Engaging Black Men Who Have Sex with Men (BMSM) in Los Angeles in HIV PreExposure Prophylaxis (PrEP)

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SECTION ONE

Introduction

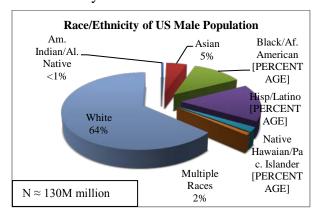
1. Introduction

1.1 Defining the Paradigm

Since 2012, when the FDA first approved the use of anti-retrovirals as a form of HIV prevention for at-risk, HIV-negative individuals, various studies have continued to demonstrate the efficacy of pre-exposure prophylaxis (PrEP) among different populations ¹⁻³. Black men who have sex with men (BMSM), lag behind in PrEP use ⁴ despite the fact that they are a population disproportionately affected by HIV/AIDS ⁵ and represent one of the single largest groups of new cases in the US each year ⁶. The minimal use of PrEP by BMSM, coupled with healthcare provider anxieties about prescribing PrEP ⁷, may reduce the potential positive effect of PrEP in reducing HIV infection rates in this disproportionately impacted population.

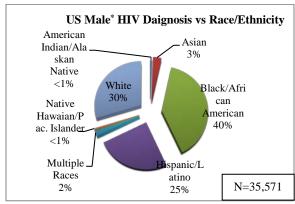
Black/African American men represent about 12% of the total US male population, but constituted 42% of all HIV diagnoses among US men in 2013 ⁶. MSM make up the majority of this group. Out of the estimated 15,847 reported infections among Black men in 2013, 78% (12,400) are estimated to have occurred in BMSM ⁶. The racial disparities are starkest among young men. Young BMSM (YBMSM) experienced the largest increase of all racial/ethnic groups in diagnosed HIV infections between 2009 and 2013. Of the 8018 HIV infections diagnosed among MSM ages 13–24 years in 2013, an estimated 58% were YBMSM ⁶.

Figure 1.a. 2014 US Male population by race/ethnicity



US Census Bureau, 2015

Figure 1.b. 2014 US Male* HIV diagnosis by race/ethnicity



CDC Surveillance Report, 2015

*2014 US Adult and Adolescent Males

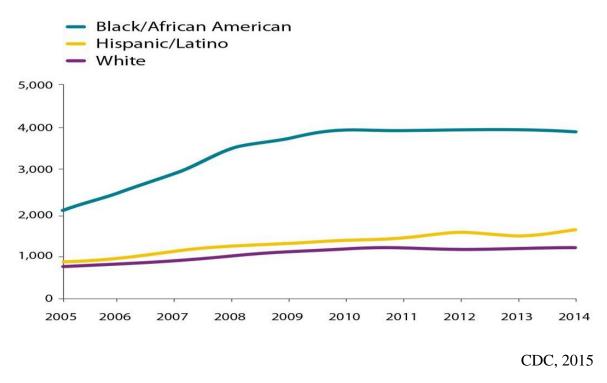


Figure 1.c. US HIV Diagnoses among MSM age 13-24 by Race/Ethnicity, 2005-2014.

Despite these significant disparities in HIV prevalence, BMSM, of all ages and social economic statuses (SES) continue to lag behind other MSM in PrEP prescription uptake and actual use. This lag persists, even in populations where data suggest that BMSM's willingness to use PrEP is comparable to, if not higher than it is for other MSM 8 . For example, in an analysis based on the 2013 cycle of the American Men's Internet Survey, Sullivan, et al., reported a higher willingness to use PrEP in both Black and Hispanic MSM (both 51%) compared to white MSM (41%, p < 0.01). However self-reported PrEP use was higher in White MSM compared to Black MSM (1.3% vs 0%, p < 0.01).

On the local front, although recent data suggest that knowledge of and willingness to use PrEP has increased significantly among MSM regardless of race/ethnicity, age group, SES and healthcare utilization, current PrEP utilization among at-risk MSM remains low ^{8,10}. In a cross-sectional analysis of 444 and 468 Los Angeles MSM recruited through the National HIV Behavioral Surveillance System (NHBS) in 2011 and 2014, respectively, knowledge of and willingness to use PrEP increased significantly while actual use remained low. Specifically, while the proportion of HIV-negative MSM with elevated HIV risk (HIV-positive partner or

recent STD diagnosis) who had heard about PrEP rose from 39% in 2011 to 82% in 2014, and willingness to take PrEP increased from 54% to 69% within the same time period, the percentage who had ever use PrEP rose to only 8% compared to 0% in 2011 ¹⁰. Use among all MSM was just 3% 2014. Thus, although PrEP adoption and usage is increasing, greater efforts are needed to rapidly bridge the gap between knowledge, willingness to use and actual use. NHBS data in Figure 2 also show that, similar to the US as a whole, Black MSM in Los Angeles County (LAC) are much more affected by HIV than other racial/ethnic group.

