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HIV Prevention Services for Hispanic/Latino Persons in THRIVE, 2015–2020

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Abstract

Introduction: Hispanic/Latino men who have sex with men (MSM) and transgender women (TGW) are disproportionately affected by HIV in the U.S. This study evaluated HIV prevention services and outcomes among Hispanic/Latino MSM and TGW in the targeted highly effective interventions to reduce the HIV epidemic (THRIVE) demonstration project and considered lessons learned.

Methods: The authors described the THRIVE demonstration project services provided to Hispanic/Latino MSM and TGW in 7 U.S. jurisdictions from 2015 to 2020. HIV prevention

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service outcomes were compared between 1 site with (2,147 total participants) and 6 sites without (1,129 total participants) Hispanic/Latino-oriented pre-exposure prophylaxis clinical services, and Poisson regression was used to estimate the adjusted RR between sites and pre-exposure prophylaxis outcomes. Analyses were conducted from 2021 to 2022.

Results: The THRIVE demonstration project served 2,898 and 378 Hispanic/Latino MSM and TGW, respectively, with 2,519 MSM (87%) and 320 TGW (85%) receiving 1 HIV screening test. Among 2,002 MSM and 178 TGW eligible for pre-exposure prophylaxis, 1,011 (50%) MSM and 98 (55%) TGW received pre-exposure prophylaxis prescriptions, respectively. MSM and TGW were each 2.0 times more likely to be linked to pre-exposure prophylaxis (95% CI=1.4, 2.9 and 95% CI=1.2, 3.6, respectively) and 1.6 and 2.1 times more likely to be prescribed pre-exposure prophylaxis (95% CI=1.1, 2.2 and 95% CI=1.1, 4.1), respectively, at the site providing Hispanic/Latino-oriented pre-exposure prophylaxis clinical services than at other sites and adjusted for age group.

Conclusions: The THRIVE demonstration project delivered comprehensive HIV prevention services to Hispanic/Latino MSM and TGW. Hispanic/Latino-oriented clinical settings may improve HIV prevention service delivery to persons in Hispanic/Latino communities.

INTRODUCTION

HIV disproportionately impacts Hispanic/Latino gay, bisexual, and other men who have sex with men (collectively referred to as men who have sex with men [MSM]) and transgender women (TGW) in the U.S.¹⁻³ Hispanic/Latino persons experience disparities in the implementation of HIV prevention resources such as pre-exposure prophylaxis (PrEP), a critical component of the Ending the HIV Epidemic in the U.S. (EHE) initiative.^{4,5} One national survey found that a lower proportion of Hispanic/Latino MSM than of White MSM were aware of PrEP, had discussed PrEP with their healthcare provider, or had used PrEP.⁶ The survey underscores the most recent national PrEP data from 2021 showing that PrEP coverage was lower for Hispanic/Latino persons (20%) than for White persons (80%).⁷

Previous research has identified key individual-, network-, healthcare system-, and structural-level barriers to effective PrEP use for Hispanic/Latino persons. These barriers include language, immigration status, stigma, mental health, substance use, distrust of healthcare systems, access to care, and health insurance, among others.^{4,8-14} To date, few studies have described the impact of culturally tailored interventions to improve PrEP uptake for Hispanic/Latino persons. Those that did primarily adopted peer-led strategies, including PrEP outreach, PrEP navigation, and social network-based interventions.¹⁵⁻¹⁸

To address the disproportionate impact of HIV among Black and Hispanic/Latino persons, the Targeted Highly Effective Interventions to Reduce the HIV Epidemic (THRIVE) demonstration project funded 7 U.S. health departments to implement comprehensive, culturally competent HIV prevention and care interventions for Black and Hispanic/Latino MSM and TGW.¹⁹ Participating health departments created and led collaboratives, including health departments, community-based organizations (CBOs), behavioral and social service providers, and clinical providers, to implement HIV prevention activities.²⁰ One THRIVE site specifically developed strong partnerships with multiple established Hispanic/Latino-

education materials and HIV prevention programs tailored to Hispanic/Latino MSM and TGW; employed staff who were native Spanish speakers and shared similar cultural backgrounds as their clients, including not only administrative staff and navigators but also nurses, clinicians, and behavioral health specialists (rather than using in-person or phone interpreter services during clinical encounters); and were located in areas with high densities of Hispanic/Latino residents. For other THRIVE sites, collaboratives may have included partners that provided outreach materials in Spanish, employed a Spanish-speaking navigator or outreach worker, or offered Spanish-language interpretation services, but those collaboratives were not able to achieve the comprehensive scope of services tailored to Hispanic/Latino clients as the site previously described.

