

Better Understanding Barriers to Widespread Audio-Video Telehealth Adoption in a Rural Native American Population



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Background

While telehealth technology has been around for a number of years, most healthcare systems were not routinely employing it prior to the COVID-19 pandemic. This was in large part due to concerns about cost, reimbursement, and provider and patient adoption. However, with the pandemic spreading across the U.S. in March 2020, the Centers for Disease Control (CDC) issued recommendations for healthcare facilities to help battle this pandemic. One of these recommendations encouraged moving many in-person services to visits utilizing audio-video telehealth technology. Our health system, informed by all of this, began offering appropriately selected patients the opportunity to engage with their provider via telehealth technology. Almost immediately, despite large numbers of CDC defined high-risk patients, we began noticing limited rates of adoption for audio-video telehealth, with most patients preferring to be seen in-person or the visit to be conducted telephonically (audio-only).

Project Aim

To better understand the barriers to widespread audio-video telehealth adoption among our rural Native American patient population.

Methods

In June 2020, we devised a short 20-item standardized survey (Figure 1) that attempted to elicit information on all adult patients that engaged in an audio-only telehealth encounter with our residency clinic between March 15th, 2020 and June 30th, 2020. This survey was completed on a total of 181 patients seen during this time. Cohort demographics are found in Figure 2. Survey responses were aggregated and analyzed.

Figure 1. Standardized Survey

Average Age	56.4
Gender Identification	M:41.4% F: 58.6%
Race Identification	Native American: 97.2% Caucasian: 2.8%
Education Level	High School/GED:61.9% College +/- Degree: 33.7% Advanced Degree: 2.8% Declined: 1.7%
Below Poverty Line:	22.1%
Average Tech Skill Self-Rating (1-10)	5.6
CDC-Defined High Risk	63.0%

Figure 2. Cohort Demographics (n=181)

Results

Survey response analysis revealed that the major barriers to greater audio-video telehealth adoption fit into 7 main categories (Figure 3).

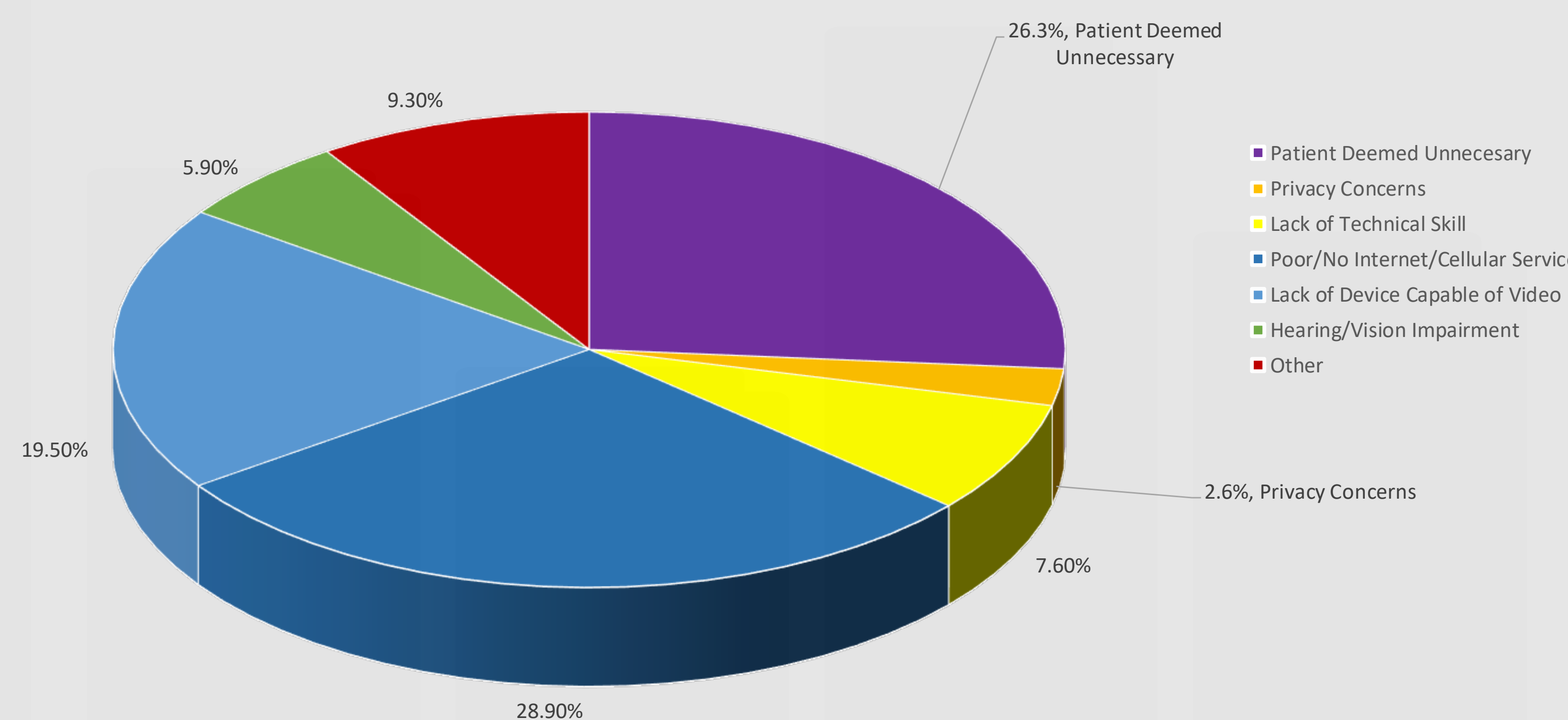


Figure 3. Survey Response Analysis

Conclusions and Next Steps

Data analysis demonstrated the most reported reason for declining an audio-video telehealth visit in favor of an audio-only visit was lack of cellular service (28.9%) (Figure 3), followed closely by the perception (by the patient) that adding the video component to the visit wasn't necessary (26.3%). Additionally, significant percentages of our surveyed patients reported that they chose audio-only visits over audio-video visits secondary to not owning a device capable of transmitting video (19.5%) as well as high numbers reporting lack of skills needed to utilize the technology they owned which was capable of video (7.6%). With the pandemic continuing to significantly affect our ability to provide in-person encounters, we remain hopeful that, now having better identified the barriers to audio-video telehealth visits, we can begin seeking funding and resources to implement strategies to overcome these barriers to improve access to care for our very vulnerable patient population.

Resources

<https://www.cdc.gov>
<https://www.cms.gov>