# Decreasing rates of HIV in MSM Under 40 In Washington D.C Through Increasing Access To PrEP and Patient Education

07.07.25

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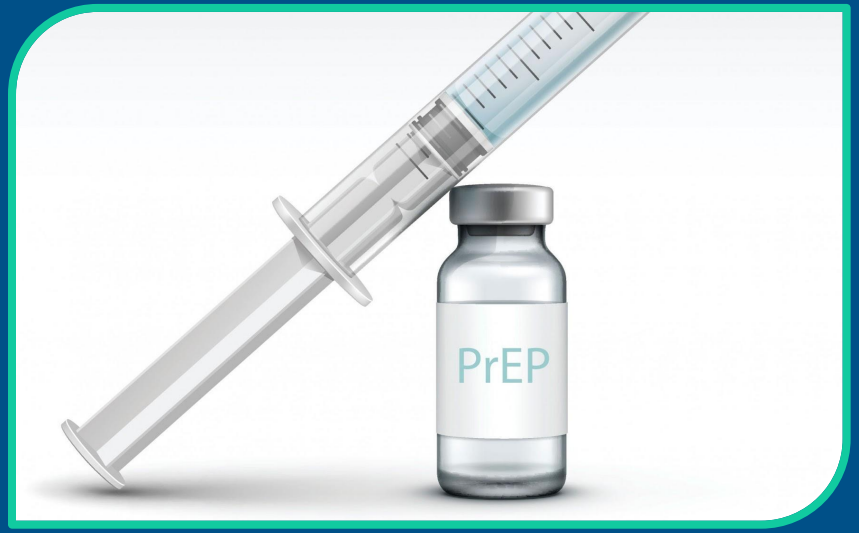
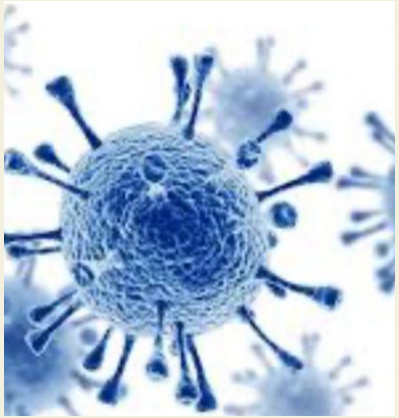



HPPA 516

1. **What is HIV?**
2. Defining the Problem
3. Target Population
4. Intervention
5. Outcome

# What is HIV?

- ★ Definition
  - HIV stands for Human Immunodeficiency Virus
  - It is a retrovirus, meaning it uses RNA as its genetic material and integrates into the host's DNA
  - HIV destroys the immune system by attacking CD4+ T cells, which are crucial for fighting infections
- ★ Transmission:
  - Unprotected sexual contact
  - Blood
  - Mother-to- child transmission



# Progression of HIV

## Acute Stage

- Virus is replicating rapidly and is highly contagious
- Patient's are experiencing flu-like symptoms

## Chronic Stage

- Virus continues to replicate at lower levels and is still contagious
- Patients may be asymptomatic or experience mild symptoms
- Phase persists for 5- 10 years

## AIDS

- Defined as: CDC 4 count <200 cells or presence of an AIDS defining illness
- Symptoms: Severe immune system damage, frequent infections, cancer
- Death within 1-3 years without treatment

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# A Growing Crisis

The urgency of necessary intervention is in the stats:

- Since **1981**, MSM were the first population associated with HIV, and HIV cases continue to rise, with **35-68%** of new cases occurring in the United States per year
- By age 40, **61% of BMSM** population will be HIV positive

# Quality of Life:

**Medically**:

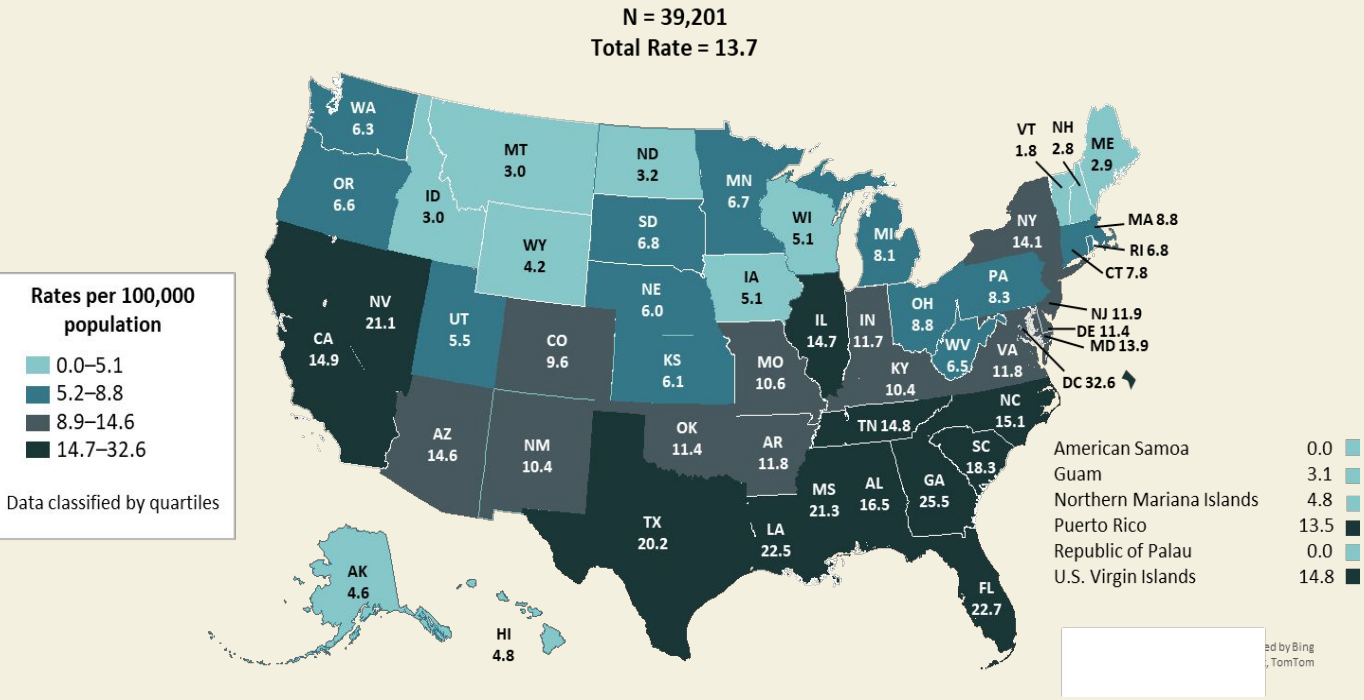
- ★ Even with treatment HIV positive people may experience:
  - Fatigue and functional limitations
  - Medication side effects
  - Psychological distress (depression, anxiety
- ★ HIV/AIDS is a significant contributor to Years Lived with Disability globally, particularly among young adults (NIH)
- ★ 630,000 people died from HIV-related illness in 2023

