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Integrating Literacy, Culture, and Language to Improve Health Care Quality for Diverse Populations

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Abstract

Objective—To understand the interrelationship of literacy, culture, and language and the importance of addressing their intersection.

Methods—Health literacy, cultural competence, and linguistic competence strategies to quality improvement were analyzed.

Results—Strategies to improve health literacy for low-literate individuals are distinct from strategies for culturally diverse and individuals with limited English proficiency (LEP). The lack of integration results in health care that is unresponsive to some vulnerable groups' needs. A vision for integrated care is presented.

Conclusion—Clinicians, the health care team, and health care organizations have important roles to play in addressing challenges related to literacy, culture, and language.

Keywords

communication; cultural competence; health literacy; language barriers; literacy; linguistic competence; minority health; quality improvement

Many patients face great difficulties in understanding health information and navigating the health care system. Nearly 2 decades of research have linked limited literacy with challenges in health care, including lower health knowledge, misinterpretation of prescriptions, and lower receipt of preventive services.[1–3] Only in the last 5 years has health literacy—defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions,"[4]—received national attention. Milestones that mark health literacy's ascendancy as a national health care priority include the Department of Health and Human Services' designation of health literacy as a Healthy People 2010 goal,[4] the inclusion of health literacy in the Institute of Medicine's (IOM) top 20 priority areas for national action[5] and its report, *Health*

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Literacy: A Prescription to End Confusion,[5] and the Agency for Healthcare Research and Quality's review *Literacy and Health Outcomes*.[3]

According to the IOM, health literacy must be viewed in the context of language and culture. This important statement, however, is followed by the acknowledgement that "the relationships between diversity and health literacy have yet to be fully delineated and investigated."[6] This article presents a framework for understanding and discussing the interrelationship of literacy, culture, and language, and the importance of addressing their intersection when the health care system cares for diverse populations. It identifies the key role clinicians play in addressing patients' literacy, culture, and language; the supports necessary for effective clinical care; and health organizations' responsibilities.

Health Literacy, Culture, and Language

There has been growing recognition that low literacy, language barriers, and cultural diversity must all be considered to ensure effective health communication. Culturally diverse individuals with limited literacy and limited English proficiency (LEP) are among the most vulnerable patients. Yet, as affirmed in a 2002 IOM report on health communication and diversity, much more work is needed to address communication effectiveness relative to diverse populations.[7]

The complex nature of health literacy, culture, and language adds to the challenge. Although it is widely agreed that health literacy is not limited to written materials in health care contexts, the measures of and research on health literacy have tended to default to literacy-based notions. Many also find deficient the construct of health literacy as a characteristic of the individual. Health literacy is not determined solely by an individual's capacity to read, understand, process, and act on health information.[8] It is the product of individuals' capacities *and* the demands the health information places on individuals to decode, interpret, and assimilate health messages. Furthermore, health literacy is not constant, but is a dynamic state that may change with the situation.[8] For example, a patient's health literacy can plummet when presented with a cancer diagnosis.

Culture in health care is also a multi-faceted concept. Culture has been defined as the "integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values and institutions of a racial, ethnic, religious or social group."[9] It is through the lens of culture that people define health and illness and perceive and respond to health messages. Culture will affect from whom health care is sought, how symptoms are described, how treatment options are considered, and whether medical treatment will be chosen and adhered to. For example, an African American woman may believe she has a folk illness called *high-pertension*, a condition that is distinct from *high blood,* and is not ameliorated by high blood pressure medication.[10]

Although everyone is a member of one or more cultural groups, this article focuses on members of racial and ethnic minority groups for 3 reasons. First, 45% of American residents with limited health literacy are members of racial and ethnic minority groups.[11] Second, racial and ethnic minority group members are the most likely to experience

dissonance with Western medical culture. Third, they do not receive the same health care as their white, non-Hispanic counterparts.[12]

Concerns related to language, as discussed in health care, generally involve individuals who speak, read, and/or write in a dialect other than English. This article is confined to the difficulties experienced by individuals with limited English proficiency. It is important to acknowledge, however, that other aspects of language contribute to challenges in providing high-quality health care. These include linguistic and conversational differences, communication disorders, and difficulty in deciphering the highly accented English of some foreign-born health care providers.

Health Literacy Is a Minority Health Issue

According to the 2003 National Assessment of Adult Literacy (NAAL), nearly 40% of American adults—60 million people—have limited health literacy.[13] Of these, almost 32 million are nonwhite and/or Hispanic.

