

# ***Getting to 90-90-90 in Asia and the Pacific***

***11th Regional Management Meeting,  
UNAIDS Regional Support Team for Asia and the Pacific***

***25 October 2014, Bangkok***

*Setting the scene:*

***90-90-90: ambitious treatment targets to help end AIDS in Asia and the Pacific***

**Dr. Michael Cassell, Regional HIV and TB Advisor, U.S. Agency for International Development, Regional Development Mission Asia**

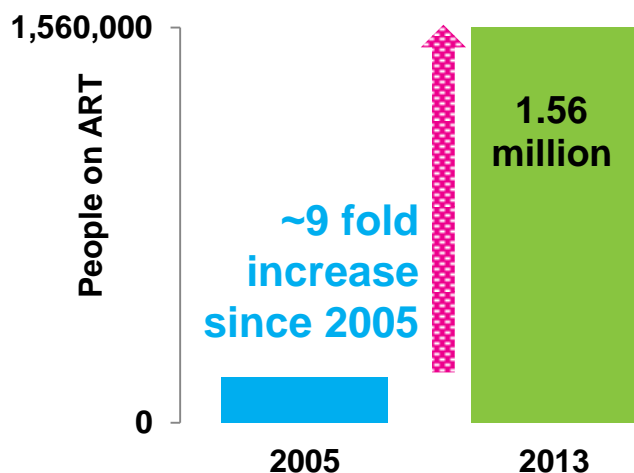
# The commitment: 2011 Political Declaration

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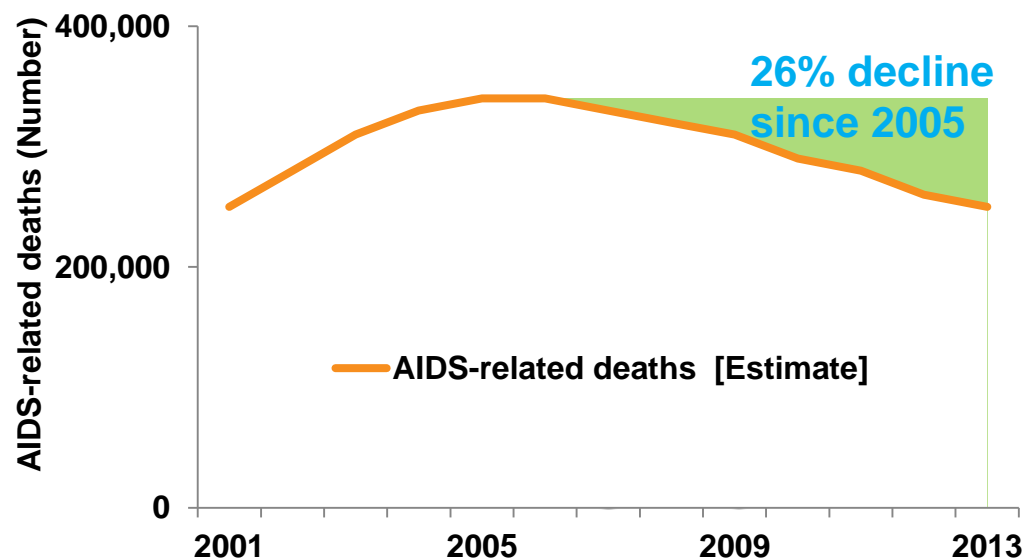
**ZERO NEW HIV INFECTIONS.  
ZERO DISCRIMINATION.  
ZERO AIDS-RELATED DEATHS.**

# Treatment saves lives: AIDS-related deaths are declining in Asia and the Pacific

People receiving ART



AIDS-related deaths, Asia and the Pacific, 2001-2013



Getting to zero



# New tools, old challenges

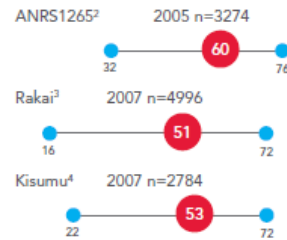
EFFICACY OF AVAILABLE BIO-MEDICAL PREVENTION INTERVENTIONS DERIVED FROM RANDOMIZED CLINICAL TRIALS. MODIFIED WITH PERMISSION FROM MARRAZZO ET AL, JAMA, IN PRESS, 2014.\*

## Treatment as Prevention (TasP)

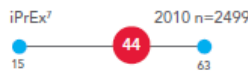
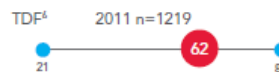
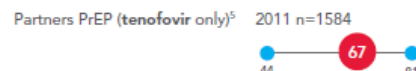
Immediate antiretroviral therapy for HIV-positive partner



Medical male circumcision

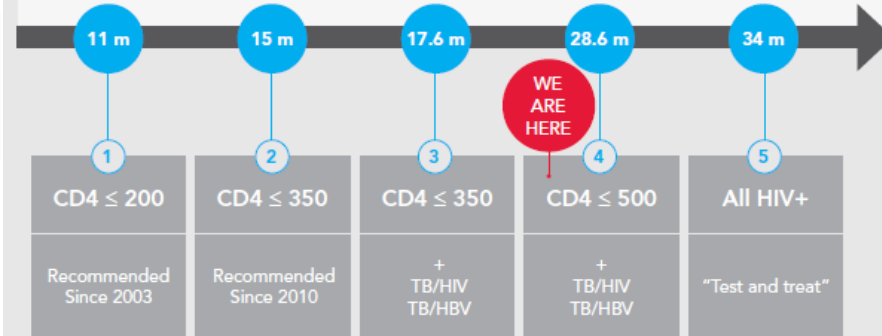


Tenofovir/emtricitabine oral pre-exposure prophylaxis



Efficacy (with 95% confidence interval)

Estimated millions of people eligible for ARV in LMIC in 2012



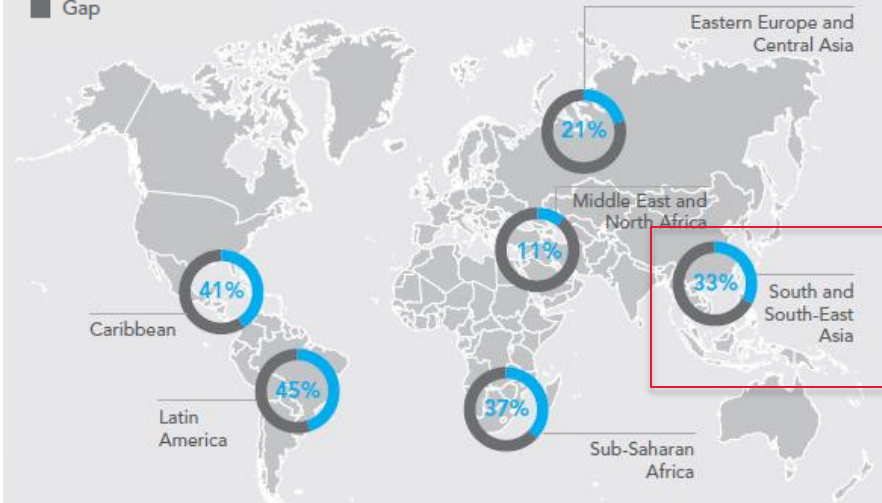
Scenarios of ARV eligibility

ART regardless of CD4 count for:

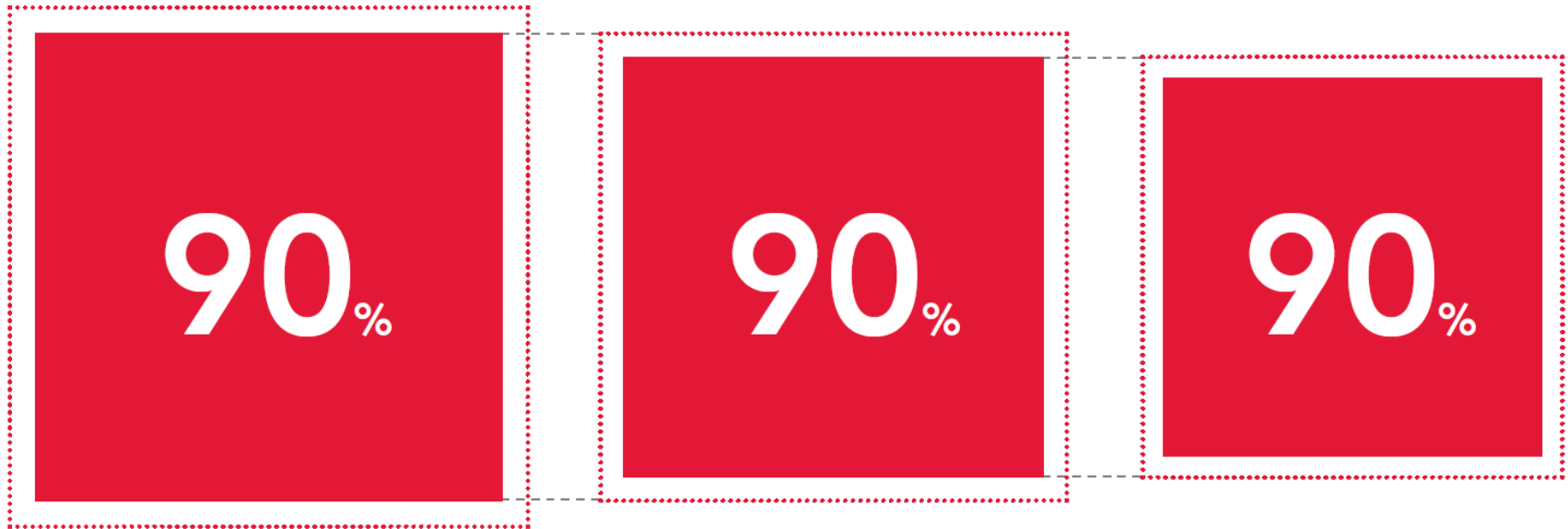
- Serodiscordant couples
- Pregnant women
- Children < 5 years

Source: WHO 2014

■ Total ART coverage  
■ Gap



# A “crystal-clear” roadmap...



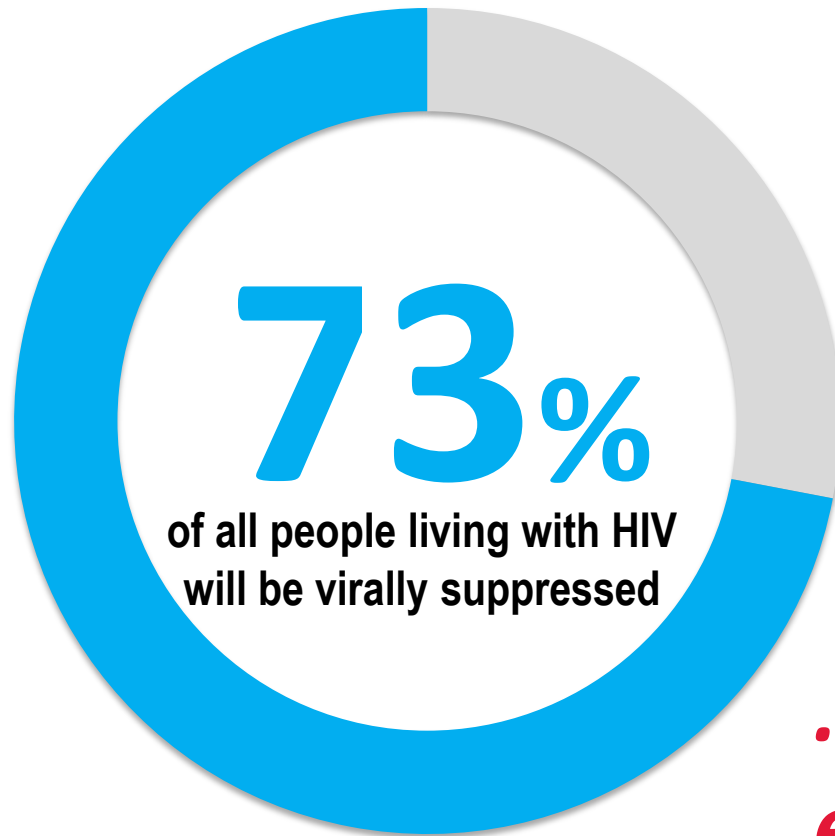
diagnosed

on treatment

virally suppressed

*...by 2020...*

# ...and the promise

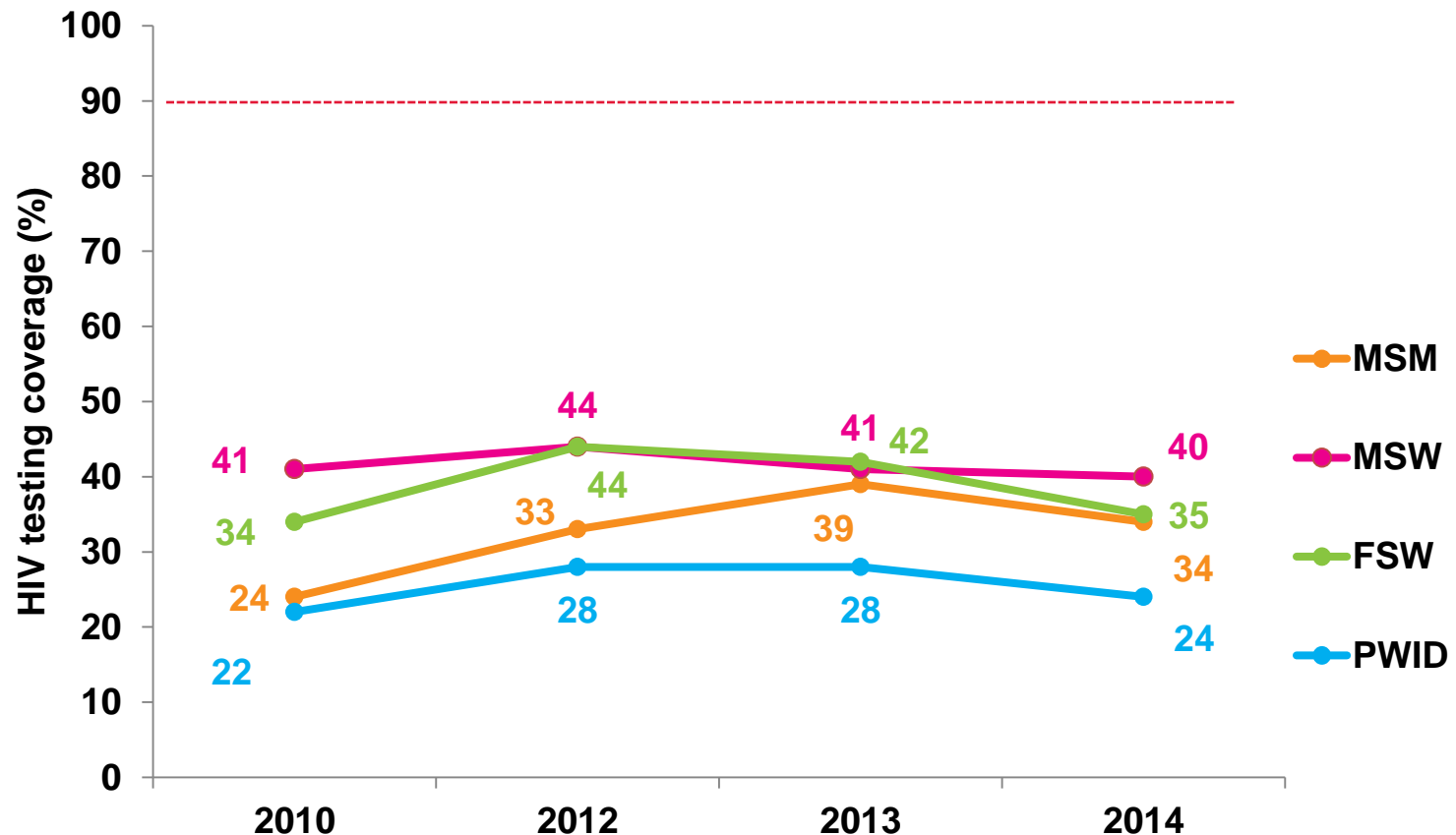


...a three-fold increase  
over current estimates...

*...an end to the AIDS  
epidemic by 2030.*

# HIV testing is the entry point for treatment, but testing coverage among key populations remains low

HIV testing coverage among key populations  
(Asia-Pacific regional median trend\*)



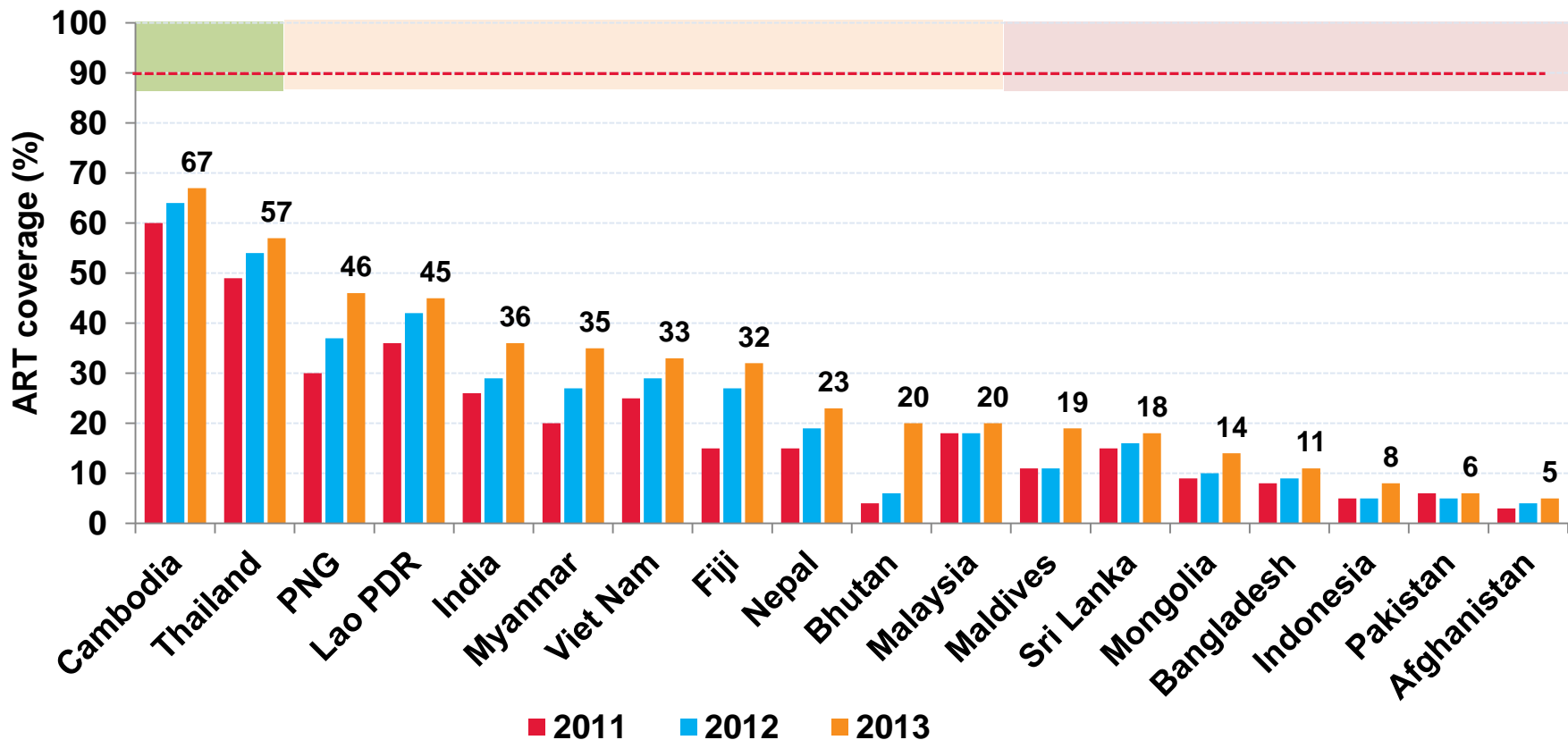
\* latest available data from UNGASS/ Global AIDS Response Progress Reporting (GARPR) 2010 to 2014

