

"The HIV Epidemic in Thailand: Trends, Challenges, and Control Strategies"



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Seminar on Management of Infectious Diseases in Immunocompromised Hosts

Disclosures

Opass Putcharoen, MD, MSc

- Non-CME/CE services: Gilead Sciences, Merck, Siam Pharmaceutical, ViiV, Hetero laboratory, Mylan, Abbott
- Advisory board: GSK, ViiV Healthcare and Gilead Sciences

Agenda

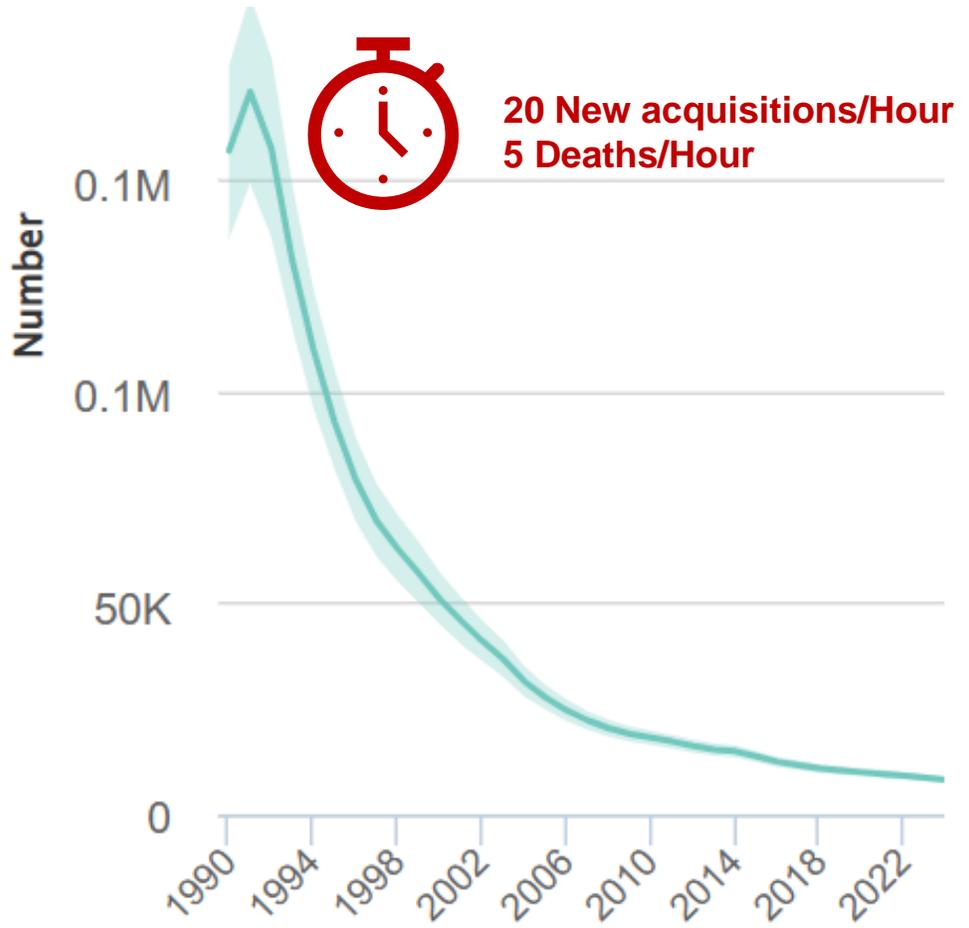
- Current situation
- Progress on prevention and treatment of HIV infection
- The barriers
- The ways forward



“Early Epidemic”

New Infections

1997 All ages estimate 170,000 (150,000-190,000)



Feature	Global / Western Context (Early 80s)	Thailand Context (Late 80s)
Primary Perception	"GRID" (Gay-Related Immune Deficiency). Seen as a disease of specific marginalized groups (4Hs: Homosexuals, Heroin users, Hemophiliacs, Haitians).	Initially seen as a "Foreigner's Disease" until the 1988 explosion among <i>IDUs proved it was local.</i>
Dominant Transmission	US/Europe: Men who have sex with Men (MSM) and IDUs. Africa: Heterosexual transmission (general population).	Heterosexual (Commercial Sex): While it started in IDUs, the <i>volume</i> of the epidemic was driven by men visiting sex workers and infecting their wives.
Speed of Spread	Slower, steady climb in specific communities.	Explosive: One of the fastest spreading epidemics in history due to the high turnover of commercial sex clients.

“Early Epidemic”

The urgency of the HIV situation in Thailand

Thailand was the first Asian nation to recognize that it had a major HIV/AIDS problem, a problem so serious as to deserve priority on the national agenda. While sporadic testing among female sex workers, injecting drug users (IDUs), and men having sex with men detected little HIV through the end of 1987, the rapid growth of HIV infections among IDUs in early 1988 spurred efforts to monitor the epidemic systematically. By mid-1989, a national sentinel serosurveillance system had been established. In the first round of testing in 14 provinces conducted in June 1989, high infection levels were detected among sex workers in the country's northern provinces, especially among sex workers in brothels. By June 1990, with the system expanded to include all 73 provinces, HIV prevalence among brothel-based sex workers had risen from 3.1 per cent in June 1989 to 9.3 per cent nationally (provincial median) and was climbing fast. By June 1991, it had grown to 15.2 per cent. Prevalence was also growing rapidly among young Thai men - who were tested when conscripted into the military at age 21 - from 0.5 per cent in November 1989 to 3.0 per cent in November 1991. Studies of behaviour and HIV infection among these conscripts and other populations soon demonstrated that most new HIV infections in Thailand were occurring through commercial sex.

Evaluation of the 100% Condom Programme in Thailand



UNAIDS
Case study
July 2000

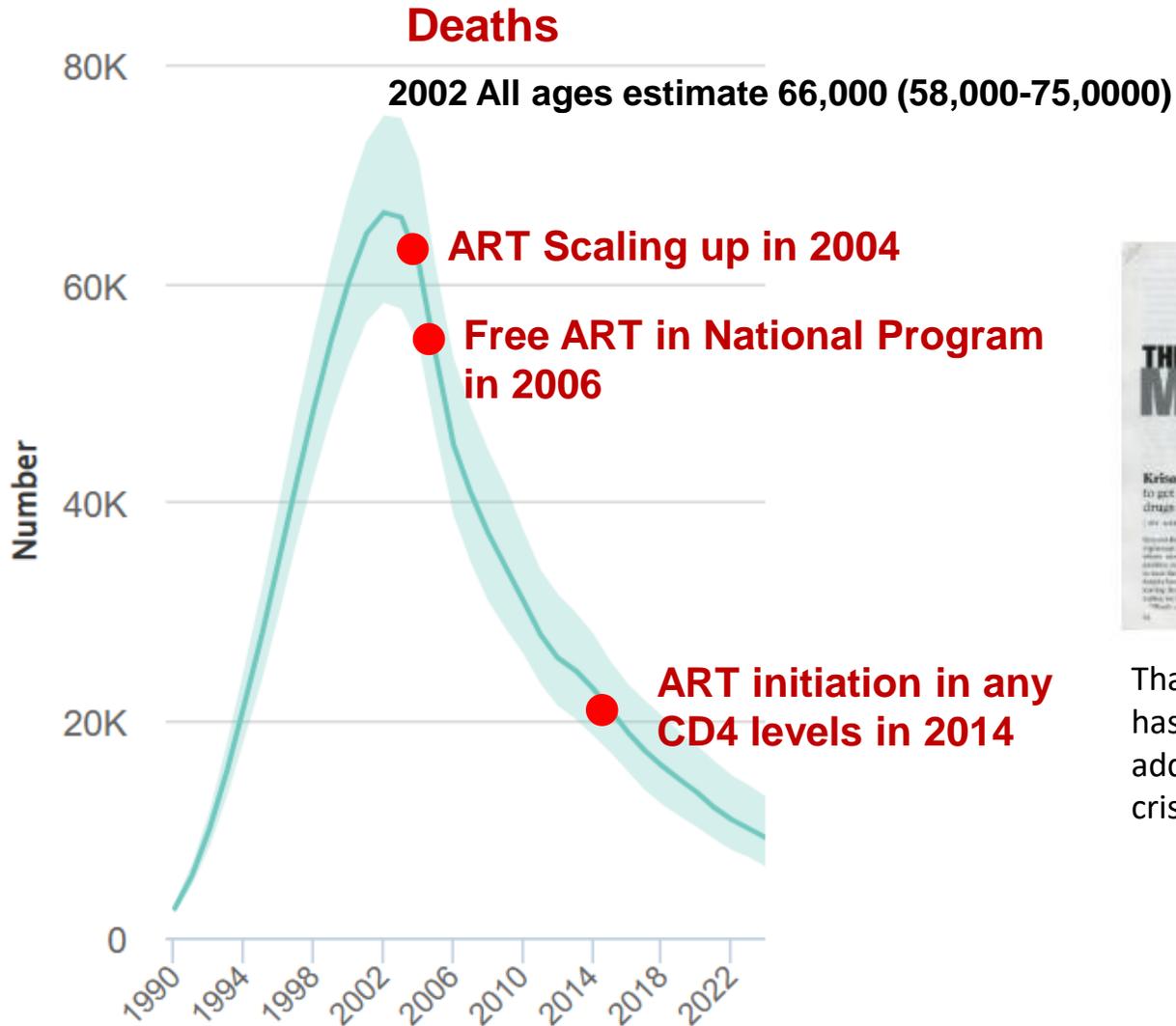


Sex, laughs and the snip: an audience with Thailand's 'Condom King'

Thailand's population growth has slowed dramatically since the 60s, with a little help from Mechai Viravaidya's vasectomy festivals and condom-blowing competitions



“Early Epidemic”



7.5 Deaths/Hour



Thai scientist Krisana Kraisintu who has been working determinedly to address Thailand's HIV and AIDS crisis.



