

Disparities in the Geographic Accessibility of Ryan White HIV/AIDS Program Clinics in the United States

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Background

- United States' (US) Ryan White HIV/AIDS Program (RWHAP): provides comprehensive care for people with HIV (PWH) with low incomes
- Ending the HIV Epidemic* (EHE) Initiative: allocated funding to jurisdictions with high burden of HIV to expand access to RWHAP
- Improving access to care for all PWH is critical because the current US viral suppression estimate is 65%
- US standards suggest <60 minutes of travel for specialty care

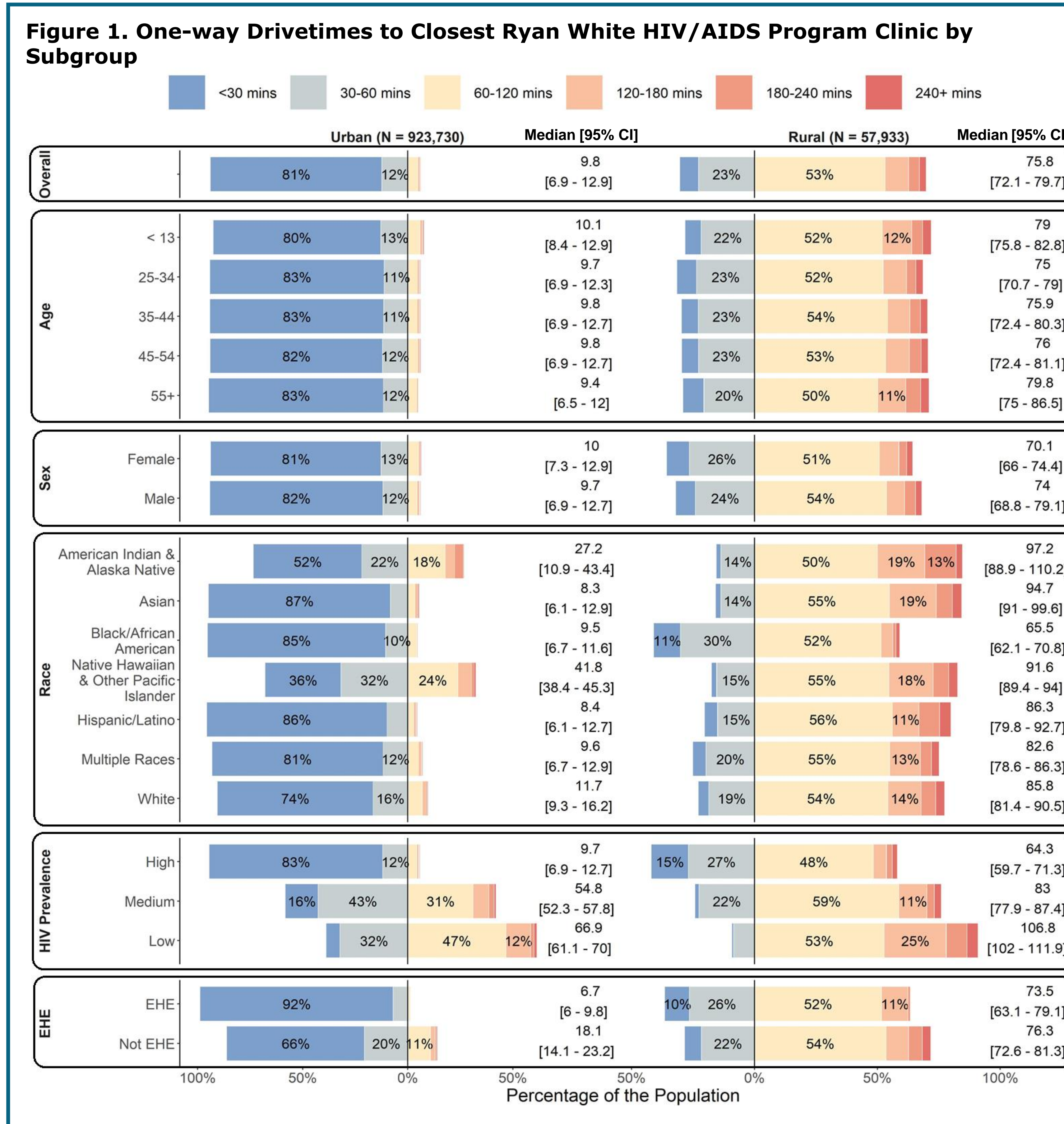
Objective

- Quantified geographic accessibility using drivetime to RWHAP clinics for PWH by (1) demographic subpopulations (2) policy-related context

Methods

- RWHAP clinic locations: clinics that received a RWHAP Part C grant 2017 – 2019
- 2019 HIV prevalence data: collected from the Centers for Disease Control and Prevention's AtlasPlus
- Counties:**
 - 48 contiguous US, a total population ≥ 100 people and HIV prevalence ≥ 5 people
 - if demographic subgroups were suppressed (ie < 5), data were imputed
- County Drivetimes:**
 - From the population-weighted center to the nearest RWHAP clinic
 - Weighted by PWH population size per county
- Calculated:**
 - Median drivetimes (in minutes) and 95% bootstrapped confidence intervals for subgroups (age, sex, race/ethnicity, HIV prevalence, EHE status) stratified by rural and urban counties

