



NATIONAL LGBTQIA+ HEALTH
EDUCATION CENTER

A PROGRAM OF THE FENWAY INSTITUTE

Innovative Models for HIV Prevention and Care

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Our Roots

Fenway Health

- Independent 501(c)(3) FQHC
- Founded 1971
- Mission: To enhance the wellbeing of the LGBTQIA+ community as well as people in our neighborhoods and beyond through access to the highest quality health care, education, research, and advocacy
- Integrated primary care model, including HIV and transgender health services

The Fenway Institute

- Research, Education, Policy



LGBTQIA+ Education and Training

The National LGBTQIA+ Health Education Center offers educational programs, resources, and consultation to health care organizations with the goal of providing affirmative, high quality, cost-effective health care for lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minority (LGBTQIA+) people.

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 - Webinars, Learning Modules
 - CE, and HEI Credit
- ECHO Programs
- Resources and Publications

www.lgbtqiahealtheducation.org

education@fenwayhealth.org



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After the Webinar

- Close the browser, and an evaluation will automatically open for you to complete
- We very much appreciate receiving feedback from all participants
- Completing the evaluation is required to obtain a CME certificate

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I have no financial conflicts of interest.



Learning Objectives

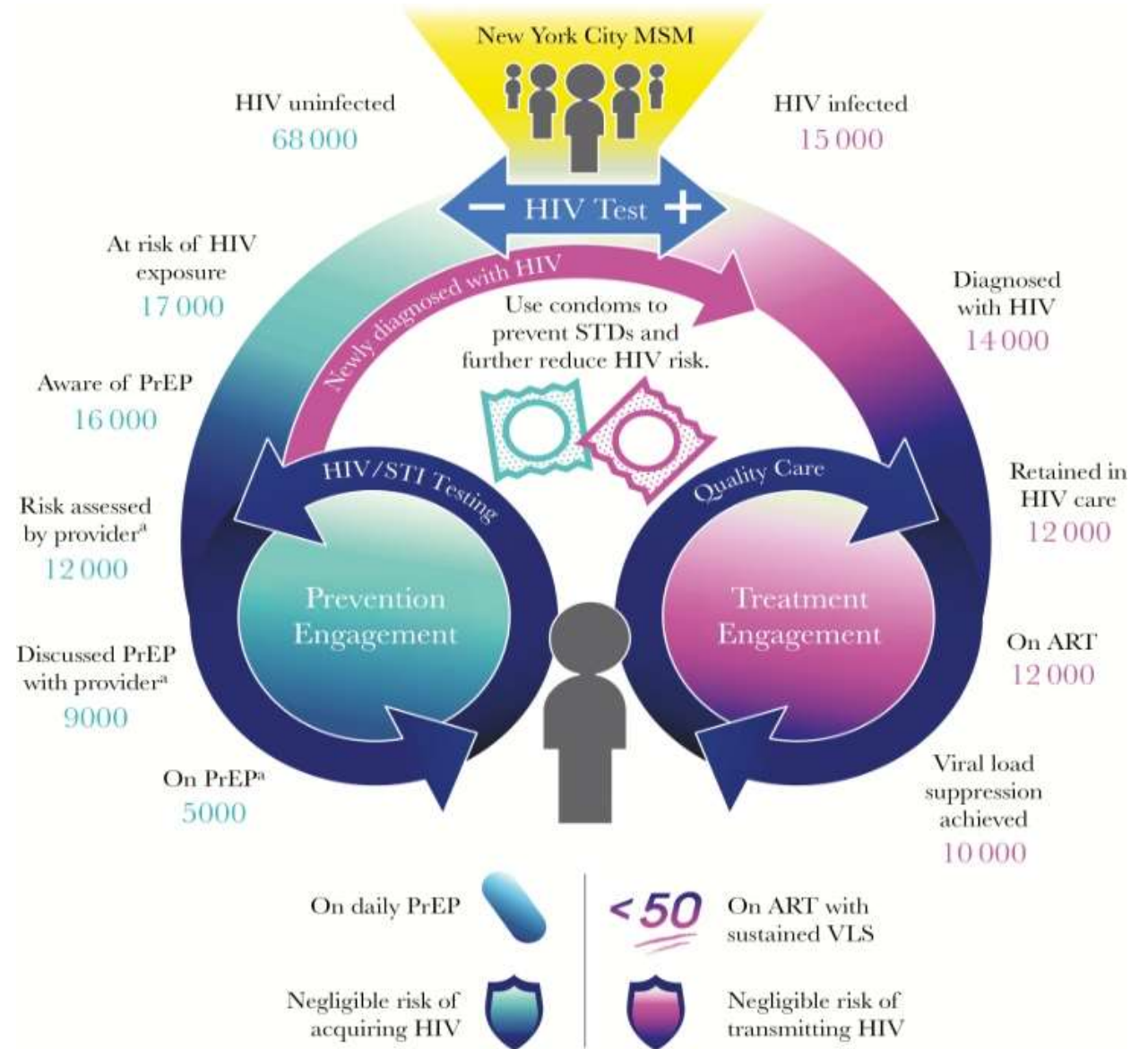
1. Describe what is meant by a status neutral approach to HIV care and prevention.
2. Explain at least 3 key considerations for same-day PrEP and rapid ART start programs.
3. Summarize how to implement long-acting injectable PrEP at health centers.

PrEP Turned 10 This Year!

July 16, 2022



HIV Prevention and Care are Increasingly “Status Neutral”



People at risk of HIV exposure **taking daily PrEP** and people with HIV **with sustained viral load suppression** have negligible risk of acquiring or transmitting HIV.

Status Neutral HIV Care and Prevention: Corresponding Services

Without HIV but at increased risk

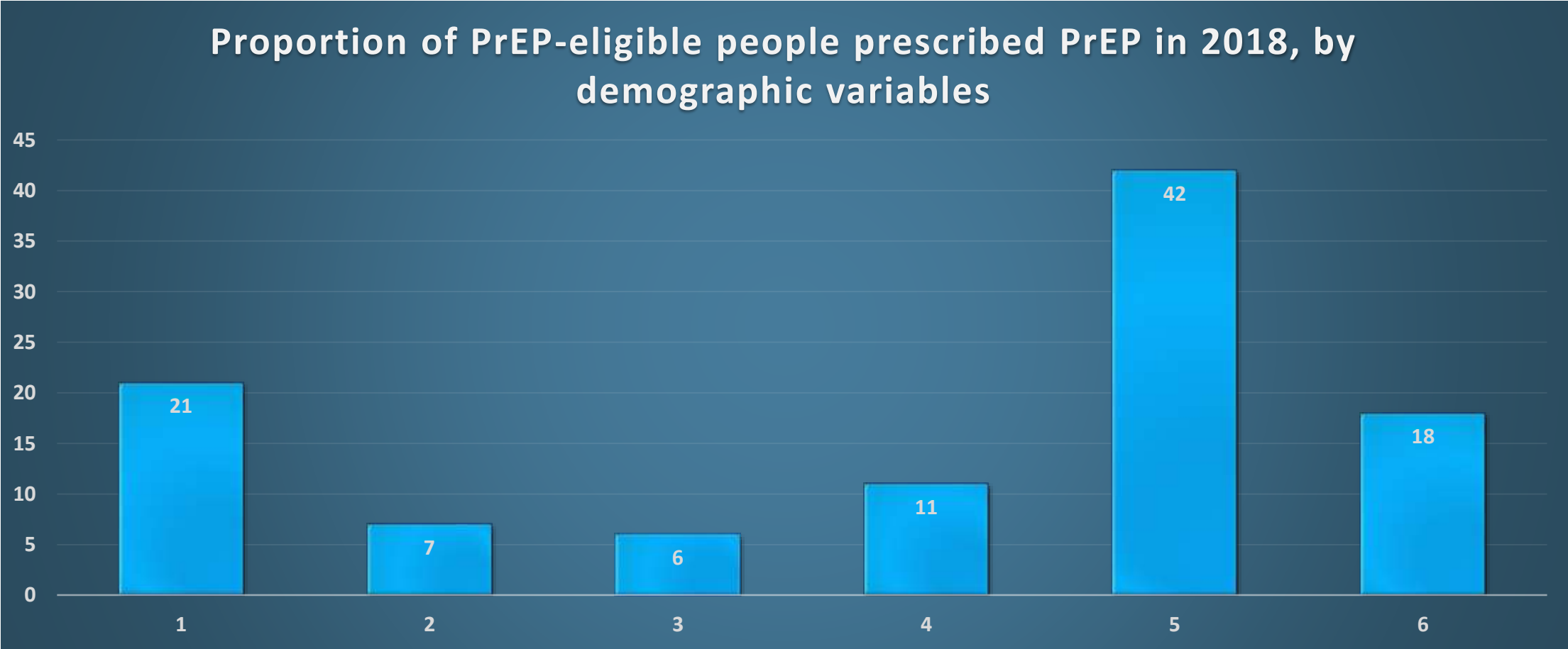
- Same-day PrEP
- Long-acting injectable PrEP