Figure 1 illustrates the percent of adults with limited health literacy—defined as scoring in the basic or below-basic levels of the NAAL—by race and ethnicity. More than a quarter of white adults had limited health literacy, compared to almost half of Alaskan Native/Native Americans, well over half of black Americans, and two thirds of Hispanic Americans.[14] The fact that a majority of minority Americans have limited health literacy may cause us to reconsider traditional approaches to health literacy and identify new integrative strategies.

Health Literacy and Cultural and Linguistic Competence

Strategies to improve communication for low-literate individuals have often been developed along parallel but distinct tracks from strategies for culturally diverse and LEP individuals. For example, research has shown that materials written in plain English and at a lower grade level result in better understanding and improved knowledge.[15] Individuals from diverse cultures, however, may not comprehend easy-to-read materials if Western constructs of health and health care are assumed. A similar problem exists if language assistance is pursued in isolation. Language barriers are often overcome through the translation of materials into non-English languages. Yet LEP Americans are at risk of limited literacy in their native language[16] and may not be able to read translated materials that have not been simplified.

Table 1 depicts some of the most prominent health literacy, cultural competence, and language assistance strategies. All 3 approaches have encompassed assessment, workforce, education and training, and other strategies, yet each has its own distinctive version of those strategies. The lack of integration forces health care providers to choose among the 3 approaches, although they know that by doing so they will be unresponsive to some vulnerable groups' needs.

The Key Role of Clinicians

Effective patient-provider interactions are fundamental to achieving successful clinical outcomes. Assuring that interactions are effective with diverse patients requires that clinicians learn about their patients' health literacy, culture, and language, and use that information to improve communication and self-management support.

Assessment

Evidence indicating that clinicians tend to overestimate their patients' reading abilities argues for the use of an assessment tool.[17,18] Several health literacy assessment instruments are available.[19–21] Low scores on these assessments (which are generally not able to test health literacy in languages other than English or Spanish), however, do not pinpoint the nature of the health literacy problem. The low score could be due to low literacy, limited English proficiency, or lack of familiarity with Western health terms and concepts. Literacy assessment should therefore go hand-in-hand with assessments of culture and language.

There are no analogous clinical tools for assessing culture and language. The tools that do exist support only the collection of data on race, Hispanic origin, and primary language.[22] Clinicians that obtain detailed information about patients' cultural group membership (eg, Vietnamese, Salvadoran, Navajo) will have much greater insight into their health beliefs than if they only know a patient is, for example, a non-Hispanic Asian.[23] Collection of language information also needs to be specific. It is not enough to know a patient's primary language or language preference. Research has shown that English proficiency is a much better predictor of language barriers' impact on health and health care than primary language.[24] Clinicians need information about the level of oral and written English proficiency to inform their decisions about using interpreter services and translated materials.

Collecting literacy, cultural, and language data requires sensitivity. Racial and ethnic minority group members, especially those who have experienced discrimination, may be suspicious. Patients may try to hide or mask their limited English proficiency or literacy out of embarrassment.[25,26] Clinicians may choose to adopt less formal assessment strategies, such as asking a single question (for example, "How confident are you filling out medical forms by yourself?"[27]), watching out for low-literacy red flags (such as when a patient says, "I forgot my reading glasses"[28]), and letting patients use their own words to describe their culture and language rather than using pre-established categories.[23] A final option is not to screen at all but to take "universal precautions" to avoid miscommunication.[8,29] There may be value in assuming that all patients possess a minimal level of health literacy regardless of language spoken, while also recognizing that culture and language reflect patient experience and may affect comprehension.

Communication

Clinicians are being encouraged to communicate more clearly with their patients. Failure to communicate clearly can result in unnecessary return for treatment or lead to pain or adverse events.[30] However, health literacy, cultural, and linguistic approaches to clear communication are distinct, and at times inconsistent.

The health literacy movement stresses several tenets of clear communication. These include limiting the number of messages delivered at one time, using simplified, jargon-free language, and using the teach-back or teach-to-goal method of having patients explain what they have been told and repeating the information until it is clear the patient understands. Although these approaches serve culturally diverse and LEP patients as well, the emphasis is on improving the way clinicians give instructions.

