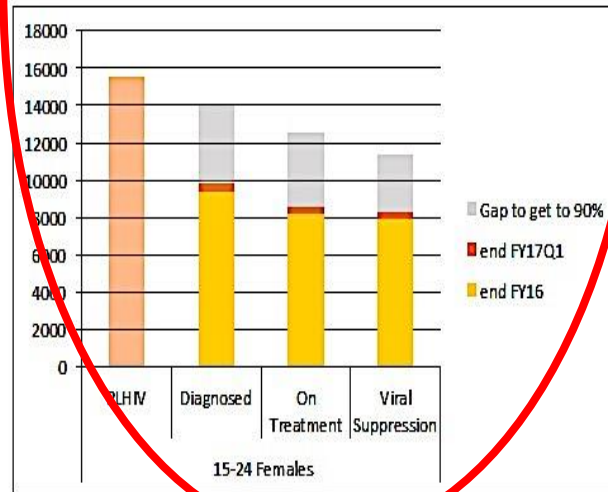
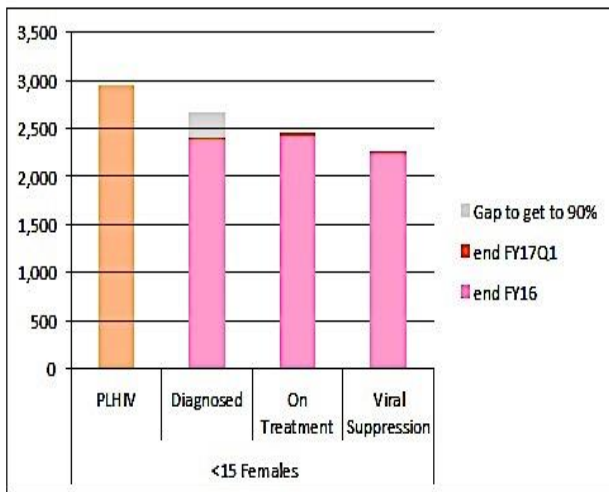
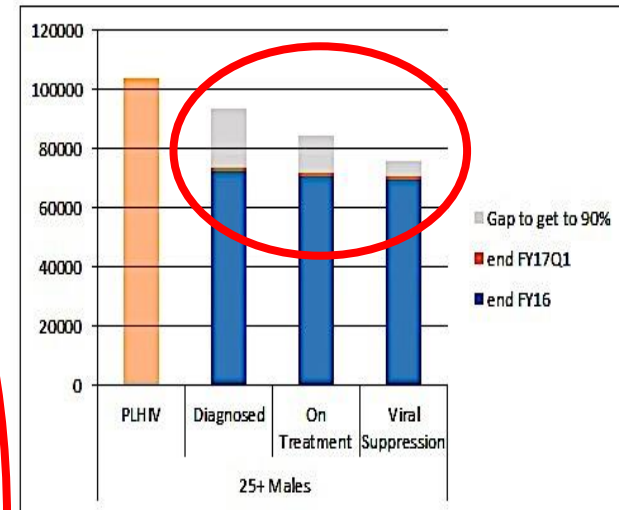
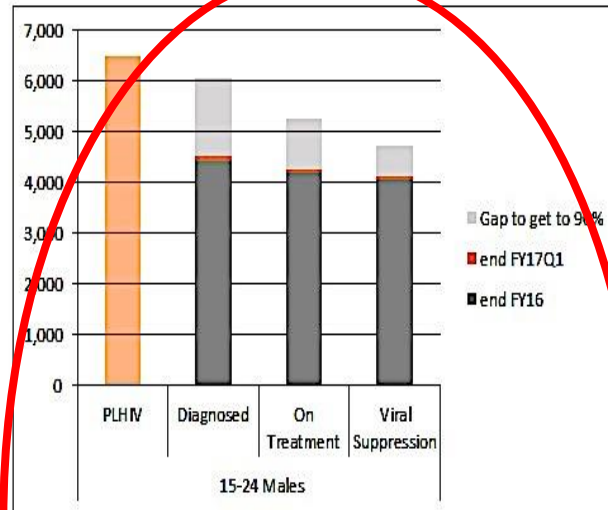
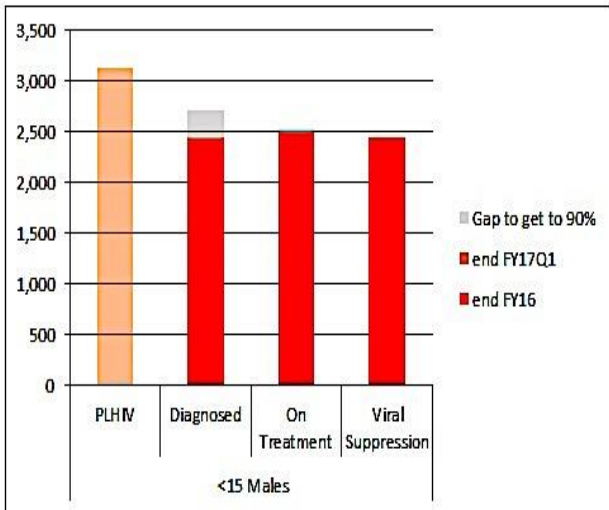
# Namibia: ART Gap by Age and Sex



