



Published in final edited form as:

Eval Program Plann. 2022 February ; 90: 101989. doi:10.1016/j.evalprogplan.2021.101989.

‘PrEP’ing Memphis: A qualitative process evaluation of peer navigation support

Latrice C. Pichon^{a,*}, Michelle Teti^b, Joshua E. Betts^{c,d}, Meredith Brantley^e

^aThe University of Memphis School of Public Health, Division of Social and Behavioral Sciences, 3825 Desoto Avenue, 209 Robison Hall, Memphis, TN 38152, USA

^bThe University of Missouri Department of Public Health, 512 Clark Hall Columbia, MO 65211, USA

^cICF, 2635 Century Center Parkway, Suite 1000, Atlanta, GA 30345, USA

^dCDC, Atlanta, GA, USA

^eTennessee Department of Health, HIV/STD/Viral Hepatitis, 710 James Robertson Pkwy, Nashville, TN 37243, USA

Abstract

Background: HIV PrEP (pre-exposure prophylaxis) navigation comprises intervention strategies used to improve PrEP uptake via education, linkage, and follow-up/ongoing engagement.

During 2016–2019, the Tennessee Department of Health (TDH) implemented a CDC-funded demonstration project (“Project PrIDE”) focused on PrEP navigation in Memphis community-based organizations (CBOs) and the Shelby County Health Department (HD). A process evaluation was conducted to determine facilitators and barriers to the implementation of the Memphis-based Project PrIDE PrEP navigation activities.

Methods: A total of fourteen in-depth qualitative interviews were conducted, with nine PrEP navigators in evaluation year 1 (2018) and five of the original navigators in evaluation year 2 (2019), to understand the navigation processes using thematic analysis.

Results: Facilitators of PrEP navigation included accessing clients at testing events, accompanying clients to first appointments, rapport building with patient and clinic staff, and maintaining consistent engagement with clients. Factors impeding PrEP navigation included difficulties assessing client readiness, tracking client navigation status, and stigmatizing clinic and social experiences for clients.

*Corresponding author. lcpichon@memphis.edu (L.C. Pichon).

Author statement

Latrice Pichon: Conceptualization, Writing- Original draft preparation, Investigation, Formal analysis.

Michelle Teti: Methodology, Writing- Reviewing and Editing, Formal analysis.

Joshua Betts: Writing- Reviewing and Editing.

Meredith Brantley: Methodology, Writing- Reviewing and Editing, Supervision, Funding acquisition.

Disclaimer

The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Declaration of Competing Interest

The authors report no declarations of interest.

Conclusions and lessons learned: Findings have informed the scale-up of PrEP navigation implementation statewide, along with priority setting and resource allocation for the local Ending the HIV Epidemic (EHE) initiative in Memphis.

Keywords

PrEP navigation; Memphis; MSM; HIV prevention; Process evaluation

1. Introduction

The Memphis Metropolitan Statistical Area (MSA) has disproportionately high rates of HIV compared to other MSAs in the United States. The MSA includes eight counties across three adjoining states: three in Tennessee (Shelby, Fayette, and Tipton), four in Mississippi (DeSoto, Tunica, Tate, and Marshall), and one in Arkansas (Crittenden). The largest proportion of the Memphis MSA population resides in Shelby County (70 %), and the remaining counties are mostly rural. In 2018, non-Hispanic Blacks constituted 46 % of the Memphis MSA population yet accounted for 84 % of individuals newly diagnosed with HIV (N = 363) and 84 % of persons living with HIV (n = 7622) (Tennessee Department of Health, 2020). That same year, the Memphis MSA ranked 4th highest for rate of new HIV diagnoses among 381 MSAs nationally. Despite advances in treatment, availability of rapid HIV testing, and the increase in evidence-based prevention interventions, disparities in HIV persist, highlighting the need for innovative approaches for HIV prevention in this population.

Memphis was late to adopt pre-exposure prophylaxis (PrEP), a powerful HIV prevention tool which, to date, has been underutilized in Memphis. In July 2012, PrEP was approved by the U.S. Food and Drug Administration (FDA) as a safe and effective method for reducing risk of HIV infection (FDA, 2012; Grant et al., 2010). The 2017 National HIV Behavioral Surveillance Memphis survey among men who have sex with men (MSM) found that 77 % of young adult MSM had heard of PrEP, 27 % had talked to their doctor about PrEP, and 19 % had ever used PrEP (National HIV behavioral surveillance, 2021). Access to PrEP in the South has proved inequitable across different groups, particularly for Black and Latinx individuals, gay and bisexual men, and transgender persons. Lack of cultural sensitivity, racial and LGBTQ-related discrimination, and conservative religious influences are documented barriers to equitable and affirming care (Cahill et al., 2017; Maulsby et al., 2013). Faith, religion, spirituality, and the church play a principal role in the social fabric of the Black community living in the Bible Belt of the South, where 64 % are members of Historically Black Churches (Pew, 2009). These dynamics are relevant in Memphis, where many medical and social services providers, particularly those serving the un- and under-insured, are affiliated with faith-based institutions.

In 2015, informed by the updated National HIV/AIDS Strategy (United States Department of Health and Human Services, 2021), the Tennessee Department of Health (TDH) expanded its HIV prevention program to include PrEP services (Tennessee HIV/AIDS strategy: An integrated HIV care and prevention plan, 2016). These efforts focused on priority populations identified via statewide surveillance data as having a disproportionately high

burden of HIV (Black MSM, adolescents and young adults aged 13–24 years, and Black transgender women).