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# Trends in antiretroviral therapy coverage 2011-2013



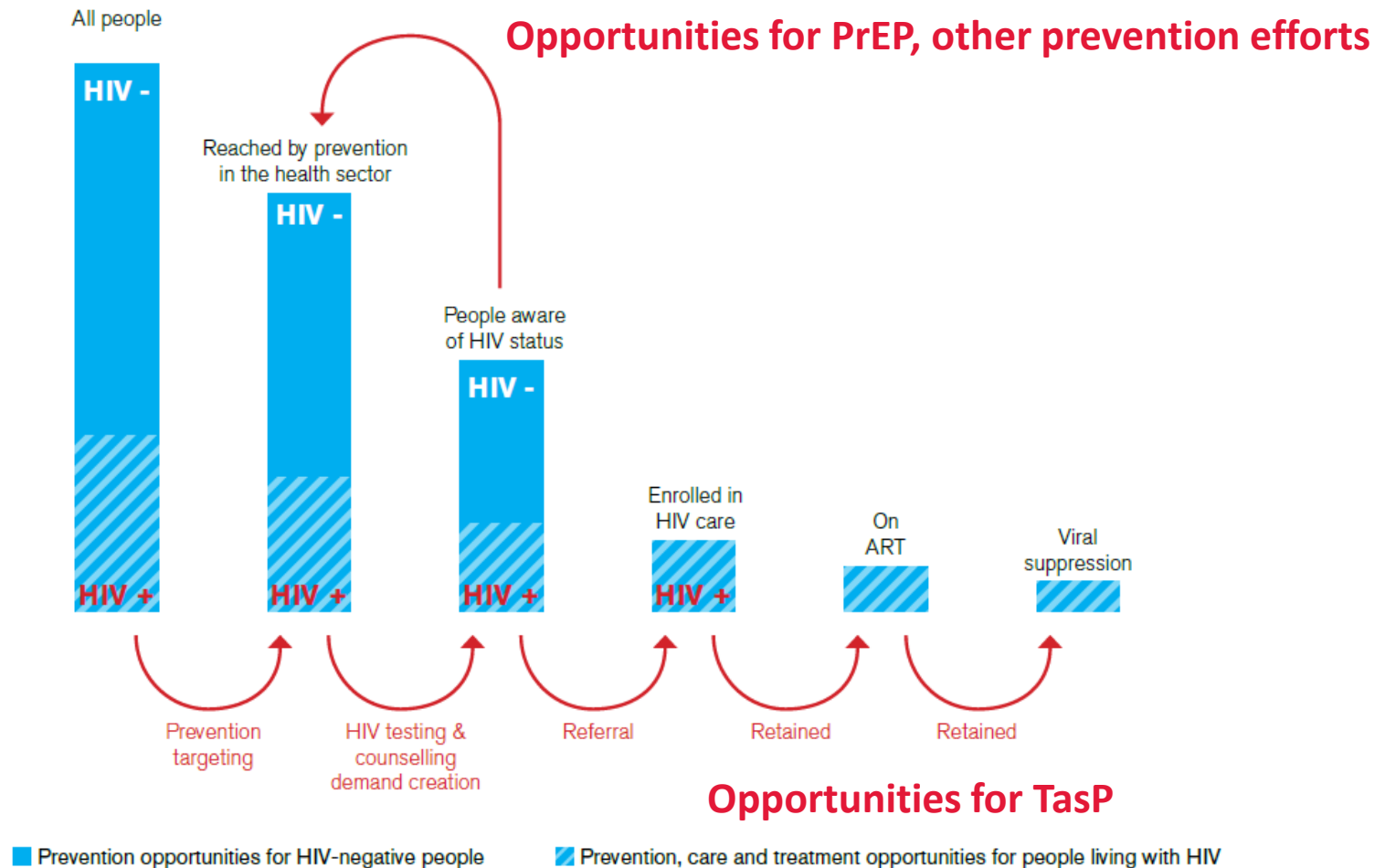
$$\text{ART coverage (\%)} = \frac{\text{Number of people receiving ARVs}}{\text{Total number of people living with HIV}} \times 100$$

Getting to zero



# The HIV cascade:

assessing and improving public health impact with *routine* program data

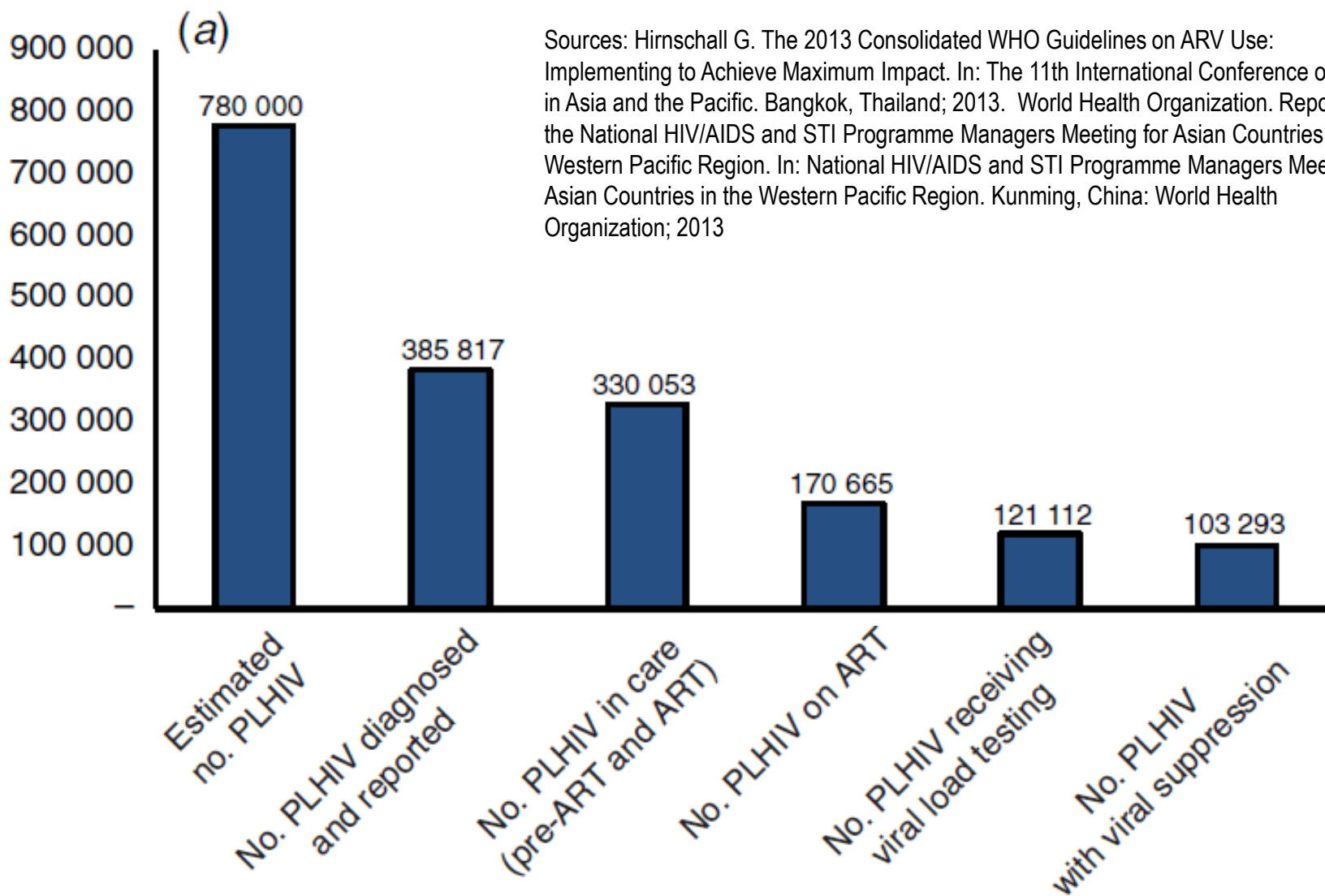


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Source: WHO, HIV, UNIVERSAL HEALTH COVERAGE  
AND THE POST-2015 DEVELOPMENT AGENDA

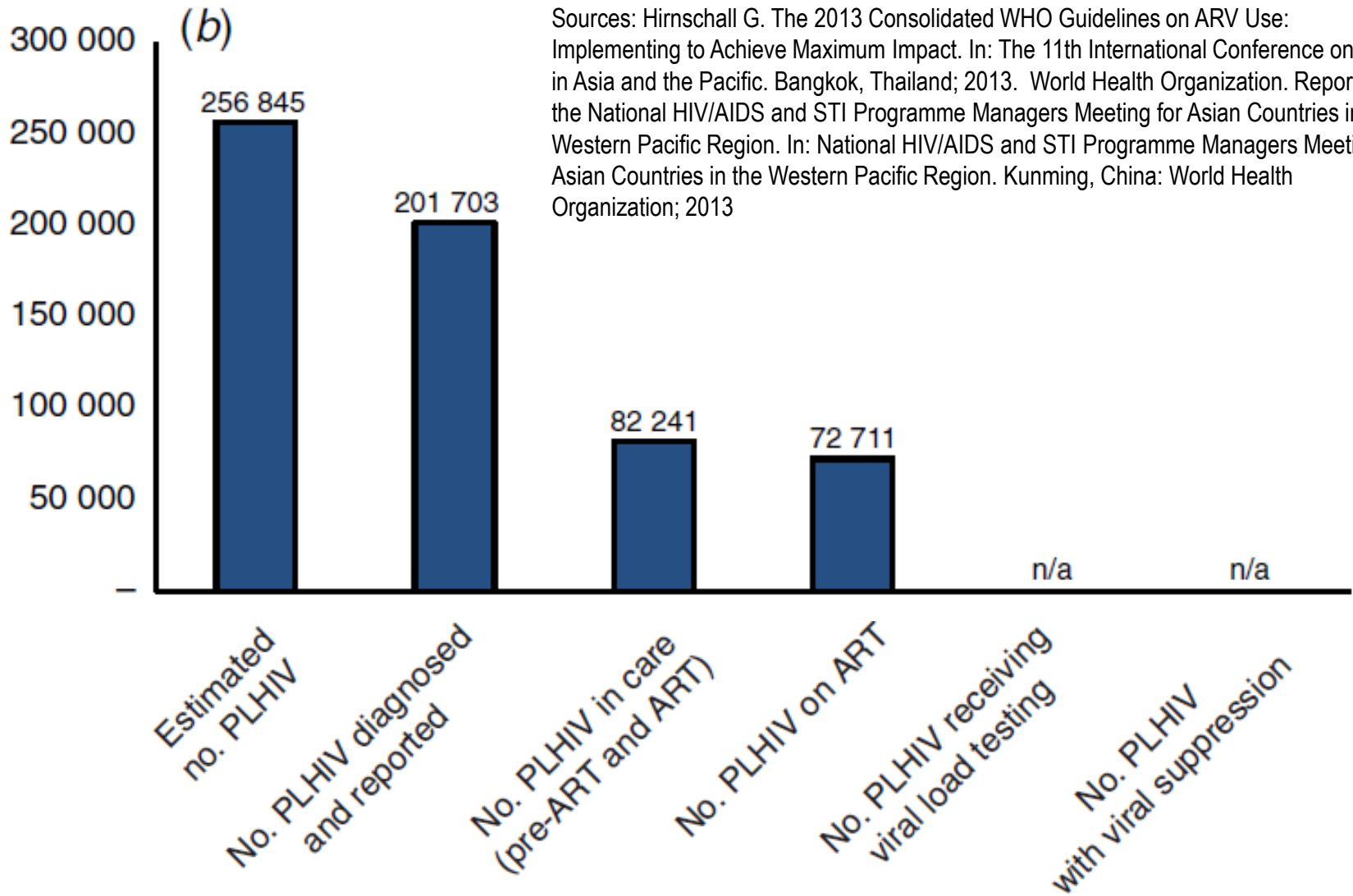


# The HIV cascade in China, 2012



Sources: Hirschall G. The 2013 Consolidated WHO Guidelines on ARV Use: Implementing to Achieve Maximum Impact. In: The 11th International Conference on AIDS in Asia and the Pacific. Bangkok, Thailand; 2013. World Health Organization. Report of the National HIV/AIDS and STI Programme Managers Meeting for Asian Countries in the Western Pacific Region. In: National HIV/AIDS and STI Programme Managers Meeting for Asian Countries in the Western Pacific Region. Kunming, China: World Health Organization; 2013

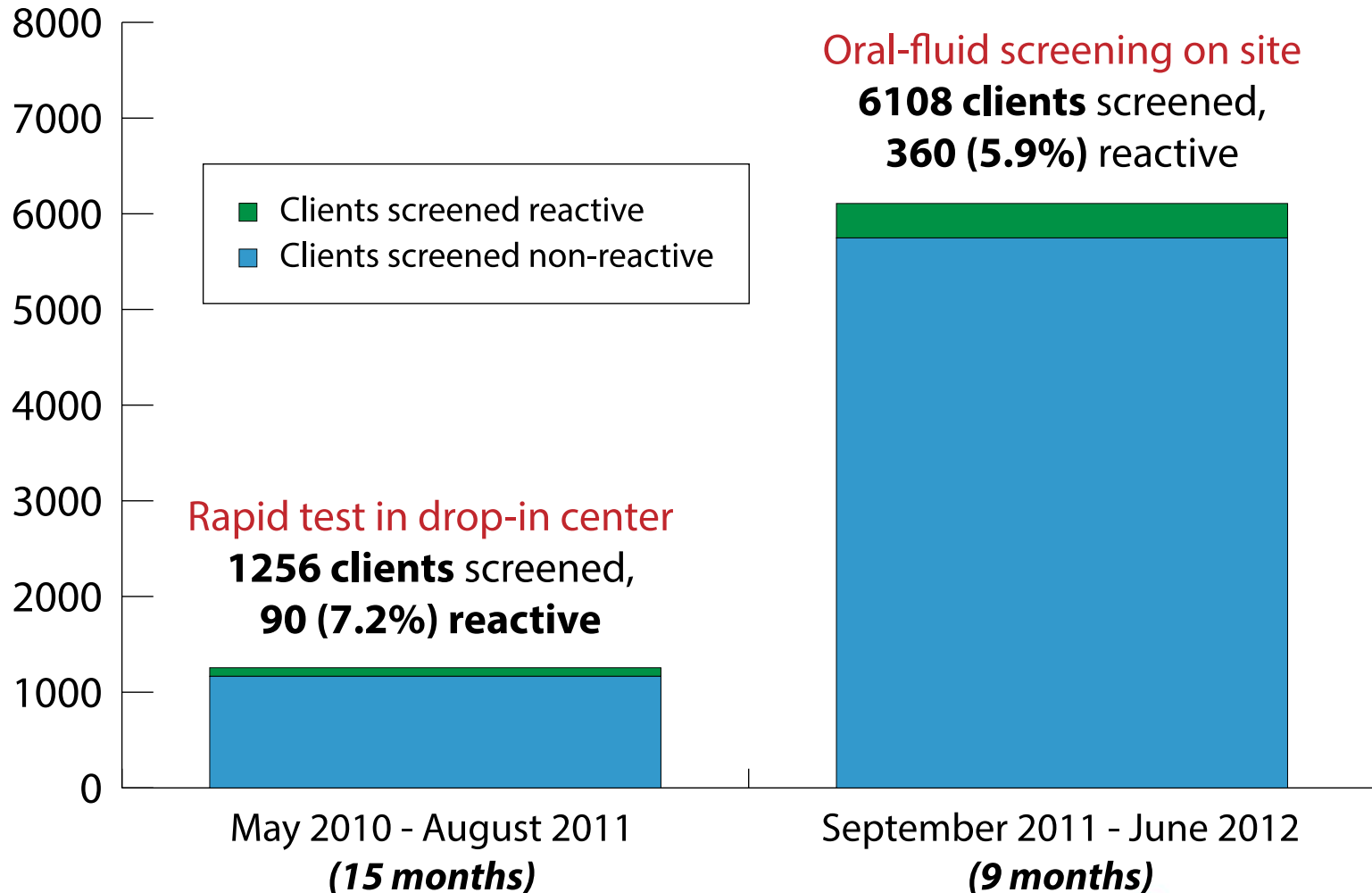
# The HIV cascade in Vietnam, 2012



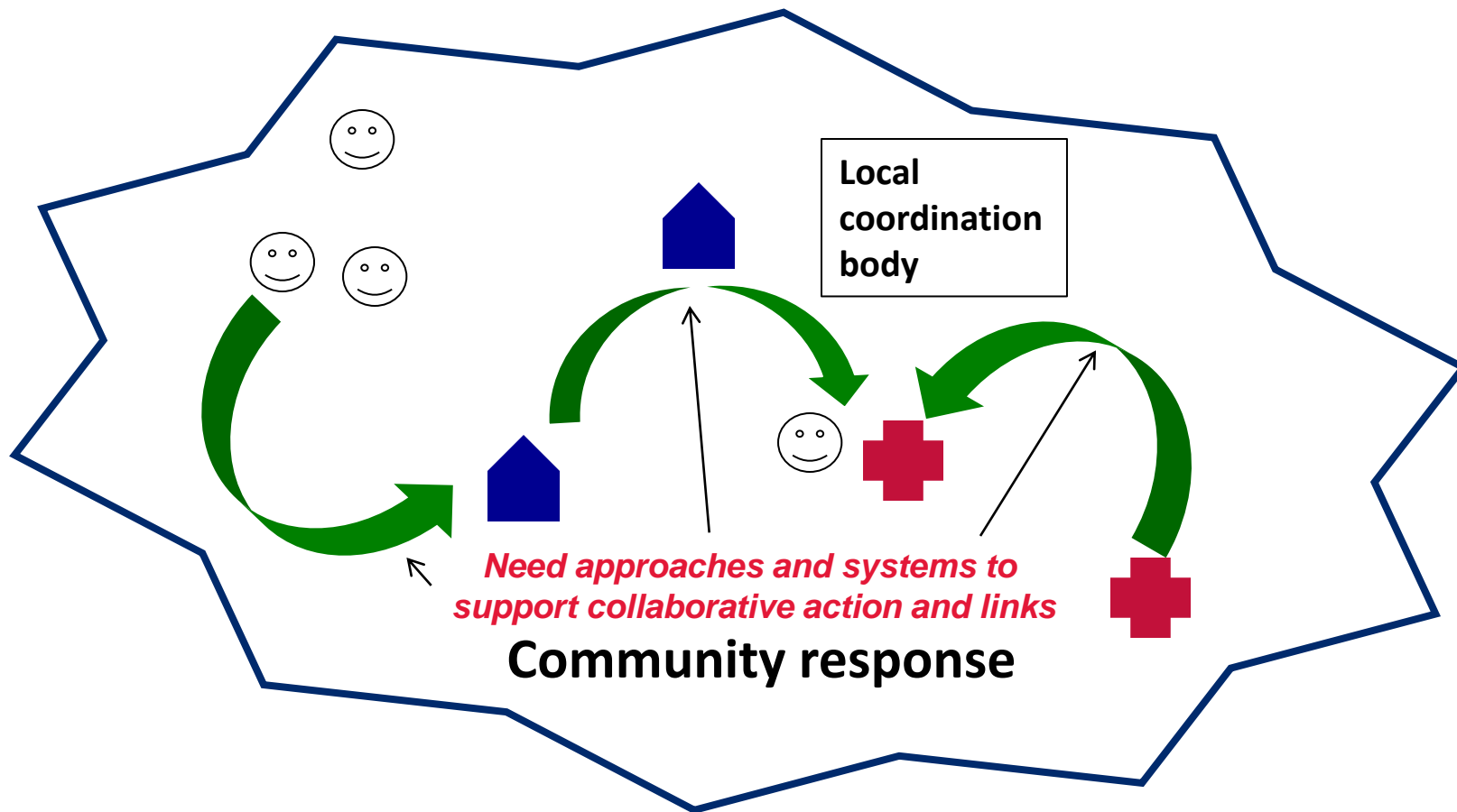
Sources: Hirschall G. The 2013 Consolidated WHO Guidelines on ARV Use: Implementing to Achieve Maximum Impact. In: The 11th International Conference on AIDS in Asia and the Pacific. Bangkok, Thailand; 2013. World Health Organization. Report of the National HIV/AIDS and STI Programme Managers Meeting for Asian Countries in the Western Pacific Region. In: National HIV/AIDS and STI Programme Managers Meeting for Asian Countries in the Western Pacific Region. Kunming, China: World Health Organization; 2013

