Working Together to Achieve Sustainable Epidemic Control and End AIDS

37th UNAIDS PCB Meeting

Ambassador Deborah Birx, MD
U.S. Global AIDS Coordinator
October, 2015
DEFINING A SUSTAINABLE RESPONSE

And the steps needed to achieve epidemic control
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

Source: UNAIDS 2015

28 MILLION
Total HIV infections averted 2015–2030

Source: UNAIDS 2015
Global HIV Funding Has Plateaued and is projected to remain flat

Values in USD, billions

Committed: 1.6 2.2 3.6 4.3 5.6 6.6 8.7 8.7 8.7 8.8 8.3 8.1
Disbursed: 1.2 2.8 3.5 3.9 4.9 7.7 7.7 6.9 7.6 7.9 8.1 8.5

Source: Kaiser Family Foundation and 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.

How can we achieve epidemic control?

- Right things
- Right places
- Right now
The Right Things to achieve epidemic control

• Expand access to ART: test and start for everyone
  – Find & treat men living with HIV
  – Pregnant & breastfeeding women
  – Children & adolescents
  – MSM & transgender people, sex workers, people who inject drugs

• Develop alternative service delivery models

• Supply chain management: improve tendering & costs

• Prevent new infections in young women (15-24): DREAMS

• Prevent new infections in men (30-45): VMMC & treatment
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
  – Refine approach to targeting interventions
  – Collect & use facility-level data
  – Use programmatic data for continuous evaluation of investments
Right Now: Urgent need to control epidemic

• Achieving a sustainable response requires immediate action and focus
• We have a limited window to recalibrate response
  – Use of granular ‘real-time’ data to direct investments
  – Open sharing of data & transparency needed
  – Efficient policy changes and immediately implementation to accelerate evidence-based interventions

Do we have the collective will to focus, and to make difficult choices together to achieve epidemic control?
FRAMING THE EPIDEMIC TODAY

Where we’re at today, and where we need to be
Dramatic reductions in HIV Incidence Rates
Maintaining momentum is key to achieving epidemic control

Trends in HIV Incidence Rates, 1990-2013

Source: UNAIDS, 2015
% Change in New HIV Infections (2004-2014)

Source: UNAIDS, 2015
% Change in New Pediatric HIV Infections (2000-2014)

Source: UNAIDS, 2015
% Change In Adult New HIV/AIDS Infections (2000-2014)

Source: UNAIDS, 2015
Treatment as Core Prevention Intervention

Countries that scaled-up treatment faster, have reduced incidence more significantly over the past decade.

- Slower scale-up
- Faster treatment scale-up, with >60% coverage

Source: UNAIDS, Treatment 2015
Global Estimates (2014-15) vs the Gap to reach 90-90-90 Targets

- **36.9 million** HIV Positive People
- **19.8 million** Diagnosed
  - **Breakpoint 1**: 13.4 million Undiagnosed (53%)
  - **Breakpoint 2**: 14.9 million not treated (41%)
  - **Breakpoint 3**: 15.3 million Not Virally Suppressed (32%*)
- **15.0 million** On ART
- **11.6 million** Viral Suppression <1000

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
TEST & START: EXPANDING TREATMENT
New WHO ART & PrEP Guidelines

- Treat ALL (at any CD4) – all people living with HIV across all ages
- The sickest remain a priority (symptomatic disease and CD4<350)
- New age band for adolescents (ages 10-19)
- Option B not taken forward; Option B+ as new standard
- PrEP as an additional prevention choice for all people at substantial risk of HIV infection (>3% incidence)
Innovative Service Delivery Models for ART are Urgently Needed

- Moving to 6 month follow-up will immediately decongest and allow for rapid addition of new patients with only the addition of the drug cost
- To decentralize services & decongest crowded clinics
- To engage communities & improve retention
- To improve access for key populations such as PWID, MSM, TG, and sex workers
Extending ART Refills & Decentralizing ART

Kenya: 5% of people on ART
Uganda: 5% of people on ART
Nigeria: 5% of people on ART
Zambia: 5% of people on ART
Zimbabwe: 5% of people on ART
South Africa: 21% of people on ART
Ethiopia: 3% of people on ART
India: 6% of people on ART
Tanzania: 5% of people on ART
Malawi: 4% of people on ART
Mozambique: 4% of people on ART

Duration of drug refill:
- 3 months & more
- 2 months
- 1 month
- No data

Coverage of decentralized drug delivery initiatives:
- Community-based initiatives identified
- No major initiatives identified
- No data
Examples of ART Decentralization Models TASO, Uganda

