



Testing for Sustainable HIV Control: What Data Do We Need for Decision-Making?

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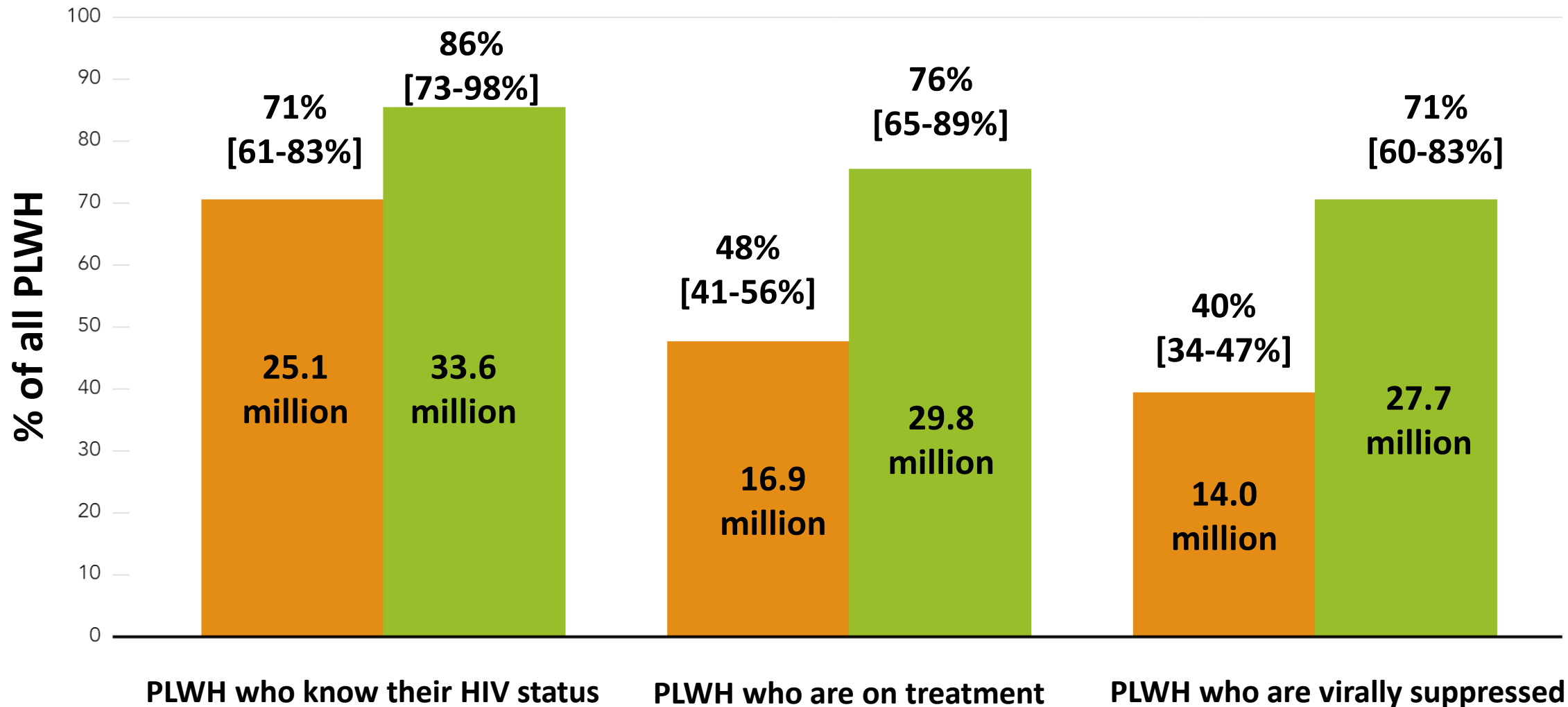


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Testing for Sustainable HIV Control: Overview

- **What is the current status versus goals and targets?**
- **What decisions on HIV testing need to be made?**
 - Numbers (targets)
 - Strategies
 - Optimized bundle of strategies/differentiated HTS for treatment and prevention/person centered
- **What information do we need to inform testing targets and locations?**
 - Program data
 - Survey data
 - Modeling data
- **Pre-meeting Survey Responses**

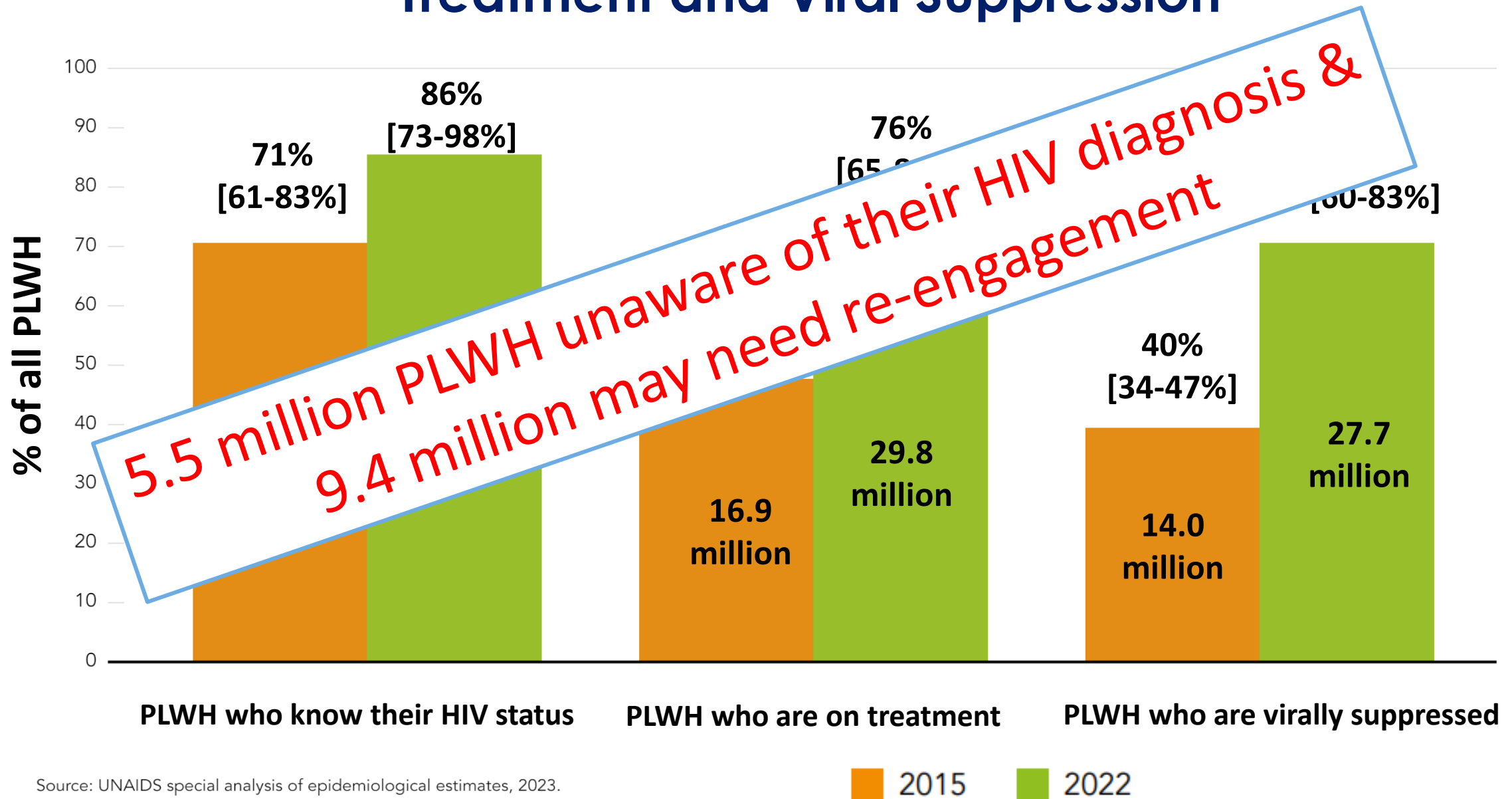
Substantial Improvement in Knowledge of HIV, Treatment and Viral Suppression



Source: UNAIDS special analysis of epidemiological estimates, 2023.

