AMERICAN ACADEMY OF HIV MEDICINE

Challenges in Improving PrEP Uptake:

Systemic Barriers & Resilient Strategies

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This activity is jointly provided by the Partners for Advancing Clinical Education (Partners) and the American Academy of HIV Medicine.

This activity is supported by independent educational grants from Gilead Sciences.

Target Audience

This activity has been designed to meet the educational needs of physicians, physician assistants, nurse practitioners, and pharmacists; other healthcare providers, such as nurses, nutritionists, social workers, and case managers are also encouraged to attend.

Statement of Need/Program Overview

Joint Accreditation Statement

In support of improving patient care, this activity has been planned and implemented by the Partners for Advancing Clinical Education (Partners) and the American Academy of HIV Medicine. Postgraduate institute for Medicine is accredited by the American Council for Continuing Medical Education (ACCME), Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

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CREDIT DESIGNATION

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CREDIT DESIGNATION

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  (Universal Activity Number JA4008073-9999-26-074-L01-P)

- Type of Activity: Application

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Nursing Continuing Professional Development

CREDIT DESIGNATION

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- Designated for 0.5 contact hours of pharmacotherapy credit for Advanced Practice Registered Nurses.

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Fee Information

There is no fee for this educational activity.

Educational Objectives

Upon completion of this activity, participants should be able to:

- Navigate systemic barriers to PrEP delivery in real-time.
- Identify nuanced challenges in adherence and persistence.
- Discuss management of marginalized communities.
- Highlight implementation in underfunded/restrictive environments.
- Address policy changes and hostile attitudes harming the workforce.

