

Service Use Variation and Associations with Viral Suppression: Five Years of Minneapolis-St. Paul TGA Data

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Introduction & Objectives

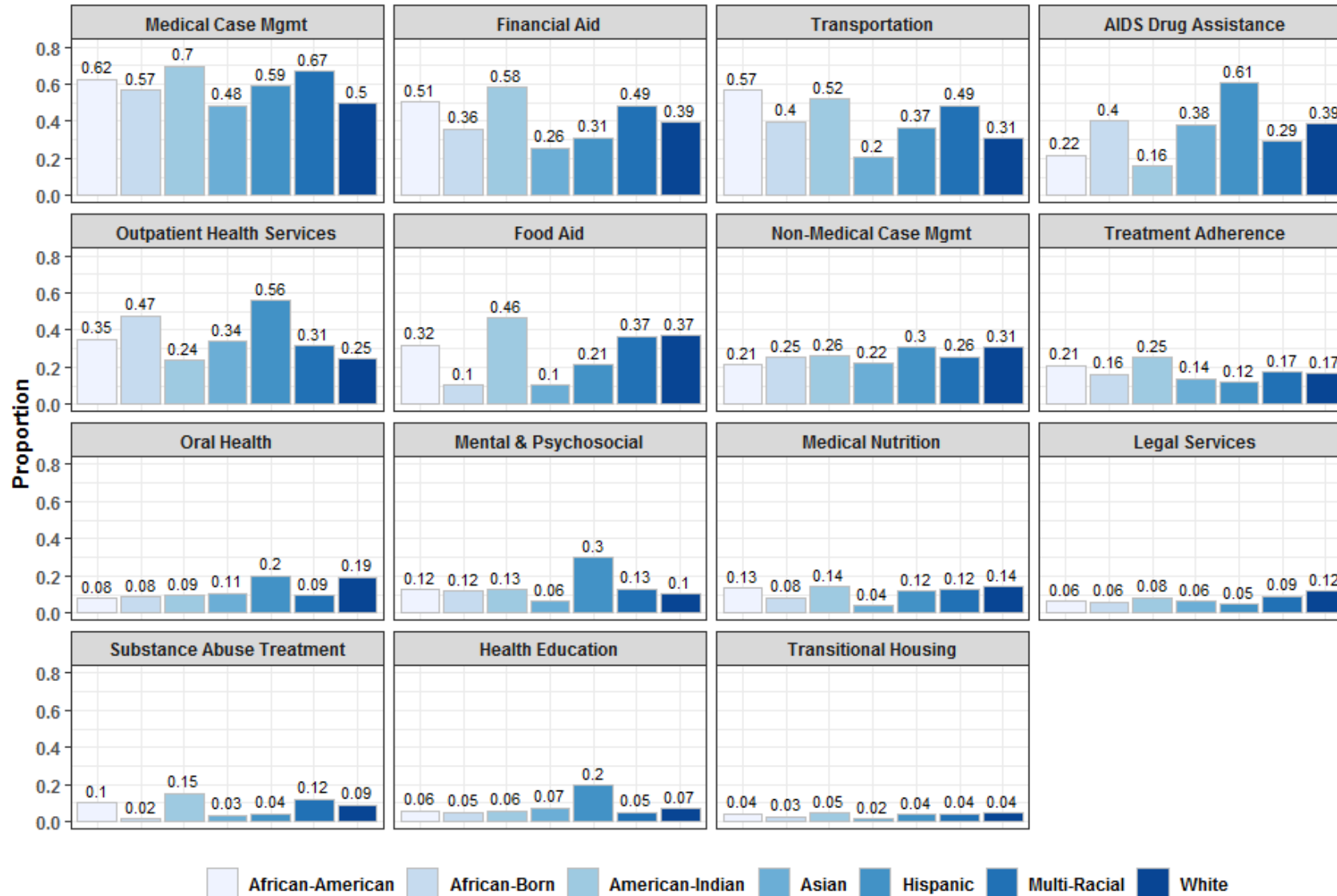
- **Motivation:** Address disparities in viral suppression outcomes
- **Objectives:**
 - To assess variation in RWHAP service use by race/ethnicity
 - To estimate the causal effect of service use on viral suppression outcomes
- Understanding which RW services are used, how often, how much, by whom and how service use is associated with VS can help identify areas for quality improvement

Methods

- **Data:** Demographics, service encounters, viral load tests between 2015-2019 (~3,500 clients per year)
- **Descriptive analyses:** variation of service utilization
- **Causal inference methods:**
 - Propensity scores to adjust for probability of service
 - Logistic regression using generalized estimating equations
 - Predict potential outcomes, estimate RDs, bootstrap SEs
- **Outcome:** sustained viral suppression (all viral tests suppressed in a year)