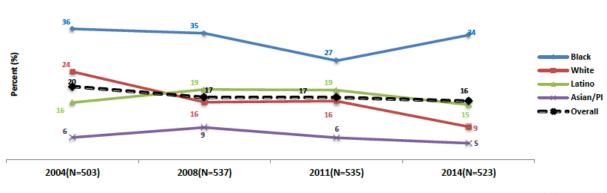


Figure 2: NHBS HIV Prevalence in MSM by Race/Ethnicity, Los Angeles County, 2004-2014

NHBS, 2014

While the reasons for higher HIV prevalence and incidence in BMSM are varied and somewhat clear ^{8,11,12}, reasons for the limited use of PrEP among BMSM and best practices for addressing these are less clear. It is in this context, that the Charles R. Drew University of Medicine and Science's (CDU) HIV Cluster, the CDU Pacific AIDS Education and Training Center (PAETC), and the California HIV/AIDS Policy Center organized a round-table discussion with local experts on Wednesday, March 18, 2015 titled: Pre-Exposure Prophylaxis (PrEP) and At-Risk Black MSM (BMSM). The discussion was led by two facilitators, Nina Harawa, PhD, MPH, coauthor, and Derrick Butler, MD, PAETC educator and medical director of To Help Everyone Clinic's HIV program.

Participants represented those at the forefront of HIV prevention and treatment in the Los Angeles region (including coordinators, staff, and investigators of two PrEP local demonstration projects, members of the LA County PrEP working group, infectious disease specialists, representatives from Los Angeles County Department of HIV/STD Programs (DHSP), a lead

medical scientist at Gilead Sciences, researchers, and HIV social service providers). A follow-up priority setting survey was completed by 16 participants and subsequent discussions were held with two primary care providers with a significant policy, research, and clinical experience in providing PrEP, two patients, coordinators and wraparound service providers from the demonstration projects, and experts in HIV policy, HIV social network, and health services interventions. For the sake of brevity, all of these individuals will be referred to as roundtable participants or participants. Participants discussed best practices for the effective recruitment and engagement of BMSM in PrEP through provider practices, policies, and outreach/education strategies. This white paper will outline the factors that participants identified as impediments to BMSM's PrEP access and uptake in Los Angeles, as well as potential solutions to the challenges. Potential next steps for implementing solutions and medium-to-long term actionable items are outlined for your consideration.

1.2 Profile of BMSM

Black men face unique and complex challenges in U.S. society. A disproportionate number experience low SES ¹³ high rates of incarceration ^{13,14} and unemployment ¹⁵ Beyond unjust and sometimes violent treatment by law enforcement ¹⁶ are an onslaught of mircoaggressions that many Black men experience daily. Furthermore, they live with a distinct and prejudicial historical legacy that includes inadequate and unjust healthcare access and delivery. BMSM can face additional marginalization ¹⁷⁻¹⁹. Many live in communities where their sexuality is vehemently and sometimes violently opposed. Often BMSM are, in some ways, more closeted than their white counterparts and face social isolation within their communities due to actual or perceived intolerance ²⁰. This isolation cannot simply be understood as resulting from homophobia, as it can also result from the internal conflict stemming from cultural expectations surrounding male gender roles such as society's view of masculinity ^{21,22}. Thus actively engaging in protective sexual practices such as using condoms, accessing preventive health care, or taking PrEP may be viewed as admitting vulnerability and unmanly. These masculine expectations are often strongly upheld by Black communities in response to perceived threats from the larger society. Not surprisingly, the interactions and experiences of BMSM with the healthcare system are informed and limited by these experiences and perceptions. Understanding these factors may therefore provide further insight to BMSM's utilization of the current healthcare infrastructure and new forms of HIV/AIDS prevention such as PrEP.

Studies have demonstrated that the type of insurance coverage an individual possesses is indicative of his/her access to life-changing preventive and therapeutic medical interventions ²³⁻²⁵. Structural barriers to HIV preventative care (e.g., low income, unemployment, incarceration) also disproportionately affect BMSM compared to other MSM. For example, in a tri-national (Canada, UK, and USA) comparison of disparities and risks of HIV infection in BMSM and other MSM, researchers found significantly greater odds of poverty and low health insurance access amongst US BMSM compared to their white counterparts in the US than those observed in the UK and Canada ⁸. Thus, although there remained racial disparities with regards to structural barriers to HIV preventative care in all three countries; the disparities seemed to be more pronounced in the United States.

Distrust of the healthcare system by minorities and HIV conspiracy theories also continue to play a role in PrEP knowledge and uptake within the BMSM community. These anxieties have been fostered by past practices of the medical establishment ^{26,27} and studies in which minorities have been deceived or taken advantage of by researchers ²⁸, individual and community member experiences of poor or discriminatory healthcare encounters, and decades-old distrust of institutions of power. This historical distrust, coupled with limited access to quality healthcare insurance and relatively lower SES in minority communities, has contributed to low utilization and access to new medical interventions. The situation becomes even more challenging when new interventions are focused on sensitive and traditionally stigmatized sexual behaviors in minority communities. Concerns pertaining to issues of confidentiality, discrimination, distrust, and HIV conspiracy theories ²⁶ similarly make BMSM less likely than other MSM to disclose their sexual behavior or identity to healthcare providers ²⁹. This limited disclosure of sexual orientation and activity restricts physicians' ability to accurately assess patients' HIV/AIDS risk and needs, thereby contributing to fewer PrEP recommendations and limiting PrEP use.

