

## CASE STUDY

# Improved HIV Preexposure Prophylaxis Uptake in New York City

Emma Kaplan-Lewis, MD, Eunice Casey, MPH, MIA, Chika Onyia, FNP, DNP,  
Komal Bajaj, MD, MS-HPed, Nichola Davis, MD, MS

Vol. 7 No. 1 | January 2026

DOI: 10.1056/CAT.25.0140

Preexposure prophylaxis (PrEP) for human immunodeficiency virus (HIV) prevention is a highly effective tool, but it is underutilized, and significant inequities exist regarding which populations are able to access PrEP. Although most PrEP care occurs in specialty settings, such as sexual health and HIV clinics, most individuals eligible for PrEP are seen in primary care; this imbalance represents an opportunity to expand PrEP access. New York City Health and Hospitals (NYC H+H) is a municipal health care system that provides primary and specialty care across the five boroughs of New York City. To address the gap in PrEP access within primary care, a multidisciplinary working group within NYC H+H was convened in June 2023, and it included primary care providers, nursing staff, and administrative stakeholders within primary care, virology, quality, and data and analytics. The working group interfaced with facilities directly to listen to and engage with the care teams and patients to identify barriers and develop supports to facilitate implementing PrEP services within primary care. In response to care team and patient needs, electronic medical record tools were developed, and customized training and patient-facing educational materials were created to address identified gaps in care team knowledge regarding PrEP care services. Training and electronic medical record tool dissemination occurred, initially, as a proof of concept at one pilot site in East New York, Brooklyn, from June to December 2023, and resulted in a threefold increase in PrEP uptake among patients who had a documented PrEP discussion with their care team, at 20% (15/76), as compared with the NYC H+H system for PrEP uptake, at 6.8% (1207/17,724) ( $P < 0.000$ ). Moreover, the increase in PrEP uptake was seen across populations that traditionally face barriers to accessing PrEP. Through this patient- and care team-centered approach, PrEP care services were able to be implemented in an equitable way within a primary care clinic setting.

## KEY TAKEAWAYS

---

- A multidisciplinary team that includes patients is valuable to successfully integrate preexposure prophylaxis (PrEP) within the primary care setting.
- It is essential to listen to — and address the concerns of — the individuals directly involved to implement a durable and impactful PrEP program.
- Resources, ideally embedded within the electronic medical record (EMR), that simplify PrEP care and support integration into existing clinical workflows are key to success and sustainability.
- Integrating or aligning PrEP metrics into facility and health system quality measures can support the durable expansion of PrEP care.

## The Challenge

PrEP for human immunodeficiency virus (HIV) prevention is highly effective,<sup>1,2</sup> but is vastly underutilized, particularly by populations most impacted by the HIV epidemic and, therefore, most likely to benefit from PrEP. The highest rates of new HIV diagnoses occur among Black and Hispanic men who have sex with men and heterosexual Black and Hispanic women; however, these populations have disproportionately low levels of access to PrEP.<sup>1-4</sup> In 2022, overall PrEP coverage was 36%, but coverage was only 13% among Black/African American individuals,<sup>2-7</sup> and women accounted for only 7.8% of PrEP use despite representing almost 20% of new HIV diagnoses that year in the United States.<sup>1,2</sup> Well-described barriers to PrEP use include lack of awareness and education among providers and patients,<sup>8</sup> stigma related to accessing sexual health and HIV prevention services,<sup>9</sup> competing health priorities, cost of medication, disagreement among providers about whether PrEP care belongs in primary or specialty care,<sup>10</sup> and limited visit time.<sup>11</sup>

New York City Health and Hospitals (NYC H+H) is a public safety-net health system that operates 11 hospitals, 29 health centers, and 5 long-term care centers, serving more than 1 million New Yorkers annually throughout the city's five boroughs. Among the over 300,000 patients who had a primary care visit at a NYC H+H facility in 2024, 75.7% were publicly insured or self-pay/uninsured. Self-reported race and ethnicity data demonstrate a diverse patient population, with patients being 42.5% Hispanic/Latinx, 31% Black/African American, and 7.9% white; in addition, 41.1% of patients reported a non-English language preference. The catchment areas where NYC H+H facilities are located have high community HIV and sexually transmitted infection (STI) prevalence and incidence.<sup>3-5</sup> Of patients who had at least one primary care or Ob/Gyn visit in 2024, 3.6% tested positive for chlamydia overall, with a range of 1.9% to 6.2% depending on facility; 1% tested positive for gonorrhea, with a range of 0.2% to 1.9%; and 1.1% tested positive for syphilis, with a range of 0.2% to 1.8%. These STI-positive rates are significant, due to the fact that a bacterial STI is a risk factor for incident HIV, indicating that many patients receiving care at a NYC H+H facility could benefit from HIV PrEP.

