Health Literacy and Its Impact on Risk, Quality & Patient Safety

Gail A. Nielsen
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Objectives

1. Describe the prevalence of low health literacy and its effects on health knowledge, behaviors, outcomes and cost

2. Explain how health literacy as a cross-cutting priority, is fundamental to safe, high quality care

3. Identify organizational strategies to address low health literacy
Swiss Cheese Model: Health Literacy

**LATENT FAILURES**

Triggers

- No trained Interpreters
- Failure to see red flags
- Busy, unwelcoming
- Questions not invited
- Doesn’t check understanding
- Uses jargon, technical words
- Too technical
- Too much info
- Failure to involve patients
- Not understanding what patient needs to know

The World

Staff Preparation | Care Environment | Interpersonal Skills | Written Materials | Patient Involvement

**DEFENSES**

Modified from Reason, 1991
Health Literacy

General Literacy:

“An individual’s ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one’s goals, and develop one’s knowledge and potential.”

National Literacy Act of 1991

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.”

Healthy People 2010
IOM, 2004: Health Literacy…

“is fundamental to quality care…”

Relates to 3 of the 6 aims in IOM Quality Chasm Report:

• Safety
• Patient-centered care
• Equitable treatment
IOM Key Findings: Health Systems

• 90 million US adults: literacy skills below high school level

• Adults with limited literacy:
  – less knowledge of disease management & health-promoting behaviors
  – report poorer health status
  – less likely to use preventive services

• Higher hospitalization rates & emergency service use – higher utilization associated with higher healthcare costs

*Health Literacy: A Prescription to End Confusion. Institute of Medicine, 2004*
IOM Key Findings: Health Systems

- Competing sources of health information intensify need for improved health literacy
- Demands for reading, writing, & numeracy skills intensify need & exceed health literacy skills of most US adults
- >300 studies show health-related materials far exceed average reading ability of US adults

*Health Literacy: A Prescription to End Confusion.* Institute of Medicine, 2004
Consequences of Low Health Literacy

• Excess use of emergency department
• Excess hospitalizations
• Longer lengths of stay
• Decreased adherence
• Poorer health outcomes
• Increased medication errors
• Predictor of all-cause & cardiovascular mortality among elderly
Updated Estimate: Cost of Low Health Literacy to US Health System

- $106 billion - $238 billion
- Attributed to:
  - Premature mortality
  - Avoidable morbidity
  - Racial, ethnic, & socioeconomic disparities in health & health care
  - Avoidable costs
- First analysis using 2003 NAAL HL Survey data

Health Literacy of America’s Adults, 2003

78 Million adults have basic or below basic health literacy.

2003 NAAL HL Levels

Percent Adults in Each Level

Proficient: Draw abstract inferences, comparing or contrasting multiple pieces of information within complex texts or documents or apply abstract or complicated information from texts or documents – **Determine an employee’s share of health insurance costs for a year, using a table…**

Intermediate: Interpret or apply information in complex graphs, tables, or health-related texts or documents – **Determine what time a person can take an rx med, based on info on the label…**

Basic: Finding more complex information in longer texts or documents – **Give 2 reasons a person with no sx of a disease should be tested…using a clearly-written pamphlet.**

Below Basic: Finding straightforward pieces of information in short simple texts or documents – **Identify when it is permissible to drink before a test, using set of short instructions.**
Prevalence of Low Literacy in Selected Cities - NALS, 1993

- Boston 53%
- Charlotte 45%
- Chicago 63%
- Dallas 55%
- Honolulu 43%
- Nashville 47%
- New York 63%
- Philadelphia 67%
- Seattle 34%
What does this mean?

