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# ELDER CARE

## A Resource for Interprofessional Providers

### Health Literacy

Barry D. Weiss, MD, College of Medicine, University of Arizona

Health literacy is the ability to obtain, read, understand, and use health-related information to navigate the health care system and to make informed decisions about medical care. It is closely related to general literacy – the ability to read and write and understand numbers – but it refers specifically to health information. Numerous studies have shown that people with limited health literacy have higher rates of illness, worse health status, worse health outcomes, and higher health care costs than individuals with adequate health literacy. These differences persist after adjusting for many sociodemographic factors, including ethnic group, education, and income. Indeed, literacy is one of the strongest, if not the strongest, predictors of health status.

In 2003, the US Department of Education conducted a national survey of the health literacy skills of American adults. The survey, called the National Assessment of Adult Literacy (NAAL), classified health literacy skills into four categories. Table 1 shows examples of question items used for each of the four categories.

**Table 1. Examples of Health Literacy Skills Items in**

Below Basic	Circle the date on a clinic appointment slip.
Basic	Find basic information in a short paragraph.
Intermediate	Use a chart to find out the age at which different vaccines should be given.
Proficient	Consult a complex table to determine an employee's monthly share of health insurance costs.

Table 2 shows the distribution of health literacy levels in the US population based on the NAAL. Only about 12% of the overall population has proficient skills and overall, about 1/3 (36%) of adults have limited health literacy (skills at the basic or below basic levels). Subsequent smaller-scale

studies suggest that the literacy skills, including health literacy skills, of the American public have declines since the NAAL, so the percentage of the population with limited health literacy is likely now higher.

**Table 2. Health Literacy Levels of American Adults Based on the National Assessment of Adult Literacy**

Below Basic	14%
Basic	22%
Intermediate	53%
Proficient	12%

### Health Literacy in Older Adults

For older adults, the rates of limited health literacy skills are the highest of all age groups, with 59% having skills at the basic or below basic level. Furthermore, older adults with limited health literacy have higher rates of medical illness than those with higher-level skills, including a higher rate of cognitive impairment over time, and thus are over-represented in the health care system. Therefore, when dealing with older adults in clinical settings, there is a high likelihood that many of those patients won't understand the health information you present to them.

### How to Improve Oral Communication

Health literacy experts recommend the use of clear communication techniques with all patients, regardless of their literacy skills, referred to as "universal health literacy precautions." Even highly literate, well-educated patients can sometimes have trouble comprehending health care information, so keep it easy to understand. Several approaches are recommended.

The first is to *speak slowly*. Research demonstrates that individuals with limited literacy skills, and indeed all patients, are more likely to understand you if you do.

### TIPS FOR UNIVERSAL HEALTH LITERACY PRECAUTIONS

- Use easy-to-understand language with all patients, regardless of their literacy skills.
- Explain things without medical or anatomical words, like you would explain them to friends or family members.
- Focus on only 2-3 key messages per visit. Patients rarely remember more than that.
- Simply asking "do you have any questions?" isn't enough. Encourage patients to ask questions.
- Verify understanding by asking patients to explain to you what you have told them.
- Written materials should be at no higher than the 5th grade level and include pictures.

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The second, and crucial, step is to explain health information in plain language, like you might explain it to friends or family members who don't know anything about medicine or anatomy. However, health professionals often don't do that and instead, use concepts and terms and that are unfamiliar to patients.

Third, it is important to limit the amount of information provided to patients. Studies have shown that patients will retain only 2-3 pieces of information per encounter, so convey only that which is most important. Don't worry that you are giving patients too little information at any one visit. If you discuss more than 2-3 things, they likely won't remember them.

Finally, use "teach-back" to confirm that patients understand what you have said. Ask them to explain back to you what you have told them to be sure they understood. Simply asking "do you understand?" will often bring a "yes" response, even if they didn't understand. Asking "do you have any questions?" will often just bring a response of "no." Instead, say something like "I know I've given you a lot of complicated information. Please help me know if I was clear by telling me the important parts of what I've told you." Teach-back is an effective way to confirm that patients understand. Research shows that patients of clinicians who use teach-back have better outcomes, such as improved diabetes control. More information about teach back is contained in the AHRQ Health Literacy Universal Precautions Tool Kit (see reference list).

## How to Improve Written Communication

Handouts are a way to provide patients with additional information, though keep in mind that individuals who don't read well do not always find written instructions useful.

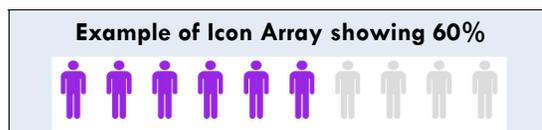
Thus, if you are going to give patients written handouts, they need to be easy to read. The average reading level of the American adult population is at the 8th grade level and the average low-income older adult reads at the 5th grade level. Despite this, the vast majority of handouts given to patients are written at much higher reading levels, often at the 10th-12th grade level or even college level. Written material should be prepared at the 5th-6th grade level. The key to achieving an appropriate reading level is

to use short words (two syllables or less), short sentences, and bulleted lists rather than paragraphs. Commonly used computer software, like Microsoft Word, includes an option to measure reading level in the spell-check feature.

Note, however, that short words alone will not assure patient understanding. Many short words (e.g., cyst, polyp, stent) may be totally unfamiliar to patients. You need to use terms from common everyday language and explain those that are not. Pictures are also helpful to explain medical issues. The book by Doak and Doak in the reference list is an excellent and classic resource on creating effective patient education materials.

## Communicating About Numbers and Risk

Many individuals do not understand numbers and risk. In one notable study involving patients in an asthma clinic (not just individuals with limited literacy skills), only 38% knew that 1% means 1 out of 100. Studies show that the best way to explain risks to patient is to use event rates (i.e., how many out of how many) or icon arrays (figure below).



## Assessing the Health Literacy Skills of Patients

Instruments are available for assessing health literacy in clinical settings, intended primarily for research purposes. But, if you don't believe that limited health literacy is prevalent in your practice, a one-time assessment of a sample of your patients will show you how common it is. Two quick (3-minute) and easy-to-use instruments are the Rapid Estimate of Adult Literacy in Medicine, available only in English, and the Newest Vital Sign, available in English and Spanish. (<https://healthliteracy.bu.edu/all>)

## If You Want to Know More...

Consult the AHRQ Health Literacy Universal Precautions Toolkit (link provided on the reference list). And, the University of Arizona has developed a 15-minute interactive health literacy education module, which is available at <http://healthlit.fcm.arizona.edu/>.

## References and Resources

AHRQ Health Literacy Universal Precautions Toolkit. Second edition. 2015. <http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2.pdf>

AHRQ. The SHARE approach – communicating numbers to your patients: a reference guide for health providers. 2018. <https://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/tools/tool-5/index.html>

Doak CC, Doak LG, Root JH. *Teaching patients with low literacy skills*. 2nd ed. Philadelphia: JB Lippincott Company. 1996.

Oliveira D, Bosco A, di Lorito C. Is poor health literacy a risk factor for dementia in older adults? Systematic literature review of prospective cohort studies. *Maturitas*. 2019; 124:8-14.

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