2015 2022

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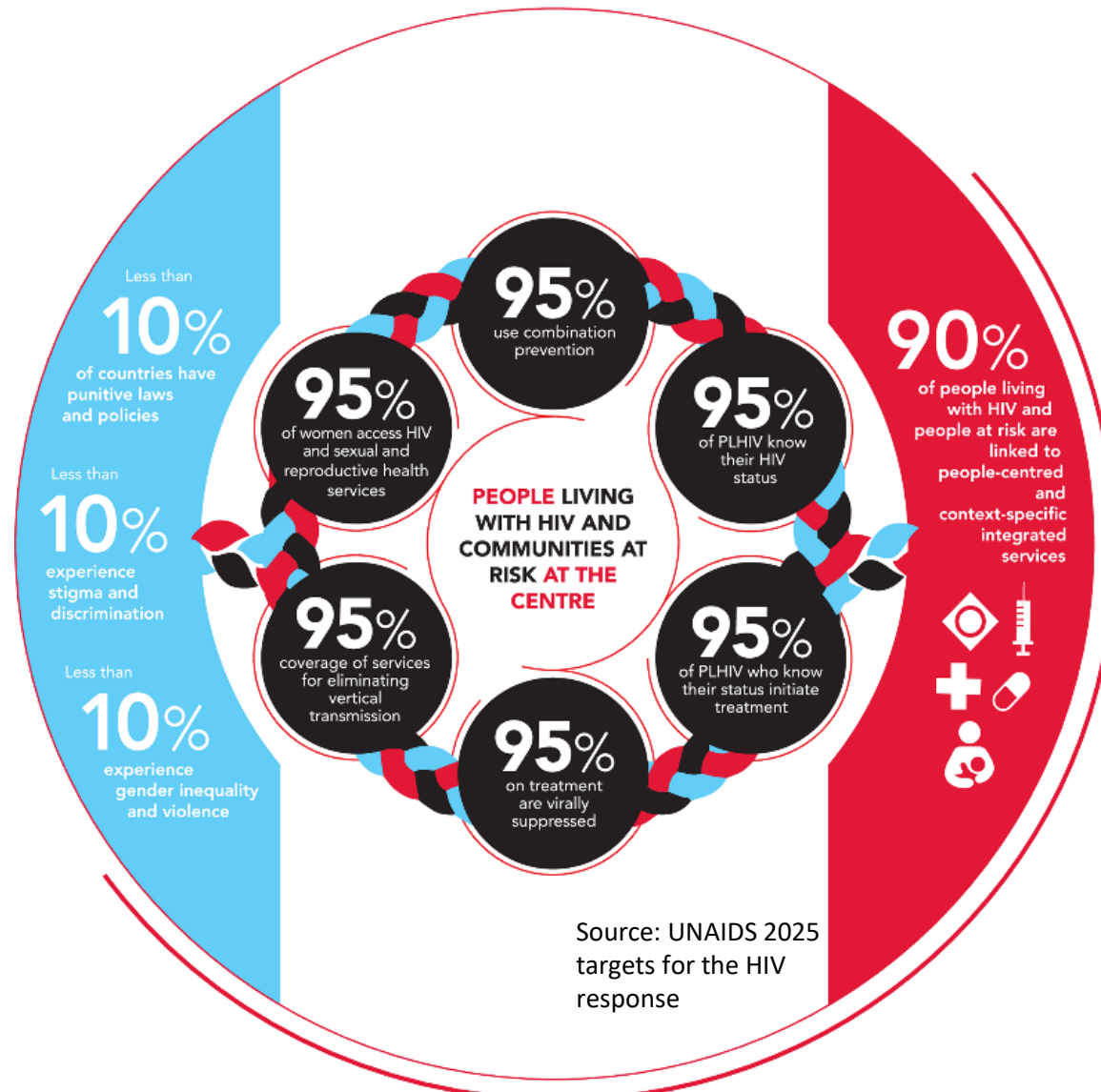
What do we know about the 5.5 million who are not aware?

- **Geographic gaps**
- **Men** living with HIV less likely to know their status than women living with HIV (varies by country)
- **Children** living with HIV are less likely to know their HIV status (63%) than adults living with HIV (86%)
- **Key populations** are less likely to know their status than the general population
- **Older adults** (> age 50 y) living with HIV less likely to know their status than those under age 50:
 - 21% were unaware of their HIV status before the surveys
 - **Of these, half (54%) had never had an HIV test**

NUMBERS

how much testing do we need and for whom?

2025 Global AIDS Strategy



Source: UNAIDS 2025 targets for the HIV response

2014:

90-90-90 global targets for 2020

and

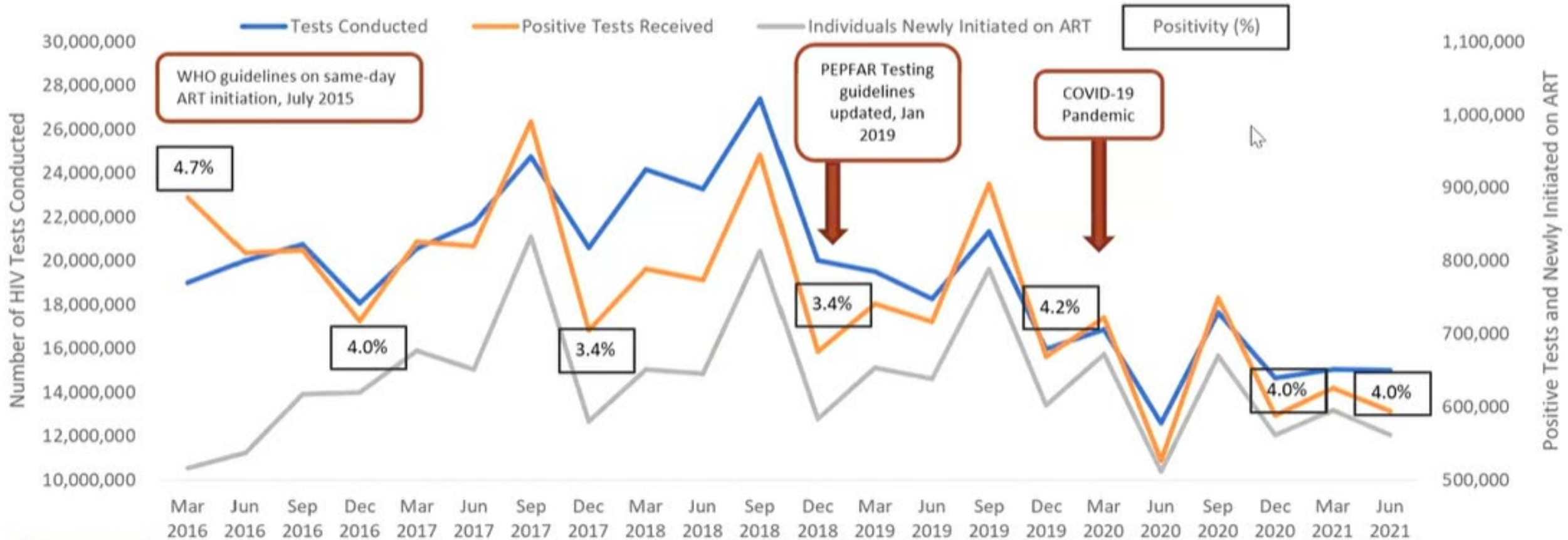
95-95-95 by 2025

to eliminate HIV as a public health threat by 2030

2025: Expanded to ten targets, including linking 90% of those at risk of HIV infection to integrated (preventive) services
Most depend on HIV testing

More targeted testing approaches have led to a decline in testing volume (2016-2021)

Number of HIV Tests Conducted, HIV-Positive Tests Results, and HIV-Positive Individuals Newly Initiated on Anti-Retroviral Treatment (ART) from 41 PEPFAR-Supported Countries, Mar 2016 to Jun 2021

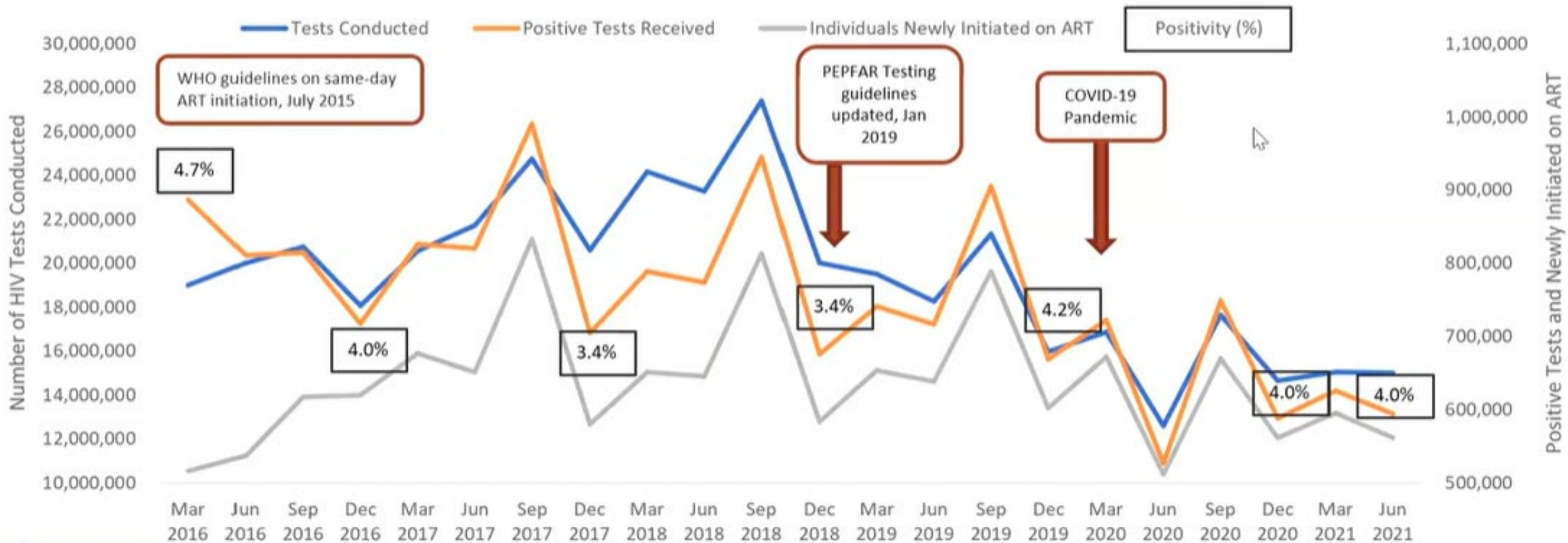


2016-2021 quarterly results (final month of the quarter shown)