The Epidemiology of Need: Lifetime Risk

Black Populations

Men: **1 in 27**

Women: **1 in 75**

Hispanic/Latine Populations

Men: **1 in 50**

Women: **1 in 287**

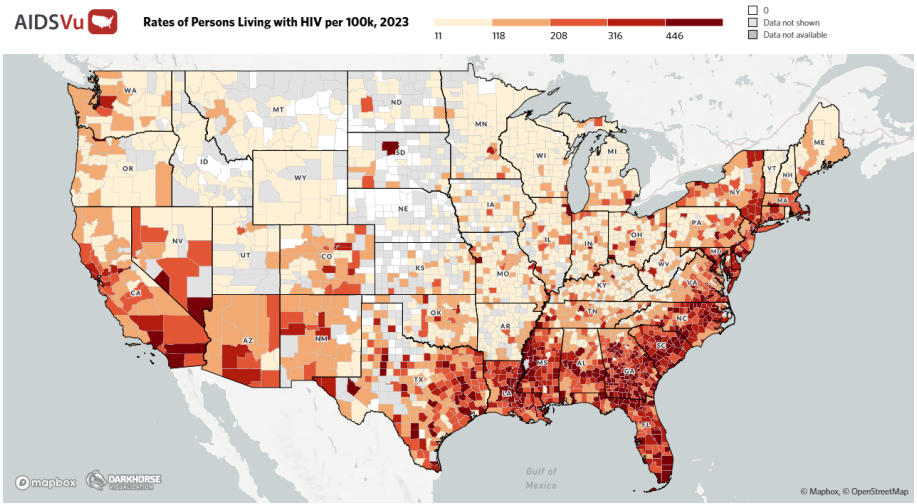
Overall US Lifetime Risk:
1 in 120

National PrEP-to-Need Ratio (PNR):
15.6↑

CDC 2025; AIDSVu 2025

Geographic Inequity: The US South

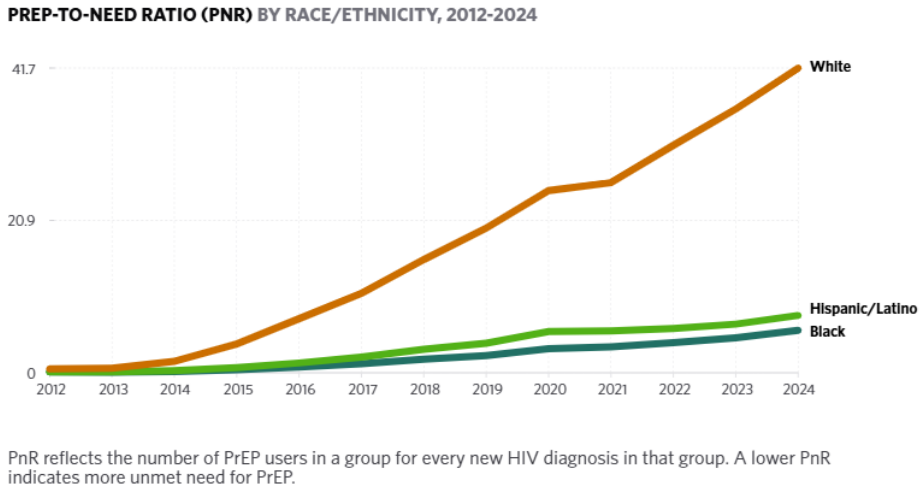
- The South accounts for 52% of new HIV diagnoses.
- Only 39% of total US PrEP users reside in the South.
- PNR in the South (12.0) remains the lowest in the nation.



AIDSVu 2025

Demographic Inequity: Racial Disparities

- Black Populations: 38% of new diagnoses / 14% of PrEP users.
- Hispanic/Latine: 32% of new diagnoses / 18% of PrEP users.
- White Populations: 24% of new diagnoses / 63% of PrEP users.



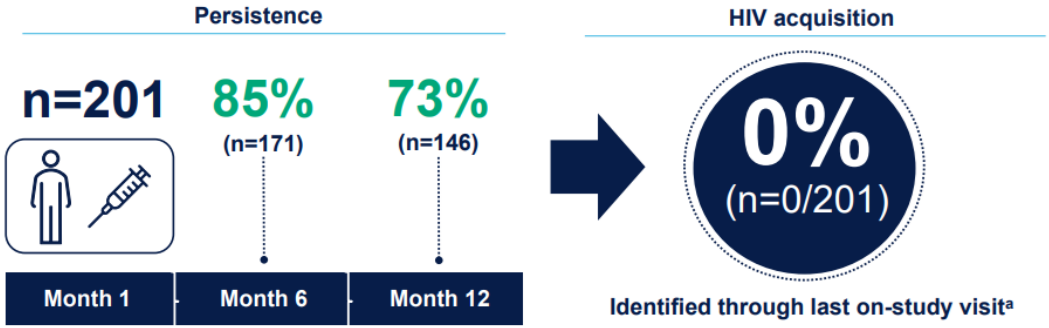
PnR reflects the number of PrEP users in a group for every new HIV diagnosis in that group. A lower PnR indicates more unmet need for PrEP.

AIDSVu 2025; CDC 2025

The Persistence Problem: PILLAR

- Phase IV Implementation Trial.
- Month 12 Persistence: 73% retention in care.
- No HIV acquisitions observed over 12 months with CAB-LA.

Figure 3. Persistence and HIV Acquisition Through Month 12



Khan, et al. CROI 2025; Abs 196

Systemic Barriers & “The Churn”

‘The Churn’

Frequent insurance interruptions causing medication gaps.

Administrative Burden

Prior authorizations as “soft barriers” to entry.

Medical Mistrust

The impact of structural racism on engagement.

Hightow-Weidman, et al. 2018

Hostile Policy & Healthcare Workforce

Rescinded Prevention Funds

Loss of local HIV infrastructure.

Political Backlash

Legislative threats create ‘chilling effects’.

Moral Injury

Provider burnout and attrition in hostile jurisdictions.

Dawson L, et al. JAIDS. 2023; 94(2):112-119

Transgender Population Challenges

- TGW HIV Prevalence: 14.1% (up to 44% in Black TGW).
- Integration with GAHT is essential for trust and uptake.

Becasen JS, et al. AJPH. 2019

Myth-Busting: GAHT & PrEP

- iBrEATHe Study: GAHT (Estrogen/Testosterone) does NOT reduce PrEP drug levels.
- Tenofovir-DP concentrations remain in therapeutic ranges.
- Conclusion: GAHT is NOT a contraindication for any PrEP modality.

Grant RM, et al. CID. 2020

Cisgender Women: The Gender Gap

PrEP Usage Disparity

Men account for 91% of PrEP users; Women represent only 9%.

