HIV Prevention Continuum among MSM, New York City, Spring 2016

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Background

- New York City (NYC) has one of the largest HIV epidemics in the US
 - 2,493 new diagnoses in 2015
 - 58% among men who have sex with men (MSM)
- Pre-exposure prophylaxis (PrEP) uptake is increasing among MSM in NYC, yet gaps remain
- NYC Health Department promotes PrEP among consumers and providers, with a focus on reducing disparities in access
- Identifying gaps and missed opportunities is a priority to drive evidence-informed public health, including elucidation of:
 - Steps leading to PrEP use (continua)
 - Information on barriers experienced by priority populations





Objectives

- Using data from NYC's Sexual Health Survey among MSM:
 - Construct an HIV Prevention Continuum that monitors steps to PrEP use
 - Among those not using PrEP, describe interest and reasons for non-use





Methods: Data Source

• **Sexual Health Survey**: Cross-sectional, anonymous survey among NYC MSM; data collected semi-annually since 2009

Survey types:

- In-person: Bars/clubs and a public, outdoor space popular among MSM of color; interviewer-administered; incentivized (\$15 gift card)
- *Online:* 5-7 dating/hook-up sites popular among MSM of color (e.g., BGCLive, Grindr); self-administered; not incentivized





Methods: Sample

- **Survey eligibility**: NYC resident, assigned male sex at birth, aged 18-40, reporting anal sex with a man in previous past 6 months
- Analytic sample: Spring 2016 survey respondents; data aggregated across in-person and online surveys; includes those considered "PrEP eligible"
- PrEP eligibility: Based on response to multiple survey questions
 - HIV-negative or status unknown
 - Report of any of the following in the previous 6 months: condomless anal sex; stimulant or injection drug use; transactional sex; PEP use; HIV-positive sexual partner; or STI diagnosis in past year
 - 78% of HIV-negative/unknown status sample



Methods: HIV Prevention Continuum

Construction of continuum

- Includes steps leading up to PrEP use
- All steps considered actionable by public health programming/policy with the onus on providers
- Continuum includes those considered PrEP-eligible
- Steps beyond PrEP eligibility Over previous 6 months, report of:
 - (1) Provider visit
 - (2) Sexual history taken by provider
 - (3) Discussed PrEP with provider
 - (4) Used PrEP

Data analysis

- Each step uses PrEP-eligible respondents as the denominator
- Stratification by race/ethnicity with differences examined using regression adjusted for age



Methods: Interest and Reasons for Non-Use

PrEP interest

- Asked of those who had not used PrEP in previous 6 months ("PrEP non-users") who were aware of PrEP
- "How interested are you in taking PrEP as a daily pill?"

Reasons for non-use

- Asked of those with PrEP interest responses of "Very/Somewhat/Don't Know"
- "What are the reasons why you are not taking it?"

Reasons for non-interest

- Asked of those with PrEP interest responses of "Not at all"
- "What are the reasons why you are not interested in taking it?"

Data measures/analysis

- Proportion calculated among PrEP-eligible respondents
- Interest by race/ethnicity with differences examined using regression adjusted for age
- "Reasons" questions: response options multi-select; based on question piloting in Fall 2015; write-in option; later categorized