TDH identified PrEP navigation as a strategy to circumvent complex individual, community, health care system, and structural barriers such as racism, homophobia, and transphobia surrounding the lives of MSM/transgender persons. During the Care and Prevention in the United States (CAPUS) demonstration project, navigation was found to be a successful intervention to re-engage persons in Tennessee with HIV who were not in care (Mulatu et al., 2018). As those in need of PrEP services experience similar social and structural barriers to health services as those with HIV, TDH applied for and was awarded funding to support a four-year (2016–2019) demonstration project, Project PrIDE, to implement and evaluate PrEP navigation in Memphis, Tennessee.

The Project PrIDE demonstration project began in June 2016. Four CBOs were selected to provide PrEP navigation, given their proven ability to reach priority populations, offer non-traditional hours of operation, and provide LGBTQ+ youth-friendly services. The local HD was also selected as an implementing partner, given access to and volume of clients with potential PrEP needs seeking care in the sexually transmitted infection (STI) clinic. CBOs employed community outreach efforts; in contrast, the HD recruited clinic patients with a recent diagnosis of a bacterial sexually transmitted infection (i.e., gonorrhea, chlamydia, or syphilis). The HD and CBOs each employed one to two navigators, which varied during project implementation. All PrEP navigators attended a mandatory TDH PrEP navigation training (1.5 days) within three months of the program start date. Navigators also completed TDH I Know HIV counseling and testing training (13 – 15 h) and received ongoing PrEP navigation technical assistance on strategies such as developing and implementing client action plans and motivational interviewing from TDH and AIDS Project Los Angeles (APLA).

Navigation is an intervention modeled after existing evidence-informed interventions where client navigators provide individualized support for clients to access medical and social services, promote re-engagement in care, maintain medication adherence, and keep track of medical appointments (Sweeney et al., 2018; Centers for Disease Control and Prevention, 2020; 2021). PrEP navigation goals under Project PrIDE were set by TDH based on previous experiences with HIV care re-engagement and adaptations of published PrEP continuums of care at the time of project initiation (i.e., identify/engage priority clients, offer PrEP education and screening, refer to provider, prescribe PrEP medication) (Mulatu et al., 2018). Specifically, navigators identified and engaged HIV negative Black MSM and Black transgender women who might benefit from PrEP, assisted them in navigating the healthcare system to ease access to PrEP services, and ultimately helped them maintain HIV negative status through timely provision of those services. Navigators were expected to ensure clients received their medication within a week to no more than three weeks from the time of the initial client encounter. No standard script or protocol was provided to allow for navigator autonomy and tailored approaches for each client encounter.

Between June 1, 2016 and June 30, 2019, navigators identified 2777 clients as candidates for PrEP. The majority of clients served by PrEP navigators identified as Black/African

American (88 %), cisgender males (79 %), MSM (63 %), and being under the age of 34 years (81 %). In 2017, a Memphis/Shelby County-based PrEP navigation demonstration project reported that among 724 PrEP-eligible individuals, 42.1 % accepted the referral to a PrEP provider, 22.2 % were linked, and 17.4 % were prescribed PrEP (Brantley et al., 2019). PrEP uptake varied by age, race, and HIV transmission risk, with significant racial and other disparities observed across Tennessee.

Because this was the first time PrEP navigation was formally implemented in Tennessee, one goal of Project PrIDE was to formally define the PrEP navigation model while documenting successes and challenges learned throughout the project, to help to inform replication and expansion throughout Tennessee. The purpose of this paper is to report findings from a process evaluation which sought to define PrEP navigation best practices and identify facilitating factors and barriers to successfully navigating clients to PrEP.

2. Methods

2.1. Data collection methods

In-depth interviews were conducted by a community-based participatory researcher from the University of Memphis School of Public Health (first author) at a convenient time and location in the community. In 2018, nine PrEP navigators (two HD-affiliated; seven CBO-affiliated) were interviewed; in 2019, five of the original navigators (one HD-affiliated; four CBO-affiliated) were interviewed again. The study design allowed for navigators newly hired for the project to settle into their roles and share experiences as new navigators and to later reflect on their experiences as veteran navigators. PrEP navigators were each emailed an invitation to participate in a one-hour in-person interview. Written consent was obtained prior to the start of the interview being audio-recorded. All interviews took place in Memphis, TN during February–March 2018 and July–August 2019.

2.2. Qualitative interview guide

A semi-structured interview discussion guide was developed by TDH and vetted by a community advisory board to improve PrEP navigation. The guide consisted of ten semi-structured questions to gather information about definitions of key terms utilized by navigators (e.g., navigation, linkage, adherence). The interview explored a range of topics including navigator training needs, context on essential steps to implement navigation, and perceptions of successful and unsuccessful PrEP navigation. Navigators were also asked about challenges to PrEP navigation, linkage and adherence, and for suggestions to make navigation more successful. Discussion guides were modified slightly for Year 2, to capture the extent to which navigation strategies evolved throughout the project as navigators became more comfortable in their roles, and in response to any changes to the local healthcare landscape (i.e., PrEP clinic closures). The questions ascertaining the main navigation activities performed, successful/unsuccessful navigation, and facilitating factors of and challenges to linkage and adherence were utilized to glean the overall facilitators and barriers of PrEP navigation presented in this article (Table 1).