Measures

Age at enrollment was categorized as 18–24, 25–34, 35–44, 45–54, and 55 years. *HIV prevention services outcomes* were defined according to the cross-site project evaluation plan. Clients were screened for PrEP eligibility using a questionnaire on the basis of the Centers for Disease Control and Prevention’s PrEP clinical guidelines.²⁴ The main PrEP outcomes of interest were *linkage to PrEP*, defined by a person attending an initial appointment with a PrEP provider, and *PrEP prescription*, defined as the provision of a PrEP prescription by a PrEP provider. *PrEP navigation* was defined as using a navigator for PrEP regardless of whether linkage to PrEP occurred. Clients were screened for nPEP eligibility by assessing behavioral risk to determine whether an exposure (1) posed a substantial risk of HIV infection and (2) occurred within 72 hours of evaluation; clients meeting both criteria were considered eligible. The main nPEP outcome was prescription of nPEP medication for eligible clients. Regarding unmet needs, clients were screened for behavioral health or essential support service needs (e.g., mental health, substance use, and insurance, among others). Sites developed their own screening tools to assess unmet needs, which relied on clients self-reporting. *Unmet need* was defined as when a client self-reported a behavioral health or essential support service need, and *navigation for unmet needs* was defined as using a navigator to address the client’s unmet need regardless of whether linkage to the service occurred.

Statistical Analysis

This study described the number of Hispanic/Latino MSM and TGW without HIV served in THRIVE by site and age at enrollment. For HIV testing, the number of tests performed, the number of clients with 1 HIV test, and the number of clients with a positive test were summed. The proportions screened and eligible for nPEP and, among those eligible, the proportion prescribed nPEP were calculated. The proportions screened and eligible for PrEP were calculated. Among PrEP-eligible persons, the proportions referred and linked to a PrEP provider and prescribed PrEP were calculated. Missing results from continuum steps were imputed as received if a client was prescribed PrEP and imputed as not received if a client was not prescribed PrEP or if the PrEP prescription variable was missing. The proportion who received navigation services among PrEP-eligible persons was determined. In addition, the proportions screened for unmet behavioral health and essential support service needs, including mental health, substance use, health insurance, housing, employment assistance, transportation, and educational assistance, were calculated. The proportion with an unmet

need among those screened and the proportion who received navigation services among those with unmet needs were calculated.

To protect anonymity for site-to-site comparisons, sites were assigned a random identifier (1–7). Sites were grouped into those with partners in their collaborative who offered Hispanic/Latino-oriented PrEP clinical services (Site 7) and those without such partners (Sites 1–6). The PrEP and nPEP clinical services continua were compared between groups. In addition, the RRs with 95% CIs of the binary outcomes of being linked and prescribed PrEP, comparing sites providing Hispanic/Latino-oriented PrEP clinical services with those that did not, were estimated using Poisson regression models with a sandwich estimator for robust SEs that controlled for age and fit for MSM and TGW THRIVE clients separately. Data were analyzed using SAS 9.4 (SAS Inc, Cary, NC).

RESULTS

From 2015 through 2020, THRIVE enrolled 2,898 Hispanic/Latino MSM and 378 Hispanic/Latina TGW (Table 1).

Most Hispanic/Latino clients were aged <35 years (MSM: 1,905 [66%]; TGW: 236 [62%]). Among MSM, 1,044 (36%) were enrolled at Sites 1–6, and 1,854 (64%) were enrolled at Site 7; among TGW, 85 (22%) were enrolled at Sites 1–6, and 293 (78%) were enrolled at Site 7.

During THRIVE, 8,016 and 1,058 total HIV tests were performed among Hispanic/Latino MSM and TGW, respectively (Table 1). HIV testing identified 26 (1%) MSM and 2 (1%) TGW with newly diagnosed HIV. Regarding nPEP among MSM, 1,040 (36%) were screened for nPEP, and 69 (53% of persons eligible) were prescribed nPEP (Table 1). For TGW, 86 (23%) were screened for nPEP, and 11 (92% of persons eligible) were prescribed nPEP. At Sites 1–6, the proportions of nPEP-eligible persons who were prescribed nPEP were 13% (9 of 71) and 0% (0 of 1) for MSM and TGW, respectively. At Site 7, 100% of eligible MSM (60 of 60) and TGW (11 of 11) were prescribed nPEP.