# Point of care diagnostics

The role of oral-fluid rapid tests in increasing HIV testing and counseling coverage among men who have sex with men in Wuhan, China



# Service coalitions to improve cascade outcomes



 Community member

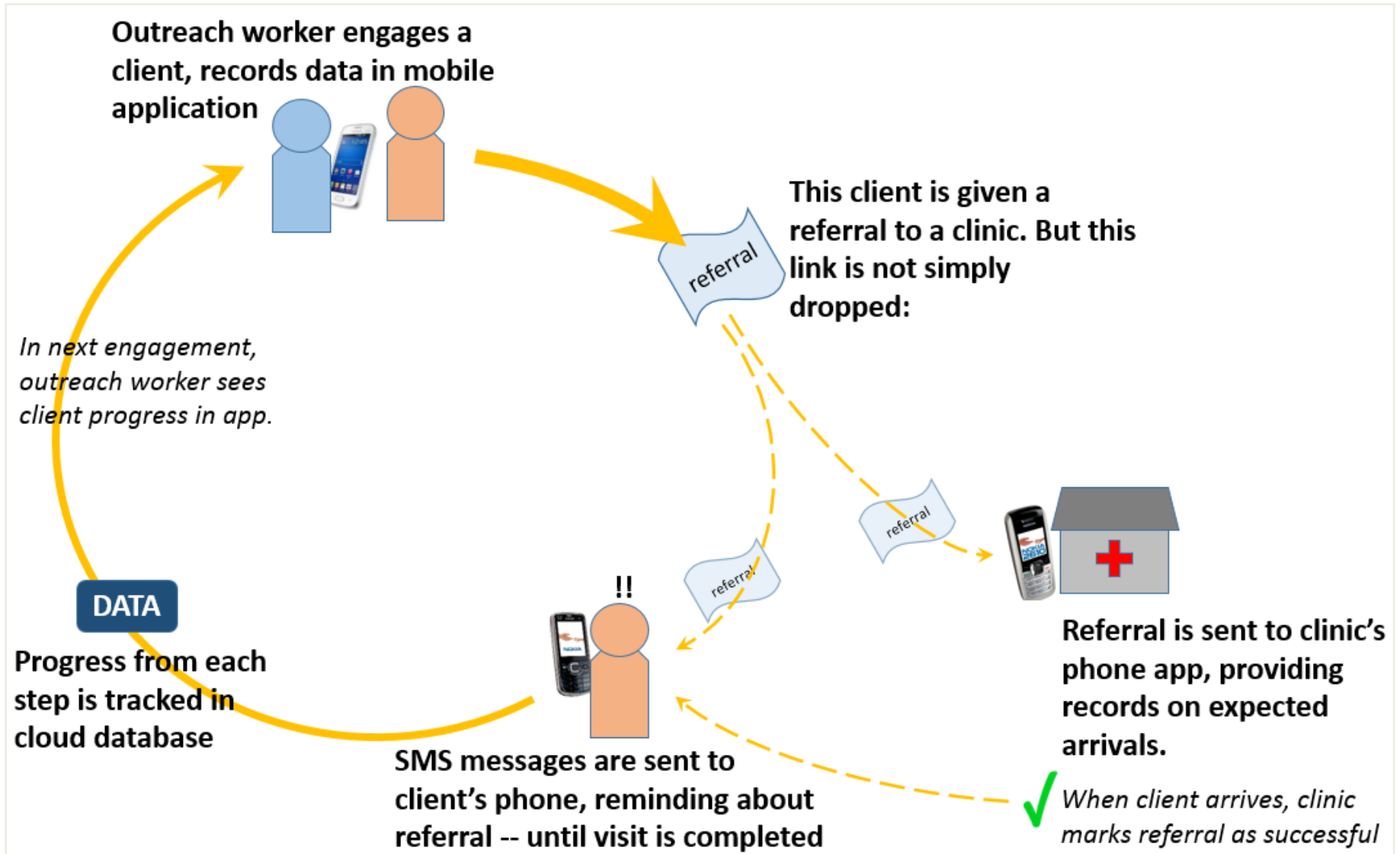
 HTC or other facility

 ART site

Getting to zero

 **UNAIDS**

# Mobile solutions



# “Right-sized” service decentralization

*When (and how best) to link clients to ART and other services vs. bringing ART and other services to them?*

OPEN ACCESS Freely available online

PLOS one

## A New Multidisciplinary Home Care Telemedicine System to Monitor Stable Chronic Human Immunodeficiency Virus-Infected Patients: A Randomized Study

Agathe León<sup>1\*</sup>, César Cáceres<sup>2</sup>, Emma Fernández<sup>1</sup>, Paloma Chausa<sup>2</sup>, Maite Martín<sup>3</sup>, Carles Codina<sup>3</sup>, Araceli Rousaud<sup>4</sup>, Jordi Blanch<sup>4</sup>, Josep Mallolas<sup>1</sup>, Esteban Martínez<sup>1</sup>, Jose L. Blanco<sup>1</sup>, Montserrat Laguno<sup>1</sup>, Maria Larrousse<sup>1</sup>, Ana Milinkovic<sup>1</sup>, Laura Zamora<sup>1</sup>, Neus Canal<sup>5</sup>, Josep M. Miró<sup>1</sup>, Josep M. Gatell<sup>1</sup>, Enrique J. Gómez<sup>2</sup>, Felipe Garcia<sup>1</sup>

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### Abstract

**Background:** Antiretroviral therapy has changed the natural history of human immunodeficiency virus (HIV) infection in developed countries, where it has become a chronic disease. This clinical scenario requires a new approach to simplify follow-up appointments and facilitate access to healthcare professionals.

**Methodology:** We developed a new internet-based home care model covering the entire management of chronic HIV-infected patients. This was called Virtual Hospital. We report the results of a prospective randomised study performed over two years, comparing standard care received by HIV-infected patients with Virtual Hospital care. HIV-infected patients with access to a computer and broadband were randomised to be monitored either through Virtual Hospital (Arm I) or through standard care at the day hospital (Arm II). After one year of follow up, patients switched their care to the other arm. Virtual Hospital offered four main services: Virtual Consultations, Telepharmacy, Virtual Library and Virtual Community. A technical and clinical evaluation of Virtual Hospital was carried out.

**Findings:** Of the 83 randomised patients, 42 were monitored during the first year through Virtual Hospital (Arm I) and 41 through standard care (Arm II). Baseline characteristics of patients were similar in the two arms. The level of technical satisfaction with the virtual system was high: 85% of patients considered that Virtual Hospital improved their access to clinical data and they felt comfortable with the videoconference system. Neither clinical parameters [level of CD4+ T lymphocytes, proportion of patients with an undetectable level of viral load ( $p=0.21$ ) and compliance levels  $>90\%$  ( $p=0.58$ )] nor the evaluation of quality of life or psychological questionnaires changed significantly between the two types of care.

**Conclusions:** Virtual Hospital is a feasible and safe tool for the multidisciplinary home care of chronic HIV patients. Telemedicine should be considered as an appropriate support service for the management of chronic HIV infection.

**Trial Registration:** Clinical-Trials.gov: NCT01117675.



# Country Experiences

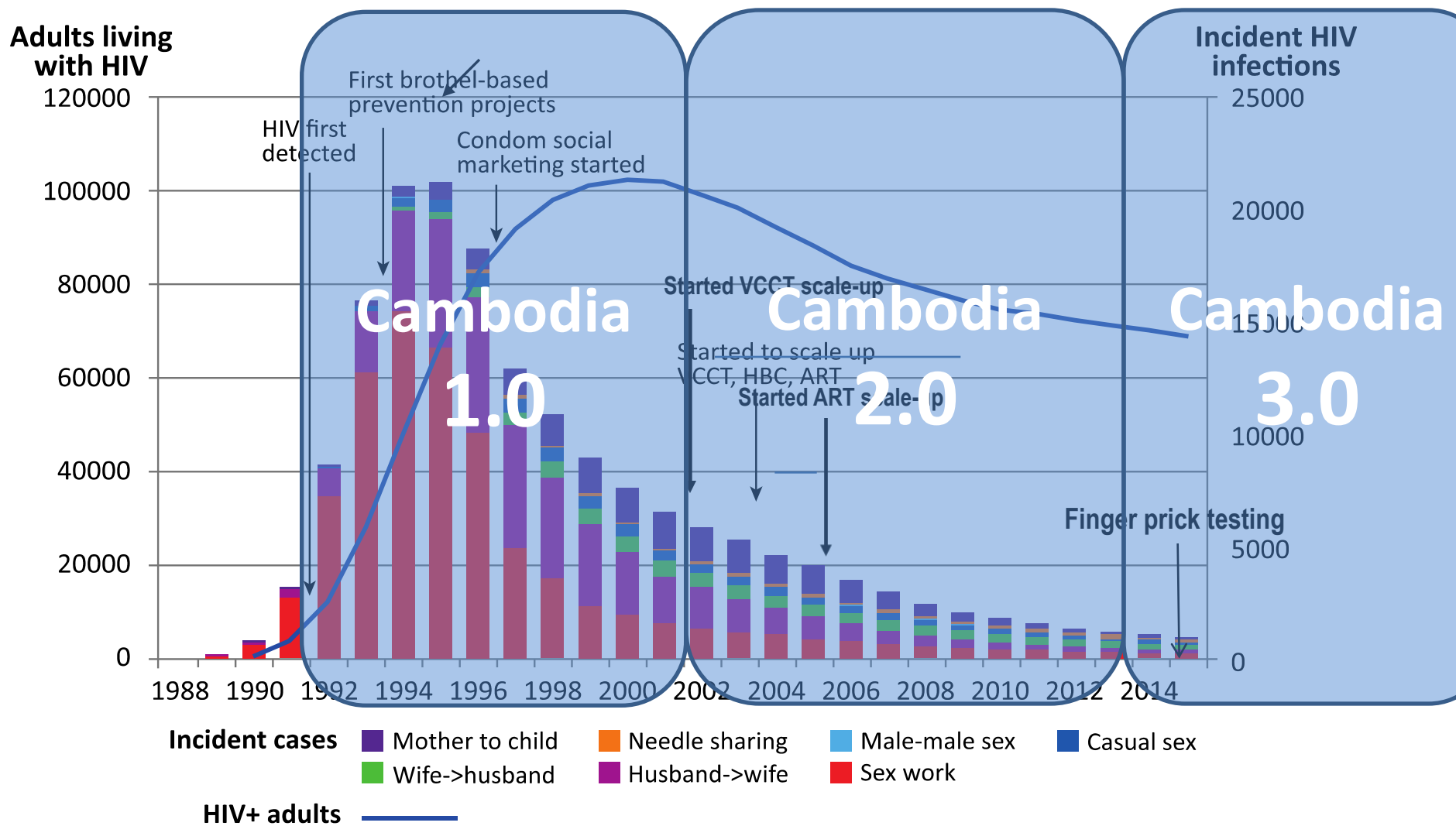
# Cambodia's experience in scaling up treatment with focus on innovative approaches along the cascade of continuum of care

**Marie-Odile Emond**

Country Director , UNAIDS Cambodia

25<sup>th</sup> October 2014

# Third decade of national AIDS response



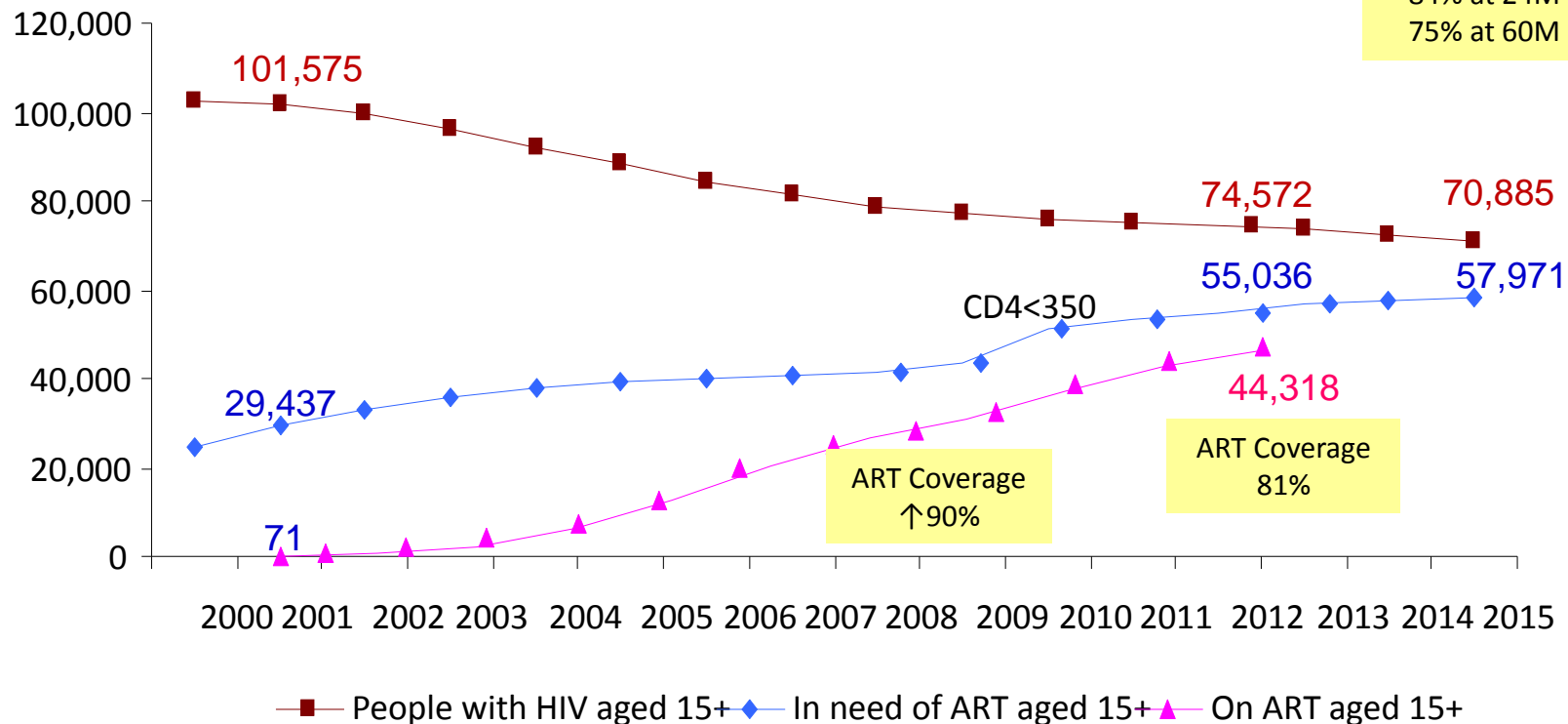
# Targeting KAP at higher risk or unreached by services

At risk +	At increased risk ++	At highest risk +++
Sex workers	SW with >7 clients/week	Injecting plus many sexual partners (paid and non-paid) and/or very high vulnerability
MSM	Male sex workers, MSM with many partners	
TG	TG with many partners (paid and non-paid)	
People who use drugs	PWID	



(Source: NCHADS, MOH Cambodia, 2014)

# Number of people with HIV in need of ART and on ART aged 15+ (2000-2015)



Source: Conceptual Framework for Elimination of New HIV Infections in Cambodia by 2020 (NCHADS, 2012)

# Ongoing innovations

New technologies: interactive voice response, social media for KAP  
Behavioural change communication under branded programme: Smartgirls (SW), Mstyle (MSM), Srey Sros (TG)



## Needle & syringe new distribution models

Finger prick testing (by community peer)  
Partner tracing/ risk tracing snowball approach  
GIS mapping

Integrated active case management  
Unique Identifier Code (KAP), mregistry

TrasPr



HBC: new model + HIV sensitive social protection (Health equity fund+, ID poor card access), linkages with other primary health care and health community system

