An Evaluation of HIV Incidence and Prior HIV Prevention Efforts among Persons Engaged in Primary Care in a Regional Ambulatory Healthcare System

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ABSTRACT

Background

Despite the widespread availability and high efficacy of HIV prevention services, HIV incidence remains disproportionately high. To reduce HIV incidence, this investigation will focus on missed opportunities for HIV prevention. In evaluating retrospective HIV risk status and HIV prevention utilization in persons living with HIV prior to seroconversion, new strategies for HIV prevention may be developed.

Methods

29 individuals between January 2012 and October 2022 met inclusion criteria of a history of primary care who acquired an incident HIV diagnosis at MedStar Health. Administrative, laboratory, medication, and diagnostic data were collected from the Cerner Powerchart electronic medical record system. Data analysis includes the chi-square test (or Fisher's exact test), the two-sample t-test, and odds ratios from logistic regression models.

Results

Gender-based differences in predominant sexual identity were observed (LGBTQIA/male: 58.8%, LGBTQIA/female: 8.30%, $p< 0.01$). More males utilized primary care within 2 years of diagnosis ($p<0.01$), were tested more recently ($p<0.05$), and obtained PrEP prescription ($p<0.01$) than females prior to seroconversion. In addition, HIV testing was more likely to occur among Black (OR=35.0, 95% CI [3.66,905]) and LGBTQIA identifying persons (OR=11.4, 95% CI [1.61, 234]).

Conclusions

Biomedical and behavioral prevention utilization must be improved throughout primary and other ambulatory care sites within the studied regional health care system, despite progress noted in some prevention with some groups at elevated risk.

INTRODUCTION

In 2024, Human Immunodeficiency Virus (HIV) continues to inflict a heavy global burden, with 39 million persons currently living with HIV (PLH). Global incident rates also remain high, with an additional 1.3 million new cases of HIV diagnosed in 2022.[1] HIV incidence in the United States– while lower than the global incidence

rate – still imposes a major public health crisis. In alignment with the Healthy People 2030 agenda, the United States Health and Human Services (HHS) aims to decrease annual HIV incidence from 37,000 in 2020 to 3,000 by 2030. Nearly five years into this initiative, there has been modest change in this metric, with incidence lowered to 31,800 in 2022.[2]

HIV disproportionately affects geographical regions and historically marginalized populations of the United States – including metropolitan centers, the Southern United States, Black persons, and men who have sex with men. Situated within this described geographical region is the District of Columbia, where the incident rate of HIV remains significantly higher than the national incident rate; in 2021, 10.8 estimated cases per 100,000 were diagnosed nationally, compared to 27 estimated cases per 100,000 in Washington D.C..[3] In parts of Washington D.C., the prevalence of HIV remains as high as 4%.[4] This inflicts a heavier burden on minority populations; of the total HIV seroconversions in Washington D.C. between 2018 and 2022, 50% were among Black men, 50% were among men who have sex with men of color, and 20% were among women of color. In 2022 alone, 74% of HIV incident cases affected Black persons. Since 2018, HIV seroconversion in women has increased by 10%.[5] In the District of Columbia, HIV incidence is not only a public health crisis, but a major health equity issue.

HIV is also a highly preventable condition with effective biomedical and behavioral interventions. For this reason, reducing HIV incidence and prevalence should be centered around prevention services. Pre-Exposure Prophylaxis (PrEP) therapies– including Truvada, Descovy, and Apretude– are highly effective at reducing HIV acquisition in men who have sex with men (MSM),[5-9] heterosexual men and women,[10-13] and persons who inject drugs (PWID).[14] In 2023, the United States Preventive Services Task Force (USPSTF) issued their final recommendation for PrEP as a grade A for those at increased risk for HIV infection.[15] In addition, behavioral strategies such as sexual partner reduction, condom usage, PrEP adherence, sexually-transmitted infection (STI) testing, and HIV risk counseling have demonstrated short-term success.[16] Given that STIs specifically have been associated with subsequent HIV infection on biological, epidemiological, and behavioral standpoints,[17-20] intervention concurrent to STI diagnosis is a promising starting point for HIV prevention services.

