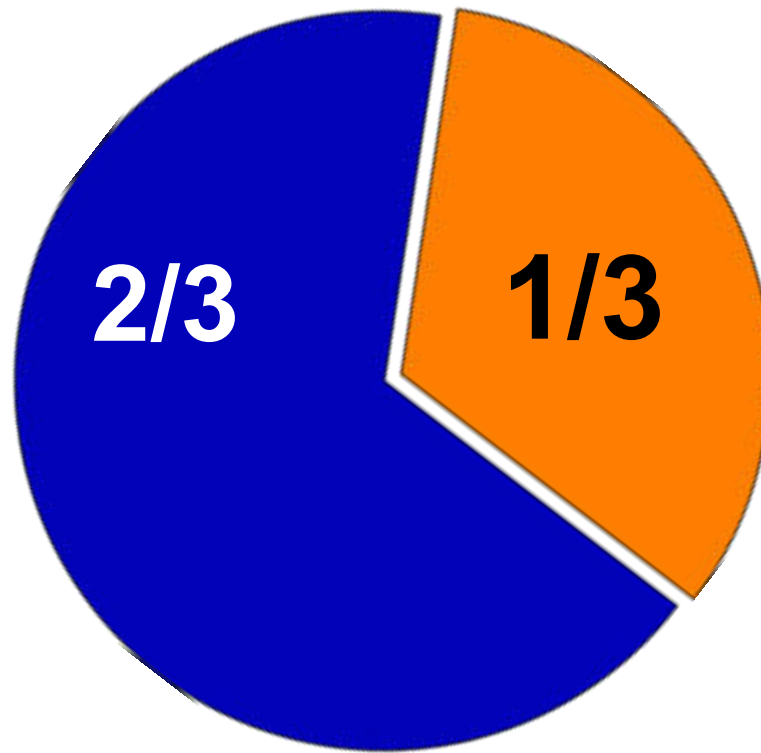


# Democratizing HIV Testing and Linkage to Care



**Diane Havlir, MD**  
**Professor of Medicine**  
**University of California, San Francisco**

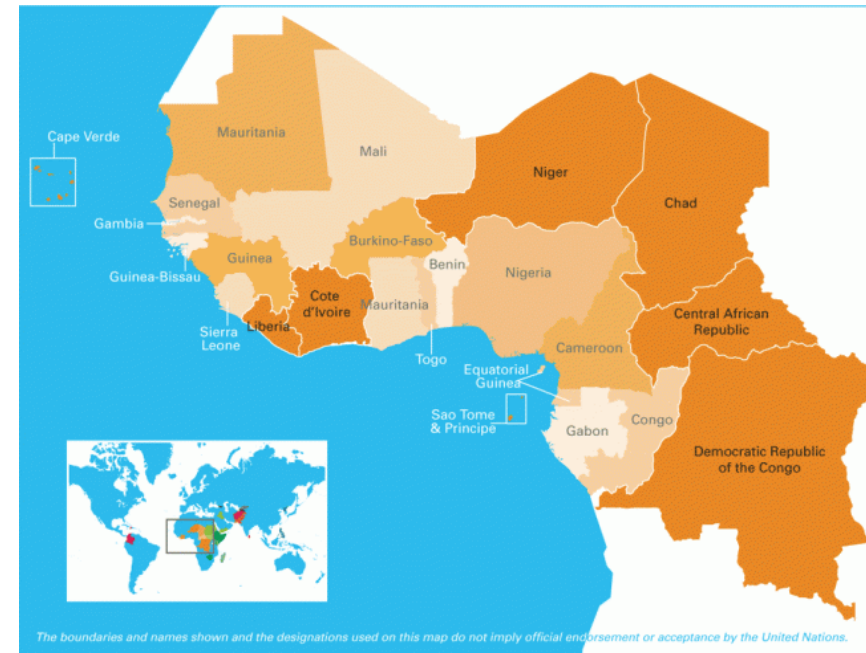
# Yesterday's Approach Falls Short of Today's Aspirations