Facility drug delivery Points (FDDP)

Clients coming to the facility for drug refill can directly go to the pharmacy without going through all other steps
- Reduced waiting time for the clients
- Optimization of facility resources: focus scarce resources (e.g., doctors) on clients really needing it

Community drug delivery Point (CDDP)

Stable PLHIV on ART receive their drugs & CD4 test outside the facility in their community
- Expert clients called Community AIDS support agents (CASA) who are in charge of supporting adherence & remind clients of their appointments

Community client-led ART Delivery (CCLAD)

Drug delivery duty can be partly delegated to clients
- CDDP clients are divided in Peer Support Groups (PSG) and only PSG leaders go to CDDP to pick up ARVs for all members

Source: TASO Uganda, 2015
Shared Responsibility

• Is not about money but about the **policy changes** that are essential to the elimination of HIV as a public health threat

• **Country leadership** on policies and adoption of WHO guidelines must be **within weeks and months** and not years

• Nearly **2/3** of the **cost of treatment is service delivery**, not the cost of drugs

• Change in policy to every 6 month appointments and tendering to allow 6 month supply of drugs will allow each current treatment site to **add 40-50% more clients on treatment** with the same facility personnel and cost
What would this mean for the next 12 months if we changed frequency of follow-up – assuming 75% of clients are eligible
Cost for seeing 1 client every 3 months or 2 clients every 6 months includes annual VL ($44/client) and required chemistries

<table>
<thead>
<tr>
<th></th>
<th>1st Line</th>
<th>Annual Lab</th>
<th>Service Delivery</th>
<th>TOTAL First Line</th>
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<tbody>
<tr>
<td>1-3mo/ f/u (1 client)</td>
<td>147</td>
<td>356</td>
<td>176</td>
<td>679</td>
</tr>
<tr>
<td>6-12mo f/u (2 clients)</td>
<td>294</td>
<td>200</td>
<td>176</td>
<td>670</td>
</tr>
</tbody>
</table>
ENDING MTCT AND TREATING CHILDREN

Virtual elimination of new pediatric infections & accelerating children’s treatment (ACT)
Number of new pediatric HIV infections, 2009-2014

Achieved to date (6 years):

~160,000 fewer new pediatric HIV infections annually

Remaining gap to virtual elimination of MTCT:

~ 140,000 annual new pediatric HIV infections

Source: UNAIDS Estimate, 21 Countries, 2015
Without lifesaving antiretroviral therapy for HIV-infected children, 50% will die before their 2nd birthday. 80% will die before age 5.
Pediatric Treatment: Percent of children <15 years living with HIV on lifelong ART by country, 2014

Source: UNAIDS Estimate, 21 Countries, 2015
Partnering to save children
PEPFAR & Children’s Investment Fund Foundation (CIFF)

Accelerating Children’s HIV/AIDS Treatment (ACT)

- $200M partnership
- Doubling the number of children receiving life saving ART
- FY 2017 Target: 600,000 on treatment
- Interim FY 2016 Target: 500,000 on treatment
- Countries: Cameroon, DRC, Kenya, Lesotho, Malawi, Mozambique, Tanzania, Zambia, Zimbabwe
DREAMS FOR YOUNG WOMEN & GIRLS

Ensuring young women are Determined, Resilient, Empowered, AIDS-free, Mentored and Safe
Age-Gender Disparity in New HIV Infections Globally, 2014

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

Source: UNAIDS 2014 estimates.
The DREAMS Partnership

- Launched on WAD 2014
- $280 million partnership
  - PEPFAR,
  - Bill & Melinda Gates Foundation, and
  - Nike Foundation
- Goal: to reduce new HIV infections in adolescent girls & young women
- Ensure that girls have an opportunity to live Determined, Resilient, Empowered, AIDS-free, Mentored and Safe lives.
Elements of the Core DREAMS Package

**Condoms**, increase consistent use and availability (female & male) + increasing contraceptive method mix

**Adolescent-Friendly Health Care**

**Violence prevention** and post-violence care, including PEP

**HTC:** HIV Testing and Counseling

**PrEP:** Pre-Exposure Prophylaxis

**OLDER MEN**

Dx and Linkage to Tx
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

Source: De Neve et al., The Lancet, 2015
RIGHT PLACES: COUNTRY EXAMPLES

Using Data to Understand micro-epidemics and refine our response
Uganda

We can be agile as governments and pivots can be sustained
New HIV Infections & AIDS Deaths: Uganda