“Where We Are Today: HIV Epidemic”

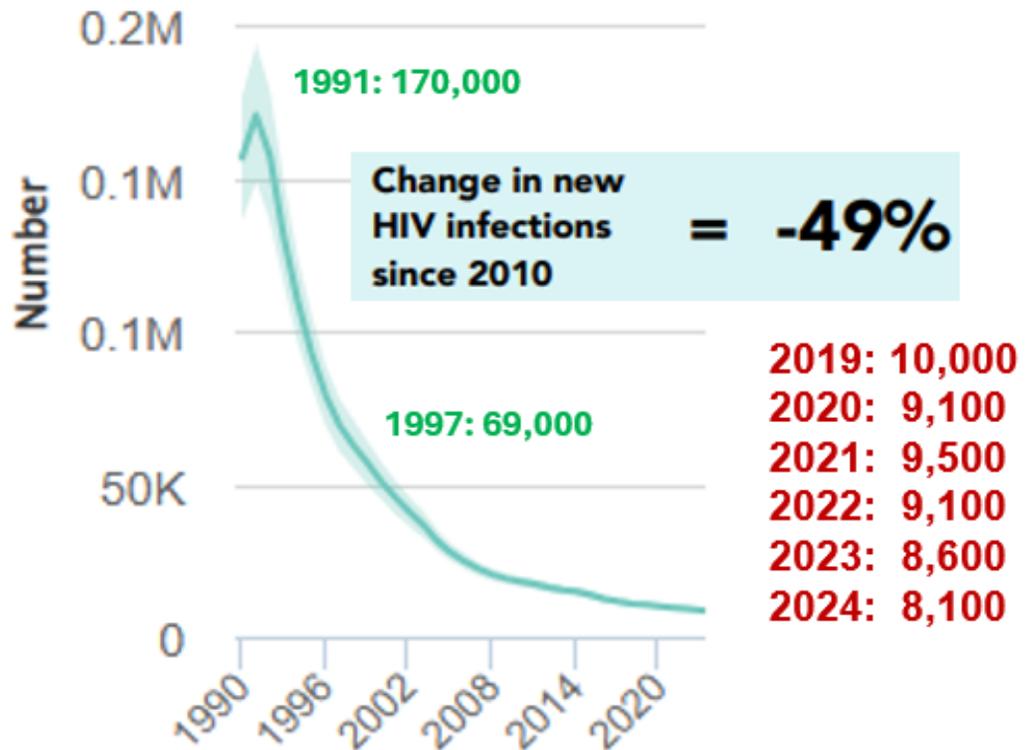
Thailand

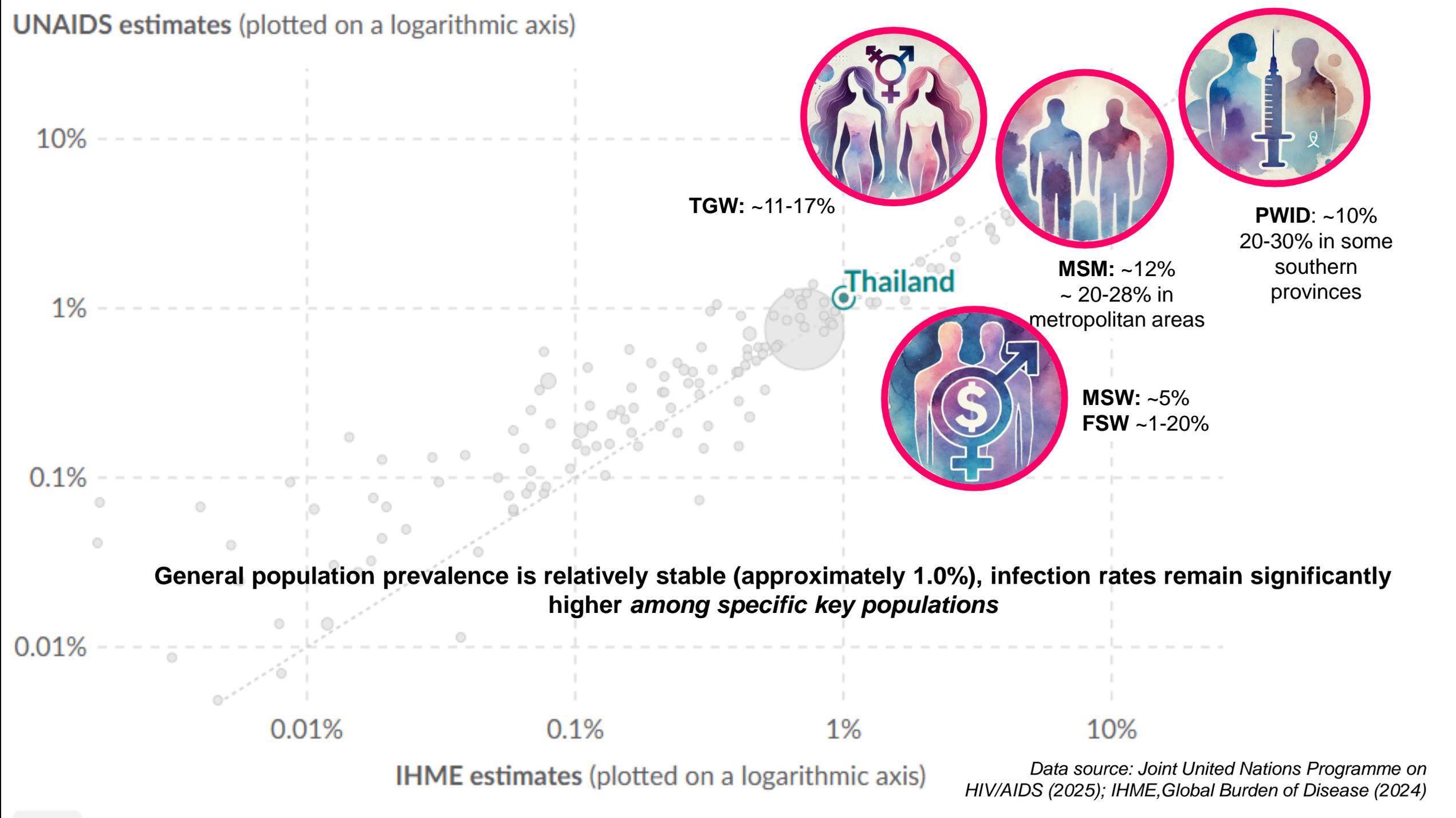


New HIV infections (all ages)

0.3M

Our Target < 1000 New Infections/Year





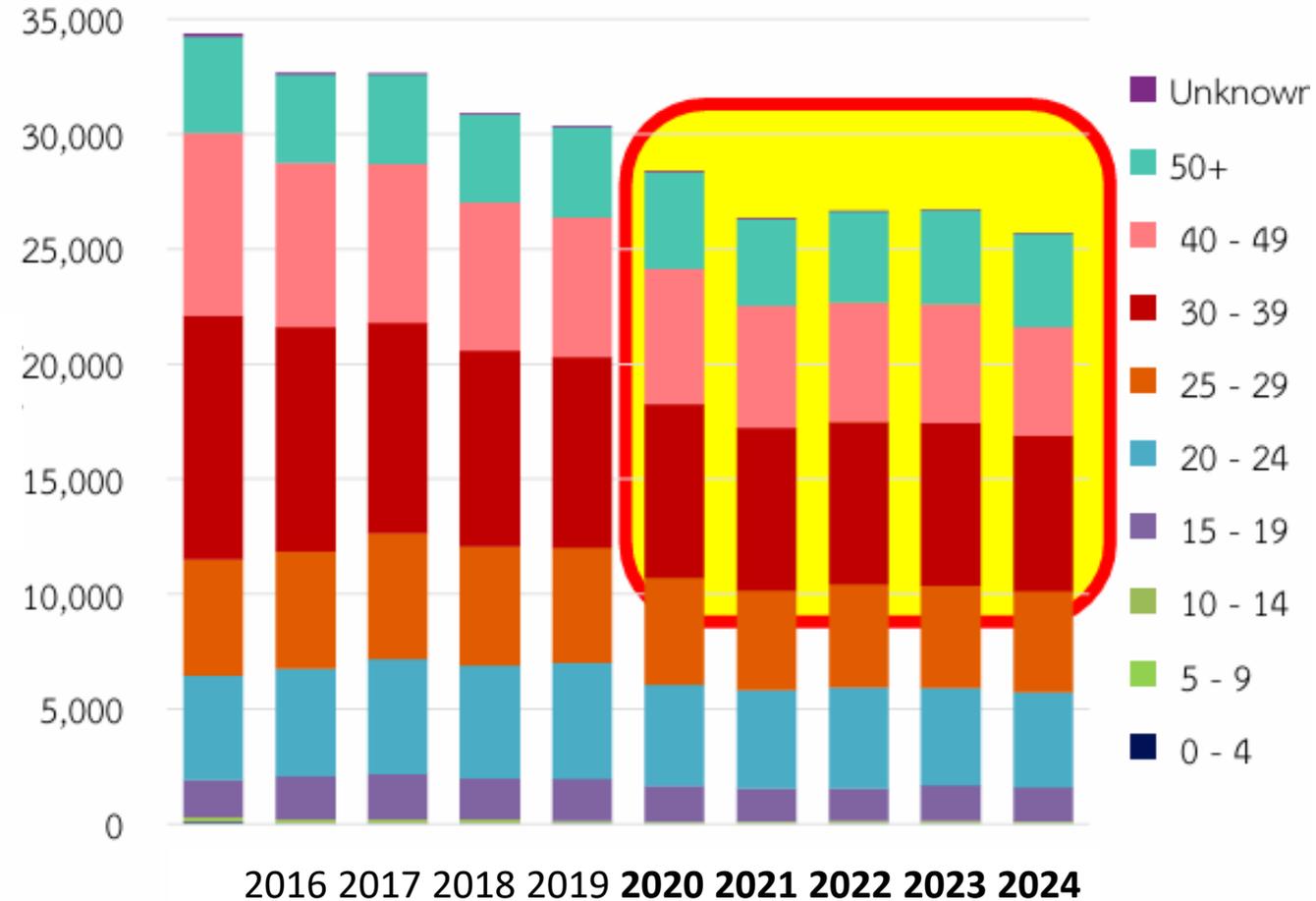
“Where We Are Today: HIV Epidemic”

