



# PREVENTION *Report*



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## Focus

### Health Literacy Crucial to Good Health

Thanks in part to America's healthcare and public health systems, millions of people enjoy long life, good health, and effective treatment of many diseases. But the same systems that provide those benefits also make demands on people seeking those services. Choosing a healthy lifestyle, knowing when and how to seek needed care, and taking advantage of preventive measures, as well as treatments for disease, require that people understand and use health information that is often complicated. Finding the right care means navigating the nation's complex healthcare systems, filling out confusing forms, dealing with complicated institutions, and sometimes deciding among different types of treatment. The ability to obtain, understand, and use the information needed to make wise health choices is known as health literacy.

According to the 1992 National Assessment of Adult Literacy, an estimated 90 million Americans are in the two lowest levels of literacy skills. Low literacy among members of such populations as older adults, people with poor reading skills, those with limited mastery of the English language, members of ethnic and cultural minorities, and immigrants is likely a major contributor to health disparities in this country, according to *Healthy People 2010*. Many such individuals lack the knowledge and skills needed to adopt good health behaviors and obtain the care that they and their families need for good health.

According to research studies, persons with low health literacy are more likely than those with adequate health literacy to skip crucial preventive measures such as well-child health visits, dental visits for their children and for themselves, mammograms, Pap smears, and flu and pneumonia vaccinations. Persons with low health literacy are more likely to have chronic conditions and

## Save the Date

**Save October 24–25, 2005.** Plan on being at the Hyatt Regency on Capitol Hill, Washington, DC, for the 3rd National Prevention Summit. The Summit will emphasize chronic disease prevention and health promotion for older Americans, health literacy improvement, and the use of information technology to promote prevention. As a special feature, Secretary of Health and Human Services Mike Leavitt will announce the recipients of this year's Innovation in Prevention Awards. Registration is free. To register, visit [www.healthierus.gov](http://www.healthierus.gov).

less able to manage them effectively. They experience more hospitalizations, but their health outcomes are poorer and the cost of their health care is higher than those individuals with higher health literacy. "Closing the gap in health literacy is an issue of fundamental fairness and equity and is essential to reduce health disparities," according to *Healthy People 2010*.

Experts now recognize that the level of health literacy is a crucial factor in the health status of individuals. "Health literacy can save lives, save money, and improve the health and well-being of millions of Americans," said Surgeon General Richard H. Carmona. Yet, despite the crucial role of health literacy, the general public and many working in the healthcare system do not appreciate its importance or the urgent need to make changes to the healthcare system to address health literacy issues. Improving health literacy therefore needs to become the focus of a national effort involving health professionals, professional organizations, the private sector, and government at all levels, as well as ordinary citizens. "All of us—government, academia, healthcare professionals, corporations, communities,

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and consumers—working together can bridge the gap between what health professionals know and what patients understand, and thereby improve the health of all Americans,” said Dr. Carmona.

## **Health Literacy Is More Than Reading**

Being an informed patient and a savvy consumer of health information takes a combination of skills. As the term implies, reading ability is crucial—but not all that’s needed—for health literacy. Reading is basic to gaining information, but words do not convey ideas or inspire action unless people understand their intended meaning and the context in which they are used. People with low health literacy often lack not only the ability to read well but also knowledge about the body, its functioning, and the nature and causes of different types of disease. Without this knowledge, they often fail to understand the relationship between lifestyle factors such as diet, exercise, or smoking and various health outcomes. They may not grasp the causes and consequences of chronic diseases such as diabetes, asthma, and high blood pressure. In addition, people with low health literacy may fail to recognize when they need to seek care, the steps involved in finding appropriate care, and how to take a medication or comply with other treatment regimens. And they may miss the importance of following instructions and using treatments consistently in order, for example, to keep blood pressure or blood sugar levels under control. People with low health literacy might read or hear expressions commonly used in health care—for example, “take on an empty stomach” or “exploratory surgery”—and not understand what these terms mean or how they relate to their own situation.

