

Filling in the Gaps in Transportation: A Needs Assessment for the Adelante Healthcare Peoria Site Expansion

A needs assessment of the transportation needs for new Adelante Healthcare FQHC in Peoria, AZ.

By Eric Ottey, MSII in collaboration with Dr. Jonathan Cartsonis, MD, Prisca Osuji, MSIII

MD Candidate 2017, Charles R. Drew University of Science and Medicine / David Geffen School of Medicine at University of California, Los Angeles

GE-National Medical Fellowship Primary Care Leadership Program Scholar, Summer 2014

ABSTRACT

BACKGROUND: Poor transportation reduces education, employment, and healthcare outcomes. The new Adelante Healthcare center in Peoria, AZ has obstacles for patients in public transportation due to county policy and location. To better understand these obstacles the transportation needs of that center will be assessed by surveys of three Adelante Healthcare clinics in the surrounding area.

METHOD: By assessing the most common transportation methods, beliefs on the reliability of transportation, and willingness to seek taxi services using a 5 question survey the general transportation needs of this community were assessed.

RESULTS: The results of the surveys indicate that 69.5% of patients utilize personal transportation. The rest use either a ride from friends or family, public transportation, or a taxi service. The results also showed that 97% of patients thought their private transportation was reliable compared to only 50% for public transportation. Also, in comparison based on the number of patients being seen at

sites near public transportation there should be more seen at sites without public options. RECOMMENDATIONS: Future studies should utilize other possible study methods to attempt to capture patients missing appointments due to transportation or those that avoid the Adelante center because of transportation needs. Overall, this information informs recommendations to fill this need for Adelante Healthcare in the future.

INTRODUCTION

There are many aspects of healthcare that have little or nothing to do with the clinical work of a physician. Before patients get to the clinic there are hundreds of barriers to health that they must cross, and when they leave there are hundreds more. I personally believe that it is in seeking out solutions to these obstacles and working with patients to improve our community overall, that we will create long lasting healthcare improvements. When an opportunity developed to look into a patient obstacle for the new Peoria site for Adelante Healthcare I saw a way to improve the health outcomes of a population by understanding their transportation needs.

Adelante Healthcare is a non-profit organization comprising seven, and soon to be eight, federally qualified health centers. Their newest site will be providing primary healthcare in Peoria, AZ. For the most underserved populations in Peoria healthcare may be out of reach except for settings like community health centers, where government financing allows for the sliding fees which offset costs for uninsured and underinsured populations. These same populations also must

overcome the social determinants of health that leave them more likely to die early from preventable illness and without adequate care.

The Peoria, AZ site for Adelante Healthcare will provide comprehensive primary care coverage for the community of Peoria. I will be assessing the transportation needs of that community by surveying three other Adelante Healthcare clinics in the surrounding area. Then I will submit recommendations for improved transportation access.

BACKGROUND

The social determinants of health are the conditions in which people are born, grow, live, and work that are shaped by the distribution of money, power, and resources.¹ Some of these include education, social support, physical environment, and transportation.² Poor transportation inhibits the ability to seek out education options, employment, and healthcare needs.² In many under-resourced populations personal transportation may not be a viable option, due to financial or legal obstacles. In environments without a strong public transportation infrastructure health outcomes will be negatively impacted.

Close to 1/3 of the United States population is considered transportation disadvantaged.³ This means that they cannot easily access basic needs such as healthy food choices, employment, or medical care due to transportation needs. Issues become exacerbated when for families earning between \$20,000-\$50,000 yearly must spend as much as 30% of their budgets on transportation.³

Peoria, AZ is a small city in Maricopa County housing over 150,000 people.⁴ Starting in September 2014 Adelante Healthcare will be the one community health

center to serve the underserved populations in this area. However, because of transportation policies in this county and the difficulties in finding a suitable location, the site for the new Adelante Healthcare clinic in Peoria will not have a direct route for public transportation leading to the center. With a population that has 18.7% making less than \$35,000 annually there is a definite need for a health center that can effectively treat patients.⁴

The city of Phoenix and its surrounding cities provide public transportation services by contract with private companies.⁵ Currently Valley Metro is the name brand for the public transit buses that operate in the Phoenix area. They have uniform prices and continue to grow as a network. Unfortunately, in the plans to expand that saw Valley Metro move into Tempe, Mesa, Glendale, and Phoenix with both bus and light rail, Peoria was not included.⁵ This is due to local policies in which the local underserved populations are overwhelmed by the masses.

