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### Authors

Ard, Kevin L  
Uzoeghelu, Ugochukwu  
Bruno, Jack  
[et al.](#)

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## Readiness of US Federally Qualified Health Centers to Provide HIV Pre-exposure Prophylaxis

Kevin L. Ard,<sup>1,2,3</sup> Ugochukwu Uzoegheli,<sup>3</sup> Jack Bruno,<sup>2</sup> Cei Lambert,<sup>2</sup> Kenneth H. Mayer,<sup>2,3,4</sup> John A. Davis,<sup>5</sup> and Alex S. Keuroghlian<sup>2,3,6</sup>

<sup>1</sup>Division of Infectious Diseases, Massachusetts General Hospital, Boston, Massachusetts, USA, <sup>2</sup>The Fenway Institute, Boston, Massachusetts, USA, <sup>3</sup>Harvard Medical School, Boston, Massachusetts, USA, <sup>4</sup>Division of Infectious Diseases, Department of Medicine, Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA, <sup>5</sup>University of California, San Francisco School of Medicine, San Francisco, California, USA, and <sup>6</sup>Department of Psychiatry, Massachusetts General Hospital, Boston, Massachusetts, USA

We report the results of a survey on HIV pre-exposure prophylaxis (PrEP) perceptions, capacity, and barriers at federally qualified health centers (FQHCs) in high-HIV burden jurisdictions in the United States. Health care workers at FQHCs identified multiple barriers to, and strategies for, improving PrEP implementation.

**Keywords.** health center; HIV; LGBTQ; PrEP; prevention.

The United States government's Ending the HIV/AIDS Epidemic (EHE) plan aims to reduce new HIV infections by 90% in 10 years, with a focus on 57 jurisdictions accounting for a majority of new HIV infections [1]. One of the plan's pillars is HIV prevention through evidence-based interventions such as pre-exposure prophylaxis (PrEP). Crucial to this pillar's success is PrEP implementation across federally qualified health centers (FQHCs). FQHCs provide primary care for >30 million people, most of whom are either uninsured or have public health insurance, identify as members of racial and ethnic minority groups, and/or have incomes at or below the federal poverty level [2].

Although many patients at FQHCs may benefit from PrEP, a study conducted between 2015 and 2017 found that only 19% of FQHCs in metropolitan areas offered PrEP [3]. To expand PrEP at FQHCs, the US Health Resources and Services Administration (HRSA) Bureau of Primary Health Care (BPHC) awarded >\$50 million to FQHCs in high-HIV burden jurisdictions in 2020 and tasked the BPHC-funded National LGBTQIA+ Health Education Center (the Education Center:

www.lgbtqiahealtheducation.org) at the Fenway Institute with providing PrEP training and technical assistance to awardees. From April through December 2020, the Education Center delivered 10 single-session virtual trainings for FQHCs in different EHE priority jurisdictions. Participants completed readiness assessments, with tailored versions for staff and leadership, gauging PrEP capabilities and perceived barriers.

We analyzed the results of these readiness assessments to cross-sectionally characterize PrEP capacity, perceptions, and barriers at FQHCs in EHE priority jurisdictions. These findings will help inform further efforts to improve PrEP access.

### METHODS

We developed a PrEP readiness assessment, adapted from a readiness assessment for serving sexual and gender minority (SGM) populations in FQHCs [4], with distinct versions for staff members and leadership (Supplementary Figures 1 and 2). Both versions assessed perceptions about inclusivity for populations at risk for HIV, current HIV testing and prevention capacity, barriers to PrEP provision, and best uses of additional resources. The staff and leadership surveys were similar, except the staff version included questions about continuing medical education and clinical practices. The Education Center recruited participants through BPHC-funded primary care associations in EHE priority jurisdictions. Registered participants were emailed a link to an anonymous online assessment; respondents could choose the staff or leadership assessment, based upon their role. We allotted time at the start of the trainings for participants to complete the assessment if they had not done so beforehand to ensure that the assessment documented baseline responses. The assessment was designed to take less than 10 minutes. A free-text question invited participants to specify their location; responses with sufficient detail were assigned to Census regions and EHE priority jurisdictions [5]. We compared categorical variables, including responses between staff and leadership, using chi-square tests of proportions. We assumed leadership best knew the array of HIV prevention services at their FQHC, so only leadership responses were used to estimate service capacity. The project was deemed not to be human subjects research by the Fenway Institute's Institutional Review Board because individual identifiers were not collected and the work was considered quality improvement.

