

Health and Digital Literacy Disparities in a Safety-Net Breast Surgical Oncology Clinic: Barriers to Equitable Care

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Background

Safety net health systems (SNHs) provide critical access to surgical care for patients with breast diseases.

SNHs generally serve larger volumes of vulnerable populations including patients with low socioeconomic status (SES), under or uninsured status, and communities of color.

Sociodemographic factors such as language, education, race, and insurance status significantly impact patient outcomes following breast surgery.

Aim: To assess the sociodemographic composition of a breast surgical oncology clinic at an urban SNH and evaluate how these factors impact digital literacy, health literacy, and access to care.

Methods

- We administered a cross-sectional survey (in Spanish and English) of adult female patients seen at an SNH breast surgery clinic from August-October 2022
- Survey items included:
 - Health literacy
 - Self-perceived barriers to accessing care
 - Demographics
- Descriptive statistics and comparative analyses were performed using Chi-squared and Fisher’s exact tests were reported

Patients who are Spanish speaking, older than 74 years of age, and/or with fewer years of education tended to have poorer health literacy and digital literacy.

Health Literacy Results:

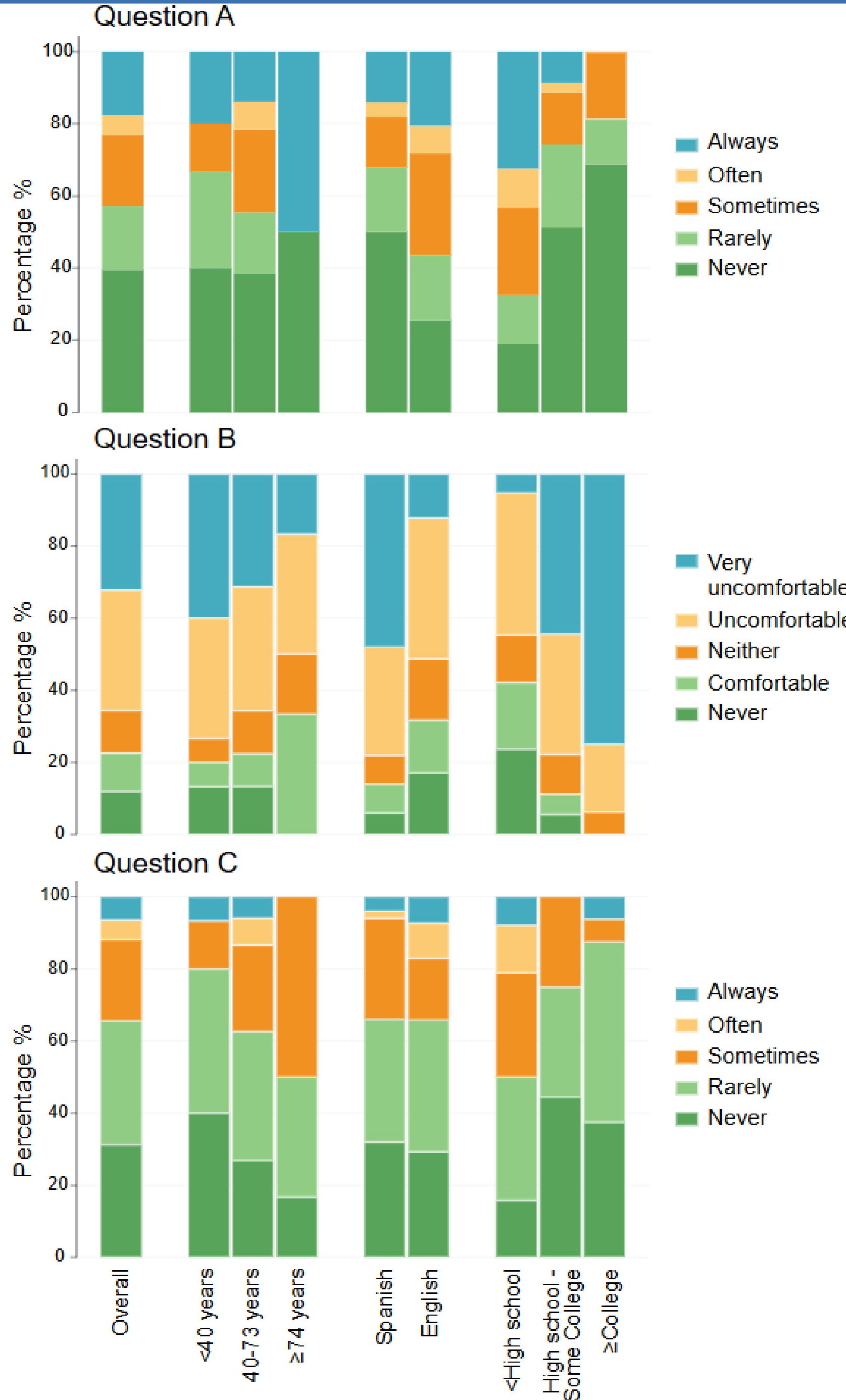


Figure 1: BRIEF Health Literacy overall and stratified by age, primary language, and highest-level of education. A) How often do you have someone help you read hospital materials, B) How confident are you filling out medical forms by yourself, C) How often do you have problems learning about your medical condition because of difficulty understanding written information.

