Psychosocial Factors Interact with Race During Countywide Personalized HIV Care (00932)

Michael J. Li[1], Brendon Chau[2], Wendy H. Garland[3], Sona Oksuzyan[3], Robert E. Weiss[2], Sae Takada[4], Uyen Kao[1], Sung-Jae Lee[5], & Steve Shoptaw[1,5]

[1] Department of Family Medicine, University of California, Los Angeles, [2] Department of Biostatistics, University of California, Los Angeles, [3] Division of HIV and STD Programs, Los Angeles County Department of Public Health, [4] Division of General Internal Medicine and Health Services Research, University of California, Los Angeles, [5] Department of Psychiatry and Biobehavioral Sciences, University of California, Los Angeles

Background

Black/African American and Latinx people in the US are disproportionately affected by the HIV epidemic, driven by structural and social factors. In Los Angeles County (LAC), California, Black/African American and Latinx people living with HIV (PLWH) have higher new diagnosis rates and lower engagement in care and viral suppression (**VS**, <200 c/mL) compared to other racial/ethnic groups. To support PLWH with complex needs, the LAC Department of Public Health (DPH) implemented a countywide Medical Care Coordination (**MCC**) Program in 2013 that provides integrated medical and psychosocial case management.

We report a longitudinal evaluation of MCC that compares trajectories of VS by gender and race/ethnicity, while accounting for differences in psychosocial issues.

Methods

We conducted a longitudinal analysis of VS data from 10,184 PLWH in the LAC MCC from 12 months prior to MCC enrollment to 18 months post-enrollment.

Medical Care Coordination Program. The MCC Program was implemented in March 2013, and now serves clients at 30 medical homes throughout LAC. MCC offers services to patients who: 1) had an HIV diagnosis in the past 6 months; 2) have not seen a HIV medical provider in ≥ 7 months; 3) are not on ART; 4) are on ART but not suppressed; or 5) had an STI diagnosis in the past 6 months.

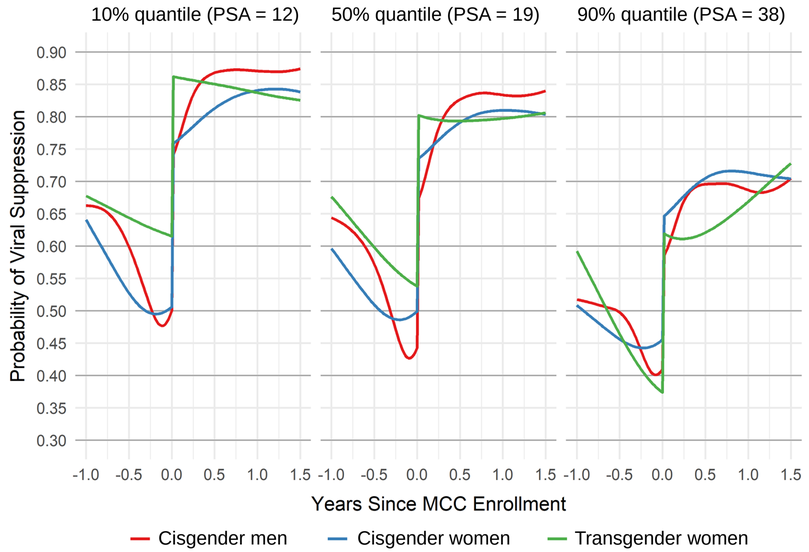
Multidisciplinary teams of a registered nurse, a Master's level social worker, a retention specialist, and a case manager are co-located at each contracted clinic. MCC teams screen patients for MCC, assess patient acuity, develop client-centered care plans, deliver brief interventions (ART adherence, risk reduction, engagement in care, and behavioral health) and provide linked referrals for mental health care, substance use treatment, housing, and other psychosocial health services.

Analysis. Psychosocial acuity (**PSA**) was assessed at MCC enrollment as part of a larger acuity assessment. PSA was on a scale of 9-72 and based on housing need, income stability, mental health status, social support, substance use, and sexual risk behaviors, with higher scores indicating someone with greater psychosocial needs. Viral load data were obtained from the LAC Enhanced HIV/AIDS Reporting System.