Section 2

Contributing Factors

2. Factors Inhibiting Prep Uptake Among BMSM

Inadequate knowledge regarding the efficacy, safety and benefits of PrEP, both among providers and at-risk BMSM, was the most consistent concern cited during the round-table discussion of barriers inhibiting PrEP utilization among BMSM. This concern is reflected in various social analyses that have demonstrated that populations most at risk are often the least likely to be aware of or to access the most innovative healthcare technologies, be they diagnostic, preventive, or therapeutic ^{30,31}. Below, we discuss this and other factors described as contributing to the relative slow uptake of PrEP among BMSM.

2.1 Access

Of the seven PrEP demonstration project sites once funded in LAC, only two continued to enroll new participants in March 2015 when this round-table was held. All demonstration studies have since been completed. As a result, project participants who desire to continue PrEP and others who wish to access it for the first time need to do so from non-research sources and may incur out-of-pocket expenses. Though California may be well ahead of most states in terms of access to HIV healthcare services, actual and perceived access to PrEP within communities of color appears to lag behind that of MSM in predominately white communities.

Lack of health insurance, inadequate coverage, and relatively high co-pays for PrEP are significant barriers among BMSM, a community that experiences high rates of poverty and unemployment. For example in the tri-national (UK, Canada and the US) comparison of HIV-related disparities and risks in BMSM and other MSM ⁸ found that HIV-negative BMSM were less likely than HIV-negative MSM of other races/ethnicities to report having health insurance. In other studies, HIV-negative BMSM have also been found to be less likely to report having health insurance or a primary healthcare provider compared to HIV-positive BMSM. On the local level, although the Affordable Care Act (ACA) and Medicaid expansion have helped to increase the number of BMSM on private and public insurance plans ³², HIV-positive BMSM continue to lag behind White MSM in terms of awareness of HIV status, linkage to care, and ARV treatment among HIV positives.

For those with health insurance, high insurance co-payments and deductibles present another barrier. Although PrEP is covered by most health insurance plans, including all Covered California (Affordable Care Law) plans, those plans that offer the lowest premiums (i.e., bronze and other minimum coverage plans) often require of their patients significantly higher out-of-pocket expenses in the form of deductibles, coinsurance, and co-pays. As one individual who inquired about PrEP coverage from his insurance and shared his experience on *My PrEP Experience* blogspot put it...

"I have a high deductible plan. After finally finding a doctor to prescribe the PrEP, I have to meet a \$1,300 deductible before it's covered. I live paycheck to paycheck so I can't even do one month to meet the deductible..."

http://myprepexperience.blogspot.com/p/truvada-track.html

Co-pay assistance coupon cards are available to reduce the cost of medication co-pays. The cards are distributed directly to active HIV and PrEP providers and pharmacies. Alternately, clients aware of these programs may apply for coupons online (Gilieadcopay.com). Furthermore, a manufacturer assistance program (MAP) is available to assist uninsured patients. However, access to these assistance programs is largely dependent on provider and pharmacy familiarity with and willingness to complete program paperwork requirements. Providers, frequently cite time limitations as a significant barrier to their completing the MAP application process. On the positive side, the income threshold for MAP qualification is <500% of the Federal Poverty Level (FPL), approximately \$58,000 for a single individual and over \$100,000 for a family of three. Thus, given the socioeconomic profile of most at-risk BMSM, a majority would likely qualify for assistance.

2.2 Risk Perception and Definition

Inconsistencies and misperceptions among providers and patients related to or regarding what HIV risk factors make someone a candidate for PrEP were also raised as a consistent challenge to PrEP uptake, particularly in communities of color. Some providers are unsure about who should be offered PrEP, which risk profiles should be their focus for intervention, and whether or not all sexually active MSM should be considered PrEP candidates. The lack of an unambiguous profile for the ideal PrEP candidate can present problems – some individuals who may benefit

from PrEP may not be offered it and inconsistencies between providers can lead to circumstances in which patients are referred by one provider to another for PrEP, only then to be told that they are not a good candidate. While experiences such as these may frustrate any patient, they may be especially discouraging to BMSM whose perceptions of and experiences with the health care system may already be negative.

Both the Centers for Disease Control and Prevention (CDC) ³³and the LAC Division of HIV and STD Programs ³⁴ offer provider guidelines ³⁵ that explicitly target MSM and transgender persons who have HIV positive partners or other risk factors. Both sets of guidelines have similar recommendations for PrEP intervention as listed below in Table 1.

