

UC Riverside

UCR Honors Capstones 2022-2023

Title

ACCESS TO HEALTHCARE FOR MINORITY POPULATIONS: SCHEDULING A HEALTHCARE APPOINTMENT

Permalink

<https://escholarship.org/uc/item/9ss2s101>

Author

Duran, Daphne L

Publication Date

2023-02-15

Data Availability

The data associated with this publication are not available for this reason: N/A

ACCESS TO HEALTHCARE FOR MINORITY POPULATIONS: SCHEDULING A
HEALTHCARE APPOINTMENT

By

Daphne Lezo Duran

A capstone project submitted for Graduation with University Honors

February 15, 2023

University Honors
University of California, Riverside

APPROVED

Associate Professor Andrew Subica
School of Medicine

Dr. Richard Cardullo, Howard H Hays Jr. Chair
University Honors

ABSTRACT

As technology advances, many traditional forms of scheduling healthcare appointments have been replaced with an online system. Scheduling appointments went from in person, to scheduling on a phone call, to now on an online portal. Unfortunately, online scheduling and technology in general is hard to navigate, can crash/not work, and costs money. This new system can be an obstacle for people trying to access healthcare. This capstone study assessed if online scheduling was a barrier to accessing healthcare for the University of California, Riverside student population. To gather data on this research, my survey targeted the UCR student patient population. My research focused on examining students' challenges and preferences when scheduling appointments online, by phone call, or in person. Furthermore, the survey asked about students' ability to navigate technology and if using an electronic device when scheduling an appointment online or through a phone call was challenging. Regarding in-person scheduling, the survey assessed if it was more convenient for communicating with a healthcare worker in-person versus through a phone-call/ online portal or if it was harder or easier to. After collecting the data, this study analyzed and ranked, by majority vote, student's preferred methods for scheduling appointments and their reasons for the ranking based on the experiences shared in the survey. Data from this study may inform healthcare facilities on what methods student patient populations prefer so that they can change, accommodate, or upgrade scheduling healthcare appointments.

ACKNOWLEDGMENTS

I would like to give a huge thank you to Professor Andrew Subica, my mentor, for believing in my research and guiding me throughout this Capstone project. Thank you to my roommate Samantha Ruiz for peer editing my papers leading up to this moment as we shared these last four years as roommates and University Honors students. Thank you to all the honor students and University Honors Professors who helped me in improving my Capstone project and for providing me with ideas on my research topic. Specifically, thank you to Dennis Frederick McIver, my first year counselor who taught me so much about professionalism and assisted me during my time at University Honors. Lastly, the biggest shoutout to my parents and friends as being a First Generation student and Honor's student is not easy, but their unconditional support from miles away kept me going, motivated, and guided me to complete this Capstone Project.

TABLE OF CONTENTS

Abstract..... 2

Acknowledgements..... 3

Introduction..... 5

Background..... 6

Materials and Methods..... 7

Data Results..... 9

Section A: Online Appointment Scheduling..... 10

Section B: Phone Call Appointment Scheduling..... 11

Section C: In Person Appointment Scheduling..... 13

Section D: Overall Preference for Healthcare Appointment Scheduling..... 14

Discussion..... 16

Future Research Recommendations 18

Limitations..... 19

Conclusion..... 21

References..... 22

INTRODUCTION

My interest in this research emerged my junior year of high school when I volunteered for a hospital back home during the summer. I was there to shadow workers, deliver gifts, flowers, and messages to the three towers within the hospital. Instead, I dedicated my time translating between many facilities and buildings as there was no Spanish language translator or interpreter available in the hospital. I was shocked that in a populated Latinx area there was no translator for any other language that was not English. It was through this experience that I understood that language is among one of the many key barriers that exist in healthcare for minority populations. These barriers continue to exist today in many other hospitals, facilities, and clinics, but not much research has been done to gather data on certain barriers for access to healthcare.

Currently, the online system of scheduling patient appointments has been at a high demand ever since the Covid-19 pandemic hit. A study on the Central Physician Appointment System (CPAS), in Turkish public hospitals, evaluated this increase of demand and concluded that there was indeed a continuous rise in online appointment booking as 34.6% of patients registered through the appointment system in 2018 in comparison to 22.1% in 2013 (Küçük et al., 2021). However, the supply and demand of patients and their preferences greatly influenced the type of methods they chose to use when scheduling an appointment and the researchers suggested these preferences should be taken into consideration (Küçük et al., 2021).

