

# Online Patient Portals Utilization Barriers



Aiden Picone<sup>1 3</sup>

Daniel A. Nwachokor, MD<sup>2</sup>

Carmen Sosa, FNP-C<sup>2</sup>

<sup>1</sup>William P. Clements, Sugar Land, Tx,

<sup>2</sup>Community Health and Life Center, Sugar Land Tx

<sup>3</sup>Gifted & Talented Mentorship Program, Fort Bend ISD, Tx



COMMUNITY HEALTH  
And  
LIFE CENTER

Daniel A. Nwachokor, MD, MPH  
Board Certified Family Medicine

**Objective:** This research aims to address the underutilization of Healow, the office's online patient portal, by identifying common usage barriers among patients and analyzing prior studies for shared trends. The findings will be shared with the faculty of Community Health & Life Center to support the primary physician's goal of automating/streamlining check-in processes and advancing office technology.

## Introduction

Patient portals are defined by the Journal of Medical Internet Research as web applications coinciding with the electronic health record (EHR), with the purpose of promoting communication between physicians and patients, highlighted by features enabling patients to schedule appointments, check lab results, view/pay medical bills, and direct messaging with the physician regarding medical advice/questions.

However, online patient portals have remained underutilized, largely due to barriers such as patient preference for in-person communication, not seeing a need/purpose for a patient portal, and feeling uncomfortable using certain features. Other barriers include limited internet access, limited technological literacy/technical skills, and the potential threat of security breaches.

## Methodology

This study is comprised of two separate data sources: an original survey conducted at the office and an analysis of a systemic review of literature from the AMIA Annual Symposium Proceedings Archive.

The original survey was posted throughout the Community Health and Life Center office via flyers with QR codes placed in the waiting area and the examination rooms. Questions asked were intended to gauge the patient's experience with the Healow application, the online patient portal presently used by Dr. Nwachokor's team. Specifically, each respondent was asked to rate the previously aforementioned barriers to patient portal utilization in accordance with how greatly it affected them.