Table 1 describes PrEP services outcomes, including navigation for Hispanic/Latino MSM and TGW overall. Briefly, among PrEP-eligible MSM, 1,456 (73%) were linked to PrEP services, and 1,011 (50%) were prescribed PrEP; among PrEP-eligible TGW, 125 (70%) were linked to PrEP services, and 98 (55%) were prescribed PrEP.

Figure 1 reports the outcomes for the PrEP continuum for Hispanic/Latino MSM and TGW. Among MSM, the percentages of clients screened for PrEP (Sites 1–6: 96%; Site 7: 79%) and eligible for PrEP (Sites 1–6: 80%; Site 7: 63%) differed by site. The percentages of PrEP-eligible MSM referred for PrEP (Sites 1–6: 88%; Site 7: 94%), linked to PrEP (Sites 1–6: 45%; Site 7: 93%), and prescribed PrEP (Sites 1–6: 37%; Site 7: 60%) were all higher for Site 7 than for Sites 1–6. Among TGW, the percentages of clients screened for PrEP (Sites 1–6: 94%; Site 7: 45%) and eligible for PrEP (Sites 1–6: 81%; Site 7: 37%) differed by site. The percentages of PrEP-eligible TGW referred for PrEP (Sites 1–6: 87%; Site 7: 87%) were similar. The percentages of PrEP-eligible TGW linked to PrEP (Sites 1–6: 43%; Site 7: 87%) and prescribed PrEP (Sites 1–6: 33%; Site 7: 69%) were higher for Site 7.

The age-adjusted RRs (aRRs) to evaluate the association between study sites offering Hispanic/Latino-oriented PrEP clinical services and PrEP outcomes were estimated in Table 2. Among MSM, there was an increased likelihood of PrEP linkage (aRR=2.0, 95% CI=1.4, 2.9) and prescription (aRR=1.6, 95% CI=1.1, 2.2) for the site that provided Hispanic/Latino-oriented PrEP clinical services. Among TGW, results were similar, with an increased likelihood of PrEP linkage (aRR=2.0, 95% CI=1.2, 3.6) and prescription (aRR=2.1, 95% CI=1.1, 4.1) for the site that provided Hispanic/Latino-oriented PrEP clinical services.

Table 3 describes unmet behavioral health and essential support services needs for Hispanic/Latino MSM and TGW. Among MSM, unmet needs were highest for health insurance (55%), substance use services (40%), and mental health services (28%). Navigation services were provided for >50% of MSM with an unmet need for every category except for substance use (9%). Among TGW, unmet needs were highest for health insurance (72%), mental health services (63%), and substance use services (52%). Navigation services were provided for >50% of TGW with an unmet need for every category except for substance use (0%).

DISCUSSION

Overall, THRIVE sites achieved higher PrEP coverage rates (MSM, 50%; TGW, 55%) among Hispanic/Latino MSM and TGW than the national average (20%) for Hispanic/Latino persons.⁷ The largest proportion of PrEP prescriptions among PrEP-eligible clients were at the site with partners who provided Hispanic/Latino-oriented PrEP clinical services. At this site, 60% and 69% of eligible MSM and TGW, respectively, were prescribed PrEP; MSM and TGW were 2 times more likely to be linked to PrEP and 1.6–2.1 times more likely to be prescribed PrEP than at sites without Hispanic/Latino-oriented PrEP clinical services. This level of PrEP coverage exceeded the EHE goal of 50% PrEP coverage by 2025 and approached the PrEP coverage indicator among White persons in the U.S., significantly narrowing the disparity in HIV prevention with PrEP among Hispanic/Latino men.^{7,25} Similar trends by site were observed for nPEP, with Site 7 prescribing nPEP to a higher percentage of eligible THRIVE clients.

Sites 1–6 screened a higher proportion of Hispanic/Latino MSM and TGW clients for PrEP than Site 7. This evaluation was not able to identify all factors that may have contributed to this difference. However, variations in the implementation of THRIVE services by jurisdiction, especially differences in THRIVE client identification and PrEP screening protocols, likely contributed to this finding. Despite a lower PrEP screening proportion, the key outcome, PrEP prescription coverage, was higher at the site with partners who provided Hispanic/Latino-oriented PrEP clinical services than at sites without those partners.