2.3. Qualitative data analysis and coding

Navigator interviews were conducted and audio-recorded by the lead author, transcribed verbatim by a professional transcription company, and verified as accurate by the lead author. Personal identifiable information (e.g., names) was removed from the transcripts by the lead author to maintain respondent privacy. Data were analyzed using thematic analysis (Guest et al., 2012) to determine key themes. Analysis steps included initial, general coding followed by more specific coding, producing analytical memos, and producing organizational matrices and reports that organized and summarized data. The coders (co-authors LP and MT) reviewed the transcripts to conduct initial coding of the data. The goal of the first round of coding was to identify all possible themes in the data. Coders assigned descriptive code labels to common words, phrases, and topics such as “testing,” “education,” “linkage,” “engagement,” and “follow-up.” Coders reviewed the data separately and then met weekly to discuss and compare their initial descriptive lists. Next, the coders reviewed the data in more detail, and sorted, collapsed, or expanded codes, and resolved disagreements to reach consensus. Coders created a codebook that identified and defined the themes and then, using the codebook, independently matched text excerpts to codes. To ensure that both coders applied the coding frame consistently, they met after coding each interview to resolve discrepancies and reach consensus.

3. Results

Six of the nine navigators interviewed identified as part of at least one priority population (Black MSM or Black transgender women), eight were under the age of 35 years, and six had at least a bachelor’s degree. All navigators had served full time in their role as navigator for at least two years. Average annual salary for the position was approximately equal to the median for Memphis residents (\$51,328) (Table 2).

3.1. PrEP navigation defined and expectations from navigators

In Project PrIDE, navigation was ultimately defined by participants as a process of interacting with and getting to know the client personally, educating the client one-on-one about PrEP and how it works, guiding the client through the process to obtain the medication, and following up. Navigators commonly reported taking on several roles, including peer educator and supporter, HIV tester and counselor, appointment scheduler and transporter, and case manager, with the end goal of empowering clients to develop autonomy over their sexual health. After an iterative evaluation of transcripts describing participants’ experiences delivering PrEP navigation, emergent themes related to facilitators (Table 3) and barriers (Table 4) to PrEP are summarized below.

3.2. Facilitators of PrEP navigation

3.2.1. Accessing potential clients at appropriate venues—CBO navigators often hosted community-based HIV testing or agency-sponsored PrEP events to bring awareness about PrEP to members of the priority population. During these events, CBO navigators distributed business cards with personal contact information to increase the likelihood of potential clients either remaining in communication with them or visiting the CBO for free HIV/STI testing in the future. They also sent mass group text messages, invitations via

social media channels, and used word of mouth and peer recruitment as opportunities first to introduce the agency to potential clients and second to describe the services offered at CBOs such as testing and PrEP navigation. HD navigators accessed clients through referrals from the HD STI clinic and via outreach to potential clients based on recent STI diagnosis.

3.2.2. Discussing PrEP in a non-stigmatizing manner—Once a client was reached, the navigators offered PrEP education, which was delivered in a non-threatening, stigma-free, no judgement manner. Navigators intentionally avoiding the use of language like ‘risky’ or ‘at risk’ or ‘targeted’, avoiding the use of ‘pushy sales approaches’ to pressuring clients to engage, and using and paying attention to client body language facilitated building of client-navigator rapport.

3.2.3. Knowing and sharing personal experiences with PrEP medications—Making the content digestible for clients and being a relatable source who shared the client’s race, ethnicity, and/or sexual identity/orientation were important personal characteristics mentioned by navigators. Additionally, navigators discussing any potential prior experience themselves taking PrEP helped solidify client interest. As one navigator noted:

“when I share that I’m also on PrEP, it definitely helps. It makes them more willing to start the process and be more consistent.”

3.2.4. Accompanying clients to their first appointments—Navigators expressed the importance of attending each client’s first PrEP appointment. One navigator reported making this action “a priority.” Navigators also often mentioned offering clients transportation to their medical appointments. While not a program component and recognized by navigators as not sustainable, some paid client co-pays to offset provider visit costs not covered by pharmacy patient assistance programs. Several navigators discussed how they had built a rapport with clients to be allowed to join them in the exam room upon the client’s request. One navigator explained:

“I don’t force myself, but I do attempt to go with them in the patient room.”

3.2.5. Establishing good rapport with providers—Navigators also discussed how rapport building goes beyond the navigator-client relationship and includes developing a rapport with clinic staff. A navigator explained:

“Not only building rapport with the client, but also trying to build whenever possible a rapport with the doctors and the nurses... to actually go and meet in person with the people who are in charge of making the PrEP appointments and prescribing it, letting them put a face to my name, and also a face to the agency that I represent.”

Navigators created and maintained lists of LGBTQ+ friendly clinics and names of staff and clinicians to meet. Utmost efforts were made to meet providers in-person. This facilitated clients’ immediate access to clinic staff responsible for scheduling PrEP appointments.

3.2.6. Having consistent and periodic client check-ins—The importance of consistently having monthly check-ins with clients was shared by all navigators. Phone calls

and informal social media means of communication were the preferred methods to stay in touch. Brief messages sent included things like “how are you?”, “Is the clinic still working for you?”, and “Did you have any trouble getting your prescription or reenrolling?” Keeping an SMS text message log or Outlook calendar tracking communication for interactions with clients facilitated navigation. Navigators believed clients appreciated having their mobile phone numbers for easy communication and that navigators built client trust by availing themselves for navigation and other essential resources when needed.