HIV Burden & Racial Disparities

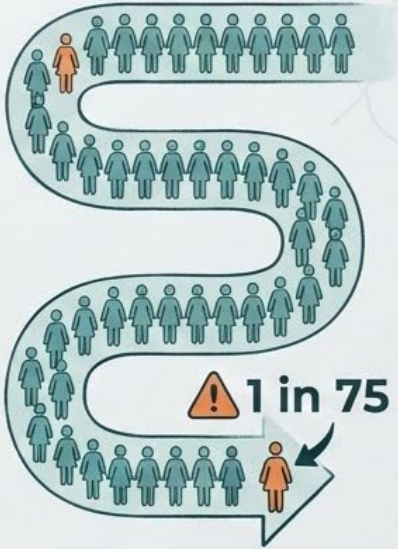
1 in 5 (19%)

Of new US HIV diagnoses occur in women

50% Black Women

Black women account for 50% of diagnoses among all cisgender women.

Lifetime Risk



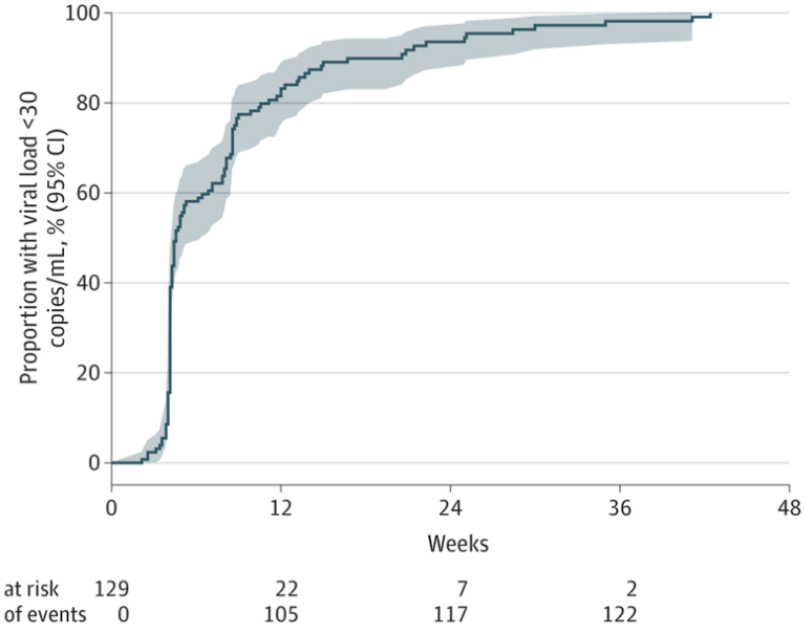
Lifetime Risk for Black Women

CDC 2025; AIDSVu 2025

Innovative Implementation: Ward 86

- Safety-net model in San Francisco.
- 83% retention using CAB-LA in unstable housing or substance use.
- Success through low-barrier and 'on-demand' clinical access.

Figure. Time to Achieve a Viral Load Less Than 30 Copies/mL for People With HIV Starting Cabotegravir/Rilpivirine With Viremia



Spinelli MA, et al. CID. 2024

The Injectable Revolution: CAB-LA

- HPTN 083 (MSM/Transwomen): Superior to daily, oral TDF/FTC. HR 0.34 (66% reduction in HIV acquisition).
- HPTN 084 (Women): Superior to daily, oral TDF/FTC . HR 0.12 (88% reduction in HIV acquisition).
- Why it works: Removes the daily pill burden, reducing stigma and privacy concerns.

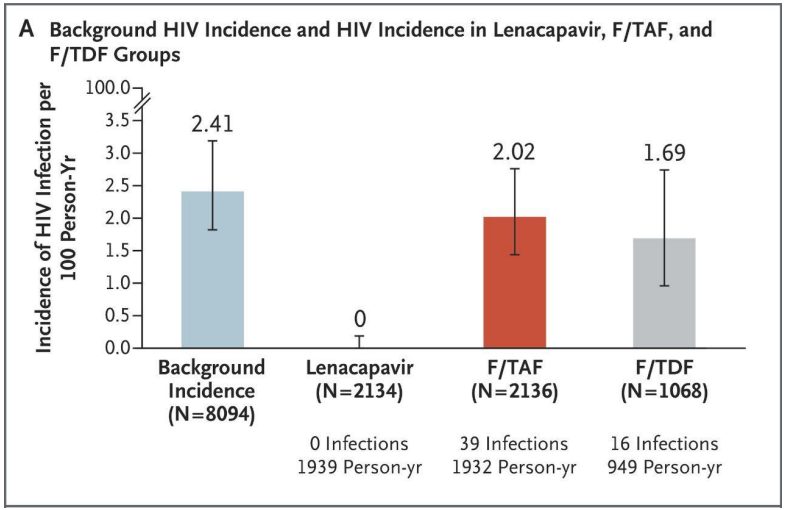
Landovitz, NEJM 2021; Delany-Moretlwe, Lancet 2022