- Patients with Below Basic Health Literacy cannot:
  - Use the dosage chart on over-the-counter medicine
  - From a pamphlet, give 2 reasons why screening is important

- Patients with Basic Health Literacy cannot:
  - Use an immunization schedule
  - Follow a prescription to “take medicine on an empty stomach”
Self-management & health literacy are *cross-cutting* priorities for improving health care quality & disease prevention.
Patient Safety & Health Literacy

A safer healthcare environment is one in which a patient:

• understands the health event(s)
• makes informed health decisions
• knows what s/he needs to do
• does not experience a sense of shame or embarrassment at any time

Our obligation:

• Recognize, anticipate, & act on potential patient harm or risk
• Mitigate or avoid risk through system change

Reducing the Risk by Designing a Safer, Shame-Free Health Care Environment. AMA, 2007
Other Influences

• Joint Commission
  – Health Literacy & Patient Safety monograph
  – Accreditation standards

• CMS
  – HCAHPS

• National Quality Forum

• National Patient Safety Foundation
A Demonstration Exercise

- The following paragraph of instructions simulates what a reader with low literacy sees on the printed page
- Read the paragraph out loud
- You have 1 minute to read
- Hint: The words are written backwards and the first word is “cleaning”
GNINAELEC – Ot erussa hgh ecnamrofrep, yllacidoirep naelc eht epat sdaeh dna natspac revenehw uoy eciton na noitalumucca fo tsud dna nworb-der edixo selcitrap. Esu a nottoc baws denetsiom htiw lyporposi lohocla. Eb erus on lohocla sehcuot eht rebbur strap, sa ti sdnet ot yrd dna yllautneve kcarc eht rebbur. Esu a pmad tholc ro egnops ot naelc eht tenibac. A dlim paos, ekil gnihsawhsid tnegreted, lliw pleh evomer esaerg ro lio.
What is it like?

• How *do* you clean the capstan?

• How did you *feel* trying to read this passage?
What people may feel about their limited reading ability

- Ashamed, embarrassed
- Less of a person
- Stupid
- Angry
- Anxious, fearful, suspicious
- “Something is wrong with me”

*Parikh N Pt Educ and Counseling 1996*
People may hide their limited reading ability

Percent Who Never Told*

- Supervisor: 91%
- Coworkers: 85%
- Health Care Providers: 75%
- Spouses: 68%
- Friends: 62%
- Children: 52%
- Anyone: 19%

*Parikh N Pt Educ and Counseling 1996
People may protect themselves in health care settings

- Seek help only when illness is advanced
- Walk out of the waiting room
- Make excuses
- Become angry, demanding
- Clown around, use humor
- Detour, let provider miss the concern
- Be quiet, passive

*Parikh N Pt Educ and Counseling 1996*
Everyone benefits from clear information

- Many patients are at risk of misunderstanding, but it is difficult to identify them
- Assessing general reading levels does not ensure patient understanding in the clinical setting

*Reducing the Risk by Designing a Safer, Shame-Free Health Care Environment.*
AMA, 2007
Strategies to enhance health literacy...

- Create a shame-free environment.
- Improve interpersonal communication with patients.
- Create and use patient-friendly written materials.
Create a shame-free, patient-centered care environment...

- Attitude of helpfulness, caring, & respect by all staff
- Easy-to-follow instructions for appointments, check-in, referrals, & tests
- Simple telephone processes
- Assistance provided confidentially
- All staff understand their role in enhancing understanding
Possible Indicators of Low Literacy (Red Flags)

- Incomplete registration forms
- Frequently missed appointments
- Skipped tests & referrals
- Medication non-adherence
- Excuses:
  - “I forgot my glasses…”
  - “I’ll look at this at home…”
  - “I’ll show it to my daughter…”
- Unable to name medications, or explain purpose or timing of administration
- Difficulty explaining medical concerns
- No questions
The Patient’s Voice

Norma Kenoyer

Toni Cordell
The Patient’s Voice:
“Medical Forms are Barriers…."

http://www.aap.org/commpeds/resources/video/Barriers2.wmv

Use website above to view video
The Patient’s Voice

- “Health literacy walk-throughs”
- Written materials reviews
- Advisors on policies & tools
- Presentations & panel discussions
- Storytelling
- Ask Me 3
- Partner with adult literacy programs
Strategies to enhance health literacy...