**Financially**: GBMSM living w/ HIV vs. GBMSM living w/out MSM

- ★ GBMSM living with HIV are 9% more likely to experience financial difficulty than GB MSM living without HIV because despite having an income they face higher costs from medical expenses
- ★ GBMSM living with HIV were 12% less likely to be employed and were 2.7 times more likely to lose their jobs than GB MSM living without HIV due to their health status from HIV

# Population: HIV Diagnosis Rates in the U.S

## *CDC Surveillance Report (2023)*




**39,000** people were diagnosed with HIV in the U.S.

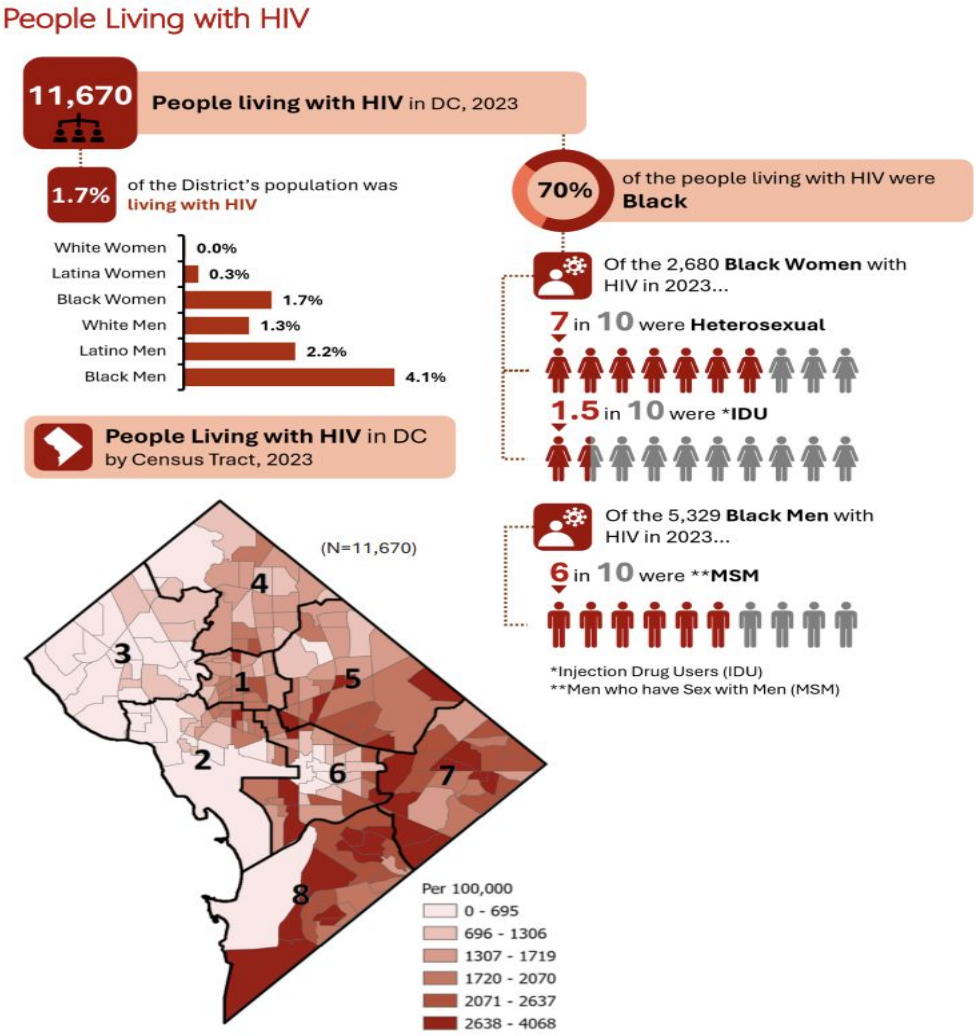
**80% were men, with 66%** attributing to the MSM group. **Hispanic & Black individuals** accounting for **greater than ⅓**