### RESULTS

Readiness assessments were completed by 364 of 412 training participants (88%); 267 identified as staff members and 97 as leaders. Respondents were affiliated with FQHCs in 15 states and the District of Columbia, encompassing 29 of 57 (51%)

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Correspondence: Kevin L. Ard, MD, MPH, 55 Fruit Street, Boston, MA 02114 (kard@mgh.harvard.edu).

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EHE priority jurisdictions. Of the 364 respondents, 134 (37%) were located in the West, 46 (13%) in the South, 25 (7%) in the Midwest, and 7 (2%) in the Northeast; 152 (42%) did not provide sufficient information to assign a geographic region.

Of staff respondents, 40% were clinical providers (MD, DO, NP, or PA) and 10% were nurses; the remainder included case managers, patient navigators, and pharmacists. Almost 90% of all respondents agreed or strongly agreed that HIV was a problem for the community their FQHC serves, and 91% agreed or strongly agreed that preventing new HIV infections was a priority, with no statistically significant differences between staff and leaders. Of staff respondents, 60%, 78%, and 58% reported training in the past 5 years on PrEP, caring for SGM populations, and caring for people who inject drugs, respectively.

More than 80% of all respondents agreed or strongly agreed that their organization was welcoming to overlapping populations disproportionately affected by HIV (Table 1). There were no statistically significant differences between staff and leaders in perceptions of a welcoming atmosphere. Respondents were significantly less likely to perceive their FQHCs as welcoming for gay and bisexual men ( $P = .04$ ), people who inject drugs ( $P < .01$ ), transgender and gender diverse people ( $P < .01$ ), and people who engage in sex work ( $P < .01$ ) than for Black/African American people.

HIV testing was the most commonly reported service (91% of leaders), while navigation for PrEP-associated benefits was least common (51%) (Supplementary Table 1). PrEP prescribing was reported by 72% of FQHC leaders. The most common context for PrEP provision was primary care, reported by 58% of leaders, followed by a sexually transmitted infection (STI) clinic, reported by 30%. The most common method of conveying the availability of PrEP to patients was by a provider in the clinical encounter, reported by 72% of leaders. Among staff who answered questions about history taking, 78% and 52% “often” elicited histories of sexual behavior and drug use, respectively.

**Table 1. Participants Agreeing or Strongly Agreeing That Their Organization Was Welcoming to Key Populations Affected by HIV (n = 364)**

Population	No. (%) Agreeing/Strongly Agreeing That the Organization Was Welcoming
Black/African American people	347 (95)
Hispanic/Latinx people	343 (94)
Gay and bisexual men	333 (91) <sup>a</sup>
People who inject drugs	323 (89) <sup>b</sup>
Transgender and gender diverse people	318 (87) <sup>b</sup>
People who engage in sex work	306 (84) <sup>b</sup>

<sup>a</sup> $P < .04$  or

<sup>b</sup> $P < .01$  compared with Black/African American.

Respondents identified a range of patient-, provider-, and systems-level barriers to PrEP (Supplementary Tables 2 and 3). The most commonly identified major barrier by staff was lack of outreach/engagement for populations at risk for HIV; the most commonly identified major barrier by leaders was patients’ willingness to take PrEP. Leaders were significantly more likely than staff to perceive patients’ unwillingness to take PrEP and providers’ lack of knowledge about PrEP as major barriers. If more resources were available, 56% of staff and 64% of leaders thought establishing a tele-PrEP program would represent the best use of those resources. About two-thirds (64%) of leaders prioritized training about inclusive environments for people at high risk for HIV (Table 2). Hiring additional clinical staff members to prescribe PrEP was the lowest priority for both staff and leaders.

## DISCUSSION

To achieve the EHE plan’s goals, PrEP must be scaled up [1], and FQHCs must be engaged, as they provide primary care for people at risk for HIV [2]. We report the results of a PrEP readiness assessment performed with a professionally and geographically diverse sample of FQHC employees, primarily located in EHE priority jurisdictions, who participated in a virtual PrEP training. To our knowledge, this is the most extensive evaluation of PrEP readiness, perceptions, and barriers at FQHCs to date.