Beyond reading and other communication skills, as well as knowledge of relevant health topics, making sense of health information and the healthcare system also requires numerical skills. Such concepts as disease risk or the normal range of values such as blood pressure or cholesterol, for example, depend on mathematical concepts and skills. Needed information is often expressed in fractions or percentages or displayed in graphs or charts. Treatments may involve measuring out medications or using values such as blood sugar levels. In fact, many skills—reading,

using charts and tables, and doing quantitative calculations—may be needed to take medications correctly or to follow other treatment regimens.

Simply having information about health and disease does not constitute an adequate level of health literacy. To obtain suitable health care, individuals need to understand the health system and how it works, as well as how to approach and interact with many kinds of healthcare providers and institutions. They need to know about the various types of health professionals, the types of services they provide, the kinds of institutions in which they work, and the organizations that provide payment for health services. To receive treatment and payment reimbursement, individuals also need to understand how to complete many kinds of forms, which may include those giving informed consent for treatment.

## **Barriers to Health Literacy**

Many barriers—including poverty, limited education, low reading levels, and inadequate English-language skills—stand in the way of developing health literacy. People who do not read well and know little about health are at a particular disadvantage because they have difficulty increasing their knowledge and understanding, but health information and the healthcare system can confuse and overwhelm even well-off Americans with advanced education. Medical science advances rapidly, and what people may have learned about health or biology during their school years often becomes outdated or inadequate, or is simply forgotten. Also, everyone confronts different aspects of a fragmented healthcare system with many new situations and complicated forms and procedures.

Beyond gaps in the education and reading skills of Americans, however, additional barriers arise because healthcare professionals often inadvertently make it difficult for lay people to understand what to do. Throughout their professional education and training, healthcare providers are taught to use precise technical language to discuss body parts and processes, disorders, and treatments—a habit that usually continues throughout their professional careers.

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Although this type of technical communication works very well to convey exact, detailed information to fellow professionals, it creates a serious obstacle to communicating with the people receiving care. Professionals often find it hard to overcome this obstacle because they generally lack training and skill in translating information, ideas, and instructions into nontechnical terms to make them clear to people without a sophisticated grasp of health topics. Many lay people have only a superficial knowledge of diseases or disease processes. Concepts that are clear and obvious to health professionals—for example, the need to complete a course of antibiotics after symptoms disappear, what constitutes vigorous exercise, or how to measure out a proper dose of medicine—may be unfamiliar to many patients.

Beyond the problems of technical jargon, patients whose cultural backgrounds differ from that of the healthcare provider may bring to the interaction their own beliefs about the body or health, which may be at odds with common conceptions in American health care. For example, patients may attribute a disease to different causes and seek relief from different sources than medical science, which makes communicating about their health especially problematic. In addition, the prestige and power of the provider, especially physicians, may discourage patients from asking questions that could clear up misunderstandings or elicit important information because they may feel ashamed of their lack of understanding or their poor English. Physicians, on the other hand, often overestimate how well patients grasp what has been said and fail to encourage questions or to check whether, in fact, the patient understands. What's more, tight schedules may discourage doctors from spending the few extra minutes needed to make sure patients understand.

### **Improving Health Literacy**

To improve the health of millions of Americans, addressing health literacy barriers must become a national priority. Professional societies, Government agencies, and the educational system must collaborate to train professionals to communicate more clearly and educate patients more effectively about their health. Healthcare administrators and oversight bodies also

must hold organizations accountable and be accountable for improving health literacy. Healthcare providers who have patient contact must develop the skills of listening and giving explanations and directions that use words and images that patients comprehend and get into the habit of checking to make sure that patients understand what they should do. One effective technique is inviting patients to summarize in their own words the provider's explanation or instructions. Such an invitation creates the opportunity

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### **Studies Link Health Outcomes to Patients' Health Literacy and Doctors' Communication Styles**

Studies show that health literacy and doctor-patient communication can directly influence specific health outcomes. Researchers at the University of California, San Francisco, found a strong link between how well persons with type 2 diabetes control their disease and how well they understand what their doctors tell them about it. Whether the doctor makes sure that the patient understands also independently affects the degree of glycemic control that the patient attains.