Do not  
know HIV  
infected

# Realities— No one likes to talk about

- We are doing a “narrow” public health approach
- We are failing in some regions and sub-populations of the world
- We-- our provider attitudes and health systems-- are barriers to testing/linkage
- People die before they link to care



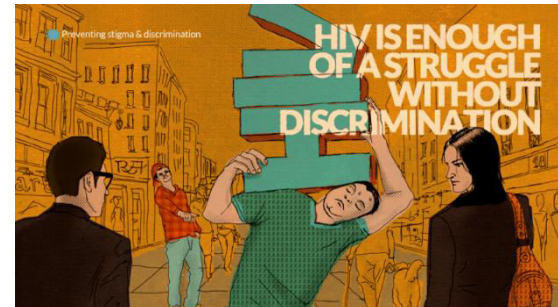
**West/Central Africa**  
**2/3 do not know HIV status**

# Democratizing HIV testing

- **Right to know**– without coercion for a preventable treatable disease
- **Autonomy**– how when and where testing is done
- **Accountability** – that testing services link clients to care and prevention rapidly

# Barriers to HIV testing

1. Lack of awareness of HIV risk and benefit of treatment for asymptomatic disease
2. Stigma, Discrimination
3. Cost and logistics



**SUPPORT PEOPLE WITH HIV:**  
**STOP THE CUTS**

# Re-Imagine the Public Health Package

Multi-disease testing and funding



Self Testing

Same Day  
Linkage to Care



# Multi-disease testing and funding

- Move out... of health facilities
- Move on ...more options: multi-disease testing and services
- Move to... new funding paradigm