Incidence was greatest from ages **25-44**

**Washington, D.C, has the highest HIV diagnosis rate in the country at 32.6 per 100,000 people**

# Prevalence in Washington D.C.

- ★ 1.7% of D.C. residents are diagnosed with HIV which is **3x** greater than the national average
- ★ Among MSM, **Black men** are most disproportionately affected
- ★ Wards 7 & 8 which is a predominantly black neighborhood, report the highest incidence rates



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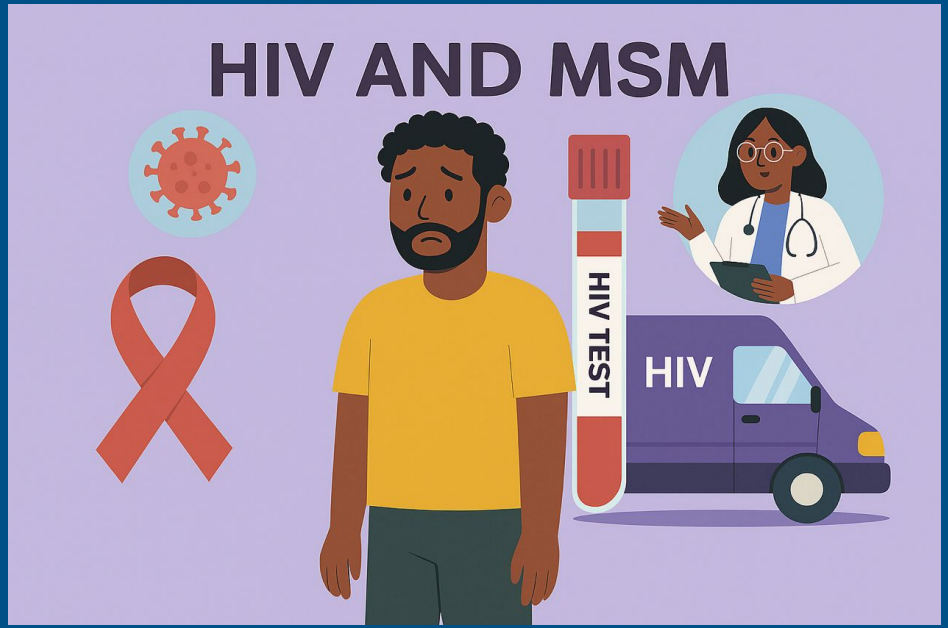
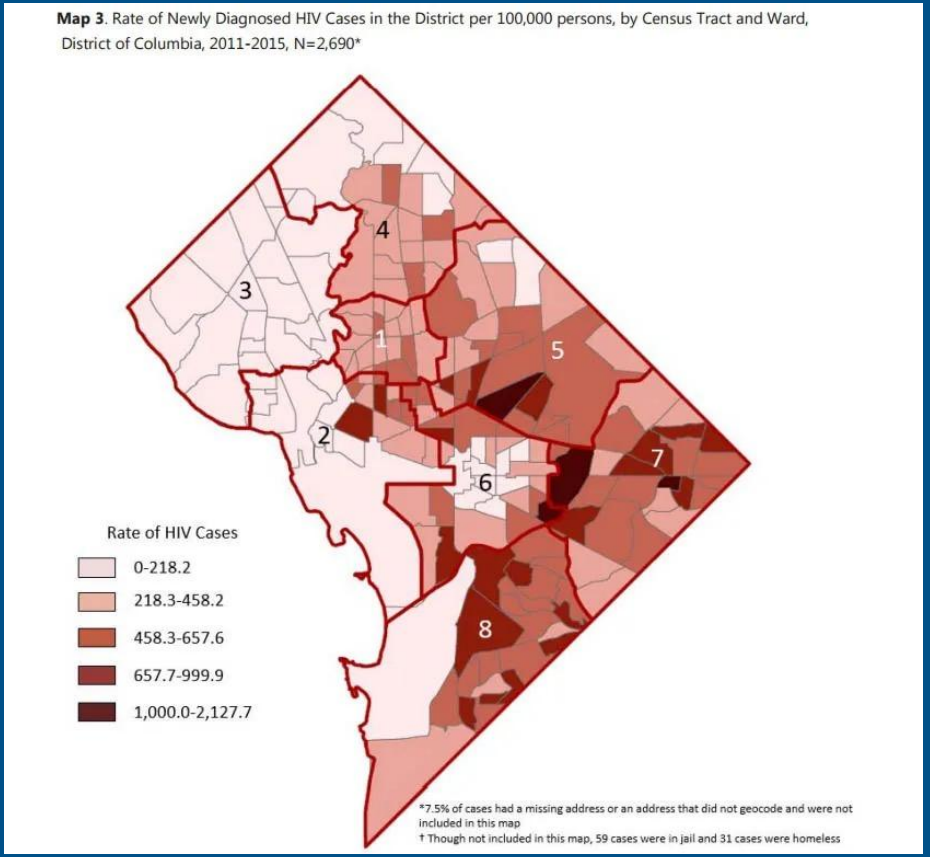
# Priority Group & Public Health Impact