Results

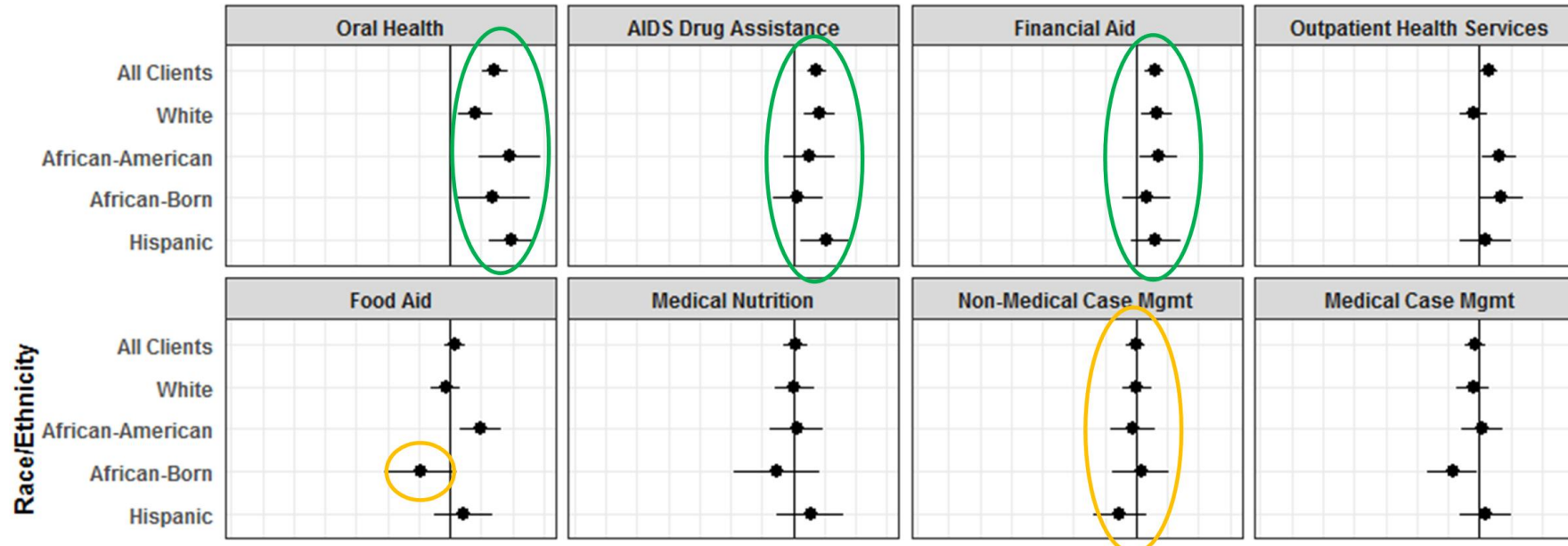
Proportion of Clients Using Services, by Race/Ethnicity



- Service use varied substantially by race/ethnicity
 - ADAP: 22% African American vs. 61% Hispanic
 - Food Aid: ~10% Asian and African-born vs. 30-40% for others

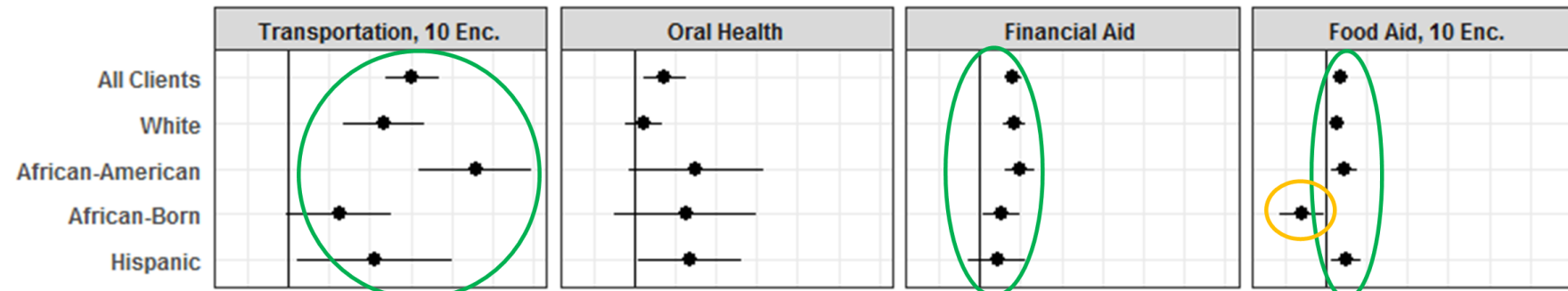
Results

Risk Difference for Probability of Viral Suppression (VS)



- Oral health, ADAP, and financial aid had positive impacts on VS
- Transportation and food aid had positive impacts on VS at higher intensities of service use
- Effects generally consistent across race/ethnicity with some exceptions

Risk Difference for VS for Each Additional Service Encounter



Conclusions

- Understanding service use variation allows programs to start investigating **why** differences exist and can inform quality improvement
- Results support continuation of **programs that address socioeconomic needs** of people living with HIV, but also highlight a need to ensure these services are designed and delivered in ways that equitably serve all clients.