

# RETENTION IN CARE AMONG PERUVIAN MSM AND TGW IN A REAL-WORLD HIV PREP PROGRAM

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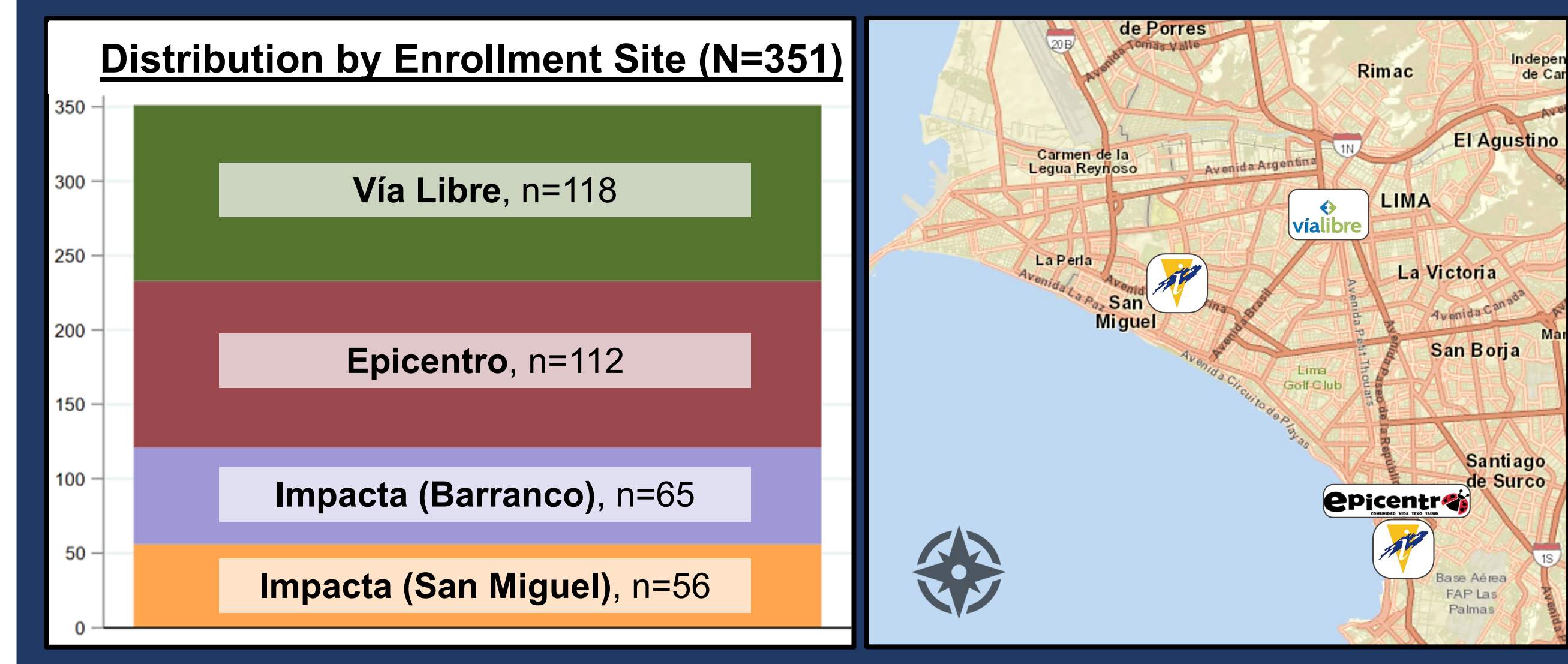
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## BACKGROUND

