

Table 2. Chart review findings from case control study. Ninety people who initiated PrEP (i.e., “cases”) were randomly matched to 180 who did not initiate PrEP (i.e., “controls”) by date of STI.

	Case PrEP Initiator N = 90	Control Non-PrEP Initiator N = 180	P value	Odds ratio
PrEP discussion documented during encounter for STI diagnosis			<0.01	
Yes	47 (52.2%)	2 (1.1%)		97.3 (22.7–416.4)
No	43 (47.8%)	178 (98.9%)		Ref
Syphilis, laboratory confirmed	44 (48.9%)	15 (8.3%)	< 0.01	10.5 (5.4–20.6)
Gonorrhea, laboratory confirmed	25 (27.8%)	28 (15.6%)	0.02	2.1 (1.1–3.9)
Chlamydia, laboratory confirmed	26 (28.9%)	76 (42.2%)	0.03	0.6 (0.3–1.0)
Suspected vs. laboratory confirmed STI			<0.01	
Suspected STI	6 (6.7%)	54 (30.0%)		Ref
Laboratory confirmed STI	84 (93.3%)	111 (61.7%)		6.8 (2.8–16.6)
No documentation of clinical suspicion or laboratory diagnosis	0	15 (8.3%)		NA
Setting of STI diagnosis			0.70	
Primary care	57 (63.3%)	114 (63.4%)		Ref
Emergency room	19 (21.1%)	42 (23.3%)		0.9 (0.5–1.7)
Other*	14 (15.6%)	24 (13.3%)		1.3 (0.6–2.7)
Complete sexual history obtained during encounter**			0.01	
Yes	10 (11.1%)	3 (1.7%)		7.4 (2.0–27.5)
No	80 (88.9%)	177 (98.3%)		Ref
Any sexual history obtained during encounter			<0.01	
Yes	72 (80%)	91 (51%)		3.9 (2.2–7.1)
No	18 (20%)	89 (49%)		Ref

*other: women’s health clinic, urology clinic, infectious disease clinic for reasons other than to start PrEP (e.g. bacterial urinary tract infection)

** Sexual history taking was considered complete when partners, practices and protections were documented.

Conclusion. Discussion and initiation of PrEP were rare in association with healthcare encounters for STIs. Not all individuals with STIs will benefit from starting PrEP, but interventions are needed to improve low rates of sexual history-taking and discussion of PrEP during healthcare encounters for STIs.

Disclosures. Bruce Alexander, PharmD, Bruce Alexander Consulting (Independent Contractor)

858. Impact of Using an Order Set on PrEP Prescribing and Laboratory Monitoring in Primary Care

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Session: P-49. HIV: Prevention

Background. CDC 2017 pre-exposure prophylaxis (PrEP) guideline recommends laboratory monitoring at baseline and follow-up and specifies that a PrEP prescription should be written for once daily dosing with a supply of 90 days or less to ensure patients repeat HIV testing every 3 months. This presents an opportunity to utilize order sets in the electronic health record to improve PrEP prescribing habits and prescriber adherence to laboratory monitoring recommendations. This study assessed the impact of using an order set on the accuracy of PrEP prescriptions and the appropriateness of laboratory monitoring in the primary care setting.

Methods. This was a retrospective, single-center, observational cohort study conducted at primary care clinics at a large academic health system. A total of 228 PrEP prescriptions from adults at least 18 years of age and that were written between April 1, 2018 through May 31, 2020 were assigned to the two comparator groups: 176 prescriptions ordered without an order set and 52 prescriptions ordered with an order set. The primary outcome was a composite of correct prescription details, defined as once daily dosing of PrEP for a 90-day supply or less. Secondary outcomes included the frequency of having an HIV antigen/antibody (Ag/Ab) test ordered within 3 months of the PrEP prescription, and the composite of appropriate baseline labs ordered for those newly starting PrEP.