According to Thailand’s Department of Disease Control, nearly 50% of the ~9,000 new HIV cases per year occur in the 15–29 age group, making it the most affected cohort

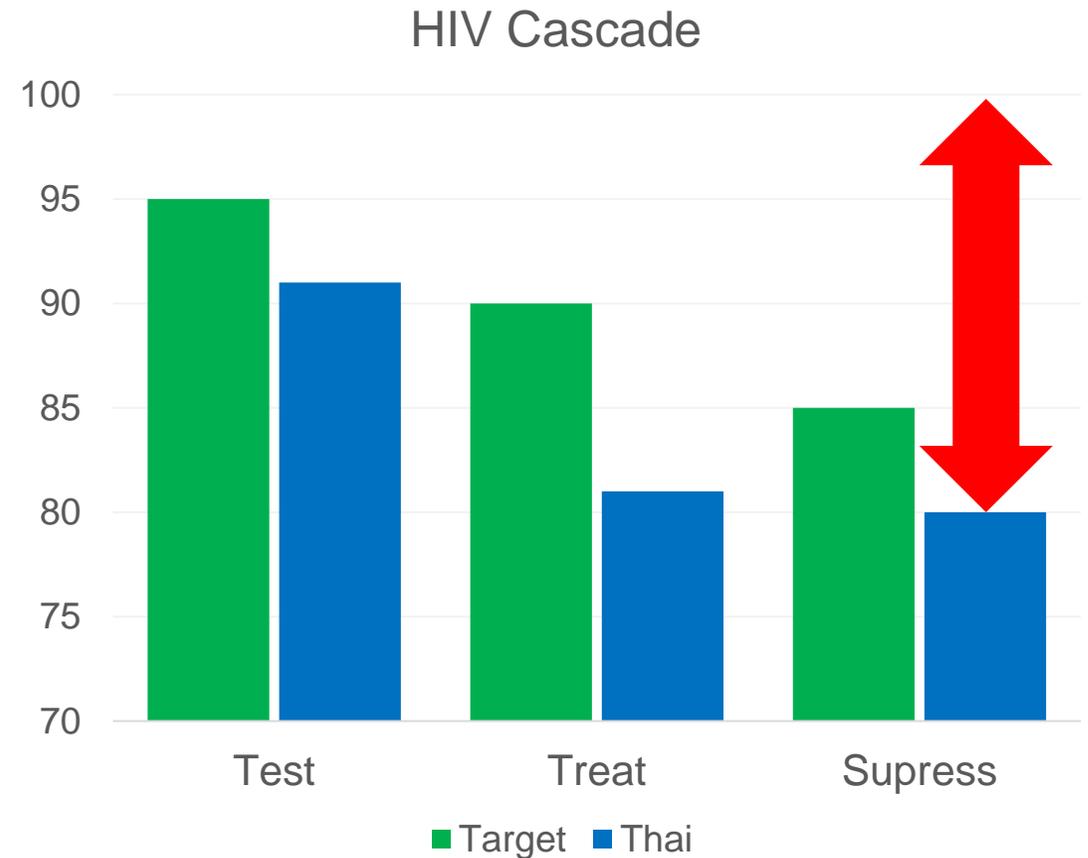
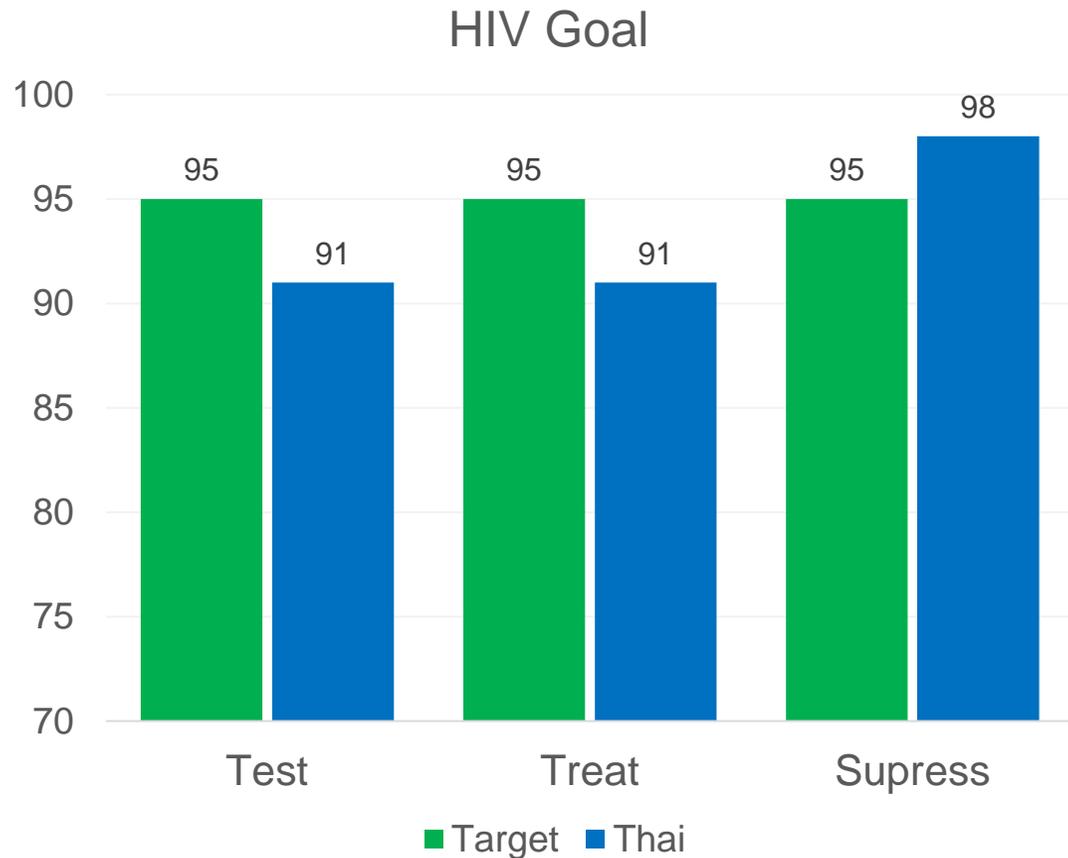
UNICEF