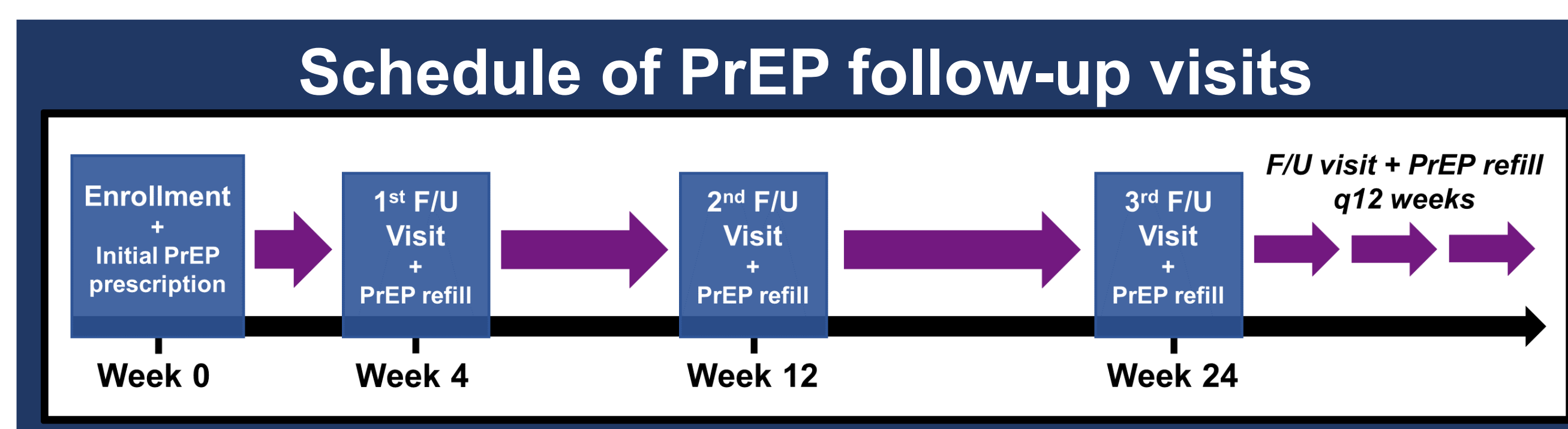
Tenofovir-based daily oral pre-exposure prophylaxis (HIV PrEP) is a highly efficacious HIV prevention modality, but sustained use over time is needed to ensure continued protection among individuals at high risk for HIV exposure. Suboptimal retention in care and adherence threaten to diminish the impact of HIV PrEP on reducing HIV incidence. PrEP PERU is an ongoing, multi-site, prospective cohort study evaluating HIV PrEP implementation among men who have sex with men (MSM) and transgender women (TGW) accessing daily oral TDF/FTC at non-government health centers in Perú. Here we describe early retention in care and adherence outcomes among PrEP PERU participants during the time prior to the onset of COVID-19 service disruptions.

## PrEP PERU Study Sites (January 2017 – March 2020)



## METHODS

We analyzed baseline and follow-up data from the PrEP PERU study through March 15<sup>th</sup>, 2020, the first day of Peru's COVID-19 lockdown. MSM and TGW ≥18 years old with one or more HIV risk factor were eligible for enrollment. After the 1<sup>st</sup> follow-up visit at 4 weeks, TDF/FTC refills and clinic visits occur quarterly, at the discretion of the prescribing clinician. TDF/FTC is provided free of charge; participants pay for laboratory testing plus a small service fee for clinic visits. Data is collected at baseline and quarterly follow-up visits on sexual risk behaviors and HIV PrEP use. We used bivariate analysis to estimate the association between baseline factors and 6-month HIV PrEP retention in care and adherence outcomes. As a proxy for adherence, we used pharmacy records to calculate the proportion of days covered (PDC) by PrEP (# of days covered by TDF/FTC, divided by # of days between enrollment and last day covered by TDF/FTC dispensations during the study period).