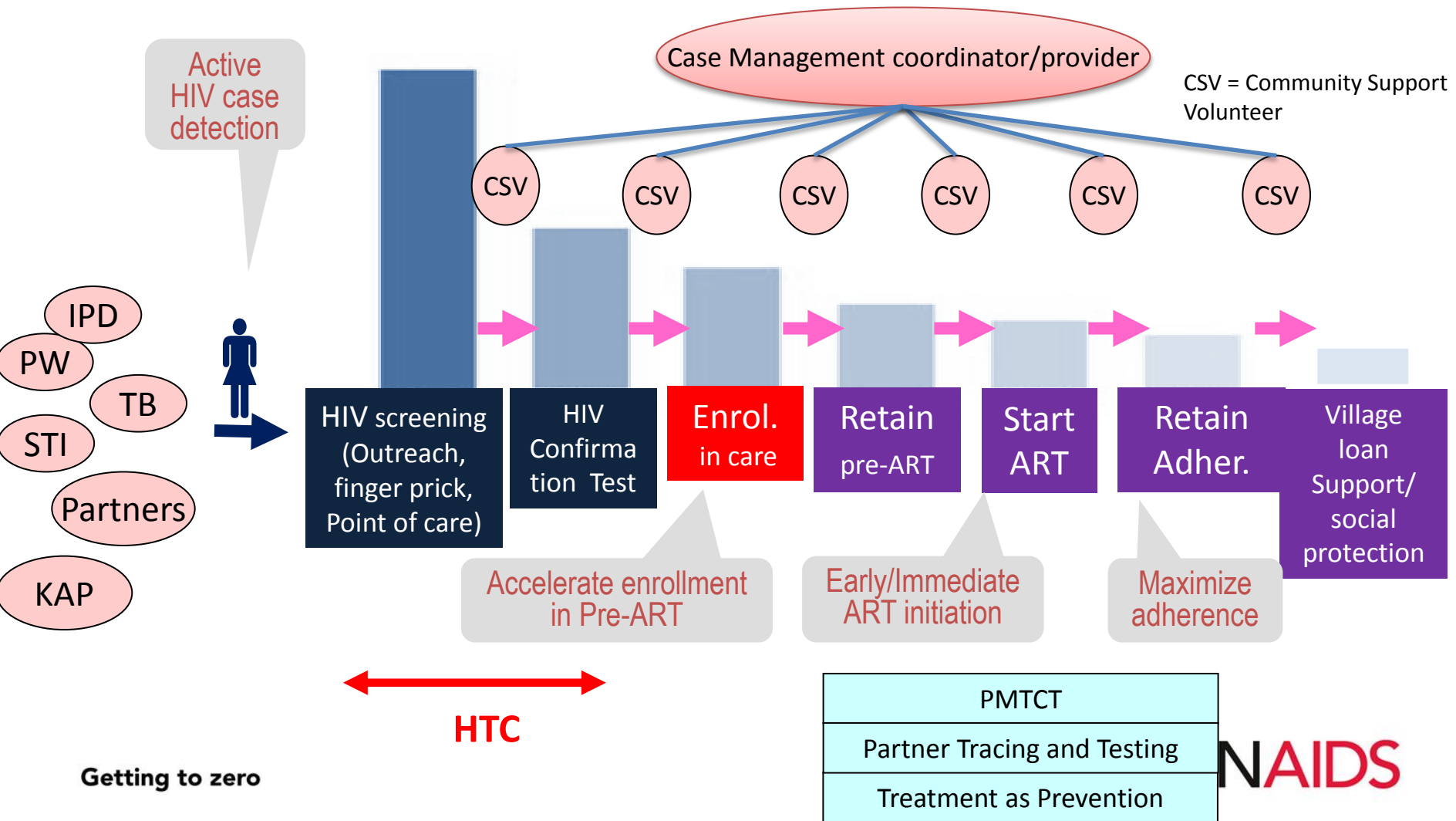
Livelihoods: village & saving loans

Getting to zero

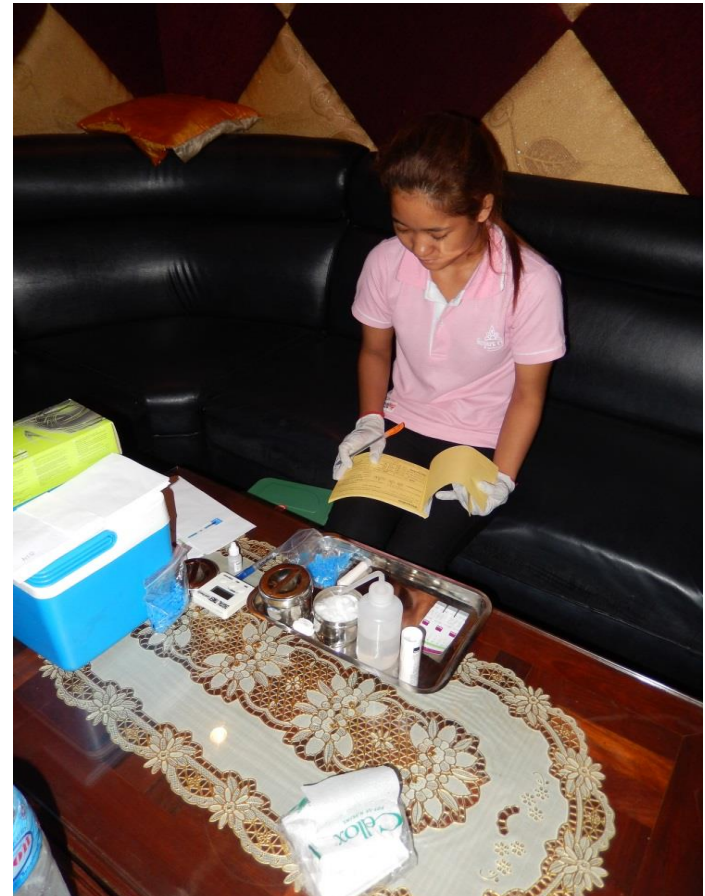


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# Integrated active Case Management to accelerate case detection and maximize retention



# Community finger prick testing at Karaoke place, Siem Reap, May 2014

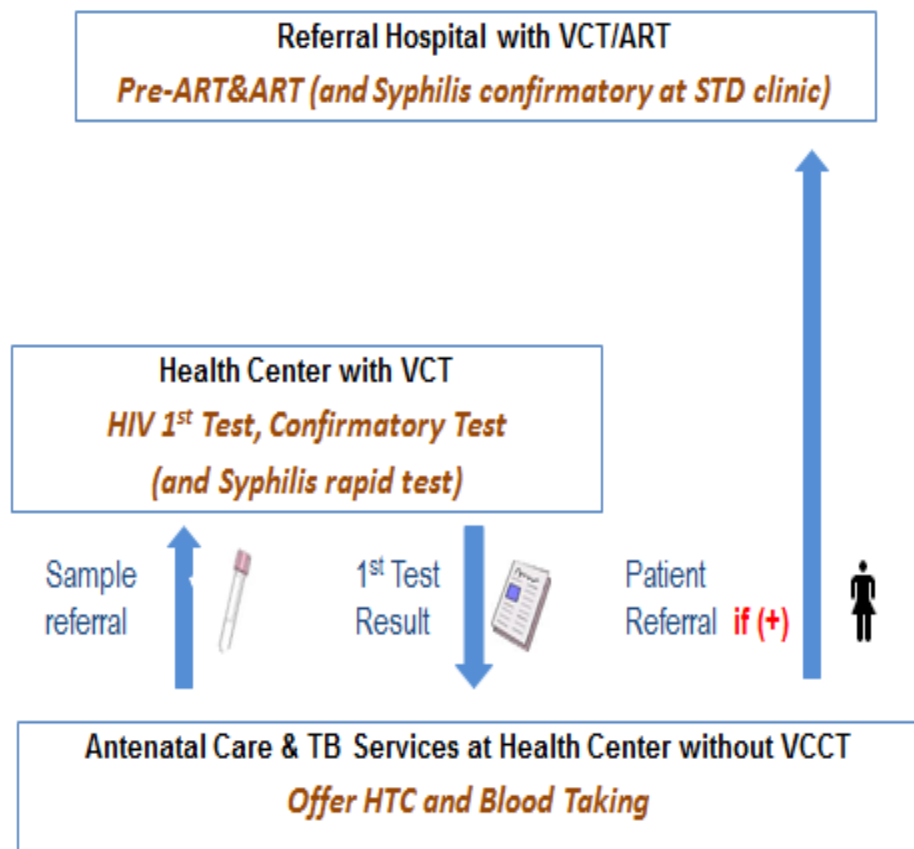


Getting to zero

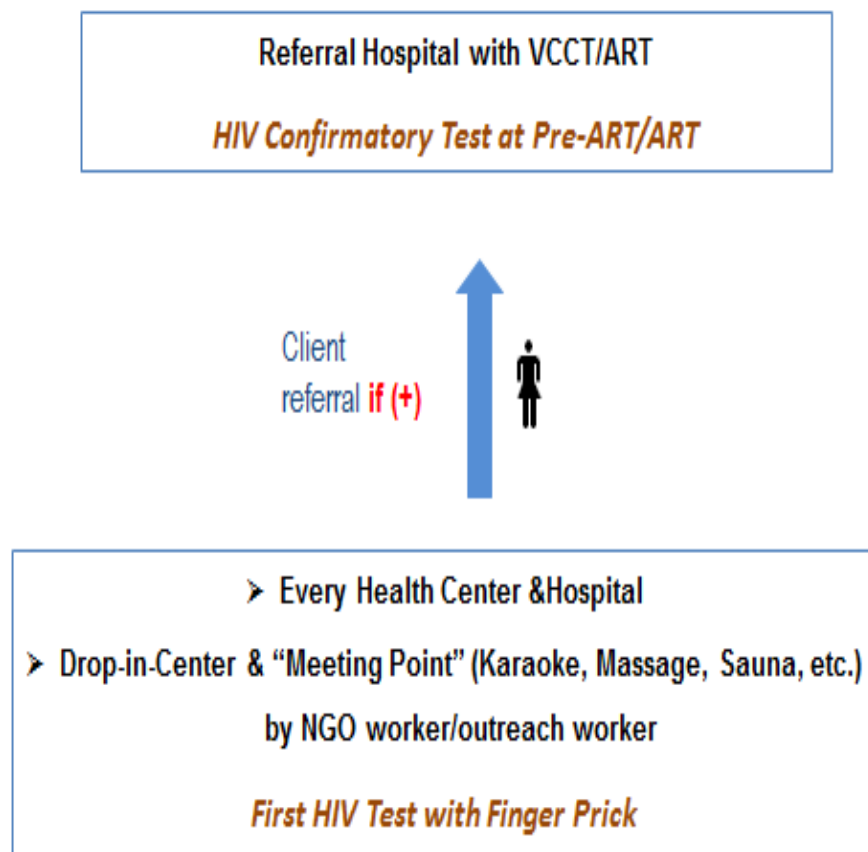


# Evolution of HTC Procedures

2009-2012



2013 –



## Finger Prick Testing Results: October 2013 – September 2014

Key Population	Number of Individuals Tested	% HIV reactive	% enrolled in pre-ART/ART	Ave. CD4 count at diagnosis (cells/mm <sup>3</sup> )
EW	14,705	0.5%	71.0%	403.7
MSM	5,008	0.5%	77.8%	414.8
TG	255	2.7%	100%	573.8
PWID	442	3.4%	100%	437.0
PWUD	3777	0.5%	88.9%	304.7
<b>Total</b>	<b>24,467</b>	<b>0.6%</b>	<b>79.4%</b>	<b>419.3</b>

- Performed by 760 trainer lay counsellor (SW), monitored by 51 trainees
- Lower prevalence – focusing on right places and people? Duplication?
- Earlier detection at higher CD4 count

# Findings of Documentation on Finger Prick Testing

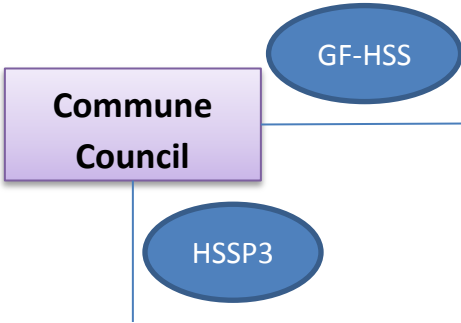


- **Good acceptance.** An effective approach in normalizing HIV and increasing demand for and uptake of HTC among key populations.
- An effective **entry point into** the **continuum of care**, increasing the efficacy of **utilizing Treatment as Prevention.**

## **Challenges:**

- confidentiality
- low capacity of lay counsellors +high rotation affect quality of testing and counselling
- Duplication? how much?
- Unable to reach highest risk individuals through venue-based outreach approach
- Lost-to-follow up for confirmatory testing and enrolment in pre-ART/ART due to migration, stigma in health setting.

New Community-based prevention, care and support model: from NGO to PLHIV/community delivery



Social protection schemes targeting poor PLHIV: eg. ID Poor,



OD Case Management Coordinator (CMC) & Assistant

Pre-ART/ART clinic

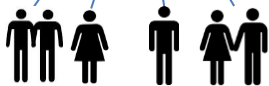
**CMPs-PLHIV**  
Triage, support group, counseling, etc.

HEF

Health Centre  
CMP-CSV Manager

VHSG

**CMPs- CSVs**



PLHIV in greatest need

Phase in/out



Stabilized PLHIV

VSL Groups

Organic community support groups



Integrated Active Case Management

# Some lessons learned with innovations

- Procurement: e.g., test kits at right place and right time!
- Who implements? Trusted implementer with links with community and health services
- Confidentiality and human rights issues
- Systematic links with PLHIV and KAP community for trust , buy in and demand creation
- Human resources intensive – need, funding, capacity and stability + dedicated long term TA support
- Translate concepts into operations
- Data to monitor (gaps and use?) and adapt– better do it well that too quick
- Phase introduction: pilot -> review -> adapt -> train -> scale up
- Funding visibility, availability and flexibility for piloting+ scaling up – risk of low marginal direct cost/benefit but other potential returns.
- Sustainability?
- New buzz words: focus, streamline, integrate

*Paradox of Cambodia as an excellent incubator of innovations  
but still low capacity, need continued technical and! financial partners support!*

# Community perspective on access to treatment services



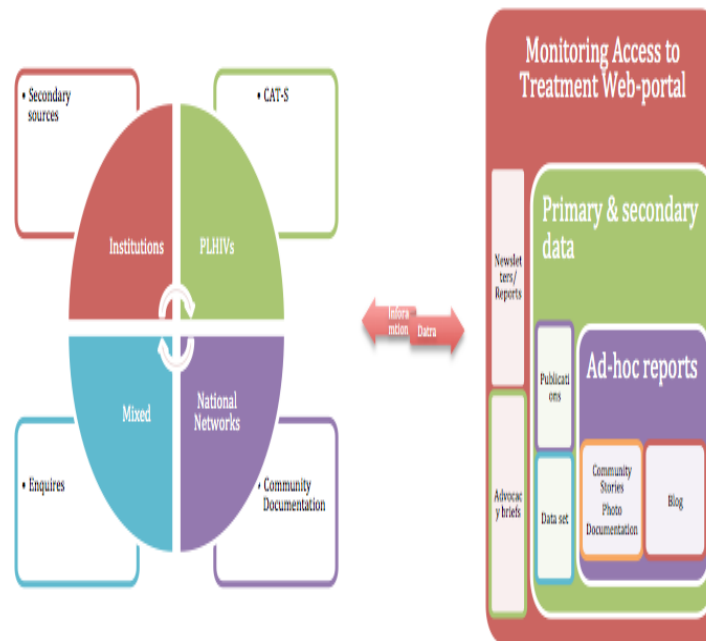
# COMMUNITY SCIENCE AT WORK

# Background

- APN+ initiate to establish a pool of strategic information dedicated for PLHIV movement in Asia and The Pacific
- Implemented as part of APN+ Multi Country Proposal GF R 10 grants implementation in 2011
- Phase I completed by Sep 2013



# Monitoring Access to Treatment in Asia (MATA)



What's in The name..

- Regional Information Portal on Treatment Access (RIPTA)- Monitoring Access to Treatment in Asia (MATA)
- Research on Access to treatment (RAT)- Community access to treatment (CAT)

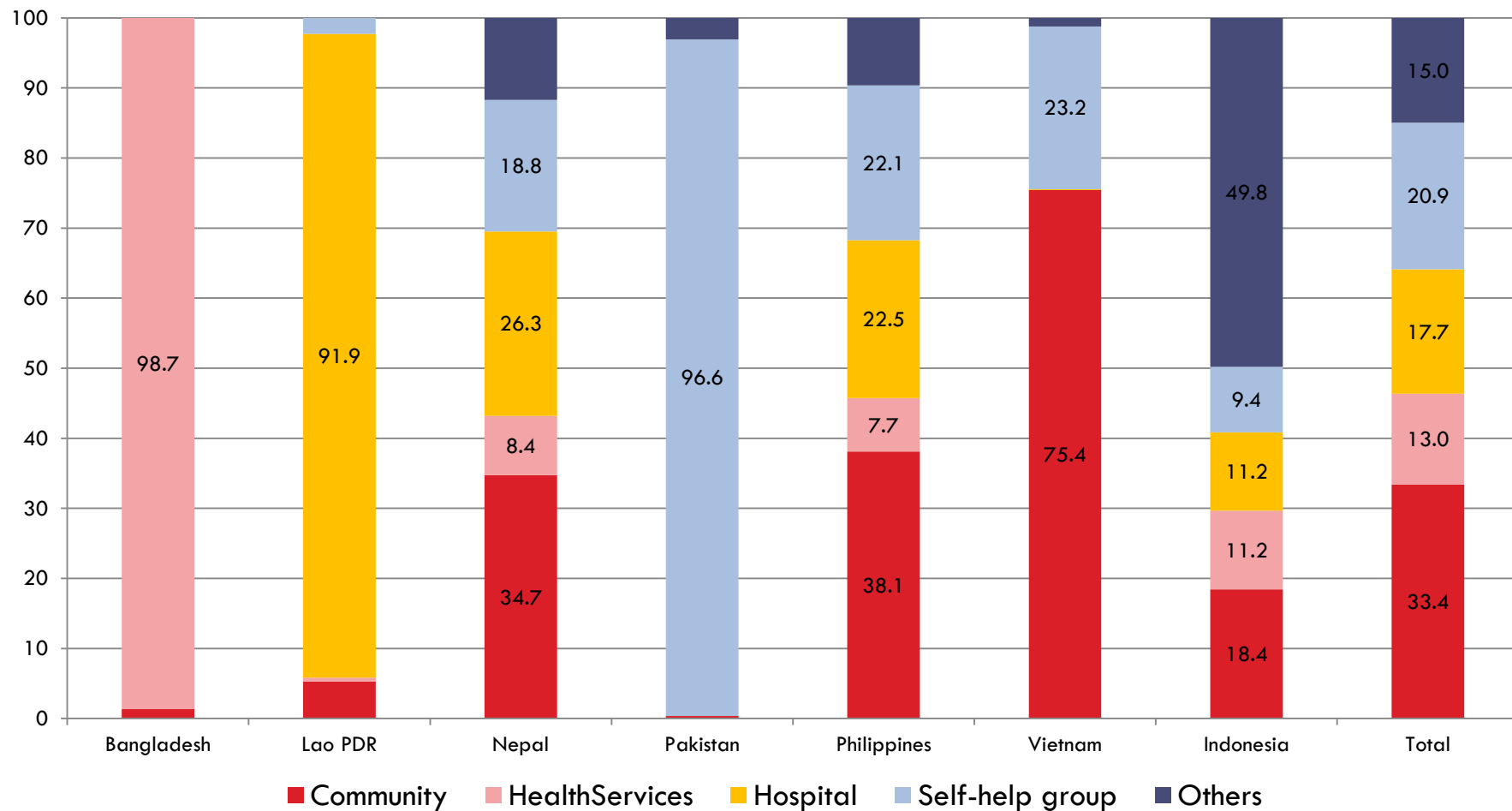
# Study Objectives

- To assess the HIV treatment-related issues such as access to pre-ART care, ART, ART adherence, treatment literacy, high risk behaviors, health seeking behaviors, etc.
- To develop baseline to monitor changes in the key issues in community access to treatment, care and support services
- Pre ART care
- Early diagnosis
- Access to CD4 and Viral Load
- Disclosure and stigma
- Reproductive health
- HIV risk behavior
- Cost of treatment
- Treatment of Hepatitis C
- Treatment Literacy
- ART adherence