Culturally competent communication, on the other hand, emphasizes that individuals' concept of health may differ, affecting the way individuals receive, process, and accept (or reject) information. Clinicians are encouraged to learn about the patients' health beliefs, for example, by asking the Kleinman Questions:[31] What do you think has caused the illness? What do you think the illness does? How does it work? What kind of treatment do you think you should receive? What are the most important results you hope you receive from this treatment? It is through this cross-cultural exploration that the clinician and patient reach agreement about the appropriate course of action.

The linguistic competence approach to clear communication is different still. LEP patients report more difficulties communicating with clinicians.[32] The remedy is to offer individuals with language barriers bilingual clinicians or interpreters. Frequently, however, literacy and cultural concerns are ignored. For example, interpreters will repeat complicated, jargon-filled communications unless health literacy is addressed along with language barriers. Furthermore, clinicians cannot assume that interpreters and patients share the same culture because they speak the same language. For example, a Farsi interpreter from a tribe hostile to the patient's tribe may not be an effective interpreter for one Farsi-speaking Medicaid recipient.

Health literacy, cultural competence, or linguistic competence alone is not sufficient to improve communication with culturally diverse patients with limited health literacy and English proficiency. Clinicians will need to recognize and overcome barriers related to all 3 vulnerabilities to achieve effective communication. Medical education and in-service training can help clinicians acquire the requisite skills and learn about interventions, such as inclusion of family and friends, that can cut across literacy, culture, and language.[33]

Supporting self-management

Clinicians are increasingly recognizing and engaging the patient as a partner in his or her own health care, but literacy, culture, and language can affect patients' ability to participate in treatment decisions and manage their own acute and chronic conditions. For example, patients with limited health literacy may not be able to write out questions in preparation of a visit or take notes to refer to later.[34] Cultural norms regarding respect of clinicians' authority or a cultural belief in fatalism may prevent patients from becoming informed and active in their care. Limited English vocabulary may inhibit question-asking by patients with LEP.[35]

Supporting self-management of patients who are low literate, culturally diverse, and LEP presents additional challenges. For example, simplifying self-management aids, such as graphically producing a medication schedule that uses symbols instead of words, may not

work if part of the problem is that expressions of pain and the role of pain medication vary across cultures.[36,37] Using interpreters to instruct patients with congestive heart failure to weigh themselves every day will not be effective if patients lack the numeracy skills to calculate and record weight changes. These examples illustrate how clinicians will fail to support their patients' self-management efforts unless they can adapt their approaches to accommodate multiple needs.

Supporting Effective Clinical Care

Clinicians' effectiveness is affected by the support available from others in the health care system. A clinician can explain to a patient how medicine should be taken, but it is the pharmacist who decides what goes on the label. Clinicians may try to select appropriate health promotion materials and audiovisual aids, but it is health plans, departments of health, and entrepreneurs that determine available materials from which to select. In addition, accreditation organizations influence clinicians' effectiveness by setting standards for their performance.

Prescription labels

Literacy, culture, and language play distinct roles in medication errors. Limited-literacy patients are less likely to be able to identify their medications, possess lower medication-related knowledge, and are more likely to misinterpret prescription warning labels and recount serious medication errors resulting from their inability to read prescription labels.[2,38–40] Similarly, LEP patients are more likely to report having trouble understanding medication labels and report bad medication reactions.[41] For example, confusing the English word *once* with the Spanish word for 11 (also *once*) landed one Hispanic man in the emergency room.[6] Cultural differences can also cause medication errors. A classic example is the tale of a mother who was instructed to give her child a teaspoon of medicine. She instead gave the child a large soup spoonful of the medicine because the only utensils in the house were chopsticks and soup spoons.

Medication errors can occur even when clinicians demonstrate how to dispense medicine.[42] Pharmacists' commitment, training, and active involvement are essential in assuring that prescription bottles feature clear, culturally acceptable terms and, where necessary, are accurately translated.

Currently the clarity of prescription labels and drug information sheets varies among pharmacies.[43] The American Pharmaceutical Association (APA) has taken the first steps by encouraging pharmacists to review all patient information for health literacy appropriateness; assess patients' health literacy; implement appropriate communications and education; and develop cultural awareness, sensitivity, and cultural competence.[44] Pharmacists also need to address language barriers. They cannot assume that because patients speak English, they will understand instructions written in English.[41]

Written materials

Like prescription labels, other written materials have to be easy to read and culturally and linguistically appropriate. All too often, material developers do not pay attention to all 3

aspects.[45] Materials translated for LEP populations are rarely tested for cultural appropriateness or literacy. The case that translation alone is not enough is made by Levya and colleagues, who found that only 29% of Spanish speakers were able to understand fully a Spanish-language drug information sheet.[43] Creating foreign language materials in tandem with their English counterparts – a process called *transcreation* – rather than merely translating them from the English versions ensures that cultural concepts and language nuances are appropriate for the audience. For example, nutritional information sheets for diabetics can reference foods commonly eaten by the target audience. However, solutions to the combined challenge of cultural diversity, limited literacy, and English proficiency should resist the temptation to assume a one-size-fits-all approach.