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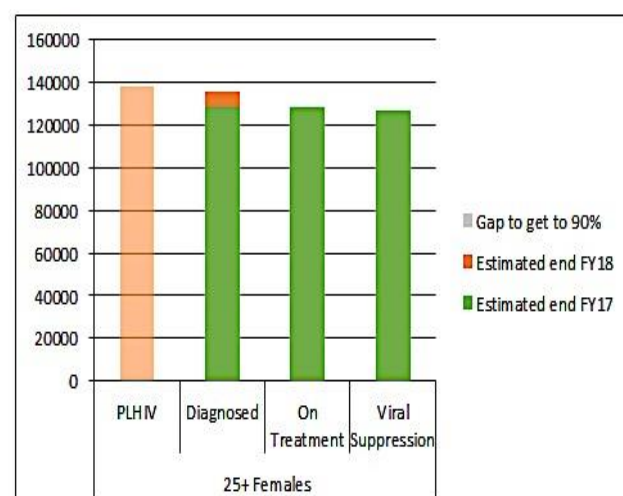
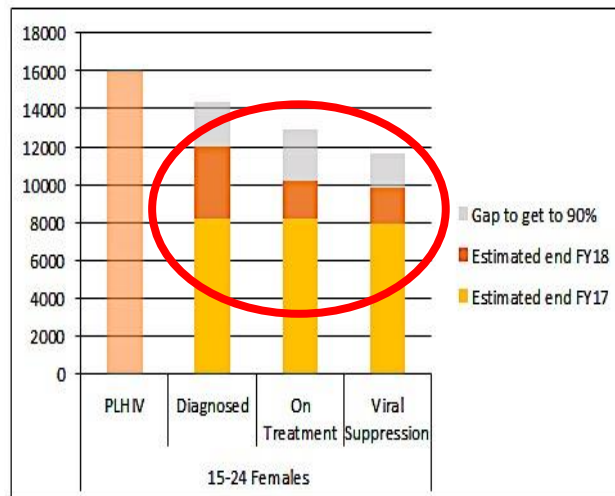
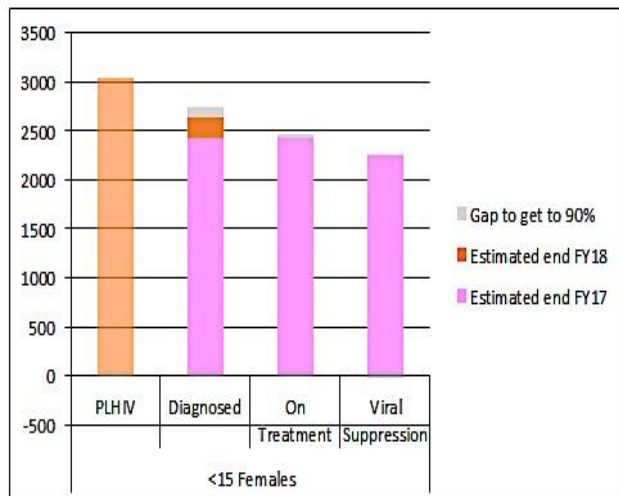