Engaging with individuals at increased risk for HIV in a primary care setting and initiating the HIV prevention continuum early may aid in lowering HIV incidence in the District of Columbia. Previous literature places a heavy focus on missed opportunities for HIV diagnosis, with the intention of reducing transmission and overall prevalence.[21–24] Additionally, much of the literature focuses on populations with increased risk for HIV, often seeking health care services within larger safety-net care systems [25–29] or from specialized sexual health clinics.[30,31] Instead, this evaluation will focus on missed opportunities for HIV prevention in individuals with moderate risk for HIV who tested positive for HIV within an ambulatory care system. This focus on primary care prevention for those with an established primary care history is unique to the field and integrates a wide variety of predictive factors for HIV to determine the relative risk level of individual patients prior to their diagnosis of HIV. In this retrospective cohort examination, we evaluated differences in risk factors and prevention services provided to primary care patients preceding an incident diagnosis of HIV.

METHODS

The MedStar ambulatory care system provides primary care services to D.C., Maryland, and Virginia, and encounters nearly six million outpatient individuals annually.[32] We conducted a retrospective chart analysis of primary care patients of MedStar who received an incident HIV diagnosis (defined as having at least one visit within a primary care setting with an established negative lab test for HIV infection).

Individuals who tested positive for HIV between January 2012 and October 2022 at any MedStar facility were included in this analysis. Subjects that did not have a history of ≥1 encounter with a MedStar primary care or OB/GYN site were excluded from analysis, as well as persons who received an incident diagnosis younger than 18 years old. Data extracted from the electronic medical record system (Cerner PowerChart) includes administrative data, laboratory data, medication data, and diagnostic data. Data analysis aimed to investigate the risk factors preceding an HIV diagnosis, and to determine differences in HIV prevention services offered between demographic groups.

The primary aim of this analysis is to quantify demographic (including age, sexual orientation, race/ethnicity, drug use, psychiatric history, and insurance status) and health care system factors (including prior STI diagnosis,

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interactions with the MedStar health care system) among persons with incident HIV diagnoses. The secondary objective of this analysis is to conduct a comparative analysis between demographic and health care system factors and their relationship to HIV prevention efforts prior to seroconversion. As well we will explore sex and gender specific variations in indications for pharmaco-prevention among primary care patients in MedStar. We used the chi-square test (or Fisher's exact test) to assess the association between two categorical variables, and the two-sample t-test to compare two groups of continuous variables. Odds ratios were calculated from logistic regression models to examine relationships between selected demographic factors (gender, age, LGBTQIA status, race, insurance type, psychiatric history, and housing insecurity history) and the use of HIV prevention prior to seroconversion (provider-mediated HIV testing and barrier protection discussions).

RESULTS

A total of 29 primary care patients were diagnosed with HIV within the MedStar ambulatory care system between January 1, 2012 and October 3, 2022. Of this population, 10.3% (n=3) presented with Acquired Immune deficiency Syndrome (AIDS) with a CD4 cell count of less than 200 cells/μL, and an additional 27.6% (n=8) presented with a viral load greater than 100,000 copies/mL (Table 1). The population has a majority of Black persons (72.4%, n=21) and of patients who use public insurance (62.1%, n=18). The majority of men studied identified as LGBTQIA, while the majority of women identified as non-LGBTQIA (LGBTQIA men: 58.8%, LGBTQIA women: 8.30%, $p < 0.01$). Women were significantly more likely than men to have a past medical history of any type of drug use – including marijuana, cocaine, and heroin use (men: 17.6%, women: 66.7%, $p<0.05$), and 3.40% (n=1) of subjects had a significant history of intravenous drug use.

Table 1. Demographic composition of a population of 29 individuals diagnosed with HIV between January 2012 and October 2022