Table1. LAC and CDC Guidelines for Individuals for Whom PrEP Is Recommended

LAC	CDC
Reports an HIV-positive sex partner;	Without acute or established HIV
Has a history of anogenital bacterial STD	infection
diagnosed in the past 12 months;	Any male sex partners in past 6 months
Has a history of multiple sex partners of	Not in a monogamous partnership with a
unknown HIV status;	recently tested, HIV-negative man
Engages in unprotected anal intercourse;	
Has other risk factors that increase HIV	AND at least one of the following
risk;	
Has been prescribed post-exposure	Any anal sex without condoms (receptive
prophylaxis ³⁶ and demonstrates continued	or insertive) in past 6 months
high-risk behavior or multiple courses of	Any STI diagnosed or reported in past 6
PEP.	months
	Is in an ongoing sexual relationship with
	an HIV-positive male partner

Courtesy: LAC Division of HIV and STD Programs and CDC

The LAC criteria for MSM however remain quite broad, leaving room for differing interpretations among providers and health care agencies. For example, the guidelines do not

specify how many risk factors a patient should meet to be a potential candidate for PrEP. Some providers might assume that any MSM who reports having unprotected anal intercourse is at risk. Others might think that the patient must report both unprotected sex and another risk factor, such as failure to curtail high-risk behavior after being prescribed PEP. Furthermore, the broad "have other risk factors" bullet could be interpreted to include a wide range of risk factors and behaviors. This ambiguity, together with documented ambivalence ^{37,38} and negative perceptions that some providers have about Black men ³⁹, may make them less likely to encourage BMSM to begin a medication regimen that requires relatively high levels of adherence. Although there is yet to emerge any evidence of racial disparities in the prescription of PrEP ⁴⁰, there are documented racial disparities in prescription practices and clinical judgment in HIV treatment ^{39,41,42}.

2.3 Provider Anxieties

2.3.1 Patient Adherence

Because studies demonstrating PrEP efficacy indicate adherence as the determinant of successful HIV prevention, round table participants noted adherence concerns as a factor that impacts provider practices. For example, some providers may avoid prescribing PrEP to at-risk MSM whom they perceive as unable to adhere. Furthermore, providers may assume that engaging in unprotected sex and using illicit drugs signals poor self-efficacy in other forms of prevention, including PrEP. These providers may not recognize the ways in which prevention practices vary within individuals. For example, unlike condoms, PrEP can be utilized without partner negotiation or even partners' knowledge. It is currently unknown whether at-risk individuals who are regular users of illicit drugs can adhere to daily PrEP regimens sufficiently to garner protection during exposure incidents. Some guidance may come from data showing MSM living with HIV who admit using stimulants can use antiretroviral medications consistently enough to counter morbidity and mortality ⁴³. This supports the assessment that illicit drug users living with HIV perceive considerable benefits from ARVs as treatment. Until data are collected otherwise, this perception may reasonably extend to use of PrEP medications by drug users.

2.3.2 Risk of Resistant Strain Emergence

Another PrEP adherence-related concern may be that the only currently available PrEP medication, Truvada, is currently being used as a front-line treatment for those who become HIV infected. Hence, some providers may not want to prescribe PrEP out of fear that non-adherence among PrEP users may lead to the emergence of an HIV strain that is resistant to a key current antiretroviral medication.

Thus far, studies have demonstrated that drug-resistance among PrEP users is minimal. Nevertheless, some providers and advocates point to the fact that the resistance pattern observed in the PARTNERS PrEP study (a large-scale, PrEP trial with serodiscordant partners) was consistent with how HIV develops resistance to a specific drug in a multi-drug regimen (i.e., against the component that offers the least barrier to resistance) and fear that more resistance could emerge with longer follow up ^{44,45}. We note, however, that the same study also found that the cumulative drug resistance from PrEP was much lower than that associated with treatment of HIV infections ⁴⁵⁻⁴⁷. In other words, PrEP prevents drug resistance by preventing HIV infection and resistance cannot emerge prior to infection.

2.3.3 The Purview Paradox

PrEP is a preventative strategy requiring ongoing monitoring of otherwise generally healthy patients. Some roundtable participants suggested that since HIV-negative BMSM are more likely to be receiving care from PCPs than from infectious disease specialists, PCPs are best positioned to administer PrEP. Others, however, expressed the view that PrEP prescription by PCPs may not be feasible due to time constraints, limited training in prescribing antiretroviral medications, and a track record of inattention to related recommendations such as routine HIV testing and sexual history taking. A repeatedly raised concern by round table participants was providers who possess limited comfort and skill with discussing HIV risk behaviors, contributing to inaccurate or incomplete risk disclosure by their patients.

This Purview Paradox regarding who is best situated to prescribe PrEP and monitor adherence may be slowing PrEP roll out. HIV specialists and STI clinic providers may have greater competence in several of these areas. However, HIV specialists indicate that they are busy taking care of those living with HIV, rarely encounter uninfected patients in their practices, and

sometimes lack reimbursement mechanisms for non-HIV patients ^{48,49} and STI clinic providers are more accustomed to acute care than ongoing care provision. Logistical concerns, including perceived burdensome insurance and medication assistance program processes, somewhat complex clinical and lab monitoring requirements, and general time constraints can further deter providers from consider PrEP for their patients.