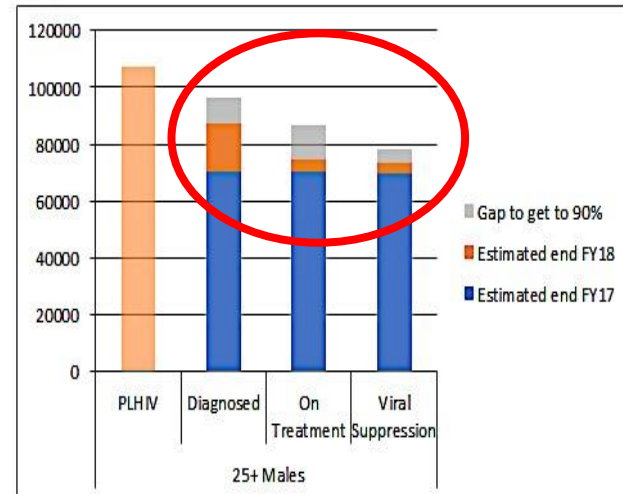
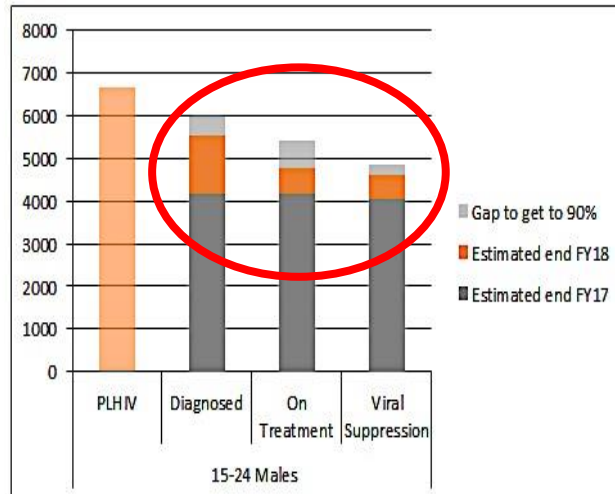
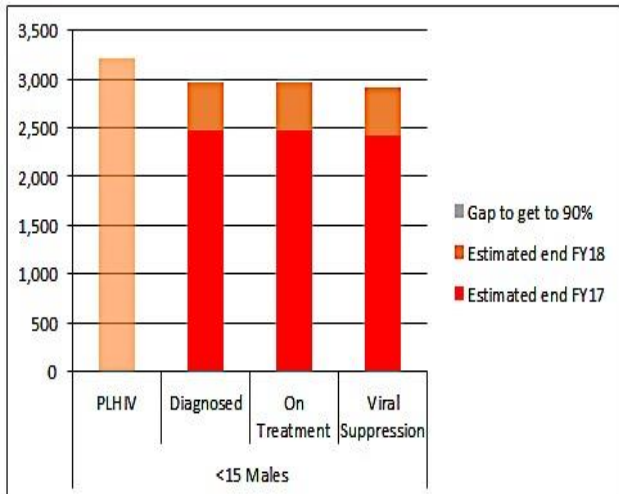
Source: PEPFAR Namibia, 2017