With HIV

- Rapid antiretroviral (ART) starts
- Long-acting injectable treatment

Same-day PrEP

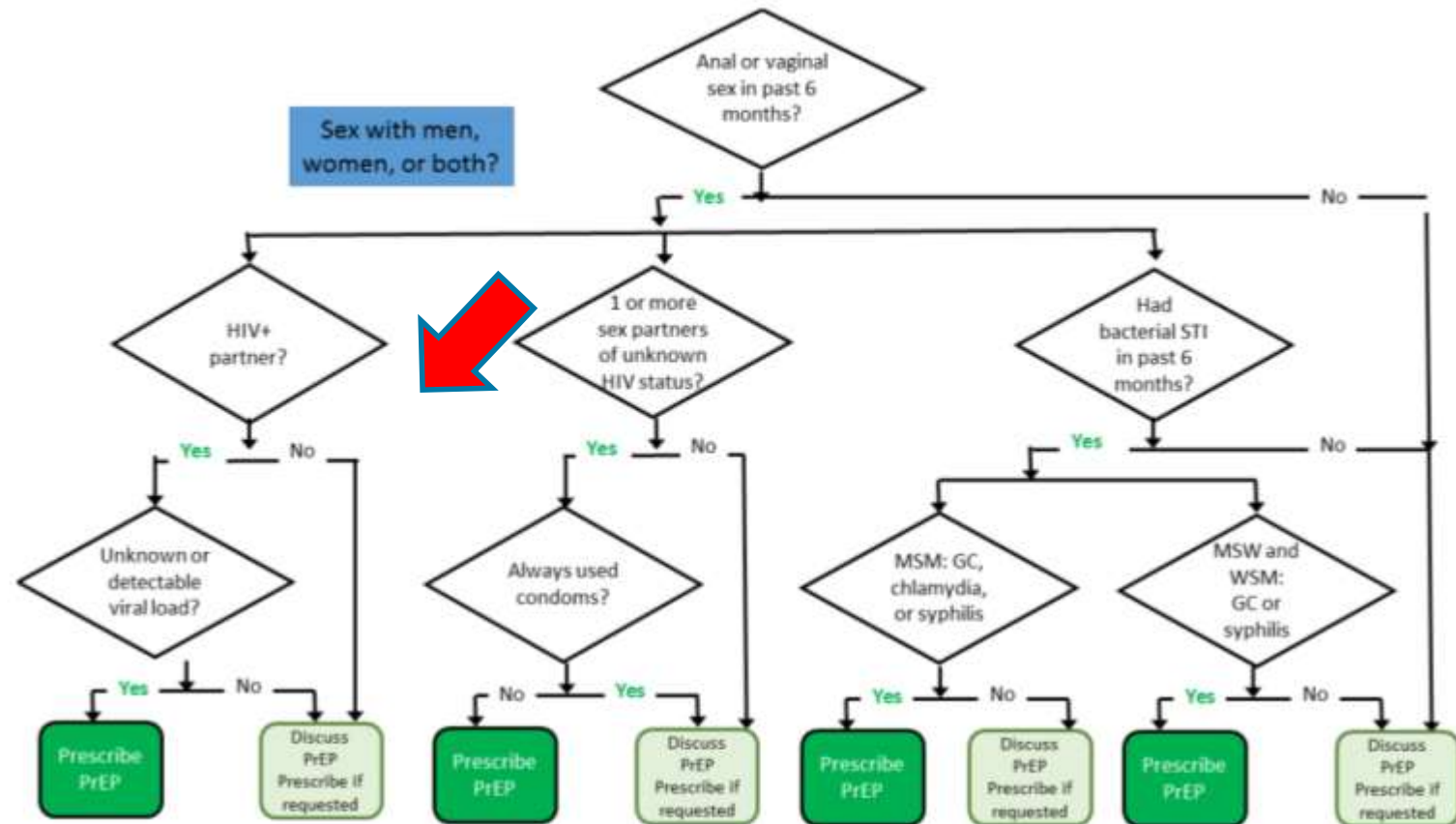
Many People with Indications for PrEP are Not Taking It



PrEP Indications for Sexually Active People

Figure 2 Assessing Indications for PrEP in Sexually Active Persons

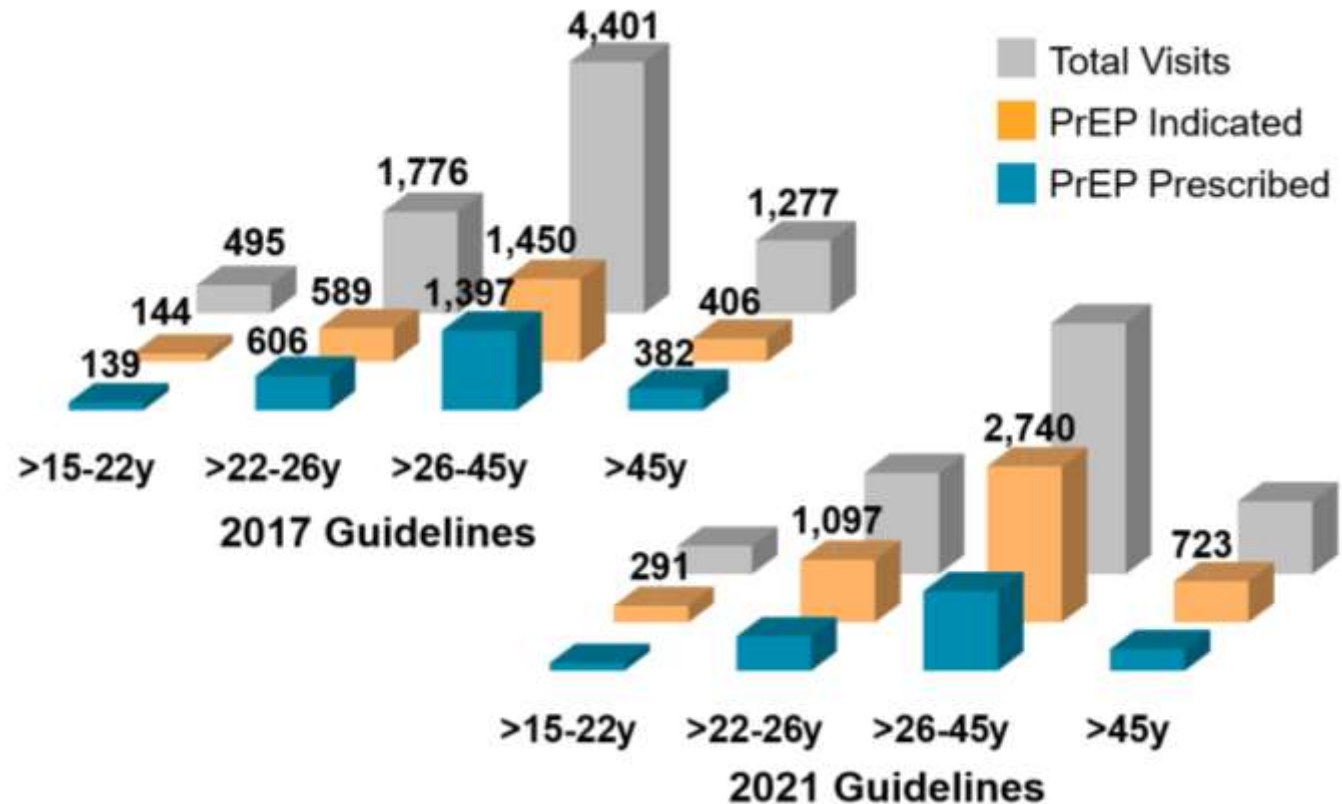
- Requesting PrEP, even without reporting risks for HIV, is considered an indication for PrEP.