## 6-month HIV PrEP retention in care and adherence at four non-government clinics in Lima, Perú (1/2017 – 3/2020)

### Early retention in care

- 91% attended ≥ 1 PrEP follow-up visit within 6 months
- 77% attended ≥ 2 PrEP follow-up visits within 6 months

### Adherence (proportion of days covered [PDC] ≥0.8)\*

- 85% of participants with PDC ≥0.8

\* Indicates quantity/timing of TDF/FTC dispensed was sufficient to cover ≥80% of days with once daily medication dosing

## RESULTS

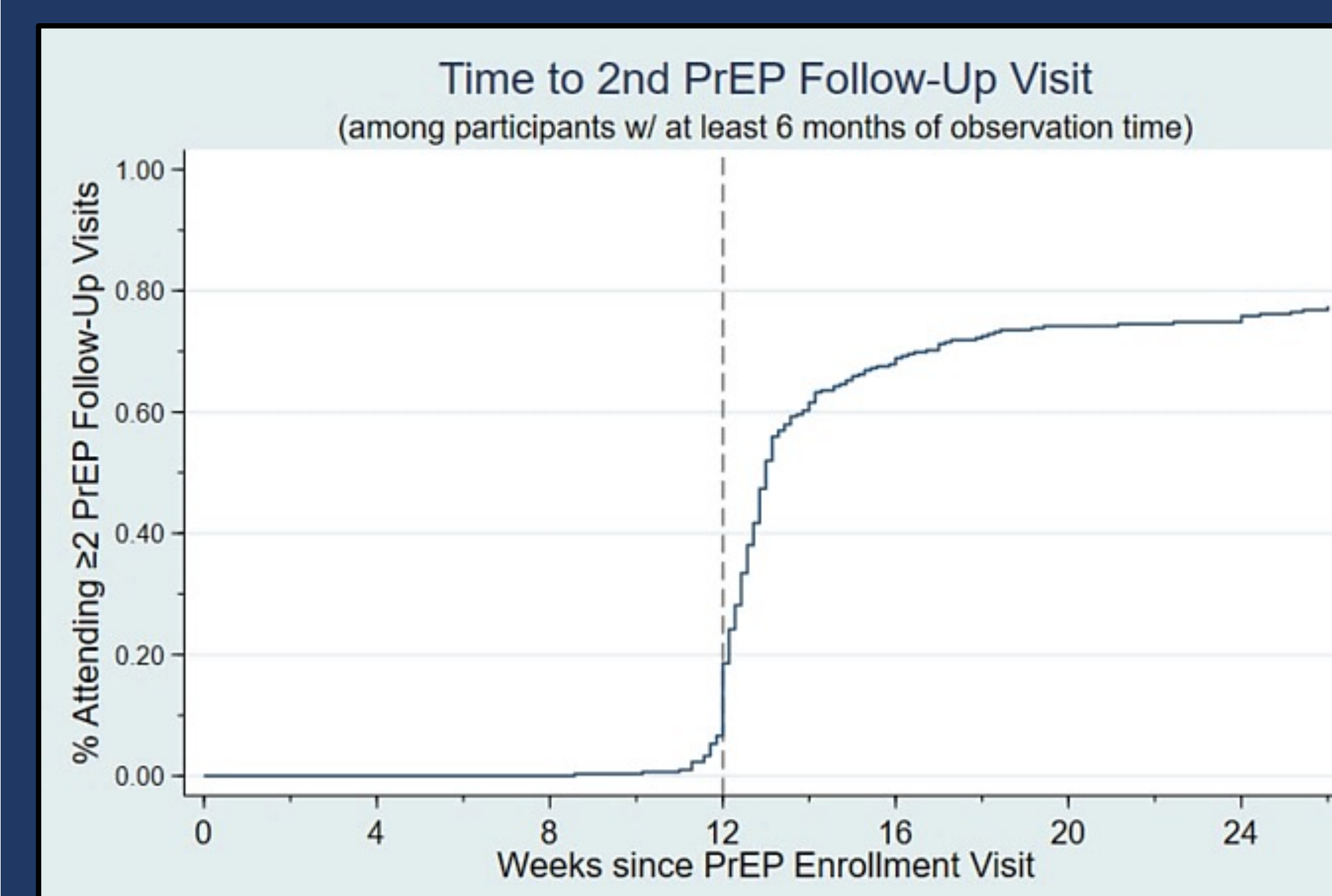
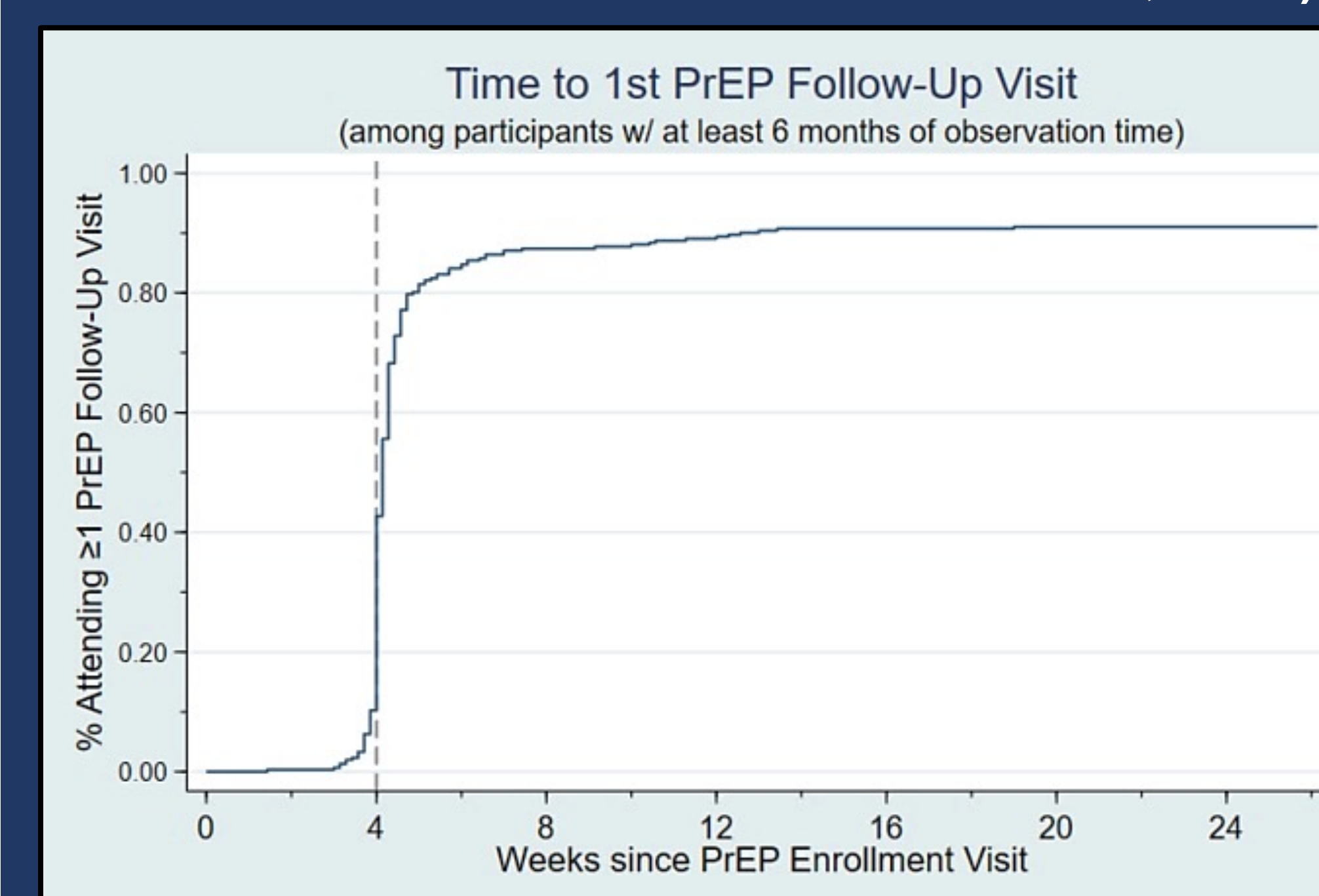
A total of 351 participants initiated TDF/FTC between 1/23/2017 and 3/15/2020 at the four PrEP PERU study sites (all in Lima) that were active during this time. Overall, 94% identified as cisgender men, 10% as bisexual, and median age was 31 years (interquartile range [IQR], 27 – 38). Among those with at least 6 months of observation time (n=302) as of 3/15/2020, 91% attended ≥1 PrEP follow-up visit and 77% attended ≥2 follow-up visits in the 6 months after PrEP enrollment. The proportion with favorable adherence (defined as PDC ≥0.8) was 85%. There were 6 confirmed HIV seroconversions over 510 person-years of combined observation time during the analysis period (1.2 per 100 person-years).