The most common model for PrEP care is in specialty care settings such as infectious disease, HIV, or sexual health clinics. However, this has been shown to add barriers for individuals unable to access or uncomfortable with accessing specialty care clinics.<sup>12-14</sup> Specific barriers related to PrEP within a specialty care setting include stigma associated with seeking care in an HIV or STI clinic, longer wait times for appointments, higher co-pays for specialty appointments, insurance-based inequities impacting access to specialty appointments, and patient discomfort with seeing a new provider.<sup>15-19</sup> To bridge access gaps and reduce inequities, in 2018, NYC H+H started to integrate PrEP into primary care and Ob/Gyn clinics.<sup>13</sup> This integration included provider-focused clinical training and PrEP care implementation support for primary care and Ob/Gyn clinicians and care teams.<sup>13</sup> Following this initiative, which was successful to an extent, we recognized that it was necessary to revisit the effort to further improve patient uptake through provider engagement in PrEP care delivery.

Beginning in June 2023, additional resources were developed and implemented. These included a new tool, a new metric, and a new staff function:

- An EMR SmartSet titled PrEP express lane — an EMR-based tool that integrated clinical decision supports, an STI order set, patient education printouts, medication orders, and diagnostic codes ([Figs. 1](#) and [2](#)) — to streamline the prescribing and care process for PrEP;
- An EMR-based metric that identifies patients eligible for PrEP based on their STI history, which was incorporated into data tools and staff workflows to improve PrEP offers for individuals at increased risk; and
- A dedicated PrEP Program Manager to support clinic-specific implementation efforts addressing the resources and limitations within individual clinic settings.

Although there was increased PrEP prescribing among the 104 providers involved in the initial PrEP integration efforts from August 2018 to February 2021, we did not see a significant improvement at the NYC H+H-system level in PrEP prescribing among a potential patient population of approximately 20,000 PrEP-eligible individuals. The current project focused on how to expand the use of these resources and/or modify the tools to more effectively support frontline clinical teams in providing PrEP within primary care.

## The Goal

The goal of this project was to identify barriers and develop related interventions that support primary care providers and care teams to successfully provide PrEP.

## The Execution

A working group of 10 individuals was established in June 2023, and it was made up of primary care providers (physicians and advanced practice registered nurses), nursing staff, and administrative stakeholders within primary care, virology, quality, and data and analytics. These individuals were from the pilot community health clinic site (n=5), as well as NYC H+H systemwide clinical and

FIGURE 1

## PrEP Express Lane: An Electronic Medical Record Tool to Streamline Care

This figure depicts the activation process of the PrEP express lane for clinicians in the primary care and Ob/Gyn settings. Simply entering “HIV PrEP” as the reason for visit or reason for call (Panel A) will launch the electronic medical record–based tool (Panel B), which prompts the “Let’s Go” button. The express lane tool incorporates clinical decision supports, a sexually transmitted disease order set, patient education printouts, medication orders, and diagnostic codes.

**Panel A: Reason for Visit**

Reason for Visit

Add a new reason + Add

Abscess	Cellulitis	Diarrhea
Endocarditis	Fever	Hepatitis B
Hepatitis C	Osteomyelitis	Pneumonia
Positive PPD	Prosthetic Joint I...	Wound Infection
Annual Visit - HIV...	Routine Visit - HI...	Initial Visit - HIV ...
Walk-in Visit - Hiv...	Pre-exposure Pro...	Post-exposure Pr...
ID Follow-up	Infectious Disease	Virology
<b>HIV Pre-Exposur...</b>	Long-Acting Injec...	Long-acting Injec...

**Panel B: Answer Questionnaires**

Reason for Visit

HIV Pre-Exposure Prophylaxis (PrEP)

**Save Time with Express Lanes!**

The following Express Lanes are available for this visit:

- Pre-Exposure Prophylaxis (PrEP) Visit

**Let's Go**

HIV = human immunodeficiency virus, PrEP = preexposure prophylaxis, PPD = purified protein derivative, ID = infectious disease.

Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

administrative leadership (n=5), with subject matter expertise on HIV, sexual health, and PrEP. Two members of the working group had prior experience with PrEP program design, training, and implementation within NYC H+H, which was based on the initiative from 2018 to 2021, which centered around a virtual training curriculum and case-based discussions aimed at increasing the number of PrEP prescribers within primary care and Ob/Gyn staff.<sup>13</sup>


FIGURE 2

## Express Lane Electronic Medical Record Tool Elements


Once activated in the electronic medical record, the preexposure prophylaxis express lane tool prompts the primary care and Ob/Gyn clinicians to support the patient with information and to facilitate ordering and documenting for the preventive care measure.

**Pre-Exposure Prophylaxis (PrEP) Visit** ⤴


**Instruction:**  
 Hover over and select desired Visit Note/Patient Instruction, then click on the pen icon to document.  
 Hover over and select pertinent orders, dx, LOS, & follow up period.  
 Click "Sign" to apply selected items.  
 Sign encounter at the end of the visit.