Technology

The great variability in preferred ways of receiving messages has given rise to a range of technology-based communication strategies tailored to specific populations.[7] Audiovisual aids such as videotapes, DVDs, CD-ROMs, computer kiosks, talking touch screens, and interactive multimedia programs hold promise as alternatives for written materials. The evidence of their effectiveness as a strategy for limited-literacy populations, however, is mixed.[6,46,47] These methods often present information in a complex manner or are used as a substitute rather than a complement to discussions with clinicians or health educators.[48] Furthermore, they often presume English proficiency or a level of technological sophistication (eg, having a DVD player at home) that does not exist in some cultures. There is a risk that technological advances that do not address health literacy, culture, and language could exacerbate disparities.[49] For everyone to benefit from the new technologies, materials have to be altered for limited-literacy, LEP, and multicultural audiences.[50]

Performance standards

Increasingly, health care organizations are being called to meet performance standards. Standards for culturally and linguistically competent care and health literacy are being issued by different organizations. For example, the U.S. Department of Health and Human Services' Office of Minority Health published the *National Standards for Culturally and Linguistically Appropriate Services*.[51] The National Council on Interpreting in Health Care issued *Standards of Practice for Interpreters in Health Care*,[52] and the Joint Commission on Accreditation in Healthcare Organizations has plans to develop health literacy performance standards.

Organizations are struggling to address holistically the gamut of literacy, cultural, and language issues. For example, the American Medical Association's Ethical Force Program has drafted a patient-centered communications framework that contains performance expectations that explicitly address patients' sociocultural contexts, language, and health literacy.[53] The National Committee on Quality Assurance has also endeavored to take into account all 3 areas in its *Enhancing Patient Centered Care in Office Practice* project, which is developing patient-centered performance metrics. Similarly, the Agency for Healthcare Research and Quality is developing a cultural-competence supplement to the CAHPS® Clinician/Group Survey that contains separate modules on language access and health literacy. Multiple performance measurement efforts are common early in a field's

development, but eventually consensus should be reached. The AQA Alliance has demonstrated it is possible to produce a single set of physician performance measures to reduce confusion over redundant clinical measures and alleviate administrative burdens.[54] Accreditation organizations are in the nascent phase of producing such alignment of health literacy, cultural, and linguistic competence performance measures.

The Health Care Organization's Responsibilities

The IOM, in its report *Crossing the Quality Chasm,* made it clear that the onus for improving health care quality does not rest solely on the shoulders of clinicians and called on "health care organizations [to] design and implement more effective organizational support processes to make change in the delivery of care possible."[55] Clinicians and other health care providers cannot expect to make significant progress in addressing health literacy needs in the context of language and culture without the commitment of their organizations. Leadership and senior management must be willing to invest in training, staffing, and physical plant that recognize the special challenges to navigating the health care system faced by patients with literacy, cultural, and language barriers.

Training

Evidence is emerging on the positive effect of health professional training to improve communication skills across culture and language,[56] and training to improve clinicians' ability to serve low-literate populations effectively also holds promise.[57,58] Unfortunately, these efforts, both of which seek to build communication skills, have remained separate. The result is that health care professionals and staff face competing demands for the limited amount of time they have for educational activities and receive mixed messages on communication priorities. Clinicians, adjunct staff, and interpreters would benefit from training that addresses both the delivery of culturally and linguistically appropriate services and recognition of and effective responses to limited health literacy.[59]

Multidisciplinary staff

The IOM states that "it is nearly impossible to deal with literacy, language, and cultural issues within the context of a 10–15 minute patient visit."[6 p. 181] Health care organizations need to use the full array of health care professionals to reinforce and augment clinician-patient communications. Members of a health care team can conduct patient assessments of literacy, culture, and language; review health care information after clinical visits to answer questions; and ensure understanding of treatment and self-management plans. The health care team should include receptionists and interpreters. As the first people seen by patients, receptionists can allay confusion, fear, or uncertainty, as well as assist in completing paperwork and arrange for interpreters. Trained interpreters can also play a role outside the clinical encounter, facilitating intake and follow-up.[60]

