

Patient Health Literacy in the U.S. and its Impact on Health

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Forum On Designing Patient-Centered Prescription Labels

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Michael Villaire, MSLM
Institute for Healthcare Advancement
www.iha4health.org
mvillaire@iha4health.org
(800) 434-4633 x202

What We'll Talk About...

- **Literacy and health literacy in America**
- **Defining prevalence of low health literacy**
- **Cost of low health literacy**
- **Impact of LHL on health care processes**
- **Resources for more information**

Definitions: Literacy, Health Literacy

- Literacy: “Using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (Kirsch et al, 1993)
- Health Literacy: “The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” (Ratzan and Parker, 2000)
- Health Literacy: “The ability to read and comprehend prescription bottles, appointment slips, and the other essential health-related materials required to successfully function as a patient.” (AMA Council of Scientific Affairs, 2000)

Do You Understand?

“Today, with the completion of the Kamioka experiment and the SAGE and GALLEX measurements of the low-energy solar neutrino flux, it is recognized that the solar neutrino problem is a profound issue for all of physics.”

--Nuclear Physics: The Core of Matter, the Fuel of Stars. Committee on Nuclear Physics, Board on Physics and Astronomy, Commission on Physical Sciences, Mathematics, and Applications, National Research Council. National Academy Press, Washington, D.C., 1999

National Surveys of Adult Literacy

- **NALS: National Adult Literacy Survey 1992 (5 literacy levels)**
- **NAAL: National Assessment of Adult Literacy 2003 (added Health Literacy component) (4 literacy levels)**

Three Types of Literacy

- **Prose Literacy** (editorials, news stories, brochures, instructional materials)
- **Document Literacy** (job applications, payroll forms, bus schedules, maps, tables, drug or food labels)
- **Quantitative Literacy** (balancing a checkbook, figuring out a tip, determining a dosage amount)

Prose Literacy

The knowledge and skills needed to perform prose tasks (e.g., to search, comprehend, and use information from continuous texts).

Example: Search an educational sheet to find out what if anything you can eat or drink before a medical test.

Document Literacy

The knowledge and skills needed to perform document tasks (i.e., to search, comprehend, and use information from noncontinuous texts in various formats).

Example: Determining where to sign a form.

Quantitative Literacy

The knowledge and skills required to perform quantitative tasks (i.e., to identify and perform computations, either alone or sequentially, using numbers embedded in printed materials)

Example: Adding amounts on a bank deposit slip, determining a child dosage.

Source: A First Look at the Literacy of America's Adults in the 21st Century, NCES 2006

Literacy Levels (NAAL)

- **Below Basic**—no more than the most simple & concrete literacy skills
- **Basic**—skills needed to perform simple, everyday literacy activities
- **Intermediate**—skills needed to perform moderately challenging activities
- **Proficient**—skills needed for more complex & challenging literacy activities

NAAL Health Literacy Findings:

- **87 million** (108 million 2008) **American adults** (36%) **at Basic or Below Basic HL levels**
- **Majority (114 million/53%)** (159 million 2008) **had intermediate HL levels (11% proficient)**
- **Women's avg. HL score 6 pts. higher** (4% more men in Below Basic)
- **Nearly 60% of 65+ in Basic/Below Basic**
- **Health ins. from employer ↑ HL, Medicare/Medicaid/No ins ↓ HL**

Health Literacy Statistics

- **1 in 2 Americans can't read above a 5th grade level** (Kirsch 2003)
- **Most patient education materials written beyond recipients' ability to understand** (Nielsen-Bohlman 2004)
- **26% couldn't understand when next appt.**
- **42% couldn't understand "take on empty stomach"**
- **60% couldn't understand consent form** (*JAMA* 1995)

Health Literacy Statistics

Those with poor health literacy skills:

- **2x more likely to be hospitalized (ER pts)**
- **More likely to have chronic health illness**
- **Less likely to get treatment**
- **MDs only ID 20% at women's clinic**

Consider This...

- **337 languages spoken/signed in U.S.**
- **More than 32.5 million foreign-born people live in the United States (2002)**
- **Nearly 9 million foreign-born live in CA (26% of population) (2000)**
- **47 million Americans speak a language other than English at home**
- **40% of Californians speak a language other than English at home (2000)**
- **21 million Americans have LEP**
- **11 million Americans couldn't communicate in English/Spanish or complete minimum # simple screening questions (NAAL)**

What This Means in Real Life...

Persons at these health literacy levels would have
67% probability of...

- **Below Basic**: recognize a medical appointment date on a hospital appointment form.
- **Basic**: using information from a clearly written pamphlet, provide 2 reasons to get tested for cancer if they had no symptoms.
- **Intermediate**: what time to take meds from Rx label
- **Proficient**: calculate ee share of health insurance cost from table

Why Does Health Literacy Matter?