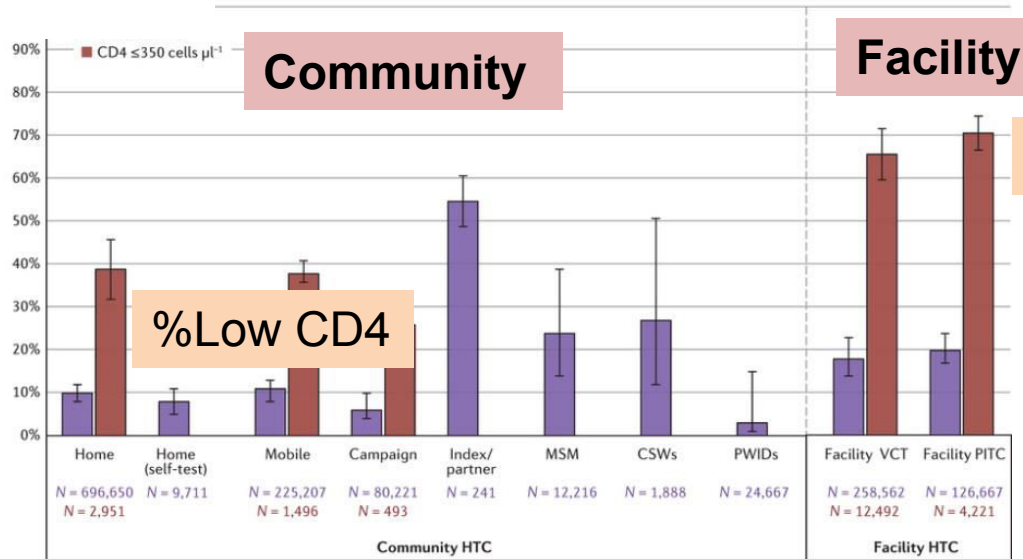
## **Addresses Barriers:**

- Awareness
- Stigma
- Cost



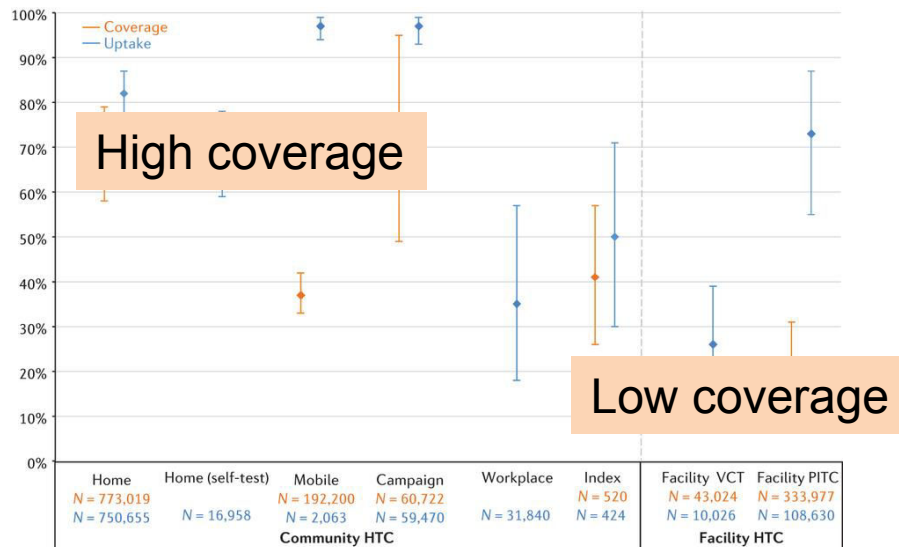
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# Moving Out of “Facility”=



%Low CD4

**Earlier Diagnosis**



**Higher “Coverage”**



1

# Community engagement required: All Genders, All ages. All in!

## MEN

- Multi-disease
- Football matches
- Boat rowing competitions
- Moonlight hours
- Priority to couples
- Bands and theater groups
- Motorcycle driver mobilizers
- Advertised in bars, churches, mosques, beaches, weddings
- Raffles



## YOUTH

- Involving in planning
- Paid to work in outreaches
- Social Media
- Activities appeal to youth
  - Sports and games
  - Peer advocates present at linkage and counseling