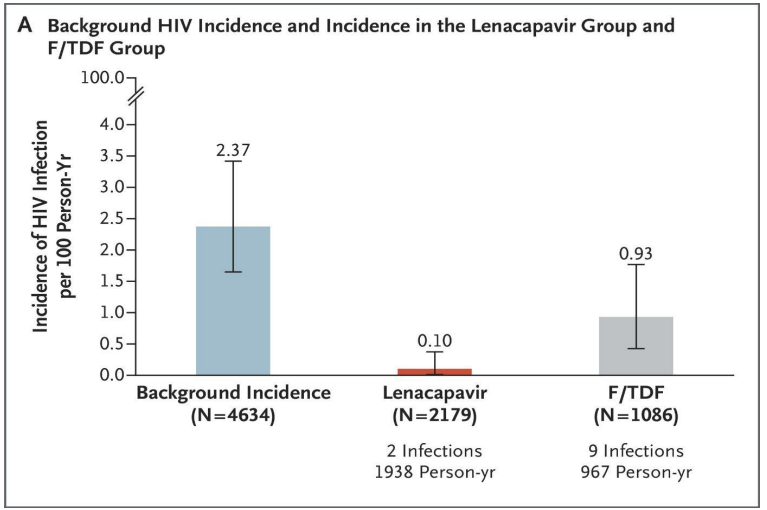
The Breakthrough: Lenacapavir (LEN)

- First-in-class HIV capsid inhibitor.
- Targets nuclear transport, virus assembly/release, and capsid core formation.
- Twice-Yearly Injections: Two once-daily oral doses, and two subcutaneous doses every 6 months.
- PURPOSE-1: 100% Efficacy (0 infections) in cisgender women; two incident HIV infections occurred among participants in the LEN arm after the time of the primary analysis.
- PURPOSE-2: 96% Relative Risk Reduction (99.9% HIV-free).
- Impact: Aligning PrEP visits with standard 6-month checkups de-medicalizes the process.

Bekker LG, et al. NEJM 2024; Kelley CF, et al. NEJM 2024

The Breakthrough: Lenacapavir (LEN)





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Bekker LG, et al. NEJM 2024

De-Medicalizing: Pharmacy-Led PrEP

- Task-shifting from clinics to community pharmacists.
- Data: 81% retention at 26 weeks; 94% on-time injections.
- Strategy: Utilizing pharmacists expands the workforce and access points.
- Overcomes white-coat anxiety and transportation barriers.

Tung E, et al. BMC Infect Dis. 2022; 22(1):669

Tele-PrEP & Digital Health

Overcomes ‘Geographic Deserts’

Expands access in underfunded and restrictive states.

Virtual Visits & Mail-in Labs

Increases uptake, especially among younger populations.

Ensures Continuity of Care

Maintains access regardless of local provider availability.

Touger R, et al. Curr HIV/AIDS Rep. 2022

Clinical Protocol: Rapid Start

1. Assessment & Symptom Screen

Same-day initiation based on clinical risk assessment. Eliminates delay. Rule out acute HIV.

2. Testing Strategy

Point-of-care rapid HIV Ag/Ab screen. Draw blood for lab 4th gen HIV Ag/Ab & & HIV RNA PCR.

3. Action: IMMEDIATE DISPENSE

DISPENSE PrEP **IMMEDIATELY** if rapid test is negative.

4. Safety & Follow-up

Do not wait for serum creatinine or HIV RNA results to start.