Source: <https://www.croiconference.org/abstract/trends-in-hiv-testing-and-linkage-to-hiv-treatment-in-41-countries-2016-2021/>

2016 to 2021: 41 countries conducted 443 million HIV tests & reported 17.5 million as HIV positive = 25.3 people tested to identify one new PLWH, ~4% yield



2016-2021 quarterly results (final month of the quarter shown)



Mind the global testing gap: 'back-of-the envelope' estimates*

Yearly need:

- Unaware of diagnosis: 5.5 M (2022)
 - 25.3 tests x 5.5M = **139 M** to identify all (assume in one year)
- Newly infected: 1.3 M/yr
 - 25.3 tests x 1.3M = **33 M**
- PrEP: 6 M (x 4 tests/y) = **24 M**
- Need for re-engagement: 9.4M (2022)
 - ?2.5 x 9.4M = **23.5M**

Sum: ~220 M tests needed, then ??

Yearly actual:

- PEPFAR 71 M and Global Fund 53 M = **124 million**
- ~ 4 M (USA) and 6 M (Europe) tests conducted in 2021 = **10 M**
- [not counted: South America and Asia]

Sum: ~135 M tests conducted

*Many assumptions!

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Yearly actual:

- PEPFAR and Global Fund 53 million
- 10 M (USA) and 6 M (Europe) tests conducted in 2021 = **10 M**
- [not counted: South America and Asia]

Sum: ~135 M tests conducted

How does HIV self-testing fit in here?

STRATEGIES

which strategies do we need and for what?

Strategies

- Strategies:
 - Algorithms: rapid tests, three-test algorithm
 - Location: home (HIVST), facility, community (pharmacies, barbershops/hair salons, etc)
 - Initiator (provider, individual, family/social network)
 - Demographic and geographic focus

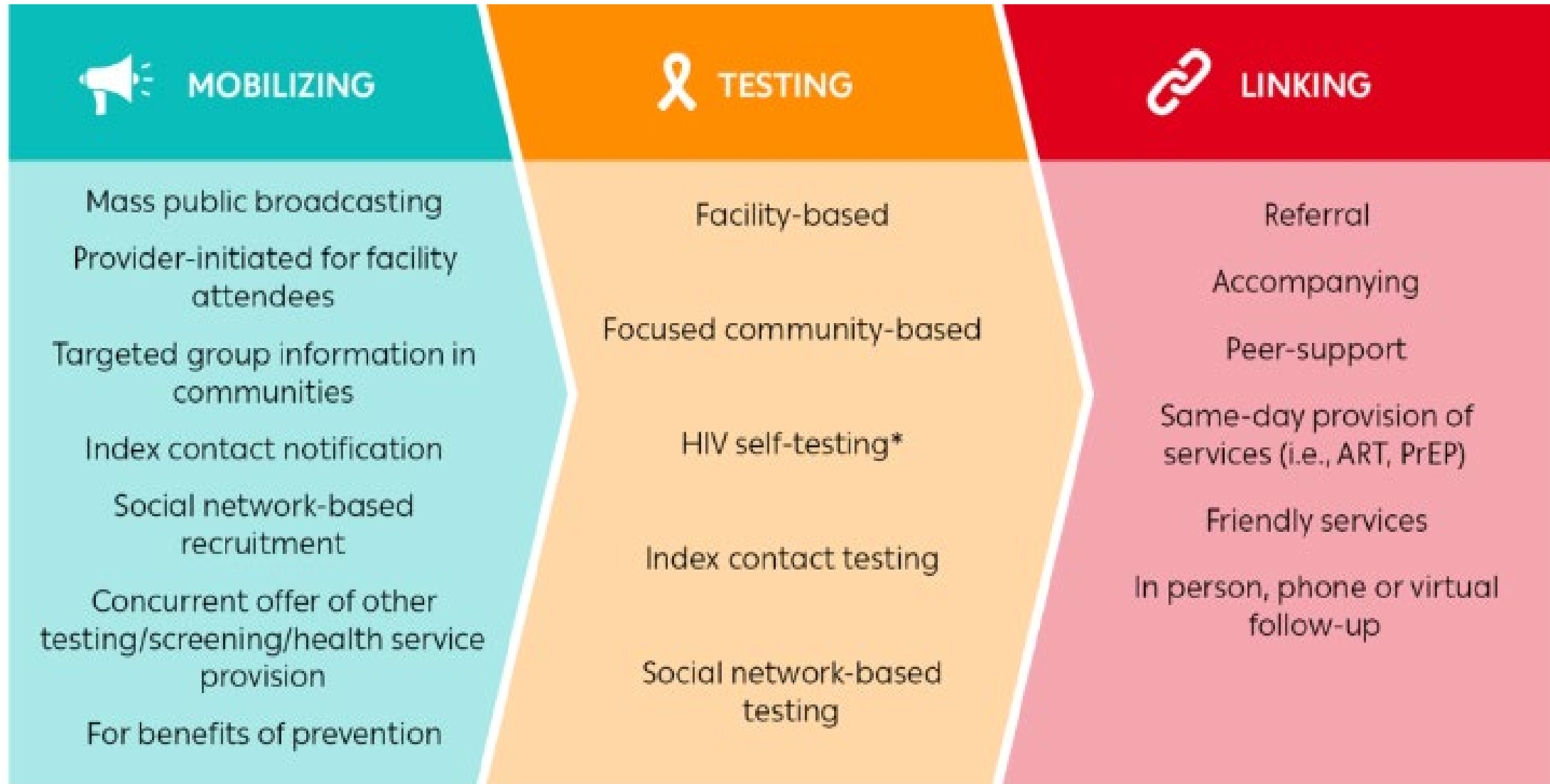
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- Optimized bundle of strategies/ differentiated HTS for treatment and prevention/person-centered

Differentiated Service Delivery Is Person-Centered



Differentiated HIV Testing Services

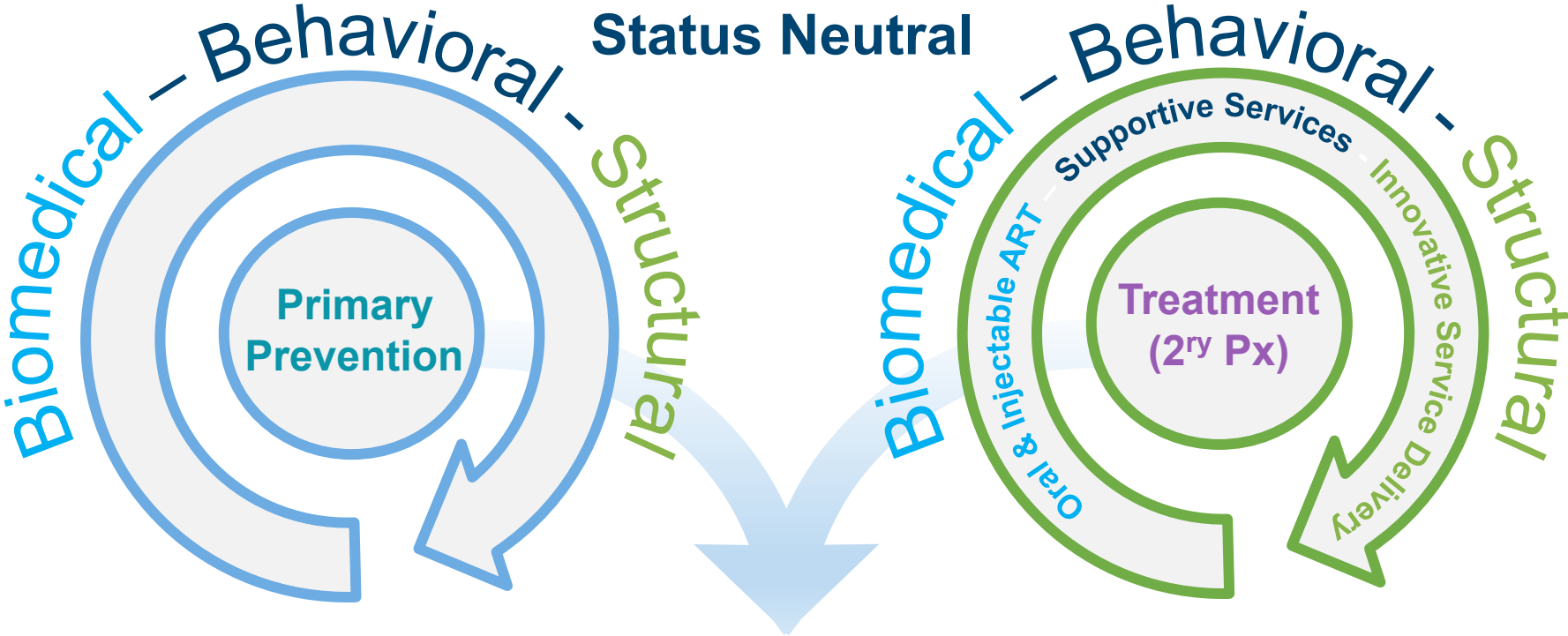


* Self-testing is a testing modality that can be used in all testing approaches, including within health facilities and in the community.