One study found that patients with diabetes who scored low on health literacy tests had poorer glycemic control and more retinal damage caused by diabetes than did those with higher scores. The data indicated that health literacy was an independent factor in patients' level of glycemic control. In another study, researchers watched doctors talk with patients about their diabetes. Doctors who asked their patients whether they understood explanations and instructions—and then tailored communication to each patient's level of understanding—achieved better glycemic control than did patients of doctors who did not confirm that their patients grasped the information. The researchers identified doctors' style of conveying information as an independent factor in patients' ability to control their diabetes.



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for an ongoing exchange between provider and patient to work toward mutual understanding.

Beyond these steps, health professionals and administrators must work to ensure that written materials provided to patients and their families are clear and understandable. Are the materials appropriate to the individual's ability to understand? Are the directions specific and concrete? Exactly what is the patient supposed to do? How? When? How often? For how long? Exactly what information does the form require? Providing clear, accurate, and useful materials to patients of all abilities means that providers must select or create materials with the patient's viewpoint and abilities in mind. At the very least, materials should be written in plain language, and a number of organizations are working to expand the use of plain language in healthcare materials of all kinds. In addition, visuals, graphics, and other forms of communication can supplement plain language and help explain and expand the meaning of the written materials.

Beyond improving communication from healthcare providers, steps must be taken to upgrade the public's understanding of health and the healthcare system. This requires better teaching of health in schools, more and better adult education about health, and better health information in the mass media. In addition, Americans need to learn to be more informed patients. They must learn that asking healthcare providers to clarify and explain unclear directions or answers must be part of every healthcare encounter.

## **Spotlight**

### **Health Literacy: A Prescription To End Confusion**

In a nation as culturally and socially diverse as the United States, complex relationships link health literacy to people's cultural, educational, and health status; to their ability to use the healthcare system effectively; and to the cost of health care. A report from the Institute of Medicine (IOM) of the National Academies—*Health Literacy: A Prescription to End Confusion*—takes a comprehensive look at the

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## **Action Steps To Improve Health Literacy**

*Communicating Health: Priorities and Strategies for Progress*, published by the Office of Disease Prevention and Health Promotion, recommends the following steps to improve health literacy:

- Develop a national focus and agenda for health literacy.
- Increase awareness of the need for health literacy among health professionals and in schools of health professions, and improve their skills for communicating with patients and the public.
- Create local partnerships between healthcare professionals and adult educators to improve literacy skills among adults with low literacy.
- Increase the public's access to accurate and understandable health information through the mass media, the development of culturally and linguistically appropriate materials, and the collaboration of professional groups.
- Improve public access to health services by making forms, questionnaires, signs, and explanatory materials comprehensible to the public.
- Support the adult education system, including literacy programs in workplaces, correctional facilities, and elsewhere.
- Support all forms of literacy skill development for Americans of all ages.
- Make health literacy a fundamental consideration in health policy and program planning, and promote the use of plain language in health communications.
- Engage community organizations and the lay public in health literacy efforts.
- Enhance health literacy research and its translation into practice.





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available research, examining the extent, causes, and consequences of inadequate health literacy for individuals and the nation. Prepared by a committee of nationally recognized experts under the auspices of IOM's Board on Neuroscience and Behavioral Health, the study examines what is needed to create a "health literate America." The report focuses in detail on the connection between poor health literacy and increased healthcare costs, and it emphasizes the need for improved communication skills among professionals and patients alike. It indicates what further research into health literacy is needed and provides specific recommendations for action by entities, including Government agencies, professional organizations, and private funding organizations.