**Documentation** ⤴  Filter



- PrEP Progress Note ⤴
- PrEP Visit Follow Up Visits ⤴
- Alternatives To Daily Truvada for PrEP ⤴
- PrEP Patient Instruction ⤴

**Labs Tests** ⤴  Search




PrEP Initial & Follow-up Visit Labs ⤴


- ☒ HIV AG/AB Screen By CMIA  Expires: 4/4/2026, Clinic Collect, Routine

PrEP STD Testing ⤴


- ☐ Syphilis Screen 
- ☐ Trichomonas Screen NAT (Send Out) 

PrEP STD Testing ⤴

- ☐ Chlamydia/ G.C. Amplification (Send Out) 
- ☐ Chlam/N.Gon, Anal/Rectal, TMA (Send Out) 
- ☐ Chlam/N.Gon, Oral/Throat, TMA 

**Medications** ⤴  Search


- PrEP Medications ⤴
- PrEP Medications Follow-up Visits ⤴

**Diagnoses** ⤴  Search


PrEP Diagnoses ⤴

- ☒ Encounter for HIV pre-exposure prophylaxis [Z29.81]

PrEP STD Diagnoses ⤴

**Level of Service** ⤴  Filter

- New Patient ⤴
- Established Patient ⤴

**Follow-up** ⤴  Filter

- Return visit ⤴

AB = antibody, AG = antigen, Chlam = *Chlamydia*, CMIA = chemiluminescent microparticle immunoassay, dx = diagnosis, G.C. = gonorrhea, HIV = human immunodeficiency virus, LOS = level of service, NAT = nucleic acid test, N.Gon = *Neisseria gonorrhoeae*, PrEP = preexposure prophylaxis, STD = sexually transmitted disease, TMA = thrombotic microangiopathy.

Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society



“*The training differed from previous health systemwide preexposure prophylaxis training in that it directly addressed the knowledge gaps and concerns identified during the listening tour and included electronic medical record preexposure prophylaxis express lane-specific training.*”

Staff feedback from the earlier PrEP integration effort — which was largely focused on opt-in participation in a six-part online clinician education curriculum — highlighted system-level barriers to PrEP expansion, such as time constraints within a visit, concern regarding remembering the initial and follow-up laboratory orders to monitor someone on PrEP, comfort related to introducing PrEP as an option, and providing the required counseling coinciding with a PrEP prescription. This feedback from the 2018–2021 initiative was used to design the PrEP express lane to support and streamline the process for providing PrEP. A PrEP program manager was hired in September 2022 to work with all sites across NYC H+H to train on EMR tools and work with individual clinics to develop local PrEP programs.

The current intervention, which began in 2023, was developed to understand barriers to and facilitators of using the existing resources with the aim of improving utilization. Owing to the heterogeneity within the different clinical sites at NYC H+H, there was recognition that understanding facility-level concerns would be key to implementation. As a result, one clinical site was chosen to be a pilot site to understand barriers and implement new processes.

The pilot clinic is a community health clinic in the East New York area of Brooklyn. This site was selected as a pilot because of the high community rates of HIV and STIs<sup>3-6</sup> and because the project lead is an HIV provider at that site. The purpose of the listening tour associated with the 2023 initiative was to assess knowledge and attitudes related to PrEP, identify implementation hurdles of concern to care teams, and tailor the intervention. A series of eight 30- to 60-minute listening sessions with frontline staff and patients was conducted. In-person interviews involved one interviewer and one or two interviewees, and they included staff in a variety of roles, including patient navigators, nursing staff, patient care associates, clerical staff, and phlebotomists. Patients eligible for PrEP and not engaged in PrEP care, and those engaged in PrEP care, were invited for listening sessions that involved one interviewer and one patient interviewee.

Insights from the listening tour included a lack of visual signage and advertisements for PrEP services around the clinic and the need for both patient and staff education materials that could be readily accessed to facilitate the offer of PrEP. Staff knowledge about PrEP ranged from zero knowledge to a vague understanding or misunderstanding of the purpose and rationale behind PrEP for HIV prevention. Providers were not aware of the EMR-based PrEP express lane and needed training on how to access and use it. Staff also wanted a way to document their counseling efforts to better capture effort and to understand when patients were offered PrEP but declined to start. The insight gained was used to design the interventions, which included the following components:

- A training series for all clinical staff on PrEP and sexual health, which occurred every 2–4 weeks over a 6-month period (June to December 2023), with additional training and support as requested. The training differed from previous health systemwide PrEP training<sup>13</sup> in that it directly addressed the knowledge gaps and concerns identified during the listening tour and included EMR PrEP express lane–specific training.
- A patient-facing campaign (Fig. 3) to build awareness of PrEP, support open conversations with care teams, and provide an avenue to directly schedule PrEP appointments.
- Support to integrate EMR resources into existing clinical workflows, including dissemination of tip sheets, individual and small group tool-specific trainings, and establishment of a new EMR tool to track PrEP discussions so that counseling efforts could be captured whether or not a patient ultimately decided to start on PrEP (Fig. 4).

## Hurdles

There are many hurdles to equitably implementing PrEP care within primary care and Ob/Gyn clinics. The specific hurdles encountered with this intervention include the reluctance of providers to incorporate a new clinical service into their practice; provider and nurse discomfort with discussing PrEP due to concerns of offending the patient or the implication that they were judging the patient; and a lack of familiarity with existing EMR-based tools to facilitate prescribing PrEP. In addition, providers expressed frustration with not being recognized when they did provide PrEP counseling and raised the point that the number of patients counseled on PrEP far exceeded those deciding to start on PrEP.