Testing for both Treatment and Prevention: What is the evidence?

- **Overarching goal:** to diagnose and facilitate access and uptake of appropriate HIV prevention, treatment, and care
- **Status-neutral testing approaches:** maintain core testing services to reach the greatest number of people with HIV not on treatment, while broadening the scope to support linkage to appropriate **prevention and treatment services**

Status-Neutral Approach to HIV Treatment and Prevention

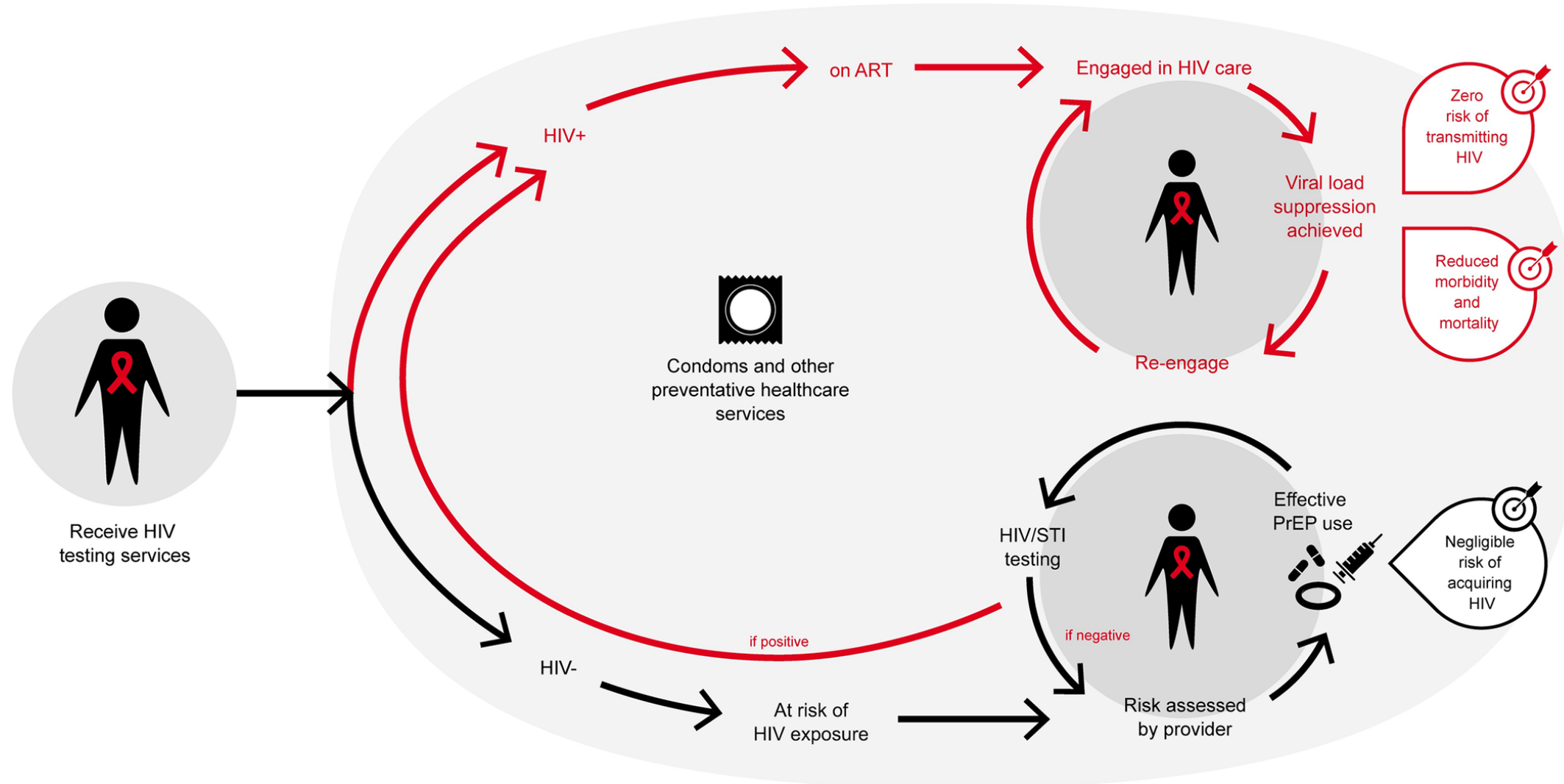


Integrated Strategy Study with Population-Specific Interventions

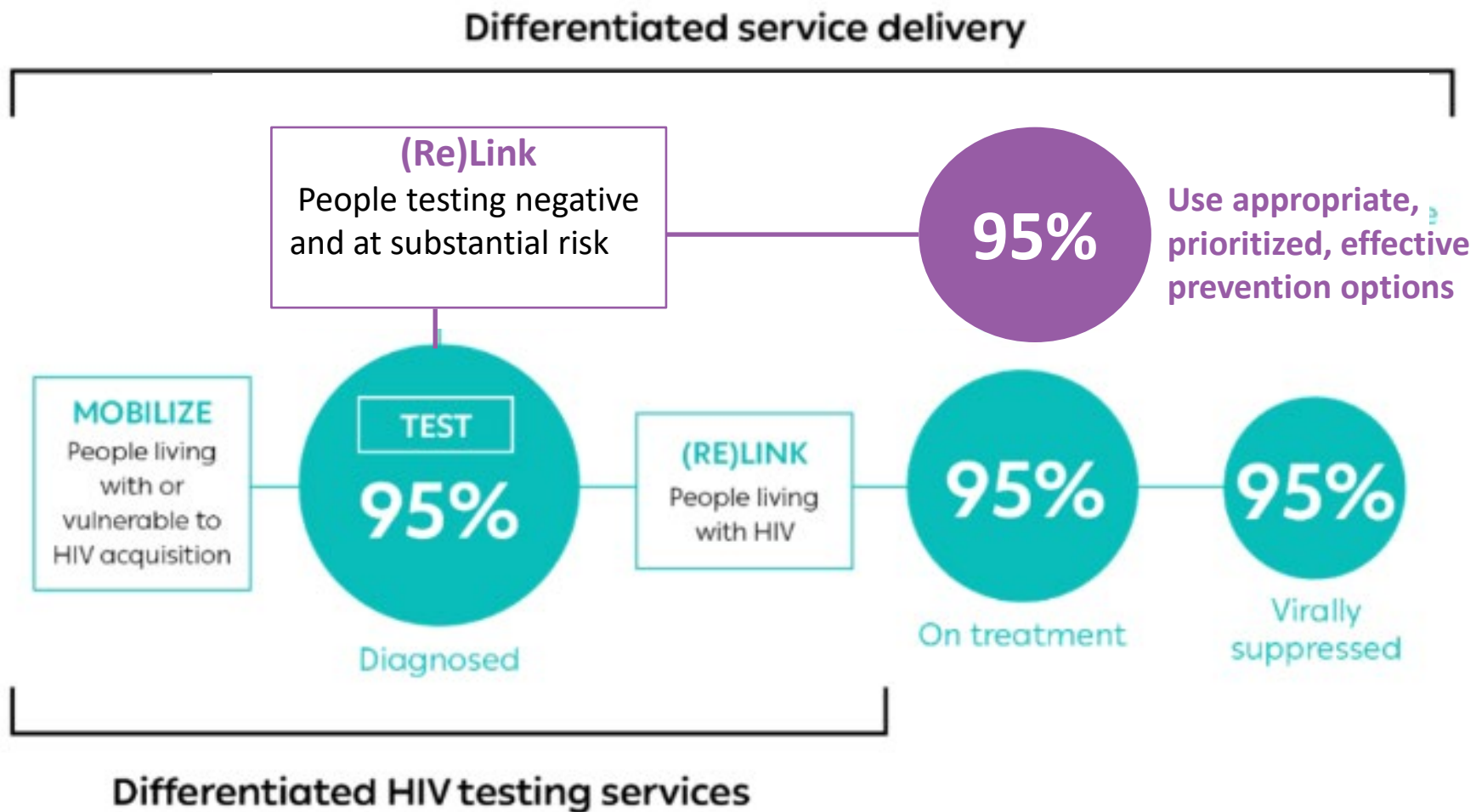
Reduce HIV Incidence

PUBLIC HEALTH IMPACT

Status-Neutral Approach to HIV Treatment and Prevention



Differentiated HIV Testing Services

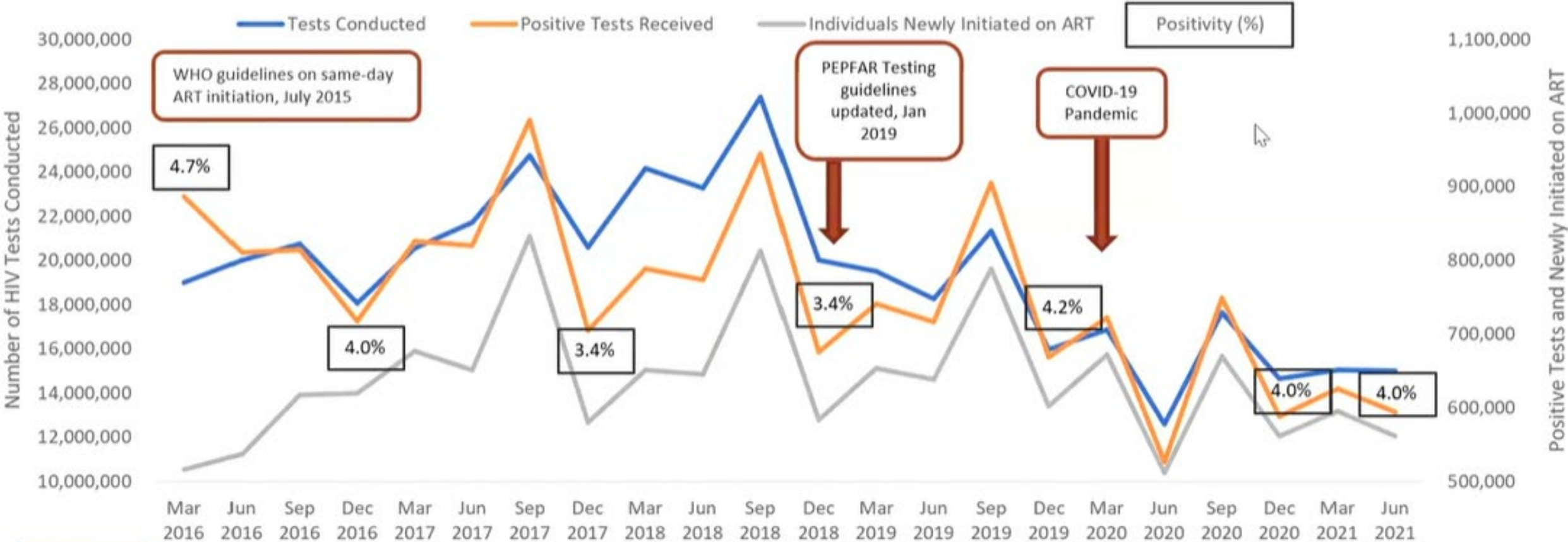


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Program data: Targeted testing approaches have led to a decline in testing volume (2016-2021)

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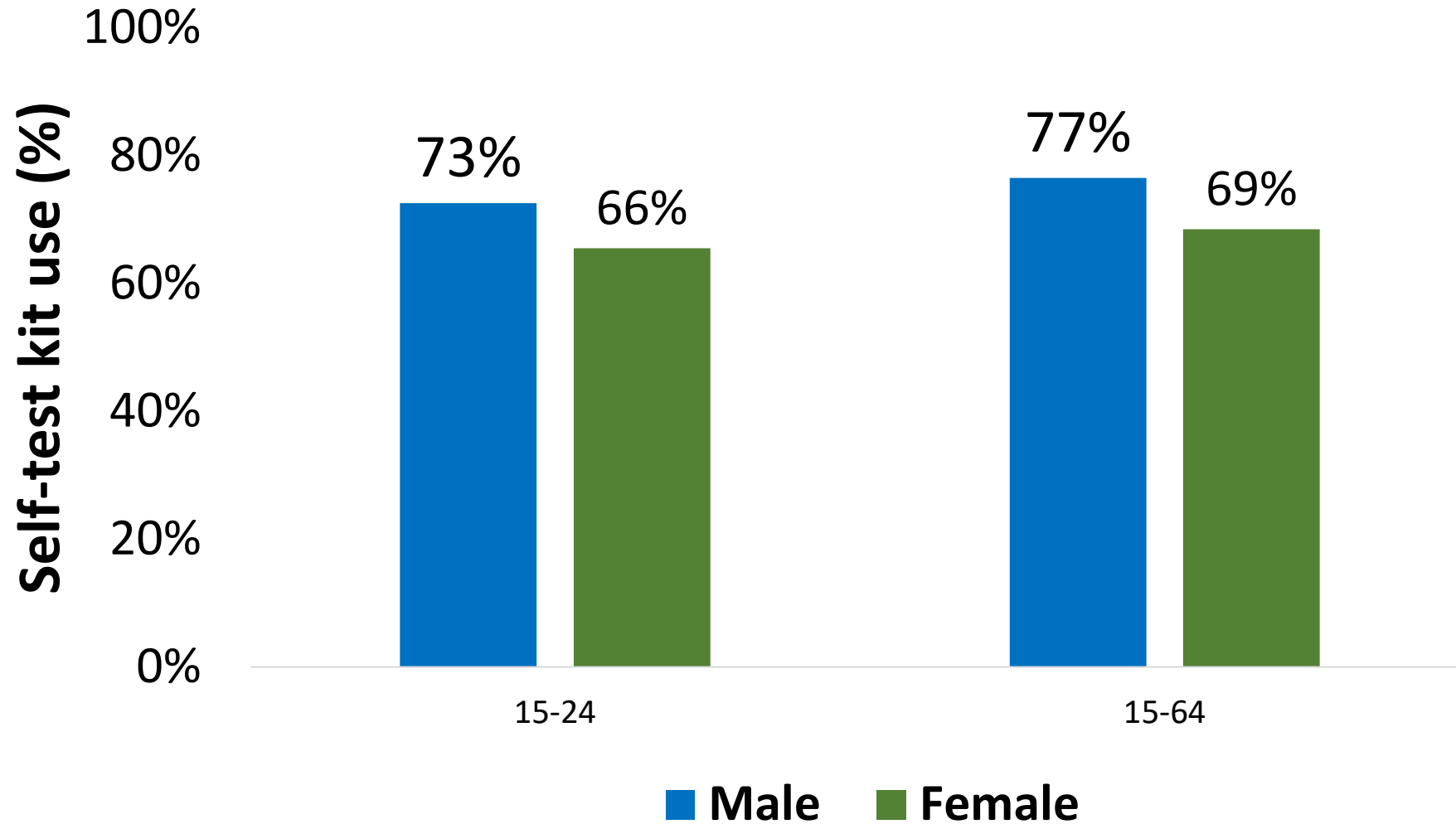


2016-2021 quarterly results (final month of the quarter shown)