Results



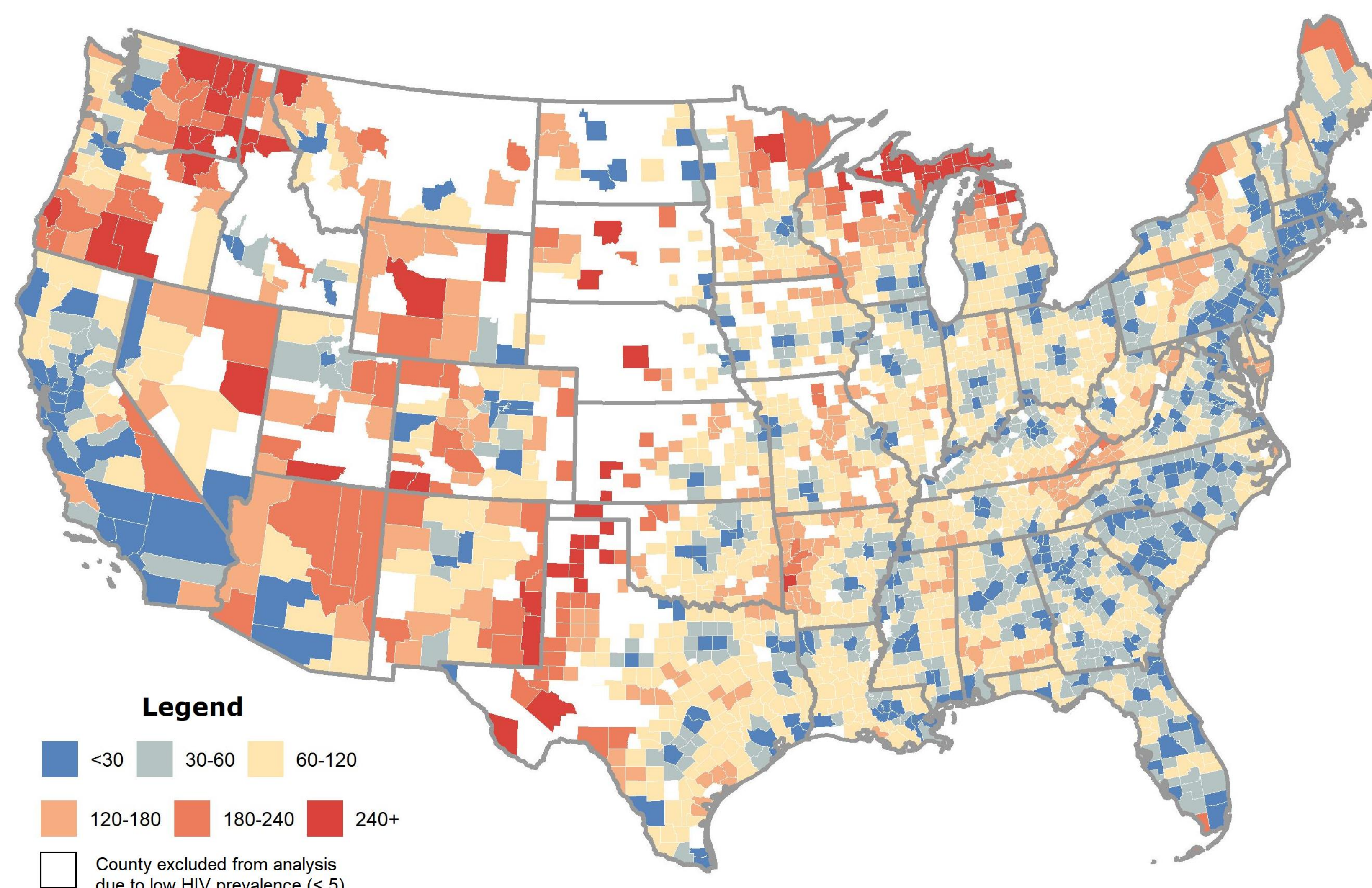
Results

- Median (95% CI) drivetimes and frequencies were calculated for 981,663 PWH living in 2,499 US Counties (**Figure 1**)
- Urban & Rural**
 - PWH in urban counties (n = 923,730): 9.8 (6.9 – 12.9)
 - PWH in rural counties (n = 57,933): 75.8 (72.1 – 79.7)
- 93% of PWH living in urban counties had drivetimes between <60 minutes compared to only 30% of PWH living in rural counties
- Within urban and rural: no drivetime differences by age or sex
- Race/Ethnicity**
 - American Indian & Alaska Native (AIAN) PWH and Native Hawaiian & Other Pacific Islander (NHPI) PWH in urban counties had longer drivetimes compared to the other subgroups:
 - AIAN: 27.2 (10.9 – 43.4)
 - NHPI: 41.8 (38.4 – 45.3)
 - 84% of Asian PWH and AIAN PWH living in rural counties traveled >60 minutes.
- EHE**
 - PWH in EHE counties had shorter median drivetimes compared to their non-EHE counterparts:
 - Urban: 6.7 (6.0-10.0) vs. 18.1 (14.1-23.8)
 - Rural: 73.5 (63.1-79.0) vs. 76.3 (72.5 - 81.5)
- HIV Prevalence**
 - Longer median drivetimes for PWH in medium and low prevalence counties:
 - Medium: 54.8 (52.3 – 57.8)
 - Low 66.9 (61.1 – 70)

Conclusions

- Our study found poor geographic access (>60 minutes) to RWHAP clinics for urban subgroups of PWH and rural PWH.
- Spatial optimization studies are warranted to identify locations for RWHAP clinics/telemedicine-sites to improve access for PWH with long drivetimes.

Figure 2. Map of One-way Drivetimes to Closest Ryan White HIV/AIDS Program Clinic



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