“*To build durable change, this intervention had to address the impact of staff turnover, work with an interdisciplinary team to change workflows, establish benchmarks for targets, and integrate data tools and standard reviews to track progress.*”

This intervention sought to directly address these hurdles in three ways: increased awareness and education, updated tool development and training, and building durable change.

### *Awareness and Education*

Gaps in both patient and staff awareness about PrEP and clinical staff concerns about the lack of resources to educate patients about PrEP are persistent.<sup>8</sup> The listening tour highlighted varying knowledge about PrEP among patients and providers, ranging from having never heard of it to being interested in starting PrEP but not knowing how. Also identified was the need for all levels of staff to be informed about PrEP to improve staff buy-in and to spread PrEP visit education and activities across a variety of clinical staff to improve efficiency and reduce time burden for any particular team member.

FIGURE 3

## Posters Displayed at the Pilot Site to Promote the Preexposure Prophylaxis

This figure includes two examples (Panels A and B) of posters placed at the primary care location that served as the pilot site. The messaging briefly describes what preexposure prophylaxis (PrEP) treatment involves and notes that the service is available at no or low cost. Anecdotal evidence supports the value of the posters — patients requesting PrEP reported seeing the posters, client navigators received direct calls related to the posters, and non–primary care provider staff reported that the posters served as a reminder that PrEP was an option available to patients.



Source: The authors

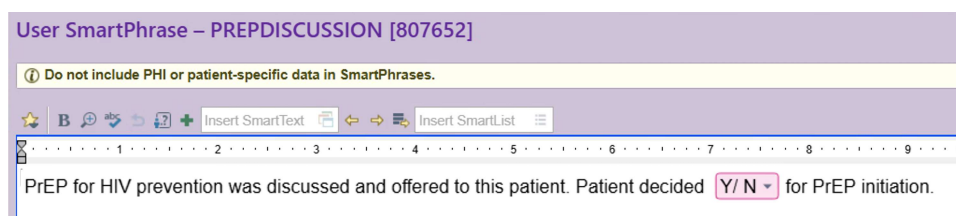
NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society



FIGURE 4

## Structured Documentation of Preexposure Prophylaxis Discussions

This figure shows how support for documenting the preexposure prophylaxis discussion was built into the PrEP express lane tool within the electronic medical record.



HIV = human immunodeficiency virus, N = no, PHI = protected health information, PrEP = preexposure prophylaxis, Y = yes.

Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

The listening tour highlighted that many clinical staff had minimal knowledge of PrEP and were concerned about the time needed during a visit to discuss sexual health and PrEP with patients. Additional concerns included a lack of comfort with medication and laboratory tests needed to safely start and monitor PrEP. Clinical teams reported a need for more clinical information in a simplified format and opportunities to build skills and understanding of PrEP and how to incorporate it into already-busy clinic visits in order to better support patients. A series of training was conducted related to the specific needs identified by providers, including how to identify patients for PrEP, how to access and use the EMR tools available, how to readily access patient and provider education materials, and how to normalize asking patients about PrEP in a routine way as part of a primary care visit.

### *Tool Development and Training*

The listening tour identified gaps in staff awareness of the existing EMR tools available to facilitate prescribing PrEP. A component of the intervention training was group and individual sessions aimed at reviewing how to access and utilize these EMR tools. To facilitate documentation of PrEP counseling, the working group designed a SmartPhrase, a structured EMR-based documentation titled PrEP Discussion, to document offer and acceptance of PrEP in a patient's chart (Fig. 4). The working group designed the SmartPhrase so that utilization could be tracked by provider specialty, clinic setting, and patient sociodemographics.

### *Durable Change*

To build durable change, this intervention had to address the impact of staff turnover, work with an interdisciplinary team to change workflows, establish benchmarks for targets,<sup>20-24</sup> and integrate data tools and standard reviews to track progress. The lack of a nationally agreed-upon standard for the proportion of eligible patients who should be on PrEP created a challenge since there is no clear goal to measure progress against.<sup>12</sup> Although the U.S. Centers for Disease Control and Prevention sets a general standard of 50% of eligible patients being on PrEP, the reality is that,

even with appropriate counseling and offer of PrEP, the proportion of individuals ultimately accepting and initiating on PrEP is highly variable and often significantly lower depending on the population.<sup>2-7</sup> The PrEP Discussion SmartPhrase was used as a process measure, allowing for patient-level tracking of PrEP discussions and prescriptions to more completely identify improvement opportunities for HIV prevention efforts. The presence of EMR tools enabled PrEP to be integrated into standard clinic workflows in a measurable, and thus improvable, way. Without these efforts, there was concern that any advancements would be temporary and would ultimately return to preintervention levels.

## The Team

The working group of 10 members included primary care providers, nursing staff, and administrative staff who oversaw project design and implementation. In addition, support was provided by the HIV, Hepatitis, and Sexual Health (HSH) team at NYC H+H. This team is a clinical and administrative team that includes a clinical quality director, a program and administrative lead, data analysts, medical informatics leads, and a PrEP coordinator. Specifically, the HSH team designed and implemented the NYC H+H-wide EMR tools and resources and built custom reports to track intervention progress. The clinical quality lead on the HSH team, who also serves as an HIV provider at the pilot clinic site, led the intervention development, implementation, and evaluation.

