

Family Medicine Updates



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PATIENTS' HEALTH LITERACY SKILLS: THE MISSING DEMOGRAPHIC VARIABLE IN PRIMARY CARE RESEARCH

Health literacy has been defined as the ability to obtain, process, and understand basic information and services needed to make appropriate health decisions.¹ According to a recent report from the Institute of Medicine, *Health Literacy: A Prescription to End Confusion*, almost one half of Americans have difficulty understanding basic health information.² Although limited educational attainment, generally less than a high school or general equivalency diploma, has been long recognized as a strong risk factor for poor health status and greater likelihood of less-healthy behaviors, the link between health literacy skills and health-related outcomes is even stronger.

Research during the past 15 years has shown that those with limited health literacy skills have higher health care costs, use health care services more frequently, have poor understanding of chronic disease management techniques, underuse preventive health services, engage in riskier health behaviors, and tend to be less knowledgeable about health-related topics than those with adequate health literacy skills.³ Based on these findings, primary care investigators should carefully consider including patients' health literacy skills as a key demographic variable when conceptualizing their research studies.

Two types of standardized literacy assessment tools—word recognition tests and reading comprehension tests—have been widely used to measure patients' literacy skills. Although several literacy assessment tools are available, the Rapid Estimate of Adult Literacy in Medicine (REALM)³ and Test of Functional Health Literacy in Adults (TOFHLA)⁴ were developed specifically to measure patients' health literacy skills. The REALM and TOFHLA are valid and reliable, and they can be easily administered while gathering demographic information from patients.

The REALM, the mostly commonly used tool, takes less than 5 minutes to administer and score. The REALM is a word-recognition test comprising

66 medical terms, arranged in order of complexity by the number of syllables and pronunciation difficulty, starting with simple one-syllable words (eg, pill, eye) and ending with multisyllable words (eg, antibiotics, potassium). Patients read down the list, pronouncing aloud as many words as they can while the examiner scores the number of words pronounced correctly using standard dictionary pronunciation as the scoring standard. Scores on the REALM vary from 0 (no words pronounced correctly) to 66 (all words pronounced correctly.) The score assigns health literacy skills into 4 categories of grade-equivalent reading level: 0-18 (\leq 3rd grade), 19-44 (4th to 6th grade), 45-60 (7th to 8th grade) and 61-66 (\geq 9th grade).

The TOFHLA and a short form of the TOFHLA (S-TOFHLA) are available in both English and Spanish. The TOFHLA takes approximately 22 minutes to administer, while the S-TOFHLA takes about 7 minutes. The TOFHLA and S-TOFHLA are timed reading comprehension tests that use the modified Cloze procedure, in which every 5th to 7th word in a passage is omitted and replaced with a blank space. The patient must select a word to fit into the blank spaces from the 4 multiple-choice options provided for each space. The TOFHLA is scored on a scale of 0 to 100, whereas the S-TOFHLA is scored on a scale of 0 to 36. Patients are categorized as having adequate health literacy if the TOFHLA score is 75-100, marginal health literacy if it is 60-74, and inadequate health literacy if the score is 0-59. Patients are categorized as having adequate health literacy if the S-TOFHLA score is 23-36, marginal health literacy if it is 17-22, and inadequate health literacy if the score is 0-16.

Patients with limited and marginal health literacy skills are routinely encountered in clinical settings.⁵ Although the field of health literacy is a relatively new area of inquiry, it is gaining momentum among investigators. We know that patients with limited health literacy skills face enormous obstacles navigating the health care system and struggle with tasks that many of us take for granted (eg, reading prescription bottles, calculating the amount of cough syrup to give to your child). The implication for adherence to treatment regimens and the threat to health outcomes are obvious and compelling. The time is now for primary care investigators to consider patients' health literacy skills as a key variable in their research studies.