3.2.7. Maintaining an organized client tracking system—Navigators knew when clients were due for recertification and to call or prompt the client to complete any necessary paperwork and submit documentation to avoid lapses in prescription refills. It was essential for navigators to maintain an organized system to keep up with client caseloads.

3.3. Barriers to PrEP navigation

3.3.1. Assessing client readiness—Accurately assessing client PrEP readiness was a challenge for navigators. As one navigator noted:

“A client can be extremely exuberant about HIV negative results. ‘I want to get on PrEP right now’. You’ll say, ‘OK, well, I can’t get you the pills right now, I’ll schedule your appointment’. Client will say ‘OK, cool, whatever, you need to do, I’ll be there.’ Then, they don’t show up.”

Navigators reported that there was a constant flow of new clients expressing interest in receiving additional PrEP education who required follow up via text. Additionally, clients might lag in their response or might express initial interest in receiving additional PrEP education but later change their minds. Navigators coined the phrase ‘the chase’ to describe calling clients, missing them, and clients agreeing to meet up with the navigator (e.g., “Oh, I’m going to go to my doctor’s. appointment”). The navigator might have even gotten as far as scheduling the PrEP appointment, arranging client transportation, and believed that the client was ready to go. However, when the appointment time occurred, the client was no longer ready.

3.3.2. Tracking client navigation status—Navigators had primary responsibility for outreach in addition to their other navigation tasks. The preparation for delivering high quality community outreach and PrEP education required considerable time commitment and effort from navigators. While navigators understood the importance of data entry, their multiple job function responsibilities – to conduct outreach, administer HIV tests, and link clients to PrEP appointments – limited the time they could spend on client-level data logging.

3.3.3. Stigmatizing clinic and social experiences—The main barriers to linkage that navigators reported were client-felt stigma and related poor treatment by PrEP providers (e.g., providers referring to clients by non-preferred pronouns and of unwelcoming clinic spaces). Navigators shared examples of how doctors were reluctant to prescribe PrEP and, in some situations, cited reasons for denying PrEP prescription with religious undertones. This reluctance was perceived by clients as a form of disrespect from medical providers

and would cause them to become reticent to continuing the linkage process. Additionally, speculation of living with HIV by the client's peer network impeded PrEP navigation. E.g., a client adhering to follow-up PrEP visits for lab work and routine HIV testing throughout the year raised their social network's suspicion that the client was living with HIV. There also was client reticence to disclose an HIV-positive status and thus they disguised themselves as a PrEP user.

4. Discussion

The goal of TDH PrEP navigation was to guide clients to engaging in and becoming self-sufficient while accessing PrEP services. Seven themes about facilitating PrEP navigation emerged, four of which are prioritized for discussion below. First, accessing clients at venues such as testing events and the STI clinic at the HD enabled navigators to reach potential candidates. A similar demonstration project found PrEP navigation can reach vulnerable populations in community and clinical settings where they are already offering testing, counseling, and prevention services (Pathela et al., 2020). Second, we found that accompanying clients to their first PrEP appointment was another facilitator of navigation. Navigators supported clients by being responsive to their requests, providing them transportation for and attending their medical appointments when needed, and helping them navigate complex medical systems and potential biases. This finding supports existing research that demonstrates that high program retention rates may be attributable to incorporating input from the population of interest and integrating their expressed needs into the design and implementation of navigation interventions (Rhodes et al., 2020). Supporting clients with strengths-based case management via goal setting and focusing on client abilities and assets have also been documented in previous research (Doblecki-Lewis et al., 2019).

Third, rapport building with both the patient and clinic staff also facilitated navigation, as well as congruence on navigator-client personal characteristics such as racial/ethnic background and sexuality. Other research with Black MSM also found patient-provider racial concordance facilitated clients' disclosure of sexual identity to providers and subsequently increased access to PrEP (Quinn et al., 2019). Future navigation programs, thus, should prioritize building navigation teams that share similarities with the people they are serving.

Finally, maintaining consistent engagement with clients served as both a facilitator and barrier to PrEP Navigation. PrEP navigators in this project maintained a communication tracking system to keep clients engaged and follow-up with clients about milestones such as insurance recertification. Engagement has been found important in other studies too, but in different forms such as attention to social determinants and structural barriers and training in motivational interviewing (MI) (Hart et al., 2021; Wiewel et al., 2020). Similar to navigators receiving training in communication strategies and motivational interviewing (MI) described in this process evaluation, another study conducted in a resource-limited setting in the Deep South found MI to be useful in PrEP navigators' roles and allowed them to better connect with and relate to clients (Burns et al., 2021).

Three themes emerged revealing factors that impeded PrEP navigation. Navigator interactions with clients uncovered barriers to client readiness for PrEP navigation. There were multiple accounts given by PrEP navigators of testing clients multiple times, courting clients for over a year, and clients wavering on their decision to commit to PrEP navigation. Some clients would express their need for more information, which is common, particularly for Black MSM who may distrust the healthcare system. Research suggests MSM are concerned about PrEP medication adverse side effects, anti-gay and HIV-related stigma from providers, and medical mistrust and mistreatment (Cahill et al., 2017). Previous and anticipated negative interactions with healthcare providers serve as barriers to accessing PrEP (Quinn et al., 2019).

