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Introducion:

- PrEP is highly effective at preventing HIV infection when taken during times of risk, i.e. “prevention-effective adherence”
- In real-world cohorts, PrEP persistence is short, with less than half remaining on PrEP at one year in various U.S. populations
- Decreased HIV risk perception is one of the most common reasons for PrEP discontinuation
- Stopping PrEP during low-risk periods may decrease toxicity and cost from the perspective of PrEP users and health systems
- However, in individuals who stop PrEP, little is known about their risk of HIV infection
- Perspectives of individuals who HIV seroconverted after trying PrEP can reveal missed opportunities for intervention

Objectives:

1. Calculate the HIV incidence following PrEP discontinuation
2. Explore reasons for PrEP discontinuation among people who HIV seroconverted after trying PrEP via in-depth interviews

Methods:

Population:

- Identified individuals who started PrEP in the San Francisco Primary Care Clinics (SFPCC) from 7/2012 through 11/2018
- 15-clinic integrated primary care delivery system for publically-insured and uninsured individuals

Data Collection:

- PrEP start and stop times were recorded by SFPCC PrEP navigators
- If start and stop times were not available, detailed chart review performed
- HIV seroconversions were identified using rigorous tracing methods via the CDC’s Enhanced HIV/AIDS Reporting System
- All individuals who developed HIV infection after starting PrEP were invited to in-depth interviews

Data Analysis:

- HIV incidence after stopping PrEP was calculated using Poisson models and was compared to HIV incidence while using PrEP
- Interviews were performed by two medical anthropologists and an infectious diseases physician, audio-recorded, and transcribed
- A code book was developed using the Motivational PrEP Cascade theoretical model, and was subsequently revised using emergent themes

Results:

Study Population:

- Overall, 986 individuals initiated PrEP from 7/2012 through 11/2018
- Median Age 35
- 66% MSM, 12% transwomen
- 8% Asian, 13% Black, 25% Latinx, 37% White, 18% Mixed/Other
- 8 HIV seroconversions: 7 after stopping PrEP and 1 while attempting to use 2-1-1 PrEP incorrectly (counted as on PrEP)
- 5 MSM, 3 transwomen; 2 Black, 2 Latinx, 1 Native American, 3 White
- 4/8 did not discuss decision to stop PrEP with their provider
- Person-time on PrEP: 953 Person-Years
- Person-time after stopping PrEP: 895 Person-Years

Discussion and Conclusions:

- HIV incidence was nearly 8-fold higher after stopping PrEP
- Participants reported challenges prioritizing PrEP in the context of housing, mental health, substance use issues
- Entering into a primary partnership dissuaded PrEP use given desire for intimacy and perception of decreased HIV risk
- Cost and insurance barriers, both perceived and actual, disproportionately impact individuals at risk for HIV
- Generic PrEP options that are low cost and simplification of process for obtaining insurance coverage could prevent HIV infections
- Only half discussed discontinuation with provider and proactive outreach would have been appreciated
- Providers should follow-up a missed visit with a phone call
- mHealth interventions to automate proactive outreach show promise
- Additional training, tools, and frameworks are needed to guide patient and provider decision-making around PrEP discontinuation
- To maximize prevention-effective adherence, providers and health systems will need to support PrEP persistence in those who remain at risk