Source: UNAIDS, 2015
Uganda: Focus on Core (Treatment)

PEPFAR Uganda Budget and Adults & Children on ART, 2008-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th>ART</th>
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<tbody>
<tr>
<td>2008</td>
<td>276,262,302</td>
<td>130,837</td>
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<td>2009</td>
<td>287,113,734</td>
<td>175,367</td>
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<tr>
<td>2010</td>
<td>286,258,372</td>
<td>207,872</td>
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<tr>
<td>2011</td>
<td>323,388,372</td>
<td>257,689</td>
</tr>
<tr>
<td>2012</td>
<td>298,388,372</td>
<td>364,207</td>
</tr>
<tr>
<td>2013</td>
<td>323,388,372</td>
<td>507,633</td>
</tr>
<tr>
<td>2014</td>
<td>320,000,000</td>
<td>643,458</td>
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Source: PEPFAR, 2015
Uganda: Focus on Core (PMTCT) B+ Acceleration

PEPFAR Uganda PMTCT: Testing of Pregnant Women & Lifelong ART for Mothers

Source: PEPFAR, 2015
Uganda: Focus on Core (VMMC)

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th>VMMC</th>
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<tbody>
<tr>
<td>2008</td>
<td>276,262,30</td>
<td>0</td>
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<td>2009</td>
<td>287,113,73</td>
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<td>323,388,37</td>
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<tr>
<td>2012</td>
<td>298,388,37</td>
<td>57,132</td>
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<tr>
<td>2013</td>
<td>323,388,37</td>
<td>352,039</td>
</tr>
<tr>
<td>2014</td>
<td>320,000,00</td>
<td>906,615</td>
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## 90:90:90 is within Uganda’s reach

<table>
<thead>
<tr>
<th></th>
<th>Infected</th>
<th>Diagnosed</th>
<th>Linked to Care</th>
<th>Retained in Care</th>
<th>On ARVs</th>
<th>Virally Suppressed</th>
</tr>
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<tr>
<td>FY 2015 Est. Cascade</td>
<td>1,439,974</td>
<td>1,066,948</td>
<td>1,008,952</td>
<td>933,805</td>
<td>918,453</td>
<td>485,359</td>
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<tr>
<td>GOU FY16 Targets</td>
<td>1,578,289</td>
<td>1,420,260</td>
<td>1,278,414</td>
<td>177,906</td>
<td>1,150,573</td>
<td></td>
</tr>
<tr>
<td>PEPFAR FY16 Targets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 90-90-90 Targets

- **Infected**: 1,578,289
- **Diagnosed**: 1,420,260
- **On ARVs**: 1,278,414
- **Virally Suppressed**: 1,150,573

**New Infections**: 422,214
**Additional patients needed to reach 90-90-90**: 90,000
**PEPFAR FY16 Targets**
90:90:90 is within Uganda’s reach and achievable in the next 12 months with an alteration to 6 months F/U, $5M to increase testing and $5M VL testing for all.
BUILDING HEALTH SYSTEMS

A sustainable response requires a strong health system
PEPFAR & Human Resources for Health

PEPFAR’s multimillion dollar HRH strategy links the following:

- Medical Education Partnership Initiative (MEPI)
- Nursing Education Partnership Initiative (NEPI)
- Field Epidemiology & Laboratory Training Program (FELTP)
- Partnership with African Society for Laboratory Medicine (ASLM)
- Global Health Service partnership with Peace Corps and Seed Global Health
>140,000 PEPFAR-supported HRH

- Over 4 years ago, Congress recognized importance of HRH
- Hyde-Lantos act called upon PEPFAR to train and retain at least 140,000 doctors, nurses, midwives, & other HRH
- FY 2010-2014, PEPFAR trained 141,677 new HRH
  - 95% in Sub-Saharan Africa

Source: PEPFAR, 2015
Supporting training for the most needed cadres of human resources for health

HRH Production, by Cadre

- Physicians: 6%
- Nurses: 36%
- Midwives: 16%
- Other HCW*: 42%

*Other HCW includes: laboratorians, pharmacy personnel, community-based workers, social workers, data & surveillance professionals, etc.

Source: PEPFAR, 2015
HRH are central to successful HIV response

None of PEPFAR’s achievements would have been possible without trained, dedicated human resources for health.