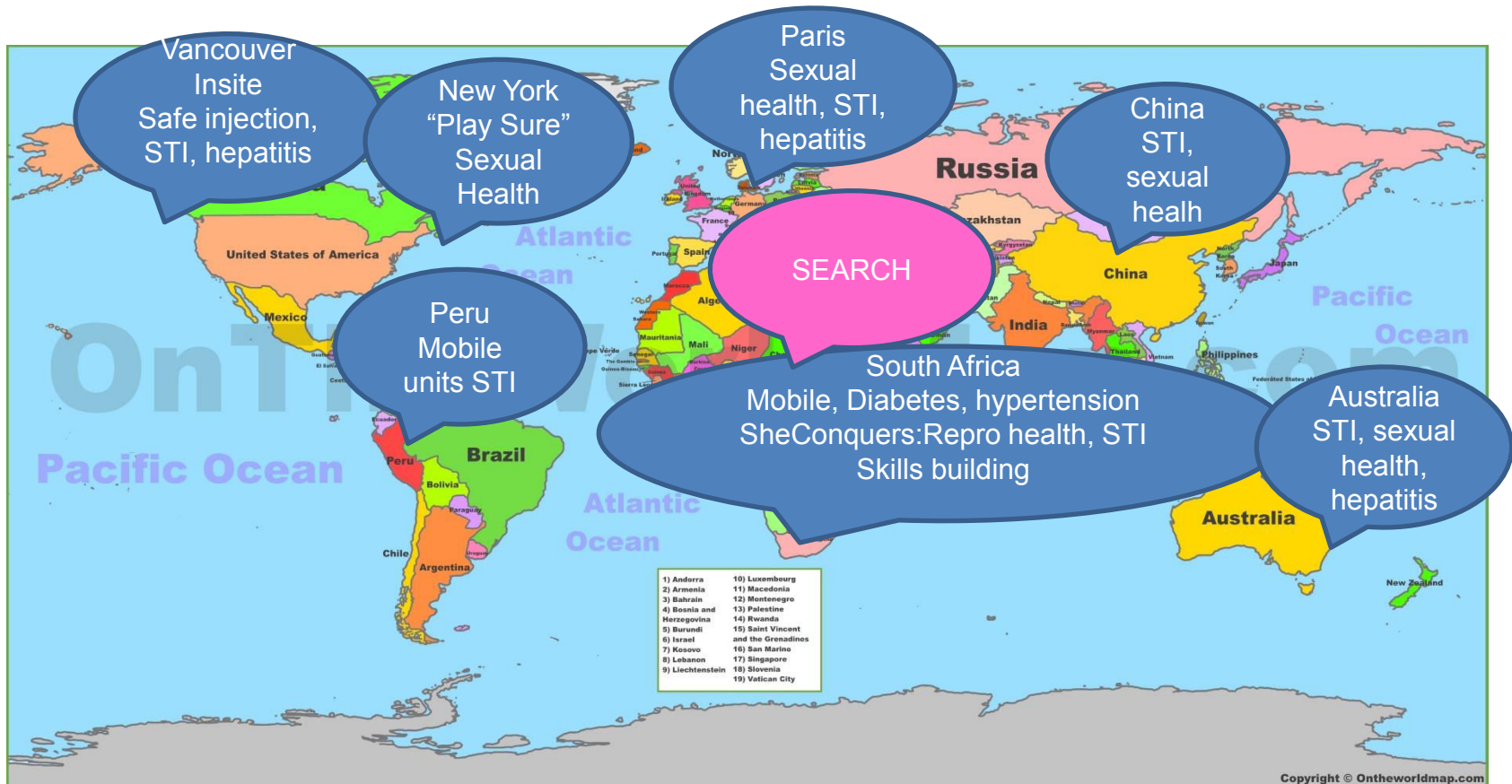
# Multi-disease testing and /services

## **ENABLE HIV testing**

- **Demand generation**
- **Stigma reduction**
- **Improved community health**

- Sexual health– STD testing, counseling
- Other infectious diseases: TB, malaria, hepatitis B and C
- Hypertension and diabetes
- Cancer screening: cervical, prostate, breast
- Common conditions-skin/eye
- Reproductive health
- PrEP, PEP