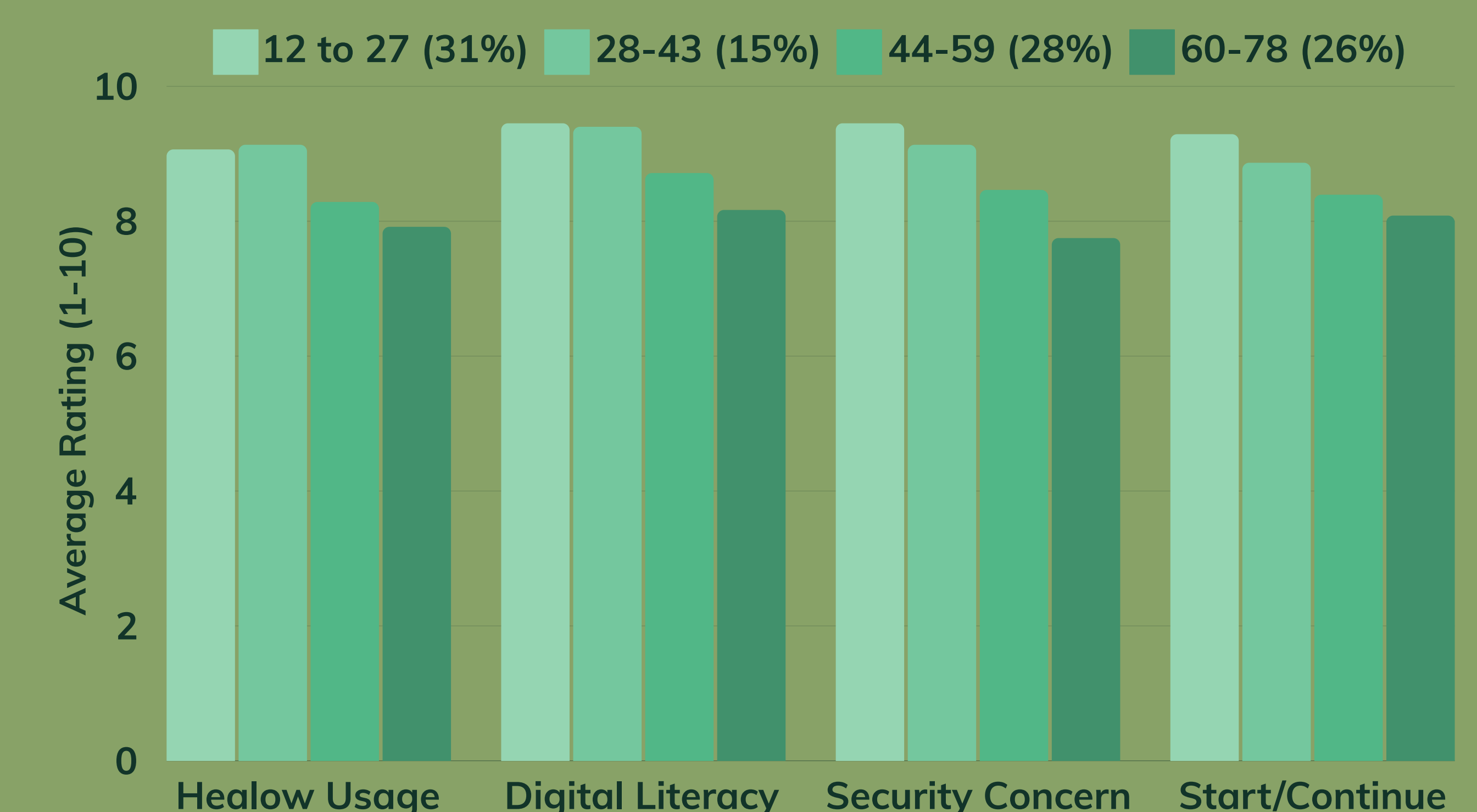
The systemic review of literature from the AMIA captured data from all published studies specifically pertaining to patient portal barriers, facilitators, and solutions. The data they collected focused on recurrent themes across valid publications to gain an in-depth understanding of the topic and to develop a consensus on the issue based on multiple sources.

## Findings

The original survey garnered 100 total respondents. The data from this survey identified a negative correlation between ascending age groups and the four rated categories: prior Healow utilization, technological literacy, level of concern for privacy/security of health information, and whether the patient was likely to begin or continue using the online patient portal [Figure 1]. The survey also found that the greatest reason for patients not fully utilizing the online patient portal was due to a preference for in-person communication for their healthcare needs with their provider [Figure 2].

In contest, the analysis from the systemic review of literature identified several commonalities concerning the underutilization of online patient portals across multiple studies, including ones not identified by the student-led original survey [Figure 3].

Figure 1. Depicts the correlation between age and various statements regarding patient experiences with Healow



■ In-Person Preference  
■ Negative Attitude  
■ Uncomfortable/Overwhelmed  
■ Lack of Internet