- Create a shame-free environment.
- Improve interpersonal communication with patients.
- Create and use patient-friendly written materials.
Universal Communications Principles: Interpersonal

- Plain “living-room” language
- Slow down
- Break it down, short statements
- Organize into 2-3 concepts & check for understanding (chunk & check)
- Teach-back
- Ask Me 3
Ensure Understanding: Teach-back

Evidence:

- “Asking that patients recall and restate what they have been told” is one of 11 top patient safety practices based on strength of scientific evidence. (AHRQ, 2001 Report, *Making Health Care Safer*)

- Physicians’ application of interactive communication to assess recall or comprehension was associated with better glycemic control for diabetic patients. (Schillinger, Arch Intern Med/Vol 163, Jan 13, 2003, “Closing the Loop”)

“Ask Me 3”

- Encourages patients to ask their providers simple, essential questions in every health care encounter:
  - What is my main problem?
  - What do I need to do?
  - Why is it important for me to do this?
- Providers’ goal should be for patients/parents to know the answers before leaving:
  - “teach to the test”
  - “…it changes the way I talk to parents…”
- www.askme3.org
Strategies to enhance health literacy...

- Create a shame-free environment
- Improve interpersonal communication with patients
- Create and use patient-friendly written materials
Universal Communications Principles - Print Materials - 1

- Focus only on key points
- Need-to-know vs. Nice-to-know
- Emphasize what the patient should do
- Show or draw simple pictures
- Minimize information about anatomy & physiology
Universal Communications Principles - Print Materials - 2

- Simple words (1-2 syllables)
- Short sentences (4-6 words)
- Short paragraphs (2-3 sentences)
- Headings and bullets
- Lots of white space
- No medical jargon
Universal Communications Principles: Print Materials - 3

- Simplify & avoid duplicative paperwork
- Underline or Circle key points
- Offer to read aloud & explain
- Check reading level (ideal 5th-6th grade)
- Ask a patient/family member/adult learner for input & feedback


Bed-wetting

Three training tricks have been applied to the problem:

- To help your child develop habits as early as possible,
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Causes of bed-wetting

Although there is a cause of bed-wetting (urine retention) that is not fully understood, there are some factors that are possible:

- Your child is not fully asleep.
- Your child is not fully awake.
- Your child has difficulty in recognizing when he or she is asleep.
- Your child is not aware of being wet.
- Your child is not aware of being wet.
- Your child is not aware of being wet.

All young children can occasionally wet their bed while sleeping. This is to be expected, as they are still developing their bladder control. However, if your child has had this condition since birth and/or has severe bed-wetting, it is possible that your child may have a medical problem. If you have concerns, talk to your health care provider.

Most children who have had bed-wetting have had medical problems. This is to be expected, as they are still developing their bladder control. However, if your child has had this condition since birth and/or has severe bed-wetting, it is possible that your child may have a medical problem. If you have concerns, talk to your health care provider.

Signs of a problem

If your child has been consistently wet for 6 months or longer, you may need to begin thinking about the problem. It may be a sign of a medical problem such as:

- Bladder or kidney disease
- Diabetes
- Bed-wetting

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- Bladder or kidney disease
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Tips to manage bed-wetting

It is important to talk to your child's pediatrician about bed-wetting. For example, children may need to use the toilet at night and during the day. Your pediatrician may also recommend adding additional fluids, such as an increase in the amount of water or milk. This can help your child's bladder control.

If your child continues to wet the bed, talk to your pediatrician.

From your doctor

If you wet the bed, talk to your pediatrician.

American Academy of Pediatrics

From the Book of All Children

The American Academy of Pediatrics publishes a book that includes information on the causes, prevention, and treatment of bed-wetting. The book is available for purchase directly from the organization.