- Priority group: Men who have sex with men (MSM), especially under age 40
- MSM continue to be the group most affected by HIV in the U.S.
- Young MSM, including Black and Latino individuals, face the highest disease burden
- HIV transmission is more efficient via receptive anal sex, especially when STIs are present
- Social stigma, poverty, and lack of healthcare access amplify the risk



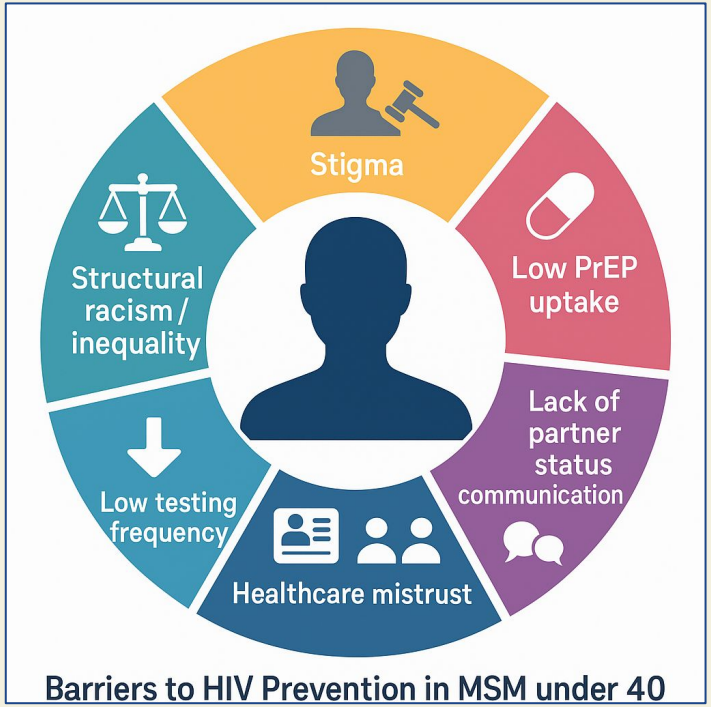
# Justification: Higher HIV Rates in MSM

- MSM accounts for the majority of new HIV diagnoses nationwide
- Young MSM, particularly Black MSM, experience disproportionate infection rates
- HIV prevalence among Black MSM in Washington, DC is estimated at ~23%, compared with ~15% in Philadelphia
- A significant number of young MSM are unaware of their HIV status, increasing transmission
- Structural barriers including racism, incarceration, and limited PrEP access worsen outcomes



# Risk Behavior & Low Prevention

- Many MSM engage in condomless sex, test infrequently, and may not know partners' HIV status
- Globally, only ~50% of MSM are aware of PrEP, and just ~58.6% are willing to use it
- Younger MSM and those with multiple partners show willingness but face barriers
- Low PrEP education and limited access leave high-risk individuals unprotected
- Misconceptions, stigma, and concerns about side effects deter PrEP uptake



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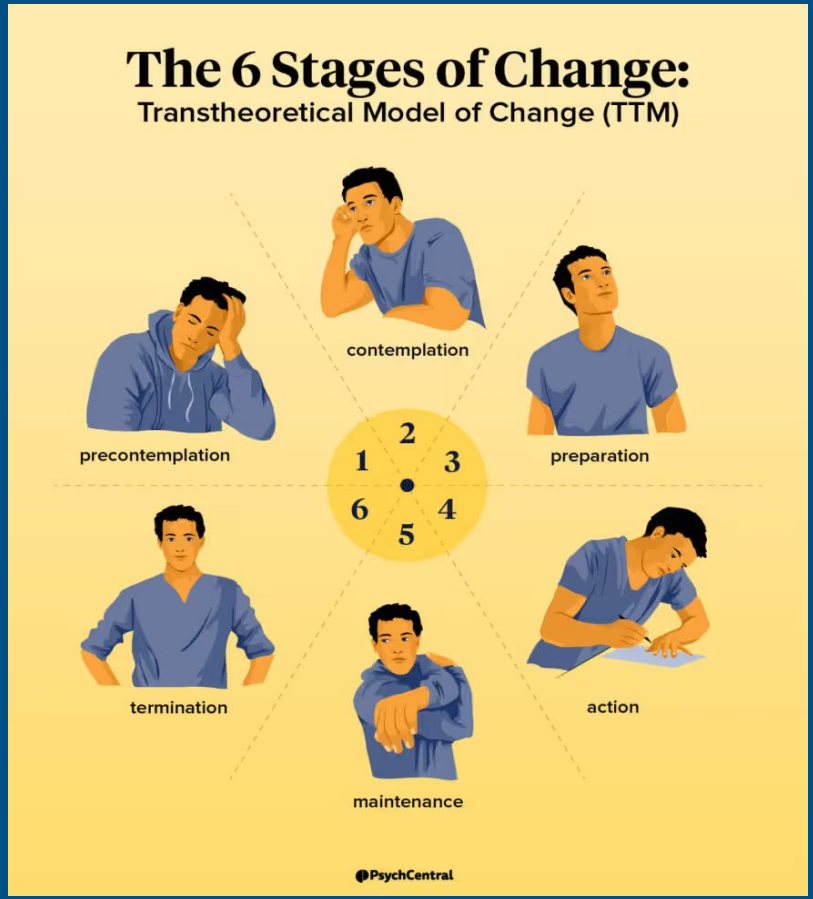
# Behavioral Barriers