METHODOLOGY

With the projected opening of the Peoria, AZ clinic in September and the observation that the public transportation options are inadequate for the fraction of the population utilizing the public transit system, patients from the three Adelante Healthcare clinics closest to Peoria were surveyed regarding transportation. These include Adelante Healthcare sites in Surprise, Phoenix, and Avondale. The survey was developed with the input from Adelante Healthcare's lead evaluation specialist. It was initially drafted as a questionnaire to be given over the phone, as that seemed like the most efficient method for conducting the short survey. However, that was not possible due to an inability to access the patient lists from the electronic medical

record. The questionnaire was then changed to a multiple-choice survey to be administered in person at sites.

The five-question survey (see Appendix A) was designed to be short and rapidly administered so that a large number of patients could be surveyed at the clinic during the busiest hours for patients. The assessment questionnaire was administered to all patients regardless of age, sex, insurance status, etc. Overall, these covered several primary care practices, dentistry, and Women, Infant, and Children (WIC) services. The surveys did not include information on age, sex, or other personally identifiable information because ultimately any change would be an overall change in practices for the area, not one based on an isolated patient group in such a large service area. The survey attempted to gather general information regarding the patient transportation choices as they travelled to and from Adelante Healthcare appointments. The surveys were given to patients with the aid of a Spanish translator when necessary. Each patient was asked whether they would be willing to be surveyed and some patients elected not to. This data was collected from the 124 patients that elected to take the survey while at an Adelante Healthcare center.

After the surveys were collected the data was recorded in an Excel document that allowed it to be easily presented in graphical format and interpreted.

RESULTS

The aggregate data from all three Adelante Healthcare sites indicate that of available transportation options 69.5% of patients use their personal car, 18.8% get a ride with family or friends, 8.6% take some form of public transportation, 2.3%

take taxis, and 0% walked (Figure 1). When asked whether they felt that they had reliable transportation to their medical visit 10.5% indicated, “No” and 89.5% “Yes” (Figure 2). This question was left up to the opinion of the patient and whatever he or she felt was reliable. When asked whether they would use a taxi service if a reliable and convenient one was available 75% said, “Yes” and 25% said “No”. One patient indicated that she lived far from the health center so a taxi would not be convenient. When asked if transportation was the main reason for missing appointments 10% indicated “Yes” while 90% said “No”.

Within the total of patient that indicated whether or not they felt they had reliable transportation to their medical visits there are stark differences. Among those that indicate that they use their personal vehicle 97% felt that it was reliable, 83% from those getting transportation from friends and family, 66% from those taking taxis, and 50% from those using public transportation (Figure 3).

The result for the Surprise site, which has no available public transportation option directly to the site, was a subset of the total, about 25% of survey results. The patients at this site indicated that for their transportation usage 77% used personal cars, 20% got a ride with family or friends, and only 3% used public transportation (Figure 4.1). In comparison, 67% of patients used personal cars, 19% got a ride with family or friends, 11% used public transportation, and 3% used a taxi service (Figure 4.2) for the Avondale and Phoenix sites. Patients were then asked if they felt they had reliable transportation 97% said “Yes” and 3% said “No” (Figure 4.3). Then when asked if transportation was the main reason for missing any appointments

97% said “No” and 3% said “Yes”. Last when asked if they would be willing to take a taxi service if it was reliable and convenient 23.3% said “No” but 76.7% said “Yes”.

DISCUSSION

Based on the survey results it would indicate that a majority of patients use personal transportation or the personal transportation of others to attend appointments at the Adelante Healthcare sites. So this patient population may not utilize a vastly increased public transportation system. However, the main purpose of community health centers is to serve the under-resourced community members that require increased healthcare so the ~11% that use some other form of transportation should be addressed. For the Phoenix and Avondale sites there is a readily available transportation system that would be a viable option for those patients needing transportation. (see Appendix B) It would be helpful to understand for what reason they use public transportation and what barriers they have to personal transportation. There were also a small percentage of patients that indicated common use of a taxi service for their appointments. Based on observations local taxi services are a resource for certain AHCCCS plans but have had mixed reviews overall. Additionally, there is no infrastructure to facilitate more efficient communication with taxi services. Overall, there must be an increase in the reliability for each of these many transportation options in use.