2.4 Community Opposition

Some of the most forceful arguments, against PrEP have come from HIV/AIDS activists. Prominent advocates in the community have gone to such lengths as lobbying the FDA to reject the primary PrEP medication, Truvada, arguing that the pill is likely to reduce the use of other preventative strategies (such as condom use and needle exchange), increase HIV complacency within the LGBT community, and divert much needed funding from proven HIV prevention strategies. Other PrEP critics argue that current HIV medications lower viral loads in HIV-positive individuals sufficiently, thereby making their HIV transmission risk negligible and reducing the need for costly PrEP medications among HIV-negative partners. The relatively slow uptake of PrEP in MSM has been partly attributed to this staunch, intra-community opposition. The AIDS Healthcare Foundation has dedicated significant resources to oppose PrEP as a widespread public health policy ^{50,51}. This opposition may have particularly impacted BMSM as AHF also provides funding, social marketing, and other HIV resources to many Black HIV-related organizations in communities throughout the US. Although the agency does offer PrEP to some patients, its social marketing has focused on the limits, rather than the benefits of PrEP.

2.5 HIV and MSM Stigma

HIV stigma, defined by Herek et al. (2002) as prejudice with all its negative attributes directed towards individuals perceived as being infected by HIV, remains a potent issue. Additionally, stigma related to being identified as MSM may lead some to being uncomfortable or unwilling to disclose their sexual practices or orientation. Round table participants posited that HIV and MSM stigma continue to limit all HIV/AIDS preventative strategies. These stigmas contribute to phenomena such as non-disclosure of HIV status to providers and sexual partners and to denial of personal risk for HIV. Responses such as these to MSM and HIV stigma seems to be more pronounced in BMSM than MSM of other backgrounds ⁵². In an interviewer-administered survey conducted in New York as part of the National HIV Behavioral Surveillance system between

2004 and 2005, Bernstein et al., found that BMSM were much less likely to have disclosed same sex attraction to their healthcare providers compared to white MSM [adjusted odds ratio = 0.28; 95% confidence interval: 0.14-0.53] ⁵³. Given that stigmatizing environments have been associated with decreased MSM involvement in HIV prevention strategies generally ⁵⁴ and among BMSM specifically ^{55,56}participants expressed the need to roll out PrEP in a way that does not reinforce stigma.

In an environment where MSM and those living with HIV infection continue to be stigmatized and where Black men experience racially motivated social and economic marginalization, it is presumptuous to expect BMSM to disclose their sexual practices, admit that they may place themselves and their partners at risk, and elect to take an expensive medication regarded by some in their social network as a "slut pill". In fact, *not* taking HIV medications is seen as a badge of honor in many Black MSM networks, perhaps due to HIV stigma or, more simply, because of personal pride in having taken successful actions to prevent HIV. Hence, taking a medication heretofore prescribed only to people living with HIV in order to remain HIV negative may be seen an unattractive option for many.

Section Three

Recommended Solutions

3. Recommended Solutions

3.1 Client-Centered Care Coordination

A frequently mentioned solution at the round table involved the use of "client care coordination" to address the multiple challenges that many BMSM face; however, most of the challenges discussed were not directly medical. Client care coordination originates from a model for addressing chronic health conditions, in which patients often receive treatment from multiple providers because of disease-related issues and multiple co-morbidities ^{57,58}. By contrast, PrEP is generally administered to healthy individuals whose needs mostly relate to socio-economic circumstances and mental health. In the case of BMSM in Los Angeles, social isolation, economic marginalization, racism, homophobia, and insufficient access to reliable housing and transportation are frequent concerns.

To address these needs, round table participants called for situating social services and peer support in the settings through which BMSM receive PrEP and recognizing the critical role that PrEP providers, whether clinicians or support staff may play for many BMSM patients. The consistent availability of providers who could take the time to listen to BMSM's concerns and provide them with support, information, and resources as appropriate, was seen as vital because many BMSM in Los Angeles were described as having few sources of social support that were both trusted and accepting of them as Black sexual minority men. The region's vast size and dispersed African American population, high cost of living, status as a destination for performers, artists and runaways, and divisions between traditionally black/heterosexual institutions and gay/white institutions may also contribute to isolating many young BMSM.

Specific service needs of many BMSM include, but are not limited to, housing services, transportation access, mental health care, substance abuse treatment, addressing criminal justice issues, and help accessing or navigating MediCal or other health insurance application and authorization processes. The advantage of a client care coordination model for helping PrEP clients to access these services is that it can be designed to ensure that important information is communicated between different service providers and that these services complement each other, thus increasing effectiveness, reducing frustrations, and building trust in the process ⁵⁹.

