Implementation of a Ridesharing Intervention to address Transportation Vulnerability for People Living with HIV in the Southern United States: Qualitative Findings on Acceptability and Feasibility

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BACKGROUND

People living with HIV (PLHIV) in the southern United States (US) are more likely to have delayed linkage to care Data Source: A randomized controlled trail (RCT) was implemented with PLHIV (N=160) experiencing new diagnoses in the US¹ and a higher mortality rate than other US regions.² South Carolina (SC) is one such southern state with poor HIV outcomes.

Social determinants of health (e.g., poverty, poor infrastructure) are drivers of these HIV disparities. The southern US is characterized by high rates of poverty, inadequate public transportation infrastructure, and a shortage of HIV providers.3 A recent statewide situational analysis identified transportation barriers as the 'most frequent and often first reported barrier' to HIV care. 4 These transportation barriers include affordability concerns, insufficient public infrastructure, unreliable transportation systems, and limited transportation schedules⁵

Limited research exists on transportation interventions for people living with HIV. For instance, a 2020 systematic review identified only eight studies on nonemergency transportation interventions across all health conditions⁶. Interventions using rideshare programs (e.g., Lyft, Uber) offer promise for addressing transportation vulnerability.⁷ However, evidence is mixed regarding whether these programs reduce missed appointments and whether they are feasible and acceptable to PLHIV.8,9

AIMS

Therefore, the current study sought to reduce transportation vulnerability among PLHIV in South Carolina—a rural southern US state. In partnership with a local healthcare system, we implemented a concierge "app-based" (i.e., LYFT) rideshare program for PLHIV experiencing transportation vulnerability. We then completed semistructured interviews to examine feasibility and acceptability of the program

METHODS

and to fall out of care compared to individuals from other regions. Indeed, the southern US has the highest rate of transportation vulnerability to determine whether a concierge ridesharing program improved viral suppression rates compared to standard of care transportation over a 12-month period. All participants were re-engaging in HIV care after ≥9 months absence or were engaged in care but not virally suppressed.

> Data Collection: A subset of participants (n = 20) were recruited to complete semi-structured, in-depth interviews about their transportation experiences. Interviews lasted ~15 minutes to 1 hour. Interview questions included questions about perceived transportation-related barriers to HIV care, as well as perceptions about the implementation of the rideshare program and its acceptability and feasibility. All interviews were audio-recorded. Recordings were then transcribed verbatim, cross-checked for accuracy, and de-identified. Participants received a \$100 participant incentive in appreciation of their time, and all study procedures were approved by the University of South Carolina Institutional Review Board.

> Data Analysis: We used an interactive, team-based qualitative analytical approach. Two coders trained in qualitative analysis developed and tested a codebook. Each transcript was coded by one coder then was secondarily coded in an unblinded fashion. The two coders came to consensus on any discrepancies between primary and secondary coding. For the current study, all excerpts with the parent codes "Lyft" were extracted

> Participant Demographics: The sample was predominantly Black or African American (n=17), with two identifying as American Indian or Alaskan Native, and one as White. Ten participants identified as heterosexual or straight women, one as a bisexual woman, five as heterosexual or straight men, three as gay men, and one man did not provide his sexual identity. The mean age of participants was 49.5 years (SD=10.4), with ages ranging from 27-64 years. About half of the participants (n=9) were unemployed, with an additional seven indicating they were unable to work. In terms of income, most participants (n=15) earned <\$10,000 per year.

RESULTS

Emergent themes and illustrative quotes on transportation vulnerability and the feasibility/acceptability of the rideshare intervention are presented below.

The rideshare intervention was described as acceptable and feasible in meeting transportation-related needs

"This plan is excellent for people like me that don't have no cars. And you know what I'm saying, I think it needs to be implemented in every organization...it would really, really help, it would be big, they would see so much difference...it's a win-win situation. I get to my appointment, and you're getting paid for taking me to my appointment. You don't have to wait on me, but you come back and get me, you know what I'm saying?" - 45-year-old straight Black woman living with HIV for 16 years

"I got it on my phone so when they'll text me, and all I got to do is call them back, or ya'll have to call them back and let them know I'm finished with my appointment... And they'll be at the door. I'll be at the door waiting on them." - 50-year-old straight woman living with HIV for 16

"There's no stigma with them [Lyft] there, and they're friendly. That's what I like about it is they're friendly...they like what they do." - 56-year-old gay White man living with HIV for 36

"I'm glad I have Uber, so I ain't have to worry about at least coming up here. That's good. That's my main [thing]...my appointment and my medicine and stuff." - 43-year-old straight Black woman living with HIV for 26 years