Characteristic	Number of Patients, n(%)			Median (IQR)	p-value
	Population	Male	Female		
	29	17 (58.6)	12 (41.4)		
Age at Dx				31 (18)	0.14
<25	8 (27.6)	6 (35.3)	2 (16.7)		
25-39	12 (41.4)	7 (41.2)	5 (41.7)		
40-64	9 (31.0)	4 (23.5)	5 (41.7)		
65+	0 (0)	0 (0.0)	0 (0.0)		
Initial Viral Load (copies/mL)				49,200 (134450)	0.86
<10,000	5 (17.2)	3 (17.6)	2 (16.7)		
10,000-100,000	10 (34.5)	6 (35.3)	2 (16.7)		
>100,000	9 (31.0)	4 (23.5)	5 (41.7)		
Unspecified	5 (17.2)	4 (23.5)	1 (8.3)		
Initial CD4 (copies/μL)				452.5 (346.5)	
<200	3 (10.3)	0 (0.0)	3 (25.0)		
>200	21 (72.4)	12 (70.6)	9 (75.0)		
Unspecified	5 (17.2)	5 (29.4)	0 (0.0)		
Sexual Orientation					0.001
Heterosexual	8 (27.6)	1 (5.9)	7 (58.3)		
LGBTQ+	11 (37.9)	10 (58.8)	1 (8.3)		
Not Specified	10 (34.5)	6 (35.3)	4 (33.3)		
Race/ ethnicity					0.28
White	4 (13.8)	1 (5.9)	3 (25.0)		
Black	21 (72.4)	14 (82.4)	7 (58.3)		

Hispanic	0 (0)	0 (0.0)	0 (0.0)		
Asian/ Pacific Islander	1 (3.4)	1 (5.9)	0 (0.0)		
Other/ Unknown	3 (10.3)	1 (5.9)	2 (16.7)		
Drug Use					0.01
History of Marijuana Use	8 (27.6)	3 (17.6)	5 (41.7)		
History of Cocaine/ Opiate/GHB/PCP Use	6 (20.7)	1 (5.9)	5 (41.7)		
History of IVDU	1 (3.4)	0 (0.0)	1 (8.3)		
No History of Drug Use	18 (62.1)	14 (82.4)	4 (33.3)		
Psychiatric History					0.14
History of Anxiety	10 (34.5)	4 (23.5)	6 (50.0)		
History of Depression	14 (48.3)	5 (29.4)	9 (75.0)		
History of Comorbid Anxiety/ Depression	9 (31.0)	3 (17.6)	6 (50.0)		
Other	7 (24.1)	2 (11.8)	5 (41.7)		
None	13 (44.8)	10 (58.8)	3 (25.0)		
Insurance Type					
Public	18 (62.1)	9 (50)	9 (50)		
Private	11 (37.9)	8 (72.7)	3 (27.3)		
Housing Insecurity	6 (20.7)	1 (5.9)	5 (41.7)		0.08

Interactions with the MedStar health care system are summarized in Table 2. Within the MedStar ambulatory care system, the highest frequency of individuals was diagnosed with HIV at primary care (41.4%, n=12). No significant differences were observed between sex and site of diagnosis, though men trended towards diagnosis at primary care and urgent care sites (men/PC: 52.9%, women/PC: 33.3%, p=0.31; men/UC: 17.6%, women/UC: 0.0%). The mean time between a subject's last HIV-negative test result and their incident HIV-positive test result was determined to be 618 days and significantly higher in women (men: 417 days, women: 903 days, $p< 0.05$). Median time between a subject's last primary care encounter and their incident HIV-positive was determined to be 444 days, and 62.2% (n=18) of individuals had at least one primary care encounter within the year preceding seroconversion. Women demonstrated an increased time between their last primary care encounter and seroconversion (men: 200 days, women: 791 days, $p<0.05$) and were significantly more likely not to have a primary care encounter within the year prior to seroconversion compared to men (women: 58.3%; men: 23.5%, $p<0.01$).

Table 2. Health care system-related factors preceding seroconversion and at HIV diagnosis.

Table 2a. Site of HIV Diagnosis

Variable	Number of Patients, n(%)			p-value
	Population	Female	Male	
Total Diagnoses	29 (100.0)	12 (41.4)	17 (58.6)	
Site of Diagnosis				
Primary Care	12 (41.4)	4 (33.3)	8 (52.9)	0.31
Emergency Department	10 (34.5)	6 (50.0)	4 (23.5)	
Urgent Care	3 (10.3)	0 (0.0)	3 (17.6)	
OB/GYN	3 (10.3)	3 (25.0)	0 (0.0)	
Other	8 (27.6)	6 (50.0)	2 (11.8)	

Bold formatting indicates subheadings.