## Metrics

Two main metrics were used to assess impact: utilization of the PrEP Discussion tool and proportion of patients initiating PrEP from June to December 2023 ([Table 1](#), [Fig. 5](#)).

Table 1 shows that, among eligible patients with a documented PrEP discussion, the overall uptake rate at the pilot primary care clinic was 15 of 76, or 20%, which is about triple the rate across the entire health system, which was 1207 of 17,724, or 6.8%. The data are from the period between June 1 and December 31, 2023. An HIV provider at the pilot clinic site led the development, implementation, and evaluation of the pilot intervention.

For all patients with a documented PrEP discussion, a structured chart review determined if the patient had accepted and been prescribed PrEP. EMR data on PrEP uptake for the pilot site and the average for the NYC H+H system were reviewed and compared for the time period when the pilot took place, that is, June 1 to December 31, 2023. PrEP uptake was defined as a PrEP prescription accepted among people with a documented PrEP discussion (intervention group) or accepted among those flagged as eligible in the EMR, based on STI laboratory and diagnosis data (NYC H+H systemwide comparison group), regardless of whether a PrEP discussion was documented. PrEP uptake was stratified by race and ethnicity, sex at birth, and gender identity.

During the 7-month intervention, PrEP uptake was significantly higher among patients who had a documented PrEP discussion at the pilot primary care site (15/76, 20%) compared with the NYC H+H systemwide results among PrEP-eligible individuals (1207/17,724, 6.8%;  $P<0.000$ ; [Fig. 5](#) and [Table 1](#)). Patients with a documented PrEP discussion had a threefold increase in the likelihood of

**Table 1. Preexposure Prophylaxis Uptake Rate at Pilot Site Greater than Systemwide Rate**

Patient Demographic	New York City Health and Hospitals n/N (%)	Pilot Site n/N (%)	P Value Chi-Square
Overall	1207/17,724 (6.8)	15/75 (20.0)	P<0.000
Race and ethnicity (self-reported)			
Black	233/5368 (4.3)	6/36 (17.0)	P=0.000337
Hispanic	628/9576 (6.6)	8/35 (23.0)	P=0.000
White	169/678 (24.9)		
Asian/Native Hawaiian/Pacific Islander	76/775 (9.7)	1/1 (100)	P=0.055217
Native American/Alaskan Native	0/23 (0.0)	0/1	
Two or more races	3/44 (6.8)		
Unknown/chooses not to disclose	25/236 (10.6)	0/2	
Something else	74/1024 (7.2)	0/1	
Sex			
Female	172/14,521 (1.2)	8/36 (22.0)	P<0.000
Male	1031/3195 (32.3)	7/39 (18.0)	P=0.057
Unknown	4/8 (50.0)		
Sexual orientation			
Straight	236/11,801 (2.0)	9/53 (17.0)	P<0.000
Missing	302/4331 (7.0)	6/22 (27.0)	P=0.000
Bisexual	107/406 (26.4)		
Lesbian/gay/queer	463/660 (70.2)		
Choose not to disclose	60/257 (23.3)		
Something else/don't know	39/269 (14.5)		

initiating PrEP; this was sustained for the subsequent 21 months after the intervention, starting June 1, 2023, through February 28, 2025. For the 12-month period ending February 28, 2025, the PrEP Discussion SmartPhrase was used 372 times for 319 unique patients. Among the patients with a documented PrEP discussion, PrEP uptake was 23.5% (75 of 319) compared with the NYC H+H PrEP uptake of 7.8% (1562 of 20,058 on data for the 12-month period through February 2025), demonstrating a sustainable increase in PrEP uptake among individuals with a documented PrEP discussion.

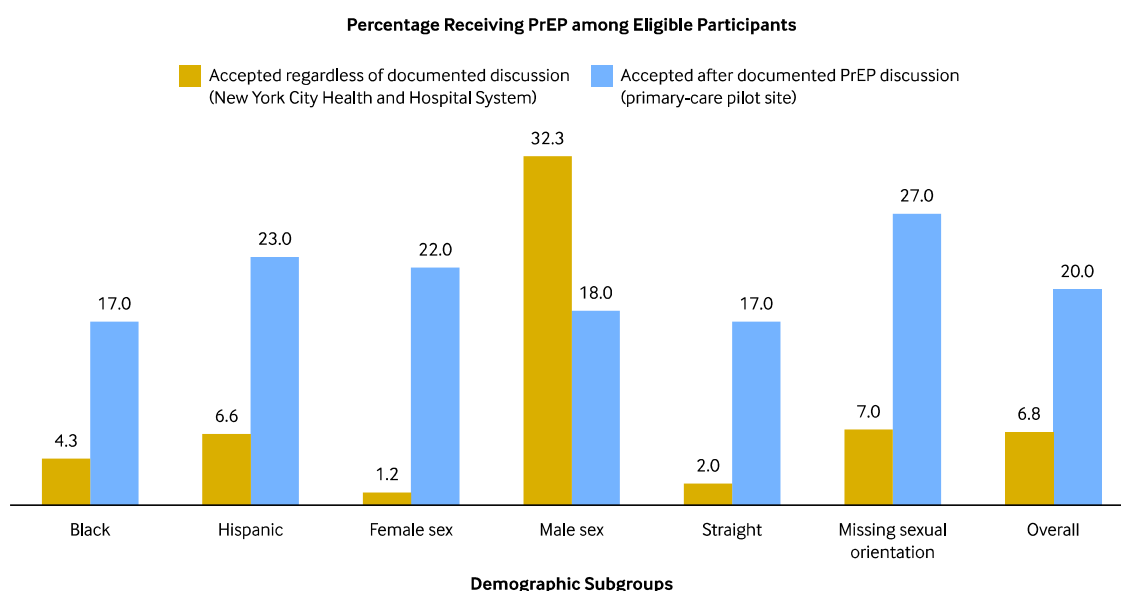
“Patients with a documented preexposure prophylaxis discussion had a threefold increase in the likelihood of initiating preexposure prophylaxis; this was sustained for the subsequent 21 months after the intervention, starting June 1, 2023, through February 28, 2025.”