Digital Literacy Results:

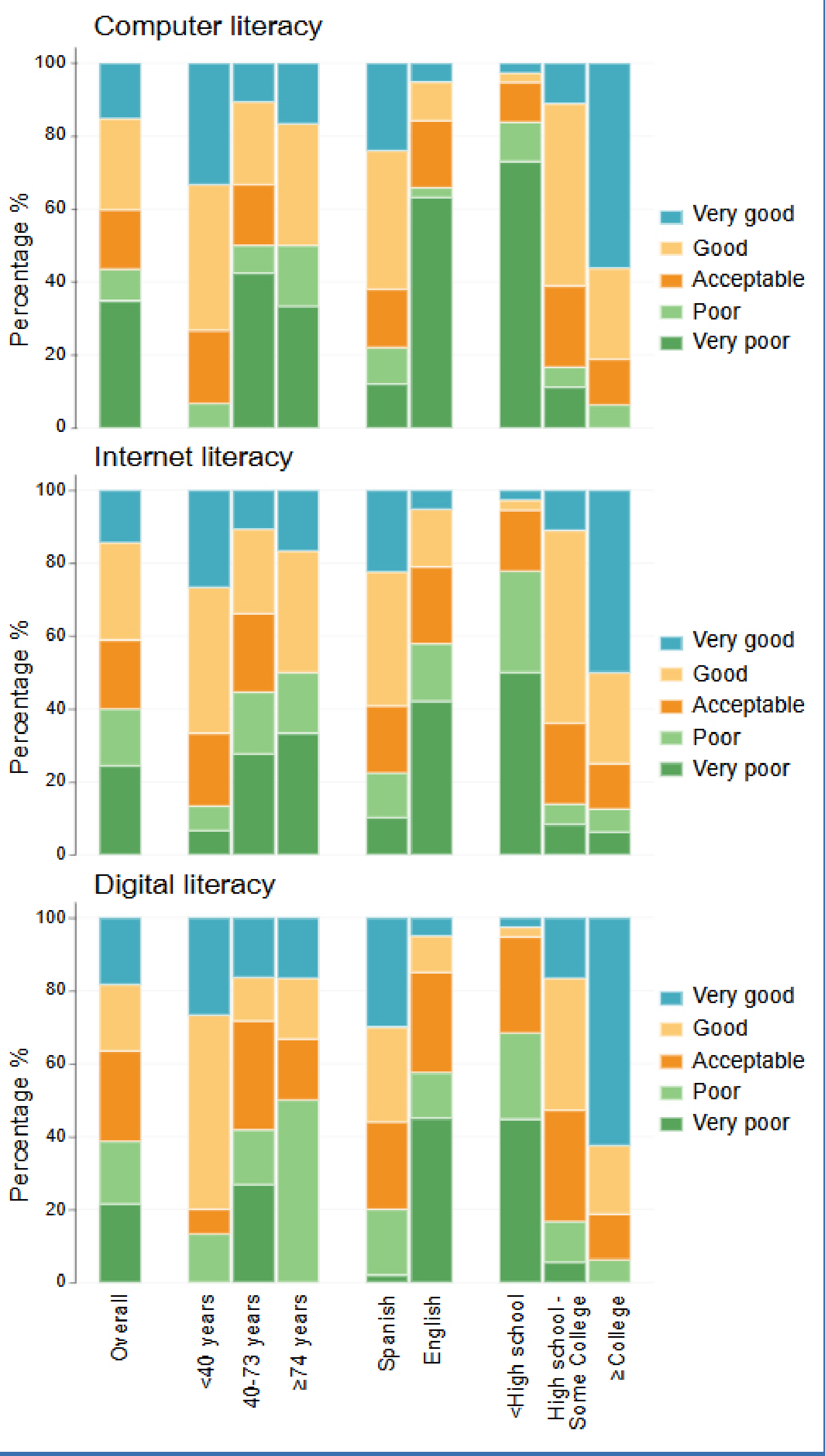



Figure 2: Digital literacy overall and stratified by educational level. Less than high school was defined as ‘No schooling, primary school, or some high school’. High school, Some college was defined as ‘High school graduate/diploma or the equivalent, some college/no degree, or trade/technical/vocational training’. College was defined as ‘associate, bachelors, master’s or professional degree’.

Results

- Of 127 eligible patients, 95 completed the survey (75% response rate)
- Demographics:
 - 57% percent identified as Hispanic
 - 43.2% preferred Spanish
 - 40% had less than a high school education.
- Health literacy was lower among Spanish-speaking, older, and less-educated patients.
- Digital literacy was also lower among these groups, with notable disparities in access to computers, the internet, and smartphones.

Future Interventions:





Enhanced patient education:

- Tailored education programs tailored to low-literacy and non-English-speaking patients
- Training healthcare providers to recognize and address literacy challenges, improving communication.

Improved access to digital resources:

- Providing computers and internet access in community centers and healthcare facilities to expand access.
- Offer digital literacy training programs to help patients navigate online health information





Supportive services:

- Increase availability of medical interpreters and culturally competent care coordinators
- Community organization partnerships to provide support and resources for patients facing barriers to care

Conclusions:

- Significant disparities in health and digital literacy exist among vulnerable breast cancer patients at SNHs, particularly among Spanish-speaking, older, and less-educated individuals
- Targeted interventions to improve education, access to digital resources, and supportive services are essential to ensure equitable care and improve health outcomes for these populations.