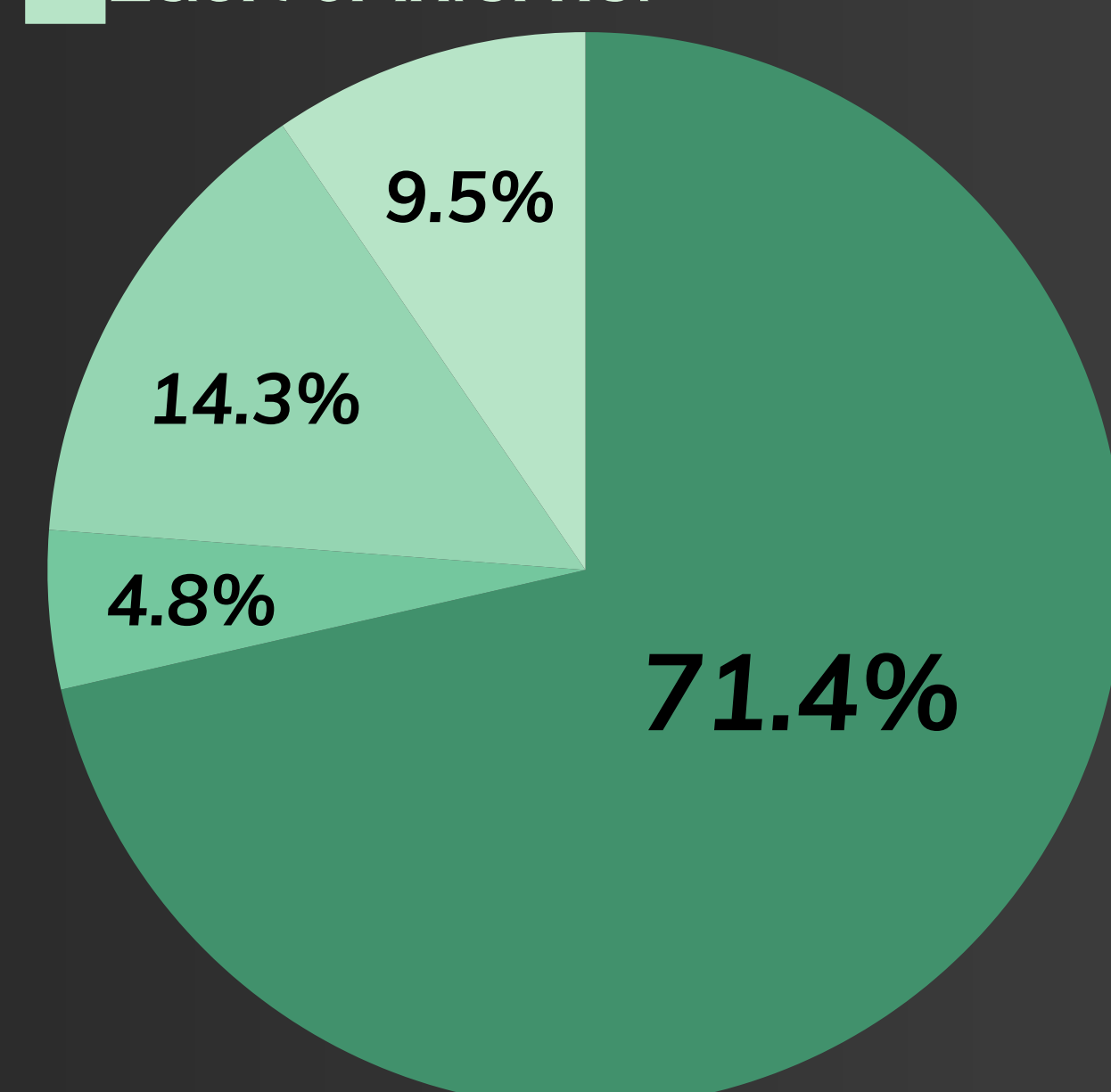
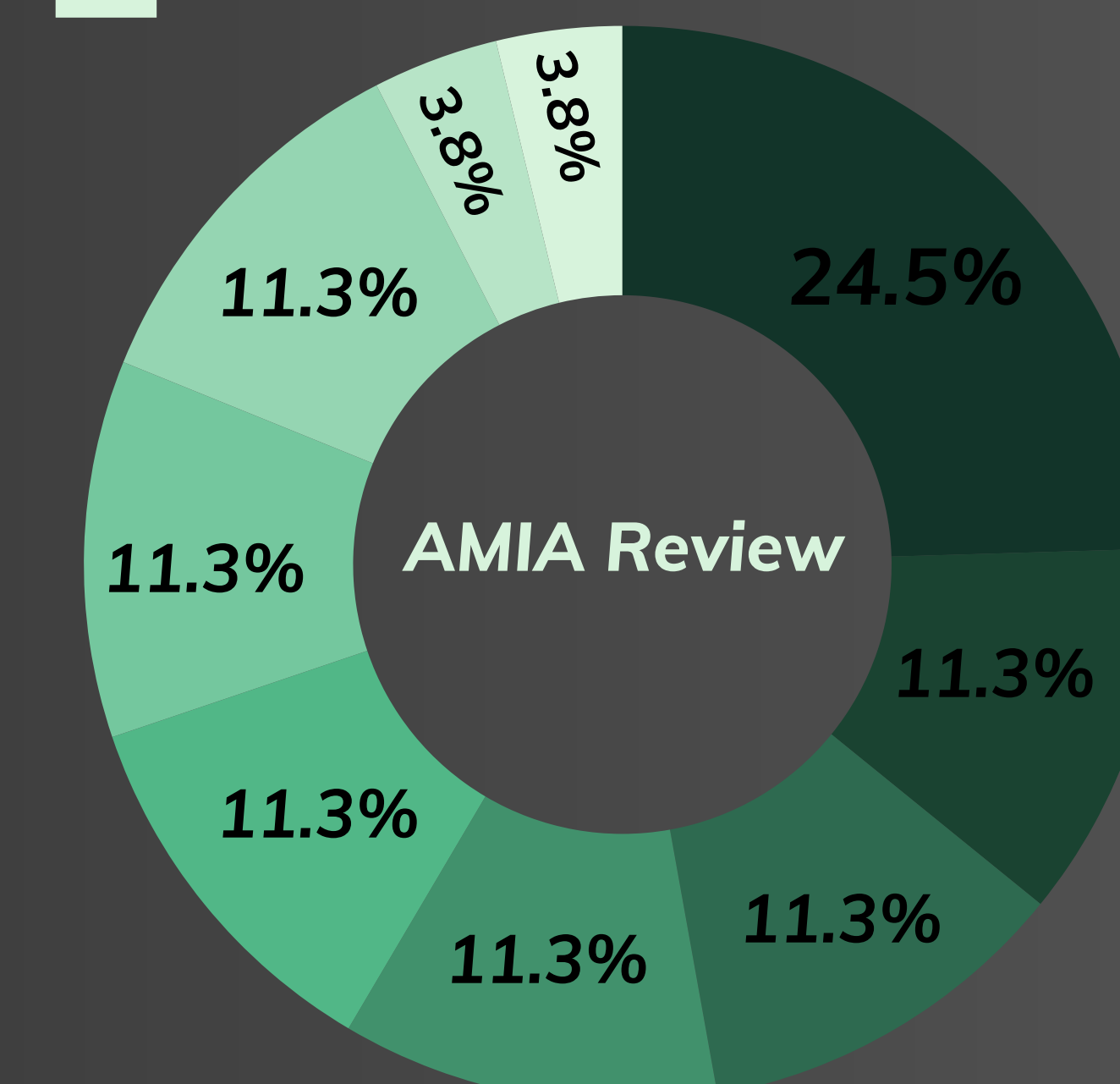


Figure 2. Displays patient-indicated reasons for Healow underutilization

Figure 3. Indicates the main reasons for patient portal underutilization found across multiple studies

■ Negative Attitude Patient  
■ Interface Problems  
■ Lack of Internet Access  
■ Poor Digital Literacy  
■ Poor Health Literacy  
■ Negative Attitude Provider  
■ Lack of Awareness  
■ Privacy Concerns  
■ Cost Concerns



## Conclusion

The research findings, diverged from my initial expectations due to biases and a slightly limited representation in the survey sample, highlighting the critical need for more extensive data collection efforts and a careful consideration of external influences in future research endeavors.

In conclusion, the findings from this research may be presented to the faculty of Community Health and Life Center with a cautionary note. The trends and commonalities found from the original survey may be considered as insights informing targeted advertising of the Healow application, especially to older demographics and patients with in-person communication preferences.