The increased likelihood of PrEP uptake was observed to a similar magnitude across multiple subgroups, suggesting that having and documenting a PrEP discussion with a patient has an equitable impact on increasing access to PrEP. Notably, male patients did not have increased PrEP uptake after a documented discussion; however, this may be due to how the systemwide and intervention populations were defined. Systemwide PrEP uptake was assessed for the entire

FIGURE 5

## Preexposure Prophylaxis Uptake after Documented Discussion

This figure shows the variation in PrEP uptake between the New York City Health and Hospitals system and the single primary care pilot site, which was located in an area with identified above-average human immunodeficiency virus incidence. The metric for PrEP uptake was defined differently for each cohort. For the pilot site, uptake was defined as a prescription accepted by an eligible patient after a documented PrEP discussion. For the rest of the system (excluding the pilot site), uptake was defined as a prescription accepted by an eligible patient, regardless of whether a documented PrEP discussion occurred. The systemwide total of eligible patients was 17,724, while the total for the pilot site was 76. Overall, and across nearly all measured demographic categories, the pilot site recorded higher percentages of uptake than the systemwide results; the exception was among male patients, where 1031 of 3,195 (32.3%) eligible male patients systemwide accepted a PrEP prescription compared with just 7 of 39 (18%) eligible male patients at the pilot site. An understanding of this variation remains uncertain. The total for systemwide eligible patients includes the number of pilot site eligible patients.



PrEP = preexposure prophylaxis.

Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

PrEP-eligible population across NYC H+H and stratified by patient sociodemographics. For the intervention population, a chart review was conducted among all individuals with a documented PrEP discussion to determine if PrEP therapy had been initiated; therefore, the male individuals represented in the intervention group may not be representative of all male patients across NYC H+H. An alternative possibility is that male patients presented to care already having knowledge of and an opinion about PrEP and were less likely to be influenced by a discussion compared with other groups with lower PrEP awareness. In addition, the sample sizes are relatively small, and the data are not considered statistically significant.

A limitation of this study is that we were not able to measure the proportion of total encounters where a PrEP discussion occurred; however, we were able to measure the proportion of patients on PrEP among eligible patients for providers that documented PrEP discussions. Based on the most recent data, as of May 2025, among the 19 providers that have used the PrEP discussion SmartPhrase (which includes 6 from the pilot site and 13 other sites), 8.8% (548 of 6257 total patients) of the population cared for by those providers is eligible for PrEP and the proportion of those eligible who are on PrEP (the PrEP active rate) is 30.7% (168 patients). The NYC H+H systemwide data for all providers and patients as of May 2025 show that 5.7% (20,088) of patients are eligible for PrEP and 8.2% (1643) are on PrEP.

## Looking Ahead

For PrEP discussions and prescribing to continue to increase — as well as be sustained in the long term — recurring trainings and boosting messages are necessary to maintain momentum. The next steps include expanding the PrEP education and training on implementation tools to additional sites and other care settings — in particular at adolescent and women’s health clinics. Screening for PrEP eligibility and providing PrEP services will ultimately need to be incorporated into systemwide standard workflows and procedures, as well as included in the onboarding process for new staff, in order to expand and sustain this effort.

We are in the process of adding a PrEP discussion topic within the health maintenance section in the EMR, and, once this is rolled out, PrEP discussions and PrEP prescribing will be tracked on a larger scale to determine if the results seen in this pilot persist. The health maintenance section is a structured place in the EMR where preventive care and health maintenance guidelines are translated into individual health maintenance topics that can be addressed by the clinician. By adding a PrEP discussion topic, the importance of offering eligible patients PrEP will be highlighted within an existing workflow already utilized by ambulatory care providers. Ultimately, the impact of expanded PrEP access on HIV incidence in the NYC H+H health system will also need to be evaluated.

## Where to Start

For those considering such an initiative, we suggest the following:

- Identify a working group within the care setting. Include different individuals in the care team, as well as leadership, and those with the ability to coordinate resources. A PrEP subject matter expert is useful to facilitate training efforts, but it can be someone from outside the care setting.
- Undertake a listening tour with staff and patients to (1) identify current attitudes, knowledge, and skills related to PrEP and basic sexual health care; (2) identify barriers and strong biases related to PrEP to understand what messaging and resources are needed; (3) build interest and ownership in making the related changes; and (4) identify effective resolutions to implementation barriers.