- However, whether accessible or not, **MSM are not taking advantage of the preventative treatment**

- Many MSM get stuck in the early stages of behavior change
  - **Precontemplation**
  - **Contemplation**



# Funding & Access

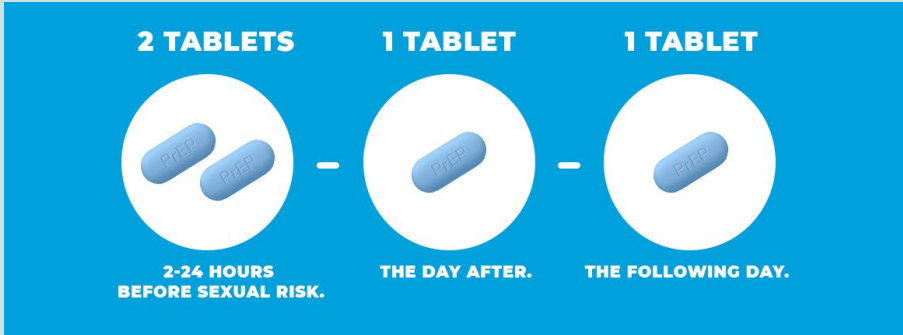
- Funding for research, prevention and reduction of HIV remains scarce, **especially for BMSM**

- Black MSM and MSM of color face **limited access to**
  - **Healthcare**
  - **HIV testing services**

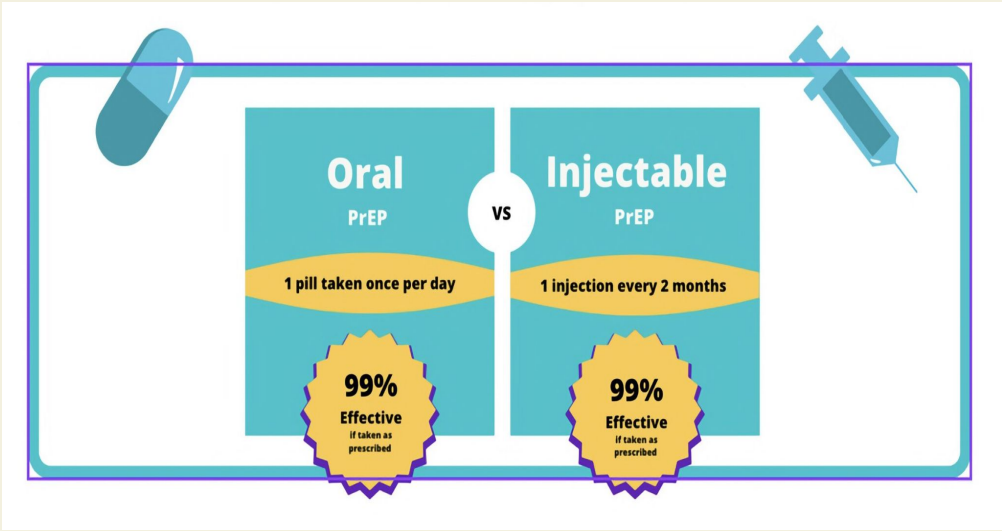
- **Lack of adherence to ART** treatment once HIV positive is also an issue

# Perceived burden of daily pills

- Many participants reported daily pill-taking as a barrier for starting/continuing PrEP
- Participants felt taking a pill everyday was burdensome
- Adherence concerns discouraged many from initiating PrEP



# Breaking the daily-pill barrier with Long Acting Injectable (LAI) PrEP

# Intervention

- ★ The goal is to target **prevention of HIV incidence in the first place** by making PrEP
  a. **More accessible** in the healthcare system
     - Increase the availability through
  b. De-stigmatized
     - Educate those at risk
     - Provide peer support for questions and guidance
  c. Less burdensome to take
     - Provide PrEP in a form that doesn't require daily dosing

# Intervention- Mobile Van Based LAI PrEP

- ★ Mobile health van programs have shown success for high risk MSM by offering **spontaneous, low-barrier access to care in non-traditional settings.** Participants valued the **convenience, non-judgmental environment, and sense of community,** which helped overcome **stigma and poor access** (Chamberlin et al 2023)

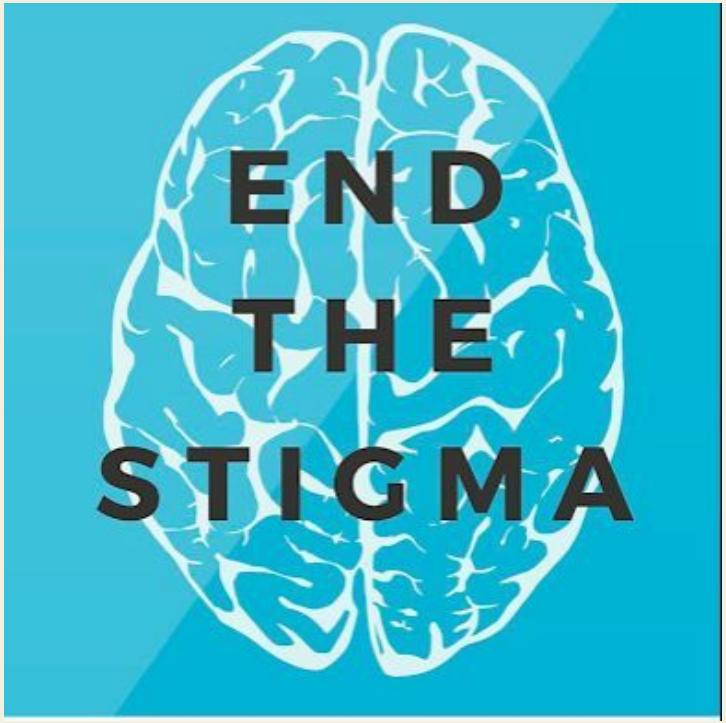
- ★ LAI-PrEP gets rid of the need for daily dosing by **injecting PrEP into muscle or fat**, **slowly metabolizing over weeks- months**
  - Cabotegravir (Apretude) popular choice