When looking specifically at the described reliability of transportation for the patients only approximately 10% indicated that their transportation option used most was unreliable. This indicates that overall the patients trust that they could get to use their preferred method to get to their appointments. However, when the

responses have been separated by type of transportation used the variation increases. The majority of patients use personal transportation (67.5%) and 97% of them find their vehicle to be reliable. This is far different than the ~50% rating for those that describe their public transportation as reliable. This indicates that although the majority of patients that come in have reliable personal transportation, there is area for improvement for the patients using public transportation. Improving access to improved public transport for either the buses or train could improve outcomes.

One option that was originally discussed to fill any transportation need was to create a reliable taxi option for patients to and from office visits. Although only 2.3% of patients currently use taxi services as their main transportation option 75% of patients indicated that they would like to use a taxi service if it was reliable and convenient. This indicates that at the sites taxi or shuttle services would be utilized if it was made available to patients in a convenient way. This should also take into account that most of the patients use their own personal vehicle and would likely not require a taxi. For the patients that have used the taxi service in use with various AHCCCS plans, the reviews are mixed. This likely reflects their variations in health insurance plans, taxi services, and distance travelled. Also, observations indicate that explicit directions are needed for the taxi service that may add to the current inconvenience. For example needing to go to the pharmacy in addition to transit home must be stated when making the call for pick-up with very little flexibility after the fact. This may be a policy to be looked into with further study.

To best illustrate the needs of the Peoria site, one of the survey sites has no readily available public transport option. In the Surprise site almost all patients used personal transportation or the personal transportation of others (97%) to attend medical appointments. However, this may not be an indicator of the real need for transportation at this site since it is unreasonable to think that patients could use public transportation in an area in which it is not offered. It is more likely that there are patients that must find some form of alternative transportation from friends or family to get to the clinic. The other alternative is that they may, unfortunately, not receive care. In comparing the Surprise site to Avondale and Phoenix it shows that there is a larger percentage of patients that use public transportation to reach their appointments. These results support the idea that there may be a group of patients that rely on public transportation and are currently unable to get to Surprise, and thus not be a part of the sample. This is one limitation of the survey.

Unfortunately, this survey has several other limitations that may have affected the results. First, it is possible that the inability to survey the no-show patients affected the data. I observed the rate of no-show patients to be fairly high and it is impossible at this time to estimate how many of those patients were unable to attend their appointment because of transportation concerns. The original idea was to contact patients via telephone and with a large enough sampling it may be possible to capture a large number of typical no-show patients.

The surveying strategy may also increase the amount of sample size overall. The assessment reached 124 patients but the results would be more concrete if I

had been able to survey even more. Adelante Healthcare sees tens of thousands of patients annually, so reaching more during the 6 weeks of research would have been better to assess the needs of the community.

Lastly, the environment of Maricopa County, AZ in the summer months is not ideal. With increased temperature in the summer, sometimes reaching over 115°, the likelihood that a patient will be willing to take public transportation to reach an appointment decreases. It is possible that the results may differ drastically in the winter when waiting for a bus, train, or taxi is more tolerable.

RECOMMENDATION

My recommendations would be to begin to incorporate new ways to insure that transportation needs are met by patients as they seek treatment at Adelante Healthcare. As a community health center the main focus is on seeking out the needs of the transportation and addressing them, both clinical and social. Transportation is an important social determinant of health that can affect the patient's long-term health outcomes so the sites of Adelante Healthcare should be aware if these needs are not being met. I would suggest adding transportation evaluations into the evaluations currently conducted for the quality assurance already performed. With a few added questions transportation needs could be assessed in a way that would support future improvements.

Secondly, I would suggest incorporating procedures regarding the accessing of taxi services for patients into the orientation for all medical assistants that work at Adelante Healthcare sites, with increased significance at those sites without public transportation. In order to increase the use and quality of taxi services each

site should seek out the taxi services in the area that could be utilized by their patients and establish relations with them. Once there is an increased use by more patients there will be an increase in the bargaining power of the health center and the ability to insure quality service as a whole.