Hispanic/Latino persons face many barriers to accessing HIV prevention services. The results of THRIVE suggest that a coordinated, comprehensive strategy developed in partnership between health departments, CBOs, behavioral and social service providers, and clinical providers can successfully address barriers to HIV prevention services. Furthermore, offering culturally and linguistically appropriate HIV prevention clinical services may be an important strategy to address barriers and ultimately reduce HIV transmission in

the Hispanic/Latino community. Although the literature regarding culturally appropriate interventions to improve PrEP uptake for Hispanic/Latino persons is limited, previous research has shown that these interventions can improve outcomes for other HIV prevention and treatment services.^{26–28}

THRIVE jurisdictions identified many unmet behavioral health and essential support service needs among Hispanic/Latino clients, including health insurance, mental health service, and substance use service needs as the most prevalent. Sites successfully provided navigation services to address many of the needs of Hispanic/Latino clients. These unmet needs represent individual- and structural-level barriers to HIV prevention services, and the high burden of unmet needs across both groups reinforces the value of screening and assisting Hispanic/Latino clients to connect with needed services. However, providing navigation for substance use services was challenging because <10% of MSM and 0% of TGW with unmet needs for substance use services received navigation. Qualitative interviews with THRIVE sites revealed significant challenges in identifying substance use treatment partners in THRIVE jurisdictions (MRT, unpublished observations, 2022). Insufficient substance use treatment services are a national problem. One national survey reported that only 10.3% of U.S. persons who had a substance use disorder in 2019 received substance use treatment that year.²⁹ The shortage is compounded by insufficient training for clinicians to provide evidence-based substance use disorder care and shortages of addiction medicine specialists.^{30–32} Where substance use disorder treatment services do exist, they are rarely tailored to the needs of sexual and gender minorities, and cost remains a barrier.^{30,33,34} These unmet needs represent important obstacles to achieving the EHE's goal to reduce new HIV infections by 90%.⁵

In THRIVE, Hispanic/Latina TGW had a high burden of unmet needs across all domains. This difference was most pronounced for mental health service needs, where 63% of TGW reported unmet needs compared with 28% for MSM. The high rate of mental health service needs was reflected in a national survey of transgender persons, which found that Hispanic/Latino transgender persons experienced serious psychological distress (45%) or had previously attempted suicide (45%), at rates 9 and 10 times higher than that of the U.S. population, respectively.³⁵ Previous studies have documented high rates of substance use, unemployment, homelessness, and lack of health insurance or access to health care among transgender persons.^{3,35–38} These barriers, exacerbated by the HIV stigma, racism, and transphobia that underlie them, have led to large disparities in HIV prevalence among Hispanic/Latina TGW compared with that among White TGW. A recent meta-analysis estimated HIV prevalence to be 26% among Hispanic/Latina TGW in the U.S. A survey of TGW in 7 major U.S. cities estimated the prevalence of HIV to be 35% among Hispanic/Latina TGW.^{2,3} Efforts to provide comprehensive, culturally appropriate HIV prevention services informed by the unique needs of Hispanic/Latina TGW are urgently needed.

Limitations

This analysis had some limitations. First, limited sociodemographic information such as education and income were collected, limiting the assessment of compositional differences in Hispanic/Latino populations across sites and their inclusion as potential confounders in

analytic models. Second, the implementation of THRIVE services varied by jurisdiction, including identifying THRIVE clients and screening for PrEP eligibility. This, along with other unmeasured site-related factors, impact the ability to compare services received by clients across sites and may have contributed to differences in the outcomes observed. Therefore, although the results of THRIVE are very encouraging, the authors cannot conclude that providing Hispanic/Latino-oriented clinical services was the cause of the differences in outcomes observed. Third, this study may have underestimated an outcome (e.g., PrEP prescription) if participants received these services from organizations outside of the THRIVE collaborative. The likelihood that THRIVE clients received services outside of the collaboratives may have varied by site, given differences in the composition of the collaboratives and resource availability in participating jurisdictions. Finally, findings from this analysis might not be generalizable to other jurisdictions with different patient populations and number of HIV diagnoses.