This Change Increases the Proportion of Patients with A PrEP Indication

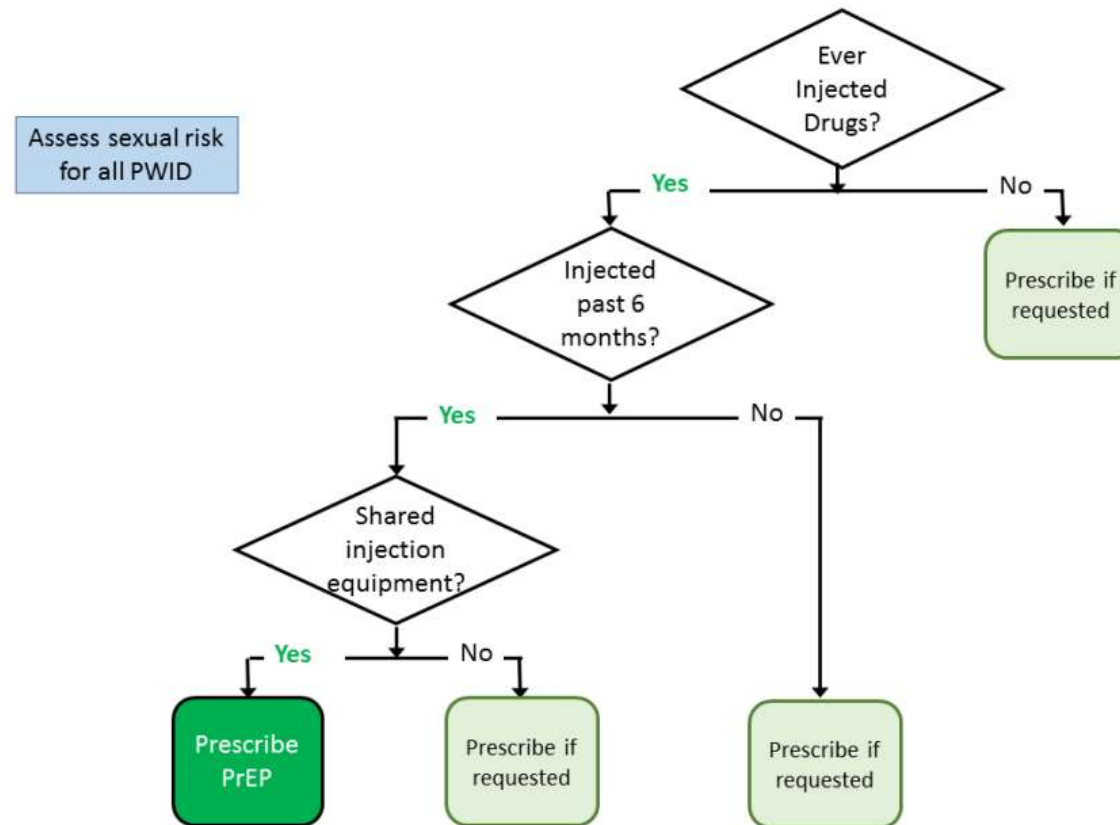
PrEP Cascades Based on 2017 versus 2021 CDC Guidelines, MGH Sexual Health Clinic

- Applying the change increased the proportion of visits with a PrEP indication from 33% to 61%.
- Increases were similar across age groups.