Other key factors hindering PrEP navigation included difficulties around tracking client progress and managing any stigmatization clients perceived from providers. First, long gaps between appointments made tracking clients' progress and current stage in the process more difficult. This is consistent with clients in other studies experiencing difficulties attending quarterly checkups, which were often attributed to limited appointments and availability of providers, as well as conflicts with client personal work schedules (D'Angelo et al., 2021). Other research found prolonged wait times for appointments may lead to client discouragement and ultimately discontinuation of the process of PrEP uptake (Doblecki-Lewis et al., 2019).

This study also found managing the stigmatization that clients perceived from providers acted as a barrier to navigation. In another southern city whose state is contiguous with the current study site, medical mistrust was pronounced among MSM at risk for HIV acquisition (Cahill et al., 2017). Very few clients had disclosed their sexuality to providers, and those who had disclosed detailed previous negative experiences such as incompetent or insensitive care (Cahill et al., 2017). Lack of provider training on PrEP, how to properly ask clients about sexual behaviors, and on identifying potential clients for PrEP underscores the need for cultural humility and providers receiving affirming health care education, particularly in the South.

4.1. Local evaluation limitations

Navigators' tracking of their interactions with clients was inconsistent and the data were not routinely entered into the project's REDCap database. Consistent with this, the database did not include intermediate steps or services that navigators provided to clients needed to accurately quantify the workload demand and hours taken to implement navigation. Also, we were unable to complete navigator interviews with the one agency exclusively serving transgender persons. Attempts were made to access supplemental notes in REDCap to address this void; however, these fields were incomplete, partially due to staff turnover at this particular agency. Finally, we were unable to interview clients to identify facilitators and barriers of PrEP navigation to have a more comprehensive view of PrEP navigation implementation.

5. Conclusions

In general, PrEP navigators who participated in this process evaluation in the Memphis MSA reported informing clients about PrEP, linking clients to a PrEP provider, and monitoring client acceptance of PrEP preventive services. PrEP navigation requires extensive relationship building with PrEP providers and authentic engagement with clients from the first encounter of navigation through at least the 6-month follow-up period. CBO-based navigators used evidence-informed outreach efforts like social network strategies (SNS) to identify potential candidates, while HD navigators relied on STI clinic referrals and lab reports (McGoy et al., 2018). Client engagement was time-consuming, but navigators reported that patience and rapport building facilitated trust with clients in need of linkage to HIV biomedical intervention.

Barriers to navigation, such as HIV-related stigma, were consistent with other studies among Black clients found in the literature (Ezennia et al., 2019). Navigators also highlighted some of the unique challenges of PrEP navigation in a resource-limited setting like Tennessee, situated in the Bible Belt, an often-understudied context. Initially, only two community-based clinics in the Memphis MSA accepted clients without insurance, one of which abruptly and unexpectedly closed, as was reported by multiple respondents. This severely hindered appointment scheduling and often resulted in longer wait times. The only other options available for clients without insurance to get on PrEP were faith-based clinics. Unfortunately, navigators shared stories of health care providers at these faith-based facilities discouraging clients from using PrEP or transgender clients being addressed by the incorrect pronoun(s) and being subjected to invasive sexual health assessments. These situations highlight the importance of PrEP navigation services in assisting clients to overcome such obstacles.

Finally, navigators' role of follow-up and supporting clients with PrEP medical appointments and regimen adherence could serve as both opportunities and challenges for navigation. Navigators developed case management skills which helped them keep track of clients at each navigation step, including during client recertification for prescription payment assistance. It also helped with coordination of PrEP appointments, which ultimately could have facilitated client adherence and possibly prevented seroconversion. Navigators kept in mind personal information shared by the clients and suspended their own assumptions about the clients' adherence to appointments and medication. Though client follow-up typically worked well, navigators reported struggling with simultaneously balancing consistent client tracking and performing other job responsibilities leading to work overload.

5.1. Local public health implications

Findings from this process evaluation were used to refine PrEP navigation implementation in Memphis and are timely for integration into the local Ending the HIV Epidemic (EHE) implementation plans currently underway. For example, EHE "Prevent" pillar strategies include increasing availability and accessibility of PrEP clinics and prescribers to priority populations and to consider including navigation when establishing new programs. To that end, the local health department opened a standalone PrEP clinic and recently hired a nurse

practitioner to increase uptake. Moreover, facilitating factors and barriers to PrEP navigation guided scale-up of TDH-funded PrEP navigation services throughout Tennessee. Lessons learned can also be leveraged by other organizations looking to implement PrEP navigation across the state and the broader mid-southern United States, and in similar socioeconomic settings where PrEP uptake is low.

Acknowledgements

We are indebted to the ten navigators hired to implement the navigation intervention. Your tireless efforts do not go unrecognized, and the value of your work will shape future programming for years to come. To the clients who bravely participated in this intervention and trusted the navigators with your personal journey: for that we are grateful, and this demonstration project could not have occurred without you believing in the concept. To the funding agency, the CDC: we thank you for the support to bring innovative prevention modalities to the Memphis community and the leadership of Project PrIDE, especially Dr. Yamir Salabarría-Peña, Dr. Wayne Johnson, and Dr. Jarvis Carter. This shows the commitment of government agencies to ending the HIV epidemic. We acknowledge TN PrIDE Staff – Dr. Shanell McGoy, Allison Sanders Wilhelm, Katherine Buchman, Mardrequis Harris, Christopher Mathews, Melissa Morrison, and Kim Truss, for your earlier contributions; Sara Zellers for initial data coding; and Ashley Yacoubian, Anna Mercedes Ruiz Lachica, and Gisela Guerrero for manuscript editorial support. This work was supported by the Centers for Disease Control and Prevention [CDC-RFA-PS15-1506].