As technology advances, many traditional forms of scheduling healthcare appointments have been replaced with an online system. Scheduling appointments went from in person, to scheduling on a phone call, to now on an online portal. Unfortunately, online scheduling and technology in general is hard to navigate, can crash/not work, and costs money. This new system

can be an obstacle for people trying to access healthcare. The goal of this project was intended to study barriers to accessing healthcare for a student patient population and find out if online scheduling becomes a barrier for access to healthcare so that healthcare can be accessible to everyone equally and healthcare providers are able to accommodate those who need assistance with technology, phone calls, and in person healthcare access.

BACKGROUND

This research's purpose was to inform healthcare facilities on what methods UC Riverside student populations prefer so that they can change, accommodate, or upgrade scheduling healthcare appointments. There has been research done on the importance of accessing healthcare for patients and how important it is to do research on preferences of patients when it comes to scheduling appointments. For example, one barrier previously identified is transportation needed for patients to attend their appointments. A private practice physical therapy clinic in an underserved area reduced this barrier by offering a van service for patients at no-cost and found a positive association with the increase of patient appointment attendance (Bove et al., 2018). While a no-cost van service can overcome the transportation barrier patients experience, sometimes these patients would rather speak to a physician over the phone due to illness, convenience, and appointment availability as a study from patients at Heal, Inc, an application (app)-based on demand phone calls platform concluded (Fortin Ensign et al., 2019). In these circumstances, an on-demand service physician house call can also positively influence healthcare access for those who prefer to access primary healthcare services through a simple phone call (Fortin Ensign et al., 2019). In both of these studies, research was done to find out how to best accommodate the specific patient population accessing healthcare. Both studies surveyed their patient population and asked them their preference to access their healthcare

needs. This study asked the student patient population at the University of California, Riverside to voice their preferences and needs on healthcare appointments.

MATERIALS AND METHODS

This study assessed two groups of students as the target population. One group was students from the Health/ Population Policy track through UC Riverside's Public Policy and the other group of students from a student non-profit organization on campus. These students matched the target population because they identify as part of the UCR student population and are of age to schedule their own healthcare appointments.

To gather participants, professors and the president of a verified non-profit campus organization were contacted via an email that explained the goal of the capstone project, that the survey was 15 minutes long, if they were willing to allow recruitment of their students, and the date the survey would be available through. Professors were asked to give students extra credit for taking the survey to encourage them to complete it and take it thoughtfully. In total three professors with courses taught in the Health/ Population Policy Track through the Public Policy major agreed for their students to be recruited and be provided extra credit. Additionally, participants from a non-profit student organization on campus completed the survey and received "a community service hour" in place of extra credit through the organization's Community Service Chair.

The method survey utilized was a Google Survey accessible to participants with a UCR email address to control that they were a current student. The Health Care Appointment Scheduling Preference Survey contained nine different sections. The first section gave a brief description of the purpose of this Capstone Project, that the survey takes approximately 15 minutes to complete in one sitting, and that the survey questions ask about types of healthcare

appointment scheduling experiences and preferences, and that questions refer to previous healthcare facilities where they personally made appointments.

The second section of the survey explained that the first set of questions addressed demographic information in order to identify the population. This section assured respondents that their responses would remain confidential and anonymous.

Section three began the demographic questionnaire. This section contained direct demographic questions. The questions included age, sex assigned at birth, first language, if an undergraduate student at UCR, if yes to the previous question what year, if they directly receive any governmental benefits (Ex: FAFSA, Medical, EBT etc.), and if they consider themselves a minority (a person whose race or ethnicity is a non-dominant race within the group).

Sections four through six pertained to the research questions. The first was regarding online appointment scheduling, then phone call appointment scheduling, and lastly in person appointment scheduling. Each of these had a description and definition of what each appointment scheduling meant and what counted as each type of appointment scheduling. These sections included objective and indirect questions asking if they had scheduled each type of appointment for themselves. A Likert-scale question was asked after asking about their experience with scheduling the appointment, for each section, which had the options as *Extremely Hard, Hard, Doable, Easy, or Extremely Easy*. The questions moved on to an open-ended question where the participant had room to explain their reasoning on behalf of their previous experience. For online appointment scheduling and the phone call appointment scheduling sections, another Likert scale item was used to ask about how experienced they think they were with online websites or speaking over the phone with their options being *Not Experienced, Somewhat Experienced, Experienced, or Very Experienced*. The last questions, on each section, were direct and indirect

objective questions. The very last question for each section was an open-ended optional question where the patient population could express any other barriers they have experienced that were not highlighted in the survey.