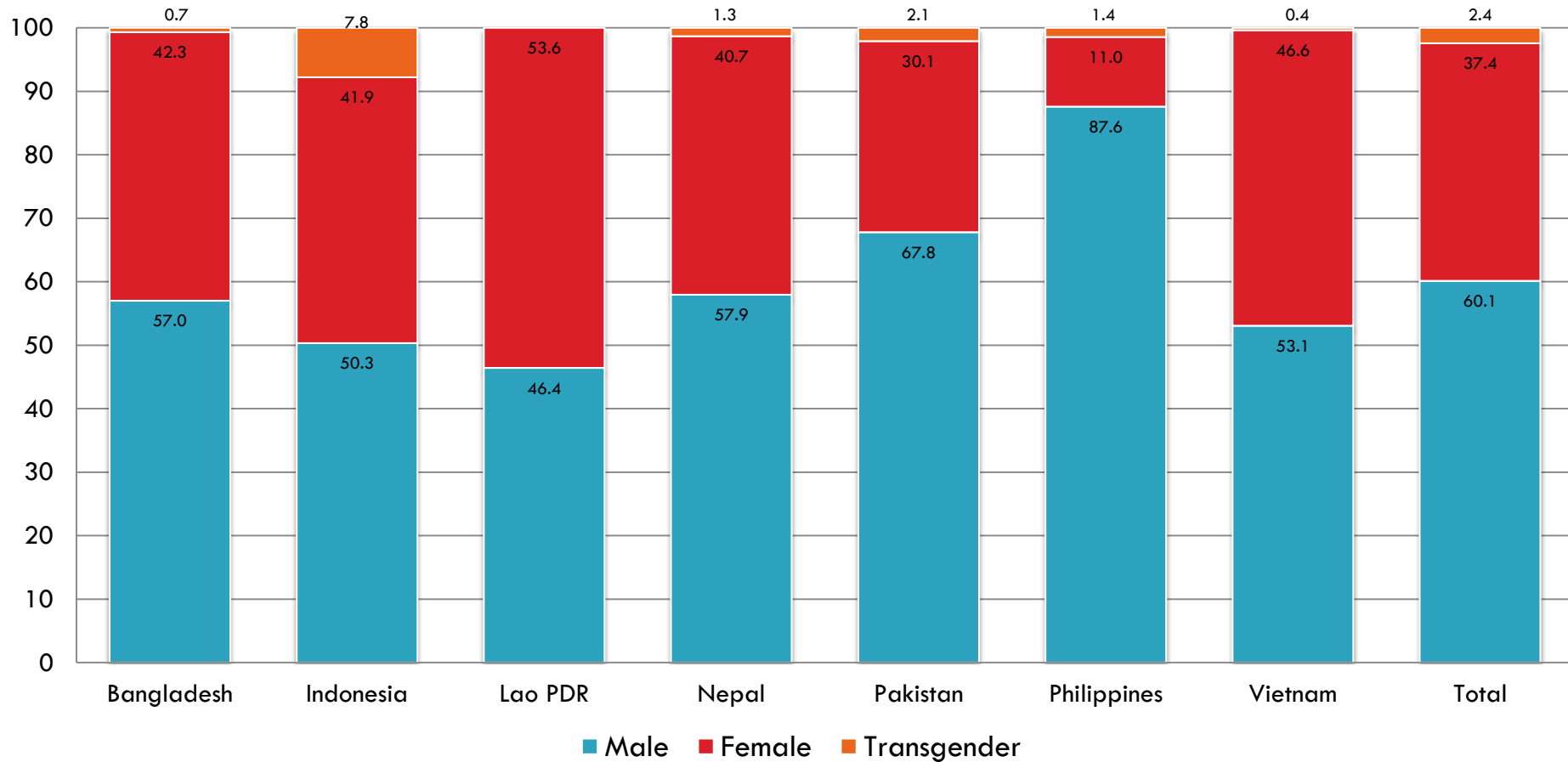
# Framework/Method

	Bangladesh	Lao PDR	Nepal	Pakistan	Philippines	Vietnam	Indonesia	Consolidated
Sample size	600	530	1,598	525	1,320	1,615	1,655	7,843
Number of data collectors	15	11	14	11	14	15	18	98
Ethical approval	Medical Research Council (BMRC)	Center for HIV/AIDS and STI (CHAS)	Nepal Health Research Council (NHRC)	Bridge Consultants Foundation	DOH Ethics Committee (DREC)	Ha Noi School of Public Health	Atmajaya University	
Start interview date	26-Nov-12	4-Jan-13	1-Oct-12	21-Nov-12	6-Nov-12	4-Dec-12	17-Nov-12	1-Oct-12
Latest interview date	30-Apr-13	7-Mar-13	29-Mar-13	4-Mar-13	7-May-13	21-Mar-13	31-May-13	31-May-13
Average time to complete question in	71	69	64	77	57	69	53	64

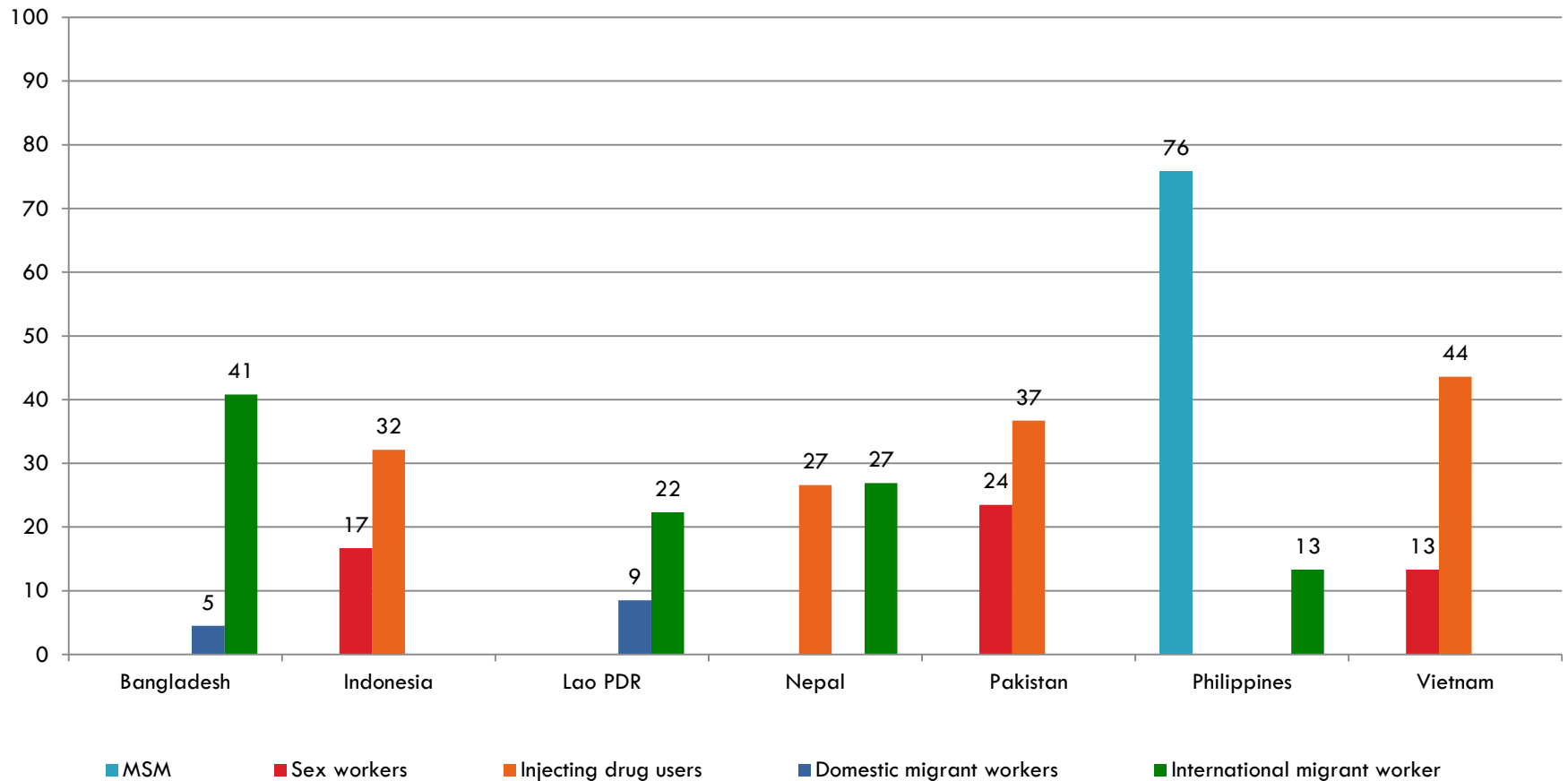
# Respondents- Place of enrollment (%)



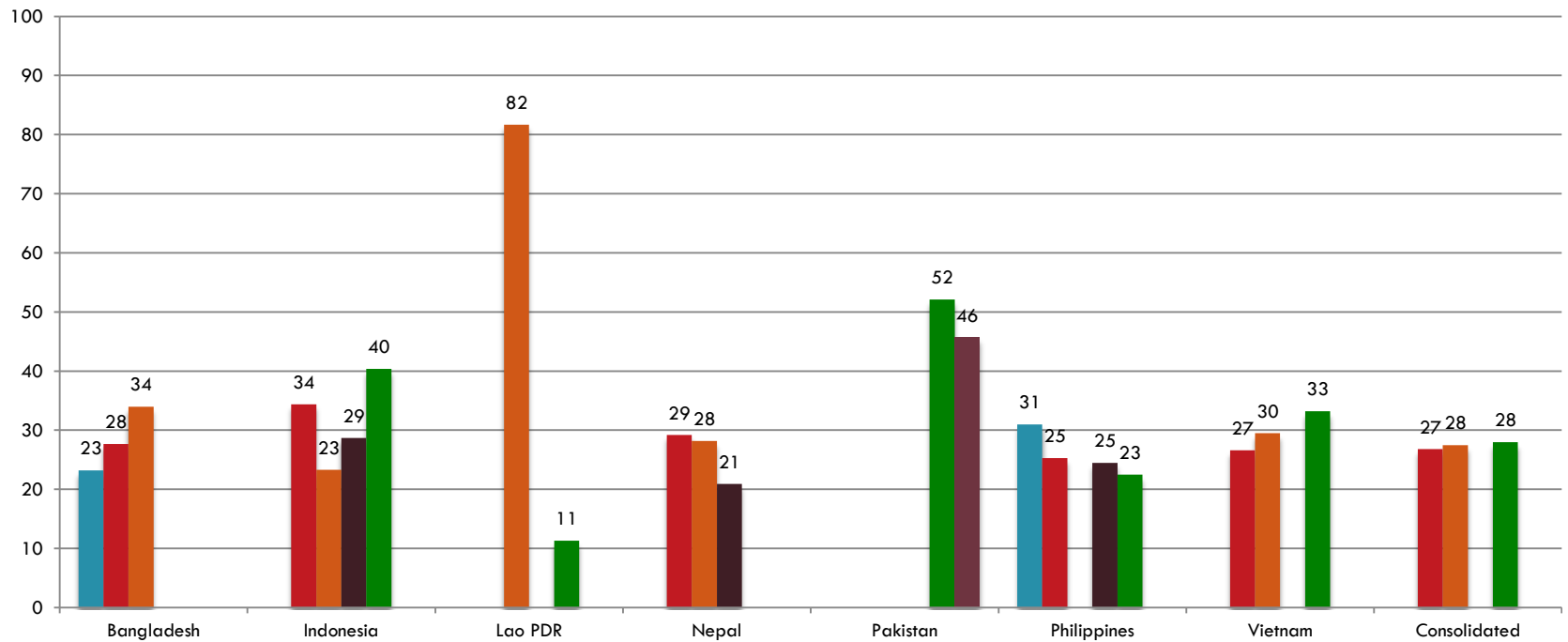
# Respondents- Gender (%)