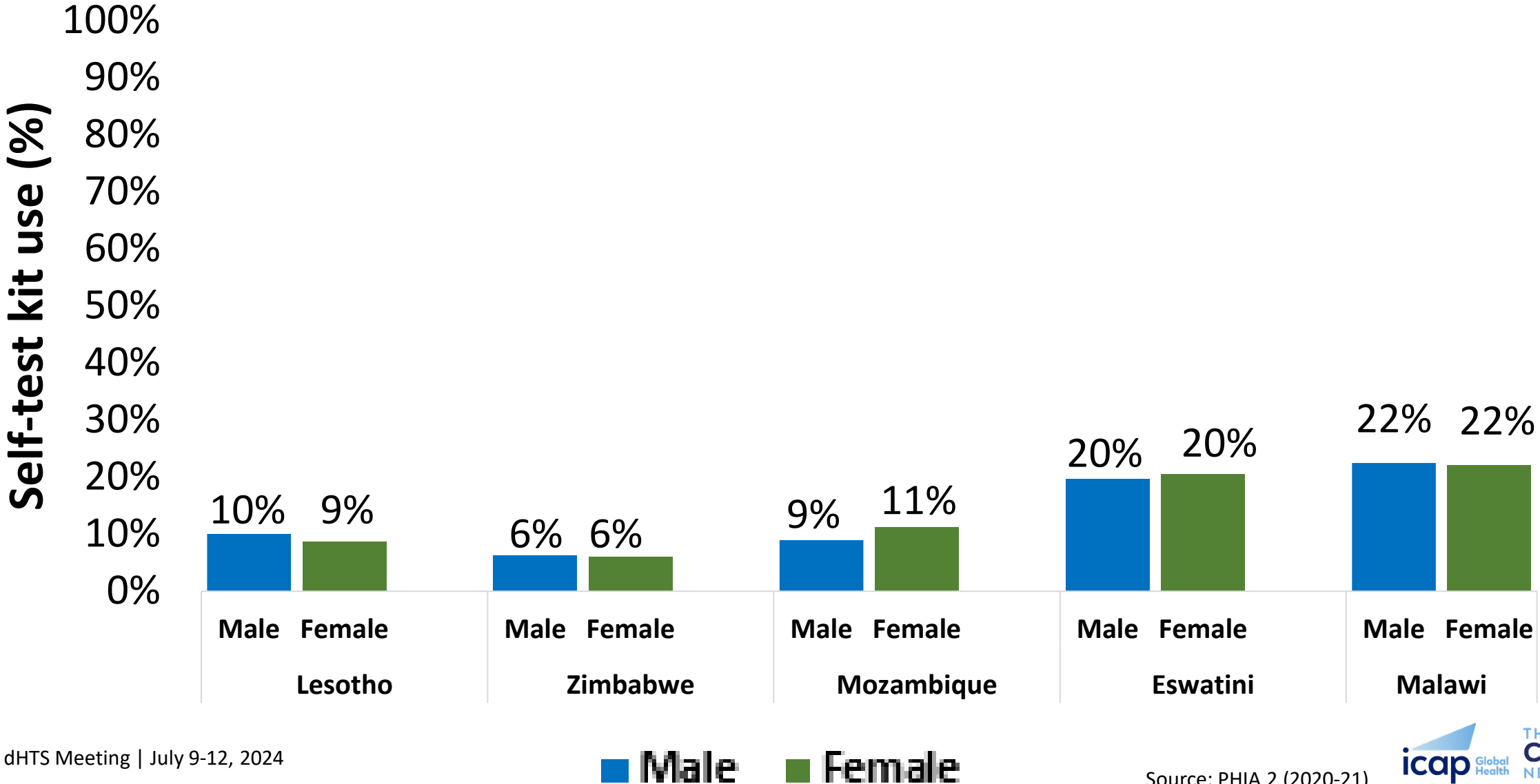


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Survey data: Percentage who would use an HIV self-test kit if available, MPHIA 2015-2016



Survey data: Percentage who have ever tested for HIV using a self-test kit, PHIA 2 (2020-21)



HIV testing in the context of expanding HIV prevention options

Oral PrEP



Dapivirine vaginal ring



CAB-LA



Lenacapavir*



Increased testing frequency
Normalization of testing

*investigational PrEP agent

Key Takeaways

- Current status of the HIV epidemic: more HIV testing needed
- Need quantitative targets (**NUMBERS**) and optimized and flexible bundles of person-centered differentiated testing approaches (**STRATEGIES**)
 - Program, survey, modeled and research data to guide targets and strategies
- HIV testing needs to be expanded
 - to reflect changes in the HIV epidemic
 - To reach prevention and treatment objectives
 - To reflect widening availability of PrEP

