THE JOURNAL OF FAMILY PRACTICE

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The authors reported no potential conflict of interest relevant to this article.

Help your patient "get" what you just said: A health literacy guide

These simple strategies can help patients with limited health literacy grasp—and retain—vital information about chronic conditions, medications, and more.

PRACTICE RECOMMENDATIONS

› *Prioritize patient teaching, and present no more than 3 to 5 key points per visit.* (C)

› *Confirm that patients understand what you've told them by asking them to explain it to you (the "teach back" method).* (B)

› *Whenever possible, use simple visual aids—eg, draw pictures, use illustrations, or show a video—to get your point across.* (B)

Strength of recommendation (SOR)

(A) Good-quality patient-oriented evidence
(B) Inconsistent or limited-quality patient-oriented evidence
(C) Consensus, usual practice, opinion, disease-oriented evidence, case series

Half of all adults are unable to understand basic health information and services needed well enough to make appropriate health decisions, according to the Institute of Medicine.[1] Findings from the 2003 National Assessment of Adult Literacy (NAAL), the National Center for Education Statistics' only study of Americans' ability to understand health-related information, painted a similarly grim picture. Although 53% of US adults had "intermediate" health literacy (HL), the NAAL found that up to 90% lacked the skills needed to manage their health and prevent disease.[2]

The National Patient Safety Foundation reports that low HL is associated with an additional $106 to $238 billion in health care costs per year.[3] Among the reasons:

- Up to half of all prescription and over-the-counter medications are taken incorrectly,[4] which helps explain why roughly 1.5 million preventable adverse drug reactions occur each year.[1]
- Chronically ill patients incur higher health care costs as a result of low HL. Consider, for instance, that patients with asthma have more frequent hospitalizations,[5] and patients with diabetes have higher glycohemoglobin (HbA1c) and a higher incidence of nephropathy and retinopathy.[6]
- Elderly patients with low HL are more likely to use the emergency department, and have significantly worse mental health and greater all-cause mortality than their counterparts with higher HL.[7]

Clearly, this is a problem primary care physicians cannot afford to ignore. The strategies discussed in the text and tables that follow will increase your awareness of the effects of limited HL—and help you take positive steps to address them.

Put health literacy on your radar screen

Anyone can have trouble comprehending medical information at times, but patients who are elderly (≥65 years), cog-

nitively impaired, or have limited education face the highest risk.[8] Half of adults who never completed high school have "below basic" HL, compared with 15% of high school graduates.[2]

Education alone is not an accurate measure of HL, however. Reading comprehension is often 2 to 5 grade levels lower than an individual's actual educational level. Socioeconomic status, race, and age affect the extent of the discrepancy, with the largest gap found among low-income minority patients.[9]

HL status is not shaped by reading comprehension alone, however. It also depends on the ability to decode symbols and charts and to formulate decisions and subsequent actions related to health. Thus, limited English proficiency (LEP) is a key risk factor for low HL, as well.[10]

Among Hispanic adults, those with LEP have higher rates of unemployment and are less likely to have health insurance or to have a usual source of health care.[10] Compared with English-speaking patients with higher HL, those with lower HL and LEP are less likely to use health services or to adhere to clinicians' recommendations—and more likely to have worse outcomes.[11]

While behavioral markers for low HL may be evident, clinicians often fail to recognize them.[12,13] Patients with low HL may ask for help with forms they're asked to fill out, submit incomplete forms, or fill out the forms with multiple misspellings. In the exam room, patients with limited HL are likely to identify a drug by its appearance—"the little yellow pill"—rather than by the name on the label. In one study, patients with limited HL were 10 to 18 times less likely than those with higher HL to correctly identify their medications.[14] Rather than request clarification, however, such individuals are frequently ashamed of their lack of understanding and attempt to mask it by asking few questions.

Incorporate an HL assessment tool

According to the National Healthcare Disparities Report, poor HL contributes not only to differences in access to care, but also to provider bias and to poor patient-provider communication,[15] which directly affects patients' understanding of, and adherence to, medications and treatment plans. But in a busy practice setting, clinicians may have limited time to screen for HL or to devote to patient education. They may also be concerned about embarrassing patients who have low HL and unsure of how to appropriately address the issue.[16]

Routinely using an HL assessment tool is an important first step. There are several screening tests that reliably assess HL, but they vary in their approach and the time needed to administer them. (See **TABLE 1** for details on the most widely used screening tools.[17-21])

Assessing time and cost. The Newest Vital Sign (NVS), a screening tool in which patients are asked to use a sample product label to determine things like fat content, calories, and serving size, was included in a study assessing the time and cost of HL interventions. Distributing the NVS and explaining how to complete it added <30 seconds to the patient intake process. Scoring the test and recording the results in the patient's electronic medical record, tasks completed by the front office staff, took <2 minutes. The office visit itself took 2 to 5 minutes more than it otherwise would have—the extra time needed for the clinician to adapt his or her communication style to the patient's documented HL level and to assess patient recall and understanding.[22]

Implementation added up to $8,000 in start-up and training costs, plus costs for refresher training and system maintenance.[22] Using free materials, such as the Agency for Healthcare Research and Quality (AHRQ)'s Health Literacy Universal Precautions Toolkit (detailed in a bit),[23] limiting training fees, and relying on existing staff members to do the training could significantly cut the cost of an HL intervention.[22]

Tools to help boost your communication skills

A number of online resources are available to help health care professionals address HL. Take a look at the following examples to see which might be most helpful to you:

AHRQ Health Literacy Toolkit. Available at http://www.ahrq.gov/qual/literacy/index.html, the AHRQ's HL toolkit starts with the assumption that most patients have difficulty understanding health information at

Patients with low health literacy may have trouble filling out forms or submit forms that are incomplete or have multiple misspellings.