A specific example of such a coordinated approach is the client-centered care coordination or C4 model implemented as part of the HIV Prevention Trials Network (HPTN 073) demonstration study. HPTN 073 is designed to assess the initiation of PrEP among BMSM as a form of HIV prevention in three U.S cities ⁶⁰. In this model, participants receive individualized care plans that include a comprehensive panel of social service referrals as needed, medical testing and counseling around HIV and other sexually transmitted infections (STI), other medical and counseling referrals not necessarily related to sexual behavior, and more. Staff of the LA-based HPTN 073 site indicates that the model has been useful in encouraging linkage but because study findings have not been released, they are unable to release details. The findings from this and other demonstration studies should provide additional support for PrEP clinics and prescribers to consider implementing a version of C4 in order to help address the multiple challenges faced by many BMSM in LAC. Further details regarding C4 and associated training are available on the HPTN website ⁶⁰.

3.2 PrEP Education, Marketing, and Message Framing

Messaging surrounding PrEP was a major discussion point during the roundtable, with a general consensus that the current marketing of PrEP was not sufficient or always on target. Although participants did not criticize ongoing efforts for contributing to PrEP stigma, they did suggest several improvements to these efforts. Specifically, they suggested that messages should be reframed in a manner that individuals considering PrEP could anticipate feeling proactive, informed, and wise to have made the choice, rather than passive and unsuccessful at other types of prevention. They argued for promoting the effectiveness of PrEP as rivaling that of condoms and therefore not a lesser option. Participants recognized that the messaging around PrEP would also have to prepare potential candidates for the potential of encountering healthcare providers who may be resistant to prescribing PrEP and outline steps to deal with that situation. Most importantly, they wanted PrEP outreach efforts to normalize PrEP use. In this sense, participants agreed that as important as shaping the content of PrEP messages was their increased frequency and wider dissemination, because the both would aid in increasing awareness and creating positive shifts in the general public's perception.

Increased outreach to both providers and potential PrEP candidates and their networks was suggested. Ideas for reaching providers included making concentrated efforts to educate local medical/nurse practitioner/physician assistant students and residents, providing free or low-cost continuing medical education trainings, and broadening direct provider outreach through pharmaceutical detailing where company representatives go directly to providers in order to share information about their product, explain medication assistance programs (MAP), and address questions or concerns. Interestingly, however, the Gilead representative in the audience expressed some resistance to the latter. In part, he indicated that this would not be effective because his company is unclear which providers see high numbers of at-risk patients. Instead, he argued for focusing outreach and education on HIV testing sites with high seropositivity rates.

We recommend a two-pronged approach – identifying and targeting high-yield HIV testing sites for BMSM, while also conducting broader outreach to targeted primary care providers. While public and other free HIV testing sites are an important venue for PrEP outreach and education, many do not offer primary care services. Furthermore, although more than 110,000 free HIV tests are performed each year through LA County's Department of HIV and STD Program's 40-plus partner agencies, much more testing occurs through primary care providers and home testing ³⁴. Hence, limiting provider outreach to official HIV testing sites and other settings with publicly supported testing programs would miss a significant portion of the providers who see high-risk patients. Surveillance data on incident HIV and rectal STIs in patients may help to identify those providers with higher numbers of at-risk BMSM patients. Furthermore, geographic data on these diseases has already been used to identify areas of the county with high rates of HIV and STIs; providers within these areas should also be targeted for focused outreach and education.

In addition to providing them with basic information on PrEP - including its efficacy, benefits, risks, and guidelines for patient monitoring -- roundtable participants agreed that it was important to share with providers some of the PrEP messaging outlined above, to directly address concerns regarding toxicity and drug resistance, and to highlight some of the potential benefits associated with PrEP for provider-patient relationships. For example, one physician participant who has provided PrEP to over 250 patients in his practice indicates that making PrEP available to his patients has improved communication and created a structure in which he has ongoing contact with patients that he might otherwise only see if they presented with an

acute health issue. Because of this contact, he has been able to identify unrelated health issues and work with these patients to address them proactively.

Reaching potential PrEP candidates and their networks could occur through several venues, with bus, billboard, television, and social media advertising campaigns were all endorsed by our group. Participants further complained that it was still easier to find HIV treatment, condom, or testing-related magazine or bus/billboard advertisements than it was to find ones promoting PrEP. While many of these print media may reach a broad cross-section of the population, social media efforts have the potential to be more directly targeted to BMSM. One specific suggestion was that public resources be used to spur at-risk BMSM social media users to promote PrEP to other BMSM through their own virtual social media networks. This suggestion raises another point -- the importance of the messenger, along with the message content and platform. It is unclear whether a well-known BMSM celebrity will come forward to serve as a PrEP patient champion; however, minor celebrities, including those in the pornography industry, and members of the community themselves have the potential to address PrEP barriers and promote PrEP benefits in a manner that public health experts and medical providers cannot ⁶¹. We further suggest that that the County Department of Public Health and Gilead Sciences engage a diverse group of BMSM (especially younger BMSM), in developing and disseminating PrEP messages. In summary, suggested strategies for improving PrEP awareness and acceptance include:

- ➤ Broader, more intense marketing to possible PrEP candidates, providers and the community at large.
- > Promotion of PrEP as part of a comprehensive health behavior approach.
- > Improved message framing with the aim of normalizing its use.
- > De-stigmatization of PrEP by labeling it as something an HIV-negative person can proactively do to maintain that status
- ➤ Provider education that highlights the potential benefits while at the same time not dismissing provider concerns surrounding potential drug resistance development.
- ➤ Policies that encourage the incorporation risk behavior solicitation and HIV counseling training in early in the education of medical and nurse providers.
- Institute and promote a comprehensive PrEP provider training certificate through practical and attractive compensation packages.