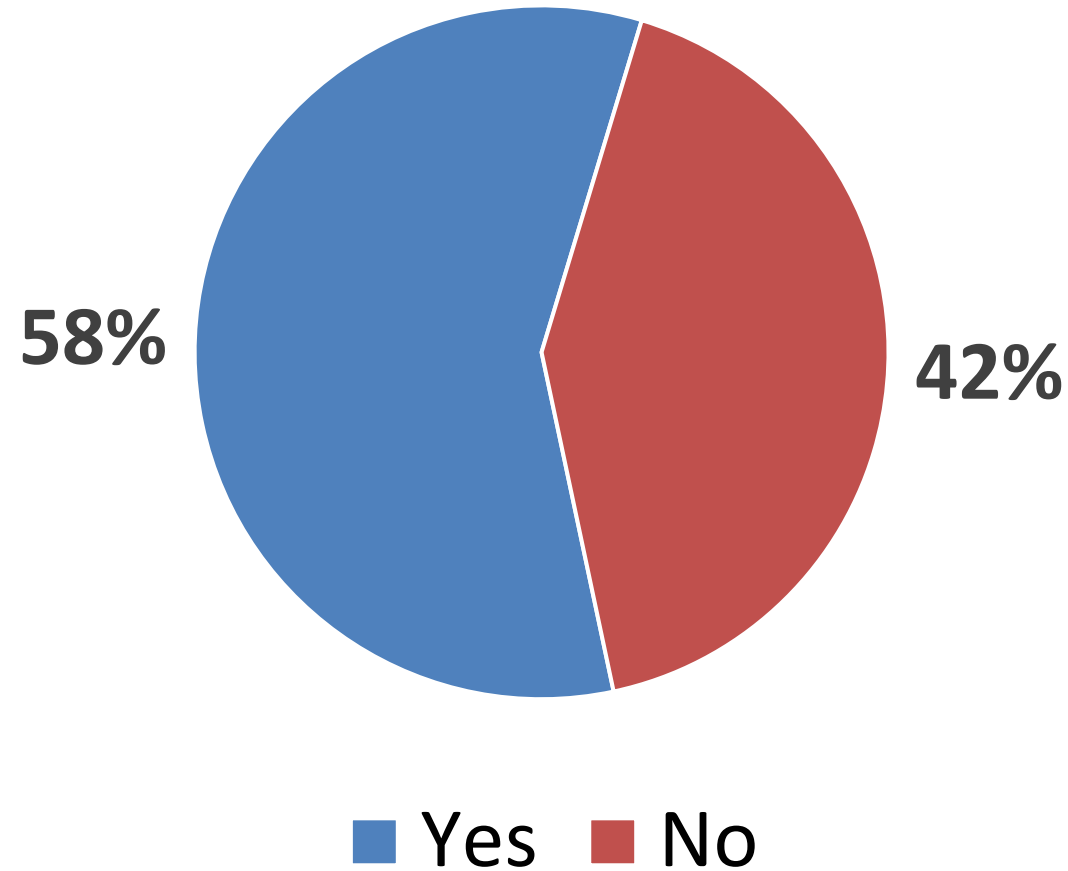
Pre-Meeting Survey Results



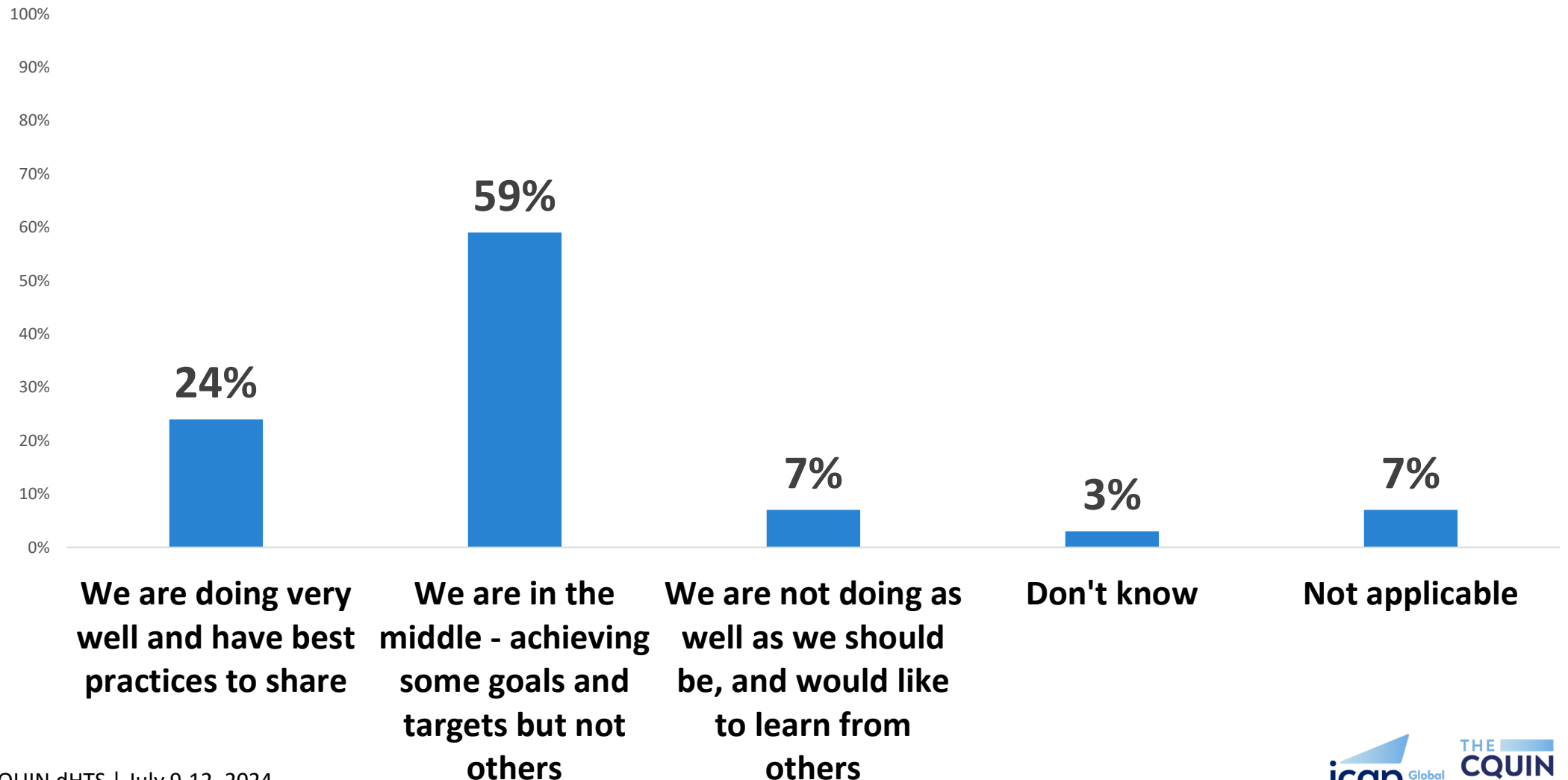
Registration Survey Information

- The registration survey was sent to all meeting participants
- **183/225 (81.3%)** participants responded to the survey
- 21 countries are included in responses
- Respondents include Ministries of Health, recipients