- Identify where PrEP can best fit into existing clinical workflows (e.g., at the time of callback for a positive STI result) and collaboratively review and modify workflows to provide a structured and standard opportunity for PrEP care.
- Develop and implement a training plan for staff and a communication plan for patients and staff to directly address the findings of the listening session.
- Build tools and resources with a focus on efficient and supportive PrEP care, such as order sets within the EMR, to address implementation concerns.
- Establish a monitoring and evaluation process to track progress and keep parties informed on opportunities where increased support or resources are needed.
- Keep all parties informed and engaged in an effective way — such as aligning PrEP care with institutional improvement efforts, including it in existing feedback systems, and providing periodic boosting messages and reinforcement.
- Celebrate successes.

**Emma Kaplan-Lewis, MD**

Clinical Quality Director of HIV, Hepatitis, and Sexual Health, Office of Ambulatory Care and Population Health, New York City Health and Hospitals, New York, NY, USA

Associate Clinical Professor, Medicine, Infectious Diseases, Icahn School of Medicine at Mount Sinai, New York, NY, USA

**Eunice Casey, MPH, MIA**

Senior Director of HIV, Hepatitis, and Sexual Health, Office of Ambulatory Care and Population Health, New York City Health and Hospitals, New York, NY, USA

**Chika Onyia, FNP, DNP**

Nurse Practitioner, Family Health, Adult Medicine/Primary Care, New York City Health and Hospitals/Gotham Health, East New York, New York, NY, USA

**Komal Bajaj, MD, MS-HPEd**

Chief Quality Officer, Jacobi/North Central Bronx, New York City Health and Hospitals, New York, NY, USA

Medical Director of Sustainability, New York City Health and Hospitals, New York, NY, USA

Professor of Obstetrics and Gynecology, Albert Einstein College of Medicine, New York, NY, USA

**Nichola Davis, MD, MS**

Vice President and Chief Population Health Officer, New York City Health and Hospitals, New York, NY, USA

Associate Editor, *NEJM Catalyst Innovations in Care Delivery*

Emma Kaplan-Lewis can be contacted at [emma.kaplanlewis@nychhc.org](mailto:emma.kaplanlewis@nychhc.org).

Disclosures: Author disclosures are available at [catalyst.nejm.org](https://catalyst.nejm.org).

We thank the Gotham Health/East New York clinical team, leadership, and patients; regional New York City Health and Hospitals Gotham leadership; the Hepatitis and Sexual Health team; Dr. Meredith Lynn; the Greater New York Hospital Association/United Hospital Fund; and Clinical Quality Fellowship Program co-fellows and faculty. Health system leaders, including a Chief Quality Officer, Vice President/Chief Population Health Officer, and Assistant Vice President of Chronic Diseases and Prevention, provided guidance and support for this initiative.

## References

1. Chou R, Spencer H, Bougatsos C, Blazina I, Ahmed A, Selph S. Preexposure prophylaxis for the prevention of HIV. Updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA* 2023;330:746-763. <https://jamanetwork.com/journals/jama/fullarticle/2808515>. <https://doi.org/10.1001/jama.2023.9865>
2. U.S. Public Health Service. Preexposure prophylaxis for the prevention of HIV infection in the United States — 2021 update: a clinical practice guideline United States. Atlanta, GA: Centers for Disease Control and Prevention, 2021. <https://stacks.cdc.gov/view/cdc/112360>.
3. America's HIV epidemic analysis dashboard. Updated January 20, 2025. <https://ahead.hiv.gov>.
4. Centers for Disease Control and Prevention. HIV Surveillance Data Tables: core indicators for monitoring the ending the HIV epidemic initiative: national HIV surveillance system data reported through June 2024. Atlanta, GA: Centers for Disease Control and Prevention, 2024. <https://stacks.cdc.gov/view/cdc/162350>.
5. Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2018–2022. Atlanta, GA: Centers for Disease Control and Prevention, 2024. <https://www.cdc.gov/hiv-data/nhss/estimated-hiv-incidence-and-prevalence.html>.
6. AIDSvu. Deeper look: PrEP. Atlanta, GA: Emory University, Rollins School of Public Health. 2024. <https://aidsvu.org/resources/deeper-look-prep/>.
7. Mann LM, Zhu W, Huang YLA, Kourtis AP, Fanfair RN, Hoover KW. Trends in oral and injectable HIV preexposure prophylaxis prescriptions in the US, 2013–2023. *JAMA* 2024;332:1580–1583. <https://jamanetwork.com/journals/jama/fullarticle/2825028>. <https://doi.org/10.1001/jama.2024.21493>
8. Sell J, Chen R, Huber C, Parascando J, Nunez J. Primary care provider HIV PrEP knowledge, attitudes, and prescribing habits: a cross-sectional survey of late adopters in rural and suburban practice. *J Prim Care Community Health* 2023;14:21501319221147254. <https://journals.sagepub.com/doi/10.1177/21501319221147254>. <https://doi.org/10.1177/21501319221147254>
9. Centers for Disease Control and Prevention. Stigma and HIV. April 16, 2024. <https://www.cdc.gov/hiv/health-equity/index.html>.
10. Lee SS, Petersen E. Overcoming “purview paradox” to make way for the effective implementation of PrEP in preventing HIV transmission. *Int J Infect Dis* 2018;77:105–106. [https://www.ijidonline.com/article/S1201-9712\(18\)34566-1/fulltext](https://www.ijidonline.com/article/S1201-9712(18)34566-1/fulltext). <https://doi.org/10.1016/j.ijid.2018.10.018>
11. Valente PK, Rusley JC, Operario D, Biello KB. Readiness to provide oral and injectable PrEP for sexual and gender minority youth among healthcare providers and clinics in the U.S. Northeast. *J Adolesc*