Section seven of the survey utilized an order of merit close-ended question for rankings. This section was placed at the end of the survey so participants had the ability to reflect on the previous section answers and experiences. This section asked students to reflect on the past three categories of scheduling an appointment and to rank them by preference from 1 being their most preferred, 2 their second preferred, and 3 their least preferred method of scheduling a healthcare appointment. A preference option description was provided to answer the close-ended question by listing Online Appointment Scheduling, Phone Call Appointment Scheduling, and In Person Appointment Scheduling as their options to list. This particular response section served to analyze and rank, by majority vote, as to what the best method of scheduling an appointment is according to the student patient population and their reasons for the ranking were linked based on the experiences shared in the survey. Further questions or comments were in section eight of the survey. Here an optional open-ended question asked students to share further questions/ comments on any of the three appointment scheduling systems.

DATA RESULTS

In total 65 respondents submitted and took the Healthcare Appointment Scheduling Preference Survey. The demographics included participants from 18-49 years of age with 21-year-olds being the majority with 32 respondents (49.2 %). Of the 65 students, 86.2% of them were female sex assigned at birth and 13.8% were assigned Male sex at birth. The first language respondents identified as learning ranged from Arabic, English, Russian, Vietnamese, and Spanish. 28 participants (46.6%) identified English as their first language, but 34 (56.6%) of

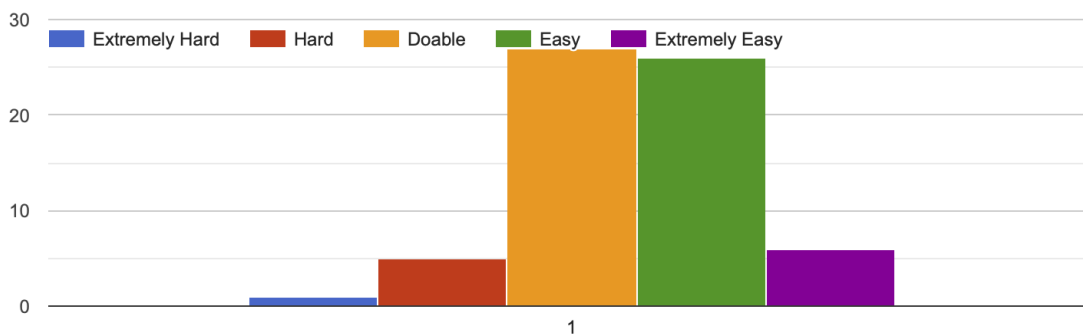
respondents stated that Spanish was their first language. Every single participant was an undergraduate student at the University of California, Riverside. These undergraduate students consisted of 16% being fourth year students. The second most undergraduate students were second years followed by third year students while first and fifth year students made up about 4% of the population. For direct governmental benefits, 80% of the students stated that “yes” they do receive them and 20% of them do not receive them. Only 9.2% of the respondents did not consider themselves to be a minority (a person whose race or ethnicity is a non-dominant race within the group; therefore, 90.8% of students consider themselves to be a part of a minority group.

Section A: Online Appointment Scheduling

For online appointment scheduling the survey stated that this refers to scheduling an appointment on a website, through an app, through a portal, or any other online source where there is no contact with a healthcare facility member either in person or through a call. 83.1% of respondents claimed they’ve scheduled an online appointment for themselves. In total 53 respondents stated that their experience was “doable” or “easy”. While 6 respondents claimed it was “hard” or “extremely hard”. The reasoning behind positive experiences to the previous question included themes that it was “easy, straightforward, and it was “fast” and simple. There were outliers such as speaking anxiety decreasing because they didn’t have to speak to a health worker and the website could be accessed 24/7. For negative reasons, students mentioned that their number one challenge was with the website or platform from the healthcare facility which made it difficult to navigate through the website. Moreover, three people stated that the “Kaiser app is difficult to navigate,” another person mentioned you can’t do follow up questions online. One other participant mentioned that online appointments are usually all booked. Additionally,

when asked about their experience with navigating technology, 57 out of 65 (95%) participants said they were either “experienced” or “very experienced” while the other eight were “somewhat experienced.” The most surprising finding came about when 47.7% of participants said they had to contact a healthcare facility or have to go to the facility to make an appointment at any point while scheduling an online appointment. 81.5% of students also believe that owning a device/ computer is necessary to scheduling an online appointment. In the end, some participants shared additional information about their experience through themes of worrying that others, such as their parents, need to know English or how to navigate technology in order to schedule an online appointment and that there needs to be a staff member to help explain for those who don’t know how to navigate portals or websites.