New HIV Diagnosis



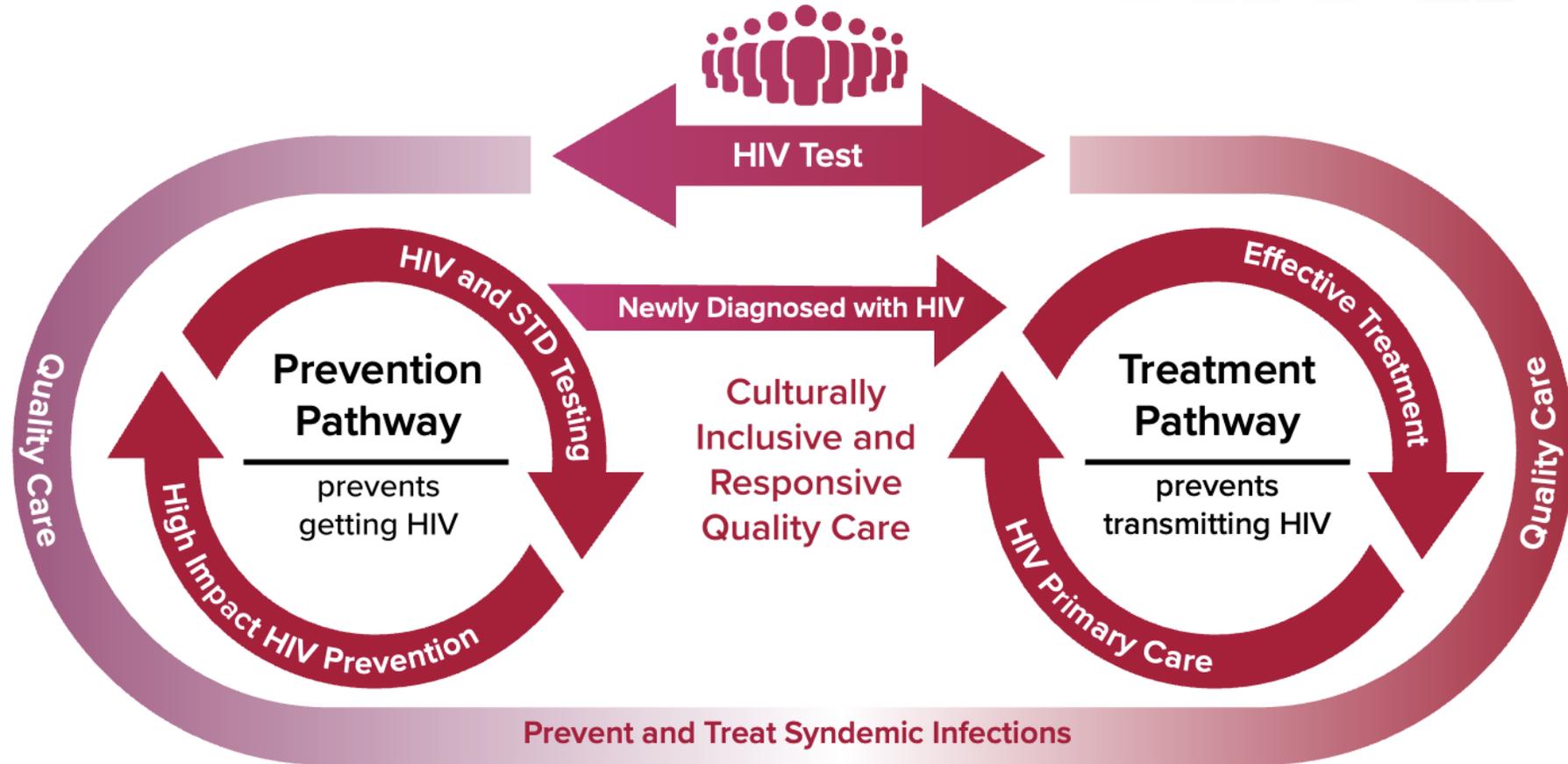
“Where We Are Today: 95-95-95 Cascade”



9% of people living with HIV (~52,000 people) do not know they are infected
9% of those diagnosed are not on medication

“Where We Are Today: Testing”

Scaling Up HIV Testing in 2024



“Where We Are Today: ART”

Thailand’s national guideline (2021/2022) explicitly emphasizes starting ART on the same day as diagnosis (“*Same-day ART*”) to reduce transmission, opportunistic infections, and mortality

- Offer SDART to ART-naïve clients who are ready and willing (client-centered, voluntary decision).
- Screen clinically for conditions where immediate ART could be harmful: TB and cryptococcal meningitis

TRC (Anonymous Clinic) showed SDART is operationally feasible at scale:

- Among 2,427 HIV-positive testers (July 2017–July 2018), ~71% were placed on ART, and same-day initiation occurred in 1,257 people; ART within 7 days in 1,576.
- Retention among eligible clients who accepted SDART was ~75% at 12 months

ศูนย์วิจัยโรคเอดส์และโรคติดต่อ สภากาชาดไทย
(คลินิกนิรนาม)
Thai Red Cross AIDS and Infectious Diseases Research Centre (Anonymous Clinic)

จัดซื้อจัดจ้าง



PrEP แบบฉีดยา
CAB-LA PrEP (Cabotegravir Long-Acting)

ราคาในสัปดาห์ 14,900.-
บัตรหน่วยเพื่อเข้ารับบริการ
LINE ID: @091aajex

ศูนย์วิจัยโรคเอดส์และโรคติดต่อ สภากาชาดไทย

ผู้มาใช้บริการคลินิกนิรนาม (ม.ค.-ต.ค. 2568)

ผู้มาตรวจ HIV (ครั้ง)	พบผู้ติดเชื้อ HIV (ราย)	ผู้มารับ PrEP (ครั้ง)	ผู้เข้ารับ SAME DAY ART (ราย)
27541	705	8146	592

“Where We Are Today:ART”

Task-shifting SDART: The Key Population-Led Health Services (KPLHS)



The main characteristics of KPLHS are:

- Services are identified by the community itself and are, therefore, needs-based, demand-driven, and client-centered
- A set of services, focusing on specific health priorities, designed by key populations
- Delivered by trained and qualified lay providers, who are often members of the key populations

STUDY PROTOCOL

Open Access



Key population-led community-based same-day antiretroviral therapy (CB-SDART) initiation hub in Bangkok, Thailand: a protocol for a hybrid type 3 implementation trial

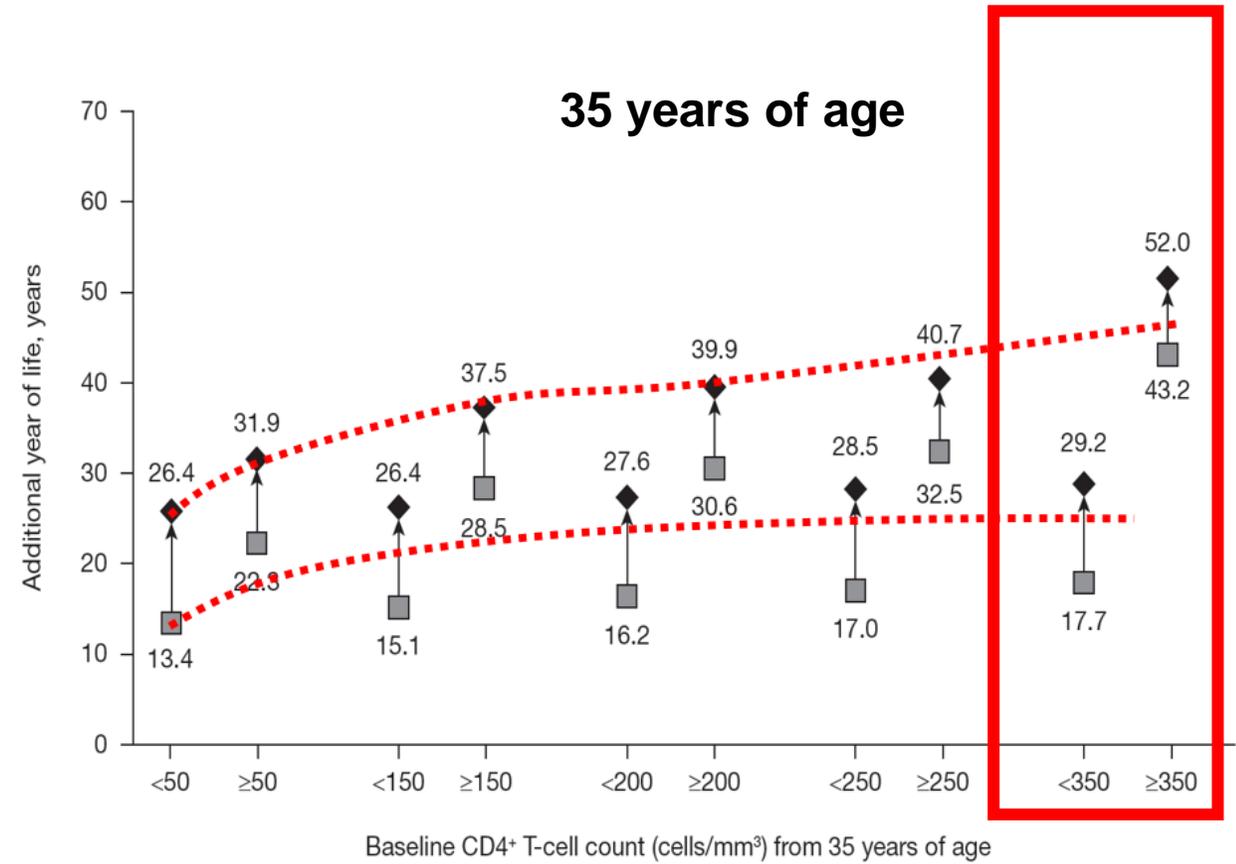
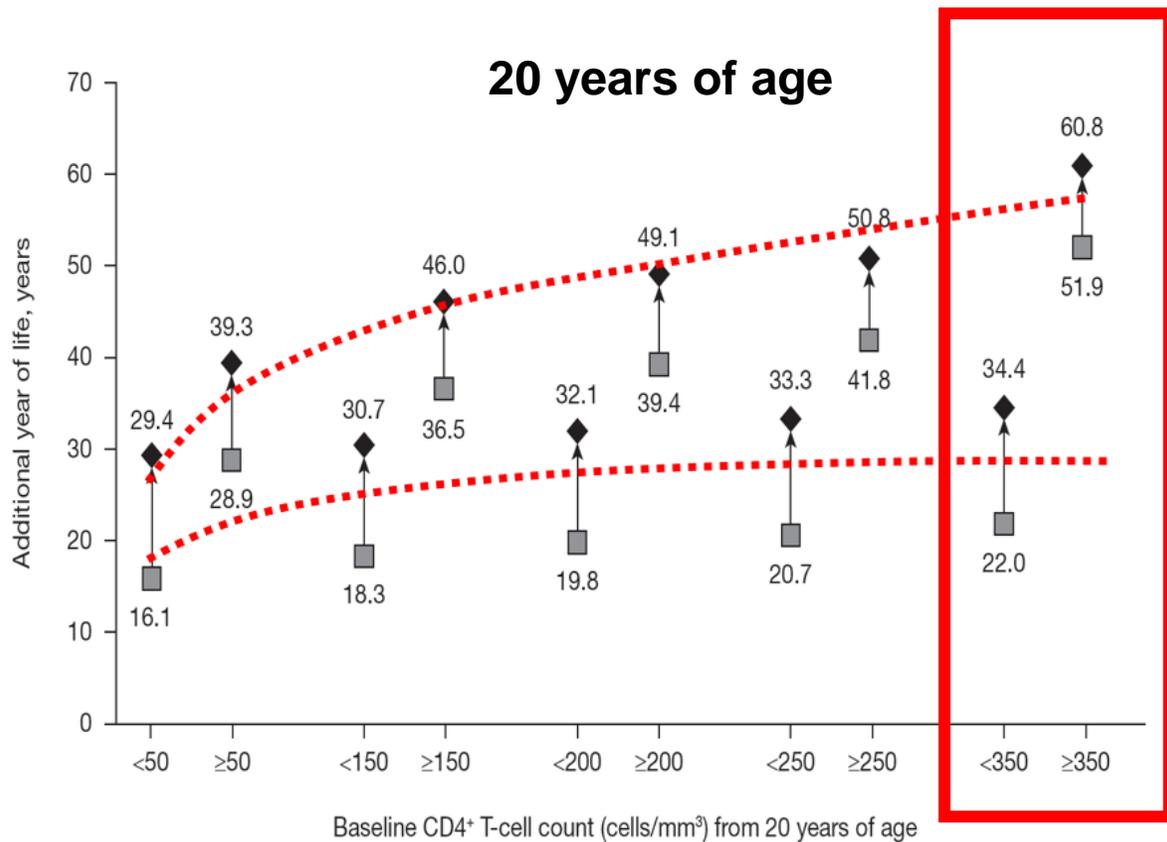
Sita Lujintanon^{1,2*}, Sorawit Amatavete², Supanat Thitipatarakorn², Thanyawee Puthanakit³, Wipaporn Natalie Songtaweasin³, Tanachai Chaisalee⁴, Surang Janyam⁵, Nittaya Phanuphak² and Reshmie A. Ramautarsing²