- Health 2023;72:722-729. [https://www.jahonline.org/article/S1054-139X\(22\)01025-4/fulltext](https://www.jahonline.org/article/S1054-139X(22)01025-4/fulltext). <https://doi.org/10.1016/j.jadohealth.2022.11.246>
12. Storholm ED, Siconolfi D, Huang W, et al. Project SLIP: implementation of a PrEP screening and linkage intervention in primary care. *AIDS Behav* 2021;25:2348-2357. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8556139/>. <https://doi.org/10.1007/s10461-021-03197-w>
  13. Casey E, Kaplan-Lewis E, Gala K, Lakew R. Successful integration of HIV PrEP in primary care and women's health clinical practice: a model for implementation. *Viruses* 2023;15:1365. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10301619/>. <https://doi.org/10.3390/v15061365>
  14. Zhu W, Huang YA, Kourtis AP, Hoover KW. Trends in the number and characteristics of HIV pre-exposure prophylaxis providers in the United States, 2014-2019. *J Acquir Immune Defic Syndr* 2021;88:282-289. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8568068/>. <https://doi.org/10.1097/QAI.0000000000002774>
  15. Edelman EJ, Moore BA, Calabrese SK, et al. Preferences for implementation of HIV pre-exposure prophylaxis (PrEP): results from a survey of primary care providers. *Prev Med Rep* 2019;17:101012. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6926349/>. <https://doi.org/10.1016/j.pmedr.2019.101012>
  16. Hsiang WR, Lukasiewicz A, Gentry M, et al. Medicaid patients have greater difficulty scheduling health care appointments compared with private insurance patients: a meta-analysis. *Inquiry* 2019;56:46958019838118. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6452575/>. <https://doi.org/10.1177/0046958019838118>
  17. Harkness A, Bainter SA, Mendez NA, et al. Factors associated with barriers to engagement in HIV-prevention care among sexual minority men. *J Behav Med* 2021;44:784-793. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8981556/>. <https://doi.org/10.1007/s10865-021-00230-0>
  18. Golub SA. PrEP stigma: implicit and explicit drivers of disparity. *Curr HIV/AIDS Rep* 2018;15:190-197. <https://pmc.ncbi.nlm.nih.gov/articles/PMC5884731/>. <https://doi.org/10.1007/s11904-018-0385-0>
  19. Goymer H, Pratt M, Burgan KW, et al. P-505. Integrating PrEP services into a gynecology clinic in Alabama: a qualitative analysis of key determinants. *Open Forum Infect Dis* 2025;12:ofae631.704. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11779233/>. <https://doi.org/10.1093/ofid/ofae631.704>
  20. O'Byrne P, Orsen L, Haines M. Active-offer nurse-led PrEP (PrEP-RN) referrals: analysis of uptake rates and reasons for declining. *AIDS Behav* 2020;24:1281-1289. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7156352/>. <https://doi.org/10.1007/s10461-019-02745-9>
  21. Farayar KA, Braun R, Ancona RM, Freiermuth C, Lyons MS. Acceptance of HIV pre-exposure prophylaxis (PrEP) referral among a sample of PrEP-eligible emergency department patients. *Am J Emerg Med* 2022;60:152-155. <https://www.sciencedirect.com/science/article/abs/pii/S0735675722004983>. <https://doi.org/10.1016/j.ajem.2022.07.055>
  22. Reisner SL, Moore CS, Asquith A, Pardee DJ, Mayer KH. The pre-exposure prophylaxis cascade in at-risk transgender men who have sex with men in the United States. *LGBT Health* 2021;8:116-124. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8195872/>. <https://doi.org/10.1089/lgbt.2020.0232>
  23. Bonner R, Stewart J, Upadhyay A, Bruce RD, Taylor JL. A primary care intervention to increase HIV pre-exposure prophylaxis (PrEP) uptake in patients with syphilis. *J Int Assoc Provid AIDS Care*

2022;21:23259582211073393. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8753072/>. <https://doi.org/10.1177/23259582211073393>

24. Stewart J, Ruiz-Mercado G, Sperring H, Pierre CM, Assoumou SA, Taylor JL. Addressing unmet PrEP needs in women: impact of a laboratory-driven protocol at an urban essential hospital. *Open Forum Infect Dis* 2024;11:ofae056. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10921387/>. <https://doi.org/10.1093/ofid/ofae056>