Results. Baseline characteristics are shown in Table 1. The primary outcome of correct prescription details occurred in 100% of PrEP prescriptions ordered with an order set compared to 65.9% of those ordered without an order set (P< 0.001). At least 1 HIV Ag/Ab test was appropriately repeated within 3 months for 65.4% of PrEP prescriptions ordered with an order set and 42.6% ordered without an order set (P=0.004). In those initiating PrEP, a composite of correct baseline labs ordered occurred with 14 (73.7%) new start prescriptions ordered with an order set versus 47 (42.7%) ordered without an order set (P=0.023).

Characteristic	Without order set (n=176)	With order set (n= 52)	P-Value
Age – year	36.1 ± 10.5	35.7 ± 9.9	0.767
Male – no. (%)	174 (98.9)	47 (90.4)	0.008
Gender identity – no. (%)			0.256
Male	136 (77.3)	37 (71.2)	
Female	1 (0.6)	1 (1.9)	
Transgender Male to Female	0 (0)	1 (1.9)	
Transgender Female to Male	1 (0.6)	0 (0)	
Not specified	38 (21.6)	13 (25)	
Race – no. (%)			0.724
White	108 (61.4)	36 (69.2)	
Black	7 (4.0)	2 (3.9)	
Asian	18 (10.2)	5 (9.6)	
Other/Unknown	43 (24.4)	9 (17.3)	
Ethnicity – no. (%)			0.362
Hispanic or Latino	55 (31.3)	14 (26.9)	
Non-Hispanic nor Latino	117 (66.5)	35 (67.3)	
Unknown	4 (2.3)	3 (5.8)	
Prescriber type – no. (%)			0.629
Attending	128 (72.7)	37 (71.2)	
Resident	45 (25.6)	13 (25.0)	
Other	3 (1.7)	2 (3.9)	
Prescription type – no. (%)			0.001
New start	110 (62.5)	19 (36.5)	
Refill	66 (37.5)	33 (63.5)	
Drug – no. (%)			0.138
TDF/FTC	165 (93.8)	45 (86.5)	
TAF/FTC	11 (6.2)	7 (13.5)	
Indication – no. (%)			0.129
MSM	169 (96.0)	48 (92.3)	
Heterosexual male/female	4 (2.3)	4 (7.7)	
Not specified	3 (1.7)	0 (0)	

*Plus-minus values are means ± SD. Percentages may not total 100 because of rounding. Abbreviations = TDF/FTC, tenofovir disoproxil fumarate/emtricitabine; TAF/FTC, tenofovir alafenamide/emtricitabine; MSM, men who have sex with men.

Conclusion. When ordering PrEP, order set use significantly improved the accuracy of PrEP prescriptions and appropriateness of laboratory monitoring at baseline and at follow-up compared to no order set use at primary care clinics of a large academic health system.