Those with limited literacy skills:

- **Report poorer overall health**
- **Are less likely to make use of screening**
- **Present in later stages of disease**
- **Are more likely to be hospitalized**
- **Have poorer understanding of treatment**
- **Have lower adherence to medical regimens**
- **Less likely to properly manage a chronic illness**

Cost of Low Health Literacy

- **\$73 billion in unnecessary costs annually**

(Friedland, Georgetown University, 2003)

- **\$106-\$236 billion in unnecessary costs annually**

(Vernon, University of Connecticut, 2007)

Cost of Chronic Illness

- **\$1.5 trillion (75% of HC expenditures)**
- **\$286 billion spent on Rx sales 2007**
- **Nearly 1 in 2 Americans live with a chronic disease**
- **70% of annual US deaths (CDC 2008)**

Impact on Health Process

- **Filling out forms at hospital/doctor's office**
- **Completing insurance paperwork**
- **Reading and acting on prescription labels**
- **Reading and understanding directions given by a doctor**
- **Reading/understanding informed consent docs**
- **Understanding health promotion/disease prevention materials**

Impact on Health Process

- **Accessing information/determine reliability**
- **Recognizing cues to action**
- **Accessing care and navigating institutions**
- **Follow health care regimens/patient action plans**
- **Being able to advocate for oneself or family**
- **Communication with professionals**

Mismatch Between Reader & Materials

- **Informed consent materials written at 13th grade level or higher**
- **Medication package inserts written at 10th-12th grade level or higher**
- **Emergency department discharge instructions at grade 7-16 level**
- **Average reading level of Medicaid recipient is grade 5**
- **60% of Medicare enrollees at Basic or Below Basic**

(Rudd, R.E., 1999. Health and Literacy: A Review of Medical and Public Health Literature)

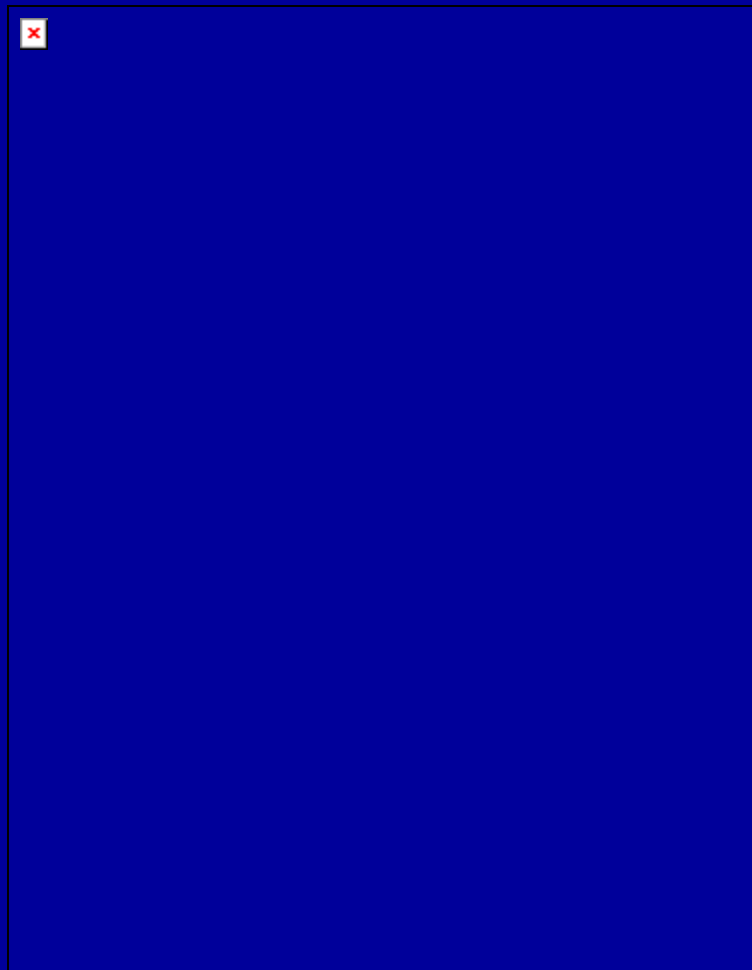
Websites

- nces.ed.gov/naal
- ama-assn.org (Foundation/Health Literacy)
- www.npsf.org/askme3
- foundation.acponline.org/hl/hlresources.htm
- www.hsph.harvard.edu/healthliteracy
- www.iha4health.org (more links)
- www.iom.edu (health literacy)
- www.nifl.gov (join listserv)
- plainlanguage.gov

IHA 8th Annual Health Literacy Conference

- Visit www.iha4health.org and click on Health Literacy Conference
- Earn continuing education credits
- Attend hands-on skill building sessions
- May 7-8, 2009 in southern California

Additional Resources from IHA



Questions?

Thank you!

Contact:

Michael Villaire

mvillaire@iha4health.org

(562) 690-4001, ext. 202