# Multi-Disease testing around the world



# SEARCH Testing Intervention: Annual Community-Based Testing

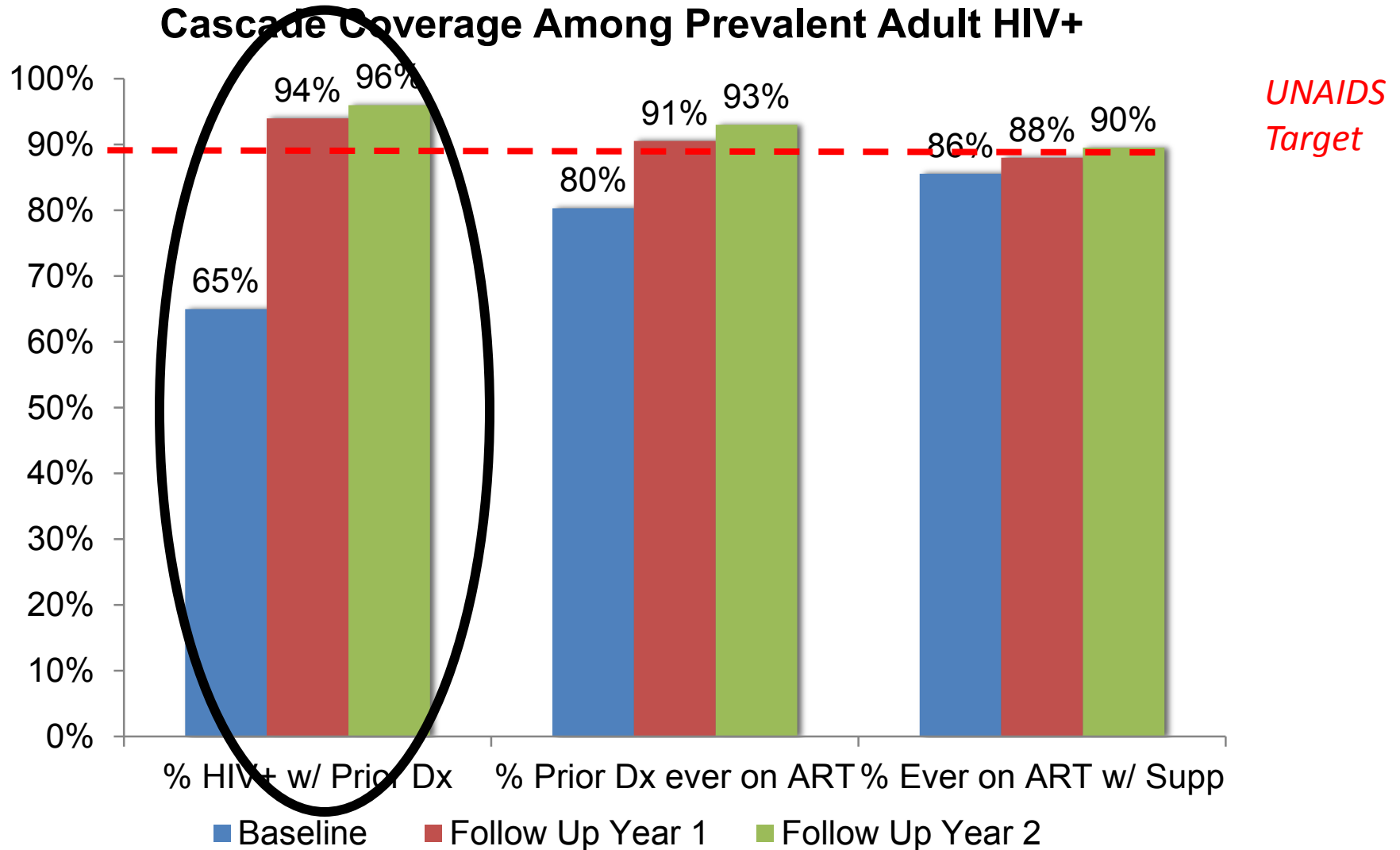
- **Goal:** >90% HIV testing
- **Approach:**
  - Community based, out of facility
  - Multi-disease: HIV, DM, HT, malaria, TB, sexual health, deworming, AMC, reproductive health
  - “Collapse the Cascade” - immediate link to public health services