In addition, a shuttle service could be created to shuttle patients from the nearest bus stop, four miles away, to the health center. It is as of yet unknown what the potential costs could be of establishing such a system but it would allow patients to take public transportation to the health center and be able to make the remainder of the journey.

CONCLUSION

Transportation options are a part of the social aspects of health that affect long-term outcomes of patients. By conducting a needs assessment of the current needs of patients in health centers near Peoria, AZ this work will provide an example to survey in the future and inform practices today. With well-informed providers patients can be more educated regarding their ability to utilize taxi services. Also, providing resources to advocate for increased bus routes may create more Valley Metro routes in the future. Although there were limitations to this study, some insight were observed and future studies will be better equipped to seek out solutions to transportation obstacles.

REFERENCES

1. What are social determinants of health May ;2013 ; Available from:
http://www.who.int/social_determinants/sdh_definition/en/ (Accessed July 2014).
2. Vlahov D, Freudenberg N, Proietti F, et al. Urban as a determinant of health. J Urban Health. 2007;84(3 Suppl):i16-26.
3. American Public Health Association. At the Intersection of Public Health and Transportation: Promoting Healthy Transportation Policy; 2009
4. Laughner, M, ;Community Profile City of Peoria, AZ January ;2010 ; Available from: <https://www.peoriachamber.com/docs/PeoriaDemographics.pdf> (Accessed July 2014).
5. U.S. Department of Transportation. Title VI Compliance Review of the City of Phoenix. Final Report, July 2005.

APPENDIX

Appendix A: Sample Patient Survey

Insurance Provider: _____



ADELANTE
HEALTHCARE

PLEASE CIRCLE ONE ANSWER!

How do you normally get to your appointments?

- a)public transportation
- b)personal car
- c)ride from a friend/family
- d>walking
- e)Other _____

Do you have reliable transportation for medical visits?

- a)yes
- b)no

Is transportation often a reason for missing an appointment?

- a)yes
- b)no

Would you be willing to take a taxi if it was convenient?

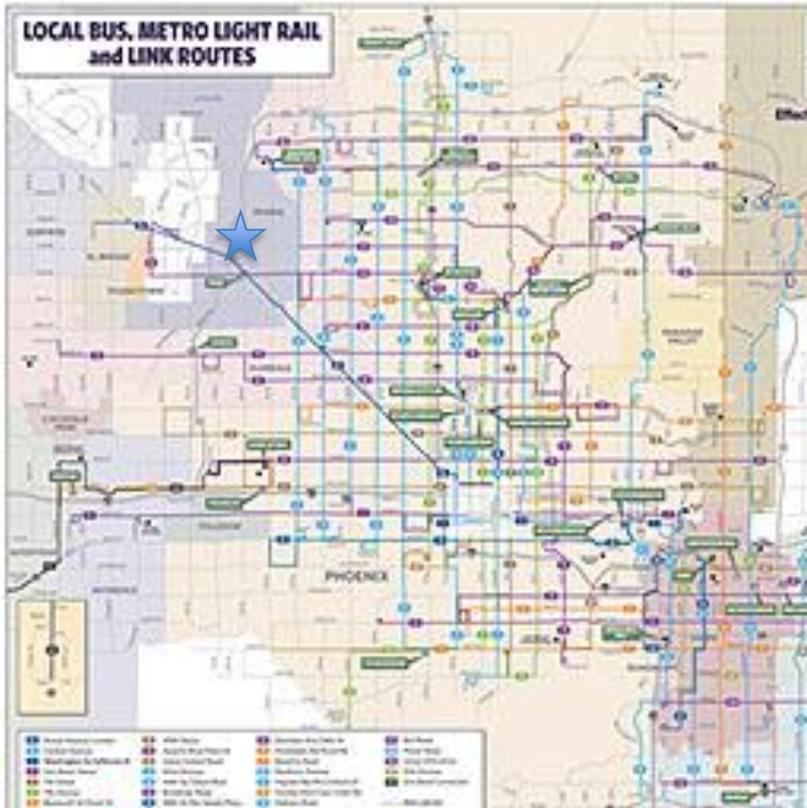
- a)yes
- b)no

How would you rate the performance of the AHCCCS taxi cabs on a scale of 1-10?