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References

1. US Department of Health and Human Services. Health Communication (Chapter 11). In: *Healthy People 2010: Understanding and Improving Health and Objectives for Improving Health*. 2nd ed. Washington, DC: US Government Printing Office; 2000.
2. Davis TC, Long SW, Jackson RH, et al. Rapid estimate of adult literacy in medicine: a shortened screening instrument. *Fam Med*. 1993;25:391-395.
3. Neilsen-Bohlman L, Panzer AM, Kindig DA, eds. *Health Literacy: A Prescription to End Confusion*. Washington, DC: National Academies Press; 2004.
4. Parker RM, Baker DW, Williams MV, Nurss JR. The test of functional health literacy in adults: a new instrument for measuring patients' literacy skills. *J Gen Intern Med*. 1995;10:537-541.
5. Paasche-Orlow MK, Parker RM, Gazmararian JA, Nielsen-Bohlman LT, Rudd RR. The prevalence of limited health literacy. *J Gen Intern Med*. 2005;20:175-184.



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FOCUS ON PRACTICE REDESIGN, QUALITY IMPROVEMENT

The new year brings Academy members 2 Future of Family Medicine resources—the Practice Enhancement Program and an Academy subsidiary company, TransformMED, Inc. Both entities are intended to help family physicians implement elements of the new model of care described in the Future of Family Medicine (FFM) report (http://www.annfammed.org/cgi/content/full/2/suppl_1/s3), which was released in 2004.

The Practice Enhancement Program, piloted in May 2005 in Spokane, Wash, and in September in Iselin, NJ, works with small- and medium-sized family medicine practices to implement changes that the FFM report deemed necessary for the specialty's survival.

Bruce Bagley, MD, AAFP medical director for quality improvement said the program "fulfills a need the Academy created with the FFM project." He likened the program to a syringe designed to "help our members inject the new of model of care into their practices."

Mentor, Teamwork Formula Effective

The 21 practices that participated in the Washington and New Jersey pilots completed a rigorous process that began with an office assessment. That first step helped participants pinpoint specific areas in their practices ripe for improvement.

Key areas of study were team development and change management, said Bagley, who stressed the importance of medical office teams coached by mentors. Each

3-person team included a physician, a clinical staff person and a nonclinical staff person from the practice. Each mentor facilitated team discussions during the 2-day onsite sessions and coached his or her team throughout the months-long process of implementing practice change.

Teams focused on a single goal, whether it was better management of patients with chronic conditions (eg, hypertension, diabetes, depression, and asthma); improved preventive care; or implementation of new office processes, such as open-access scheduling. Participants were taught the basics of making an improvement using the PDSA cycle of plan, do, study and act. Coaches helped teams devise an improvement plan, implement it on a small scale, study the results and tweak the process, and launch the plan practice wide.

Grant Ensures Project Expansion

Thanks to a grant of nearly \$209,000 from the Physicians' Foundation for Health Systems Excellence, the Practice Enhancement Program is expanding beyond the pilot phase and into a full-fledged program. Bagley said the money will allow the Academy to offer the program to 3 more constituent chapters this year and will fund development of a faculty program to aid expansion to even more chapters in 2007.

"The program needs a modular, consistent curriculum that uses a standard set of concepts as well as local faculty to keep the costs low," said Bagley, adding that he envisions a "train the trainer" model.

In 2006, "the Academy needs to take the program to family physicians who are interested in transforming their practices by working with other like-minded physicians in a group setting," he said.

The hope, said Bagley, is that once team members learn how to implement a practice improvement, they can use that knowledge to make more changes and further improve the delivery of health care to their patients.

"I don't think there's a lack of members who want to do this," said Bagley. "Who wouldn't want to get home earlier and run a more efficient practice? Physicians are seeing practice redesign work, and more and more of them are saying, 'I want this too.'"

Practice Resource Center Becomes Reality

The Academy broke new ground early in 2005 when the Board of Directors voted to move forward with the creation of a resource center dedicated to offering real tools and services to help family physicians achieve practice redesign.

The company was named TransformMED for a reason, said CEO Terry McGeeney, MD, a family physician from Ames, Iowa. "The transformation of family medicine is the basis for the Future of Family Medicine report, and the company name reflects that."