

DEPARTMENT OF MEDICINE – DIVISION OF INFECTIOUS DISEASES

HIV Pre-exposure Prophylaxis Counseling among Non-Hispanic Black Youth Diagnosed with Bacterial STI, 2014-2019

Dovie L. Watson, MD, MSCE (she/her/hers)

Pamela A. Shaw, PhD | Danielle T. Petsis , MPH | Julia Pickel, BA

José A. Bauermeister, MPH, PhD | Ian Frank, MD | **Sarah M. Wood, MD, MS** | **Robert Gross, MD, MSCE**

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Introduction & Background

- ▶ Youth account for 21% of new HIV infections (2018 CDC estimates)
- ▶ Youth acquired half of all new STIs with steadily increasing annual incidence rates of chlamydia, gonorrhea, and syphilis since 2014 (2018 CDC estimates)
- ▶ Emtricitabine (FTC) / tenofovir disoproxil fumarate (TDF) was only FDA-approved HIV pre-exposure prophylaxis (PrEP) medication during study period
- ▶ Bacterial STI in the past six months is a PrEP indication per CDC guidelines
- ▶ PrEP use among youth is limited
- ▶ Challenges to providing PrEP to youth
 - E.g., concerns about inadvertently disclosure of risk behaviors to guardians; PrEP-related expenses; poor medication adherence; Title X Family Planning regulations
- ▶ We evaluated rates of PrEP counseling among non-Hispanic Black youth after an incident bacterial STI diagnosis and identify patient- and health care-level factors related to receipt of PrEP counseling.

Methodology

▶ Study Design

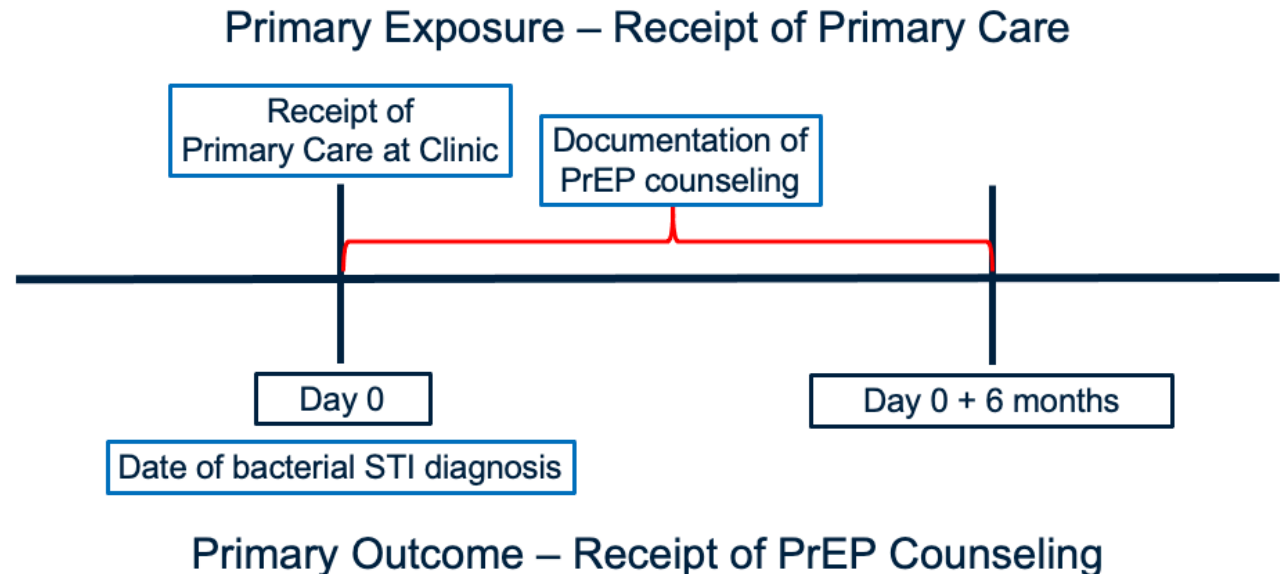
- Retrospective cohort study of non-Hispanic Black youth at two clinics in West Philadelphia (June 1, 2014-June 30, 2019)
- All subjects met CDC eligibility criteria for PrEP due to qualifying bacterial STI
- Examined PrEP counseling rates for youth who received primary care services vs. those who did not