A Bangkok implementation-trial protocol highlights:

- SDART has been implemented in Thailand since 2017 at several facilities.
- Retention among eligible clients who accepted SDART service at months 3, 6 and 12 was 79.8%, 75.2% and 75.3%, respectively.

“Where We Are Today: ART”

Increase life expectancy after ART but the gap remains



■ Life expectancy of Thai HIV patients (n=12,957) ◆ Life expectancy after surviving beyond 6 months (n=9,435) ■ Life expectancy of Thai HIV patients (n=43,951) ◆ Life expectancy after surviving beyond 6 months (n=37,321)

Overall life expectancy after ART was 25.4 (95%CI, 25.3-25.6) for a PWH started ART at age 20 and 20.6 years (95% CI, 20.5-20.7) for a PWH started ART at age 20

Aging PWH

The goals of initial antiretroviral therapy

- Reduction of HIV-related morbidity and mortality
- Restoration and preservation of immune function

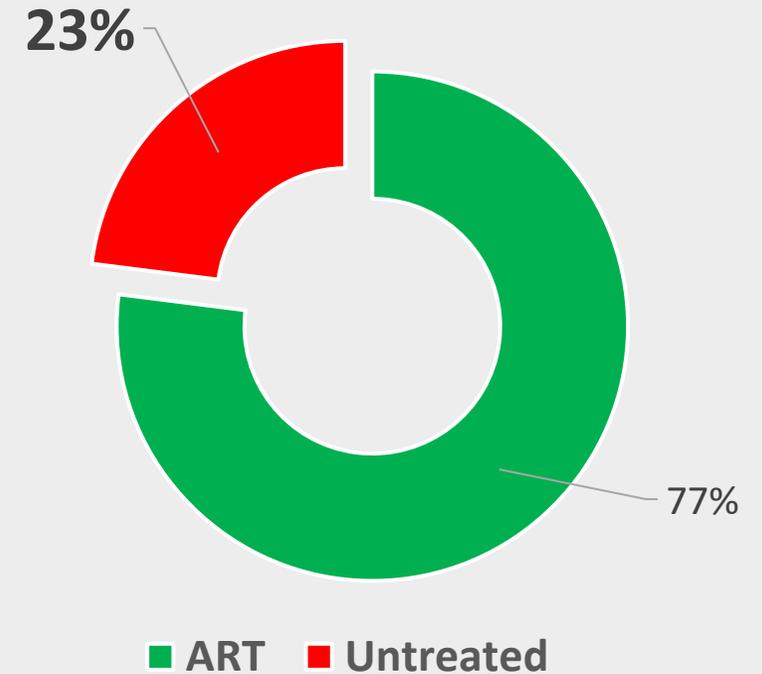


AI-generated photo

Additional goals for HIV management:

- Quality of aging PWH
- Non-communicable disease comorbidities in HIV patients: diabetes, hypertension and heart disease are prevalent. These comorbidities require intervention to improve QOL in PWH
- Eliminate stigma and discrimination