# Respondents- Risk classifications (%)



# Reasons for HIV test (%)



■ Overseas working

■ Spouse/partner/children get sick/death due to HIV infection

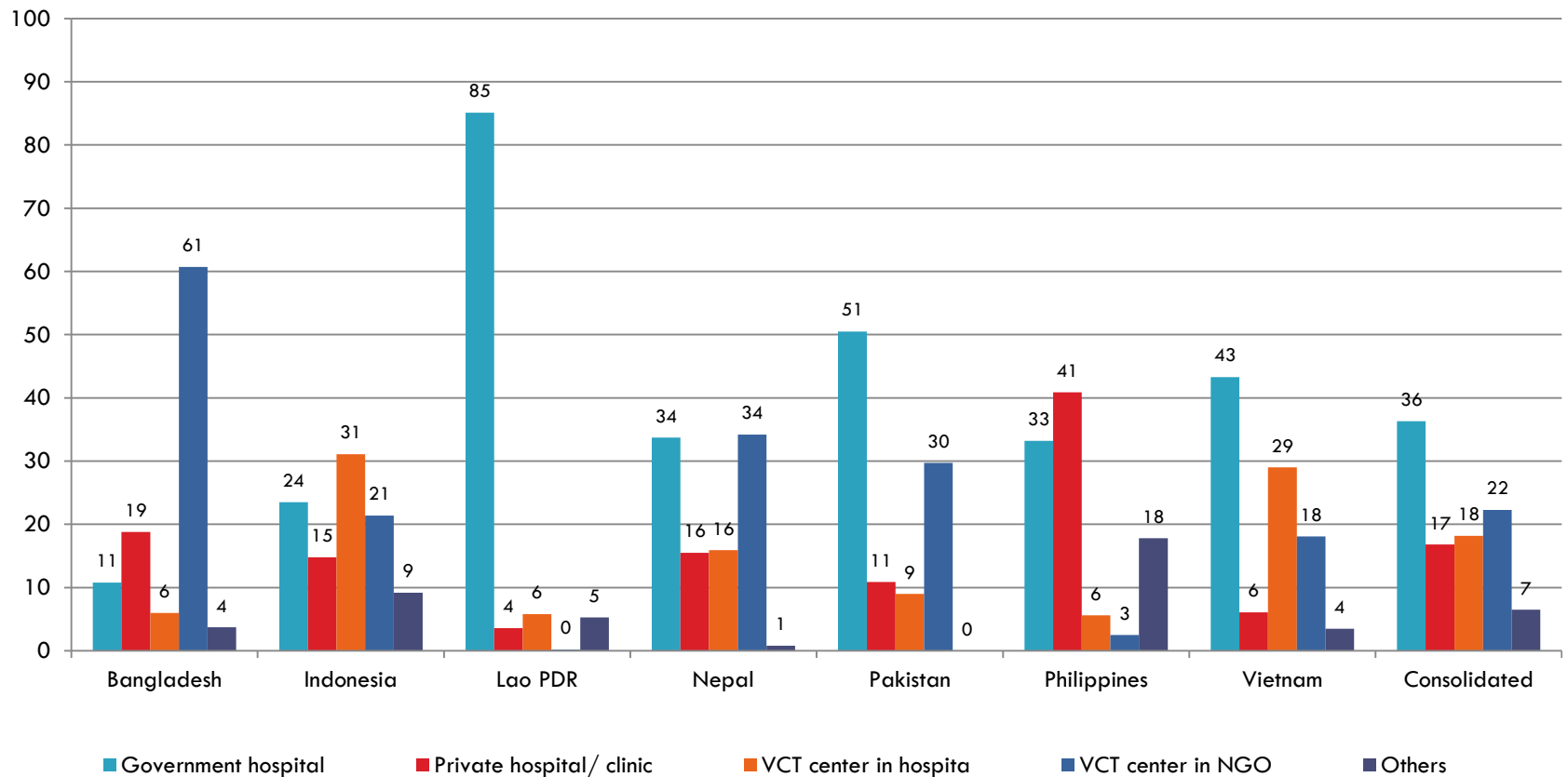
■ Risky behavior

■ Refer by a doctor

■ Want to know

■ Never choose, got result from a doctor

# Place of initial HIV test (%)

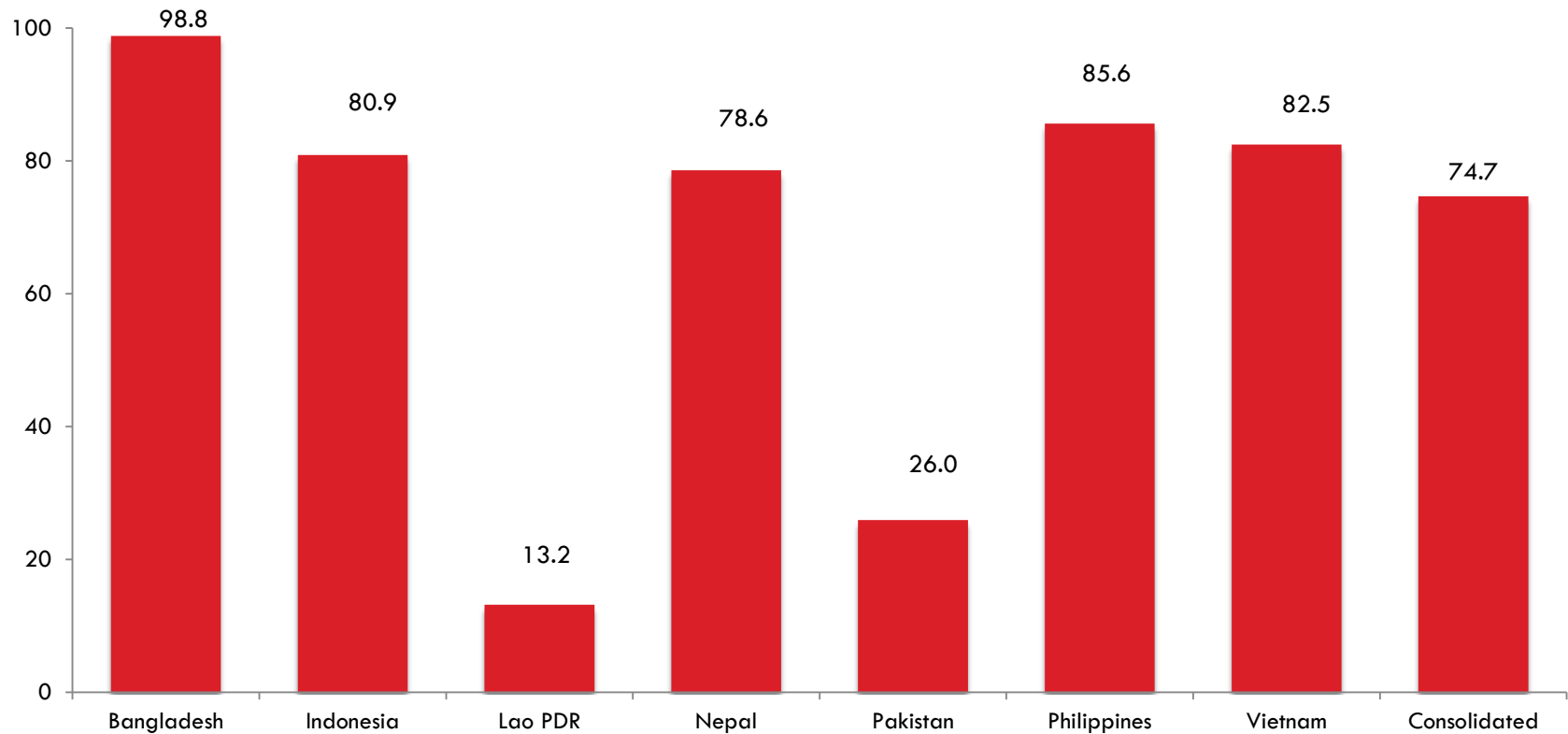




# Duration HIV diagnosis (years) & Average of baseline CD4 count

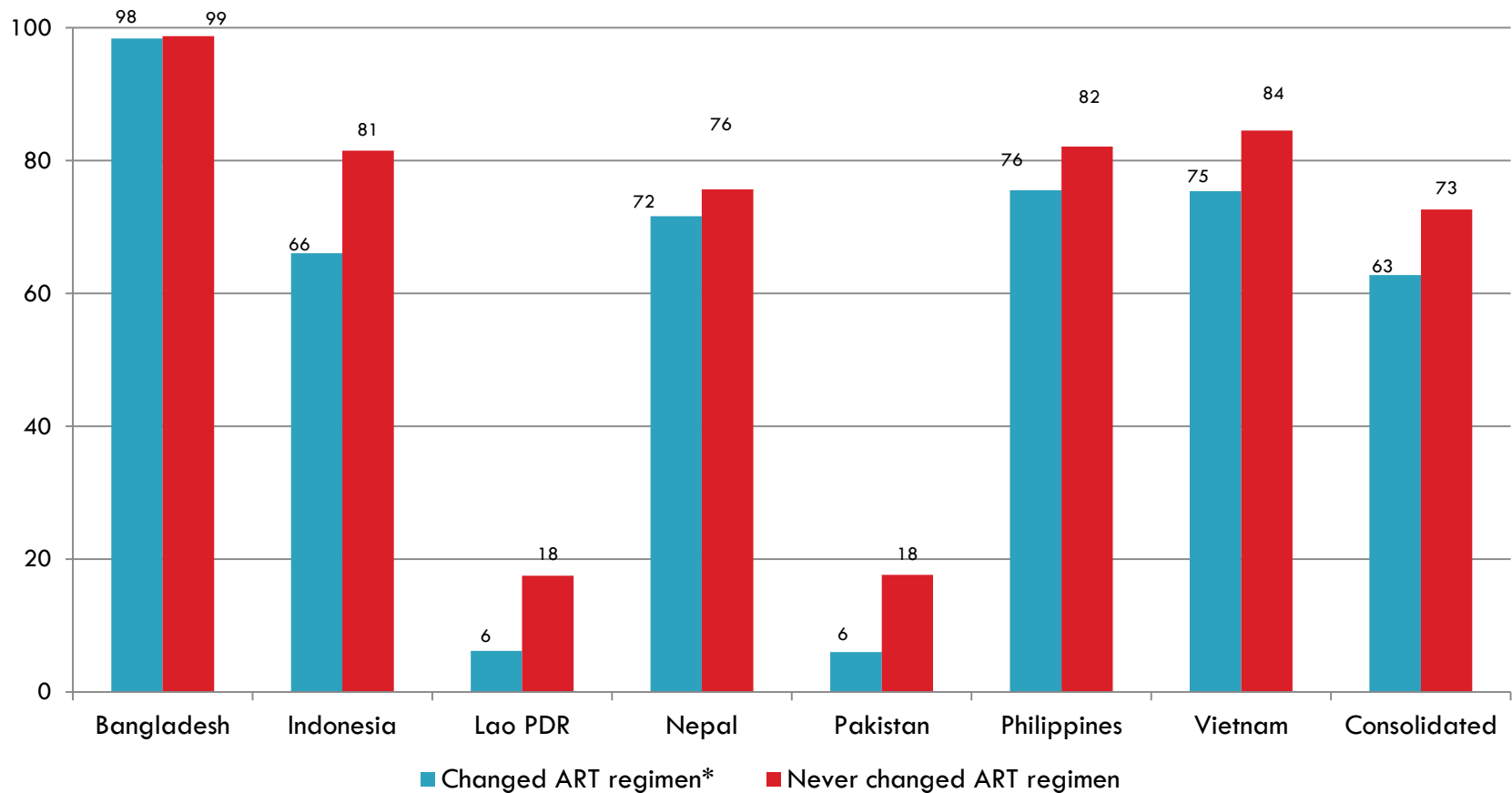
Duration of HIV diagnosis	Bangladesh	Indonesia	Lao PDR	Nepal	Pakistan	Philippines	Vietnam	Consolidation
<1 year	268	278	204	335	324	216	408	258
1-2 years	256	252	243	407	341	319	399	312
2-3 years	291	259	177	378	351	317	346	309
3 years or more	288	257	171	352	379	293	273	290
Total	281	259	181	361	367	281	292	292

# Percentage of respondents who never had viral load test (%)

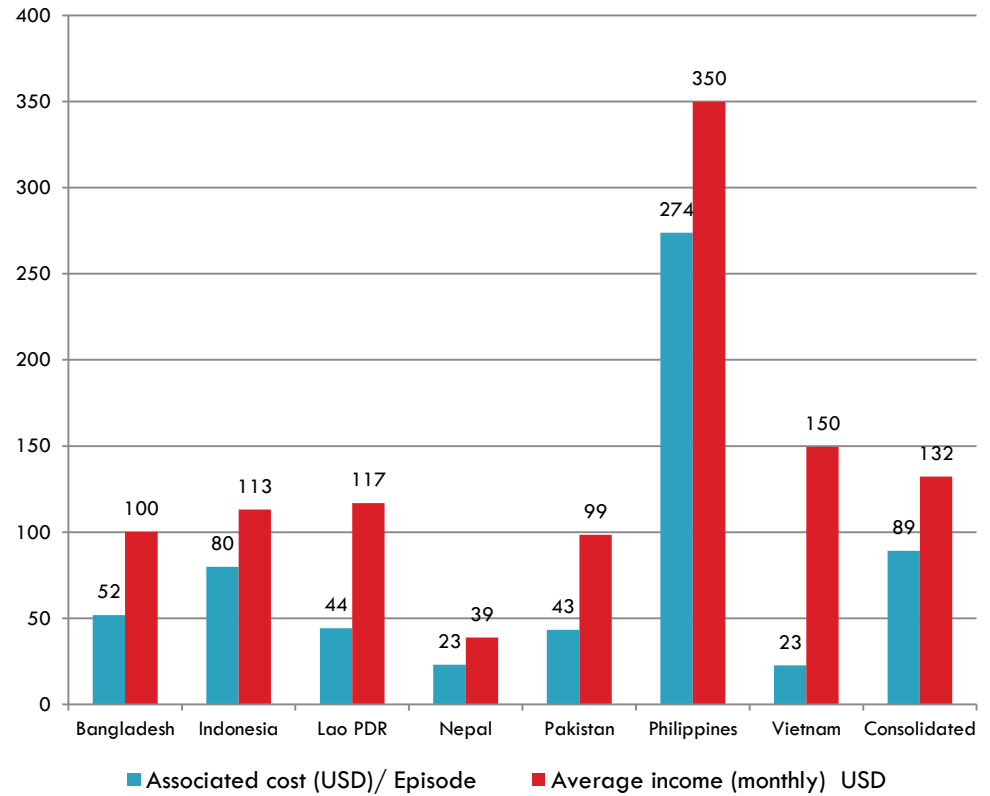
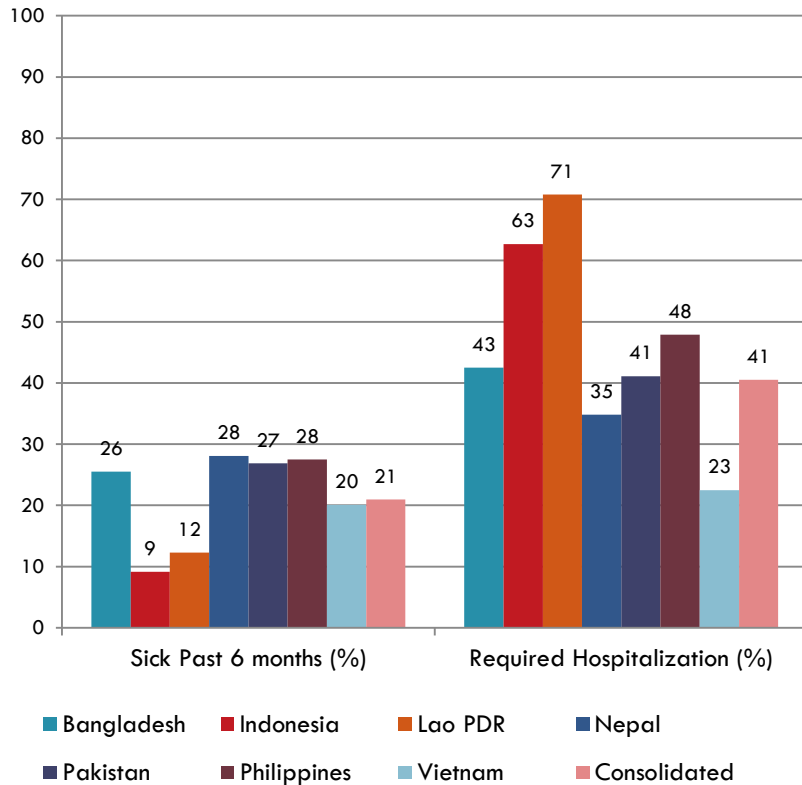


\*\* 7.8% - cannot remember

# Never had viral load test VS Ever changed ART regimen (%)



# Cost of health care



Self reported average monthly income

# Access\* to HIV prevention services

Countries	% condoms (all respondents)	% clean needles and syringes (PWID)
Bangladesh	59.2	44.6
Indonesia	66.1	12.6
Lao PDR	88.7	-
Nepal	51.3	5.9
Pakistan	63.6	15.0
Philippines	48.1	14.5
Vietnam	49.4	7.5
<b>Total</b>	<b>57.4</b>	<b>10.6</b>

\* Available- every time when needed

# Self-reported ART Adherence

Countries	% with > 95% adherence	% never missed a dose	% missed an appointment of HCP
Bangladesh	99.6	78.8	2.6
<b>Indonesia</b>	<b>78.5</b>	<b>48.2</b>	<b>11.4</b>
<b>Lao PDR</b>	<b>49.3</b>	<b>83.7</b>	<b>9.1</b>
<b>Nepal</b>	<b>72.7</b>	<b>70.4</b>	<b>3.6</b>
Pakistan	83.3	63.6	18.1
Philippines	88.2	58.2	9.9
<b>Vietnam</b>	<b>70.1</b>	<b>60.3</b>	<b>12.7</b>
<b>Consolidated</b>	<b>76.3</b>	<b>62.9</b>	<b>9.7</b>

# Conclusions- Findings

- Indication of late diagnosis, Low CD4 at diagnosis
- Poor access to viral load counts – Monitoring of viral load is almost non-accessible in 7 countries
- Absence of VL count as part of ART program will reduce treatment effectiveness, and may increase risk of PLHIV morbidity and mortality rates
- Despite large scale funding for treatment - out of pocket costs of care is still a burden

# Conclusions-Findings

- Access to prevention services need to be improved (Condoms , Needle and Syringes)
- Self-reported adherence is lower than 80% in 4 out of seven countries.

Visit <http://apnmata.org> for more data and stories



# Ways forward

- Use of data from CAT-S in refining existing service deliveries as well as new programmatic approach (incl. funding allocation), especially during country's NFM proposal development process;
- Continue expanding database, recognize and include human stories of PLHIV community as part of on-going community documentations; and
- APN+ continue to facilitate a community platform to interact, share and learn.

COMMUNITY SCIENCE AT WORK

# Ways forward

- Encourage PLHIV National Network to develop country's specific data analysis in partnership with key stakeholders (MoH, NAC, UNAIDS) to feed on new strategies towards new *UNAIDS 90-90-90* target;
- Initiate an innovative approach in addressing barriers to access HIV test service (i.e. community led testing)
- Strengthening country's Health System and infrastructure as in-country preparedness to implement full treatment cascade (including access to VL monitor, ARV drugs SCM, health financing approach for PLHIV)

# Acknowledgement

- Asar Alo Society, Bangladesh
- National Association of People Living with HIV, Nepal
- Pinoy Plus, Philippines
- Association of People Living with HIV, Pakistan
- Lao Network of People Living with HIV, Lao PDR
- Vietnam Network of People Living with HIV, Vietnam
- GWL- INA, Indonesia

Full report and presentation can be downloaded at [www.apnmata.org](http://www.apnmata.org)

For questions, comments etc get in touch at

[sushil@apnmata.org](mailto:sushil@apnmata.org)

[aor@apnmata.org](mailto:aor@apnmata.org)

Thank you!

# Young people and access to HIV services

What young people living with HIV in  
Asia Pacific are facing with ?

- Knowing our HIV status.....

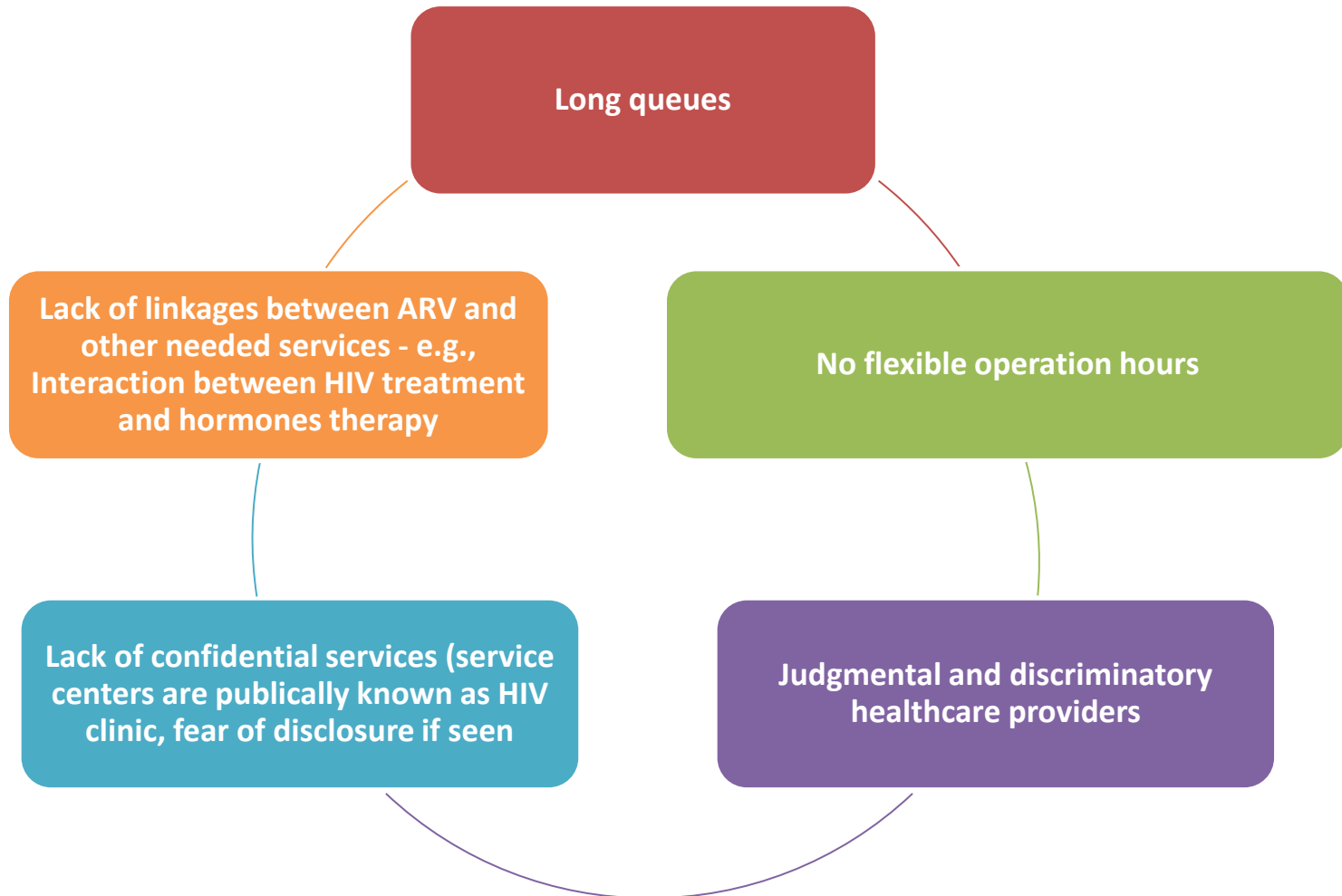
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- Navigating healthcare systems.....

# NO!

We face policy and legal barriers:

- Consent for minors to access HIV testing
- Punitive laws on homosexuality, transgressed expression, sex work.





## What needs to be done to reach 90-90-90 ?

- Holistic, age-appropriate, **confidential, nonjudgmental** and **nondiscriminatory health services** are must!
- Adolescents and young people living with HIV **have right to best possible treatment and related care**, accessible, affordable, optimal and uninterrupted ARVs; and regular access to diagnostics and monitoring tests for HIV
- **Peer support services** to address treatment adherence and education, as well as mental health; sexual and reproductive health services have to be introduced
- **PrEP** should be included in the comprehensive package of services as per WHO Consolidated Guidelines recommendation

# Closing the gaps in the HIV cascade

# **Cascade of HIV testing, care and treatment services in Asia: Closing the gaps**

*Yu Dongbao*

WHO Regional Office for the South-East Asia

25 Oct., 2014

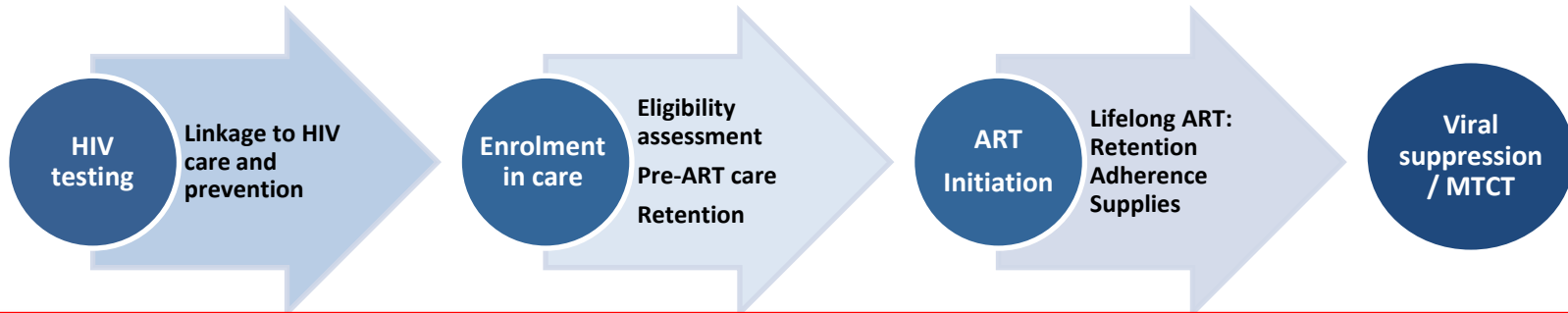
Metrics for monitoring the  
cascade of HIV testing,  
care and treatment services  
in Asia and the Pacific



- Developed & published by WHO WPRO/SEARO, CDC, USAID together with partners
- Objectives:
  - To assess and improve the effectiveness of HIV testing, linkages, and retention along the cascade of HIV, TB/HIV and PMTCT services at national and subnational levels;
  - To assist country program in prioritizing key indicators to monitor the cascade of HIV services from HIV testing to linkages to care and treatment.