▶ Data Sources & Measurement

- Subjects identified in Children's Hospital of Philadelphia (CHOP) STI database

▶ Statistical Methods

- Multivariable mixed effects logistic regression analyses Adjusted for patient- and health care-level factors.
- Random effects for the individual and clinic site used given number of repeated measures



Results

- **35 patients (8%) received PrEP counseling**
 - 29 (83%) patients assigned male sex at birth (AMAB) and reported same sex partners and/or had a rectal STI diagnosis
 - 3 heterosexual patients assigned female sex at birth (AFAB)
 - 2 heterosexual patients AMAB
 - 1 patient AFAB with self-reported same sex partners

Characteristic	Univariable Mixed Effects Model OR (95% CI)	P	Multivariable Mixed Effects Model aOR (95% CI)	P
Primary care patient (Ref: Not a primary care patient)	0.97 (0.02 to 52.9)	0.99	0.30 (0.05 to 1.84)	0.19
Age at qualifying STI encounter	1.50 (0.59 to 3.81)	0.39	0.90 (0.61 to 1.33)	0.61
Assigned male sex at birth (Ref: Assigned female sex at birth)	22.3 (0.15 to 3348)	0.23	40.2 (3.32 to 487)	0.004
Qualifying STI diagnosis after FDA approval for adolescent PrEP Use (Ref: STI Diagnosis before FDA Approval)	6.72 (0.34 to 131)	0.21	1.60 (0.10 to 25.8)	0.74
Time elapsed from diagnosis to FDA approval for adolescent PrEP use (per month) (Ref: Time 0 = May 16, 2018)	1.10 (0.83 to 1.44)	0.52	1.02 (0.67 to 1.56)	0.92
Repeat qualifying STI encounter (Ref: Index Visit)	6.09 (0.64 to 57.5)	0.12	3.41 (0.89 to 13.1)	0.07
Adolescent medicine specialist (Ref: Not Adolescent Medicine)	28.4 (0.26 to 3132)	0.16	1.64 (0.39 to 7.02)	0.50
Diagnosed with chlamydia (Ref: No Chlamydia diagnosis)	5.0 (0.31 to 80.6)	0.26	0.49 (0.13 to 1.90)	0.31
Diagnosed with gonorrhea (Ref: No gonorrhea diagnosis)	0.07 (0 to 11.18)	0.31	0.08 (0.01 to 1.02)	0.05
Diagnosed with syphilis (Ref: No syphilis diagnosis)	2.16 (0 to 40065)	0.88	4.94 (0.43 to 56.8)	0.20
Diagnosed with rectal STI (Ref: No rectal diagnosis)	521 (44.5 to 6106)	<0.001	61.7 (6.63 to 574)	<0.001

Table 2. Episode-level univariable and multivariable mixed effects logistic regression assessing patient- and health care-level factors and PrEP counseling at 521 qualifying STI encounters, 2014 – 2019

Discussion and Conclusions

- ▶ This was an opportunity to examine PrEP care continuum among Black/African American youth—one of the few demographics for which HIV incidence has not improved.
- ▶ Among this cohort of more than 400 PrEP-eligible youth, EHR documentation of PrEP counseling was inadequate, and rates of PrEP use were rare.
- ▶ Contrary to our hypothesis, primary care patients did not have a higher rate of PrEP counseling than non-primary care patients.
- ▶ Recent bacterial STI diagnosis is a frequently missed opportunity for medical providers to inform and counsel young Black patients about PrEP, particularly patients assigned female sex at birth.
- ▶ These findings support the need for robust investment in PrEP-inclusive sexual health services that are widely implemented and culturally tailored to non-Hispanic Black youth at risk of HIV acquisition, particularly cisgender heterosexual females.

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