Biographies

Latrice C. Pichon, PhD, MPH, CHES is an Associate Professor in the Division of Social and Behavioral Sciences at the University of Memphis School of Public Health. She received post-doctoral training in CBPR in the Kellogg Health Scholars Program at the University of Michigan School of Public Health. She was selected for the Visiting Assistant Professor Program at the Center for AIDS Prevention Studies at University of California, San Francisco. Her current research focuses on the evaluation of PrEP uptake among Black MSM and Black transgender women and evaluating a photovoice intervention addressing internalized HIV stigma to inform Memphis Ending the HIV Epidemic Plans.

Michelle Teti, MPH, DrPH is an associate professor and the associate chair of the department of public health at the University of Missouri, Department of Public Health. She has over 20 years of experience conducting qualitative community-based HIV research.

Joshua E. Betts is a Project Coordinator/Programmer Analyst II for ICF working at the Centers for Disease Control and Prevention (CDC) within the Division of HIV/AIDS Prevention (DHAP) in the Prevention Research Branch (contractor). Before joining his current Branch, he worked at ICF as a Project/Program Management Analyst within the Epidemiology Branch of DHAP. Prior to this, he was an Oak Ridge Institute for Science and Education (ORISE) research fellowship participant within the Epidemiology Branch of DHAP. He has been working on studies primarily focused on HIV disparities for over 8 years. Mr. Betts received his Master of Public Health degree in Epidemiology from Emory University.

Dr. Meredith Brantley is the HIV Program Director at the Tennessee Department of Health. Prior to that, she held roles at the Health Resources and Services Administration as a Health Scientist in the HIV/AIDS Bureau; and the Centers for Disease Control and Prevention (CDC) as a Public Health Analyst within the Division of Global HIV/AIDS and an Epidemiologist within the Division of Viral Hepatitis. Dr. Brantley received her Master

of Public Health degree in Epidemiology from Emory, and her Doctorate in Social and Behavioral Sciences from Johns Hopkins University.

References

- Brantley ML, Rebeiro PF, Pettit AC, Sanders A, Cooper L, McGoy S, & Morrison M (2019). Temporal trends and sociodemographic correlates of PrEP uptake in Tennessee, 2017. *AIDS and Behavior*, 23(Suppl. 3), 304–312. 10.1007/s10461-019-02657-8 [PubMed: 31456198]
- Burns PA, Omondi AA, Monger M, Ward L, Washington R, Sims Gomillia CE, ... Mena LA (2021). Meet me where I am: An evaluation of an HIV patient navigation intervention to increase uptake of PrEP among black men who have sex with men in the Deep South. *Journal of Racial and Ethnic Health Disparities*, 1–14. 10.1007/s40615-020-00933-1 [PubMed: 33104967]
- Cahill S, Taylor SW, Elsesser SA, Mena L, Hickson DM, & Mayer KH (2017). Stigma, medical mistrust, and perceived racism may Affect PrEP awareness and uptake in black compared to white gay and bisexual men in Jackson, Mississippi and Boston, Massachusetts. *AIDS Care*, 29(11), 1351–1358. 10.1080/09540121.2017.1300633 [PubMed: 28286983]
- Centers for Disease Control and Prevention. (2020). Patient navigation. September 14. Centers for Disease Control and Prevention <https://www.cdc.gov/screenoutcancer/patient-navigation.htm#:~:text=Patient%20navigators%20guide%20patients%20through,and%20understand%20the%20medical%20system>.
- Centers for Disease Control and Prevention. (2021). STEPS to care: Patient navigation. April 12. Centers for Disease Control and Prevention <https://www.cdc.gov/hiv/effective-interventions/treat-steps-to-care/dashboard/patient-navigation.html>.
- D'Angelo AB, Lopez-Rios J, Flynn AW, Holloway IW, Pantalone DW, & Grov C (2021). Insurance- and medical provider-related barriers and facilitators to staying on PrEP: Results from a qualitative study. *Translational Behavioral Medicine*, 11(2), 573–581. 10.1093/tbm/ibz191 [PubMed: 32065637]
- Doblecki-Lewis S, Butts S, Botero V, Klose K, Cardenas G, & Feaster D (2019). A randomized study of passive versus active PrEP patient navigation for a heterogeneous population at risk for HIV in South Florida. *Journal of the International Association of Providers of AIDS Care*, 18, 1–9. 10.1177/2325958219848848
- Ezennia O, Geter A, & Smith DK (2019). The PrEP care continuum and black men who have sex with men: A scoping review of published data on awareness, uptake, adherence, and retention in prep care. *AIDS and Behavior*, 23(10), 2654–2673. 10.1007/s10461-019-02641-2 [PubMed: 31463711]
- Food and Drug Administration. (2012). Truvada for PrEP fact sheet: Ensuring safe and proper use. Food and Drug Administration. fda.gov/media/83586/download.
- Grant RM, Lama JR, Anderson PL, McMahan V, Liu AY, Vargas L, ... Glidden DV (2010). Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. *New England Journal of Medicine*, 363(27), 2587–2599. 10.1056/nejmoa1011205 [PubMed: 21091279]
- Guest G, MacQueen KM, & Namey EE (2012). *Applied thematic analysis*. SAGE Publications.
- Hart TA, Noor SW, Skakoon-Sparling S, Lazkani SN, Gardner S, Leahy B, ... Adam BD (2021). GPS: A randomized controlled trial of sexual health counseling for gay and bisexual men living with HIV. *Behavior Therapy*, 52(1), 1–14. 10.1016/j.beth.2020.04.005 [PubMed: 33483108]
- Maulsby C, Millett G, Lindsey K, Kelley R, Johnson K, Montoya D, & Holtgrave D (2013). A systematic review of HIV interventions for black men who have sex with men (MSM). *BMC Public Health*, 13(1), 1–13. 10.1186/1471-2458-13-625 [PubMed: 23280303]
- McGoy SL, Pettit AC, Morrison M, Alexander LR, Johnson P, Williams B, ... Rebeiro PF (2018). Use of social network strategy among young black men who have sex with men for HIV Testing, linkage to care, and reengagement in care, Tennessee, 2013–2016. *Public Health Reports*, 133(Suppl. 2), 43S–51S. 10.1177/0033354918801893 [PubMed: 30457951]
- Mulatu MS, Hoyte T, Williams KM, Taylor RD, Painter T, Spikes P, ... Shabu T (2018). Cross-site monitoring and evaluation of the care and prevention in the United States demonstration project, 2012–2016: Selected process and short-term outcomes. *Public Health Reports*, 133(Suppl. 2), 87S–100S. 10.1177/0033354918803368 [PubMed: 30457956]

