



# LOW-INCOME HEARING HELP-SEEKERS' SELF-REPORTED PROFICIENCY WITH COMPUTERS

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## INTRODUCTION

The average price of a hearing aid in the United States is about \$2,500 (Bailey, 2020). Neither Medicare nor Oklahoma Medicaid provides hearing aids for adults with low incomes which forces them to rely on "safety net" programs. The United Way Hearing Aid Bank (UWHAB) in the John W. Keys Speech and Hearing Clinic provides entry-level advanced digital technology (ADT) hearing aids at low cost to adults who are at least 1.7 times below the US Federal Poverty Level and live in one of seven central Oklahoma counties: Canadian, Cleveland, Kingfisher, Lincoln, Logan, Oklahoma, and Pottawatomie.

The ADT hearing aids can be connected to patients' smartphones via an app for streaming, controlling settings, and remote programming from the audiologists' office via teleaudiology which requires mastery of basic computer skills. Henshaw et al (2012) found that adults 50 to 74 years who had slight hearing difficulty had greater odds of computer and Internet use than their peers with no loss.



## PURPOSE

The purpose of the present study was to assess the self-reported computer proficiency of hearing help-seekers with low incomes.

## METHODS

The 33-item *Computer Proficiency Questionnaire* (Boot et al, 2013). designed for this study was mailed to 106 patients who had obtained hearing aids through the UWHAB during the past four years who had the ability to fill out a survey on their own. Each packet contained a \$10 Walmart gift card as an incentive for patients to complete the survey.

## RESULTS

Forty-two patients (M = 13; F = 29) with a mean age of 63.38 y (SD = 23) returned surveys for a response rate of 42% (42/[106-7 return to sender]).

Most took between 3 and 6 medications per day and had the following comorbidities: arthritis (50%; 21/42), hypertension (45%; 19/42), diabetes (43%; 18/42), ocular disorders/low vision (43%; 18/42), and hyperlipidemia (29%; 13/42). Patients reported living an average of 20 miles away from clinical services (M = 20.1; SD = 25) and 14% (6/42) did not have reliable transportation.

Note that for all of the data presented in each of the following categories, most (>50%) of the respondents reported whether they believed that they had these skills.

**Computer basics:** could turn them on, use a keyboard/mouse, adjust the volume of the speakers and size of the text on the screen, but had never tried using a trackball.

**Communication:** could open/send messages and pictures via email, and post on social media, but needed assistance or had never tried instant messaging and posting in chat rooms or messages on the Internet.

**Internet:** could use search engines to obtain information about health, hobbies/interests, and news and make purchases, but needed assistance or had never tried bookmarking favorite sites, saving text and images, using the calendar to enter events, checking date/time of appointments, or setting up alerts.

**Entertainment:** could watch videos but needed assistance or had never tried playing games or listening to music.

## DISCUSSION

We conclude from these self-reported responses that these hearing help-seekers with low incomes would need instruction on computers to be able to participate in teleaudiology appointments.

The fact that many of these respondents reported not having key skills simply because they had not tried them bodes well for how instruction from hearing healthcare providers may be all that is needed for success.

Case histories should include queries about mobile device proficiency so that auditory rehabilitation may include patient-centered instruction to help patients' use of their hearing aids with smartphones and computers and enhance hearing aid follow ups.

Limitations of this survey include self-selection bias, small sample size, respondents from only one clinic, reliance on patients' self-reported rather than demonstrated abilities, and not asking specific hearing aid/mobile device and computer skills.



## CONCLUSIONS

These findings should generalize to other clinical sites and have implications for all allied health professionals who may be considering the use of telehealth with patients, especially those with low incomes and during the present COVID-19 Pandemic.

## REFERENCES

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