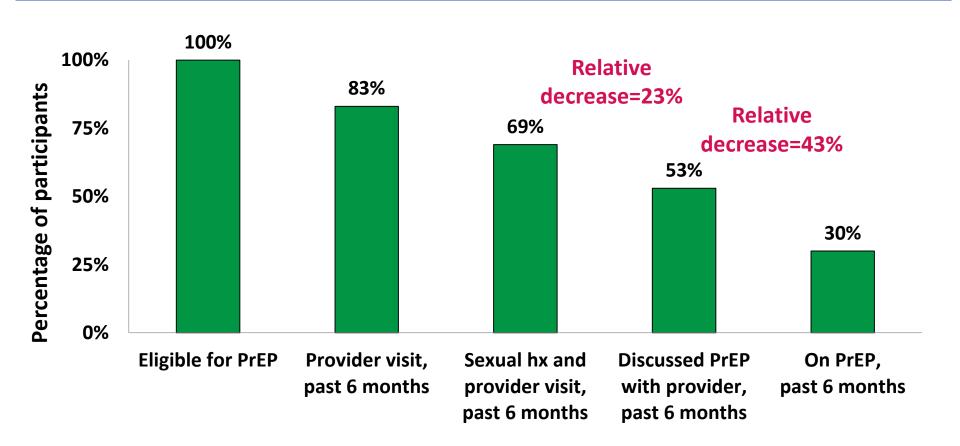
Description of PrEP-Eligible Sample

	n/N*	Col %
Survey Type		
In-person	229/633	36%
Online	404/633	64%
Age (years)		
18-29	361/633	57%
30-40	272/633	43%
Race/Ethnicity		
Black, non-Hispanic	106/475	22%
Hispanic	134/475	28%
White, non-Hispanic	187/475	39%
Other	48/475	10%
Highest Level of Education		
Less than Bachelors degree	166/481	35%
Bachelors degree or higher	315/481	65%
Income		
Less than \$20,000	83/458	18%
\$20,000 to \$59,999	187/458	41%
\$60,000 or greater	188/458	41%
Insured	409/482	85%
Aware of PrEP	520/545	95%

^{*}Proportions calculated among those with response to corresponding question

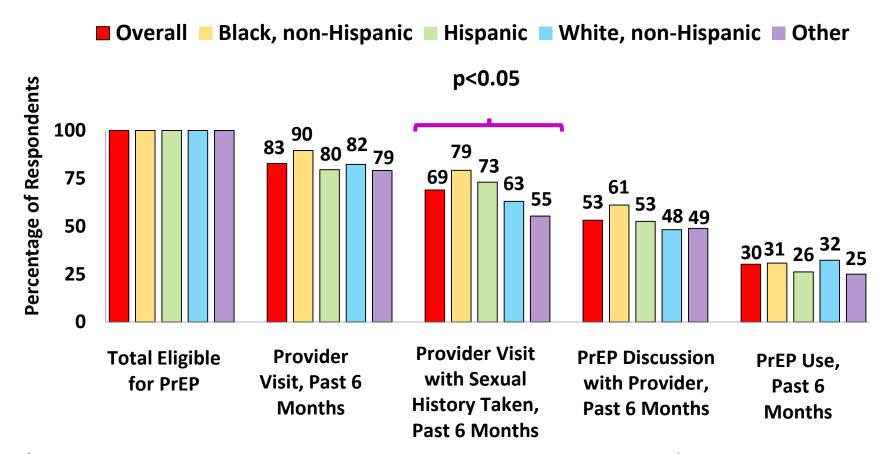


HIV Prevention Continuum among NYC MSM Eligible for PrEP*



^{*}Sample includes sexually active MSM aged 18-40 years and who report HIV-negative/unknown status. PrEP-eligible defined as reporting diagnosis of an anal STI in the past year or any of the following in the previous 6 months: unprotected anal intercourse, transactional sex, use of cocaine, crack, methamphetamines or injection drugs, using PEP or having had an HIV-positive partner.

HIV Prevention Continuum among NYC MSM Eligible for PrEP* by Race/Ethnicity

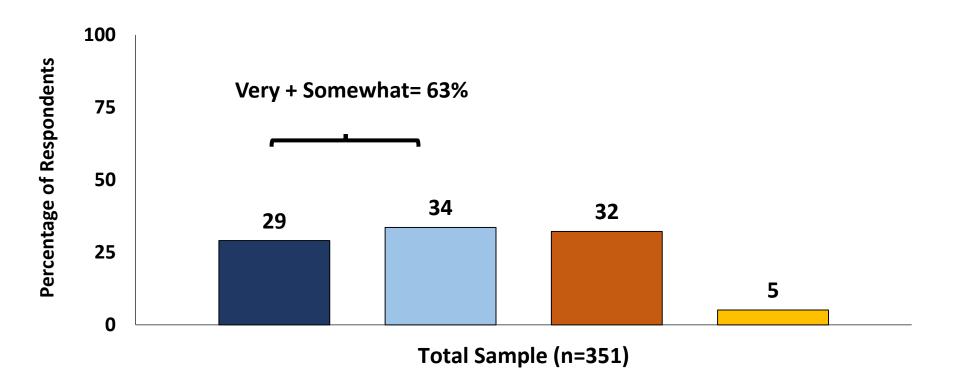


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Interest in PrEP among Non-Users* who are Eligible and Aware of PrEP

■ Very interested
■ Somewhat interested
■ Not at all interested
□ Don't know/Not sure