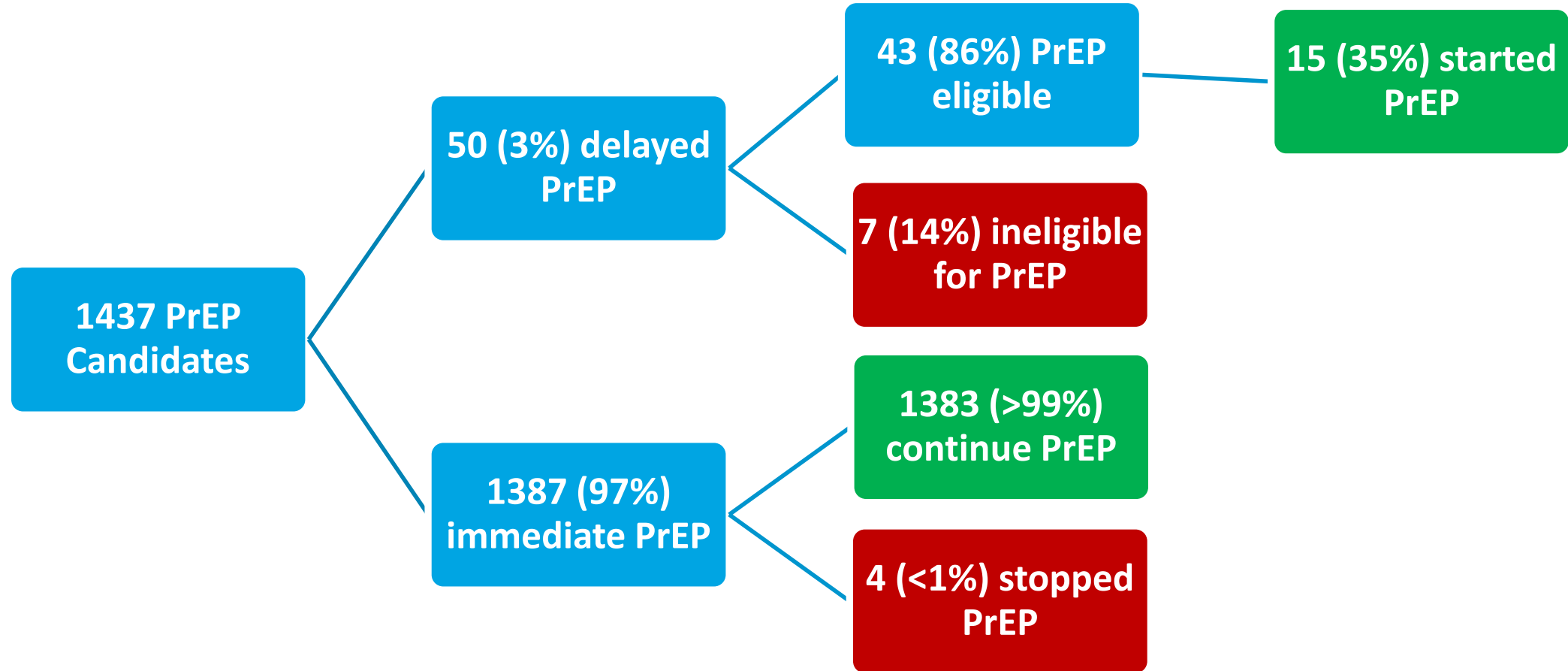


PrEP Indications for People who Inject Drugs

Figure 3 Assessing Indications for PrEP in Persons Who Inject Drugs



Same-day PrEP Increases Uptake While Maintaining Safety



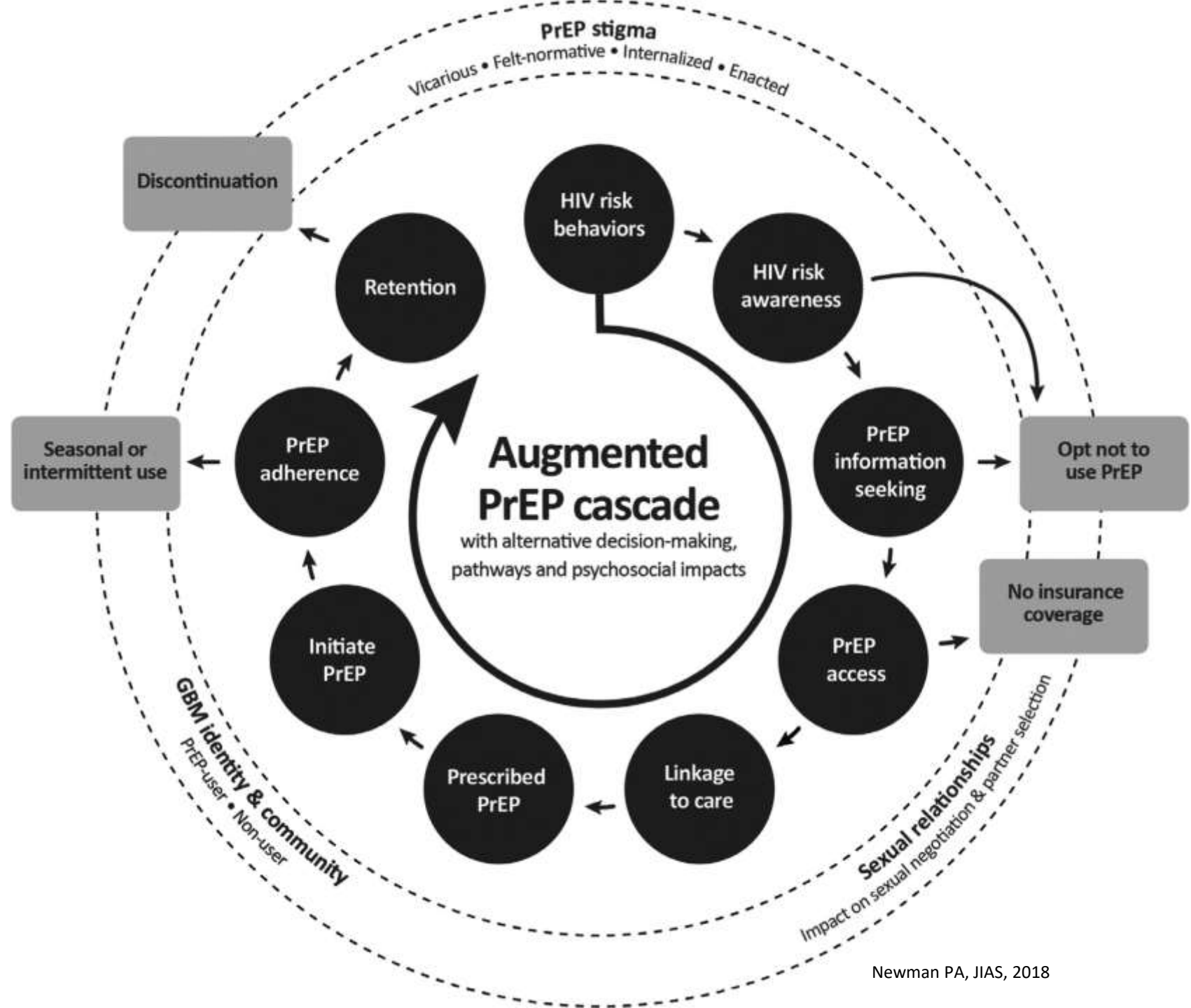


Table 5 Timing of Oral PrEP-associated Laboratory Tests

Test	Screening/Baseline Visit	Q 3 months	Q 6 months	Q 12 months	When stopping PrEP
HIV Test	X*	X			X*
eCrCl	X		If age ≥ 50 or eCrCl < 90 ml/min at PrEP initiation	If age < 50 and eCrCl ≥ 90 ml/min at PrEP initiation	X
Syphilis	X	MSM /TGW	X		MSM/TGW
Gonorrhea	X	MSM /TGW	X		MSM /TGW
Chlamydia	X	MSM /TGW	X		MSM /TGW
Lipid panel (F/TAF)	X			X	
Hep B serology	X				
Hep C serology	MSM, TGW, and PWID only			MSM, TGW, and PWID only	

* Assess for acute HIV infection (see Figure 4)

Facilitators of Same-day PrEP

- Rapid-turnaround HIV testing
- Point-of-care serum creatinine and urine pregnancy testing
- On-demand benefits navigation and/or PrEP starter packs.
- Reliable contact information and/or methods and support staff to reach patients should PrEP need to be stopped

Panel: Considerations for same-day PrEP

Reasons to consider same-day PrEP

- Minimise drop-off between PrEP evaluation and initial prescription
- Reduce barriers to PrEP access and delivery (eg, time)
- Standard of care for other medical conditions (eg, oral contraceptives)

Reasons not to consider same-day PrEP

- System barriers (absence of insurance or payment assistance, absence of referral network for PrEP continuity care, absence of laboratory services)
- Patient considerations (history of renal disease, inability to contact for follow-up if abnormal laboratory test results)
- Unknown effect on PrEP persistence and adherence

Facility considerations for providing same-day PrEP

- Ability to do point-of-care HIV testing
- Ability to test for creatinine and pregnancy
- Ability to draw blood for laboratory testing
- Ability to contact patients to discontinue PrEP if needed
- Access to insurance navigation and medication assistance programmes for uninsured and underinsured individuals
- Capacity to attend the 1 month or 3 month (or both) follow-up appointments for ongoing PrEP care (onsite or through referral network)

Same-day PrEP Process

Person responsible	Step
Administrative assistant	1. Checks in patient, obtains preferred contact information and consent to text
Patient (clinician during Covid-19)	2. Completes standardized questionnaire with questions about sexual behavior and drug use
Nurse practitioner	3. Discusses PrEP, asks about symptoms of acute HIV, obtains baseline laboratory studies at the same time as STI testing, writes prescription
PrEP navigator	4. Provides on-demand benefits assistance and enrollment
Data coordinator	5. Enters patient into a clinical database for quality tracking and adherence support
Administrative assistant	6. Books follow-up appointment
Nurse practitioner or nurse	7. Performs follow up visits



Rapid ART Starts

Rapid ART Starts

- “Rapid” is defined differently by different programs; many aim to start treatment immediately upon diagnosis.
- Potential advantages of rapid ART starts:
 - **Earlier viral suppression**, with its associated health and prevention benefits
 - **Improved retention in care**
 - **Lower mortality** (in a resource-limited setting)
- Challenges:
 - Co-locating (or rapid linkage between) testing and treatment expertise
 - Duration of visits (e.g. 2-3 hours)

Facilitators of Rapid ART Initiation

- On-demand benefits navigation
- ART starter packs
- Ability to obtain all necessary baseline testing (even though not yet resulted) – e.g., HIV RNA, resistance testing, chemistries, hepatitis serologies, etc.
- Reliable contact information and/or methods and support staff to reach patients

Medical Logistics of Rapid ART Initiation

Avoid regimens that:

- Contain abacavir: The results of HLA-B*5701 testing will not be back
- Do not treat hepatitis B
- Require knowledge of baseline HIV RNA and/or CD4 (e.g., anything with rilpivirine)
- Are based on Non-nucleoside reverse transcriptase inhibitors (NNRTIs): The results of resistance testing will not be back.

The options thus become:

- TAF/FTC/BIC (biktarvy)
- DTG (dolutegravir) with either TAF/FTC or TDF/FTC
- DRV/r or DRV/c (boosted darunavir) with either TAF/FTC or TDF/FTC

If there is clinical concern for a serious opportunistic infection (e.g., cryptococcal meningitis), do **not** start ART immediately!

Long-acting PrEP

Which Barriers Will Long-acting Injectable PrEP Overcome?

Patient	Provider	Structural/environmental
Limited knowledge of PrEP	Knowledge of PrEP	Homophobia
Low HIV risk perception	Willingness to prescribe PrEP	Transphobia
Limited knowledge of partners' risks	"Purview paradox"	Sexism
Medical mistrust	Competing priorities	Racism
Financial concerns	Failure to elicit HIV risk information	Lack of health care access
Competing priorities	Billing/reimbursement concerns	Insurance climate
Confidentiality concerns		HIV-related stigma
Adherence		

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Confidentiality concerns		HIV-related stigma
Adherence		

Potential Advantages and Disadvantages of Long-acting Injectable PrEP

Advantages

- Choice
- Adherence
- Confidentiality
- Reduced stigma
- Does not require GI absorption

Disadvantages

- Cost
- Schedule of care?
- Injection site reactions
- Long subtherapeutic tails