# Botswana : Cascades by Age & Sex as of FY17Q1 missing men across ages and young women





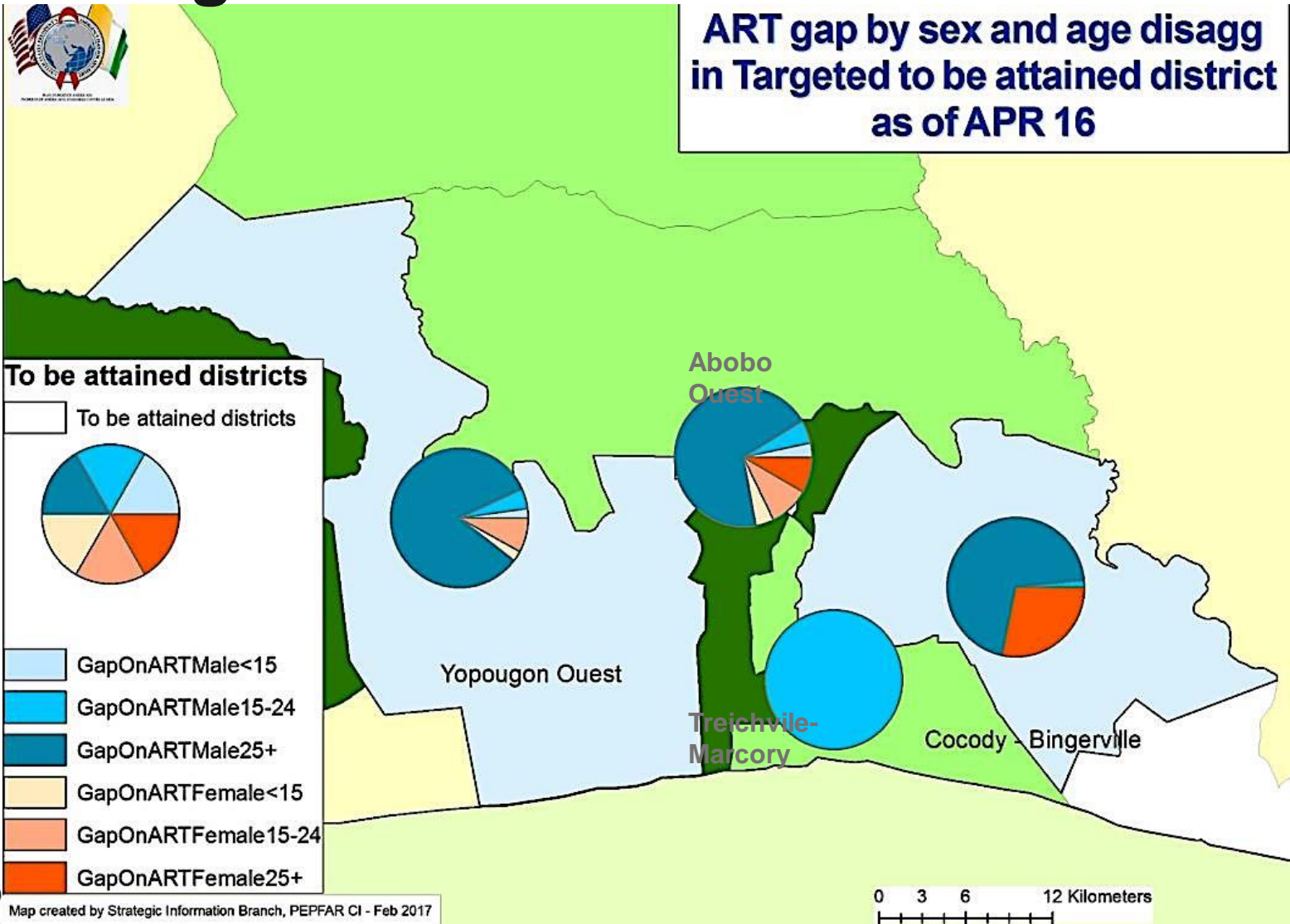
# Botswana : Cascades by Age & Sex as of end of FY18 – addressing the gaps in



# CI: Treatment Targets through 2020

Years	Target ART (All)	Target ART Coverage (All)	Male Target	Coverage Male	Female Target	Coverage Female
2016	211,600	46%	70,533	36%	141,067	53%
2017	262,200	57%	87,400	45%	174,800	66%
2018	312,800	68%	125,120	64%	187,680	71%
2019	363,400	79%	145,360	74%	218,040	82%
2020	414,000	90%	165,600	85%	248,400	94%