Disclosures. All Authors: No reported disclosures

859. Suboptimal Uptake, Retention, and Adherence of Daily Oral PrEP Among People with OUD Receiving HCV Treatment

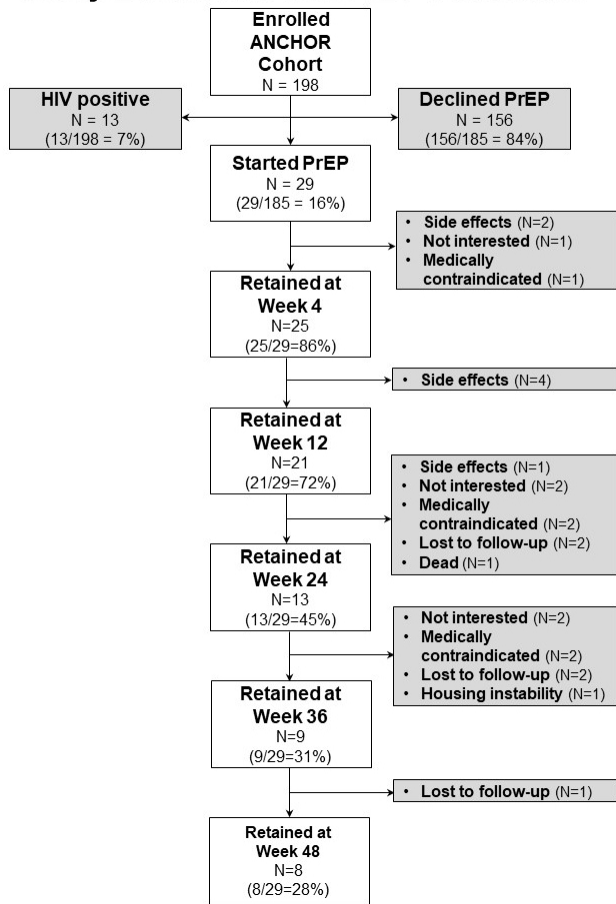
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Session: P-49. HIV: Prevention

Background. Daily oral pre-exposure prophylaxis (PrEP) with tenofovir/emtricitabine (TDF/FTC) effectively prevents HIV among people who use drugs (PWUD). Despite rising rates of HIV incidence and injection drug use, PrEP use remains low and limited research exists on PrEP adherence and retention in this population.

Methods. Based in Washington, DC and Baltimore, the ANCHOR investigation evaluated a community-based model of care collocating hepatitis C (HCV) therapy, medication for opioid use disorder (OUD), and PrEP in people with chronic HCV, OUD, and drug use within 1 year. PrEP counseling was offered from HCV treatment Day 0 until Week 24 and subjects could start any time during this window. PrEP patients were followed for 48 weeks and assessed for adherence by self-report and dried blood spot analysis of TDF.

Study Enrollment and PrEP Continuum

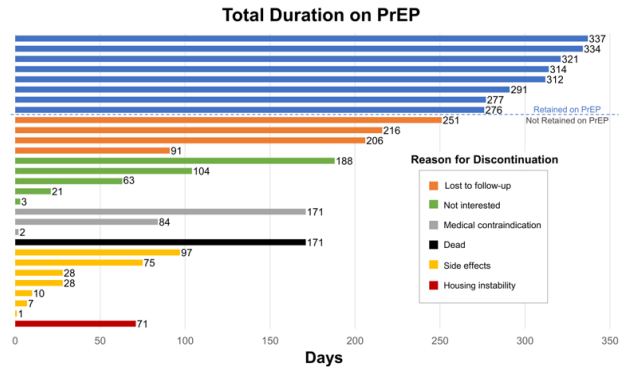


ANCHOR PrEP study enrollment and participant retention along the PrEP continuum.