Although the result of extensive scholarship, the report is written in a style accessible to nonexperts. The 346-page book is available for sale from the National Academies Press by calling (800) 624-6242 and is available online at [www.nap.edu](http://www.nap.edu).

## Resources

*Literacy and Health Outcomes*, a report from the Agency for Healthcare Research and Quality, reviews the state of knowledge about the relationship between health literacy and health outcomes. Available online at <http://www.ahrq.gov/clinic/epcsums/litsum.htm>.

*Healthy People 2010 Health Literacy Action Plan—Communicating Health: Priorities and Strategies for Progress (2003)* describes specific steps to realize the objectives of improving health literacy and health communication in *Healthy People 2010*. Available online at <http://odphp.osophs.dhhs.gov/projects/healthcomm>.

The "Health Literacy" Web page of the Health Resources and Services Administration provides links to the Agency's health literacy activities and to a variety of health literacy resources. Available online at <http://www.hrsa.gov/quality/healthlit.htm>.

"Improving Health Literacy," a Web page provided by the National Institutes of Health, includes links to research on health literacy, advice on how healthcare providers can improve communication with patients, and a range of other resources. Available online at <http://www.nih.gov/icd/od/ocpl/resources/improvinghealthliteracy.htm>.

"Understanding Health Literacy and Its Barriers," part of the National Library of Medicine's *Current Bibliographies in Medicine*, provides an extensive listing of health literacy materials. Available online at <http://www.nlm.nih.gov/pubs/cbm/healthliteracybarriers.html>.

*Prevention: A Blueprint for Action* was published in 2004 by the Office of Health Policy, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services and is part of the Department's *Steps to a HealthierUS* initiative. This report outlines simple steps that individuals and interested groups can take to promote healthy lifestyles and encourage healthy behavior. It includes a discussion of the importance of health literacy for prevention. Available online at <http://aspe.hhs.gov/health/blueprint/>.

The Food and Drug Administration provides **Easy-To-Read Publications** in both English and Spanish. Brochures address numerous topics, including volunteering for clinical trials, diet and heart disease, arthritis, food safety, weight loss, breast cancer, skin cancer, child health and safety, diabetes, and medical treatments. Available online at <http://www.fda.gov/opacom/lowlit/7lowlit.html>.

The **Health & Literacy Special Collection** of the National Institute for Literacy provides selected health materials for use with persons of limited literacy. Available online at <http://www.worlded.org/us/health/lincs/>.

**Health Literacy**, part of the online Consumer Health manual prepared by the National Network of Libraries of Medicine, provides a list of health literacy

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organizations and programs, bibliographies, Web sites, and health literacy listservs. Available online at <http://nnlm.gov/scr/conhlth/hlthlit.htm#Health%20Literacy>.

**Health Literacy: Help Your Patients Understand**, an educational kit prepared by the American Medical Association Foundation, is designed to help physicians, healthcare professionals, and patient advocates improve their communication with patients. Available online at <http://www.ama-assn.org/ama/pub/category/9913.html>.

The Council of State Governments prepared the **State Official's Guide to Health Literacy** and a **Health Literacy Tool Kit** to educate state officials about the importance of health literacy and what they can do to improve health literacy. The guide provides an overview of state initiatives as well as information on relevant academic research and successful private-sector initiatives. Additional information is available online at <http://www.csg.org/CSG/Policy/health/health+literacy/default.htm>.

The **Health Literacy Studies** program at the Harvard School of Public Health provides an overview of health literacy, links to research, resources to help create and assess materials, and innovative approaches. Additional information is available online at <http://www.hsph.harvard.edu/healthliteracy/index.html>.

**Health Literacy Resources**, a Web page from the American College of Physicians Foundation, includes a video on health literacy and links to materials from other organizations. Available online at <http://foundation.acponline.org/healthcom/hli/resources.htm>.

The **National Literacy and Health Program** (NLHP) Web site of the Canadian Public Health Association provides links to NLHP services (including the Plain Language Service in both English and Spanish), projects, and publications. Available online at <http://www.nlhp.cpha.ca/>.