3.3 Increasing Sources of PrEP Referrals

Notwithstanding the efficiency and efficacy of any preventative strategy in the field of public health, the ease with which a targeted population is able to access such an intervention will be key to its success. Importantly, strategies for engagement must take into account where and when it is that at-risk Black MSM do and do not tend to interface with health care systems. It is vital to acknowledge that due to issues of limited access, medical distrust, public health practice, and cultural norms related to masculinity, such interactions have often been limited to emergent health matters, rather than ongoing preventive care ⁶². It is apparent that many BMSM who fit the profile for PrEP use may not be linked to potential prescribers or may not feel comfortable requesting this particular intervention. Participants of the round table, therefore, suggested a wide range of options for broadening the base of potential PrEP prescribers, increasing avenues of possible client-prescriber engagement, and expanding the settings through which men might be referred for PrEP. These include the following:

- ➤ Engaging HIV testing programs, post-exposure prophylaxis prescription sites, and STD clinics in assessing potential clients for PrEP.
- Engaging case managers, drug treatment counselors, mental health workers, peer navigators, as well as nurse practitioners and physician assistants within the Los Angeles public and private healthcare sectors in identifying at-risk individuals who may benefit from PrEP.
- ➤ Engaging Los Angeles County Unified School District & other educational institutions, especially community colleges and the California State systems in normalizing the use of PrEP and providing PrEP referrals or treatment for at-risk students.
- Considering occupational and sports-related medical venues for promulgating HIV prevention and PrEP-related information.
- ➤ Instituting a consistent referral criterion for PrEP consideration across the County.
- Actively promoting existing MAPs through engagement of both CBOs that serve Black MSM in particular as well as more general populations of Black men.
- ➤ Widely disseminating the County's PrEP provider directory

 (http://publichealth.lacounty.gov/dhsp/PEP-PrEP-Provider.htm) among testing facilities, social service agencies, and school clinics serving significant numbers of Black men.
- Institutionalizing/normalizing the criteria for adequate PrEP follow-up to facilitate coverage with minimal cost-sharing as a preventive service under ACA.

3.4 Supporting PrEP Adherence

Because adherence has been critical in all PrEP efficacy studies ⁶³⁻⁶⁵ and research shows that (regardless of condition) a majority of patients do not adhere to their prescribed frequency of medication intake ^{34,66,67}, participants also prioritized strategies for improving medication adherence and related support services for clients. They advocated for the development and implementation of tailored adherence curricula for both providers and patients. To our knowledge, none have been published and tailoring for Black MSM and other at-risk subgroups may be beneficial. A proposal was also made to engage LACDMH, social workers and mental health providers in efforts/programs that support adherence. Participants observed that due to the innovative and unprecedented nature of PrEP treatment, no comparison exists in current medical practice for predicting how clients would adhere to PrEP. Hence, making widely available additional support services that encourage adherence, as well as simple, low-cost tests for monitoring patient adherence, would be important to the overall HIV prevention effort. Participants suggested the following specific approaches that may be included in an adherence promotion curriculum:

- ➤ Identification of client-specific barriers and facilitators to adherence, including the potential shifting roles of risk perceptions and behavioral intentions in adherence.
- ➤ Identification of potentially depressed PrEP clients for further engagement as depression ⁶⁷ has been shown to be a predictor for medication non-adherence.
- ➤ Identification of potential cultural and social network-specific adherence supports, facilitators, and barriers.
- Clarification of the importance of communication with providers and of ongoing testing and monitoring for patients.

3.5 Increasing "Real Access" to PrEP

There was a general consensus that, with the current healthcare infrastructure and assistance provided by both LA County (premium support) and the medication manufacturer (MAP), access to PrEP for individuals who are aware and able to navigate the healthcare system is quite manageable if not adequate. However for BMSM, who may not necessarily be "out" about their

sexual practice and thus may also not be actively seeking HIV prevention methods, these programs may be insufficient. To address this issue, some participants suggested the creation of more prevention clinics that can offer targeted and culturally competent treatment spaces for Black MSM while avoiding the stigma often associated with HIV specialty clinics. Streamlining medication assistance and premium support programs were also recommended as solutions with the potential to encourage providers and clients to access these programs more.