Choice May Lead to Uptake

CROI 2022

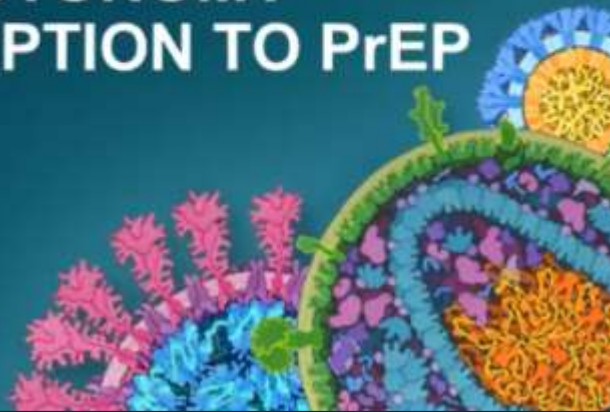
APPLYING LESSONS ON EFFICACY AND AUTONOMY FROM CONTRACEPTION TO PrEP

Dominika Seidman, MD MAS

University of California San Francisco

San Francisco, California, USA

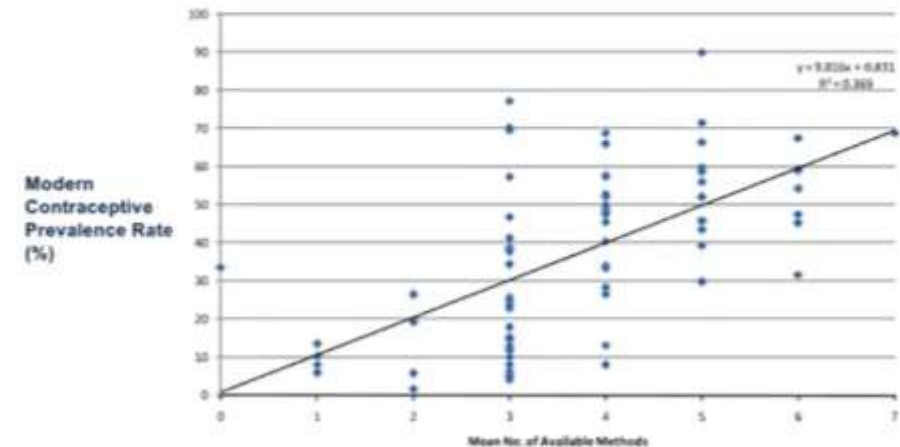
Disclosure: None



Study Center
for Global
Reproductive
Health

UCSF
University of California
San Francisco

Contraception: more choices → greater use



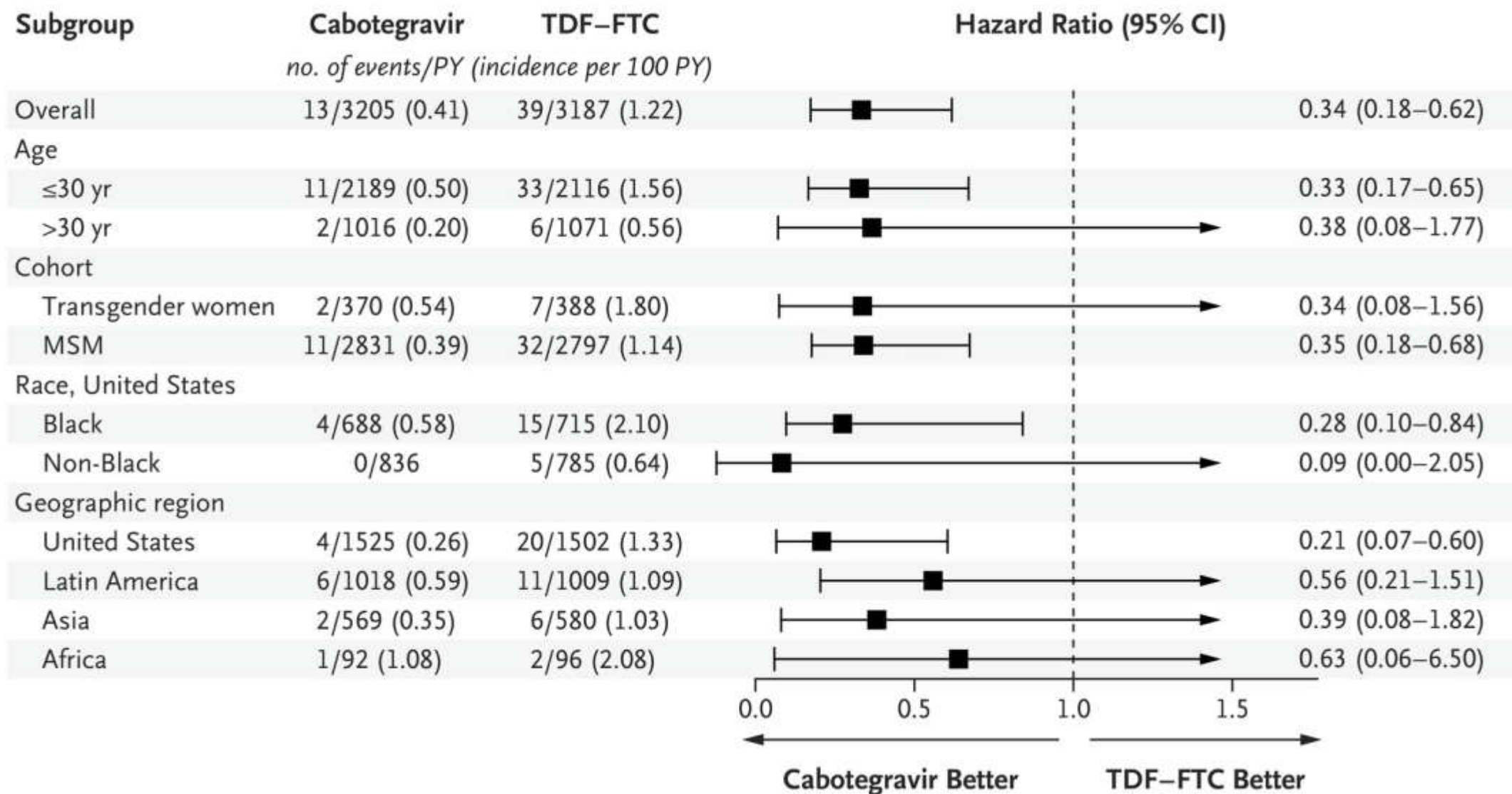
Ross & Stover, Global
Health Sci Pract 2013



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B Incident HIV Infection in Prespecified Subgroups



CAB-LA is Superior to TDF/FTC for PrEP Among Cisgender Women

- **HPTN 084:** Randomized clinical trial of CAB-LA versus TDF/FTC for PrEP among 3,224 women in Africa
- CAB-LA reduced the risk of HIV by **88%** in comparison to TDF/FTC.
- Adherence to TDF/FTC was moderate; **42%** took it daily based on drug levels.

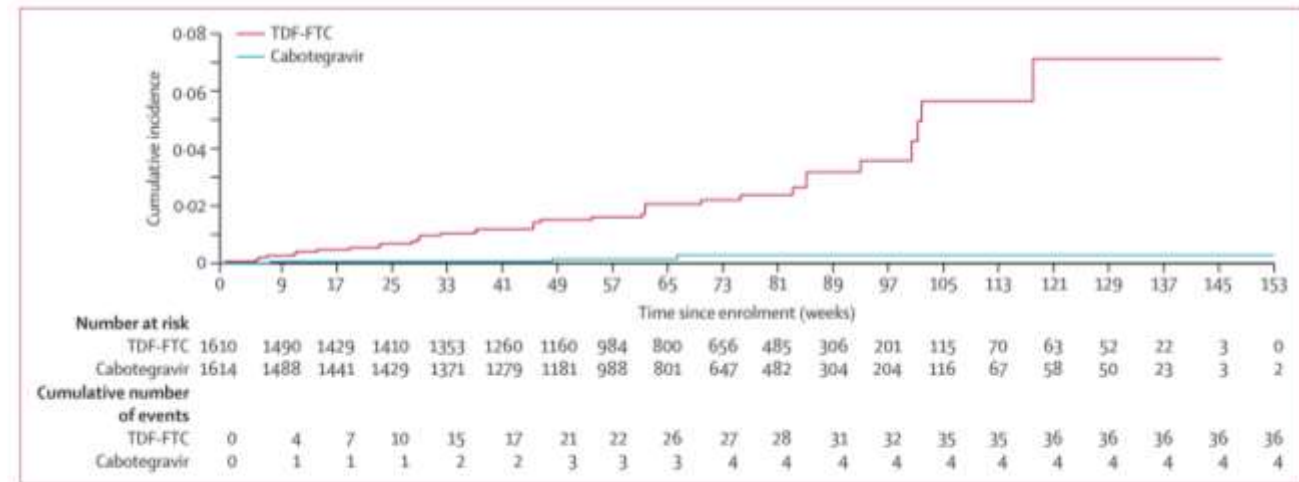


Figure 3: Cumulative HIV incidence by study group

Table 7 **Timing of CAB PrEP-associated Laboratory Tests**

Test	Initiation Visit	1 month visit	Q2 months	Q4 months	Q6 months	Q12 months	When Stopping CAB
HIV*	X	X	X	X	X	X	X
Syphilis	X			MSM^/TGW~ only	Heterosexually active women and men only	X	MSM/TGW only
Gonorrhea	X			MSM/TGW only	Heterosexually active women and men only	X	MSM/TGW only
Chlamydia	X			MSM/TGW only	MSM/TGW only	Heterosexually active women and men only	MSM/TGW only

* HIV-1 RNA assay

X all PrEP patients

^ men who have sex with men

~ persons assigned male sex at birth whose gender identification is female

Why no assessment for viral hepatitis in those at risk?

HIV RNA Assays for Monitoring Those with Antiretroviral Exposure

Rationale:

- Antiretrovirals impact HIV test performance
- Antigen/antibody positivity may be delayed beyond that of an HIV RNA assay for incident infections by a mean of
 - 98 days in those receiving CAB-LA
 - 31 days in those receiving TDF/FTC

Questions and challenges:

- Obtaining HIV RNA assays for people who are un- or underinsured
- Limitations of the USPSTF/ACA provision

Questions about CAB-LA

Will it prevent HIV transmission from injection drug use?

- **CDC:** “PWID are likely to benefit from PrEP with any FDA-approved medication with or without an identified sexual behavior risk of HIV acquisition.”

Can CAB-LA be used in adolescents?

- The FDA approved the drug for adults *and* adolescents.
- **CDC:** “CAB is not recommended for adolescents < 18 years old.”
- The HPTN 083-01 study is assessing CAB-LA among people < 18 years.