- ★ A 2017 Study based in Washington D.C. found that **62%** of participants reported being **very likely to use PrEP** and **27%** reported being **most likely to use PrEP** if either **free or cove**

- ★ **67%** of participants **preferred LAI-PrEP over the oral pill**

# Intervention- Mobile Van Based LAI PrEP

- ★ The van **brings the service to communities** where MSM of color under 40 **frequent/reside**
- ★ Clinical staff can provide **counseling and educational resources**, destigmatizing PrEP
  - Peer support etc.
- ★ Offering an LAI vs. oral dosage will generate **greater outreach**



# Intervention- Mobile Van based LAI PrEP

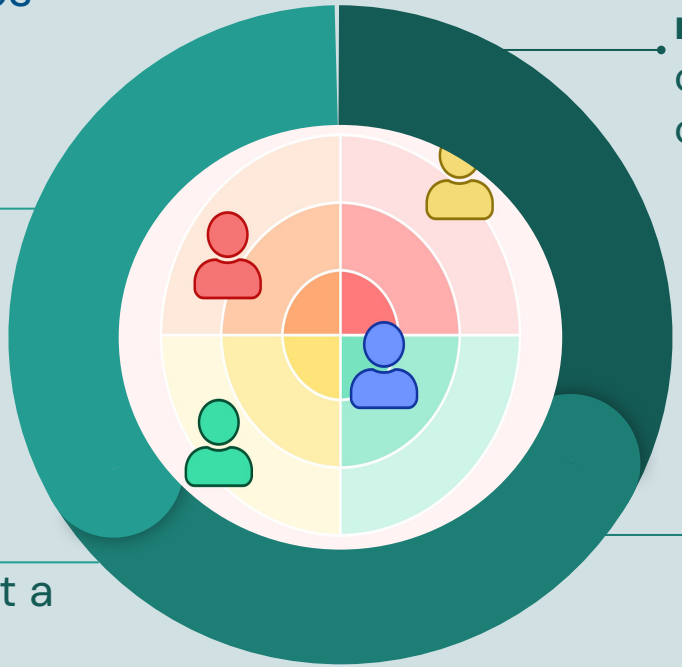
- ★ Key locations:
  - Gay/LGBTQ+ **clubs and bars**
  - Neighborhoods (especially **low-income**) with **high prevalence** of HIV cases and/or MSM communities
  - **Pride events**/ community fairs and festivals
  - Areas with **limited healthcare access**
- ★ Schedule:
  - Operate during evenings (M-F) and weekends to reach working adults and youth.
  - Mostly function on walk-in care.

# Intervention- Awareness

- ★ **Educational Materials**: Pamphlets about HIV and HIV Mobile Van
  - Healthcare Facilities: Distribute materials to primary care physician clinics and community centers
  - Targeted Ads: Spread awareness of the Mobile Van dates and locations through our Instagram, Facebook, and TikTok.
- ★ **Healthcare Provider Involvement:**
  - Primary Care Visits:
    - Encourage PCP's to advocate for the Mobile Van
    - We will like to form connections with PCP to refer patients that show interest in following up with a PCP

# Stakeholders

★ Would ideally have **1 or more** of the following qualities



**Well-established and recognized PrEP clinics**, or connections to organizations that do

Located in **Washington D.C.** to help **spread word and build credibility**

**Vested interest** in MSM, POC, holistic health, patient education, preventative care and/or de-stigmatization of medicine

Can provide access to **funds** and/or resources at a **discounted rate**

# Stakeholders

- ★ **Whitman-Walker Health**
  - A **national leader in LGBTQ+ care,** advocacy research and education
    - Focus on **black, latinx and underserved** community health
    - **Already run a PrEP clinic** and HIV care

- ★ **Us Helping Us**
  - **Trusted community-based organization** providing care to **Black MSM and transgender communities**
    - **Already run a PrEP clinic** and HIV care
    - Have peer support counselors and prep specialists on board

- ★ **D.C. Department of Health**
  - One of the **main funders of HIV prevention** in the city
    - Could provide funding through existing public funds, grants and more
    - Run an initiative called **Ending the HIV Epidemic (EHE)**
  - Already have an **existing outreach network/resources**
    - Network of clinics, non-profit organizations and pharmacies

# Who should know about this?

| | |
|---|---|
| **MSM of color under 40** | Need to know the van exists to benefit from the service |
| **Community centers, bars, clubs** | For advertising, community outreach and exposure |
| **Local LGBTQ+ orgs** | For guidance, materials and target population trust through affiliation |
| **Social media influencers** | Through hashtags and posts for exposure and influence |
| **Health clinics and Pharmacies** | For referrals, medications and medical supplies |
| **City officials** | For funding and public advocacy to sustain the intervention |

# Implementation

Outreach will include social media promotion, flyers, posters and other community based materials to share van locations around Washington, DC, as well as schedules and services for high risk MSM under 40

Our goal is to reach HIV-negative MSM at the high risk area and start the implementation of LAI PrEP through our mobile van by Summer 2026.