# What to measure?



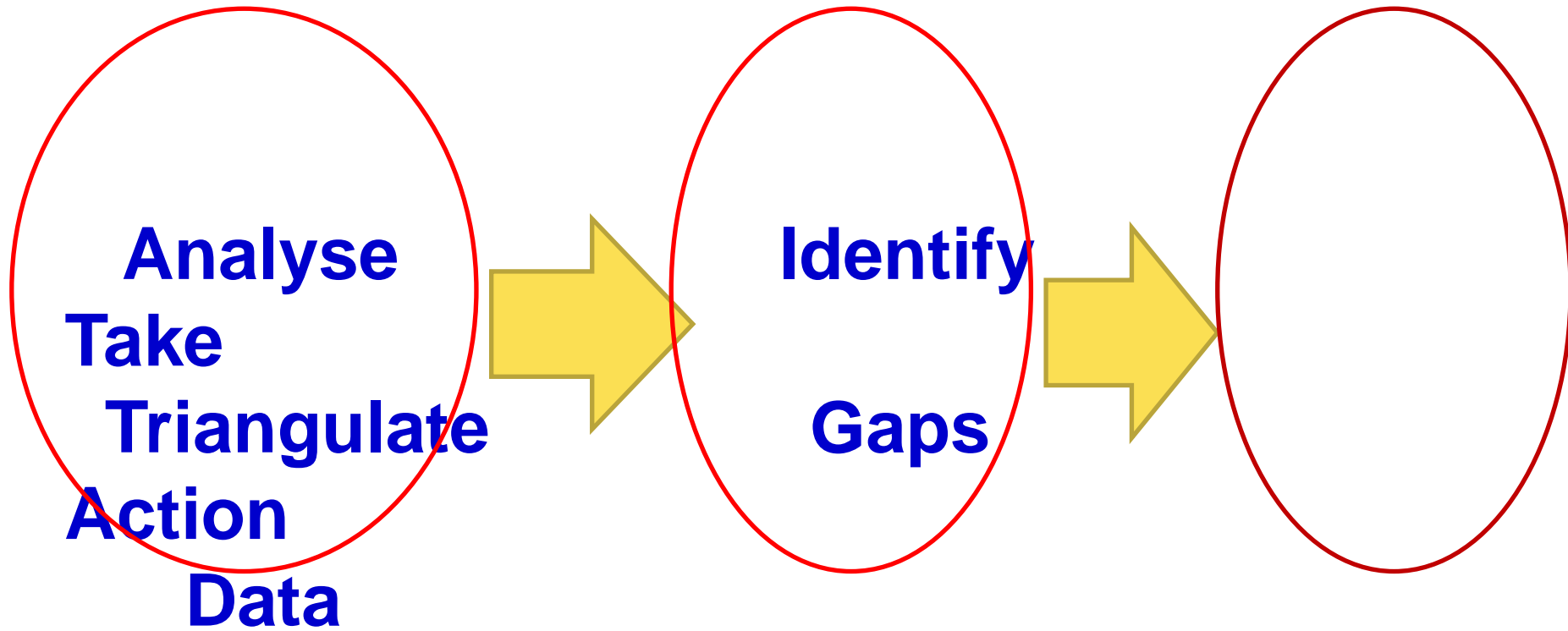
## Cascade Indicators:

- Aware of HIV status
- Uptake of HIV testing by: TB patients; pregnant women
- Ratio of newly enrolled to newly diagnosed
- Retention in pre-ART care
- Coverage of ART (overall, TB/HIV and PMTCT)
- Retention on ART
- Viral load suppression
- HIV+% infants

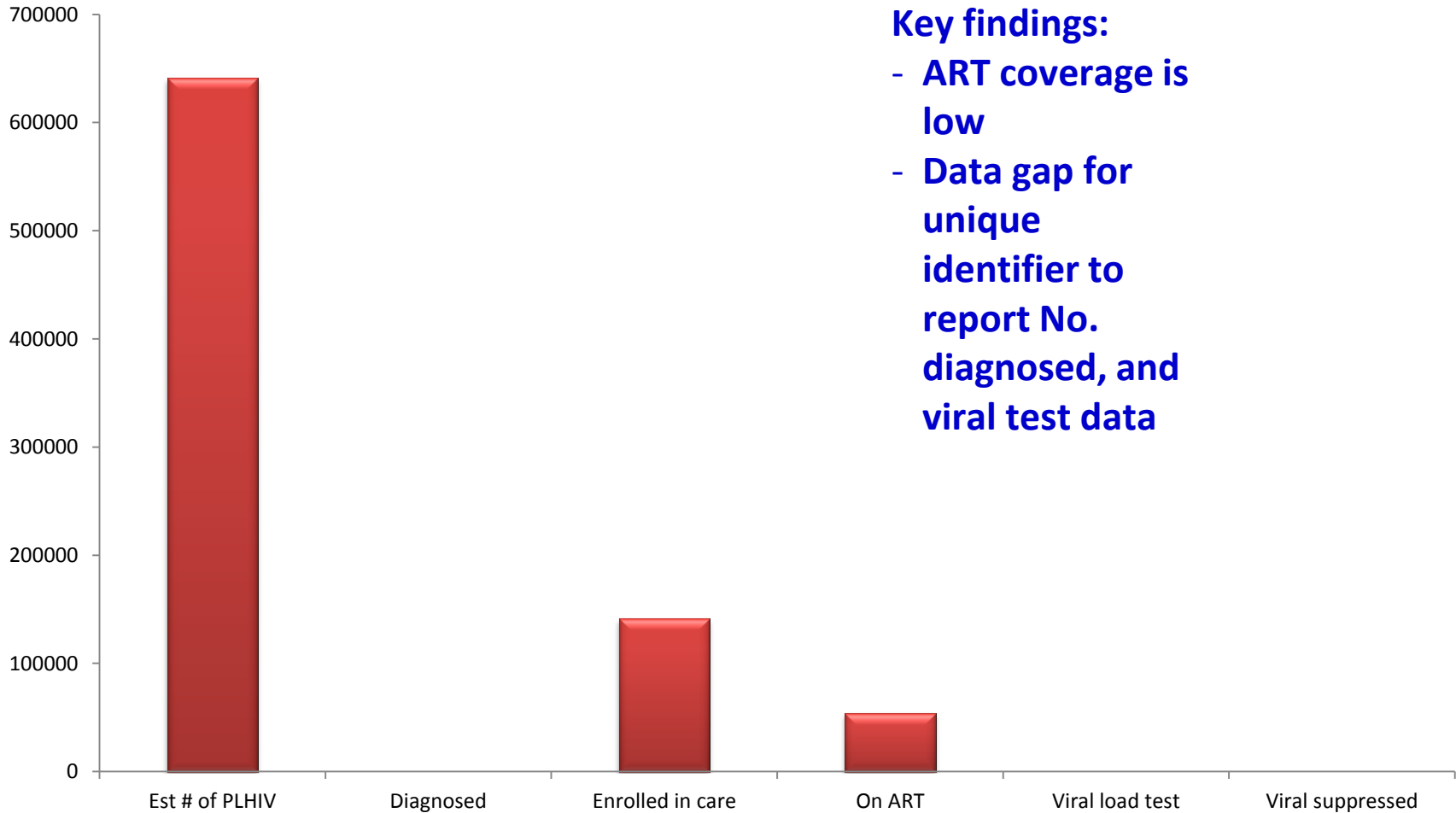
## Programme Indicators:

- Uptake of HIV testing by KP (SW, MSM, PWID); partners; EID
- CD4 count at enrolment
- Timely initiation of ART
- On-time drug pick-up
- ARV stock out

# How?

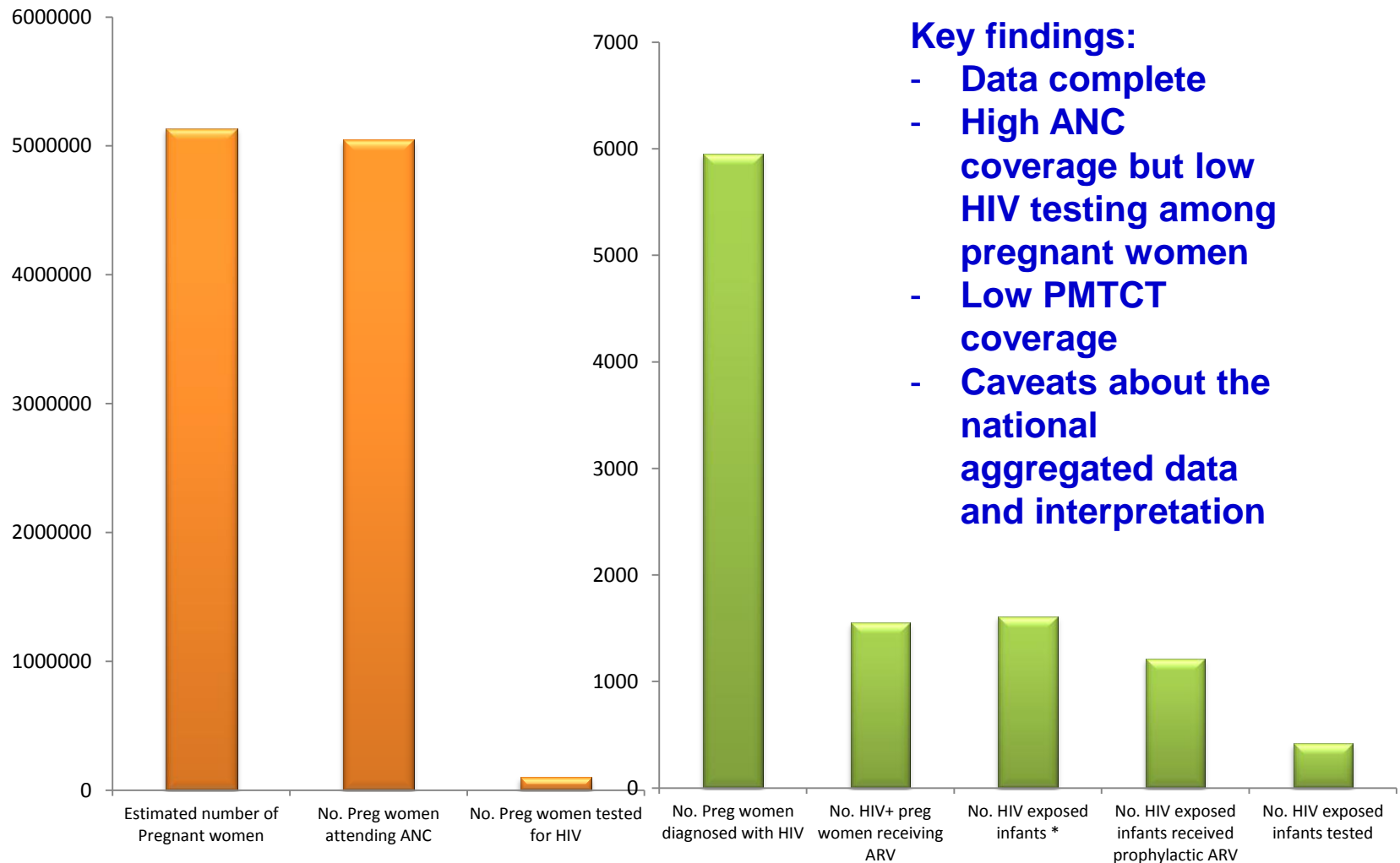


# Country example 1: HIV cascade in Indonesia, 2013



Source: GARPR, 2014

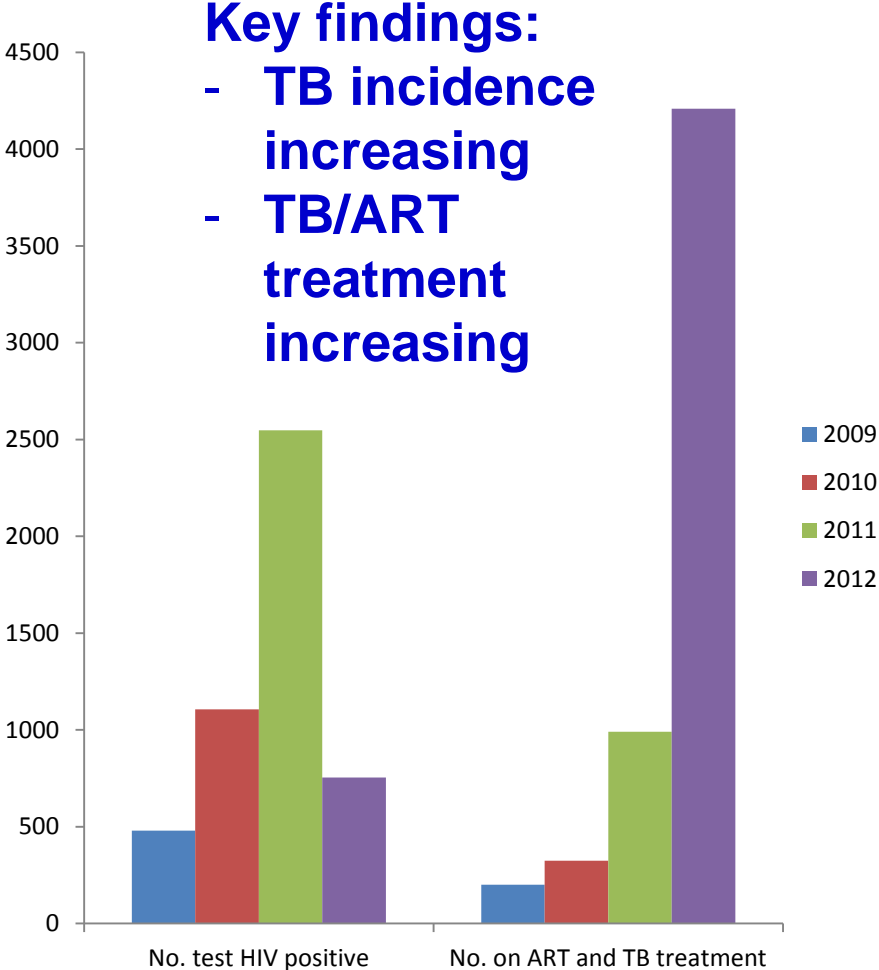
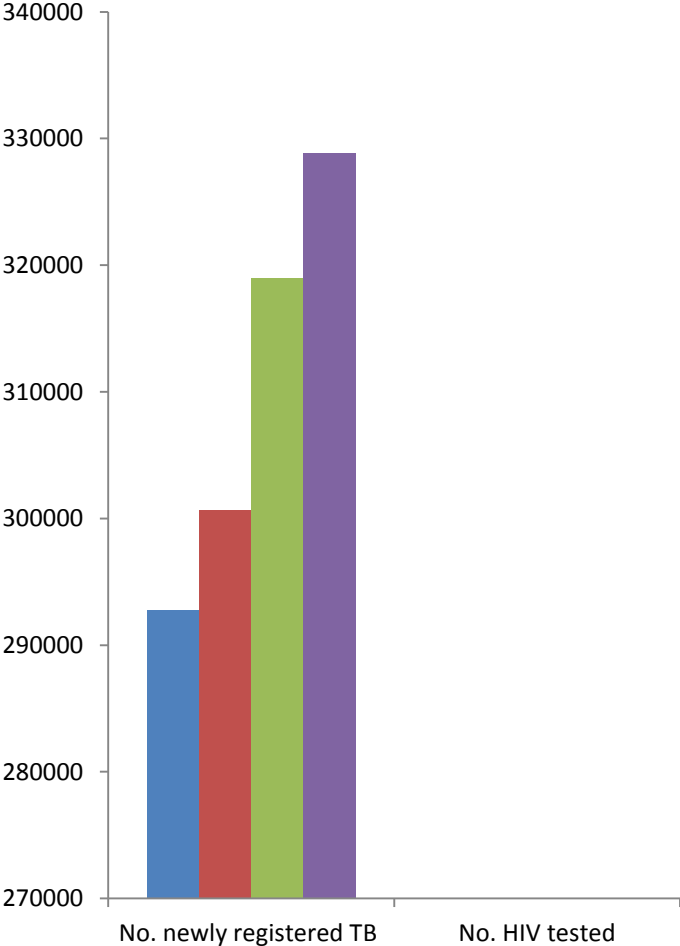
# Country example 1: PMTCT cascade Indonesia, 2013



Data source: GARPR

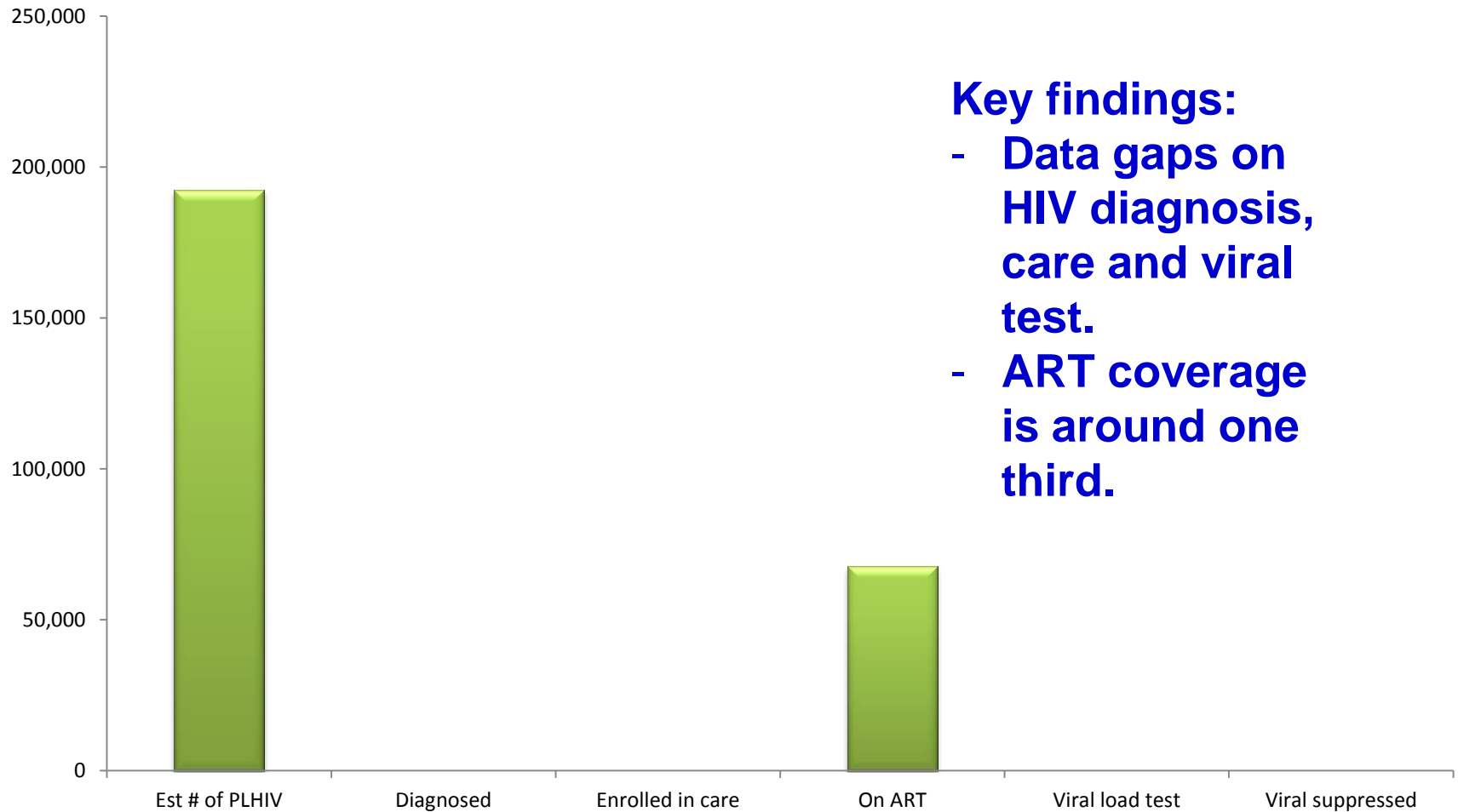


# Country example 1: TB/HIV services in Indonesia, 2009-2012



Source: UNAIDS, [aidsinfoonline.org](http://aidsinfoonline.org). Data reported from WHO TB programme.