CONCLUSIONS

In summary, the THRIVE demonstration project successfully served Hispanic/Latino MSM and TGW by implementing and supporting the use of comprehensive HIV prevention services, including HIV testing, PrEP, and nPEP. The inclusion of collaborative partners that provided Hispanic/Latino-oriented PrEP clinical services was associated with increased receipt of HIV prevention services by Hispanic/Latino MSM and TGW. This study also found that a large proportion of Hispanic/Latino THRIVE clients, especially TGW, had unmet behavioral health and essential support service needs. Implementing comprehensive, Hispanic/Latino-oriented HIV prevention services; behavioral health services; and essential support services that are specifically designed to meet the needs of Hispanic/Latino MSM and TGW communities can support achieving the goals of the EHE initiative and decrease disparities in HIV diagnoses among these populations.

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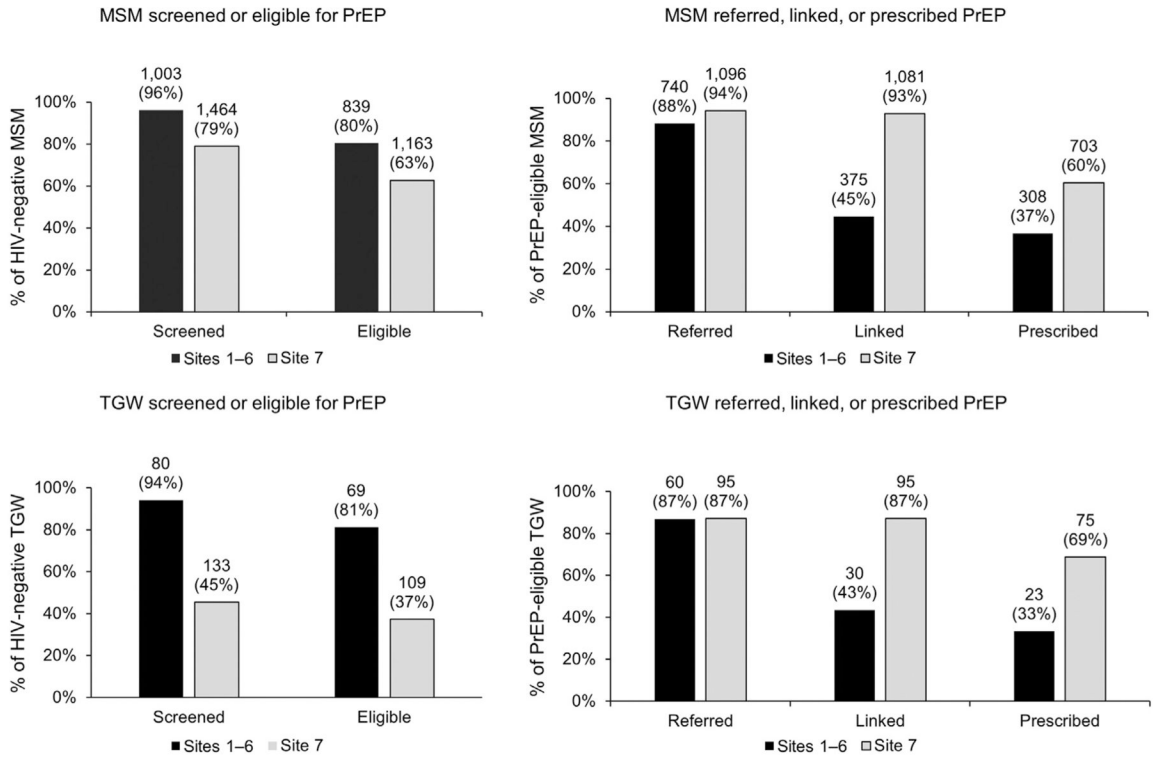


Figure 1. HIV PrEP services among Hispanic/Latino (A) MSM and (B) TGW during the THRIVE demonstration project, 2015–2020. *Note:* The number above each bar represents the number in each subgroup followed by the percentage among the total sample size for the corresponding sites. At Sites 1–6, 1,044 MSM were HIV-negative; at Site 7, 1,854 MSM were HIV-negative. At Sites 1–6, 85 TGW were HIV-negative; at Site 7, 293 TGW were HIV-negative. MSM, men who have sex with men; PrEP, pre-exposure prophylaxis; TGW, transgender women; THRIVE, Targeted Highly Effective Interventions to Reduce the HIV Epidemic.

Table 1.