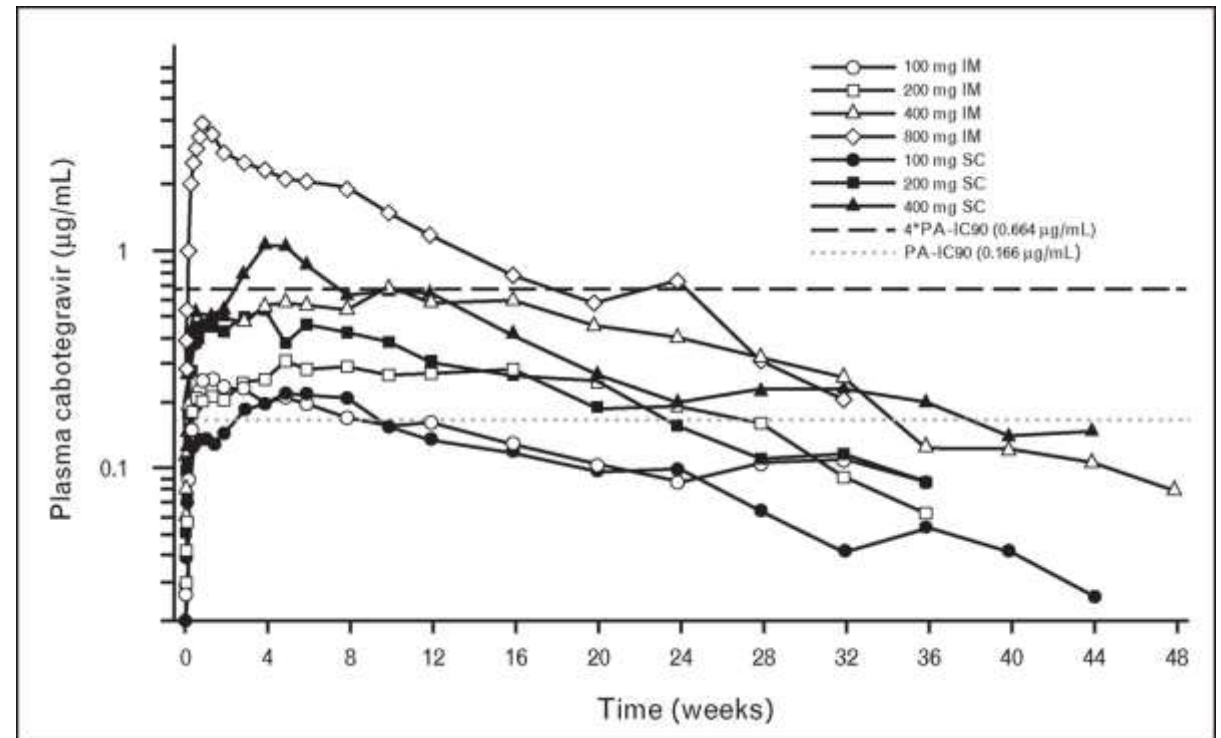
Questions about CAB-LA, Continued

Will CAB-LA be compatible with pregnancy/breastfeeding?

- **HPTN 084:** 29 pregnancies in the CAB-LA group; no congenital anomalies observed
- **Package insert:**
 - Use during pregnancy “only if the expected benefit justifies the potential risk to the fetus.”
 - Implications of tail phase
 - Antiretroviral Pregnancy Registry (www.apregistry.com)

Key Aspects of Patient Counseling

- The option of an oral lead-in phase
- Injection site reactions
- The importance of returning on time for subsequent injections
- If applicable, what is known about the drug in pregnancy
- The implications of the tail phase
 - Theoretical risk of drug resistance if HIV is acquired during the tail phase
 - Recommendation for oral PrEP if HIV prevention is indicated after stopping CAB-LA injections



Poll

What are your biggest concerns about LA-CAB for PrEP?

- A. Ensuring patients return for injections
- B. Cost/access
- C. Logistics prescribing/administering
- D. Breakthrough HIV infections
- E. Side effects
- F. Something else

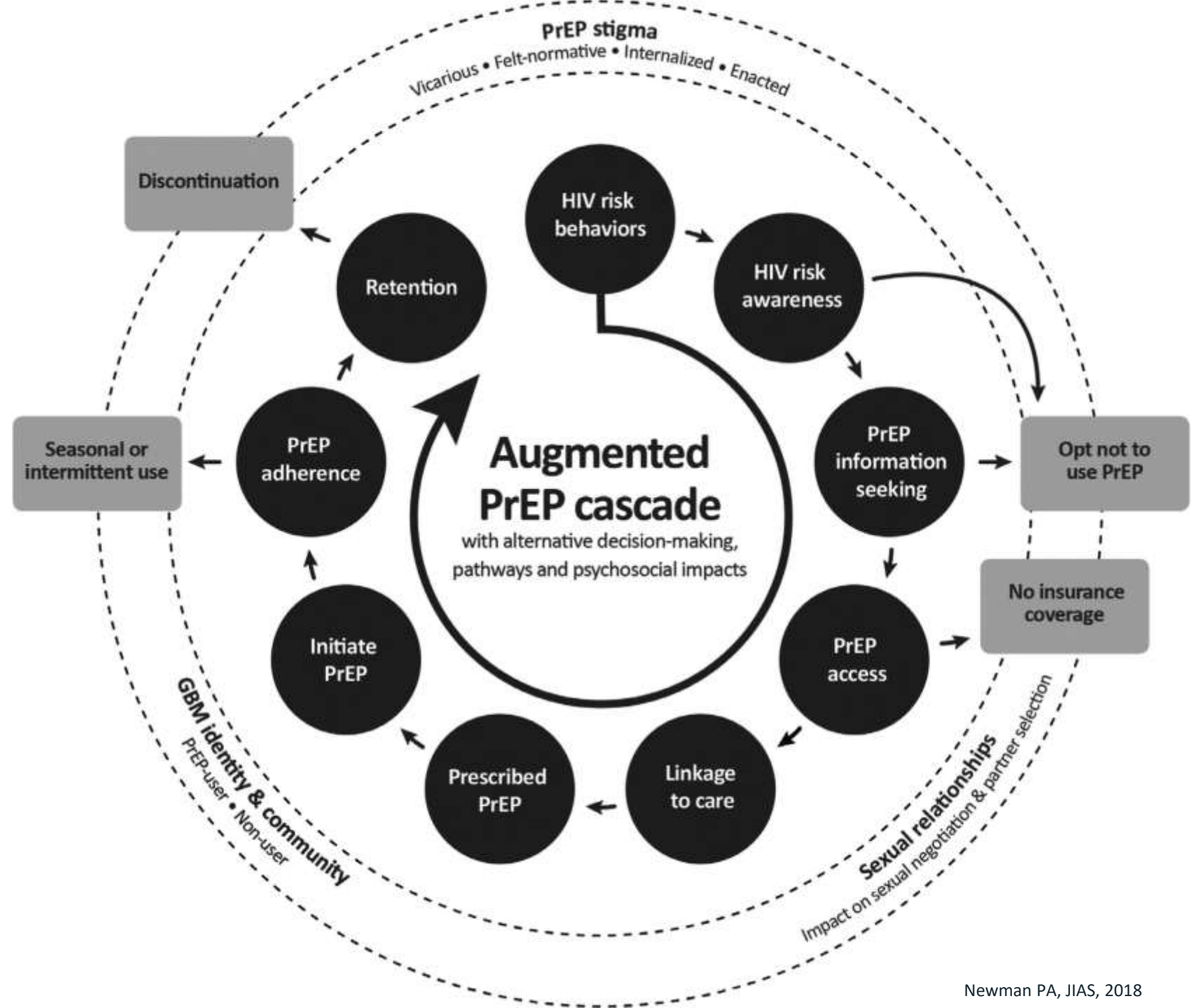
Implementing CAB-LA: Many Questions

Two decisions:

- Enroll in ViiVConnect or independently manage benefits and acquisition
- Access the medication through:
 - Buy and bill:
 - Clinic purchases and stores the drug
 - Clinic submits claims for the medication and its administration
 - Specialty pharmacy:
 - Specialty pharmacy assesses benefits and determines the need for prior authorization
 - Specialty pharmacy arranges medication shipping to the clinic

Questions:

- Optimal workflows?
- Local PrEP drug-assistance programs?
- Ensuring patients return for their first injection?



Will Same-day PrEP be Possible for CAB-LA?

Panel: Considerations for same-day PrEP

Reasons to consider same-day PrEP

- Minimise drop-off between PrEP evaluation and initial prescription
- Reduce barriers to PrEP access and delivery (eg, time)
- Standard of care for other medical conditions (eg, oral contraceptives)