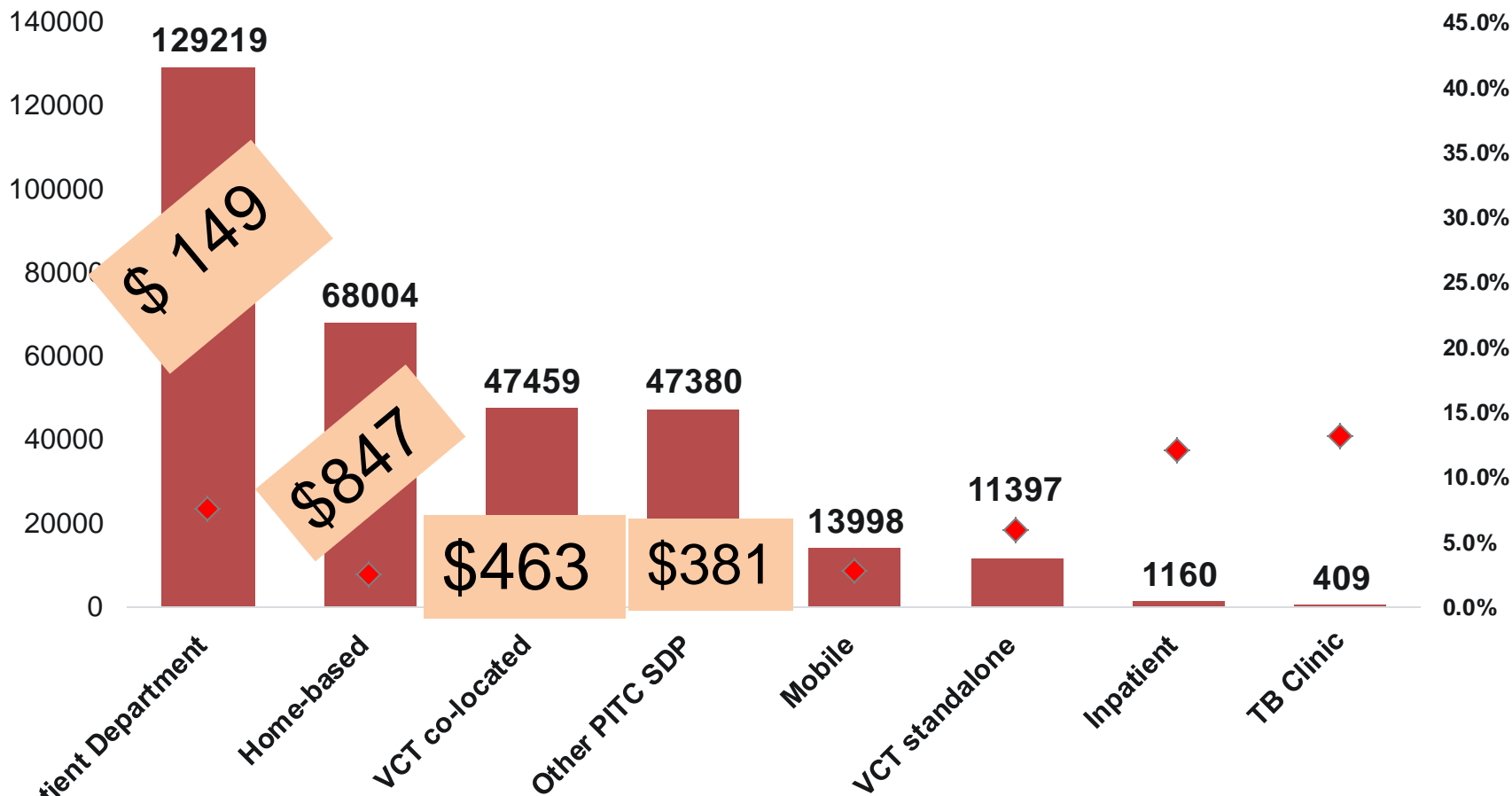
# CI: Map of ART Gap by Sex and Age in Targeted To be Attained Districts



