

Patient Perspectives on Quality of Care, Communication and Health Literacy in a Rural Outpatient Clinic

Tanna D. Albin, BS, Mary D. Gallagher-Jansen, MD, Sandra E. Leaders, APRN, Jeremy A. Vitamvas, MPAS, PA-C, Rita J. Black, PhD., Phyllis A. Nsiah-Kumi, MD, MPH
General Internal Medicine, University of Nebraska Medical Center, Omaha, NE

Background

- Low health literacy is a significant problem often leading to patient difficulties navigating the healthcare system and poor health outcomes.
- Healthcare teams are often unaware of the health literacy skills of their patients.
- Few studies on health literacy in rural populations have been conducted.
- We examined patient perspectives on the quality of care delivered, communication with the health care team and health literacy in a rural outpatient clinic.

Hypothesis

- Half of patients would have low health literacy, seek improvement in communication with their provider and would rate themselves within the lowest health rating.

Methods and Analysis

- Population: 135 adults (45 per provider), 67.4% women, mean age 56.4 18.2 years, from an outpatient primary care facility in a rural Midwestern community.
- Eligibility Criteria: Current appointment with a provider and seen within the previous 12 months by that same provider.
- A trained interviewer conducted 20 minute Computer-Aided in-Person Interviews (CAPI) using SNAP 10 survey software (Portsmouth, NH).
- Informed consent, demographics, height, weight, and blood pressure data obtained. BMI was calculated and classified using CDC categories.

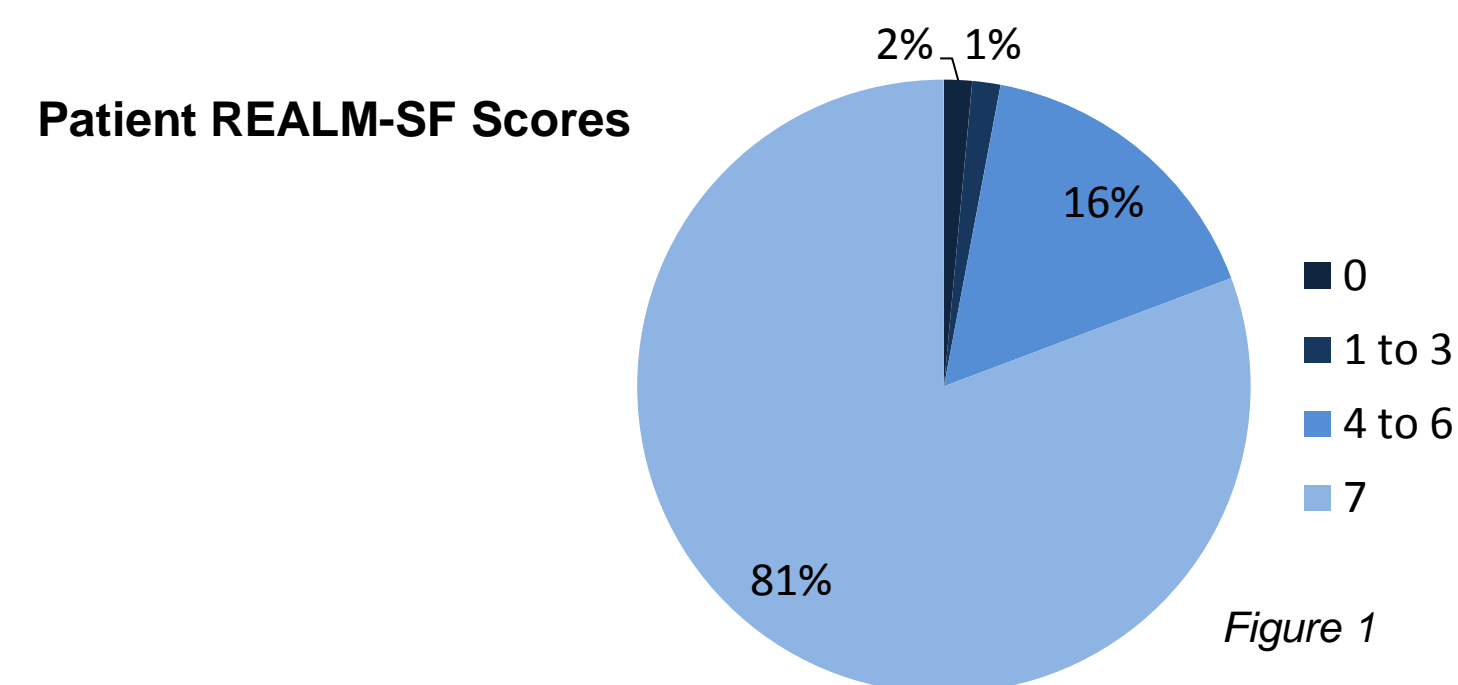
Study Instruments

- **Consumer Assessment of Healthcare Providers and Systems (CAHPS) Clinician and Group Survey Adult Primary Care Questionnaire** (version 1.0 in English with 4-point scale responses)
 - Assesses patient experiences with ambulatory care, communication with their provider and health literacy
 - 37 core items
 - Developed by the U.S. Agency for Healthcare Research and Quality (AHRQ)