Overall, respondents considered HIV prevention a priority, and nearly three-quarters reported that their organizations provided PrEP. While this survey is not a direct measure of PrEP capacity, it suggests improvement over the 19% of FQHCs offering PrEP in an earlier study [3] and parallels increases in PrEP users and prescribers at urban FQHCs in a more recent analysis [6].

Most participants perceived their organizations as welcoming for populations bearing an increased burden of HIV infection. Larger proportions of respondents perceived their FQHCs as inclusive for Black/African American and Hispanic/Latinx people than they did for SGM people and those who inject drugs. FQHCs have traditionally provided care to racial and ethnic minority communities, and this is a strength in the realm of HIV prevention, as HIV disproportionately affects Black/African American and Hispanic/Latinx people [7]. Respondents were significantly less likely to perceive their FQHCs as welcoming for people who inject drugs, sex workers, and SGM people, and more than half of participants selected training in inclusive environments as a priority for additional resources, with leaders being significantly more likely than staff to prioritize this. Ensuring that FQHCs welcome all people at risk for HIV will be critical to achieving EHE targets.

Staff and leaders emphasized different barriers to PrEP, which may speak to their different experiences, perceptions,

**Table 2. Best Uses of Additional Resources to Support PrEP, by Staff and Leader<sup>a</sup>**

Potential Use	Staff (n = 267), No. (%)	Leaders (n = 97), No. (%)	PValue
Hiring a physician to provide PrEP	51 (19)	13 (14)	.21
Hiring a nurse practitioner to provide PrEP	62 (23)	20 (21)	.60
Hiring a physician's assistant to provide PrEP	41 (15)	15 (15)	.98
Hiring a clinical pharmacist to provide PrEP	37 (14)	23 (24)	.03
Hiring a nonclinical staff member to help patients with adherence	125 (47)	43 (44)	.67
Hiring a nonclinical staff member for benefits navigation	134 (50)	42 (43)	.24
Dispensing same-day PrEP	106 (40)	46 (47)	.19
Professional development/CME for clinicians	130 (49)	57 (59)	.09
Establishing a tele-PrEP program	150 (56)	62 (64)	.19
Training and technical assistance for more welcoming/inclusive environments	128 (48)	62 (64)	.01
Participating in community events to raise awareness	148 (55)	58 (60)	.46
Providing PrEP at off-site locations	111 (44)	44 (45)	.52
Establishing a syringe service program	84 (31)	27 (28)	.51
Enhancing the electronic medical record to facilitate PrEP	137 (51)	44 (45)	.32

Abbreviations: CME, continuing medical education; PrEP, pre-exposure prophylaxis.

<sup>a</sup>Respondents could select multiple options.

and roles. Both staff and leaders identified a telemedicine program for PrEP as a priority for additional HIV prevention resources. The COVID-19 pandemic, which limited in-person care, may have fostered support for telemedicine. Even prior to the pandemic, however, telemedicine emerged as a promising model to increase PrEP access [8]. Maintaining and expanding telemedicine for PrEP even after the COVID-19 pandemic will be key for PrEP scale-up in the United States.

A limitation of our study is the anonymous nature of surveys, such that we are unable to analyze responses by demographic or geographic variables. However, anonymity may also have increased candor and response rates. A second limitation is that the results may be biased by different numbers of participants from different health centers. The readiness assessments were performed during the COVID-19 pandemic; thus, PrEP-related perceptions, capacity, and barriers may not apply to nonpandemic times. In addition, all participants opted to participate in a PrEP training and were primarily located in high-HIV burden EHE priority jurisdictions; thus, they may not represent FQHC staff across the country. Finally, the cross-sectional nature of our survey precluded measurement of changes resulting from the training.

FQHCs are an integral component of the United States health care system and crucial to HIV prevention and the larger EHE strategy. Among FQHC employees in EHE jurisdictions, commitment to preventing HIV is high. Although multiple barriers to PrEP exist, FQHC staff and leaders identified numerous ways to improve PrEP provision. In particular, expanding

telemedicine and ensuring that FQHCs are welcoming for all populations may facilitate HIV prevention.

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**Patient consent.** This study did not involve patients and did not include aspects necessitating patient consent. The study was deemed not human subjects research by the Fenway Institute's Institutional Review Board.

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