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Table 2b. Health care Encounters and HIV testing encounters preceding HIV seroconversion

Variable	Number of Patients, n (%) or Mean (SD)			p-value
	Population	Female	Male	
Days Between last negative and incident positive test (mean, sd)	618 (542)	903 (650)	417 (346)	0.03
Days Between last Primary Care Encounter and Diagnosis (mean, sd)	444 (631)	791 (865)	200 (166)	0.04
Primary Care Encounters within 1 year (Yes)				< 0.01
0	11 (37.9)	7 (58.3)	4 (23.5)	
1-2	9 (31.0)	0 (0.0)	9 (52.9)	
3-4	6 (20.7)	3 (25.0)	3 (17.6)	
5+	3 (10.3)	2 (16.7)	1 (5.9)	
Emergency Department Encounters within 1 year (Yes)				0.91
0	17 (59.4)	8 (66.7)	9 (52.9)	
1-2	9 (31.3)	3 (25.0)	6 (35.3)	
3-4	1 (3.1)	0 (0.0)	1 (5.9)	
5+	2 (6.9)	1 (8.3)	1 (5.9)	
Other Encounters within 1 year (Yes)				0.93
0	18 (62.1)	8 (66.7)	10 (58.8)	
1-2	4 (13.8)	1 (8.3)	3 (17.6)	
3-4	3 (10.3)	1 (8.3)	2 (11.8)	
5+	4 (13.8)	2 (16.7)	2 (11.8)	
Urgent Care Encounters within 1 year (Yes)				0.24
0	22 (75.9)	11 (91.7)	11 (64.7)	
1	4 (13.8)	0 (0.0)	4 (23.5)	
2	2 (6.9)	1 (8.3)	1 (5.9)	
3	1 (3.4)	0 (0.0)	1 (5.9)	
Total Encounters within 1 year (Yes)				0.13
0	6 (20.7)	5 (41.7)	1 (5.9)	
1-2	4 (13.8)	1 (8.3)	3 (17.6)	
3-4	6 (20.7)	1 (8.3)	5 (29.4)	
5+	13 (44.8)	5 (41.7)	8 (47.1)	

We additionally investigated the presence of personal risk factors and HIV prevention utilization prior to seroconversion (Tables 3 and 4). Among this population, 55.2% (n=16) of individuals were previously diagnosed with an STI, and 27.6% (n=8) of these infections occurred within two years of seroconversion. Only 27.6% (n=8) and 13.8% (n=4) of individuals engaged in PrEP conversations or acquired a PrEP prescription prior to their diagnosis, respectively. Men were significantly more likely to discuss PrEP with providers, as zero women were engaged in these discussions ($p<0.01$). No women had received a PrEP prescription prior to seroconversion. In terms of prevention conversations, 44.8% (n=13) and 48.3% (n=14) of subjects engaged in documented barrier protection or HIV testing conversations with providers, respectively. No sex differences in STI history were observed (Table 3). LGBTQIA identifying individuals had 35 times higher odds than non-LGBTQIA identifying individuals to have engaged in HIV testing discussions prior to seroconversion (OR=35.0, 95% CI [3.66, 905]). In addition, Black persons had 11 times higher odds than non-Black persons to have engaged in HIV testing discussions prior to seroconversion (OR=11.4, 95% CI [1.61, 234]). Compared to references, men, LGBTQIA identifying individuals, Black persons, and individuals with negative history for diagnosed psychiatric disorder trended positively in both forms of HIV prevention. Conversely, older individuals and individuals experiencing housing insecurity trended negatively in both forms of HIV prevention. Individuals utilizing private health

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insurance had higher odds of having discussed barrier protection with a provider, though lower odds of having discussed HIV testing (Table 4).

Table 3. Association between sex and documented HIV risk/prevention utilization prior to seroconversion.

Variable	Number of Patients, n(%)			p-value
	Population	Female	Male	
Incident HIV Diagnoses	29 (100.0)	12 (41.4)	17 (58.6)	
Past Gonorrhea Infection (Yes)	6 (20.7)	4 (33.3)	2 (11.8)	0.20
Past Chlamydia Infection (Yes)	7 (24.1)	5 (41.7)	2 (11.8)	0.09
Past Syphilis Infection (Yes)	8 (27.6)	3 (25.0)	5 (29.4)	1.00
Past HCV Infection (Yes)	1 (3.4)	1 (8.3)	0 (0.0)	0.41
Any Prior STI (Yes)	16 (55.2)	7 (58.3)	9 (52.9)	1.00
STI Dx Within 2 Years Prior to Seroconversion (Yes)	8 (27.6)	3 (25.0)	5 (29.4)	1.00
Primary Care Encounter within 1 year (Yes)	18 (62.1)	5 (41.7)	13 (76.5)	0.12
Past PrEP Discussion (Yes)	8 (27.6)	0 (0.0)	8 (47.1)	< 0.01
Past PrEP Prescription (Yes)	4 (13.8)	0 (0.0)	4 (23.5)	0.12
Past nPEP Prescription (Yes)	1 (3.4)	0 (0.0)	1 (5.9)	1.00
Past Barrier Protection Discussion (Yes)	13 (44.8)	5 (41.7)	8 (47.1)	1.00
Past HIV Testing Discussion (Yes)	14 (48.3)	4 (33.3)	10 (58.8)	0.26
Unspecified Sexual Orientation (Yes)	9 (31.0)	4 (33.3)	5 (29.4)	1.00