TABLE 1

Health literacy assessment: Validated screening tools[17-21]

Assessment tool	Description	Administration time	Scoring	Advantages
Newest Vital Sign (NVS) http://www.annfammed.org/content/3/6/514.figures-only	6-question test of ability to interpret an ice cream nutrition label	<3 minutes	0-1 correct=high likelihood of limited HL; 2-3 correct=possibility of limited HL; ≥4 correct= adequate health literacy	Quick, widely accepted; available in English and Spanish
Rapid Estimate of Adult Literacy in Medicine, Short Form (REALM-SF) http://www.ahrq.gov/populations/sahlsatool.html	7-item health word recognition test	2-3 minutes	0 correct=≤3rd grade;* 1-3 correct=4th-6th grade; 4-6 correct= 7th-8th grade; 7 correct=high school	Quick; large font available
Test of Functional Health Literacy in Adults (TOFHLA) http://www.peppercornbooks.com/catalog/information.php?info_id=5	Timed reading comprehension test†	18-22 minutes (7 minutes for S-TOFHLA)	75-100=adequate HL; 60-74=marginal HL; 0-59= inadequate HL	Available in short version, very short version, and in Spanish

*≤3rd grade: unable to read most low-literacy materials; 4th-6th grades: needs low-literacy material and may be unable to read prescription labels; 7th-8th grades: will struggle with most patient education material; high school: able to read most patient education material.

†Uses modified Cloze procedure (every 5th to 7th word is replaced with a blank space and the patient selects the word from 4 multiple choice options).

HL, health literacy; S-TOFHLA, Short Test of Functional Health Literacy in Adults.

times. It outlines a systematic approach to assessing clinical practices, evaluating patients' HL, improving provider-patient communication, and teaching patients self-management skills. AHRQ provides 20 tools, specific implementation steps, worksheets, and sample forms, among other resources.

Communication course for providers. The Health Resources and Services Administration (HRSA) is another valuable resource. Noting that ensuring effective health communication is a shared responsibility, HRSA offers a free online course (http://www.hrsa.gov/publichealth/healthliteracy/) titled "Effective Communication Tools for Healthcare Professionals." The curriculum incorporates HL, cultural competence, and LEP.

"Ask Me 3" campaign. Developed by the National Patient Safety Foundation, this program (available at http://www.npsf.org/for-healthcare-professionals/programs/ask-me-3/) is designed to promote provider-patient communication by encouraging patients to ask 3 questions at each visit:

1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

The role of providers is to ensure that patients understand the answers. Ask Me 3 brochures, posters, and patient handouts, which can be purchased on the foundation's Web site, are designed to remind patients to speak up.

Assess comprehension and recall

Studies suggest that up to 80% of medical information received is forgotten by patients immediately, and nearly half of the content that's retained is incorrect.[24] Prioritizing information you wish to provide and limiting yourself to 3 to 5 key points per visit is one way to increase the likelihood that patients will remember what you said. Using open-ended questions (eg, "Tell me what you'll do when you get home") and the "teach back" method—that is, asking patients to repeat in their own words what you've taught them about

TABLE 2

How to conduct a "brown bag" medication review

Before the visit	**Tell the patient what to bring to the next visit:** • All prescription medicines (including pills and creams) • All OTC medicine taken regularly • All vitamins, supplements, and herbal remedies **Remind the patient:** • On the appointment card • During the appointment reminder call • With posters in the exam rooms and waiting room and (anonymous) case studies posted on a bulletin board, eg, "Miss Smith brought all her medications to her last visit and found out that she was still taking a blood pressure medicine that she no longer needed." **Offer encouragement:** • Emphasize benefits (eg, a brown bag review may result in the provider stopping some medications) • Provide a medication container (a small canvas, paper, or plastic sack, possibly with a printed reminder on one side and the name of your practice on the other)
During the visit	**Display the medications** • A nurse or medical assistant should place all of the medications on the counter in the exam room **Thank the patient** • Stress the importance of bringing all of his or her medications to every visit **Review the medications** • Ask whether the patient has any questions about the medications • Ask follow-up questions, eg: – Are you taking any new medications since your last visit? – Have you stopped taking any medications since your last visit? – How many of these pills do you take each day? – What do you take this medication for?" **Clarify medication instructions** • Review the medications to be taken and how to take them • Discard any drugs or OTC products that are old, discontinued, or must be changed • Ask the patient to "teach back" to you **Update the patient's chart** • Clearly document medication inconsistencies and what the patient is directed to take **Give the patient an updated medication list** • Include how often and at what time each one should be taken
After the visit	**Document and code the medication review** • Note in the chart when full medication reviews are done and when partial or updated reviews are conducted • Select the correct code (ICD-9 V58.69)*

OTC, over-the-counter.