CDC 2025 Guidelines

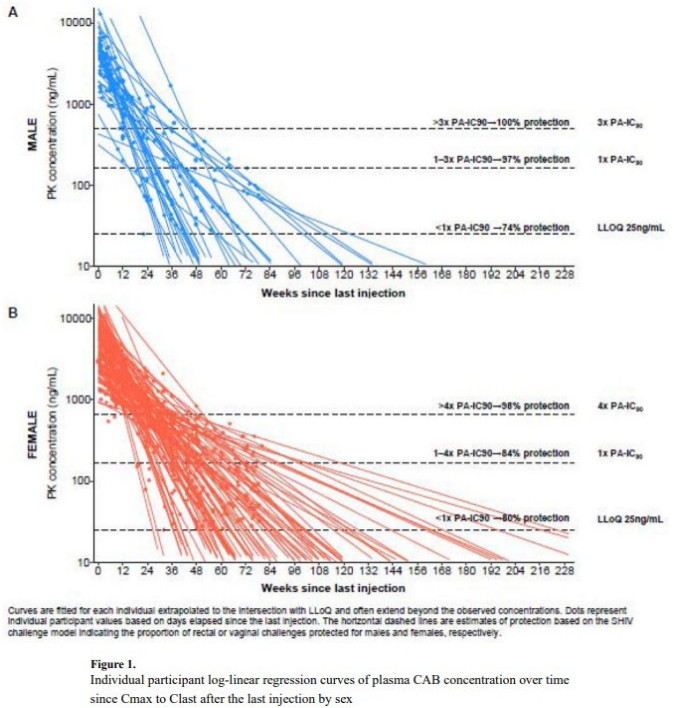
Clinical Challenge: Acute HIV & 'LEVI' Syndrome

- LEVI (Long-Acting Early Viral Inhibition): Long-acting agents can blunt HIV antibody response to early HIV infection, masking detection of new, acute HIV infection.
- Risk: Delayed HIV diagnosis leads to resistance.
- Detection: 7 participants in HPTN 083 receiving on-time CAB-LA injections acquired new HIV infection; 5 of these developed INSTI resistance.
- Strategy: Diagnosis requires careful questioning for high risk exposures; standard Ag/Ab tests may be delayed or non-reactive. HIV RNA PCR test is needed to diagnose.

Marzinke MA, et al. J Infect Dis. 2021

LEVI Syndrome

- Long-Acting Early Viral Inhibition (LEVI).
- Masked HIV infection can result in delayed diagnosis for 6-12 months.
- Risk of high-level INSTI resistance (G140/Q148 mutations).



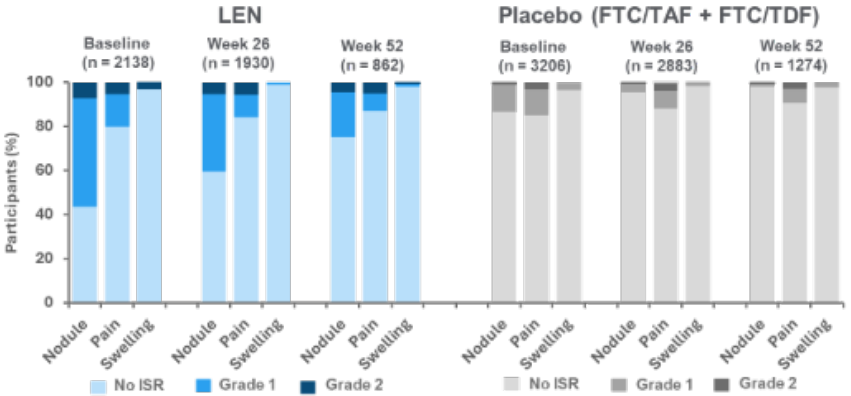
Curves are fitted for each individual extrapolated to the intersection with LLoQ and often extend beyond the observed concentrations. Dots represent individual participant values based on days elapsed since the last injection. The horizontal dashed lines are estimates of protection based on the SHIV challenge model indicating the proportion of rectal or vaginal challenges protected for males and females, respectively.

Figure 1.
Individual participant log-linear regression curves of plasma CAB concentration over time since Cmax to Clast after the last injection by sex

Landovitz et al., 2020; Marzinke MA, et al. J Infect Dis. 2021

Managing Side Effects: ISRs

- Prevalence: About 70% to 80% of patients experience ISRs initially; <5% discontinue.
- Technique: Slow injection (10-15 seconds) of room-temperature medication.
- Comfort: Use of cold packs pre- and post-injection.
- Counseling: 'Grade 1-2' soreness is expected; severity decreases over time.