Table 4. Association between demographic variables and HIV prevention services offered prior to seroconversion.

Variable	Unadjusted Documented Barrier Protection Discussion		Unadjusted Documented HIV Testing Discussion	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Sex				
Female	Reference		Reference	
Male	1.24 (0.28, 5.75)	0.77	2.86 (0.64, 14.52)	0.18
Age				
≤ 45	Reference			
> 45	0.36 (0.02, 3.27)	0.40	0.31 (0.01, 2.78)	0.33
Sexual Identity				
Heterosxual	Reference			
LGBTQIA	2.00 (0.32, 13.42)	0.46	35.00 (3.66, 905.21)	< 0.01
Race				
African American	Reference			
Other	1.52 (0.29, 8.98)	0.63	11.37 (1.61, 234.19)	0.04
Insurance Type				
Public	Reference			
Private	3.33 (0.70, 19.33)	0.15	0.67 (0.14, 3.02)	0.60
History of Psychiatric Disorder				
Yes	Reference			
No	1.94 (0.44, 9.02)	0.38	2.67 (0.61, 12.85)	0.20
Housing Insecurity				
Yes	Reference			
No	0.55 (0.07, 3.39)	0.53	0.46 (0.06, 2.84)	0.42

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DISCUSSION

This study evaluated the utilization and distribution of HIV prevention services in an integrated health care network among patients engaged in primary care services. In retrospectively analyzing an HIV positive cohort, this study sought to quantify demographic and health care system characteristics among incident HIV diagnoses and to identify missed opportunities for HIV prevention in primary care.

Clear, sex-based differences in biomedical and behavioral HIV prevention utilization were observed in this population. Compared to women, men were more likely to encounter primary care within 1 year of seroconversion ($p<0.01$). Men also demonstrated a significantly smaller median time difference between the most recent HIV–negative test and seroconversion ($p<0.05$). Further, PrEP was discussed significantly more frequently with men than with women ($p<0.01$); more specifically, no women had discussed PrEP with a health care provider or received a PrEP prescription prior to seroconversion. This demonstrates that within this system, men were more likely to engage with both behavioral and biomedical HIV prevention services prior to seroconversion.

These findings support known trends of HIV testing and prevention among women, including studies noting women are less likely to be screened for HIV concurrently with STI testing, to discuss condom use, and have a sexual history taken.[31, 33] Furthermore, our findings that no women received a PrEP prescription prior to seroconversion reinforces the larger trend of PrEP underutilization in women relative to men, particularly considering the burden of disease of HIV among women in the United States.[26, 31, 34, 35, 36] This may, in part, be due to underestimation of risk among both patients and providers,[37] or primary care providers' perception that PrEP is outside of their regular scope of practice.[30] Yet, the rising incidences of HIV among cisgender heterosexual women in the District of Columbia[5] and nationwide highlight the urgency of bridging these disparities in testing and prevention to end the HIV epidemic nationally and locally.

Despite this, our findings highlight system-level progress in primary care with regard to HIV prevention among persons identifying as sexual and racial minority groups. Our finding that within the studied health system, LGBTQIA and Black persons had significantly higher odds (35 and 11 times, respectively) of HIV testing and barrier protection discussions suggest the primary care providers are taking good initial steps in fostering HIV prevention discussions among populations disproportionately affected by HIV nationwide and in the District of Columbia.[3] While our findings concur with studies noting increased HIV testing among LGBTQIA persons,[36, 37] they contrast with studies noting reduced HIV testing and PrEP discussion and prescriptions among Black persons.[35, 36, 38] While this is promising regarding HIV prevention discussions between providers and groups disproportionately impacted by HIV, the absolute numbers of PrEP and nPEP prescriptions were low among our study population. This suggests more improvement is needed.