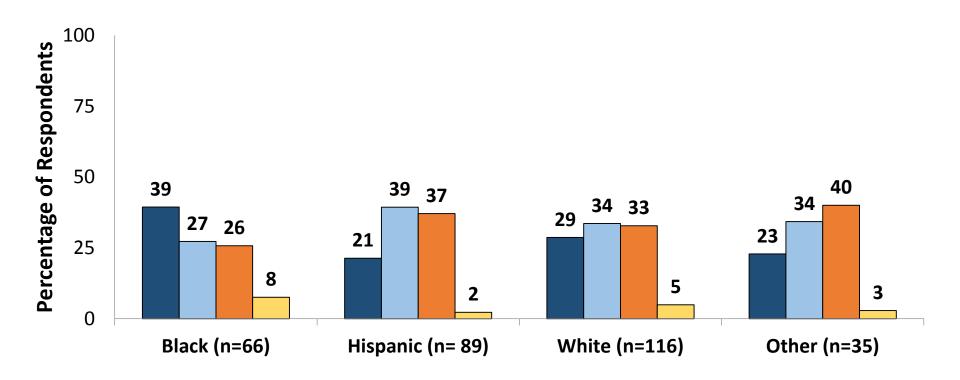


^{*}Report not using PrEP in previous 6 months



Interest in PrEP among Non-Users* who are Eligible and Aware of PrEP, By Race/Ethnicity

■ Very interested
■ Somewhat interested
■ Not at all interested
■ Don't know/Not sure



^{*}Report not using PrEP in previous 6 months

Note: Interest did not differ statistically significantly by race/ethnicity using age-adjusted regression model



Top Reasons Given for PrEP Non-Use among Potentially Interested and Eligible MSM

Reason(s) Given	n/N	Row %*
Insurance/financial issues	70/238	29.4%
Worry about side effects	64/238	26.9%
Not enough information to decide whether to take PrEP	48/238	20.2%
Self-perceived low risk of exposure **, †	35/238	14.7%
Inconvenience/unwilling to take a daily pill**	7/238	2.9%
Provider resistance**	6/238	2.5%
Don't know where/how to get it**	6/238	2.5%
In the process of getting PrEP**	6/238	2.5%

^{*} Categories were multi-select and percentages are not mutually exclusive



^{**} Recoded from write-in response

[†] Responses such as consistent condom use, monogamous partner, few partners

Top Reasons Given for Non-Interest in PrEP among Eligible MSM

Reason(s) Given	n/N	Row %*
Self-perceived low risk of exposure	91/113	80.5%
Worry about side effects	30/113	26.6%
Don't have enough information about it	7/113	6.2%
Inconvenience/unwilling to take a daily pill**	5/113	4.4%
Concerns about efficacy**	4/113	3.5%
Insurance/financial issues**	2/113	1.8%



^{*}Categories were multi-select and percentages are not mutually exclusive

^{**} Recoded from write-in response

[†] Responses such as consistent condom use, monogamous partner, few partners

Summary

- Using a new framework, the HIV Prevention Continuum among NYC MSM, we observed
 - High engagement in prevention among NYC MSM
 - Drop-offs from sexual history taking to discussing PrEP with a provider to using PrEP
 - Limited differences observed by race/ethnicity
- Over half of PrEP non-users who appeared to be eligible for PrEP were interested in PrEP
- Among those potentially interested and eligible for PrEP, top reasons given for non-use included:
 - Insurance/financial issues
 - Worry about side effects (also non-interest)
 - Not enough information (also non-interest)
 - Self-perceived low risk of exposure (also non-interest)



Limitations

- Limitations inherent to the study design of the data source: self-reported data, convenience sample, cross-sectional
- Continuum does not account for all possible steps to PrEP or steps beyond PrEP use; constructed to include key actionable steps in public health context
- Reasons for non-use and non-interest analysis was exploratory;
 refinement to response options an iterative process
- Generalizability may be limited



Discussion and Next Steps

Discussion

- Gaps identified through the Continuum that suggest the need for continued education of providers
- High interest in PrEP among non-users, suggesting demand is not yet met
- Barriers to information or access reported by those non-users reveal the importance of PrEP outreach and navigation

Next steps

- Continue promotion among priority populations and providers
- Support PrEP navigation through a network of community-based organizations, testing sites, and clinical sites
- Continue to collect data to monitor progress; data incorporated into NYC's status neutral continuum*







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Thank you!

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Questions?





Extra Slides

Measuring PrEP on SHS

- Awareness: "Sometimes people who do not have HIV take HIV
 medications on a daily basis before sex to keep from getting HIV. This
 is called pre-exposure prophylaxis, or PrEP. Have you ever heard of
 PrEP?"
- Use: "In the <u>past 6 months</u>, have you used PrEP to prevent yourself from becoming infected with HIV?"
- Interest: "How interested are you in taking PrEP as a daily pill?"
- Reasons for non-use among Interested and Not Sure: "What are the reasons why you are not taking it?"
- Reasons for non-use among not Interested: "What are the reasons why you are not interested in taking it?"



HIV STATUS NEUTRAL PREVENTION & TREATMENT CYCLE Aware of Prep