PEPFAR’s investments in HRH have been transformative:
- Quality of pre-service and in-service training vastly improved
- Future graduates will also benefit
- HIV services and total healthcare system improve concurrently

Example: FELTP graduates were crucial to Ebola response.
Strengthening Lab Systems, Saving Lives

• Built, renovated, or supported thousands of labs
  o HIV & other lab services
  o Sample transport networks
  o Training lab staff
  o Outbreak investigation

• Stepwise Laboratory Improvement Process Towards Accreditation (SLIPTA) in 29 African countries

• Support for African Society for Laboratory Medicine (ASLM)
Focusing Programs & HRH in the Right Places

• Highest burden countries
  – Prevalence & number of PLHIV

• Countries with greatest unmet need for services
  – Among general population
  – Among specific neglected populations

• Sub-national regions/districts with highest burden
  – Analyzing data to target programming geographically & among neglected populations

• Highest volume facilities
  – Analyzing site-level data to prioritize support to facilities and communities with greatest need
Kisumu: HIV Prevalence at ANC/PMTCT Sites

Source: PEPFAR, 2015
Site Prioritization: Priority Districts

Plan for detailed analysis to determine appropriate client referrals
ART sites volume / Scale-up and Maintenance districts

Low – High volume ART sites

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of ART sites</td>
<td>636</td>
</tr>
<tr>
<td>Low volume ART sites (&lt;= 25 patients)</td>
<td>196</td>
</tr>
<tr>
<td>High volume ART sites (&gt; 1,000 patients)</td>
<td>28</td>
</tr>
</tbody>
</table>

ART Sites volume

# ART patients (APR 14)

- 0 - 25
- 26 - 200
- 201 - 500
- 501 - 1000
- 1001 - 4337

Map created by Strategic Information Branch, PEPFAR CI - May 2015
CRITICAL ANALYSIS OF PEPFAR’S HSS PORTFOLIO

To ensure every dollar is invested as strategically as possible
Analyzing Investments in Health Systems

Difference in COP13 HSS Budget vs. Expenditures

COP 13 OHSS Budget  $296 M

EA 2014 HSS Expenditure  $750 M

Difference  $454 M
Analyzing Investments in Health Systems

Criteria for Investments in Health System Strengthening (HSS) in COP 15

1. Resource projections must show affordability and efficient allocation of resources
2. Teams must determine how much of the budget is carried by target achievement and how much by above-site support/strengthening activities
3. HSS programmed from non-OHSS budget codes not well coordinated or understood
4. Many HSS activities were redundant—costs carried by other program budget codes/targets, unnecessarily squeezed budget envelope
EMPOWERING CIVIL SOCIETY & PLHIV

Supporting civil society groups is key
The World Was Slow to Recognize the Global AIDS Crisis
Advocates Driving the U.S. HIV/AIDS Response

Advocates Demanded Change in US Domestic Response

- 1982: Gay Men's Health Crisis (GHMC) founded as first organized response to AIDS.
- 1988: ACT UP (AIDS Coalition to Unleash Power) demand FDA accelerate AIDS drug approval process
- 1990: ACT UP protests at NIH demanding more HIV treatments and the expansion of clinical trials to include more women and people of color
- 1991: Black Coalition on AIDS begins providing services targeted to people of color in San Francisco
Advocates Driving the Global HIV/AIDS Response

- **1983:** Brazilian civil society successfully pushed government to adopt first government AIDS program.

- **1987:** AIDS Support Organization in Uganda developed model for community-based care & launched concept of “living positively”.

- **1992:** first global networks of people living with HIV are established for global action: GNP+ and ICW.

- **2003:** PMTCT & treatment roll-out in South Africa would have been delayed or non-existent if not for the Treatment Action Campaign & AIDS Law Project.
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 should play a meaningful role in shaping HIV programs & have powerful voices within their countries
• Support from donors has been inadequate
• We must do more to support efforts of networks of PLHIV and civil society groups
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.
- Challenge new partners to contribute new resources and ideas to spark innovation.
SUMMARY

Key take-aways & top priorities
Do we have the collective will to focus?

- We have the opportunity to control the HIV/AIDS epidemic in countries by doing the **right things in the right places, right now** in partnership with host countries, UNAIDS, and GF.

- Do we have the collective will to **make the hard choices and policy changes for maximizing our impact** to reach more in need by focusing resources and efforts?

- Can we increase impact with **innovative service delivery models and alteration of follow-up intervals** to expand ART & prevent new HIV infections?

- **USG accountability** will continue to be enhanced to ensure achievement of the targets and ensuring HIV/AIDS epidemic control; **PEPFAR data will be available** to everyone for analyses.
Our work is far from done. This week alone…

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