1. Census/Mobilization
2. Two week Health Fair
3. Home testing for non-participants

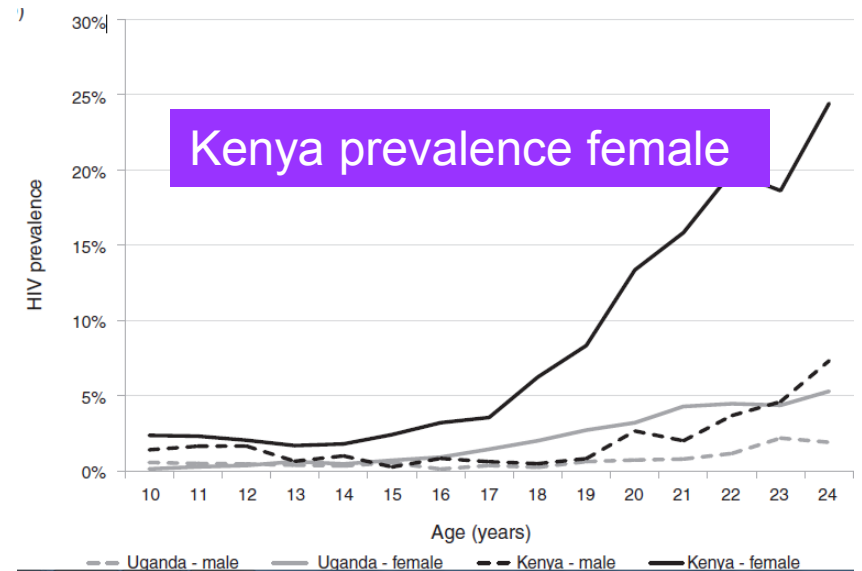
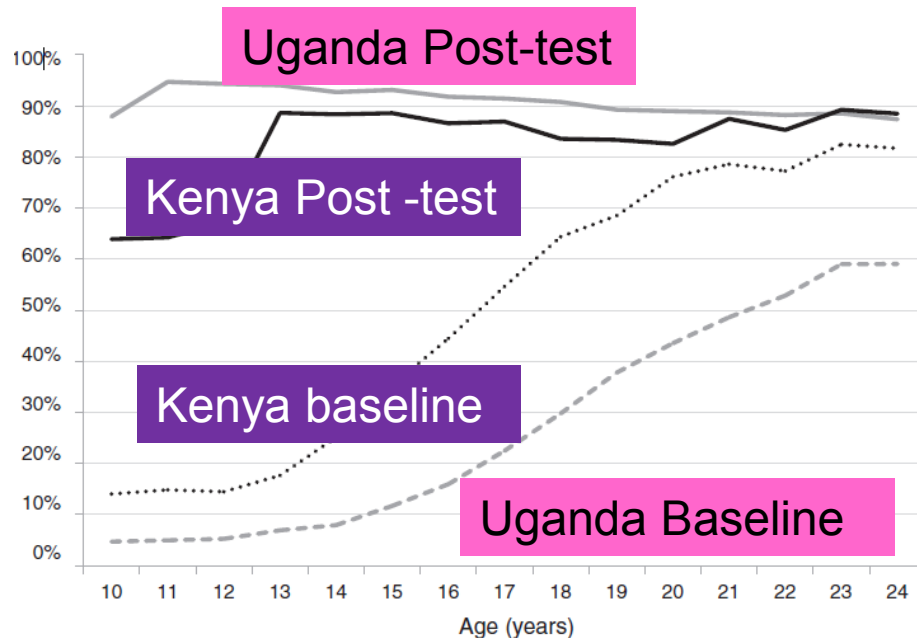
Chamie, *Lancet HIV* 2016



# UN AIDS 90-90-90 Target Achieved



# SEARCH Adolescent testing coverage increase from 22- 88%



- **Adolescents 10-24 years of age: 98,694**
- **HIV testing coverage increased from 28% to 88%**
- **57% of HIV+ new diagnosis**
- **Predictors of HIV+ with no prior testing: Male, Uganda, unmarried**

1

Q: Why do we need a new approach to funding?

A: Current Funding Model puts our continued success at risk

Investment in HIV testing based on “yield”

- As we move out from facility, yield goes down
- For low prevalence, non-concentrated epidemics, yield likely low
- As we succeed, yield decreases using current approaches



1

# Looking at HIV testing through a new lens

What about multi-disease services with a new funding paradigm?