*This code alone may not always be reimbursable, but may be used as a practice tracking tool in conjunction with the appropriate diagnosis.

Adapted from: Agency for Healthcare Research and Quality. *Health Literacy Universal Precautions Toolkit.* Available at: http://www.ahrq.gov/qual/literacy/index.html. Accessed February 8, 2012.

The reading comprehension of many adults—especially low-income minorities—is 2 to 5 grade levels below the education level attained.

their medications and treatment plan—helps to reinforce key take-home points.

The focus of "teach back" should be on how well the provider has explained things, AHRQ emphasizes. Thus, the toolkit suggests saying something along the lines of, "I want

TABLE 3

Tips for helping patients with limited health literacy[23-30]

Strategy	Key points
Warmly greet each patient	Maintain eye contact when you greet patients and during the interaction to encourage questions and disclosure
Use plain language (eg, high blood pressure rather than hypertension; liver instead of hepatic; heart attack, not myocardial infarction) and nonmedical terms, and speak clearly and at a moderate pace	Notice what words your patients use to describe a symptom or condition, and use those words throughout the interaction
Limit content	Prioritize what needs to be discussed, and present no more than 3 to 5 key points
Use visual aids	Draw simple pictures, use illustrations, demonstrate with 3-D models, or show videos that use nonmedical terms (adapted, as needed, for patients with LEP)
Provide encouragement	Encourage patients to ask questions about their health and treatment plans and to take an active role in managing their own health care
Assess recall and comprehension	Be specific and concrete, and repeat key points; confirm understanding by using "teach back"—asking patients to explain to you the information you provided to them
Take steps to provide additional patient support	Promote adherence and self-management skills by: • instituting group visits • implementing telephone/online coaching, reminders, or monitoring • linking patients, as needed, to one or more members of an interdisciplinary health care team

LEP, limited English proficiency.

In one study in which 9 practices implemented brown bag medication reviews, errors were found in 80% of the reviews.

to be sure that I explained your medication correctly. Can you tell me how you're going to take this medicine?"[23] In a study of patients with diabetes, those whose providers assessed their recall or comprehension of new concepts were almost 9 times more likely to achieve HbA1c targets than patients whose doctors did not do so.[25]

Zero in on medication adherence

Another method highlighted in AHRQ's toolkit is the "brown bag" medication review—asking patients to bring every prescription drug and over-the-counter product they take every time they come in and carefully reviewing each one (**TABLE 2**).[23] The NAAL found that 36% of patients do not read at the level required to understand medication labeling.[23] The percentage of adults who do not adhere to prescribed medication regimens is considerably higher.

In one study in which 9 practices implemented brown bag medication reviews, errors were found in 80% of the reviews. Among the most common errors: patients who stopped—or started—taking a drug without the knowledge of their provider, or continued to take a medication after it had been discontinued.[23]

Consider visual aids, group visits, and other interventions

In attempting to simplify patient handouts, consider using simple graphics (**TABLE 3**).[23-30] In a randomized controlled trial (RCT) including 120 women—48% of whom had limited HL—a graphics-based educational tool significantly improved patient understanding of preeclampsia.[26] Another RCT demonstrated that patients who had inadequate or marginal reading skills, had not completed high school, or were cognitively impaired

were most likely to regularly refer to a medication schedule illustrated with pictures of their pills. More than 90% of the study group agreed that the illustrated schedule was easy to understand and helped them remember the name and purpose of their medications, as well as the time to take them.[27]

For patients who have low HL and are chronically ill, having the support of family or friends—any trusted confidante—is associated with better medication adherence. Group visits (in which a physician or other health care professional meets with a group of patients who have the same condition or diagnosis) is one way to provide such support. In one study, patients with diabetes who participated in group visits had higher rates of breast and cervical cancer screening and were more likely to get influenza and pneumococcal vaccinations and take ACE inhibitors, among other measures recommended by the American Diabetes Association.[26]

Take advantage of telemedicine . . . Health care delivered by telephone, Internet, video conference, or any other remote network may also be helpful. A Cochrane review found that patients with asthma who were the recipients of such interventions had a significant reduction in hospitalizations, particularly among those with more severe asthma.[29] A systematic review found that for patients with diabetes, mobile phone interventions were associated with a statistically significant improvement in glycemic control and self-management.[30]

. . . and other providers. Interdisciplinary care has also been found to have a positive effect on management of chronic disease. One study found that patients with diabetes who received telephone coaching by nurses or nutritionists achieved a greater reduction in cholesterol and adherence to lipid-lowering medications than those who received the usual care.[31] Direct patient care provided by pharmacists has also been associated with increased medication adherence and improvements in blood pressure, cholesterol levels, and HbA1c levels.[32] JFP

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Simple graphics—eg, a medication schedule illustrated with pictures of a patient's pills—can boost adherence to the treatment plan.

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