How was your experience when scheduling the online appointment?



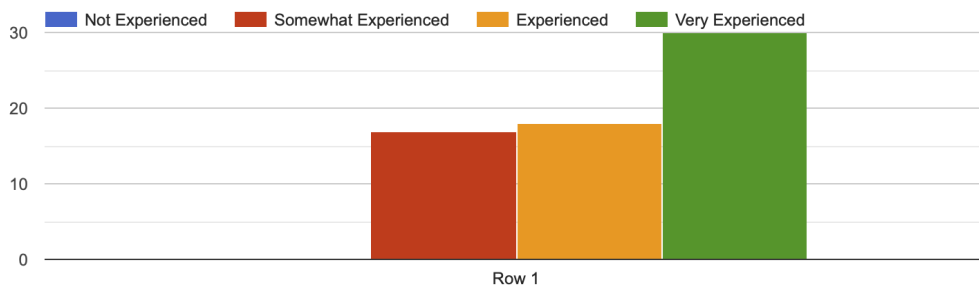
Section B: Phone Call Appointment Scheduling

The phone call appointment scheduling was defined as using any type of cellular device to call and talk to a healthcare provider or automated healthcare operator to schedule an over-the-phone appointment. Similar to online healthcare appointment scheduling, 87.7% of students have scheduled a phone call appointment for themselves. However, 26 (40%) participants stated that they found this experience “doable”. On the other hand, 22 (33.8%) found it to be “easy” and 11 (16.9%) found it to be “extremely easy”. In total 6 (9%) respondents

believed that it was either “hard” or “extremely hard”. Most of these participants expressed negative feelings towards scheduling a phone call appointment. The themes varied from wait times and being placed on hold being the majority issue. Other themes included rude customer service from receptionists, insurance and healthcare provider obstacles, social anxiety speaking to someone on the phone, and one concern about difficulty hearing the other person on the other end of the phone call. While most of the participant responses reflected negative feelings, some positive experiences ranged from helpful receptionists, easy interactions, and convenience of speaking to a healthcare professional.

All 65 respondents showed that they feel they are all “somewhat experienced”, “experienced” or “very experienced” when speaking with others over the phone and making a phone call. 87.7% did not have to go to the facility to schedule their appointment at any point during their phone call, yet 12.3% still had to go in to do so. 84.6% of respondents believe that owning a cellular device is necessary to schedule a phone call appointment. Those that shared any other concerns with their phone call appointment scheduling reinforced that phone navigation is essential and the healthcare worker scheduling the appointment can break or make an experience negative or positive when it comes to scheduling phone call appointments. One participant shared that they don’t think that “they [healthcare providers] take your health as serious” over the

How experienced do you think you are with making a phone call and speaking with others over the phone ? [Copy](#)



Section C: In Person Appointment Scheduling

In person appointment scheduling was described as physically going to a healthcare facility to make an appointment with a healthcare facility worker. In this instance, similarly to online and phone call appointment scheduling, 84.6% of the population have scheduled their own in person healthcare appointment.

Like the online and phone call appointment scheduling, 84.6% of respondents have scheduled an in person healthcare appointment. Twenty-seven respondents stated that their experience was “easy”, 15 respondents said it was “extremely easy” and 23 of them said it was doable. Many of the participants stated that they considered this experience to be easier because of face-to-face convenience that allowed for asking questions, understanding their process, having resources present, and because it accounts for disabilities. Moreover, they stated that with in person appointment scheduling was normally done as a follow up appointment when they were already at the healthcare facility; therefore, they received first come first serve service, had easy access to dates, and did not have to deal with technology issues or very long wait times. Those whose experiences with in person appointments were not satisfactory claimed it was because they had anxiety speaking to healthcare facility members in person, were still required to use some sort of technology to schedule their appointment, had a challenging interaction with healthcare providers, or were not sure where to go to schedule the appointment. A theme of inconvenience was also present as respondents shared that accessing locations was inconvenient as most facilities close at 5 pm, they had to make time out of their day to travel there, and visiting during Covid-19 social distancing was a challenge too.