## Baseline Characteristics (N=351)

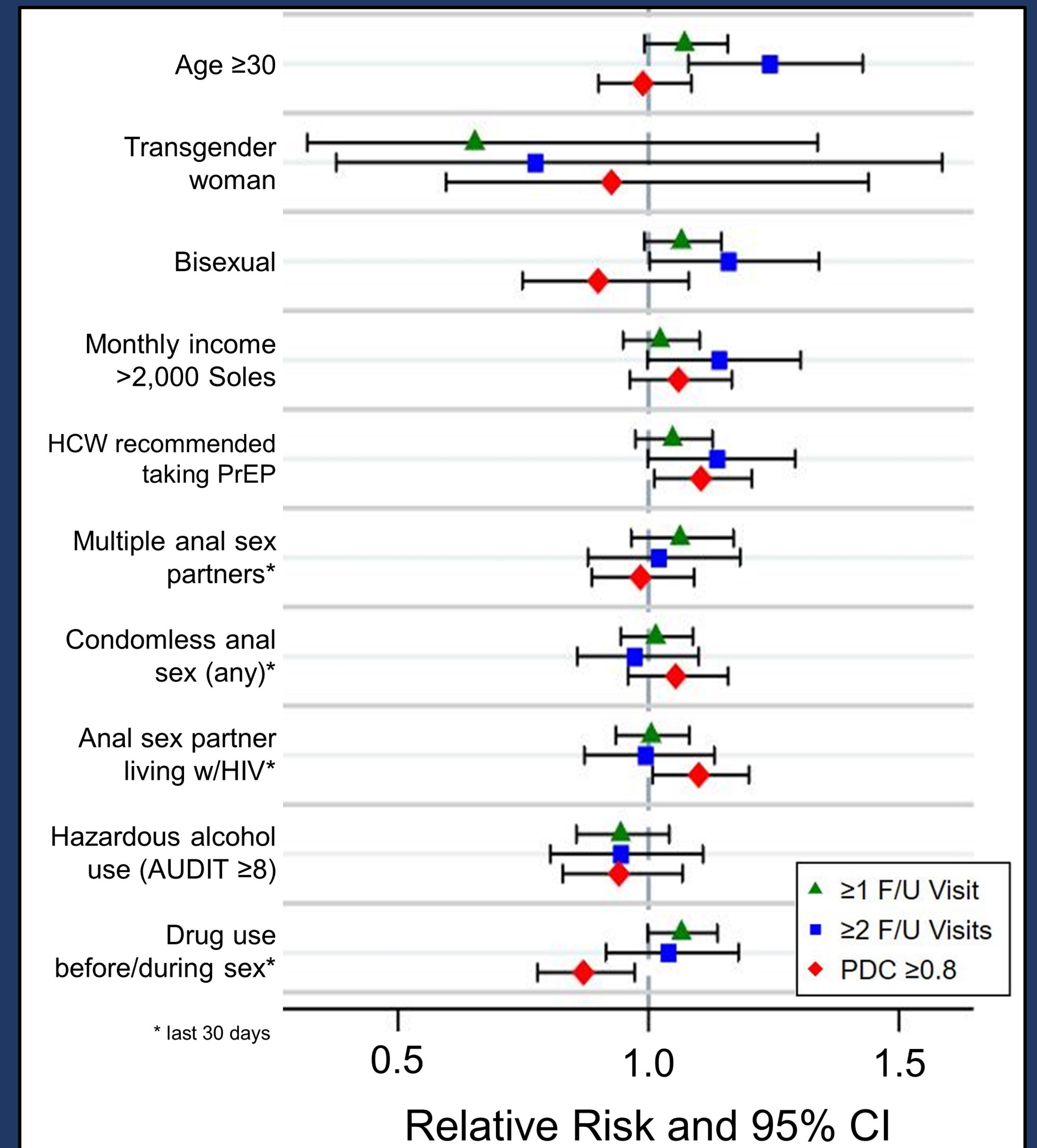
	Overall (N=351)	Seroconverted (n=6)
<b>Age, years</b>		
Median (IQR)	31 (27 – 38)	29 (27 – 38)
<b>Gender, n (%)</b>		
Cisgender man	330 (94%)	4 (67%)
Transgender woman	5 (1.4%)	0 (0%)
Not reported	16 (4.6%)	2 (33%)
<b>Sexual orientation, n (%)</b>		
Homosexual/Gay	286 (81%)	4 (67%)
Bisexual	36 (10%)	0 (0%)
Other	4 (1.1%)	0 (0%)
Not reported	25 (7.1%)	2 (33%)
<b>Monthly income (Soles<sup>1</sup>), n (%)</b>		
> 2000	182 (52%)	1 (17%)
≤ 2000	146 (42%)	3 (50%)
Not reported	23 (6.6%)	2 (33%)
<b>Health insurance, n (%)</b>		
Any insurance	239 (68%)	3 (50%)
No insurance	88 (25%)	1 (17%)
Not reported	24 (6.8%)	2 (33%)
<b>Total # of anal sex partners<sup>2</sup></b>		
Median (IQR)	5 (2 – 9)	4 (1 – 8)
<b>Condomless anal sex<sup>2</sup>, n (%)</b>		
Any form	200 (57%)	4 (67%)
Receptive	123 (35%)	3 (50%)
Insertive	154 (44%)	2 (33%)
Not reported	9 (2.6%)	0 (0%)
<b>Anal sex partner living w/HIV<sup>2</sup>, n (%)</b>		
Yes	125 (36%)	1 (17%)
No	212 (60%)	4 (67%)
Not reported	14 (4.0%)	1 (17%)
<b>Alcohol use, n (%)</b>		
Low risk (AUDIT = 0-7)	221 (63%)	6 (100%)
High risk (AUDIT ≥ 8)	77 (22%)	0 (0%)
Not reported	53 (15%)	0 (0%)
<b>Drug use before/during sex<sup>2</sup>, n (%)</b>		
Any drug (excluding alcohol)	121 (34%)	2 (33%)
Poppers	56 (16%)	1 (17%)
Marijuana	60 (17%)	1 (17%)
Cocaine	5 (1.4%)	0 (0%)
Not reported	10 (3%)	0 (0%)

<sup>1</sup> 1 Sol = 0.3 USD (per exchange rate 1/23/2017); <sup>2</sup> Refers to last 30 days

## PrEP Follow-Up Visit Attendance (N=302 with at least 6 months observation time between enrollment date and March 15<sup>th</sup>, 2020)



## Predictors of 6-month PrEP Outcomes (N=302)



## CONCLUSIONS

In this analysis of HIV PrEP outcomes prior to COVID-19 pandemic disruptions in Perú, over three quarters of MSM and TGW prescribed PrEP were still in care after 6 months and had favorable levels of adherence by PDC. Age ≥30, bisexual identity, and higher income were positive predictors of retention in care but not adherence; those who cited a healthcare provider recommendation as a motivating factor in their decision to take PrEP were both more likely to be retained in care and have higher PDC adherence. The level of early PrEP engagement observed in this cohort compares favorably to reports from other HIV PrEP implementation programs in the region. Future analyses of PrEP persistence and adherence in this cohort over a longer follow-up period, including since the onset of the COVID-19 pandemic, will be important to enable further understanding of real-world PrEP outcomes and associated factors in this setting.

## ACKNOWLEDGEMENTS

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