- National Hiv behavioral surveillance. *TN.gov*. (n.d.). <https://www.tn.gov/health/health-program-areas/std/std/surveillance/-national-hiv-behavioral-surveillance.html>.
- Pathela P, Jamison K, Blank S, Daskalakis D, Hedberg T, & Borges C (2020). The HIV pre-exposure prophylaxis (PrEP) cascade at NYC sexual health clinics: Navigation is the key to uptake. *Journal of Acquired Immune Deficiency Syndromes*, 83 (4), 357–364. 10.1097/qai.0000000000002274 [PubMed: 31904700]
- Pew Research Center. (2009). A religious portrait of African-Americans. January 30. Pew research center's religion & public life project. <https://www.pewforum.org/2009/01/30/a-religious-portrait-of-african-americans/>.
- Quinn K, Dickson-Gomez J, Zarwell M, Pearson B, & Lewis M (2019). A gay man and a doctor are just like, a recipe for destruction”: How racism and homonegativity in healthcare settings influence PrEP uptake among young black MSM. *AIDS and Behavior*, 23(7), 1951–1963. 10.1007/s10461-018-2375-z [PubMed: 30565092]
- Rhodes SD, Alonzo J, Mann-Jackson L, Song EY, Tanner AE, Garcia M, ... Reboussin BA (2020). A peer navigation intervention to prevent HIV among mixed immigrant status Latinx GBMSM and transgender women in the United States: Outcomes, perspectives and implications for PrEP uptake. *Health Education Research*, 35(3), 165–178. 10.1093/her/cyaa010 [PubMed: 32441760]
- Sweeney P, Hoyte T, Mulatu MS, Bickham J, Brantley AD, Hicks C, ... Wendell D (2018). Implementing a data to care strategy to improve health outcomes for people with HIV: A report from the care and prevention in the United States demonstration project. *Public Health Reports*, 133(Suppl. 2), 60S–74S. 10.1177/0033354918805987 [PubMed: 30457958]
- United States Department of Health and Human Services. (2021). HIV national strategic plan (2021–2025). April 8. *HIV.gov* <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/nhas-update>.
- Wiewel EW, Singh TP, Zhong Y, Beattie CM, Lim S, Walters S, Braunstein SL, & Rojas J (2020). Housing subsidies and housing stability are associated with better HIV medical outcomes among persons who experienced homelessness and live with HIV and mental illness or substance use disorder. *AIDS and Behavior*, 24(11), 3252–3263. 10.1007/s10461-020-02810-8 [PubMed: 32180090]
- Tennessee HIV/AIDS strategy: An integrated HIV care and prevention plan. *TN.gov*. (2016, September). https://www.tn.gov/content/dam/tn/health/documents/TN_HIV-AIDS_Strategy_September_2016_with_appendices.pdf.
- Tennessee Department of Health. (2020, January). Tennessee HIV Epidemiological Profile 2018. *TN.gov*. <https://www.tn.gov/content/dam/tn/health/program-areas/hiv/Tennessee-HIV-Epidemiological-Profile-2018.pdf>.

Table 1

Topical Areas included in the PrEP Navigator Interview Guide in Year 2018 and Year 2019, Project PrIDE, Memphis.

	Topic
1	Definition of PrEP Navigation
2	Navigator Training
3	Additional Training Needed
4	(Un)Successful Navigation
5	Navigator Characteristics
6	Navigation Activities
7	Navigation Challenges
8	Linkage to PrEP
9	PrEP Adherence
10	Suggestions for PrEP Navigation

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 2

Self-reported demographic characteristics of PrEP navigators in Year 2018 and Year 2019, Project PrIDE, Memphis.

Characteristic	Year 2018 (n = 9) n (%)	Year 2019 (n = 5) ** n (%)
Sexual Orientation/Gender Identity		
Cisgender heterosexual female	2 (22)	1 (20)
Transgender woman	1 (11)	–
Lesbian	1 (11)	–
MSM	5 (56)	4 (80)
Education		
High School diploma	2 (22)	1 (20)
Bachelor's degree	6 (67)	3 (60)
Graduate degree	1 (11)	1 (20)
Race/Ethnicity		
Black, non-Hispanic	7 (78)	4 (80)
Hispanic/Latino/Latinx	1 (11)	1 (20)
White, non-Hispanic	1 (11)	–
Navigation Setting		
CBO	7 (78)	4 (80)
HD	2 (22)	1 (20)

Abbreviations: n=number; MSM=men who have sex with men; CBO=community-based organization; HD=health department.