of care, PEPFAR (CDC/USAID), WHO, implementing partners

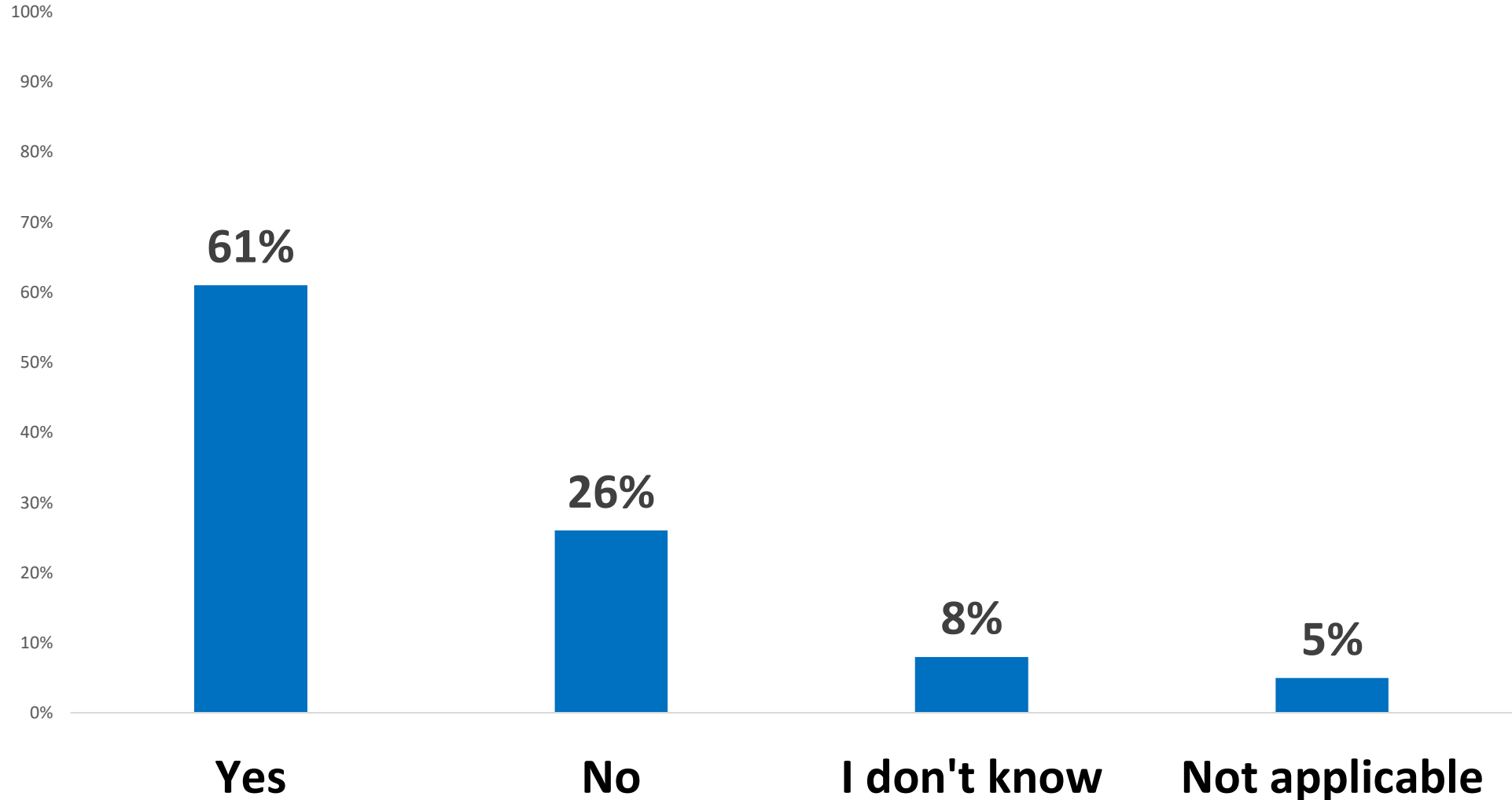
Have you attended a CQUIN multi-country meeting before (virtual or in-person)? (N=183)



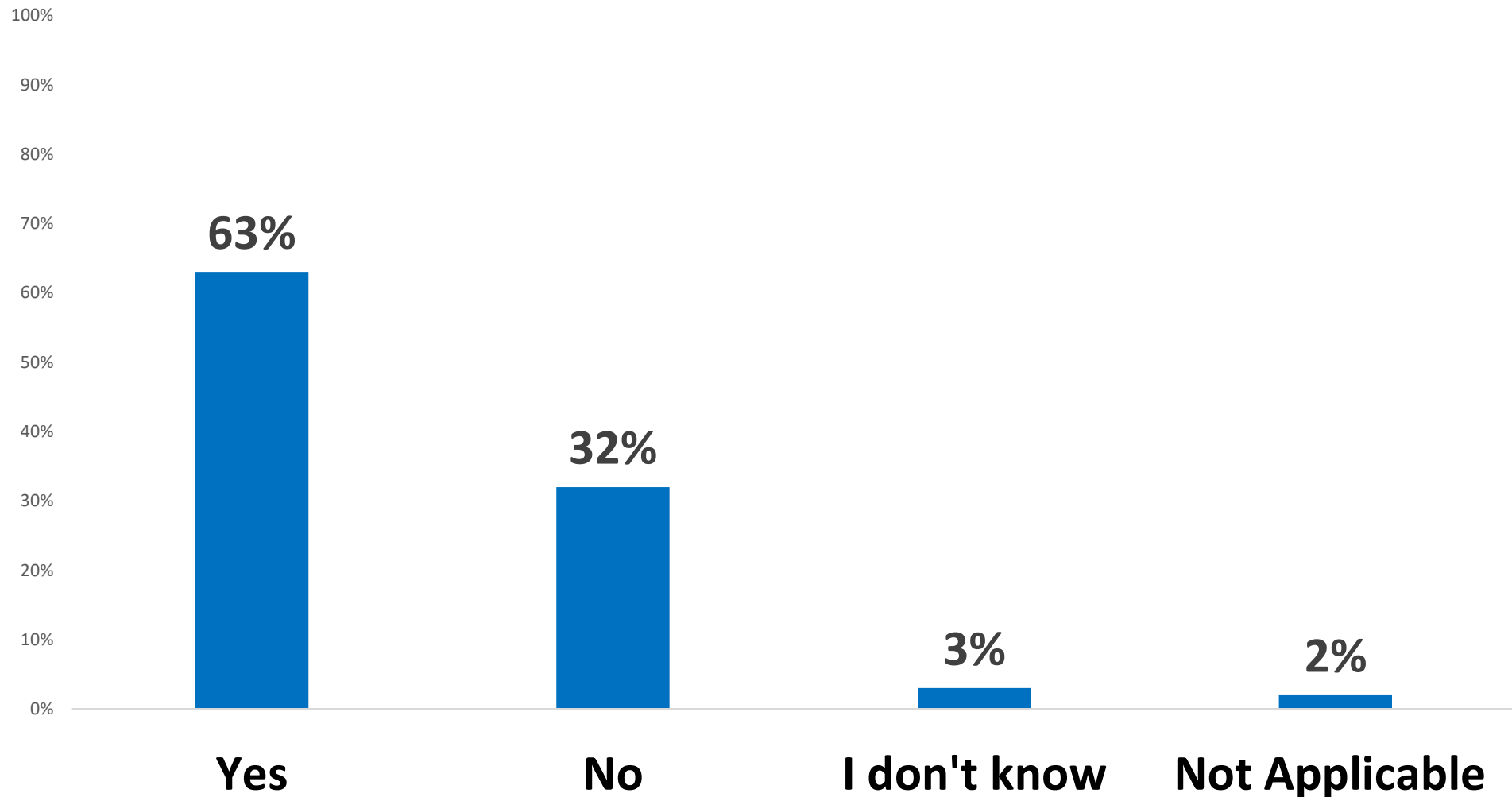
To what extent does your country/organization/institution have capacity to mobilize key and priority populations for HIV testing?