Characteristics of Hispanic/Latino MSM and TGW Without HIV and HIV Prevention Services Received, THRIVE, 2015–2020

Characteristics	MSM, <i>n</i> (%)	TGW, <i>n</i> (%)
Total, N	2,898 (100)	378 (100)
Age group at enrollment, years		
18–24	574 (20)	78 (21)
25–34	1,331 (46)	158 (42)
35–44	516 (18)	80 (21)
45–54	194 (7)	22 (6)
55	78 (3)	6 (2)
Unknown	205 (7)	34 (9)
THRIVE site		
Site 1	57 (2)	1 (0)
Site 2	110 (4)	7 (2)
Site 3	378 (13)	23 (6)
Site 4	236 (8)	30 (8)
Site 5	137 (5)	17 (4)
Site 6	126 (4)	7 (2)
Site 7	1,854 (64)	293 (78)
HIV testing		
Total tests	8,016	1,058
Clients with 1 HIV test	2,519 (87)	320 (85)
Clients with positive test results	26 (1)	2 (1)
nPEP services		
Screened for nPEP ^a	1,040 (36)	86 (23)
Eligible for nPEP ^b	131 (13)	12 (14)
Prescribed nPEP ^c	69 (53)	11 (92)
PrEP services		
Screened for PrEP ^a	2,467 (85)	213 (56)
Eligible for PrEP ^a	2,002 (69)	178 (47)
Referred for PrEP ^d	1,836 (92)	155 (87)
Linked to PrEP services ^d	1,456 (73)	125 (70)
Prescribed PrEP ^d	1,011 (50)	98 (55)
PrEP navigation services		
Navigation services received ^d	904 (45)	75 (42)

Note: The 7 funded THRIVE jurisdictions included Birmingham, AL; Baltimore, MD; District of Columbia; New Orleans, LA; Brooklyn, New York City, NY; Philadelphia, PA; and Hampton Roads, VA.

^a Among persons without HIV.

^b Among persons screened for nPEP.

^c Among persons eligible for nPEP.

^d Among persons eligible for PrEP.

MSM, men who have sex with men; nPEP, nonoccupational post-exposure prophylaxis; PrEP, pre-exposure prophylaxis; TGW, transgender women; THRIVE, Targeted Highly Effective Interventions to Reduce the HIV Epidemic.

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Table 2.

Association of PrEP Services With THRIVE Site for Hispanic/Latino MSM and TGW, THRIVE, 2015–2020

THRIVE site	Linked to PrEP, ^a aRR (95% CI) ^b	Prescribed PrEP, ^a aRR (95% CI) ^b
MSM		
Sites 1–6 ^c	Reference	Reference
Site 7 ^c	2.0 (1.4–2.9)	1.6 (1.1–2.2)
TGW		
Sites 1–6 ^c	Reference	Reference
Site 7 ^c	2.0 (1.2–3.6)	2.1 (1.1–4.1)

^a Among persons eligible for PrEP.^b aRR (95% CIs) using Poisson regression.^c Adjusted for age group.

aRR, adjusted RR; MSM, men who have sex with men; PrEP, pre-exposure prophylaxis; TGW, transgender women; THRIVE, Targeted Highly Effective Interventions to Reduce the HIV Epidemic.

Table 3. Unmet Behavioral Health and Essential Support Service Needs Among Hispanic/Latino MSM and TGW, THRIVE, 2015–2020

Unmet need	Screened for need, <i>n</i> (%)	Persons with unmet need, ^a <i>n</i> (%)	Navigation provided, ^b <i>n</i> (%)
MSM (<i>n</i> =2,898)			
Insurance	1,178 (41)	648 (55)	450 (69)
Mental Health	907 (31)	255 (28)	182 (71)
Substance use	1,217 (42)	491 (40)	45 (9)
Employment assistance	1,063 (37)	242 (23)	124 (51)
Educational assistance	1,046 (36)	143 (14)	118 (83)
Housing	1,007 (35)	90 (9)	73 (81)
Transportation	809 (28)	62 (8)	38 (61)
TGW (<i>n</i> =378)			
Insurance	216 (57)	156 (72)	143 (92)
Mental Health	142 (38)	90 (63)	48 (53)
Substance use	155 (41)	81 (52)	0 (0)
Employment assistance	121 (32)	55 (45)	31 (56)
Educational assistance	126 (33)	45 (36)	29 (64)
Housing	121 (32)	30 (25)	23 (77)
Transportation	92 (24)	19 (21)	11 (58)

^a Among persons who were screened for unmet needs.

^b Among persons who reported an unmet need.

MSM, men who have sex with men; TGW, transgender women; THRIVE, Targeted Highly Effective Interventions to Reduce the HIV Epidemic.