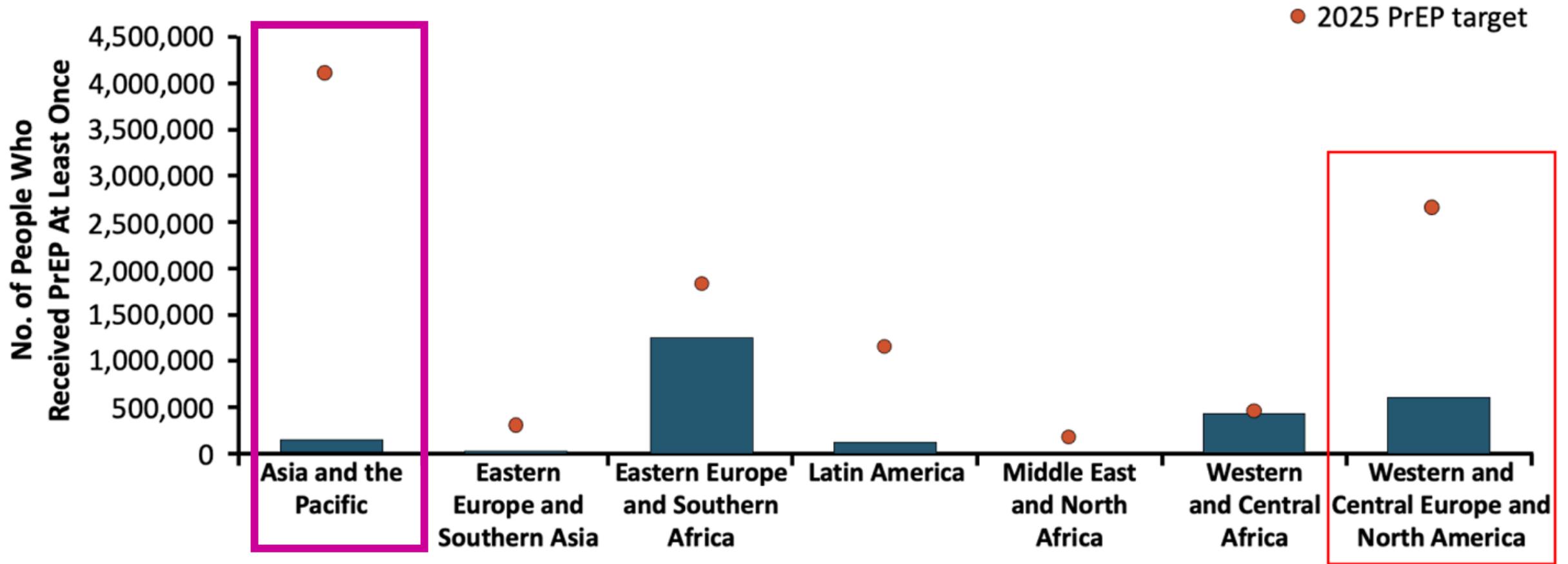
Treatment as Prevention



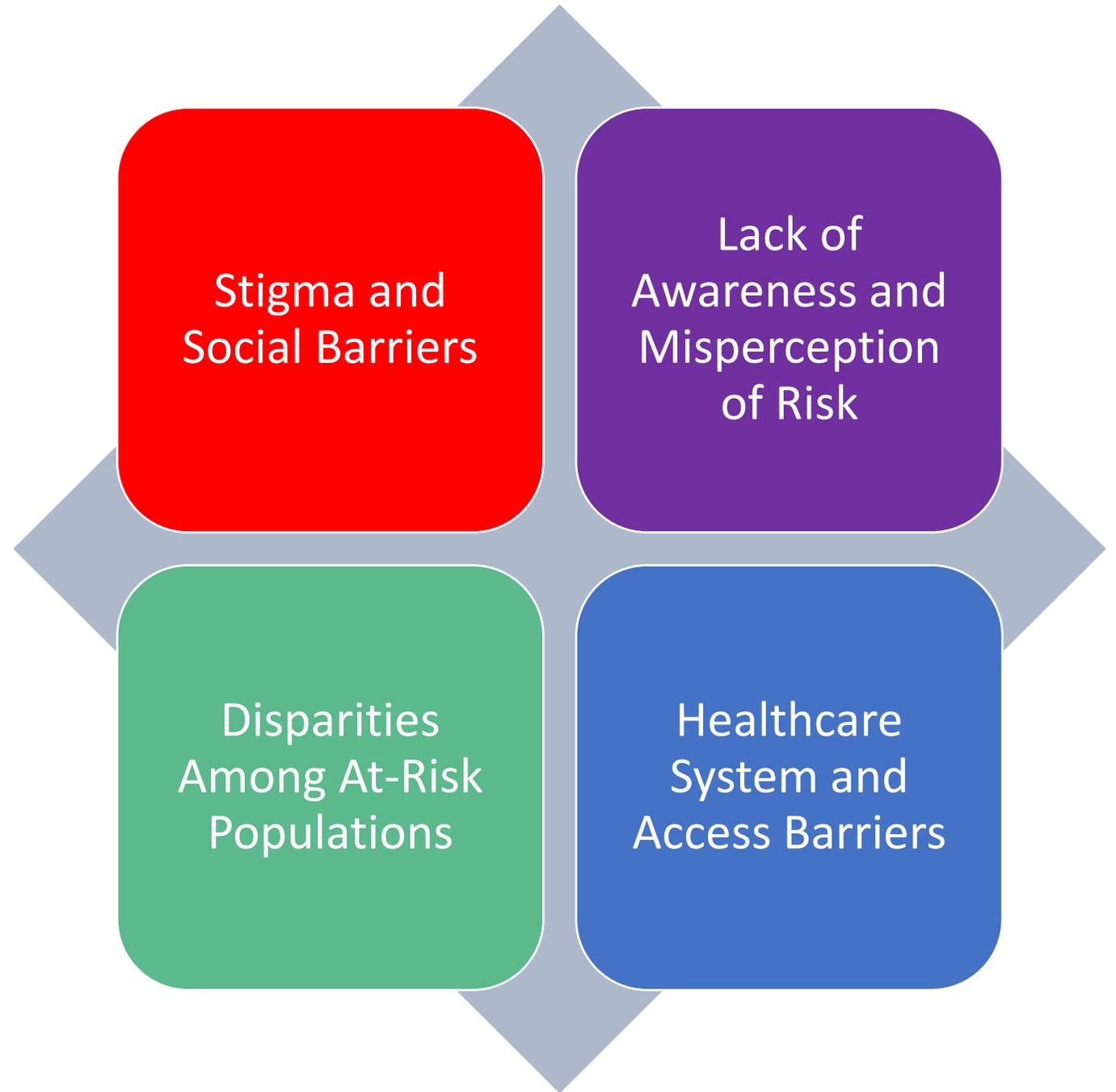
Treatment alone cannot end the epidemic

As of the end of 2024, approximately 31.6 million people living with HIV globally were on antiretroviral therapy (ART), with 77% of all people with HIV having access to treatment (UNAIDS)

PrEP Is Available, Yet the Targets Remain Unmet



Key gaps in PrEP Uptake





**Normalization of
PrEP/HIV Prevention**



**Innovation and
Alternative Models of
Care**



Advocacy



**Normalization of
PrEP/HIV Prevention**



**Innovation and
Alternative Models of
Care**



Advocacy

“HIV prevention should become routine healthcare, not specialized care.”





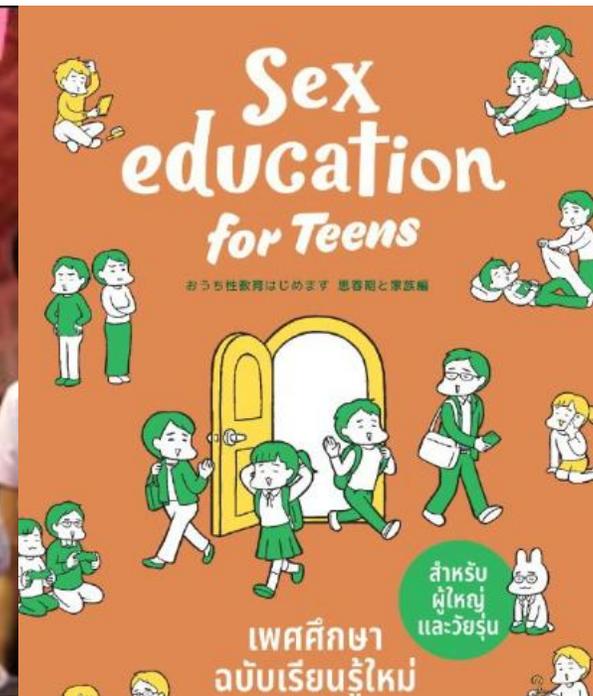
Normalization of
PrEP/HIV Prevention

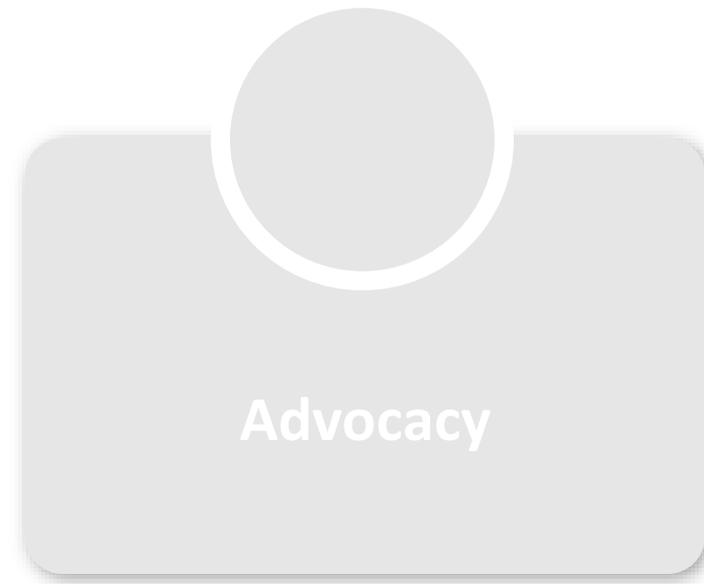


Innovation and
Alternative Models of
Care

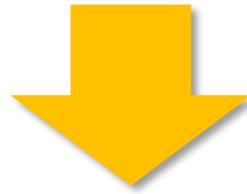


Advocacy





Innovation of PrEP options



TDF/FTC

as daily oral PrEP for all populations at risk of HIV acquisition



TAF/FTC

as daily oral PrEP for MSM/TGW only



CAB LA, LEN

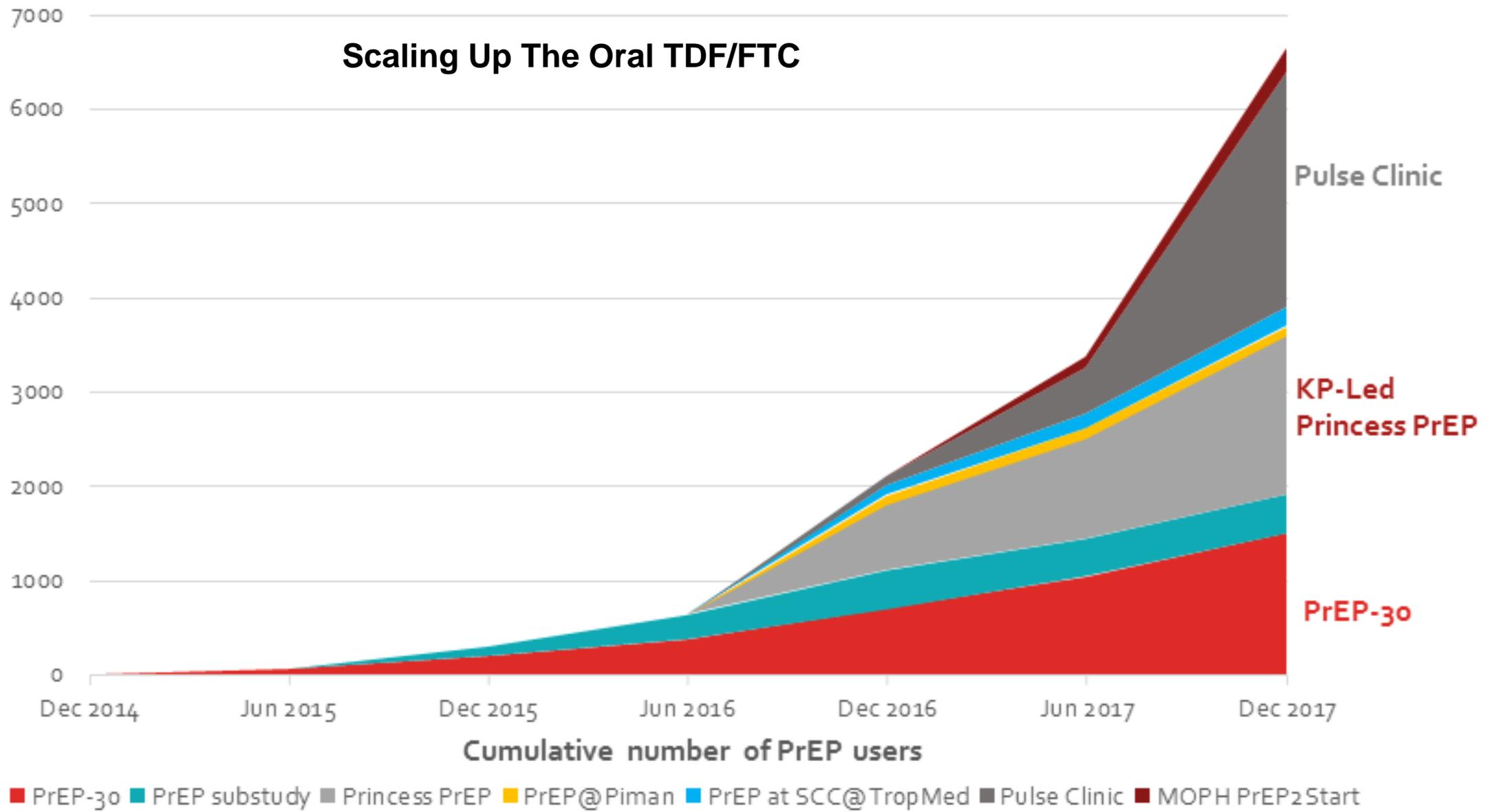
as IM injections given every 2 months (CAB-LA) or 6 months (LEN) for all populations at risk of HIV acquisition