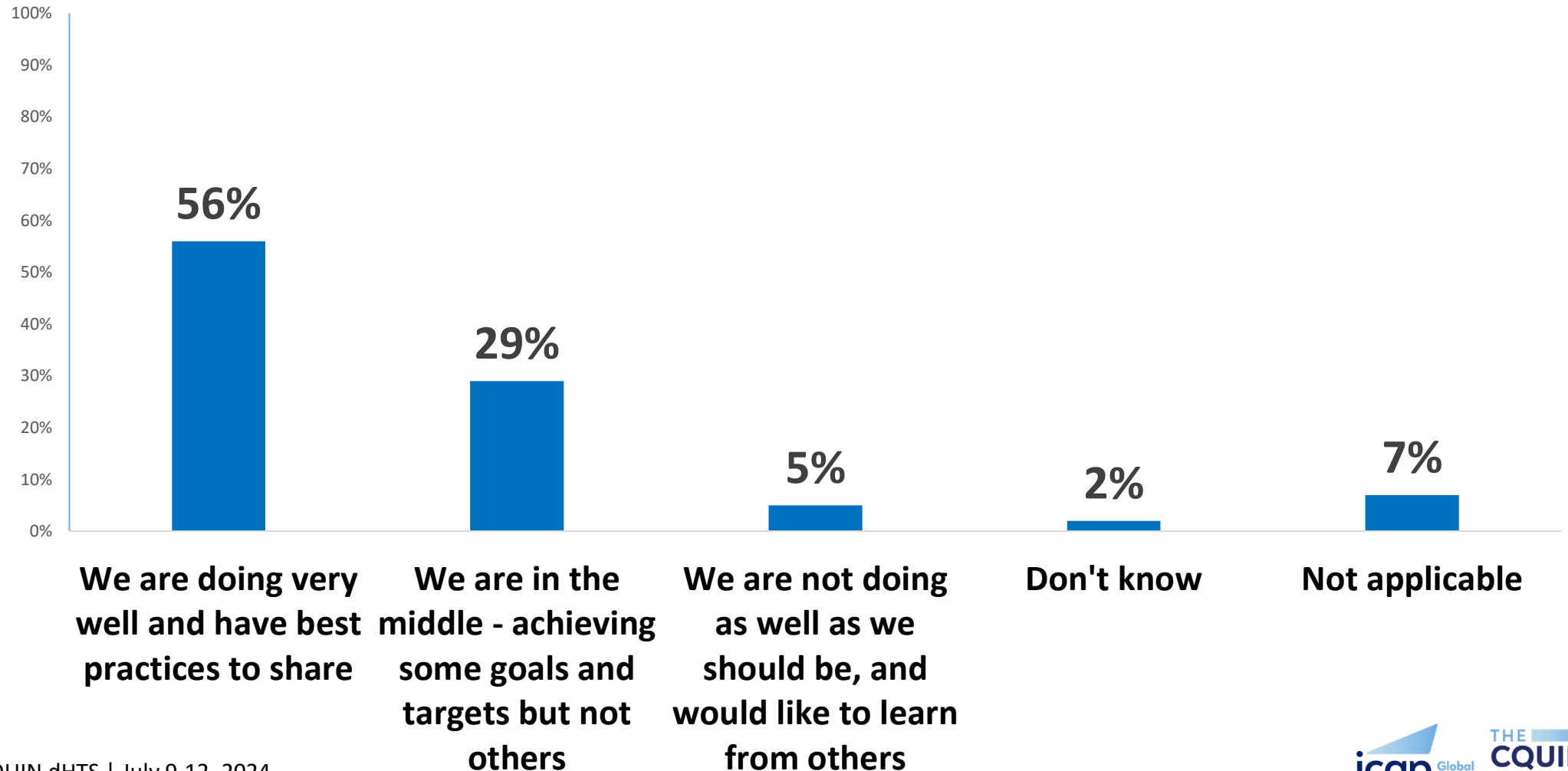
Do you feel there is enough guidance or understanding of the 3-test algorithm?



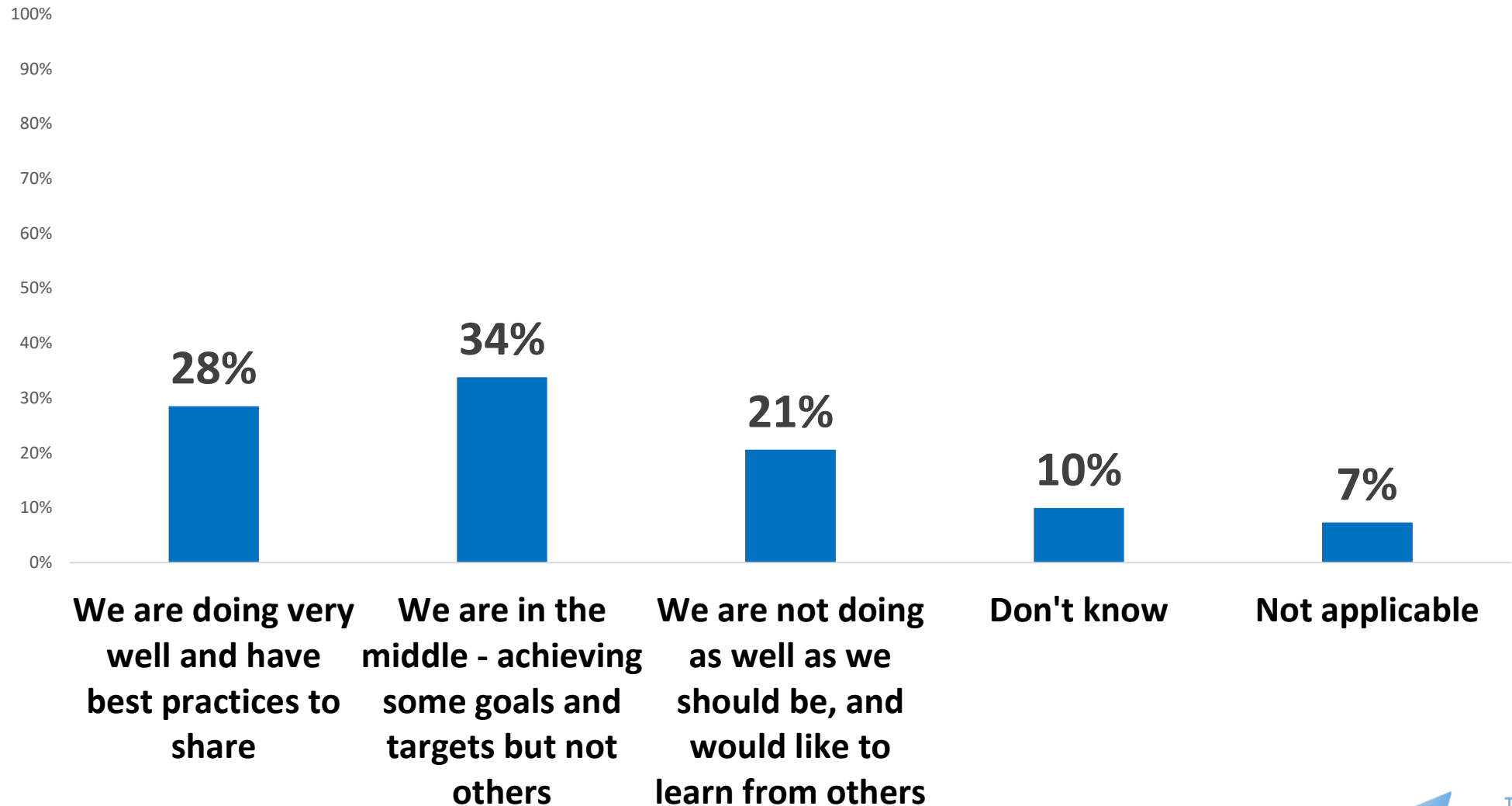
Do you feel there is enough guidance or understanding on testing for prevention?

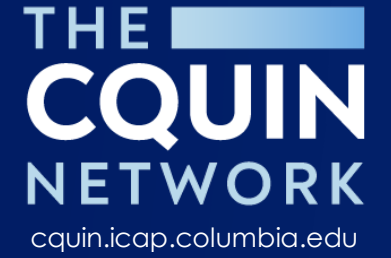


To what extent has your country/organization/institution addressed the issue of linking people who test HIV positive to treatment (including linkage from all testing entry points and for all sub-populations)?



To what extent has your country/ organization/institution scaled up HIV proficiency testing to reach HIV rapid testers?





Thank You!