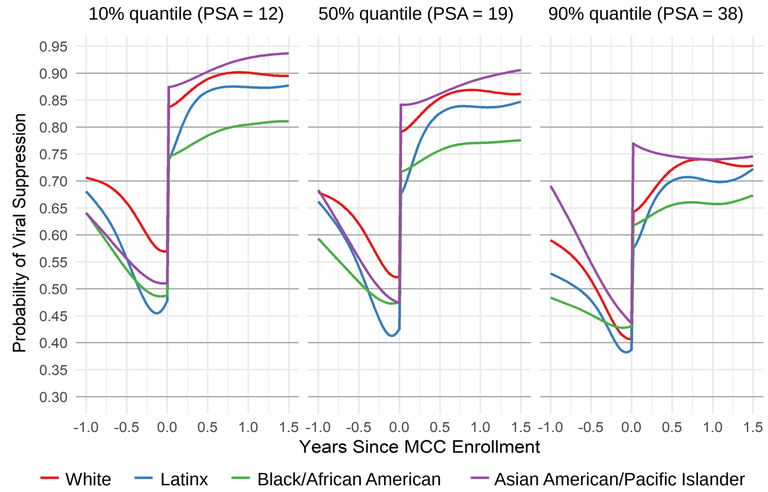
We used Bayesian longitudinal semi-parametric modeling to estimate the probability of VS from 12 months before MCC enrollment to 18 months after as a function of race/ethnicity (White, Latinx, Black/African American, and Asian American/Pacific Islander, gender (cisgender men, cisgender women, and transgender women), and PSA.

Results

- 85% of PLWH in MCC were cisgender men, 12% were cisgender women, and 3% were transgender women; 47% were Latinx, 28% were Black/African American, 21% were White, and 4% Asian American/Pacific Islander.
- The mean PSA (range 9-72) was higher in transgender women (22.6, SD = 10.4) than cisgender men (21.6, SD=10.9) and cisgender women (25.8, SD = 11.8) in MCC. The mean PSA was higher in Black/African American (23.9, SD = 11.1) and White PLWH (24.0, SD = 10.9) than Latinx (21.6, SD = 9.8) and Asian American/Pacific Islander PLWH (19.3, SD = 8.7) in MCC.
- By 18 months following MCC enrollment, the probability of VS exceeded that at both MCC enrollment and 12 months prior to enrollment.
- Higher PSA scores were associated with lower VS probability over time.
- By 6 months post-enrollment, transgender women with high PSA scores (90% quantile, PSA = 38) did not achieve the same probability of VS as cisgender women and men, but eventually achieved similar VS probability by 18 months post-enrollment.



- Black/African American PLWH did not achieve the same probability of VS as other racial/ethnic groups during the 18 months following MCC enrollment. This disparity was more pronounced in those with moderate (50% quantile, PSA = 19) and low PSA scores (10% quantile, PSA = 12) than those with high PSA scores (90% quantile PSA = 38).



Discussion

- By 18 months following enrollment in MCC, the probability of VS was higher than at any point in the 12 months preceding enrollment.
- Disparities in VS appear in Black African American and transgender MCC patients following MCC enrollment.
- Unexpectedly, disparities in VS between Black/African American MCC patients and other racial/ethnic groups were greatest when PSA scores were moderate or low, suggesting other factors may be driving these disparities.
- To reduce HIV disparities and advance the national Ending the HIV Epidemic Initiative, future evaluation is needed to understand the differential impact of other individual, provider, and system-level factors not captured in this study, such as discrimination, medical mistrust, and other clinical conditions—on care engagement and successful treatment.

UCLA Health
Family Medicine

CHIPTS
Center for HIV Identification, Prevention and Treatment Services

County of Los Angeles
Public Health

Acknowledgements

This research was supported by the Center for HIV Identification, Prevention and Treatment Services (National Institute of Mental Health grant P30M0H58107), and the National Institute on Drug Abuse (K01 DA051329).