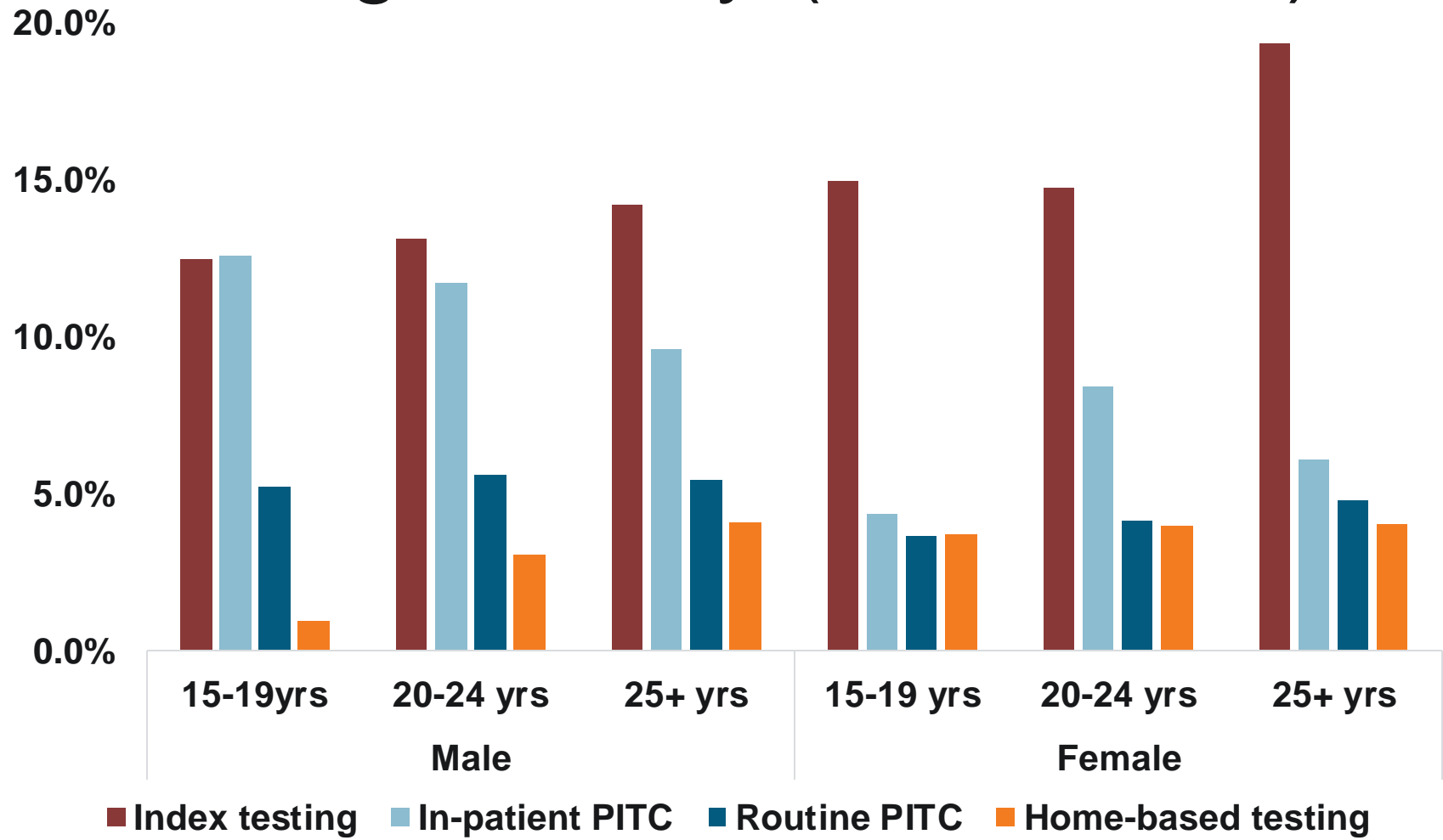
Map created by Strategic Information Branch, PEPFAR CI - Feb 2017  
 U.S. President's Emergency Plan for AIDS Relief