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Bekker LG, et al. NEJM 2024; Landovitz et al., 2020

Status-Neutral Care Continuum

- Engaging every patient in sexual health, regardless of status.
- HIV Testing -> PrEP (if negative) or ART (if positive).
- Removes the 'Moral Judge' from the encounter.
- Status-Neutral Care is patient centered not disease centered.

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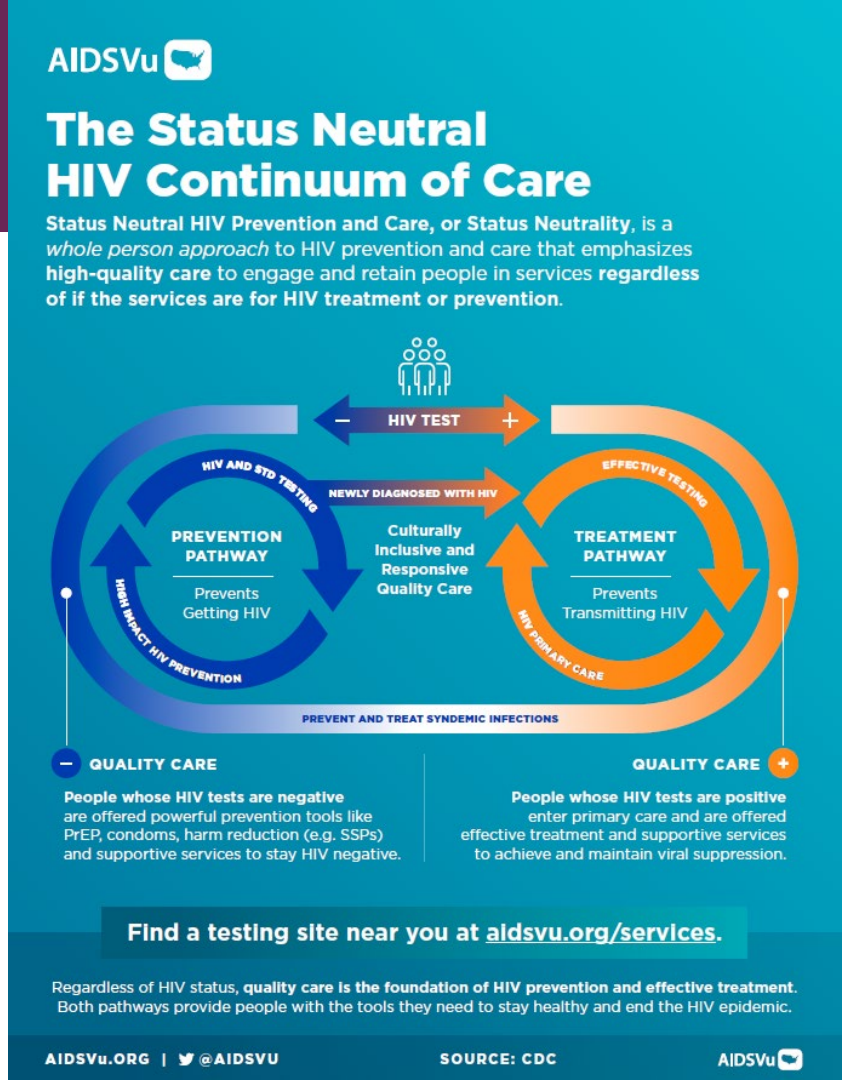

Gate-Opener vs. Gatekeeper

- Reframing PrEP from a reward to a routine health option.
- Eliminating intrusive behavior questions in favor of autonomy.
- De-medicalizing' the eligibility process.

Conclusion

- Scientific Breakthrough: Transitioning from daily oral to 6-month dosing.
- Dismantling Myths: Instability is an indication for long-acting PrEP, not a barrier.
- Addressing Inequity: Overcoming the social policing of sexuality and the gender gap.
- Systemic Evolution: Utilizing pharmacy-led and Status-Neutral care models.
- Call to Action: Move from Gatekeeper to Gate-opener to ensure health autonomy.

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