- **Supplemental CAHPS Health Literacy Items**
 - 29 supplemental items for addressing health literacy
 - Released in 2009
- **Rapid Estimate of Adult Literacy in Medicine, short form (REALM-SF)**
 - 7-item word recognition test
 - Developed by AHRQ

Results

- Mean Patient REALM-SF score: 6.6 1.2
- Mean educational attainment: 12.9 2.4 years



Scoring range/grade level equivalent:
0=third grade, 1-3=fourth to sixth; 4-6=seventh to eighth; 7=high school

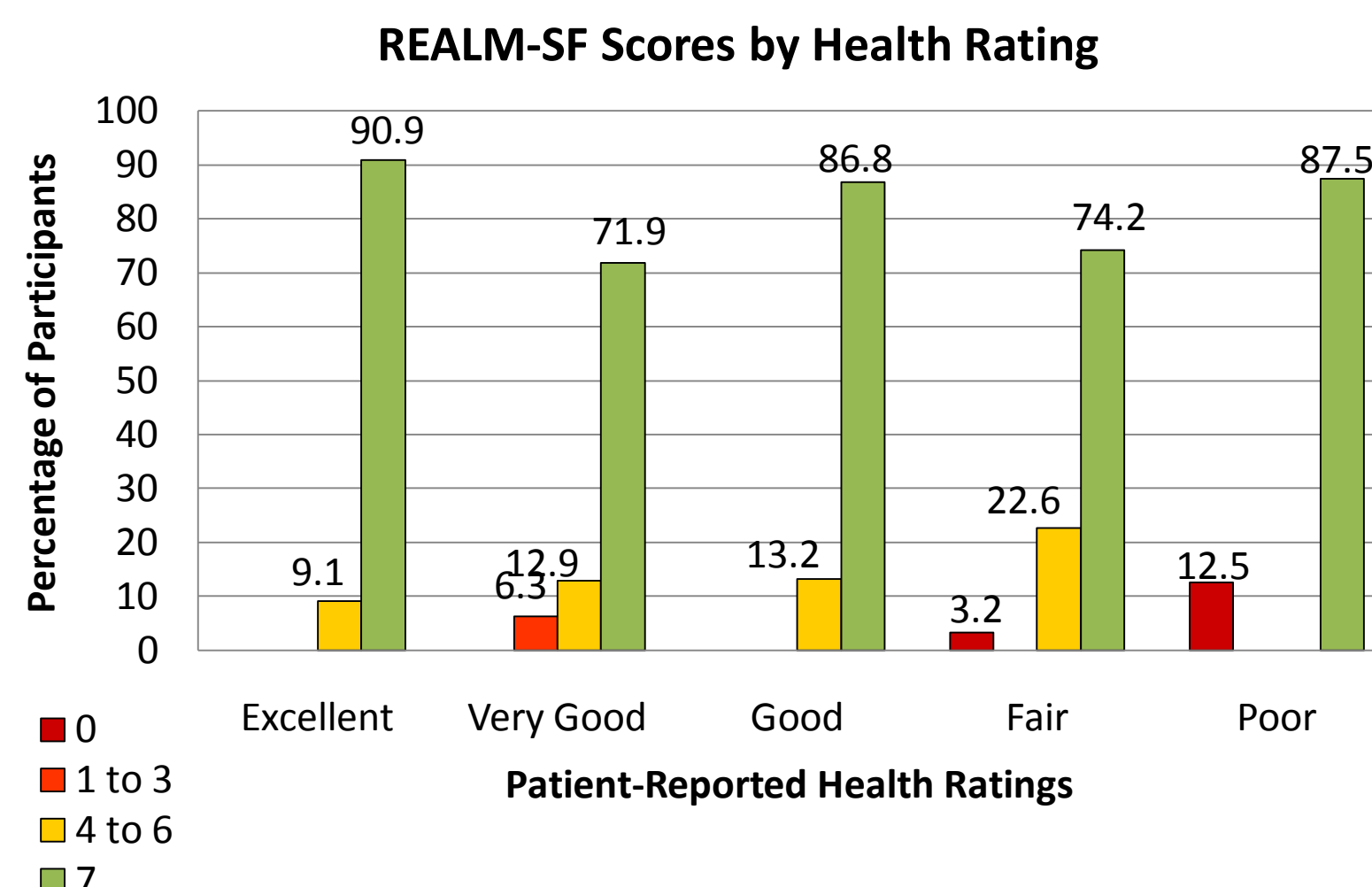


Figure 2. REALM-SF scores by patient-reported ratings for overall health status.