This intervention will be launched for approximately one year, concluding in summer 2027. During this period, we will assess its effectiveness, uptake, retention to inform decision regarding potential expansion or continuation

# Financial Requirements: Budgeting Needs

## 1 . Administrative Staff:

| | |
|---|---|
| 1.1 | Program Coordinators: To organize and manage the testing distribution and education campaigns. |
| 1.2 | Driver/Operation Tech: to ensure van setup, transportation, supply logistic-mostly operational role |
| 1.3 | Data and Evaluation Support: manages data collection, monitor key metrics and generates report |

## 2. Healthcare Professionals & Community Outreach Workers

| | |
|---|---|
| 2.1 | Nurses and NPs: to administer LAI PrEP, screen patients |
| 2.2 | .Community outreach worker: for community engagement, education about PrEP and navigation |

# Financial Requirements: Budgeting Needs

## 3. Initial Investment

**3.1**

PreP: Purchase LAI-PrEP

Technology: Purchase Excel to track attendance of patients. Purchase EMR software to track patients PreP injection.

**3.2**

Distribution: Cost of resources for the van like gasoline that will be used up during the drives.

**3.3**

Awareness Campaigns: Funding for pamphlets we need to print and distribute to bring awareness for the van.

# Funding Source

- ★ Federal Government Grants/Local State Government
  - CDC- Disease of HIV Prevention
  - HRSA- Ryan White HIV/AIDS Program
  - NIH
  - DC Department of Health
- ★ Private
  - Gilead COMPASS Initiative
  - Elton John AIDS Foundation
- ★ Partnership Opportunities
  - Local LGBTQ+ clinics
  - Universities with school of public health or medicine
  - HIV advocacy groups (Whitman-Walker)

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# How will we measure success?

- We will track how many people learned about PrEP through our outreach
- We will record how many people people started using PrEP because of the program
- An increase in HIV testing and fewer new diagnoses will show our health impact
- We will collect feedback on whether our program is helpful and informative
- These results together help us see if our program is working effectively

# What data will we collect?

## Knowledge & Behavior

- Assess whether people knew about PrEP before the program, and what they know after
- Gather information about condom use and awareness of partners' HIV status
- Track changes in willingness to initiate or continue PrEP
- Track changes in sexual health habits that suggest increased prevention awareness

## Health & Access

- Count how many people received an HIV test via the mobile van
- Track how many begin and maintain PrEP
- Monitor mobile van usage frequency and follow-up visits
- Record how many people are referred to clinicals or support services

# How will we collect the data?

- Use brief pre- and post-visit surveys to capture knowledge and awareness gains
- Conduct interviews and focus groups for in-depth feedback
- Maintain detailed logs of services: visits, tests, prescriptions, referrals
- Track follow-up to measure ongoing engagement and support

# What success looks like?

- More MSM under 40 are **aware of and using PrEP**
- **Increased HIV testing rates** and **fewer new HIV diagnoses**
- Positive feedback from community members of their experience
- **Return visits and referrals** shows trust in the mobile van program
- Overall impact: **improved access**, **awareness**, and **stronger prevention outcomes**

# Limitations

## *Financial*

- ★ Operating a mobile clinic costs **$275,000-$500,000**
- ★ Additional Expenses:
  - Hiring trained staff (peer navigators, clinicians, etc.)
  - Van maintenance (permit/ licensing, gas, etc.)

## *Existing Funding Programs*

- ★ **340B Drug Pricing Program** → Federally funded initiative that hospitals/clinics use to buy prescription medications at significantly discounted rates, supporting medically underserved communities
  - Barriers: 1. Must be a federally qualified health center (FQHC)
    2. Ryan White HIV/AIDS Program grantee (federal program that provides treatment for uninsured HIV+ patients.
       Does **NOT** fund PrEP (prevention)
    3. Specialized Health Clinics (Ex: Tuberculosis clinics, Family Planning)