## Activities

October is **Health Literacy Month**. This international grassroots campaign was founded in 1999 by Helen Osborne to create awareness of the importance of understandable health information. The campaign Web site presents ideas to get individuals, associations, and communities started, including thinking about the message, finding partnering organizations that share the commitment to understandable health information, and planning and running a Health Literacy Month event. The site also contains links to health literacy fact sheets, articles, sponsors and partners, and ordering information for posters and postcards. For more information, visit <http://www.healthliteracymonth.com/>.

**Ask Me 3<sup>TM</sup>** is an educational program, developed by the Partnership for Clear Health Communication, to improve health communication between patients and healthcare professionals. The mission of the Partnership for Clear Health Communication—a collaborative effort of the American Medical Association, the American Nurses Association, the National Council on Aging, and the Partnership for Prevention—is to create awareness about low health literacy and its effects on health outcomes, as well as to develop and research practical solutions to improve communication channels between healthcare providers and patients. The *Ask Me 3* program offers the public free and low-cost resources and programs that deliver information such as medical education and practice management tools to healthcare providers and organizations that share information with patients. For more information, visit [www.AskMe3.org](http://www.AskMe3.org).

The University of Washington (UW) Health Sciences Library, along with all six UW health sciences schools and the Information School, will be leading the new health literacy project, **Evaluating and Promoting Health Literacy in Recovering Alcoholics and Addicts**. This project will facilitate the exchange of information and knowledge about the health literacy of recovering alcoholics and addicts in the

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Seattle Salvation Army Adult Rehabilitation Center (ARC). Investigators hope to promote long-term recovery and long-term self-care of this population using three approaches: (1) by conducting an exploratory study of health literacy among this population, (2) by providing health education information to ARC residents, and (3) by training ARC residents and staff to find functional and suitable health information. For more information, visit <http://nnlm.gov/pnr/funding/oldproj.html>.

The National Institutes of Health, in partnership with the Agency for Health Care Research, has issued **program announcements on health literacy**. Under the program announcement entitled “Understanding and Promoting Health Literacy,” investigators are invited to submit R01 research grant applications to provide research studies up to \$500,000 that will increase scientific understanding of the nature of health literacy and its relationship to healthy behaviors and health outcomes. A separate R03 program announcement invites applications for pilot or feasibility studies and other small projects up to \$50,000. For more information and deadlines for letters of intent and application submission, visit <http://www.ahrq.gov/news/enews/enews140.htm#5>.

## ***In the Literature***

**Understanding Health Literacy** by J.G. Schwartzberg (ed.). American Medical Association, December 2004. This compilation covers health literacy from multiple perspectives. Researchers, public health professionals and educators, pharmacists, and policymakers will find this a useful resource. The book begins with an overview of health literacy in health care. Chapters address health literacy from the patient’s perspective, the effect of health literacy on communication regarding the patient-provider relationship, and the impact of health literacy on the delivery of health care. Also included are a glossary and information on literacy tests.

### **Influence of Patient Literacy on the Effectiveness of a Primary Care-Based Diabetes Disease Management Program**

by R.L. Rothman et al. *Journal of the American Medical Association* 292(14):1711–1716, October 2004.

This research study looked at the influence of literacy on glycemic control and systolic blood pressure in patients age 18 and older with type 2 diabetes and poor glycemic control. The research concluded that patients with low literacy levels who received individualized information were more likely to achieve goal hemoglobin A1c (HbA1c) levels. On the other hand, the likelihood of achieving goal HbA1c levels for patients with higher literacy levels remained constant.

### **Functional Health Literacy and the Quality of Physician-Patient Communication Among Diabetes Patients**

by D. Schillinger et al. *Patient Education and Counseling* 52:315–323, March 2004.