When asked about any circumstances that impeded them from physically scheduling an in person appointment students who identified that there was stated that it was because of three

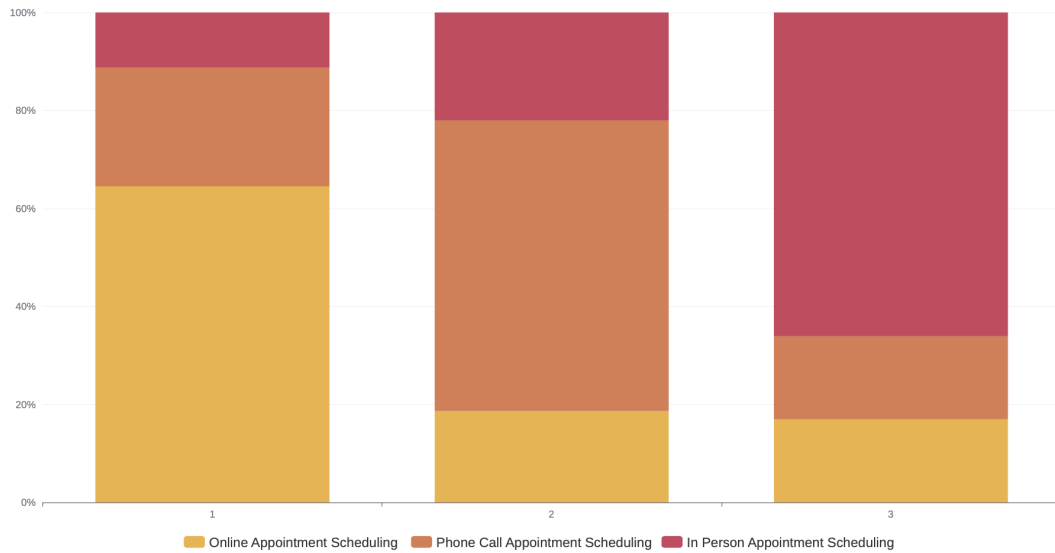
main reasons: transportation, fear, and conflict with scheduling around facility hours. For transportation the reasons ranged from distance, ability to drive, having no ride, or not having a car. Fear unlocked reasons such as social anxiety and Covid-19 fear of too many people and exposure to it. Conflict with facility hours were because they had no availability to go into the facility when it was open because of classes or other external circumstances or when they did they were missing documents or did not have correct one's to schedule an appointment. Moreover, the location was not advertised or not open during Covid-19 so this was not an option.

When scheduling an in person appointment 10.8% participants stated they needed assistance from someone else because of transportation or because healthcare facility workers needed another worker to schedule the appointment. Overall, participants who chose to share further about their experience reinforced that it can be inconvenient, but requirements needed to be met such as having documents and transportation to the healthcare facility.

Section D: Overall Preference for Healthcare Appointment Scheduling

Section seven was strategically placed after participants shared and reflected on their experiences with the three types of healthcare appointment scheduling. They were then told that after completing the questionnaires of the three categories of scheduling a healthcare appointment to rank them in order of preference from 1 being the most preferred, 2 their second preferred, and 3 their least preferred. They were then given a preference option box that included Online Appointment Scheduling, Phone Call Appointment Scheduling, and In Person Appointment Scheduling. In their response option they were asked to include the number 1, 2, and 3 respectively. To visualize the significant findings, A Stacked Column Bar Graph with three sets of data was created to compare the ranking totals across the three different healthcare appointment scheduling categories.

Healthcare Appointment Scheduling Preference



Based on the results obtained from the ranking scale question and the data presented in the Stacked Column Bar Graph the healthcare appointment schedule preference for students at UC Riverside is as follows: Online Appointment Scheduling being their most preferred (65%), Phone Call Appointment Scheduling being their second preference (50%), and In Person Appointment Scheduling being their least preferred (70%). It is to note that overall phone call appointment scheduling was either the most preferred or the second preference. Respondents were approximately split when it came to deciding whether online scheduling was their second preference or their least preferred when scheduling a healthcare appointment. On the other hand, in person appointment scheduling was strongly the least preferred and only about 10% of the respondents stated it was their most preferred method of scheduling. Online and phone call appointment scheduling ended being similarly equally split between the least preferred. More than half of the participants expressed that online appointment scheduling was their most

preferred, Phone Call Appointment Scheduling their second preference, and In Person Appointment Scheduling their least preferred.