DPV ring

for cis-gender women only as part of combination prevention approaches

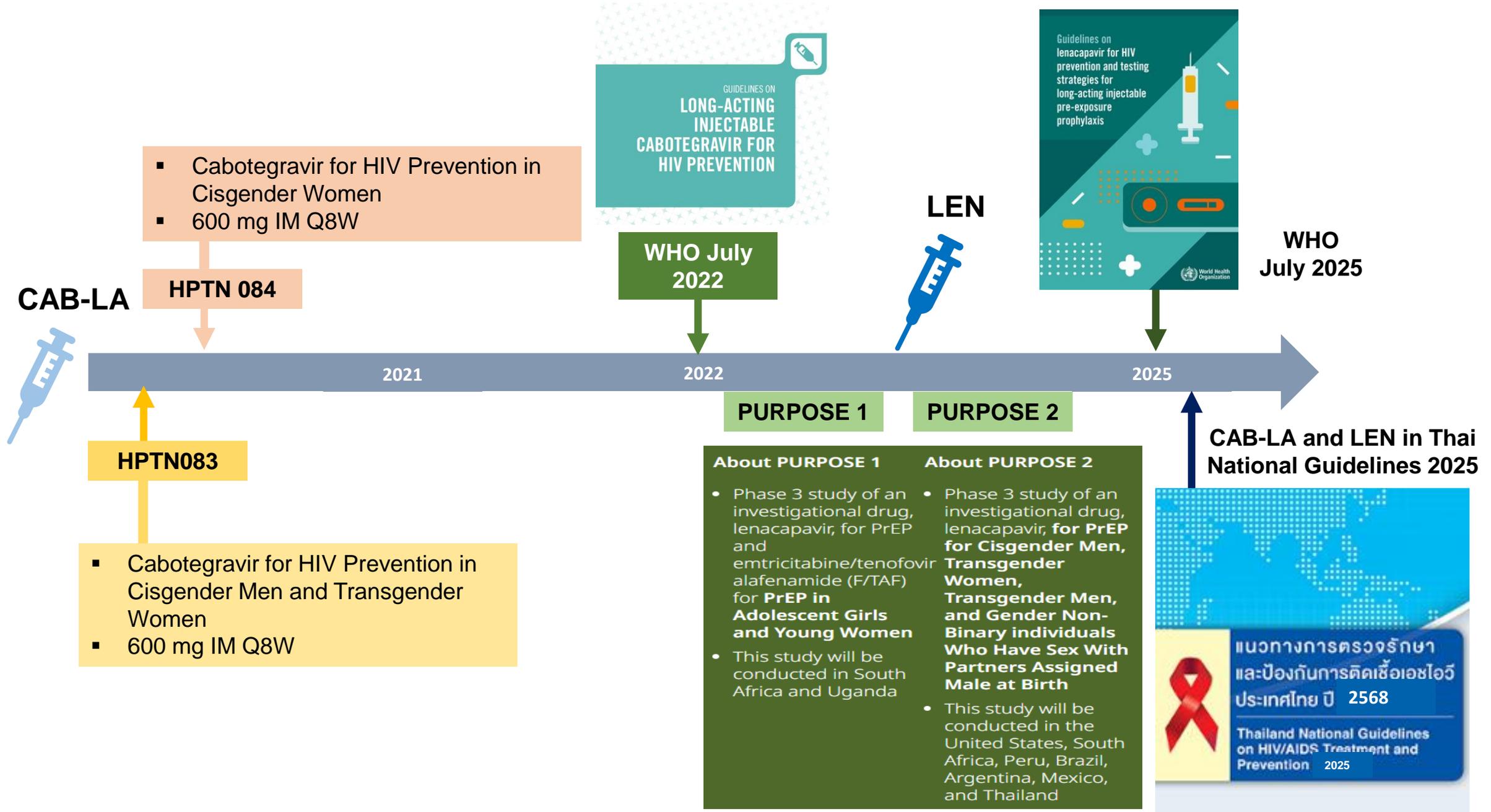
Scaling Up The Oral TDF/FTC



Estimated number of PrEP users by December 2017



Long-Acting Agents for HIV prevention



Recommendation for PrEP regimens in Thai HIV Guidelines 2025

Type of Client	Daily TDF/FTC	On-demand TDF/FTC ⁿ	Daily TAF/FTC ²¹	Cabotegravir Lenacapavir
Insertive vaginal or anal intercourse	√	√	√	√
Receptive anal intercourse	√	√	√	√
Receptive vaginal and neovagina intercourse	√		√	√
Intravenous drug user	√			√
Creatinine clearance (30-60 cc./min or osteopenia/osteoporosis)			√	√

Lenacapavir: a potential game changer for HIV prevention in the Americas, if the game is played equitably

Valeria D. Cantos,^{a,b,*} Brenda Crabtree Ramirez,^c Colleen F. Kelley,^{a,b} Carlos del Rio,^{a,b} and Beatriz Grinsztejn^d



'HIV-ending' drug could be made for just \$25 per patient a year, say researchers

As regulator prepares to approve lenacapavir in the US, campaigners are urging the manufacturer, Gilead, to make it 'available and affordable for all who need it'



Lenacapavir, sold under the brand name **Yeztugo**, is priced at **\$28,218** per year in the US.

Trial	Population	Location	Size	2022	2023	2024	2025	2026	2027	2028
PURPOSE 1 Phase 3 Injectable lenacapavir & oral F/TAF	Cisgender adolescent girls and young women	South Africa and Uganda	5,010			Initial results released in June 2024 demonstrated no infections in the LEN arm				
PURPOSE 2 Phase 3 Injectable lenacapavir	Cisgender men who have sex with men, Transgender women, Transgender men, Gender non-binary	US, South Africa, Peru, Brazil, Mexico, Argentina, and Thailand	3,000			Initial results released in September 2024 demonstrated LEN reduced HIV infections by 96% compared to background HIV incidence				

2027



Key Population-Led Health Services (KPLHS): PrEP

Led by lay providers: Trained members of key populations (e.g., MSM, TGW) deliver essential HIV services¹

- Same-day PrEP initiation with flexible dosing options.¹
- In 2020, Thailand incorporated quality standards and certification for lay providers into national policy.²
- By September 2022, 82% of Thailand's ~32,000 PrEP users were supported through community-led services.³

The epidemiological impact and cost-effectiveness of key population-led PrEP delivery to prevent HIV among men who have sex with men in Thailand: A modelling study

Lisbeth Versteegh,^a Sorawit Amatavete,^b Tanat Chinchom,^b Noppawit Thammasha,^b Shreeshee Mukherjee,^c Stephanie Popping,^d Rattaphon Triamvichanon,^e Aritk Pusamang,^f Donn J. Colby,^{g,h,i} Matthew Avery,^j Stephen Mills,^k Nittaya Phanuphol,^l Reshmi A. Ramautarsing,^{m,n} and David van de Vijver^{o,p,q}

Component	Description
Services	Lay key-population members trained and certified ²
Delivery model	HIV/STI testing, PrEP provision (daily & on-demand), counseling, tele-medicine link to clinicians ¹
Policy integration	<ul style="list-style-type: none"> • Same-day, client-centered, community-based, stigma-free¹ • Government certification, funded under universal healthcare, cost-effective and widely adopted¹

HIV: human immunodeficiency virus; MSM: men who have sex with men; PrEP: preexposure prophylaxis; STI: sexually transmitted infection; TGW: transgender women.

1. Versteegh L et al. The epidemiological impact and cost-effectiveness of key population-led PrEP delivery to prevent HIV among men who have sex with men in Thailand: A modelling study. *www.thelancet.com* Vol 7 December, 2022. 2. Pengnonyang S et al. *J Int AIDS Soc* 2022, 25:e25965. 3. AIDSMAP. Key population-led services now account for the majority of Thai PrEP users. Available at <https://www.aidsmap.com/news/sep-2022/key-population-led-services-now-account-majority-thai-prep-users>. Accessed June 25, 2025.

Innovations in HIV Prevention and PrEP Delivery



Meeting people where they are^{1,2}

Accessible Care^{1,2} Thailand's Youth Outreach Program²

- Bringing prevention to schools, youth centers, and community spaces.
- Mobile clinics:
 - Provide education on HIV prevention and PrEP
 - Offer free HIV testing

Options suited to an individual's lifestyle^{1,2}

HIV: human immunodeficiency virus.