Source: PEPFAR CI, 2017

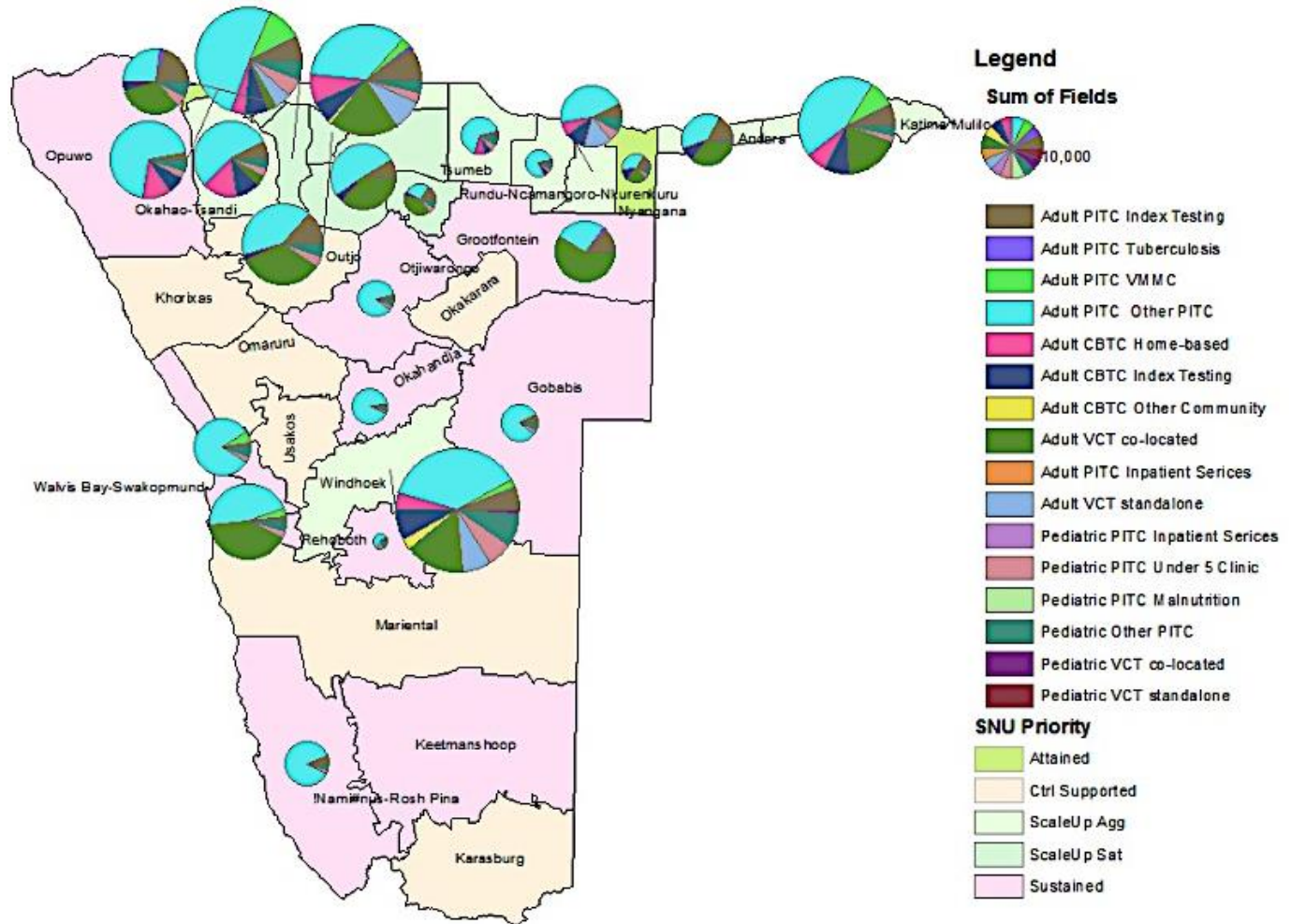
# COP15 HIV Testing Models, Yield and Cost Per Positive Case Identified



# HIV Test Yield by Age, Sex and Testing Modality (Q1, COP16)



# Testing by Modality by SNU Prioritization



0 125 250 500 Kilometers



Source: PEPFAR Namibia, 2017



# 8

## Accelerating Children's Treatment (ACT)

# ACT Results, 2015

PEPFAR is supporting

**567,000 children** with life-saving antiretroviral treatment in the ACT countries up from 300,000 just 12 months, 267,000 additional children on treatment and lives saved due to ACT