"Cause as long as we got Lyft, a lot of us, patients will come to the doctor. If we guarantee a ride and a ride back, we will come. "-45-year-old straight Black woman living with HIV for 16 years

Participants felt safe using the rideshare intervention (e.g., in interactions with drivers, in road safety)

"Everybody I've dealt with with Lyft has been just as nice as they can be and they're clean cars...I've not felt unsafe with any of them." - 56-year-old gay White man living with HIV for 36 vears

"I never had no bad experience with a Lyft driver. Man or woman, I've never had a bad experience versus me getting a ride with somebody I really don't know. You know what I'm saying? And it's crazy because I don't know the Lyft driver either, but the atmosphere and the energy that I got from these Lyft drivers is enough to make me know okay, I'm safe, they're not going to bother me." - 45-year-old straight Black woman living with HIV for 16 years

Without the rideshare intervention, participants would have difficulty getting to care appointments

"Lyft made it...easier. [Without Lyft] it'd be hard. I couldn't make it. I'd have to reschedule my appointments." - 27-year-old bisexual woman living with HIV for 5 years

The rideshare intervention was described as reliable, timely, and convenient

"By the time I get downstairs, I might be down there 10 minutes and they're pulling in." - 56year-old gay White man living with HIV for 36 years

"You get a text and they tell you [where] your driver will be. You've got an appointment on such and such day, for this appointment on this Uber. Okay. Your driver when they drop the appointment there, takes you, your driver would be there at such, such a time. ...[It's] great, everything['s] perfect." - 43-year-old straight Black woman living with HIV for 26 years

"Ya'll say 15 minutes, that's what ya'll do. Ya'll come on time." - 50-year-old straight woman living with HIV for 16 years

"I like it because they tell you, okay we're gonna get you at such and such time, and such and such is arriving in 5 minutes. That's giving me a heads up, okay, my ride is coming, let me just do whatever I got to finish doing, and then like that [they're here.] **That's not complicated**." 45-year-old straight Black woman living with HIV for 16 years

Participants preferred for staff to arrange rideshares than to arrange the ride themselves through an app

"I was confused at first because the first one she set up for me, it said to text this number back to start your round trip thing. So I texted the number back and this lady calls me and she says, Well, are you coming out?' And I'm like, what do he mean? My appointment ain't till tomorrow. Uh, she said, well, you texted saying you needed the ride. I said, well, they tell me to text that, so then I've got it straight. The lady that makes the appointment, she said, once I get a text, just don't respond at all. And she said that the appointment will be set, they'll pick you up at a certain time and she'll let him know that I'm ready to go home." - 56-year-old gay White man living with

"I think [it's] better that they order it ... Because, it is, they know what time the appointment and everything is, they know exactly what to tell people to come and get you. It's better." - 61year-old straight man living with HIV for four years

One participant noted concerns about privacy when using rideshare options

"It's like you taking that chance...I've lived in [small metropolitan city] all my life. So you're taking that chance of that Lyft come in. And what if I went to school with that person? Or what if I know them personally or they know me?...When I choose my doctors or my primary physicians or whatever, you have to scope out the office. And if I see somebody I know, Nope--can't come to you. Going to find someplace else to go, which I know HIPAA...protects us but Lyft drivers don't have to abide by HIPAA laws." – 43-year-old straight woman living with HIV for 20 years

CONCLUSIONS

Addressing transportation vulnerability among individuals living with HIV in the southern US is critical to reduce HIV disparities and to ensure access to HIV care. Much of the southern US is characterized by high poverty and inadequate public transportation, indicating a strong need for novel transportation interventions

Qualitative findings from a diverse group of PLHIV suggest that a concierge ridesharing program is perceived as an acceptable and feasible approach to help individuals overcome transportation-related challenges. The ridesharing program was described as convenient, safe, and reliable. Participants described the intervention as integral to their engagement in HIV care. Results also indicate the importance of customizing transportation interventions to individual needs. For example, many participants voiced a preference for clinic staff to coordinate the rideshare services, rather than managing the rides personally. Likewise, while most had favorable opinions towards the rideshare program, one participant voiced concerns about the privacy of the rideshare program. As such, clinics should customize interventions based on patient preferences. Overall, qualitative findings indicate positive perceptions towards the concierge

An ongoing RCT of the rideshare intervention will provide insight into the efficacy of this transportation intervention on key HIV care outcomes (e.g., missed appointments, viral suppression) for PLHIV in the US with transportation vulnerabilities.

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