Reasons not to consider same-day PrEP

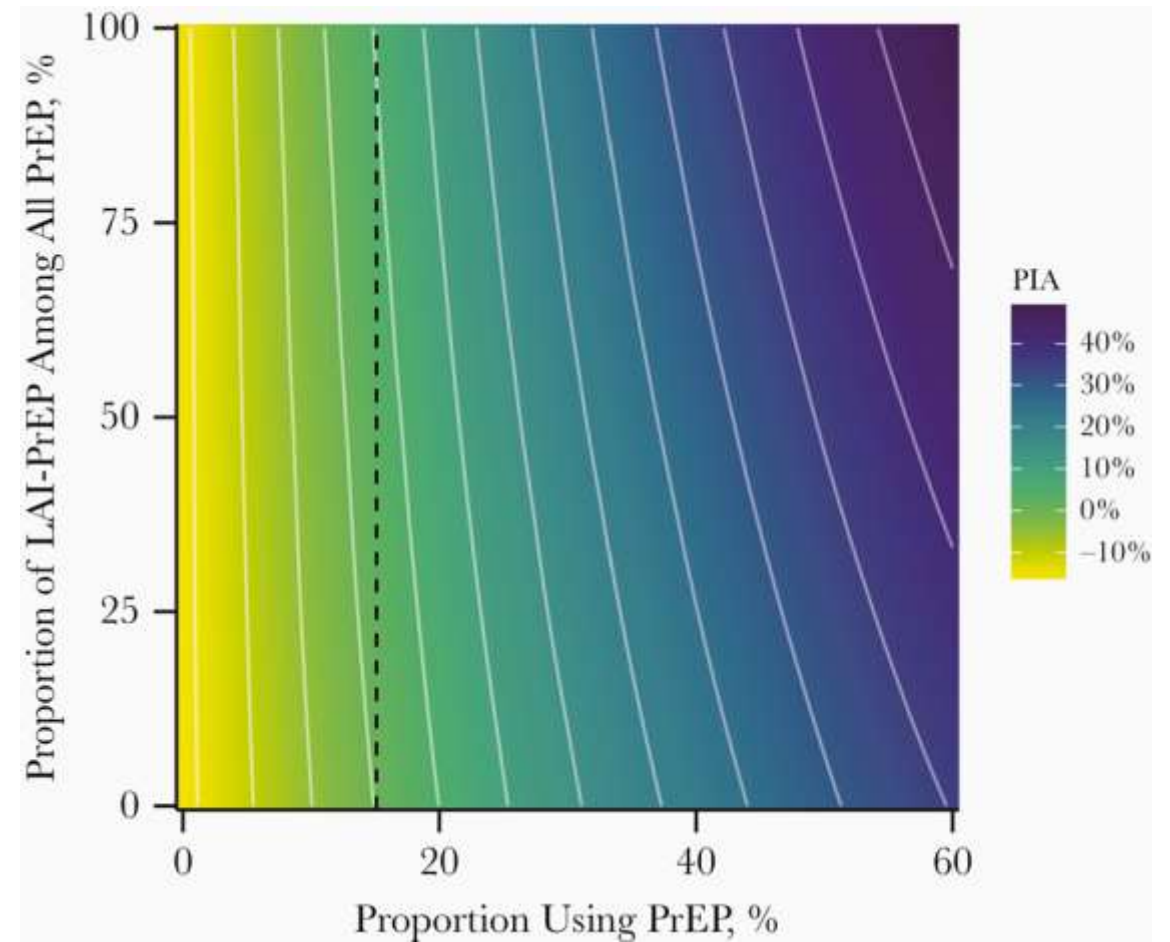
- System barriers (absence of insurance or payment assistance, absence of referral network for PrEP continuity care, absence of laboratory services)
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- Unknown effect on PrEP persistence and adherence

Facility considerations for providing same-day PrEP

- Ability to do point-of-care HIV testing
- Ability to test for creatinine and pregnancy
- Ability to draw blood for laboratory testing
- Ability to contact patients to discontinue PrEP if needed
- Access to insurance navigation and medication assistance programmes for uninsured and underinsured individuals
- Capacity to attend the 1 month or 3 month (or both) follow-up appointments for ongoing PrEP care (onsite or through referral network)

Modelled Impact of Long-acting PrEP Among MSM in the Southeastern U.S.

- **Comparison:** 15% of eligible MSM using daily oral PrEP
- If 50% of PrEP users opt for long-acting injectable PrEP, 4% of infections averted over 10 years



PrEP Options in 2022

Medication	Advantages	Disadvantages
Oral TDF/FTC	<ul style="list-style-type: none"> → Prevents HIV acquisition through sex and injection drug use → Effective when used in an on-demand fashion among MSM → Available as a generic 	<ul style="list-style-type: none"> → Should not be used when estimated creatinine clearance is < 60 mL/min → Risks of renal adverse events and decreased bone mineral density
Oral TAF/FTC	<ul style="list-style-type: none"> → Prevents HIV acquisition through sex → Less likely than TDF/FTC to adversely affect kidneys or bone → Can be used if the estimated creatinine clearance is ≥ 30 mL/min 	<ul style="list-style-type: none"> → Use in an on-demand fashion or among cisgender women has not been studied → Risk of weight gain and dyslipidemia
Intramuscular CAB (CAB-LA)	<ul style="list-style-type: none"> → Superior to TDF/FTC for PrEP among MSM, transgender women, and cisgender women → Every-two-month injections obviate the need for taking a pill daily 	<ul style="list-style-type: none"> → Requires more frequent clinic visits than oral PrEP → Injection site reactions are common but tend to be mild → Limited data about safety in pregnancy

Long-acting HIV Treatment



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Long-acting Cabotegravir/Rilpivirine for HIV treatment (CAB/RPV)

- Indicated for people with HIV-1 who “are virologically suppressed (HIV-1 RNA < 50 copies/mL) on a stable antiretroviral regimen with no history of treatment failure or known or suspected resistance to either cabotegravir or rilpivirine”
- Monthly or bi-monthly intramuscular injections



Cabenuva prescribing information,

https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/212888s000lbl.pdf

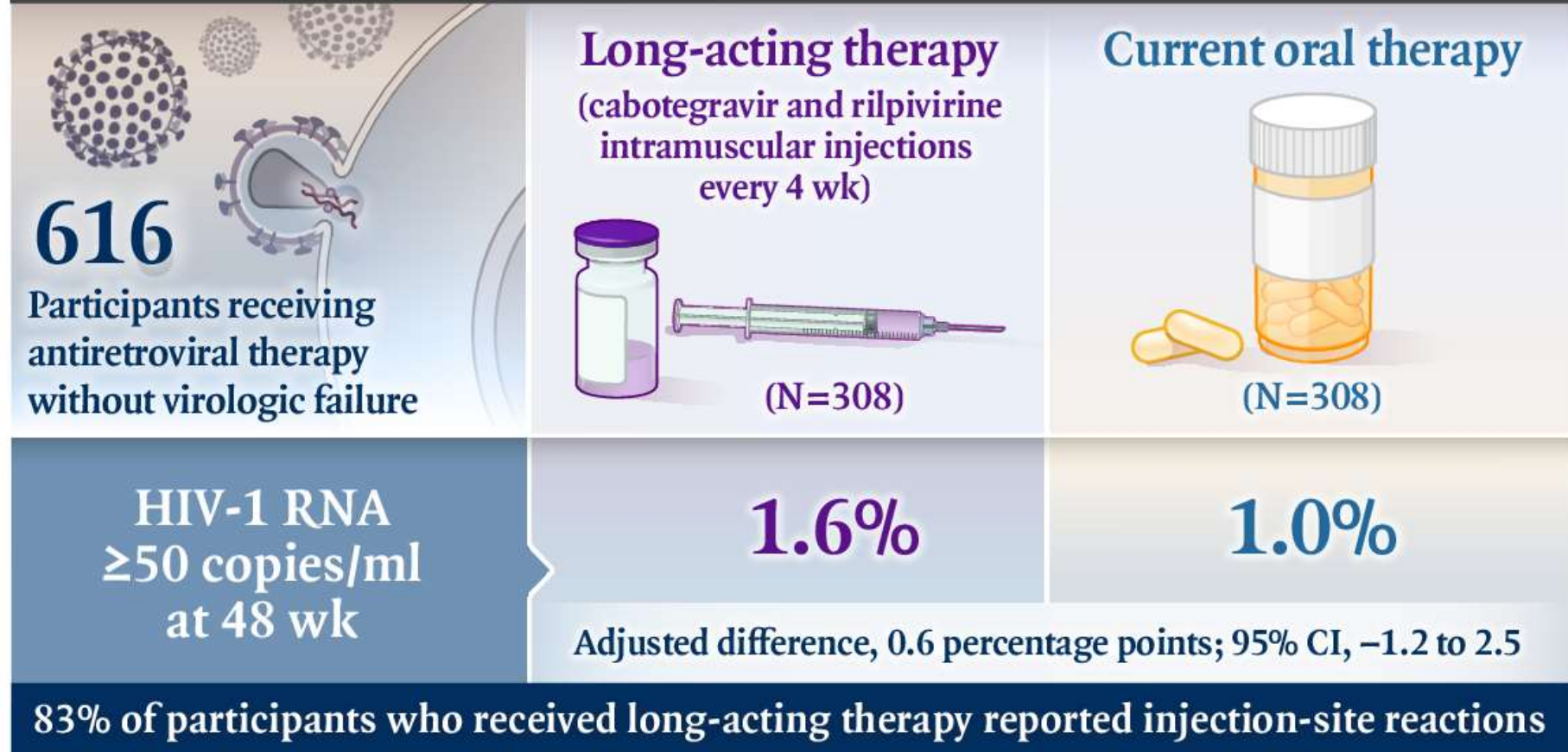
Image from <https://www.poz.com/article/cabenuva-every-month-maintains-viral-suppression-two-years>