Outreach

Anecdote and research have documented that limited-literacy patients may avoid health care settings for fear of being embarrassed,[61] just as LEP and culturally diverse patients may not seek health care where they cannot communicate with or do not trust health care

providers.[40,62,63] Reducing access barriers for these populations is likely to require health care organizations to create or expand their involvement with and connections to the communities they serve. Community health workers, a cultural-competence intervention whereby members of minority communities serve as liaisons to health care organizations,[33] may prove useful in engaging individuals with limited literacy as well. Another technique to reach out to community organizations is to invite them to serve on community advisory boards. Adult education programs are a good target for outreach activities; not only can adult educators provide access to adult learners and their families, but they can also provide health care providers with insight into how adults learn and how to converse with LEP and culturally diverse individuals.[64]

Facility navigation

Culturally diverse, limited literacy and/or LEP individuals can face significant challenges in finding their way to and around health care facilities.[65] Left unaddressed, the challenges can discourage return visits. Having patient navigators or using translated signage or pictograms to supplement written information may help. The effectiveness of these strategies needs to be investigated because limited-literacy patients could be confused by signs in more than one language,[65] and pictograms may suggest different meanings to culturally diverse individuals.[6] For example, Hablamos Juntos' Signs That Work project addresses the intersection of literacy, culture, and language by testing symbol signs to determine if they are meaningful across language and cultural groups.[66]

Toward an Integrated Approach

The previous discussion has focused on the importance and value of recognizing the interrelationship of literacy, culture, and language in the context of health care. It has also highlighted points of intervention and initiative for the clinical setting and health care organizations.

What might a fully integrated approach to health literacy and cultural and linguistic competence look like? The field is likely to struggle with this question for many years to come. Here we present one vision of a health care system in which providers and their organizations have worked to integrate all 3 into improving health care quality.

Clinicians and the health care team would …

- Record sufficiently detailed information on patient preferences and requirements with respect to health literacy, culture, and language in medical records and use it to tailor care to individuals' needs.
- Solicit information about the environment, lifestyle, family values, cultural health beliefs, folk medicines, and other health practices that will affect patients' willingness and ability to undertake medical treatment.
- Employ clear communication principles to describe treatment options and convey instructions for the agreed-upon course of action, confirm understanding, and probe whether culture and/or language could be a factor in any miscommunication.

- Select educational and instructional materials that are easy to read, culturally relevant, and translated into appropriate languages.
- Use interpreters trained in cultural competence and health literacy as well as medical interpretation.
- Invite family members and friends to participate in the clinical encounter to assist with asking questions, taking notes, and recalling instructions and to participate in decision making that is essential in some cultures to obtain patient buy-in and treatment adherence. (Family members and friends would not be asked to serve as interpreters.)

Pharmacists, writers of health promotion and other materials, audiovisual producers, technology innovators, and accreditation organizations would….

- Test all materials (eg, medication instructions, health promotion brochures, computerized decision aids) with diverse audiences to check that they are understandable and acceptable across literacy, culture, and language.
- Develop new materials in other languages or translate and test materials with native speakers.
- Disseminate products with information about their appropriateness for various audiences (eg, those who read English at grade 5 and above and are familiar with the concept of contagion).
- Invent new methods to assist those who have difficulty reading or understanding written materials (eg, multilingual help lines associated with in-home monitoring devices).
- Promulgate unified performance standards for quality care for limited-literate culturally diverse, and limited English proficiency patients.

Health care organizations would….

- Design settings to be welcoming to all and minimize stigma associated with limited literacy and English proficiency and being a foreigner. From the directions on how to get to the facility, to the posters on the wall, to the receptionists' offer to assist with filling out forms or calling for an interpreter, the health care setting would be geared to minimizing misunderstanding and intimidation.
- Capitalize on opportunities to consolidate health literacy, cultural, and language strategies. For example, one individual could serve the roles of community health worker, patient navigator, cultural broker, health educator, and interpreter.
- Provide integrated health literacy, cultural, and linguistic training for health care professionals and staff. Training could include how to collect assessment data, when to use and how to use interpreters, and how to engage in cross-cultural and clear communication.

- Include representatives from a variety of cultural and linguistic groups as well as the adult learner community on advisory councils and other bodies.
- Adapt their systems to capture literacy, culture, and language data and analyze the data to inform quality improvement activities.

