

# Adaptation of eHealth Learning Intervention for Aging Spanish-dominant Latinos

NIMLAS Pilot Project Final Report

PI: Christian E. Vazquez, PhD, MSW

University of Texas at Arlington

Funding Period (including NCEs): 8/1/2023 to 3/31/2026

## 1. What major activities have been accomplished, under each of your specific aims, with your pilot project funding?

The goals of this project were to increase the representation of Spanish-dominant older adults in health and aging research and add to limited knowledge base of eHealth literacy interventions for Spanish-dominant older adults. This work cut across two NIMLAS themes focused on 1) assessing technologies (with a non-English speaking group) and 2) recruitment methods across contexts. These and the corresponding aims and activities accomplished.

**Aim 1.** Culturally and linguistically adapt the content of English-language modules from an intervention to increase eHealth literacy for older adults into Spanish.

The PI and a graduate research assistant reviewed literature and consulted experts to culturally and linguistically adapt, refine, and translate web-based learning modules. An evidence-based English-language version of the intervention was used as the foundation. The adaptation included strategies such as, use of content that can be shared with family, inclusion of relevant motivating factors for digital engagement beyond project period such as using religious beliefs to counter perceived barriers, using content examples from places where Latinos tend to search for health information (i.e., social media). The modules were developed in a digital learning platform named Articulate. Adaptation and build-out of the modules was completed over six months. Recruitment was initiated during this period. Community partners that serve Spanish-speaking populations helped engage their members. Most participants came from older adult day programs as part of in-person recruitment methods, while a few responded to an email from their organization's listserv or a flyer in-person at their site. Recruitment was completed over three months.

**Aim 2.** Assess the adapted intervention content with 50 Spanish-dominant older adults through cognitive interviews.

We enrolled 49 Spanish-dominant Latinos. Participants provided feedback via cognitive interviews during a 1-hour in-person meeting. Participants were asked to interpret close-ended items as intended to inform revisions in item wording prior to larger administration of materials. They were also asked to provide general feedback on items such as navigation, satisfaction, usability, content, audio, etc. We developed six modules and had a set of surveys, instructions, and other tasks on physical paper as part of the study. The participants were grouped into groups of seven, such that seven people provided feedback on Module 1, seven people provided feedback on Module 2, and so forth, ending in seven people provided feedback on the surveys and other paper documents. The research team brought a laptop, headphones with covers, and a mouse. Participants were compensated for their time. The cognitive interviews were completed over another three months. Data was recorded on standardized templates and interviews were audio recorded. Analysis included reviewing templates that had quantitative and qualitative data to assess practical feedback (e.g., text on screen too small) and conceptual feedback (e.g., it would be helpful to stop at this step for practice). Individual feedback was stored as well as grouped into themes.

### *Preliminary Themes & Subthemes*

---

Theme	Subthemes
-------	-----------

---

Cultural Relevance	Need Spanish-language health materials/website examples; culturally relatable content (e.g., familiar representations);
Technology Challenges	Familiarity with tablet and smartphone use vs. other technologies
Family Support in Health Navigation	Family members: medical interpreters; manage appointments; help with health technology
Aesthetic Preferences	Large text; simple language; charts and tables transcend language
Motivation in Health Engagement	Distrust of some medical online sources; trusted sources include doctors, adult day programs, and family; desire for independence

**2. How have lessons learned / research findings / analysis results from each of your specific aims been disseminated to the broader community of longitudinal researchers that might benefit from what you have learned?**

The findings have been presented in various forums that include the broader longitudinal research community, the broader research community focused on Latino aging, and the general population (community-based dissemination).

For the longitudinal research community, I have presented the findings at the NIMLAS annual plenary, in NIMLAS working group meetings, and am publishing my findings in peer-reviewed academic journals. I am also leading the NIMLAS working group that is submitting a white paper focused on data collection methods for improving representation. My work will be included in this white paper along with other current projects in this area.

For the Latino aging research community, I have presented at the International Conference on Aging in the Americas (in-person poster), as an invited talk for the Knoebel Institute for Healthy Aging (in-person), and as an invited talk for the Primary Care Effectiveness and Quality in Latinos Research Center (virtual).

For the general population that includes participants in this study, I have presented the findings of the work at two of the main study sites (community-based organizations), as well as virtually to two other organizations who invited me to share this information with their members. I have developed a community advisory board as part of this work and they continue to contribute insight into this work as well as for future projects.

**3. Please provide formal citations for all conference presentations, technical reports, journal articles, or data sets arising from your work. Submitted abstracts, papers, or reports that are under review should also be included.**

Vazquez CE, Ponciano A, Falk D. (under review). Findings from Cognitive Interviews and Photovoice Study to Develop eHealth Literacy Training Modules for Spanish Speakers.

Handique S, Vazquez CE, Falk D, Lin J, Carson HY, Xie B. (under review). An Umbrella Review to Inform eHealth literacy interventions with U.S.-based older adult Spanish-speaking Latinos.

Vazquez CE, Handique S, Lin J, Carson HY, Xie B. (September 2024). eHealth literacy interventions with older U.S. Spanish-speaking Latino adults: An empty systematic review. Poster presentation at the 2024 International Conference on Aging in the Americas, Austin, TX.

Vazquez CE, Mauldin RL, Mitchell DN, Ohri F. Sociodemographic Factors Associated with Using eHealth for Information Seeking in the United States: Cross-Sectional Population-Based Study

with 3 Time Points Using Health Information National Trends Survey Data. *J Med Internet Res.* 2024 Aug 14;26:e54745. doi: 10.2196/54745. PMID: 39141905; PMCID: PMC11358649.

Vazquez CE. Improving Digital and eHealth Literacy: Engaging Older Latino Adults. *Oral presentations to the community in the DFW area about the project and results (virtual and in-person; English and Spanish).*