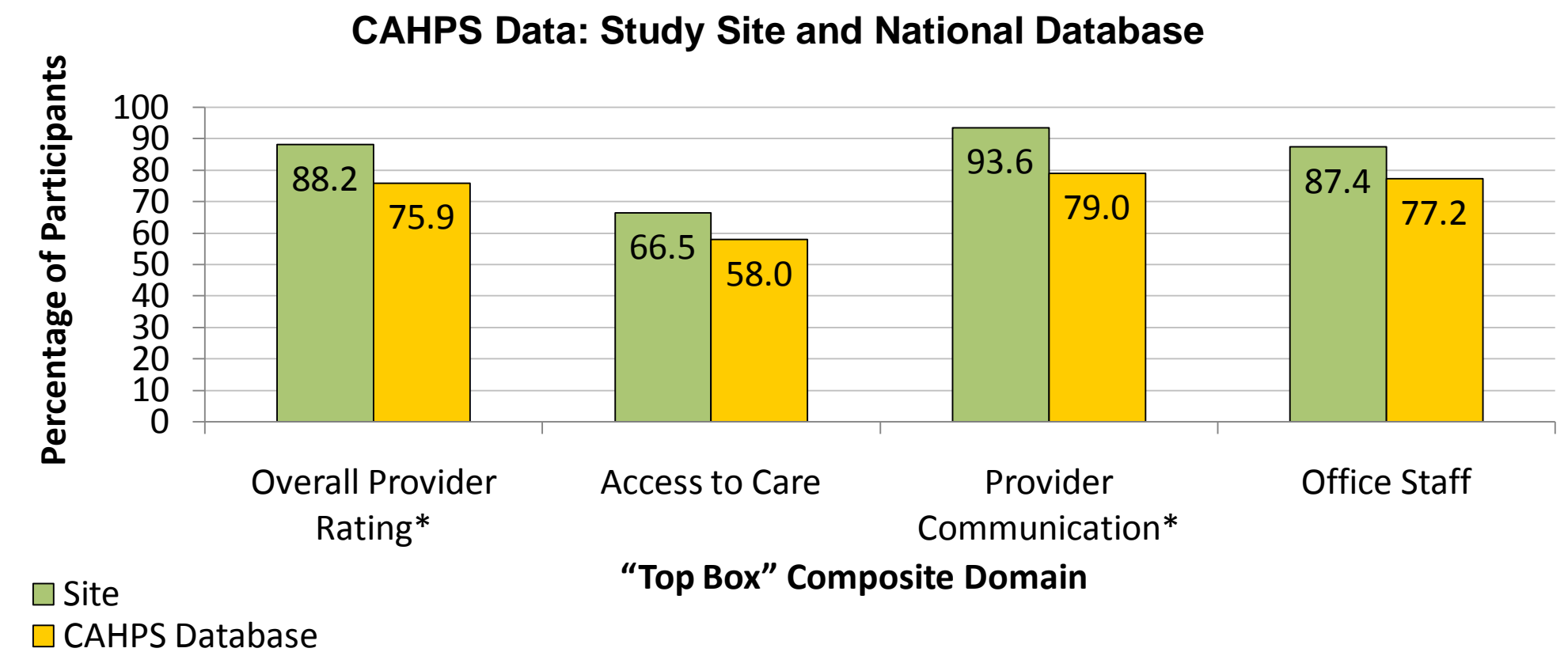


Figure 3. Composite study site "Top Box"*** Scores and National "Preliminary Comparative Data" from November 2010 CAHPS Database.

*Employed "Provider" vs CAHPS "Doctor" since two mid-levels and one physician served as providers.
***"Top Box" scores are percentage of respondents reporting the most positive response to an item.

Chronic Conditions	REALM-SF scores ≤6
67.4% had seen a provider ≥3 times within the last year for the same condition or problem	20.9%
92.6% were taking prescription meds to treat a condition for ≥3 months	23.8%
62.2% had seen provider ≥3 times within the preceding 12 months	13.1%

Table 1. Display of total study population with chronic conditions. Of those with chronic conditions, percentage with REALM-SF ≤6.

Conclusions:

- Average education level was 13 years, but the REALM-SF grade level was slightly above 8th grade.
- Those with low health literacy levels rated themselves to be in poorer health than those with higher health literacy.
- Site "Top Box" scores were above average in all areas but still followed the national trend for each area.

Implications for Practice

- Providers must make efforts to teach to patient's actual skill level rather than their educational attainment level.
- Rural outpatients' perspectives on care and communication can inform interventions focused on increasing health literacy.