CONCLUSION

This vision for an integrated approach is intended to serve as a catalyst for transforming the health care system to meet the needs of limited-literacy, culturally diverse, and limited English proficiency patients. Clinicians and health care staff have an important role to play, but the responsibility for achieving real progress for patients facing challenges related to literacy, culture, and language must extend to organizations that support them.

We are still at an early stage of understanding the scope of literacy, cultural, and language challenges patients face and developing remedies to address them. The relationship between health literacy and health disparities is only beginning to be explored.[67] The strategies identified in this article are just a beginning in an area needing significantly greater resources for research and intervention. To that end, funders and policy makers will need to consider how to provide research support and/or incentives to improve health care for diverse populations with limited literacy and English proficiency.

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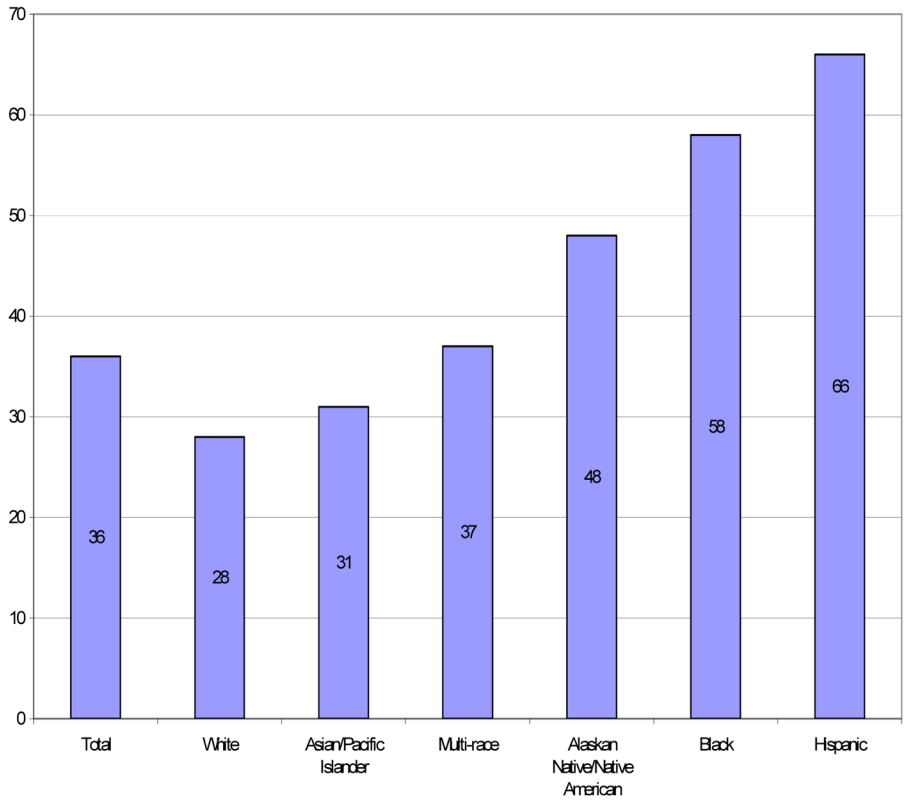

Figure 1.

Americans with Limited Health Literacy by Race and Ethnicity

Source: Kutner M, Greenberg E, Jin Y, et al. 2006.

Table 1

Health Literacy, Cultural Competence, and Linguistic Competence

	Patient Assessment Strategies	Workforce Strategies	Education and Training	Other Main Strategies
Health Literacy	• Rapid Estimate of Adult Literacy in Medicine (REALM) • Short Test of Functional Health Literacy in Adults (S-TOFHLA) • Newest Vital Sign • Single question, red flags	• Patient Navigator • Health Educator	• Communication • Plain language	• Patient education and empowerment • Easy-to-read materials • Teach-back • Graphics, color-coding, pictograms • Audiovisual materials
Cultural Competence	• Race • Hispanic origin • Cultural group membership	• Racial/Ethnic Concordance • Community Health Worker	• Cultural sensitivity • Cross-cultural communication • Diversity • Racism	• Coordination with traditional healers • Family/Community Inclusion • Culturally competent health promotion • Community involvement
Language Assistance	• Primary language • English proficiency • Interpreter needs	• Bilingual clinician/staff • Interpreter • Translator	• How to interpret • How to work with interpreters • Foreign language	• Testing interpreters' language proficiency and interpreter skills • Process for accurate translation • "I Speak" card