DISCUSSION

While technology continues to advance and methods of scheduling a healthcare appointment become subject to innovation, my research findings suggest that the UCR student patient population is advancing with technology. Clearly, respondents prefer to schedule their healthcare appointment online rather than in person. They also prefer to call to schedule their healthcare appointment before going to the healthcare facility. Many reasons were provided on the preferences for each category.

For online appointment scheduling, the preference came about because it was easy for participants to schedule an appointment and convenient. One of the claimed reasons for this method being easy is that the website could be accessed 24/7. Online appointment scheduling is convenient because participants stated that their anxiety decreased as they didn't have to speak to a health worker face to face, had the opportunity to "chat" with them online, or simply avoided verbal communication by following the website instructions. The issue that stood out the most was that certain portals and websites could create a challenge and barrier to scheduling an online healthcare appointment because they were difficult to navigate. Some participants stated that having instructions or a healthcare provider explain directions on navigating the portal and website could address this barrier. One should pinpoint that more than half of the respondents are experienced or very experienced when navigating technology. Furthermore, one should note that none of the students stated that technology cost or internet access was a barrier to their preference when it came to scheduling a healthcare appointment online.

The second most preferred option was phone call appointment scheduling. Only 28

(43%) participants out of 65 identified English as their first language, yet none identified language as a barrier to scheduling their healthcare appointments. In fact, most of the respondents claimed that the biggest barrier was being placed on hold and waiting to be in contact with a healthcare provider. Other experiences included rude customer service from receptionists, insurance and healthcare provider obstacles, social anxiety speaking to someone on the phone, and one concern about difficulty hearing the other person on the other end of the phone call. While there are a variety of negative reasons why phone call appointment scheduling is a challenge it was still the second most preferred. Participants expressed that their interactions were easy after getting a hold of someone on the other end of the phone call as they were helped accordingly. Moreover, many emphasized the convenience of speaking to a healthcare professional on the phone regarding scheduling concerns and even follow up questions regarding their health.

In person appointment scheduling ended up being the least preferred method of scheduling a healthcare appointment with 70% of respondents preferring this method. While this was more frequent before Covid-19, many concerns were brought up by participants about how it changed after the pandemic. A lot of negative feedback was also generated as in person appointment scheduling came to be the most challenging for participants due to facility hours, transportation, the inconvenience of documents, and generating time out of one's day to go to the facility. In person healthcare appointment scheduling seems to be on a downward trend too, as those who have scheduled appointments in person claimed they only did so as a follow up appointment when they were already at the healthcare facility. However, when scheduling appointments in person the benefits that participants emphasized included face-to-face convenience that allowed for asking questions and understanding their healthcare scheduling

process. Additionally, healthcare providers served as a resource to obtain information about other departments and healthcare needs. Students highlighted that in person appointment scheduling accounts for disabilities as healthcare providers can better assist needs and accommodations in person.

UCR students seem to be adapting to technology and the new methods of scheduling healthcare appointments. These students experienced the pandemic and were forced to adapt to only the online navigation system. Although, even after going back in person and having access to other traditional systems of scheduling healthcare appointments, they still prefer the use of innovative technology to schedule an appointment online or through a phone call.

FUTURE RESEARCH RECOMMENDATIONS

Based on study findings, future studies should continue to examine student's preferences for scheduling online appointments to further increase student access to healthcare while reducing existing barriers. One research recommendation is to study if all healthcare appointments should provide an online option as students continue to move with the new system.

While technology keeps advancing and healthcare providers move into this new online system, something that should be tracked is how minority populations are affected by this change. For example, the ability to access the internet, have certain softwares downloaded, or have technological devices handy is something to consider for future research for minority and elderly populations who may not have access to these trends. Another research study can be done on the preference for non-student populations, including those who have not grown up with technology and can have a hard time navigating it. Moreover, the elderly population can definitely have a different preference on scheduling healthcare appointments and their opinion is just as valuable as that of UCR students.