**

All respondents in 2019 were also respondents in 2018.

Table 3

Description of key themes as benefit/facilitators to navigation and salient comment.

Theme	Example Quote
- Knowing or having personal experience with PrEP medication	- <i>"It helps when you are the navigator who is assisting is on PrEP, because not only do you have the information, but you can also speak as an individual using your official testimony and how your experience has been." (Year 2019)</i> - <i>"I tell my clients, 'You know, PrEP is something that if you're going to be on it, you have to take it every single day.' Sharing my personal story with it helps. It makes them realize it works if you take it." (Year 2018)</i>
- Building rapport with patient and clinic staff	- <i>"Being a familiar face. I know [name] office, there was one point where I was seeing them almost once every two weeks. They were familiar. They knew who I was. Another clinic, I think, is starting to get a little used to me and the same with [clinic name]." (Year 2018)</i> - <i>"You're either building a relationship with the provider and the staff, or you're building a relationship with the client." (Year 2018)</i>
- Maintaining consistent engagement with clients via organized system for tracking	- <i>"Don't be alarmed when you get a letter that says this is running out. Just call me and I'll give you the Patient Advocate Foundation, but you're going to handle it. You're going to call them, and you're going to answer the questions." Yes. You need to call. This is your deal. You need to call. I applaud them and keep supporting them to keep doing that." (Year 2018)</i>

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 4

Description of key themes as challenges to navigation and salient comment.

Theme	Example Quote
- Assessing client readiness	<p>- <i>I was testing him probably twice after the initial time. He's been tested three times, came back negative every time. He's always been a, "Oh, thank you Jesus!" kind of person. It's like, "You should get on PrEP if you're that anxious about your status." He's like, "No, I don't want. No, I don't want to take a pill every day." (Year 2018)</i></p> <p>- <i>There's one client, he's 19. I tested him last year, back in June. February/March is around the time I tested him again. Now he wants to move forward with PrEP. I have been talking to him this entire time. (Year 2018)</i></p> <p>- <i>Then you have some who marked "yes" at the beginning, and then once you hit them up, they're like, "Oh, I changed my mind." Then you've got those that are like, "Oh, I'm still thinking about it." You got others that, "OK, I'm interested, but I need more information." (Year 2019)</i></p>
- Tracking client status in the process	<p>- <i>Overload happens more, for me personally, at the beginning stages. For example, we'll do outreach. We'll briefly talk about PrEP. Then after that encounter, I have to go back to the office and then follow up with these people. (Year 2018)</i></p> <p>- <i>Sometimes we have a lot going on, a lot of outreach, and things get hectic, of course, but we definitely try to put documentation in the database. (Year 2019)</i></p> <p>- <i>If I encountered 50 people, and let's say out of those 50 people, 20 people marked that they're interested, having to text them or follow up with them. Some of them are quick to respond. Others, you've got to reach out two or three times before you get a response. (Year 2019)</i></p> <p>- <i>Some weeks I'll spend an entire day just following up with people. Calling, trying to get responses, sometimes I have long conversations, and sometimes I don't have no response at all. (Year 2019)</i></p> <p>- <i>You try to document that you followed up. Sometimes that can be a lot because you still have to do outreach for this month, then have to do testing for the month, then have to link new people for that month. Everyone's in different phases and keeping up and having to remember where everyone is at can be a lot of work. (Year 2019)</i></p> <p>- <i>When you have this huge gap between their appointment, it becomes hard to document because at what point did their six months start? when you tested them? when they got linked? To me, that's where the whole caseload becomes a lot. (Year 2019)</i></p>
- Stigmatizing clinic/social experiences	<p>- <i>We're clarifying a few things because everyone hears something that's not true. Like 'PrEP gives you HIV'. 'If I'm going to get on this? Is it more easily for me to get HIV?' It's a lot of stigma that's still around PrEP that we have to dispel sometimes. (Year 2019)</i></p> <p>- <i>Thankfully, when I took [transwoman] to the clinic, it was no issue as far as he, her, she, him. But I think that depends on where you go. If I would have gone to [clinic name] I would have probably had to be like, "OK, it's she/her, not he/him." (Year 2019)</i></p> <p>- <i>I would step in and also just to make sure that my clients are treated well and with respect. I do put down a little work with the LGBT community. Specifically, gay men of color and transgender of color. Being that most of our providers unfortunately are faith based. There's been situations where there's been the misuse of pronouns. Where they try to pray for our clients. I definitely want to make them feel like they are being welcomed, and that they have a voice in these spaces. (Year 2018)</i></p> <p>- <i>Even at the end of the consultation with the doctor, after he was coming off as he didn't want to prescribe the medication and after getting a second doctor to get the opinion, he was like, "OK, well, do you mind if we pray for you?" (Year 2018)</i></p> <p>- <i>I have had one guy that I was messaging on Grindr. He said he was on PrEP. He saw on my profile that I do HIV tests. He was like, "I want to get tested, though." I was like, "OK, well, you're on PrEP." I met up with him. He came back positive. He was never on PrEP. What I'm saying is, that's how some people are in Memphis, is that they will lie about their status. (Year 2018)</i></p>