Transportation Barriers to Healthcare in Adults 65+ in the Greater Burlington Area

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Introduction

Missed appointments lead to poorer patient healthcare outcomes and a major economic burden on medical centers [1, 2]. Vermont's population is one of the top ten oldest in the country per capita. 14.6% of the total population is 65 years or older and is estimated to increase to 25% by 2030 [3].

Transportation is an obstacle to accessing medical care for elderly patients in Vermont, resulting in delayed medical appointments [4]. The Special Service Transportation Agency (SSTA) is one currently available service for seniors to help overcome transportation barriers. While the types of transportation barriers faced by elderly populations have been identified in some rural and small urban areas, none have focused specifically on the Vermont community [5]

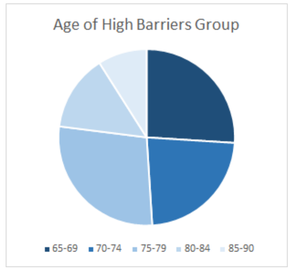
We surveyed senior citizens in Chittenden county to determine both the type of transportation barriers and medical care missed due to the lack of transportation.

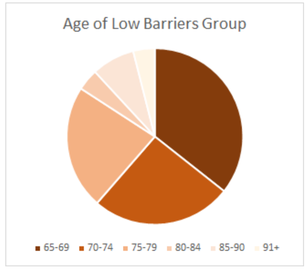
"I was lucky that my neighbor was able to take time from her job to bring me to my colonoscopy. None of the services I called could do it. Either you needed to reserve a month ahead or services didn't qualify as safe transport after the procedure."

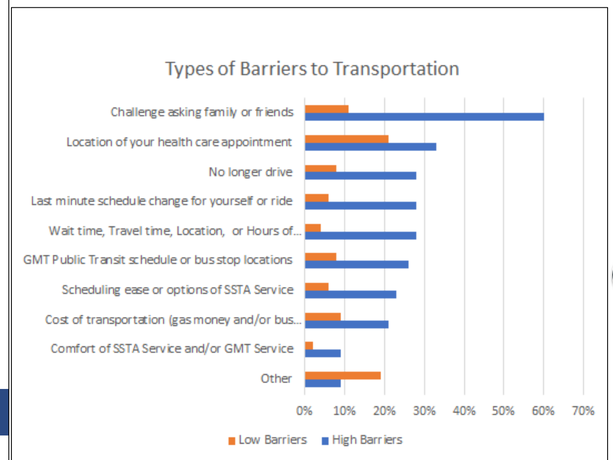
Methods

- An original survey assessing the impact of transportation on health care was distributed in person and online via Front Porch Forum.
- Inclusion criteria were residents 65 years+ who scheduled 1+ health care appointments in the past year
- Participants were asked to identify: How often transportation was an issue for attending healthcare appointments, specific barriers to obtaining transportation & type of health care appointments missed
- Of the collected surveys (N = 251), 96 surveys indicating barriers to transportation were grouped into either having high (always, often or sometimes had issues in the past year; n = 43), or low (rarely had issues; n = 53) transportation barriers.
- Outcomes measured included: Modes of transportation used, types of appointments missed, and participant age, and insurance coverage
- Fisher's Exact Test was used to measure statistical significance

Results



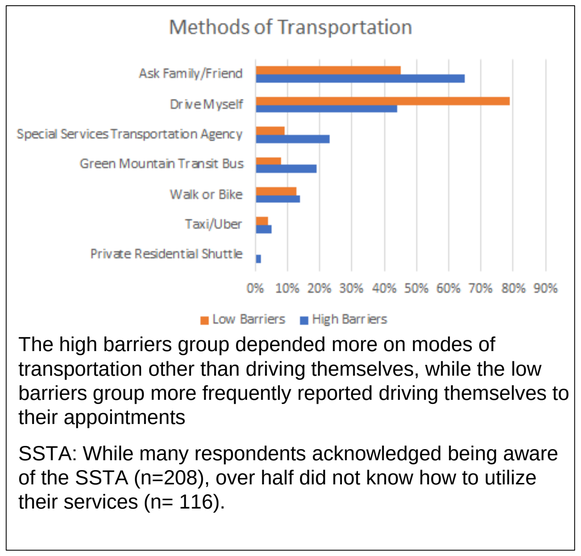




The high barriers group encountered 9 out of 10 specific transportation barriers more frequently than the low barriers group

There was an association between reported high barriers to transportation and a "challenge asking family or friends" as their greatest barrier to transportation (p = 0.001)

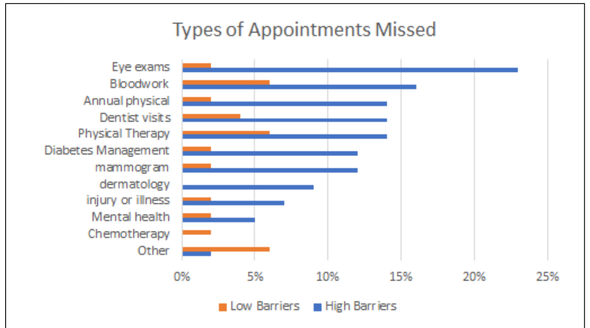
"I worry about inconveniencing others to provide me transportation. Perhaps I've overlooked some health concerns because I couldn't make an appointment due to lack of transportation."



The high barriers group depended more on modes of transportation other than driving themselves, while the low barriers group more frequently reported driving themselves to their appointments

SSTA: While many respondents acknowledged being aware of the SSTA (n=208), over half did not know how to utilize their services (n= 116).

"At this time, I don't feel the barriers but I foresee difficulties in the future when I can no longer drive."



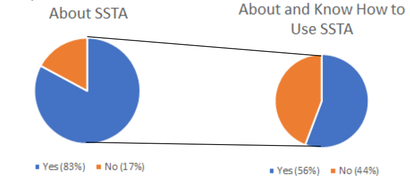
The high barriers group reported more appointments missed; eye exams were the most missed in this group

High barrier and low barrier groups both missed bloodwork and physical therapy the most

Discussion

- Limitations to our study included:
  - The high number of surveys meeting exclusion criteria (n = 155) limited statistical analysis
  - Our survey methods did not adequately capture homebound, non-English speakers, and populations aged 80+ who likely face significant transportation barriers
- The results suggest a trend between barriers to transportation and a lack of access to healthcare appointments
- Respondents who reported no current transportation barriers expressed concern about encountering such barriers in the future.

Future Directions



- Increase awareness on how to utilize existing services (i.e. SSTA).
- Future studies should identify the effect of missed appointments on chronic conditions and the associated cost burden.
- More research is needed to evaluate how missed appointments affect morbidity and mortality.
- There is a need to more accurately define the transportation barriers faced by elderly populations by using missed appointment data from medical centers.
- A more reliable definition of 'Transportation Barrier' may be necessary for future studies to better identify distinct differences in access to healthcare.

References

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