1. The path that ends AIDS: UNAIDS Global AIDS Update 2023. Geneva: Joint United Nations Programme on HIV/AIDS; 2023. Licence: CC BY-NC-SA 3.0 IGO. 2. Versteegh L et al. The epidemiological impact and cost-effectiveness of key population-led PrEP delivery to prevent HIV among men who have sex with men in Thailand: A modelling study. www.thelancet.com Vol 7 December, 2022.



Normalization of
PrEP/HIV Prevention



Innovation and
Alternative Models of
Care



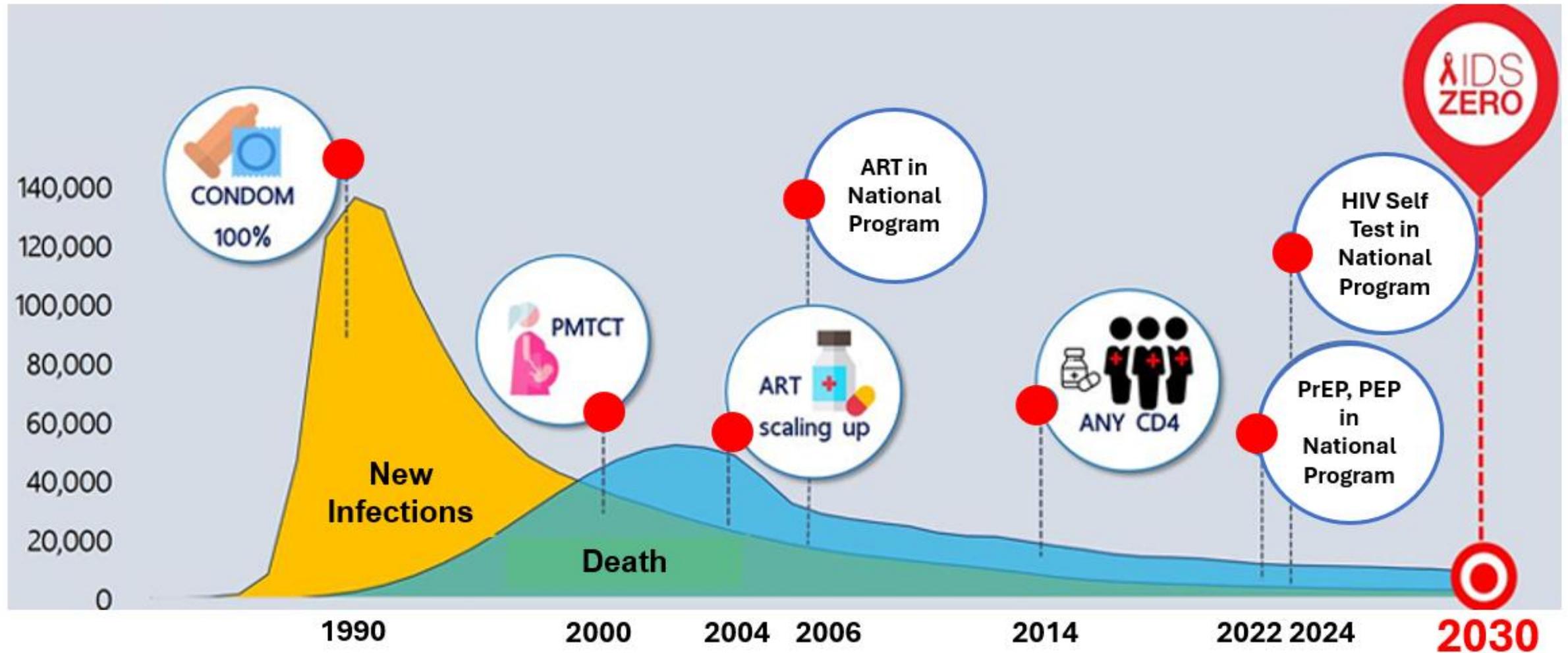
Advocacy



HIV advocacy works to remove barriers that prevent people from accessing HIV services and living healthy, stigma-free lives.

- Policy advocacy
- Rights-based advocacy
- Community-led advocacy
- Social and stigma-reduction advocacy

"Thai Success Story"



Thailand became the first country in Asia to eliminate Mother-to-Child Transmission (MTCT) of HIV (WHO validation).

We Have the Tools, But the Job Isn't Done Yet

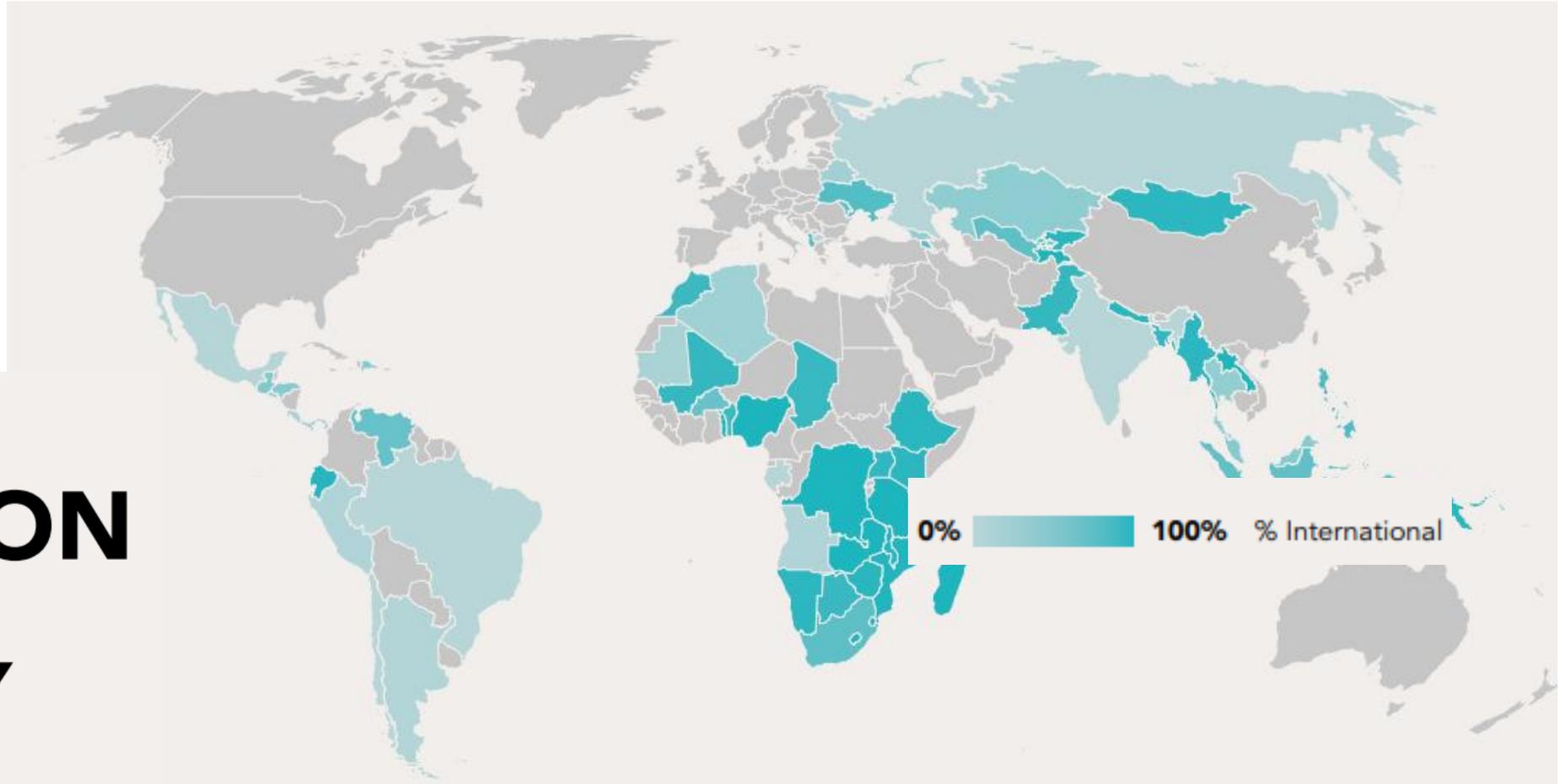
A dramatic landscape with a man in a dark coat pushing a massive, smooth boulder up a steep, rocky hillside. The sky is filled with heavy, dark clouds, with a sliver of light breaking through near the horizon. In the distance, a valley with a winding river and rolling hills is visible under a hazy sky. The overall mood is one of perseverance and the weight of a significant challenge.

Goals for 2030 (Ending AIDS)

- New infections to <1,000/year
- AIDS-related deaths to <4,000/year
- Discrimination by 90%

Transitioning from international funding (Global Fund) to domestic funding.

HIV PREVENTION IS IN JEOPARDY



Permanent termination of HIV programs receiving external funding could result in over 6.6 million additional new HIV infections globally between 2025 and 2029.

The Road to 2030 & Conclusion

- HIV is now a chronic immunocompromising condition
- ART success shifts burden to long-term care
- Advanced HIV disease remains common in Thailand



To end AIDS by 2030, Thailand *must*

- Aggressively scale Key Population-Led Health Services (KPLHS)
- Normalize testing and PrEP
- Implement Same-Day ART universally
- Remove legal barriers to ensure youth and marginalized groups can access care without stigma or parental consent



ID CHULA
TOWARDS EDUCATIONAL EXCELLENCE