1 2 3 4 5 6 7 8 9 10 I Don't use
AHCCCS Taxis

Any other comments/concerns???

Appendix B: Valley Metro Map of Phoenix, AZ



Star indicates
Peoria, AZ

FIGURES AND GRAPHS

Figure 1

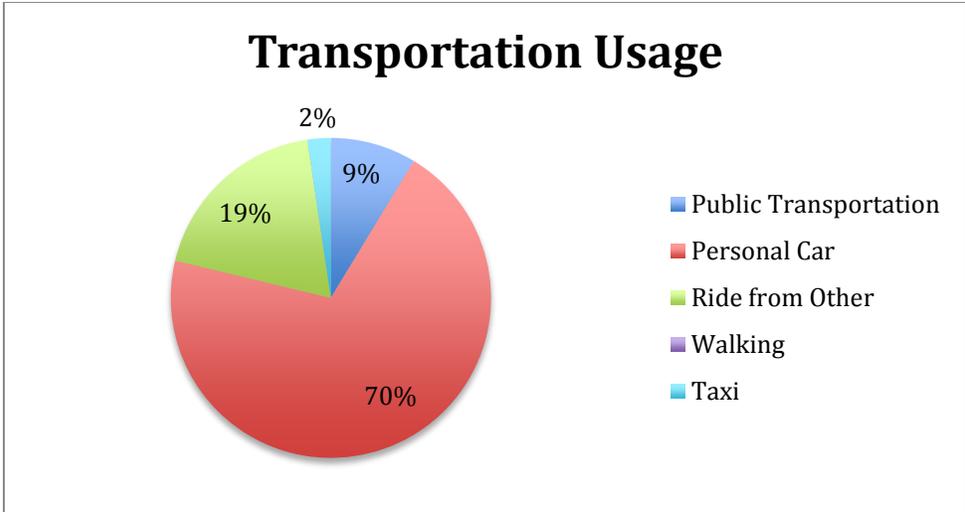