- Demand generation increases; stigma decreases
- Success: Yield of all diseases, not just HIV
- Community Health Worker movement
- Move towards Sustainable Development Goals
- New Funding Paradigm: Multi-funded for Multi-disease with shared costs



That is not possible. You do not understand funding streams and politics



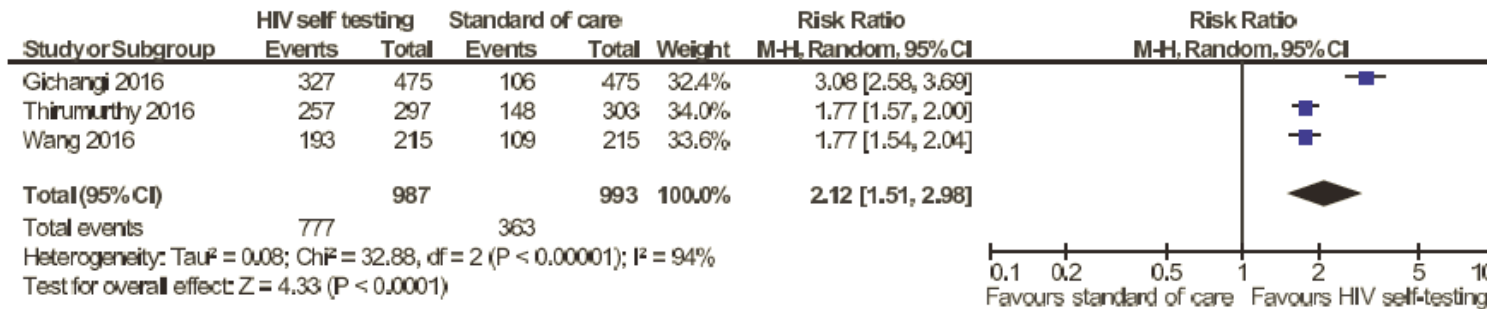
# HIV Self testing

## Addresses Barriers:

- Awareness
- Stigma



## HIV Self Testing 2 fold higher than standard care:



M-H: Mantel-Haenszel; CI: Confidence interval.

**Distribution pathways:** Community lay workers, mail, storefronts, home, health fairs, events (AMC), share among young adults, men, sex worker

# UNITAIDS Self testing Africa (STAR)

- 4.8 million HIV ST distributed across Malawi, Zambia, Zimbabwe, South Africa, Lesotho and Swaziland by 2020.
- Distributed 380,000 HIV self test kits in first year
- Door to door , lay-workers sex worker peers, men workplace, VAMC
- Outcomes– 12-26% first time use
- Increased uptake in youth and men



# “A hora e agora” Brazil



- “The time is now”
- Secure web based platform
- Free HIV oral ST
- Online tutorials/24 hour hotline
- Confirmatory testing at clinic



Home » Assista como fazer o teste



# Expectations

- Adds an option for testing
- Not the option for everyone
- Limitations
  - Does not detect acute HIV
  - May be cost prohibitive
  - Susceptible to counterfeits





# Same day Linkage

*“We should be measuring linkage to care in minutes not months from time of HIV diagnosis ”*

## Why?

- Subgroups—youth and men no linkage= no treatment
- Delay can = death

Diagnosis



Cascade Cliff

Linkage

## Barriers

Geography  
“Activation” energy  
Costs  
Clinic behavior



# HOW? RAPID San Francisco :

## Treatment on Diagnosis

HIV Test sites for new Diagnosis

Magnet/Glide  
AHP/DPH  
37%

Private/UCSF  
STM/CPMC  
22%

SF City  
Clinic  
14%

SFGH  
13%

Kaiser  
9%

Client Friendly



Referral as Needed  
RAPID program

Other  
9%

Private/UCSF  
STM/CPMC  
32%

SF City  
Clinic/DPH  
Clinics  
12%

SFGH  
26%

Kaiser  
14%

HIV Treatment Sites



# RAPID San Francisco : Treatment on Diagnosis

HIV Test sites for new Diagnosis

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SF City  
Clinic  
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SFGH  
13%