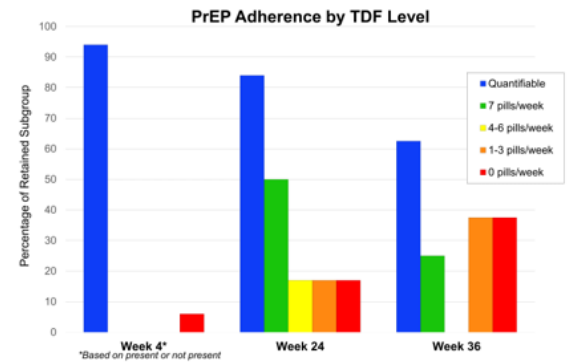
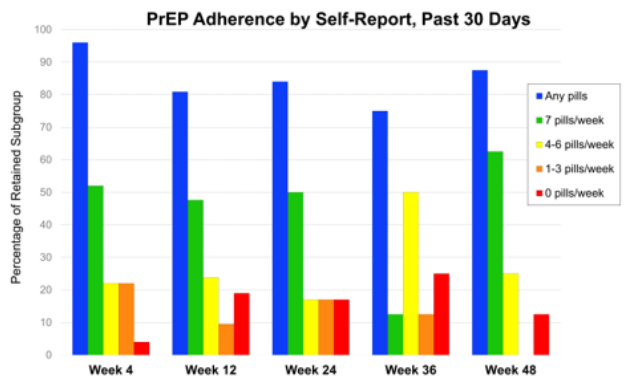
Results. 198 participants enrolled in ANCHOR, of whom 185 (93%) were HIV-negative. 29 subjects (16% of HIV-negative group) initiated PrEP. 116 subjects (63%) met 2014 CDC criteria for PrEP initiation due to IDU (82, 44%), sex (9, 5%), or both (25, 14%). Those who initiated were more likely to meet both CDC sexual and IDU risk criteria than those who declined PrEP ($P=0.006$). Providers recommended PrEP to 94 subjects (51%), which was associated with uptake ($P=0.02$). While median treatment duration was 104 days (IQR 28, 276), only 8 subjects were retained through Week 48. The most common reason for discontinuation was side effects in 7 subjects or 24% of PrEP subgroup. Treatment interruptions occurred in one-third of the PrEP subgroup. Adherence of 4 to 7 pills per week was variable over time by self-report and declined by TDF analysis. No HIV seroconversions occurred.

Table 1. Baseline Population Characteristics				
Characteristic	HIV-Negative N=185	PrEP N=29	No PrEP N=156	P-value
Demographics				
Median age (IQR), years	57 (52, 61)	54 (52, 60)	58 (52, 61)	0.20
Male, N (%)	129 (69.7)	21 (72.4)	108 (69.2)	0.83
Black race	155 (83.8)	26 (89.7)	129 (82.7)	0.42
Heterosexual	172 (93.0)	27 (93.1)	145 (92.9)	1
Baseline Epidemiology				
Unstably housed, N (%)	101 (54.6)	17 (58.6)	84 (53.8)	0.69
Drug use daily or > frequency	111 (60.0)	21 (72.4)	93 (59.6)	0.22
Receptive needle sharing, past year	24 (13.0)	7 (24.1)	17 (10.9)	0.07
Receptive IDU equipment sharing, past year	54 (29.2)	8 (27.6)	46 (29.5)	1
>1 sex partner, past year	33 (17.8)	8 (27.6)	25 (16.0)	0.18
Condomless vaginal sex, past year	72 (38.9)	12 (41.4)	60 (38.5)	0.84
Condomless anal sex, past year	11 (5.9)	2 (6.9)	9 (5.8)	0.68
Transactional sex, past year	10 (5.4)	2 (6.9)	8 (5.1)	0.66
2014 CDC Eligibility				
Met IDU criteria only, N (%)	82 (44.3)	10 (34.5)	72 (46.2)	0.63
Met sex criteria only	9 (4.9)	2 (6.9)	7 (4.5)	0.31
Met both criteria	25 (13.5)	9 (31.0)	16 (10.3)	0.006

Demographic and epidemiological background of the ANCHOR study population.



Total duration, in days, on PrEP in the ANCHOR study. Discontinued participants are grouped by reason for cessation of therapy.



Adherence to PrEP by ANCHOR study timepoint, assessed via self-report (above) and dried bloodspot analysis of tenofovir level (below).

Conclusion. In this cohort of people with OUD and HCV, 16% of subjects started PrEP. While clinical recommendation was associated with uptake, high rates of disruption and discontinuation, compounded by variable pill adherence, made daily oral TDF/FTC a suboptimal preventive strategy in this cohort. Emerging PrEP modalities like long-acting injectables have potential to address these barriers, but PWUD have been excluded from their research and development to date. Additional work to identify vulnerable individuals and to promote use, adherence, and retention will be critical in implementing PrEP more effectively in this key population.

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860. HIV Post-exposure Prophylaxis Availability at Small and Critical Access Hospitals in the Western Region

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