# *Impact of Distance to HIV Clinic on Care Retention among Older People with HIV in the US Deep South*

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## BACKGROUND

The Ryan White HIV/AIDS Program (RWHAP) encourages people with HIV (PWH) to use local clinics, yet **many PWH still travel past their nearest facility to seek care elsewhere**. While some clinics have seen a rise in out-of-area patients, we don't fully understand how longer travel distances affect health outcomes. **This is especially true for older PWH, who often struggle with limited mobility and a lack of reliable transportation.**

## METHODS

- This retrospective cohort study included older PWH (≥50 years) who initiated care at an urban, academic-affiliated HIV clinic in Alabama (UAB 1917 Clinic at Dewberry) between 2010–2022 and resided in AL at care initiation.
- **Patients were grouped by age (50–64 vs. ≥65 years) and travel distance (≤50 vs. >50 miles, one-way).**
- The primary outcome, **retention-in-care (RiC)**, was defined as the completion of at least two HIV primary care visits, spaced at least 90 days apart, within 12 months of the patient's initial visit.

## RESULTS

- Among 2,604 eligible older participants included in the analysis, 1,972 were aged 50–64, and 632 were aged ≥65 years.
- Among those aged ≥65, 90.2% living within 50 miles of the clinic were retained in care compared to 81.0% of those living more than 50 miles away.
- For those aged 50–64, RiC was 89.5% for PWH ≤50 miles of the clinic and 88.0% for >50 miles.
- **PWH aged ≥65 who traveled >50 miles were significantly less likely to be retained in care (OR=0.50, 95% CI: 0.33, 0.76), compared to those aged 50-64 who traveled up to 50 miles.**
- **This association persists when controlling for patient- and neighborhood-level factors (aOR=0.48, 95% CI: 0.29–0.79).**

**Overall, the combination of distance to HIV Clinic is significantly associated with RiC.**

**Older PWH (≥65 years of age) who traveled >50 miles (one-way) were significantly less likely to be retained in care, compared to older PWH who live within 50 miles.**

**A better understanding of factors that influence clinic choice among older PWH is needed to better serve this expanding group.**

**Table 1.** Univariable and multivariable analysis of retention in care by age at first HIV care visit and travel distance to HIV clinic

| | Retention-in-care Freq. (Col. %) | Univariable [a] OR (95% CI) | Multivariable [b] aOR (95% CI) |
|---|---|---|---|
| **Age and travel distance to HIV Clinic** | | **.0434** [c] | **.0361** [c] |
| ≥ 65 years, > 50 miles | 132 (81.0%) | Reference | Reference |
| ≥ 65 years, 0 – 50 miles | 423 (90.2%) | **0.46 (0.28, 0.77)** | **0.41 (0.22, 0.74)** |
| 50 – 64 years, 0 – 50 miles | 1333 (89.5%) | **0.50 (0.33, 0.76)** | **0.48 (0.29, 0.79)** |
| 50 – 64 years, > 50 miles | 424 (88.0%) | **0.58 (0.36, 0.94)** | 0.65 (0.38, 1.11) |

Abbreviations: HIV = human immunodeficiency virus; CI = confidence interval

BOLD Hazard Ratio (95% CI) or p-value indicates significance at the α = 0.05 level

a Univariable generalized estimating equation (GEE) analysis, modeling the association between retention in care (Yes), and age at first HIV care visit and travel distance to Clinic

b Multivariable generalized estimating equation (GEE) analysis, modeling the association between retention in care (Yes), and age at first HIV care visit and travel distance to Clinic, controlling for patient-level factors

c Overall test of significance, Wald $\chi^2_3$ test, p-value

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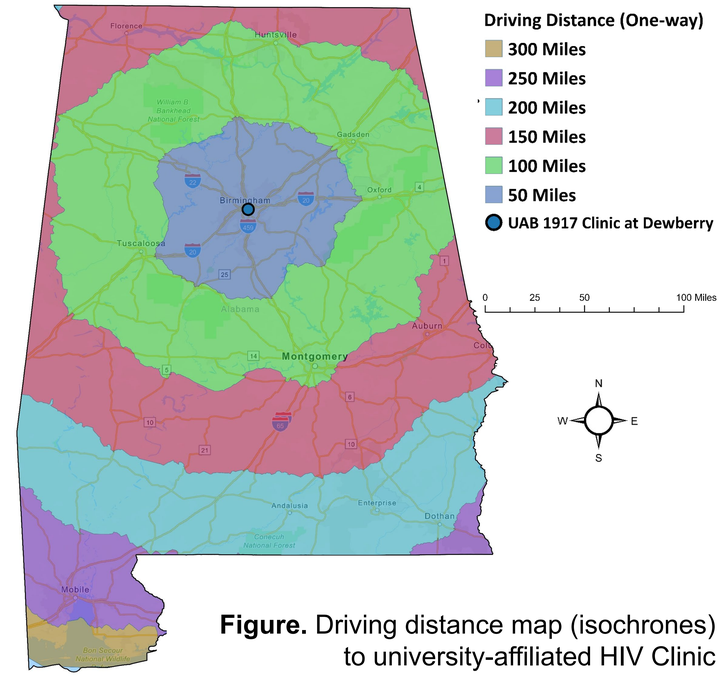



**Figure.** Driving distance map (isochrones) to university-affiliated HIV Clinic

## CONCLUSIONS

- Older PWH traveling long distances—often over 100 miles round-trip—face barriers to consistent HIV care.
- The distance to a clinic is a critical factor for older PWH due to a combination of health, mobility, social, and systemic challenges.
- Clinic travel distances for older PWH can be reduced by choosing care at more proximal clinics, ultimately resulting in more equitable distribution of RWHAP resources across this Deep South region.

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## CONTACT INFORMATION

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