ATLAS Study

The NEW ENGLAND JOURNAL of MEDICINE

Long-Acting Cabotegravir and Rilpivirine for HIV-1

PHASE 3, OPEN-LABEL, MULTICENTER, RANDOMIZED TRIAL

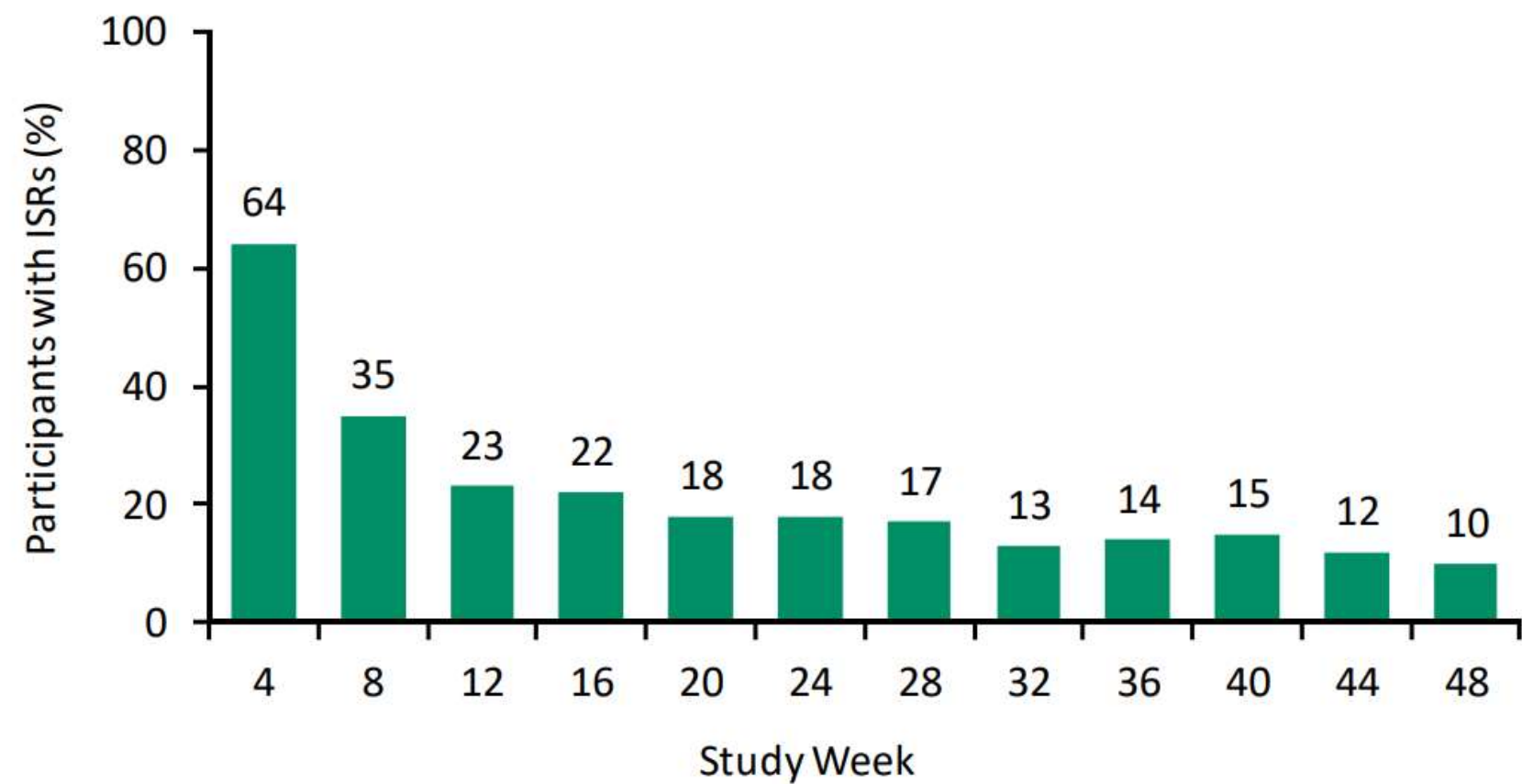


S. Swindells et al. 10.1056/NEJMoa1904398

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Figure S3. Incidence of Injection Site Reaction Adverse Events, LA Arm.

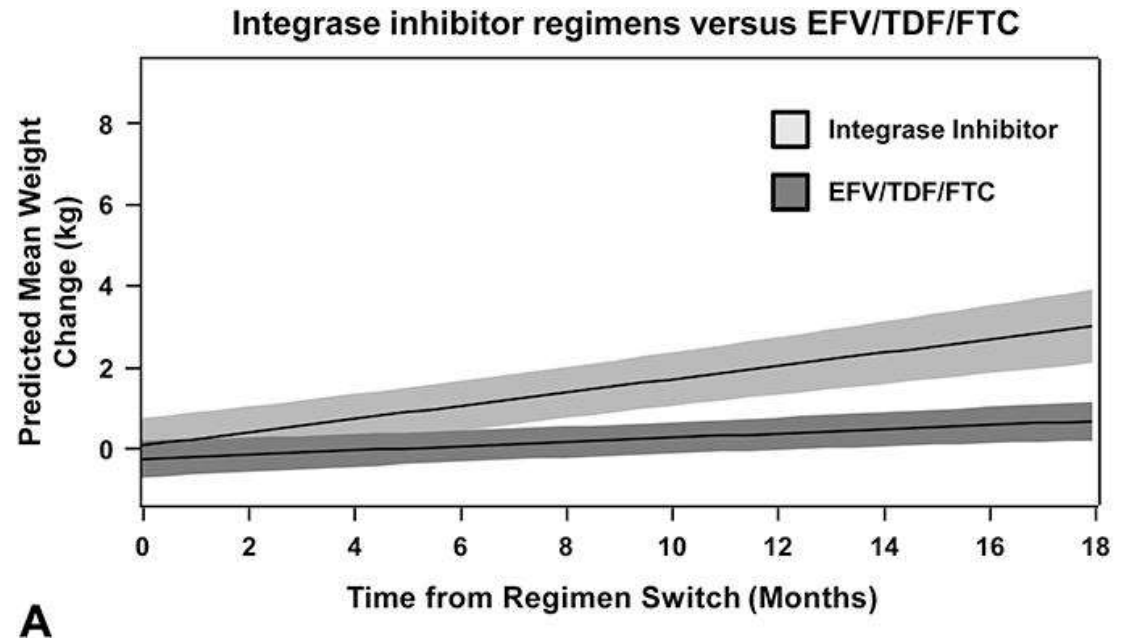
A Any Injection Site Reaction



- 83% of participants in the long-acting therapy group reported an injection site reaction
- 99% of these were of mild or moderate severity
- Most resolved within 7 days (median = 3 days)

Cabotegravir and Weight Gain

- Pooled analysis of subjects in ATLAS, FLAIR, and ATLAS-2M
- Weight changes at 48 weeks were:
 - + 1.2 kg in the every-4-week CAB/RPV group
 - + 1.25 kg in the every-8-week CAB/RPV group
 - + 1.0 kg in the oral ART group



Managing Missed Doses

- If dose is ≤ 7 days overdue, give the next dose.
- If dose is > 7 days overdue, start oral CAB/RPV.
- For unplanned missed doses, re-assess the appropriateness of long-acting injectable ART.
- If resuming injectable ART after a missed dose,
 - Administer the maintenance dose (CAB 400 mg and RPV 600 mg) if the time since the last injection was ≤ 2 months.
 - Administer the loading dose (CAB 600 mg and RPV 900 mg) if the time since last injection was > 2 months.

Additional Considerations

- Do not use CAB/RPV in people with hepatitis B (unless they are receiving separate treatment for HBV).
- Data in pregnancy are extremely limited; there is potential for fetal exposure even after the drug is discontinued.
- For administration:
 - Use a 23-gauge, 1.5-inch needle or, if BMI is > 30, a 2-inch needle
 - Inject into the gluteus, ideally on opposite sides
 - Not an option for people with buttock implants or fillers
- Check HIV-1 RNA 4-8 weeks after switching to injectable ART and when there are unplanned missed visits and delayed doses



The **LATITUDE** Study

Long-**A**cting **T**herapy to **I**mprove **T**reatment **S**uccess in **D**aily **L**ife

STUDY PURPOSE: To compare the “regimen success”^{*} of Long-Acting (LA) ART (using Rilpivirine (RPV)-LA and Cabotegravir (CAB)-LA) to Standard of Care (SOC) in persons living with HIV (PLWH) who have had barriers for adherence by 48 weeks of follow-up after an incentivized oral induction period.

KEY INCLUSION CRITERIA:

- PLWH \geq 18 years of age; prescribed ART for at least 6 months with a screening HIV RNA > 200 copies/mL
- Evidence of non-adherence to HIV medications - Defined as having one of the criteria below:
 - Poor virologic response within the last 18 months in PLWH who have been prescribed ART for at least 6 consecutive months
 - Lost to clinical follow-up within the last 18 months with ART non-adherence for \geq 6 consecutive months

Summary

- In the era of antiretroviral prevention, there are increasing similarities in the care of those with HIV and those without HIV but who are at increased risk.
- Same-day PrEP and rapid ART initiation may contribute to adherence, retention, and HIV prevention.
- Long-acting injectable PrEP and HIV treatment are promising strategies.