Kaiser  
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Client Friendly



Median time from  
HIV Diagnosis to  
viral suppression  
75 days

Other  
9%

Private/UCSF  
STM/CPMC  
32%

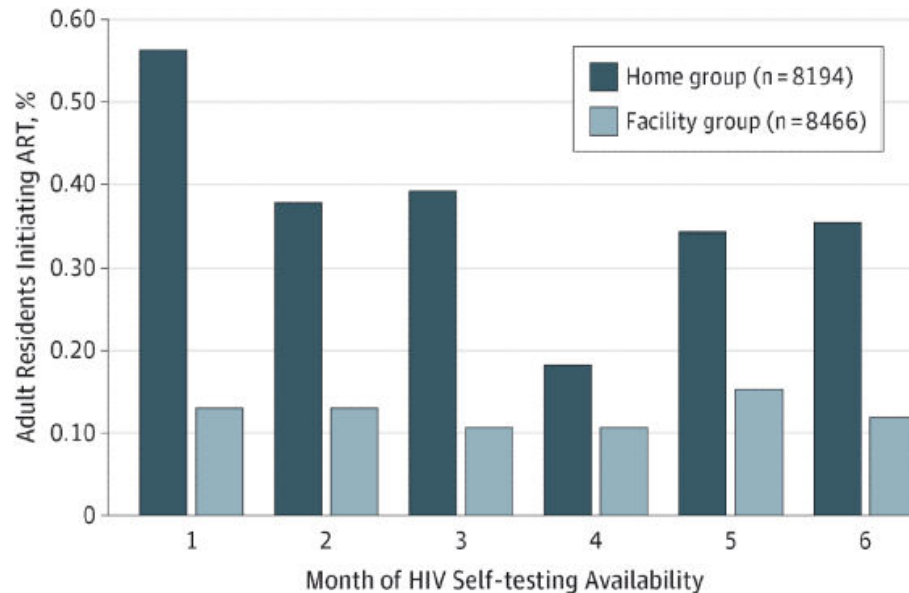
SF City  
Clinic/DPH  
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HIV Treatment Sites

# How: Malawi Same Day Linkage with HIV Self Test at Home!



**Figure 3. Cluster Resident ART Initiations During 6 Months of HIV Self-testing Availability**  
ART indicates antiretroviral therapy.

MacPherson, JAMA, 2014



HIV testing without  
same day  
linkage/ART start  
options

More research  
to get there

# Way forward: Democratizing HIV testing and linkage

## ACT NOW

Public Health Package:  
Multi-disease, multi-funded



Self Testing

Same Day Linkage

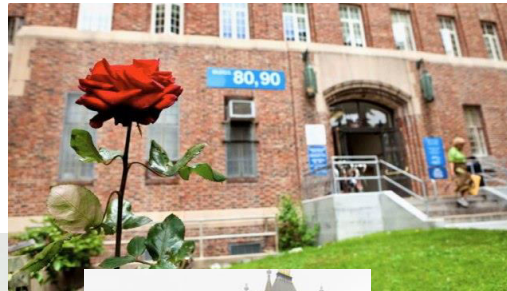
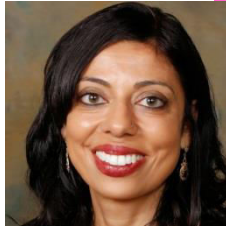
## PUSH FORWARD INNOVATION/EVIDENCE

- Data and technology tools
- Assays: Acute HIV, other diseases
- Human centered design
- Community health workers
- Research multi-disease funding models

**More Doors and More Open Doors -Leave Fewer Behind**

# Acknowledgments

*Begin, be bold and venture to be wise*  
Horace



Edwin Charlebois, Monica Gandhi, Tamara Clark, Moses Kanya, Maya Petersen, Gabe Chamie, Vivek Jain, Annie Luetkemeyer, wonderful SEARCH team, Michele Sidibe, Badara Samb, UNAIDS, Ambs Eric Goosby, Deb Birx, Haileyesus Getahun, and HIV unit WHO, Chris Beyrer, Johns Hopkins, Tony Fauci, Carl Dieffenbach, Melanie Bacon, NIH. Special thanks to all my trainees.