Researchers assessed communication experiences in relation to functional health literacy levels among 408 English- and Spanish-speaking diabetes patients using the Interpersonal Processes of Care in Diverse Populations instrument. The study found that patients with low functional health literacy levels experienced oral communication problems, especially in explanatory encounters with clinicians.

### **Health Literacy: A Policy Challenge for Advancing High-Quality Health Care**

by R.M. Parker et al. *Health Affairs* 22:147–153, July–August 2003.

Health literacy among older Americans with chronic health conditions is a problem not only for patients who are not able to function as informed consumers but also for the healthcare system itself. In the past, health policies focused on improving health and education as two separate issues, rather than on the relationship between the two. Health literacy has become a significant issue among health policymakers, and this paper presents strategies for improving health literacy.

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## **Closing the Loop: Physician Communication With Diabetic Patients Who Have Low Health Literacy**

by D. Schillinger et al. *Archives of Internal Medicine* 163:1745–1746, July 2003. Physicians caring for patients with diabetes mellitus and low functional health literacy seldom assess patient recall of information or comprehension of new concepts. This study measured the extent to which primary care physicians assess recall and comprehension of new concepts in their patients and found that patients whose physicians used an interactive communication strategy were more likely to have better glycemic control.

## **Unweaving the Web: An Exploratory Study of Low-Literate Adults' Navigation Skills on the World Wide Web**

by C. Zarcadoolas et al. *Journal of Health Communication* 7:309–324, July–September 2002. Using findings from an ethnographic study, researchers evaluated Web navigational skills among a group of low-literate adults. The research examined navigational success in 24 participants with a 5th- to 7th-grade reading level and identified specific barriers for this population. The vast majority of the participants were enthusiastic to explore the Web, although they experienced significant barriers while trying to navigate the Web.

## **Teaching Patients With Low Literacy Skills**

by C.C. Doak et al. Philadelphia, PA: J.B. Lippincott Co., 1996. This practical book guides the reader in developing materials to be used for teaching patients with limited literacy skills. The authors share proven strategies for evaluating comprehension and teaching patients using written materials, audiovisuals, computer-aided instruction, and graphics. The book includes many case studies that demonstrate the application of teaching/learning theory to actual practice.

## **Meetings**

**WHCoA Mini-Conference on Health Literacy and Health Disparities.** 2005 White House Conference on Aging. Chicago, IL. Visit <http://www.whcoa.gov/about/policy/meetings/mini-conferences.asp>. **July 21, 2005.**

**American Academy on Physician and Patient: International Conference on Communication in Healthcare.** Chicago, IL. Visit <http://www.physicianpatient.org/>. **October 6–8, 2005.**

**“Breaking Down Barriers: Health Literacy in Community Health.”** National Primary Care Week. Washington, DC. Visit <http://www.amsa.org/programs/npcw/>. **October 16–22, 2005.**

**3rd National Prevention Summit: Innovations in Community Prevention.** Washington, DC. [www.healthierus.gov](http://www.healthierus.gov). **October 24–25, 2005.**

**Fifth International Conference on Plain Language. Health Literacy Sessions: The Importance of Clear Communication for Better Health.** Washington, DC. Visit [www.plainlanguagenetwork.org/conferences/2005](http://www.plainlanguagenetwork.org/conferences/2005). **November 3–6, 2005.**

**133rd Annual American Public Health Association Meeting.** New Orleans, LA. Visit [http://www.apha.org/meetings/continuing\\_ed.htm](http://www.apha.org/meetings/continuing_ed.htm). **November 5, 2005.**

- Sessions:
- Health Literacy & Communication: It's About Improving Patient Health Workshop
  - The Critical Contribution of Health Professionals to Health Literacy Improvement

**American College of Physicians Foundation's Fourth Annual Health Communication Conference. Practical Solutions to the Problems of Low Health Literacy.** Washington, DC. Visit [http://foundation.acponline.org/healthcom/hcc\\_reg.htm](http://foundation.acponline.org/healthcom/hcc_reg.htm). **November 30, 2005.**