



**SUSAN B. MEISTER
CHILD HEALTH EVALUATION
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MICHIGAN MEDICINE

Availability of Transportation to Medical Appointments For Children and Young Adults Living With Sickle Cell Disease in Michigan

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Background

- Sickle cell disease (SCD) is an inherited blood disorder associated with severe morbidity and early mortality.
- Transportation insecurity, or the lack of resources needed to travel between places, is an adverse social determinant of health that disproportionately impacts marginalized communities, particularly when considering access to care.
- Little is known about access to transportation among children and young adults with SCD in Michigan.

Objective

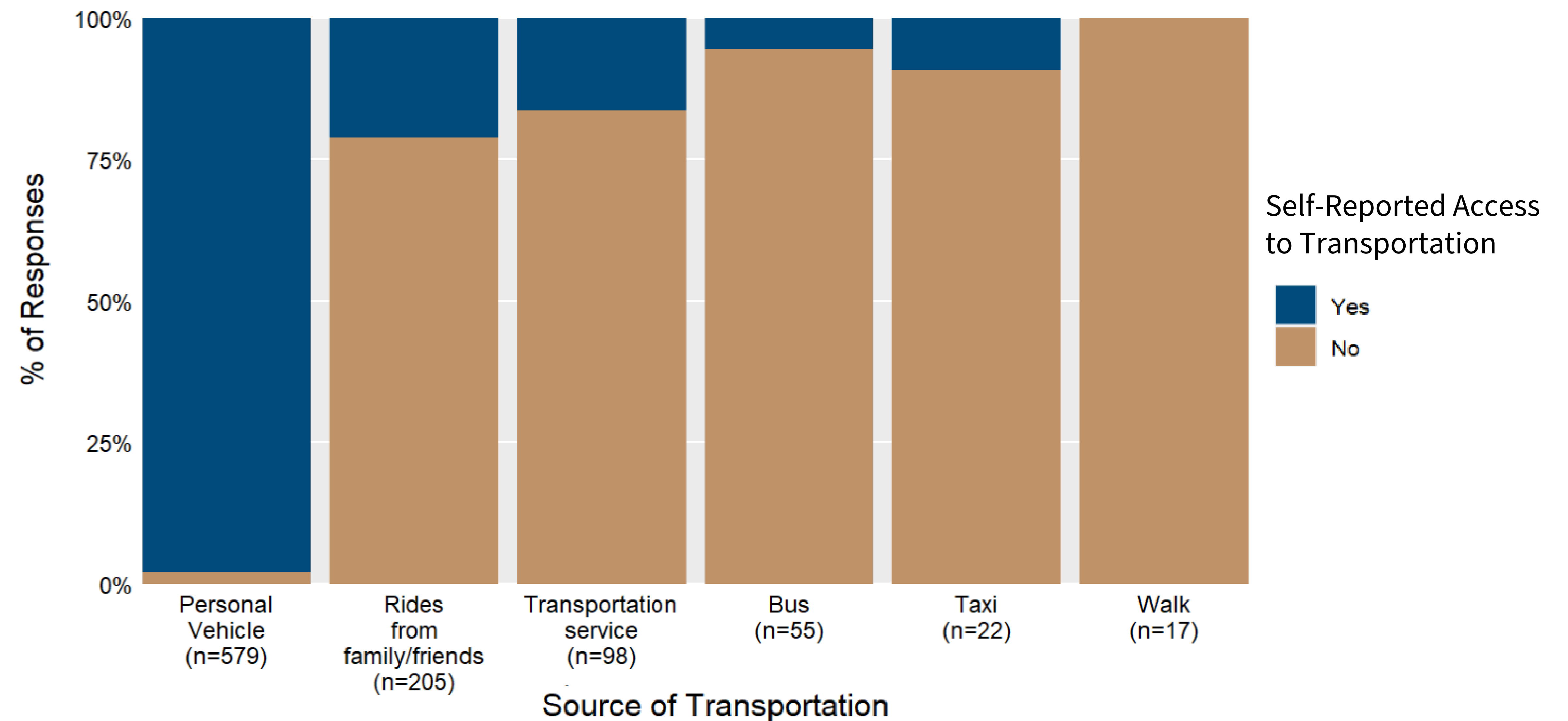
- Examine caregiver and self-reported transportation availability to medical appointments among children and young adults with SCD in Michigan.

Methods

- Michigan Department of Health and Human Services and the Sickle Cell Disease Association of America-Michigan Chapter (SCDAA-MI) created Health Status Assessments to collect information on barriers to care among individuals with SCD in Michigan.
- Health Status Assessments were conducted by patient advocates connected with families through SCDAA-MI.
- Health Status Assessments were answered by parents (children < 18 y) or self-reported (≥ 18 y).
- The study population included individuals < 25 y with a completed Health Status Assessment between 2013-2021.
- Transportation availability (yes/no/sometimes) was assessed, overall and stratified by age group (0-6 y, 7-12 y, 13-17 y, 18-24 y) and annual household income. Type of transportation was stratified by transportation availability.
- Logistic regression models were performed to assess the associations between transportation availability, age, and annual household income.

Results

Figure 1. Transportation Sources Used to Travel to Medical Appointments, Stratified by Access to Transportation



- The study population included 781 individuals: 50% female (n=393) and mean age 10.1 years (SD=7.4).
- Overall, 23% reported not having access to transportation for medical appointments.
- 38% of young adults (18-24 y) with SCD reported not having access to transportation. Young adults had 0.66 times lower odds of having access to transportation compared to children.
- Individuals with an annual household income greater than \$20,000 had 4.8 times higher odds of having access compared to those with a lower income.
- Among those with adequate transportation, 97% owned a vehicle. Of those without adequate transportation, 84% utilized “rides from friends and family” and 41% utilized a transportation service arranged by their insurance or clinic (**Figure 1**).

Conclusions

- 1 in 4 children and young adults with SCD in Michigan reported experiencing transportation insecurity for medical appointments.
- Transportation insecurity may be more prevalent among young adults with SCD, a particularly vulnerable age for this population, compared to children.
- Medicaid policies prioritizing travel reimbursement should be leveraged among this population.

Contact Information

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