Figure 2

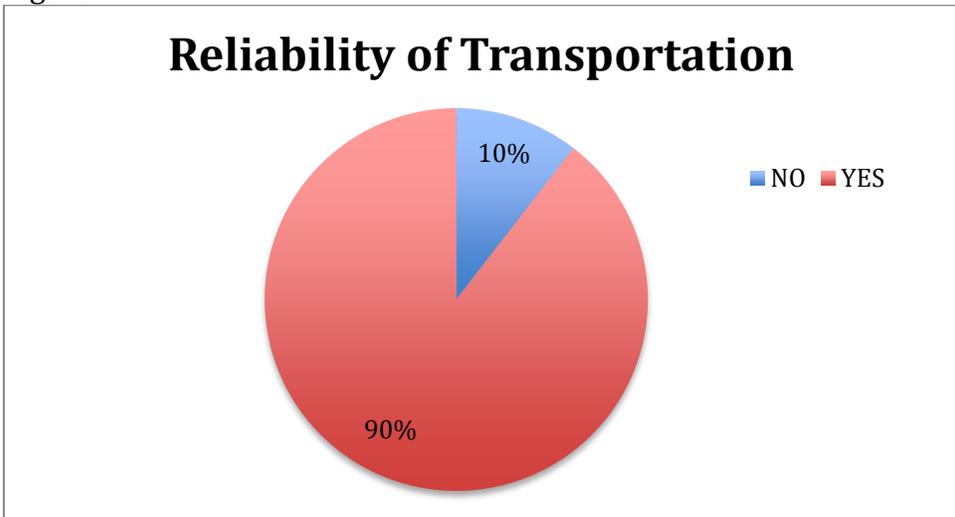


Figure 3

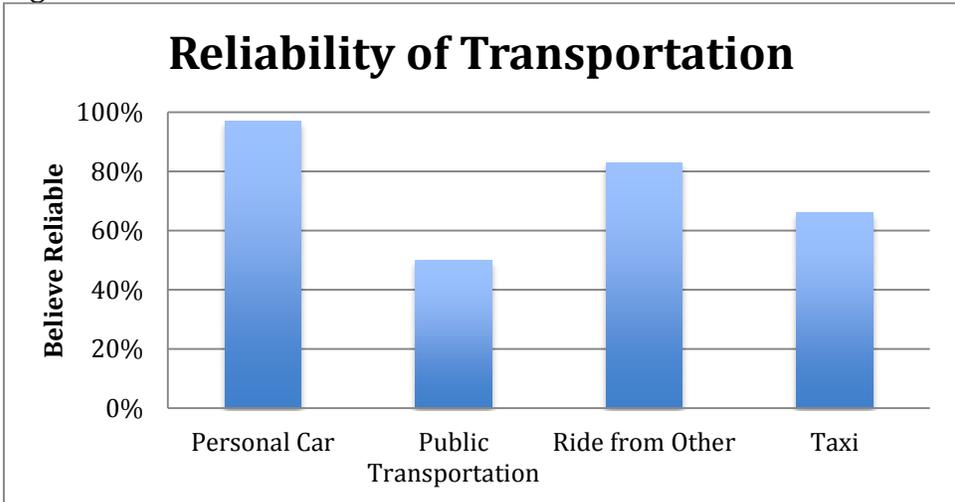


Figure 4.1

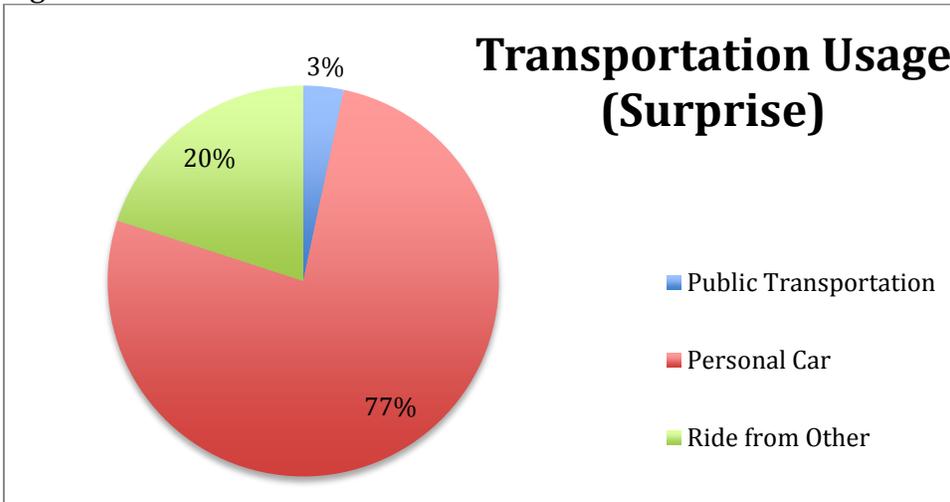


Figure 4.2

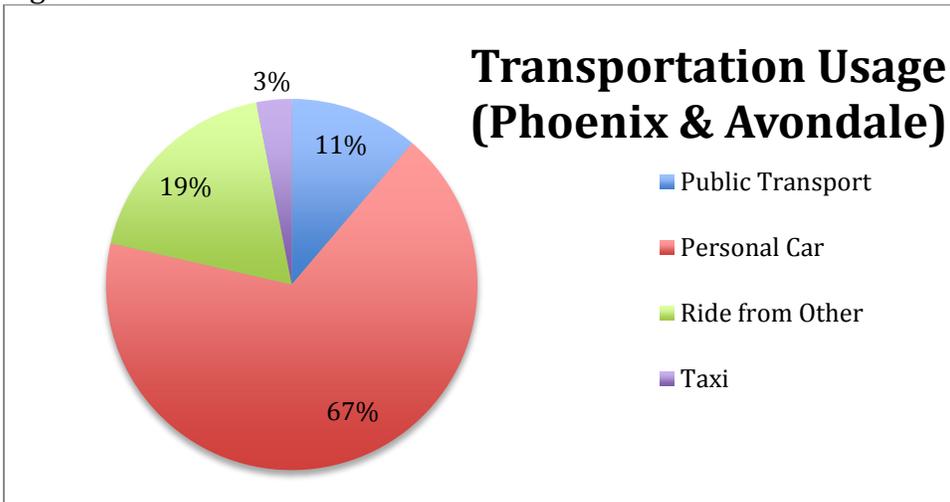


Figure 4.3