# Country example 2: HIV cascade Myanmar, 2013

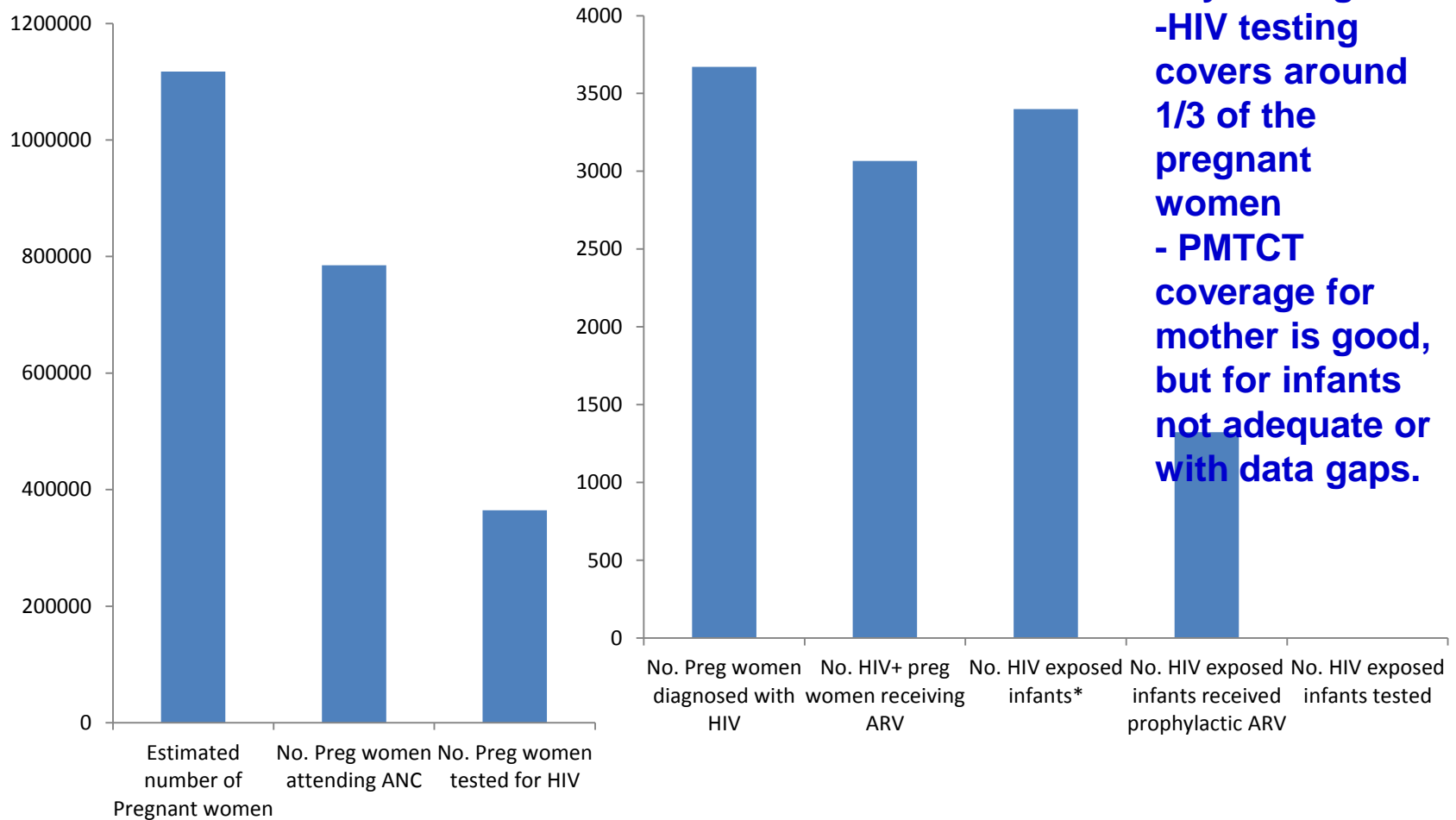


## Key findings:

- Data gaps on HIV diagnosis, care and viral test.
- ART coverage is around one third.

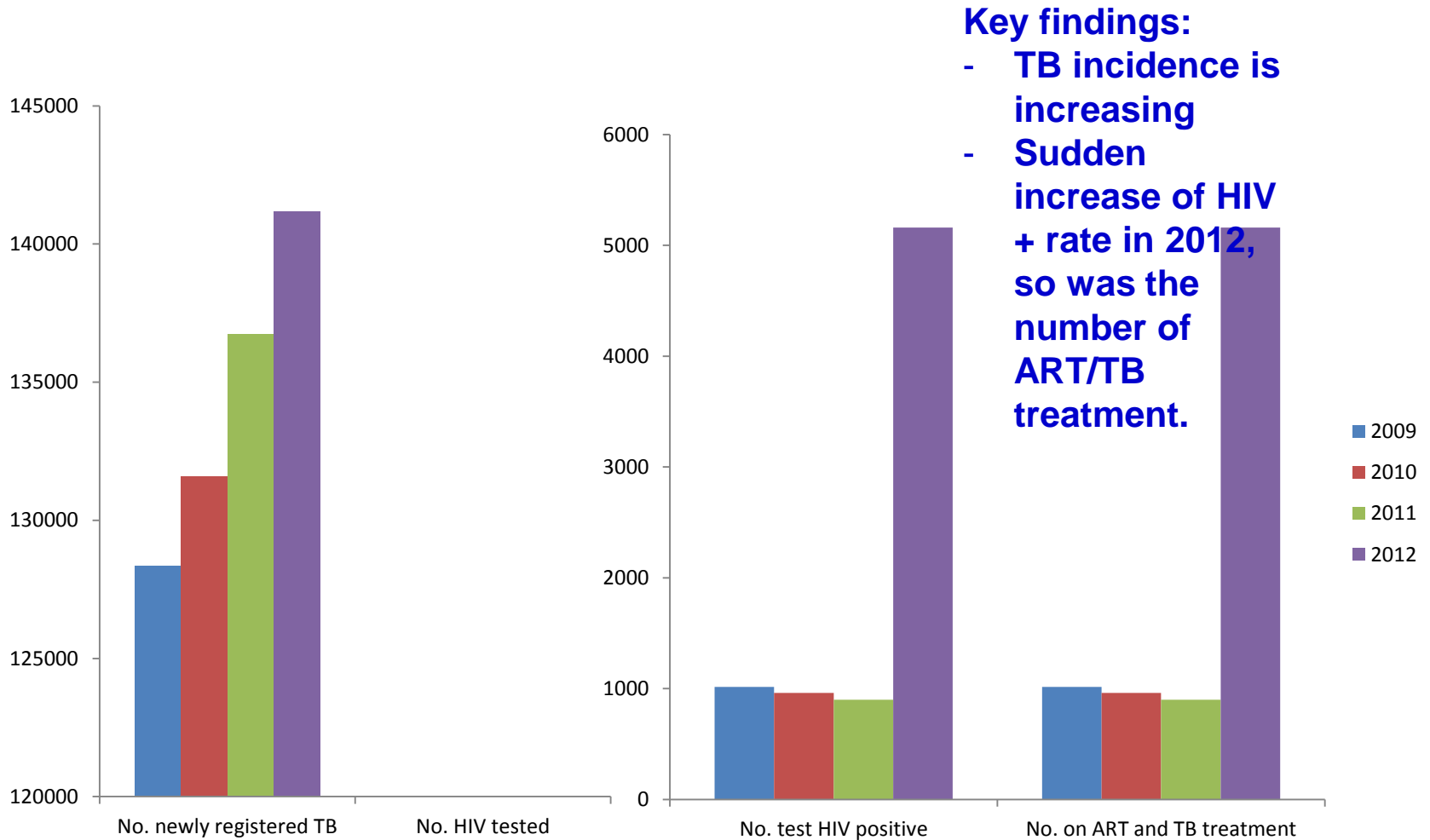
Source: UNAIDS, WHO. GARPR, 2014

# Country example 2: PMTCT in Myanmar, 2013



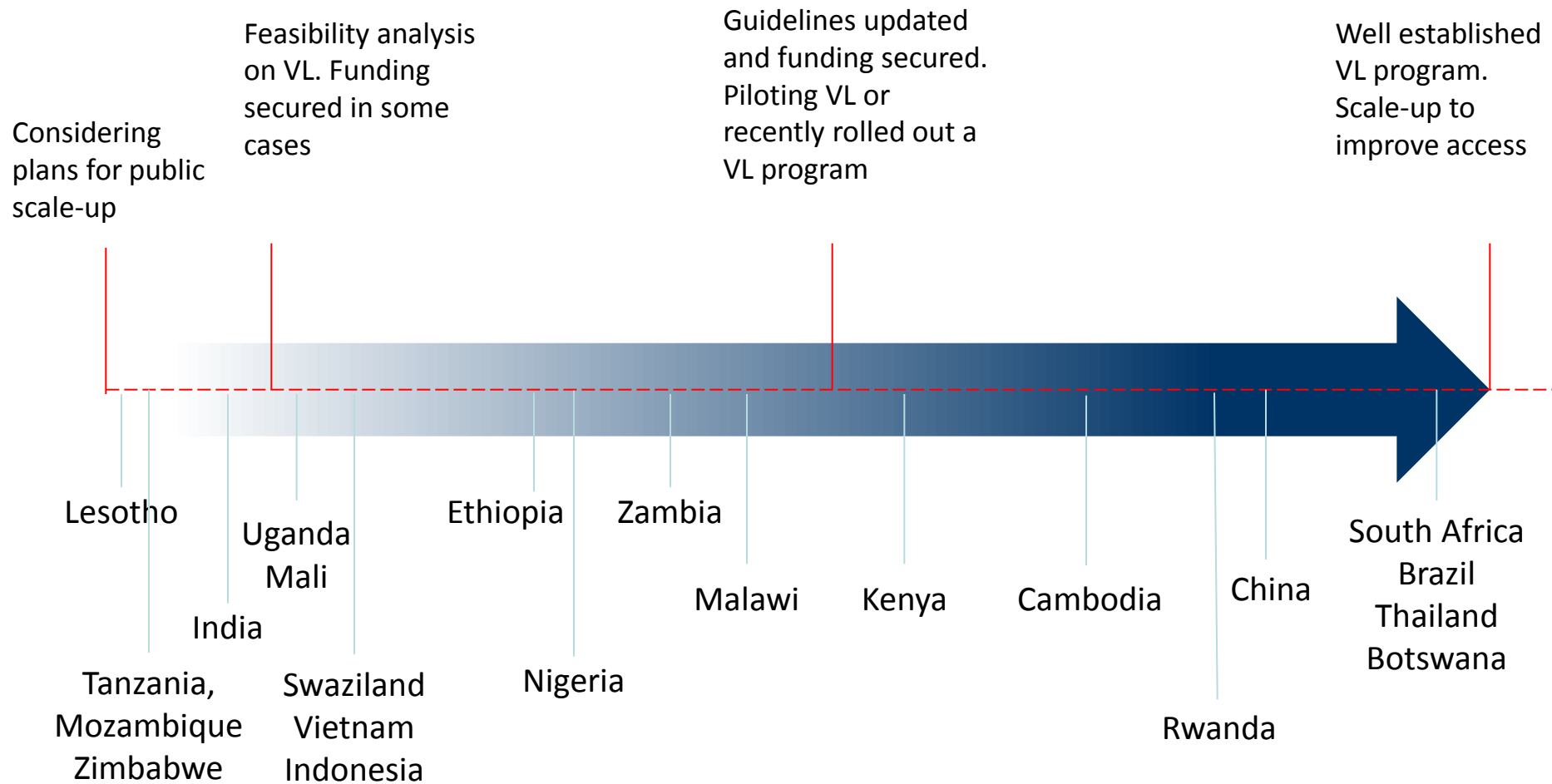
Source: UNAIDS, WHO. GARPR. 2014

# Country example 2: TB/HIV services in Myanmar, 2009-12



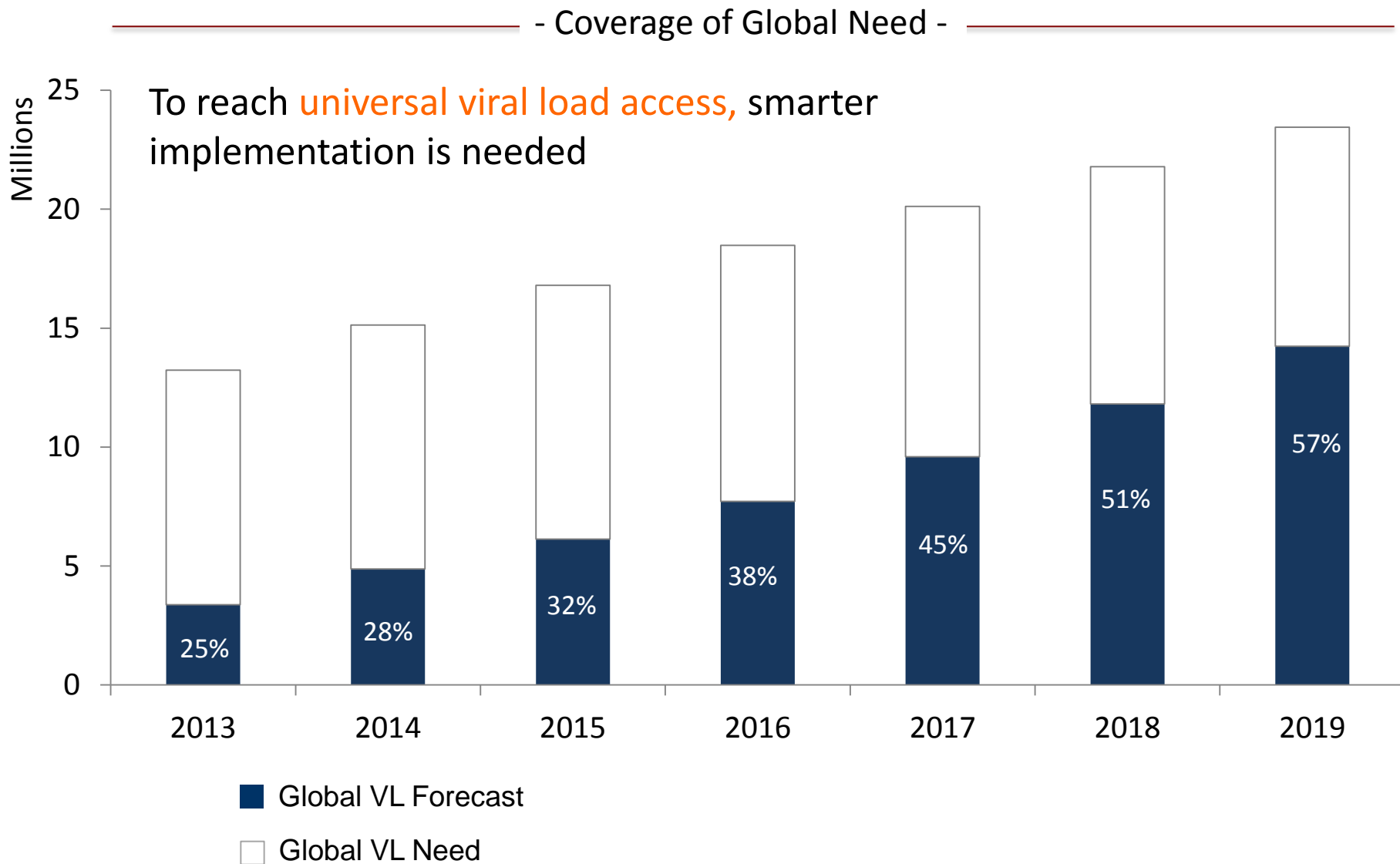
Source: UNAIDS, [aidsinfoonline.org](http://aidsinfoonline.org).  
2014

# Viral Load scale-up in many public programs is starting



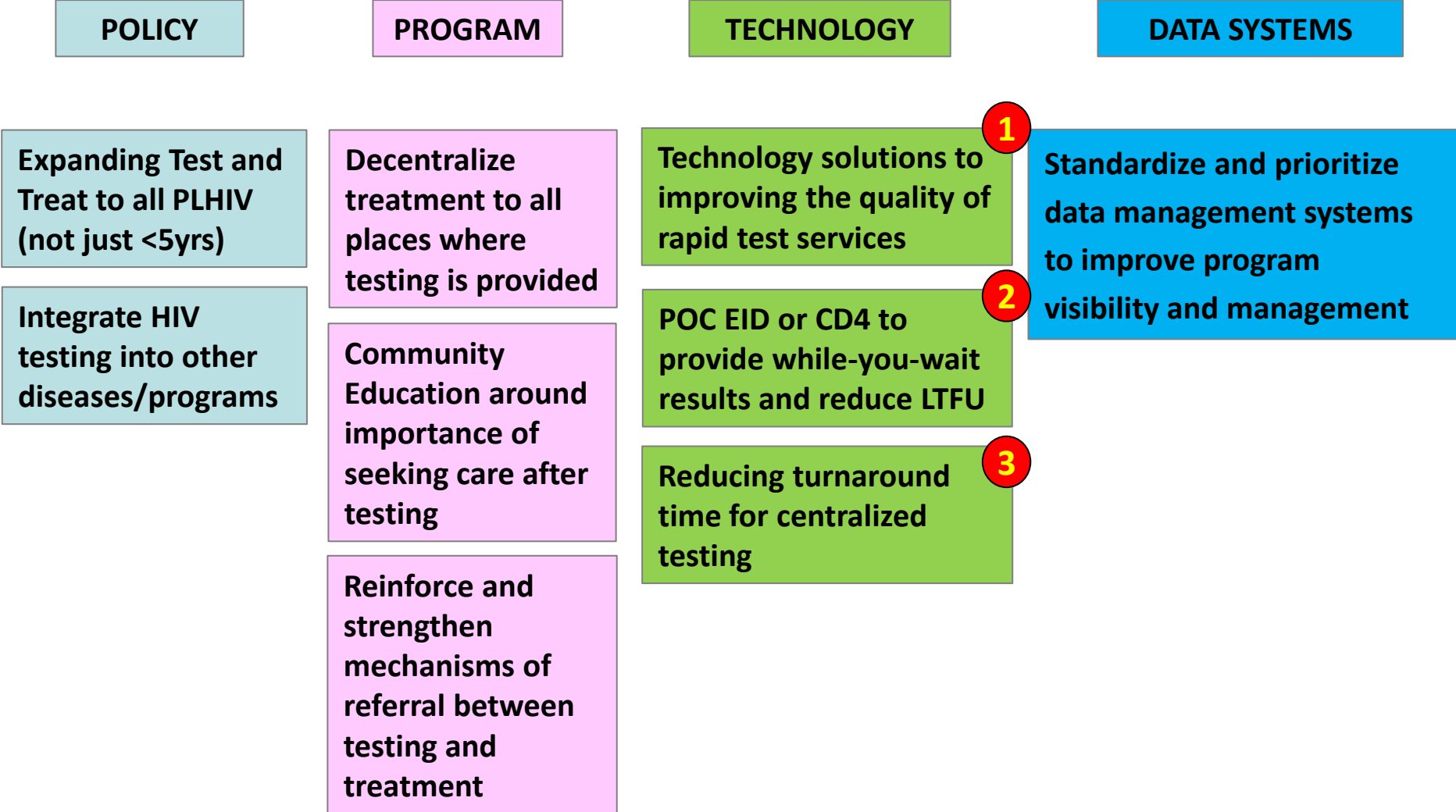
Source: CHAI, June 2014

# However scale-up rates are too slow *even with old targets* – better strategies to deploy viral load are needed



Source: CHAI, 2014

# Multiple levels of innovation are needed



Source: CHAI, 2014

# Conclusions and suggestions

- Significant gaps in both HIV services and data in most countries. Scaling up services (including VL test) and strengthening data needed.
- The cascade analysis useful for analysing gaps in HIV services and data.
- It provides **snapshots** of services and gaps when using cross-sectional aggregated national data.
- It may be more valuable if **cohort data** is available; it is more useful for **subnational analysis**, such as at site and district level.
- For M&E purpose, lack of Unique Identifier Code (UIC) is the one of the biggest barriers for most countries.
- Can be adapted by countries according to country context.



**Thanks!**