## *Key Considerations*

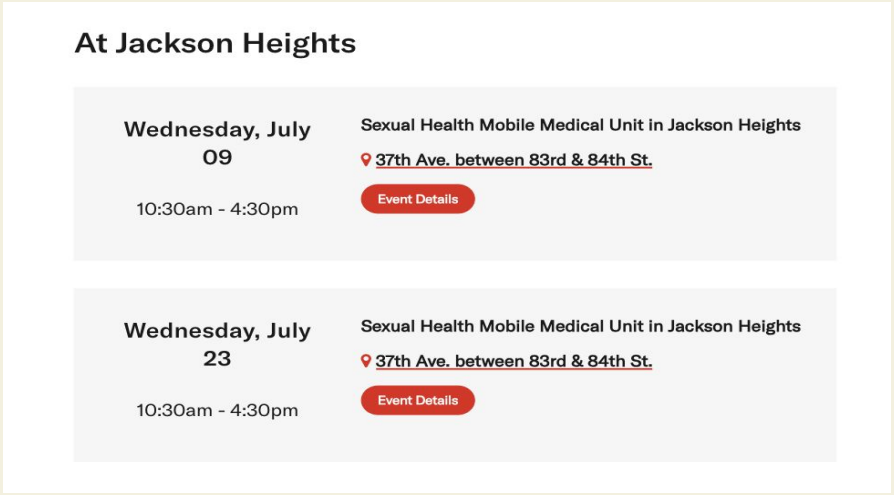
- ★ Our implementation plan cannot guarantee access to 340B unless we are partnered with an eligible organization
- ★ We may end up paying full price for medications such as Cabotegravir (Injectable medication for PrEP), which costs **$22,000 annually.**

# Limitations: Grants

- ★ **HIV/AIDS, Hepatitis, STD, and Tuberculosis Administration (HAHSTA)** → Federal funds (ex: CDC) are distributed to D.C. local government and given to organizations that focus on:
  - Testing, PrEP education, counseling
- ★ **D.C. Ends HIV Funding** → Federal funding to D.C. as a part of the initiative: *Ending the HIV Epidemic (EHE)*

- ★ Priority → MSM, youth, Wards 7&8, clinics (including mobile)
- ★ **Limitations**→
  - 1. Annual reapplication
  - 2. Varying application cycles
  - 3. Highly competitive
  - 4. HAHSTA is given to nonprofits
  - 5. Must obtain an established partnership such as, CDC for D.C Ends HIV

# Limitations: Access Gaps in LGBTQ-Dense Neighborhoods




★ **Jackson Heights** is a neighborhood home to a large LGBTQ population and has been known to host the Queens Pride Parade each year since the 1920s.

★ Institutions such as New York Presbyterian (NYP) have their own Sexual Health Mobile Medical Unit throughout the 5 boroughs, including Jackson Heights

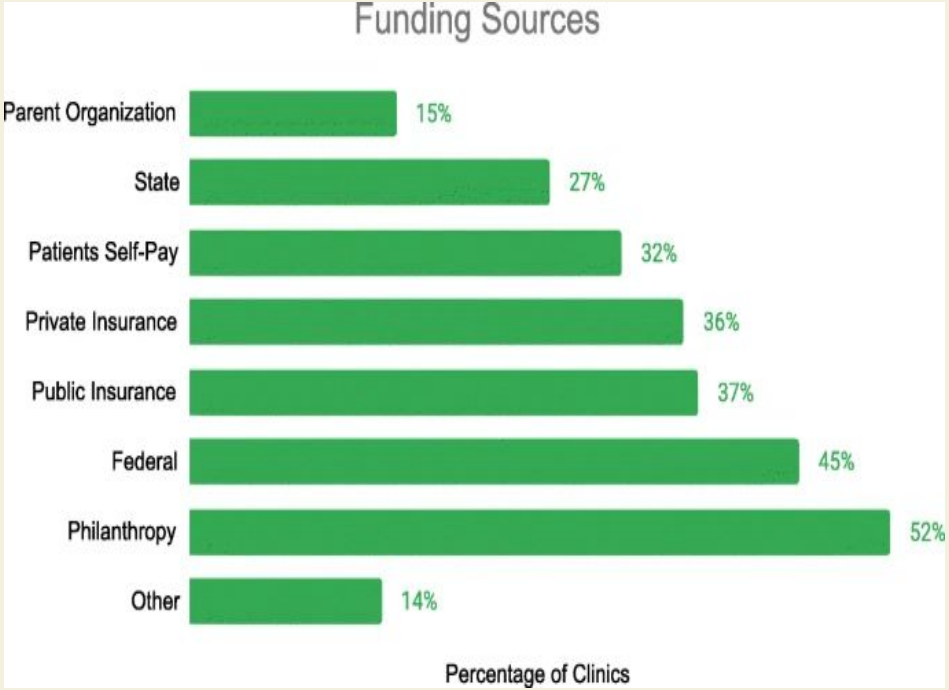
★ NewYork-Presbyterian Hospital has been ranked as the #1 hospital in NY and consecutively for 21 years as being a part of the nation's best hospitals according to U.S. News & World Report

★ Despite its recognition as a top medical center, NYP chooses to operate its Sexual Health Mobile Medical Unit in Jackson Heights in **July** for only **1-2 days & 6 hours total**

# Limitations: Short Term Grants

★ A national survey of **281 mobile clinics** demonstrates the percentage that rely on various types of funding **(federal, insurance, philanthropy) → 52% rely on philanthropy, 45% on federal, and 29% hospital funding**

★ This highlights that the **majority of mobile clinics rely on grants** that are **not** guaranteed or sustainable because it is **short-term** and require **cyclical applications**



# NYC Limitations Reflect Future D.C. Barriers

★ How does this relate to our proposal?

- A world-renowned hospital system like NYP **cannot** deliver regular mobile sexual health services in a neighborhood with a strong LGBTQ presence, with visits just **twice a month**, it is clear that there is a **lack of targeted funding**

- Our proposal must take into consideration that it is difficult to maintain a service for HIV prevention outreach without accounting for **future high costs without investors**

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