Other research also needs to be done on other behaviors associated with healthcare appointments such as examining why people are late to appointments and why there are no shows. Additionally, research can be done on the demand for virtual telehealth appointments. Other research can include exploring viable solutions to accessing scheduling a healthcare appointment such as addressing barriers presented in this research that include website difficulties, long on hold wait times, and transportation.

This research's purpose overall is to influence other healthcare providers, clinics, and hospitals, etc. to survey their patient population in order to provide the best healthcare access and encourage patients to speak up about their preferences. I hope these types of research surveys will aid in facilitating access for patient populations and ease the high demand for healthcare facilities and healthcare workers.

LIMITATIONS

Limitations of this research study include the population size. While 65 respondents filled out the survey, they do not fully represent the student population at the University of California, Riverside. Another limitation is that about 80% of the population claimed to have scheduled either an online, over the phone, or in person healthcare appointment while others have never scheduled one. Therefore, not everyone was able to share their experiences and results may be skewed to a preference when it came to ranking the healthcare appointments. To control for this, researchers need to target a population that they believe has lived through the changes and adaptations of healthcare appointment scheduling.

While all respondents were undergraduate students at the University of California, Riverside, this too is a limitation. These students range from 18-49 years of age with 21-year-olds being the majority with 32 respondents (49.2 %). In this case, this population

mostly consists of young adults who have grown up adapting to technology. These young adults may have also begun to schedule their own appointments when turning 18 years old; therefore, may not have more background knowledge on the traditional forms of scheduling a healthcare appointment such as over the phone or in person. Additionally, since 100% of the population consist of UC Riverside students, computer access and internet access would not be identified as a barrier as UC Riverside provides free internet access to students on campus and offers computers through many resources. In this case research can be done on the parents of these undergraduate students as they have scheduled appointments for them and have lived through the three types of appointment scheduling approaches. Then there can be a comparison on the information gathered of both parents and their undergraduate students on their preferred method of scheduling a healthcare appointment to control for technology and scheduling method limitations.

The last limitation involved Covid-19. Due to this recent world event and it still being very active, students have different experiences with in person appointment scheduling as well as online and over the phone. Their experiences can vary due to the barriers that Covid-19 has placed on society and can skew them to prefer a different method because of fear of being exposed to the pandemic and/or facility Covid-19 ongoing restrictions. Therefore, when future research is done it will be challenging to control for Covid-19 experiences and the new way generations portray healthcare facilities and access. One recommendation would be to account for Covid-19 and its influence by controlling for it through questions regarding Covid-19 experiences beforehand.

CONCLUSION

Studying and researching if online scheduling is a barrier to accessing healthcare for the University of California, Riverside student population gave students the ability to speak up about their experiences and the barriers they face when scheduling healthcare appointments. Overall, respondents ranked their preference as online being the most preferred method for scheduling healthcare appointments, with a phone call the second most preferred, and in person the least preferred.

Furthermore, the survey data established that this population's ability to navigate technology is high and using an electronic device when scheduling an appointment online or through a phone call is for the most part essential. While language barriers were not identified in this research, undergraduate students identified other barriers they have encountered and that they use to determine their preference when scheduling a healthcare appointment.

Considering the novelty and relevance of this data to UCR's student population, UC Riverside may wish to consider this data when it comes to developing effective healthcare appointment methods for students. In addition, other healthcare facilities and campuses may wish to research what methods their student patient populations prefer so that they can also modify, accommodate, or upgrade scheduling healthcare appointments. Through this research and future studies in this area, healthcare appointments and healthcare access may become more accessible to all student patients equally and equitably.

REFERENCES

- Bove, A. M., Gough, S. T., & Hausmann, L. R. M. (2018). Providing no-cost transport to patients in an underserved area: Impact on access to physical therapy. *Physiotherapy Theory and Practice*, 1–6. <https://doi.org/10.1080/09593985.2018.1457115>
- Fortin Ensign, S., Baca-Motes, K., Steinhubl, S. R., & Topol, E. J. (2019). Characteristics of the modern-day physician house call. *Medicine*, 98(8). <https://doi.org/10.1097/md.00000000000014671>
- Küçük, A., Demirci, M., Kerman, G., & Soner Özsoy, V. (2021). Evaluating of hospital appointment systems in Turkey: Challenges and opportunities. *Health Policy and Technology*, 10(1), 69–74. <https://doi.org/10.1016/j.hlpt.2020.11.008>