Longitudinal, web-based and user-friendly patient or client management tools that prompt primary care practitioners to engage or initiate conversations on sexual practice at the point care was also brought up in follow-up discussions with a number of primary care providers as an opportunity to introduce BMSM to PrEP. This may consist of a computerized self-administered intake questionnaire (web- and or mobile-based) that a client would complete before seeing a provider ⁶⁸. A client who answers sexual practice questions affirmatively as an MSM would then prompt the medical provider to engage the individual in HIV prevention strategies including PrEP. Practitioners emphasized the need for this tool to have speed, simplicity and subtleness so that it does not unnecessarily disrupt clinic work flows. This assertion is backed up by research that shows that technology-based clinical decision support systems are optimized when they fit smoothly into user work flow, is able to anticipate the needs of clinicians and ultimately make it easy for practitioners to act ^{69,70}. As one practitioner put it;

'...most providers will disregard any activity that disrupts workflow, especially a prompt unrelated to the primary reason for the visit that is generalized to large group of individuals and is time consuming to execute. Simple and subtle interventions work best.'

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The use of an integrated information platform that allows medical providers to elicit pertinent preliminary information related to sexual preference and practice via indirect means may particularly assist with overcoming some of the training limitations and stigma issues discussed earlier. These tools do not supplant the need for subsequent direct communication with those who indicate potential risks, but they may help to overcome those factors that currently inhibit both provider and patient communication regarding sexual orientation, risk behavior, and HIV.

In summary, suggested strategies for improving PrEP awareness and acceptance include:

- ➤ Promote the availability of PrEP medication and co-pay assistance programs to both potential providers and patients.
- > Streamline such programs, where appropriate.
- ➤ Encourage appropriate sexual history taking through training, provider-friendly electronic medical record prompts, and technologies for collection of self-administered risk histories from patients.
- > Create and support more specialized sexual health prevention clinics that offer PrEP.

Section 4

Conclusion and Short-Term Action Items

4. Conclusion and Short-Term Action Items

Participants in this process elaborated a range of challenges in promoting this innovation in HIV prevention to one of the groups most in need of it. Nevertheless, they offered solutions that are likely implementable and feasible. In fact, progress on several has occurred in the time since the round table was first held. These include the availability of a PrEP assistance hotline information (855 HIV PrEP or 855-448-7737) and a growing directory of local PrEP providers (http://www.getprepla.com/provider_directory.html). Both of which should be widely distributed.

Table 2 summarizes the solutions suggested, while highlighting in bold those that we recommend should be prioritized for implementation in the short term. Given the stark disparities in HIV risk and potentially growing disparities in PrEP utilization observed across racial/ethnic groups of MSM, we emphasize both the urgency of this work and the importance of ensuring that efforts be targeted to and tailored for Black MSM, their providers, and social networks wherever possible. In the absence of this focus, both overall PrEP underutilization and observed racial/ethnic disparities may increase.

Table. 2 Proposed Solutions with Action Items

Proposed Solutions	Actionable Items
3.1 Client-Centered Care Coordination	 Co-locate social and medical services to address issues with social support, health literacy, poverty, criminal justice involvement, and transient housing circumstances that complicate the lives of many BMSM. Promote best practices for client-centered care coordination, including the HPTN's C4 Model, in order to address medical co-morbidities, in addition to the challenges indicated above. Ensure provider compensation for time spent on the abovementioned services.
3.2 PrEP Education & Marketing	 Improve message framing with the aim of presenting PrEP as a pro-active preventative measure. Broaden and increase outreach and promotion efforts. Target social media education and marketing efforts to young Black men, with their substantial input. Identify key providers to Black MSM for education efforts. Promote provider education that emphasizes the potential benefits of providing PrEP and addresses provider concerns. Educate providers and potential referrers especially on sexual-risk history taking and PrEP prescription criteria. Incorporate PrEP into medical education.
3.3 Broadening PrEP Referral Sources	 Constitute and promulgate clear, consistent local PrEP candidate referral criteria. Engage HIV testing programs, PEP sites, and STD clinics Engage case managers, drug treatment counselors, mental health workers, peer navigators, as well as nurse practitioners and physician assistants Engage LACDMH, LAUSD & other educational institutions, especially community colleges and the California State University systems.
3.4 Supporting PrEP Adherence	 Develop and implement culturally tailored adherence curricula for both providers and patients. Engage LACDMH, social workers and other mental health providers in efforts to support adherence. Develop policies that address provider compensation for time spent on PrEP adherence activities. Create and distribute simple, inexpensive patient and provider adherence tools, including those for monitoring adherence.
3.5 Increasing Real Access to PrEP	 Promote the availability of PrEP medication and co-pay assistance programs to both potential providers and patients. Streamline such programs, where appropriate. Encourage appropriate sexual history taking through training, provider-friendly electronic medical record prompts, and technologies for collection of self-administered risk histories from patients. Create and support more specialized sexual health prevention clinics that offer PrEP.

LACDMH: Los Angeles County Department of Mental Health

LAUSD: Los Angeles Unified School District.

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