These findings are limited by the small sample size, which led to a lack of statistical power. The strength and consistency of the trends presented, however, should not be disregarded. Additionally, only prior STIs diagnosed within a MedStar facility or reported by the patient were included, which may underestimate the frequency of prior STIs. Additionally, while investigating the quality of sexual history documentation was an aim of this examination, lack of documentation and administrative errors in the production of clinical notes may have contributed to the demonstrated disparities in prevention utilization. Poor documentation itself may have confounded the results as well; the high frequency of individuals with an unspecified sexual orientation may have impacted findings pertaining to differences in sexuality. Finally, given the niche focus of this evaluation– PWH who seroconverted while having an established primary care history within an ambulatory health care system– these results may not be generalizable to different health care contexts.

Furthermore, this study provides a unique health-system level perspective on sexual and other health-care seeking behaviors among primary care patients immediately preceding HIV seroconversion. We noted patients engaging in care at both emergency and urgent care sites, despite having an established relationship with a primary care physician. Likewise, site of diagnosis was similar between primary care and other forms of care (Table 2b). As MedStar patients are seeking care throughout its integrated sites, this indicates that there is a need for system-wide interventions in HIV prevention services. In addition, this study is unique for its emphasis on missed opportunities for HIV prevention. While most studies focus on missed opportunities for HIV diagnosis, we have aimed to decrease HIV incidence and transmission as a whole under the lens of preventative health care.

In summary, these findings illustrate the need for increased biomedical and behavioral prevention services offered to primary care patients. PrEP therapy is indicated for those who have been sexually active within 6 months, have a sexual partner who is HIV positive or with an unknown HIV status, engage in condomless sex, or have been diagnosed with an STI within 6 months.[39] Given these broad recommendations, prevention services must be expanded to minority populations in PrEP utilization, such as women and heterosexual-identifying individuals. Both PrEP and nPEP were under-prescribed in this population– particularly in women– which illustrates a detrimental deficit in the HIV prevention continuum. Additionally, despite the predictive power of STIs for a subsequent HIV infection, HIV prevention services and safe sex discussions were not consistently administered concurrently with STI diagnosis. This indicates another missed opportunity for prevention that requires intervention. In using the risk factors and demographic inequities quantified by this analysis, health care providers may be better equipped to prevent HIV infection at the ambulatory care level.

CONCLUSION

This evaluation investigated the risk factors impacting HIV incidence and diagnosis among primary care patients within a wider ambulatory care system and showed distinct inequities in prevention utilization between demographic groups. In particular, HIV prevention discussion and provision should be increased among primary providers for heterosexual-identifying individuals and women. Despite likely sexual history and prevention documentation, the limited provision of PrEP is evidence that improvements in HIV prevention are needed in the primary care system. By improving the efficacy and equity of prevention, these findings may aid in lowering HIV incidence in the District of Columbia.

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Conflict Of Interest

There are no actual or potential conflicts of interest to report.

Ethical Considerations

The Georgetown University IRB has granted approval for this research under STUDY00005689. As a secondary data analysis, this study poses no more than minimal risk to subjects. Thus, a waiver of written informed consent was requested from patients. Outside of a research context, this project does not contain procedures that would typically require written consent. To minimize risk of loss of confidentiality, data will only be available by password to key personnel on secure software and was de-identified after chart review.

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SUPPLEMENTARY FIGURES

Supplementary Table 1: HIV Prevention Services Administered Concurrently to STI infection

STI contracted	Number of Patients (n)		
	Population	Men	Women
Gonorrhea Infection	6	2	4
Concurrent HIV Test	2	1	1
Concurrent Syphilis Test	3	1	2
PrEP Discussed	0	0	0
Other Prevention Discussed	0	0	0
Chlamydia Infection	7	2	5
Concurrent HIV Test	1	1	0
Concurrent Syphilis Test	1	1	0
PrEP Discussed	1	1	0
Other Prevention Discussed	1	1	0
Syphilis Infection	8	5	3
Concurrent HIV Test	6	4	2
PrEP Discussed	2	2	0
Other Prevention Discussed	3	2	1

Bold formatting indicates subheadings.