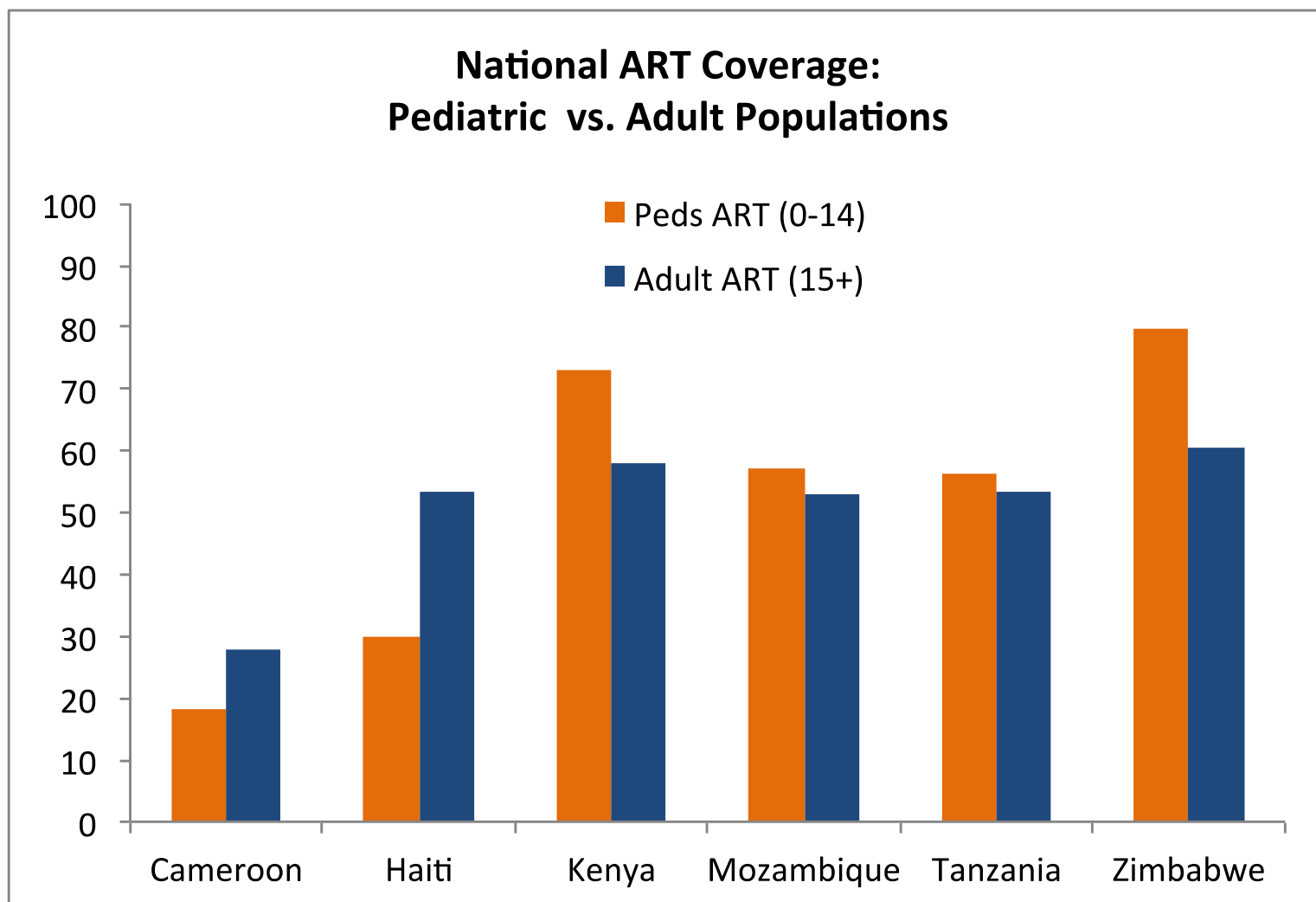
Importantly, **1.1 million children** are now on treatment through PEPFAR a 97% increase in 2 years.



Source: PEPFAR, 2015



# Pediatric vs Adult ART Coverage,



# 9

## Summary

Need for Continuous Assessment of The Epidemic in Real Time and Partner Performance

# Going forward

- Developing a assay that not only diagnosis HIV and if a recent infection
- Continuous Improved partner performance using quarterly data and cost analysis
- Must know the areas of higher transmission and understand the primary transmission risk by age group and population
- More aggressive prevention for young women 15-19 utilizing successful elements out of the DREAMS
- Aggressive Prevention for young men: continued expansion of VMMC
- New testing and treatment strategies needed to reach < 35 yo to ensure access to treatment

# Our work is far from done. This week:



Over 2,000 children died  
from HIV

Over 19,200 adults died  
from HIV

Over 2,800 babies were infected with  
HIV

Over 37,000 adults were infected  
with HIV, of which more than 7,500  
were young women



# Thank You!

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PEPFAR Dashboards  
Using Data for Decision Making



**PEPFAR**

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