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Understanding Retention in PrEP Care in the South: Insights from an Academic HIV Prevention Clinic

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Background

- HIV pre-exposure prophylaxis (PrEP) given as once daily emtricitabine/tenofovir disoproxil fumarate or emtricitabine/tenofovir alafenamide is one of the most effective tools in the prevention of HIV acquisition.
- PrEP is poorly utilized in the Southern United States where in 2016 the Southeast accounted for more than 50% of new HIV diagnoses but only 30% of PrEP users nationally[1].
- A limitation to PrEP is the need for regular follow-up at three-month intervals for HIV screening, medication monitoring, and sexually transmitted infection (STI) screening[2].
- Despite this effective means of preventing HIV, patients at risk for HIV have been falling out of care since the rollout of PrEP programs nationally[3-4].

Objectives

- Describe retention in PrEP care and incident STI diagnoses in a large academic PrEP clinic in Durham, North Carolina.

Methods

- Retrospective chart review from Jan. 1, 2015 through Oct. 15, 2019.
- Short-term retention was completion of a 3 month visit. Long-term retention was completion of a 3 month visit and an additional visit between 8 and 12 months after initial encounter.
- Baseline STI was defined as a diagnosis at or within 1 year prior to initial PrEP visit. STI diagnosis while on PrEP was any subsequent diagnosis while retained in care.
- Multivariable logistic regression was conducted to explore association between patient-level determinants and outcomes of interest (SAS 9.4, Cary, NC)
- Data was collected prior to COVID pandemic and thus does not reflect if/how services were effected.

Patient Cohort

- Inclusion/Exclusion Criteria:
  - At least 1 encounter at the Duke PrEP Clinic
  - HIV + status prior to first encounter excluded

Demographics	N(%) (N=255)
Age at First PrEP Visit (yrs)	
17-25	63 (24)
26-35	90 (35)
36-45	51 (20)
46-55	37 (15)
≥56	14 (5)
Gender	
Male	227 (89)
Race/Ethnicity	
Black	95 (37)
White	122 (48)
Hispanic	14 (5)
Multiracial/Other	21 (8)
Declined/Declined	17 (7)
Sexual Practice	
Men Who Have Sex with Men (MSM)	186 (73)
HIV+ Partner Ever	76 (30)
Insurance Status	
Uninsured	52 (20)
Referral Source	
Self	62 (24)
Medical Provider	103 (40)
Other*	90 (35)

*Other includes peer, dating app, community based organizations, and unknown sources of referral

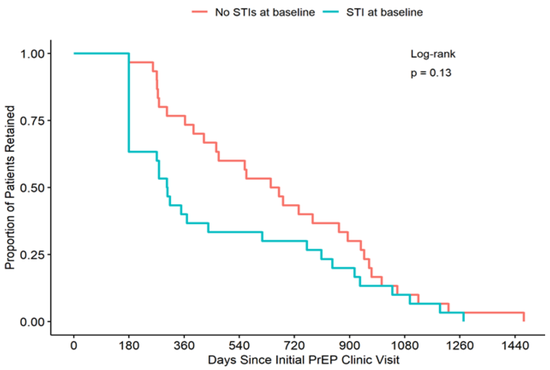
Retention in Care

Adjusted Odds Ratios (OR) for Retention in Care

Variables for Predicting Retention in Care	Short Term Retention OR (95% CI) [P value]	Long Term Retention OR (95% CI) [P value]
Female	2.81 (0.73-10.8) [0.13]	0.17 (0.01-1.48) [0.10]
Black	0.81 (0.45-1.46) [0.49]	0.83 (0.39-1.79) [0.64]
Hispanic	1.42 (0.42-4.76) [0.57]	0.96 (0.22-4.11) [0.95]
MSM	**5.22 (1.57-17.32) [0.007]**	1.46 (0.39-5.37) [0.56]
No Insurance	0.50 (0.25-1.02) [0.06]	**0.32 (0.11-0.91) [0.03]**
Self-referred	1.18 (0.67-2.07) [0.57]	**2.18 (1.12-4.23) [0.02]**
HIV + Partner Ever	0.89 (0.44-1.78) [0.74]	1.66 (0.72-3.85) [0.23]
<=35 years old	0.87 (0.50-1.52) [0.64]	0.59 (0.30-1.13) [0.11]
Baseline STI	0.81 (0.35-1.86) [0.62]	1.95 (0.73-5.18) [0.18]

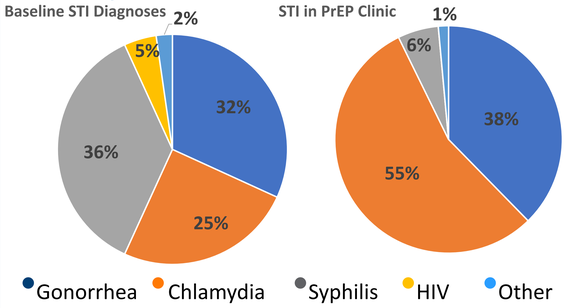
- Adjusted OR generated using multivariable logistic regression
- Bold signifies significant p values (<0.05)

Retention in Care with Baseline STI Diagnosis



*Kaplan-Meier curves were generated for retention in care and compared using the log rank test.

Sexually Transmitted Infections



- STI diagnoses were made in 30 (12%) patients for a total of 42 unique infections at baseline and 44 (17%) patients for a total of 69 unique infections during follow-up.
- 2 HIV diagnoses made at initial visit prior to initiating PrEP

Conclusions:

- In the Duke PrEP Clinic, 55% (130/237) and 37% (80/217) of patients were retained at 3 months and the following 8-12 months respectively. These findings are similar to prior reports in the Southeast where 56% and 30% of patients were retained at 3 and 12 months[5].
- MSM and self-referred patients were more likely to remain in care, both in the short and long term. Uninsured patients were less likely to remain in care in the long term. We will plan further studies examining reasons for discontinuation of PrEP care and how to improve retention of our PrEP patients.
- Interestingly, patients with STI diagnoses were less likely to remain in care. While there are many possible reasons for PrEP discontinuation, having an STI has been identified as a reason for PrEP discontinuation in other cohorts[6].

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