Additional resources:

- Bed-wetting and other sleep disorders
- National Institutes of Health: Bed-wetting and other sleep disorders
- Mayo Clinic: Bed-wetting and other sleep disorders
- American Academy of Pediatrics: Bed-wetting and other sleep disorders
Bedwetting

Most children learn to use the toilet between 2 and 4 years of age. Even after children are toilet-trained, they may wet the bed until they are older. It's even common for 6-year-olds to wet the bed once in a while. Some children still wet the bed at age 12.

What to Do About Bedwetting
Bedwetting usually goes away as your child gets older. Talk with the doctor if you or your child are worried about bedwetting. These tips can help in the meantime:

**Try These Tips**

- **Protect the bed.** Put a plastic cover under the sheets.
- **Have your child use the toilet just before bedtime.**
- **Don't give your child sodas pop (especially cola) before bed.**
- **Wake your child up to use the toilet 1 or 2 hours after going to sleep.** This will help him or her stay dry through the night.
- **Reward your child for dry nights.**
- **Try a star chart.** (See “Using a Star Chart” on the right.) Do not punish your child for wet nights.
- **Let your child help change wet sheets and covers.** But don't force your child to do this if you know he or she is being punished.
- **Set a no-duty rule in your family.** Let others know that it's not the child's fault.
- **Don't make bedwetting a big issue to your child won't retaliate.**

Tell Your Child

- **Wetting the bed is not his or her fault.**
- **It won't last forever.**
- **Lots of kids go through this, but no one talks about it at school.**

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**I Can Keep Dry!**

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**Using a Star Chart**

Try using a calendar and star-shaped stickers to keep track of your child's "dry" nights. Each morning, check your child's bed. If it is dry all night, praise your child. Let him or her put a sticker on the calendar for that day. You can also make a chart that shows the days of the week. See the chart above.

For many children, just seeing the stars add up is enough. Other children may need a reward. For example, do something special with your child after a week of dry nights.

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If you need more help...

Try the tips on the first page of this handout for 1 to 3 months. Then, talk with your child's doctor if bedwetting is still a problem. The doctor may suggest one of the following:

**A Bedwetting Alarm**

You can use a bedwetting alarm. The alarm goes off when it gets wet. Then the child learns to wake up to use the toilet. Over time, this helps a child stay dry at night. But don't give up. It can take weeks or months to work.

**Reasons for Bedwetting**

We don't always know what causes bedwetting. Here are some possible reasons:

- **There is a family history of bedwetting.**
- **Your child is a deep sleeper and doesn't wake up when he or she has to pee.**
- **Your child's bladder is too small to hold urine all night.**
- **Your child has trouble passing stool (poops).** This can put pressure on the bladder.
- **Your child has a minor illness, is very tired, or is going through changes or stress at home.**

**Signs of a Health Problem**

Talk with your child's doctor if...

- **Your child has been completely toilet-trained for more than 6 months and...**
- **Your child starts wetting the bed again.**

These 2 things together may mean that your child has a health problem.

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**Word to Know**

bladder—a hollow organ that holds urine in the body until you go to the toilet.
Moving From External Influences to Internal Action

Developing an Informed Consent Process With Patient Understanding in Mind
HL Consent Work

Goals:

- Create health-literate written consent *document*
- Prompt action on informed consent *process*, using teach-back
- Collaborate with HL Teams, adult learners, risk managers, healthcare providers, legal department
- Consider your first project:
  - Universal focus without regulatory requirements
  - Example: IHS focus - Surgery/Procedure consent form
“It has been explained to me that during the course of the operation, unforeseen conditions may be revealed that necessitate an extension of the original procedure(s) or different procedure(s) than those described above. I, therefore, authorize such surgical procedure(s) as are necessary and desirable in the exercise of the professional judgment. The authority granted under this shall extend to all conditions that do require treatment even if not known to Dr. ________ at the time the operation is commenced.
“I understand the doctor may find other medical conditions he/she did not expect during my surgery or procedure. I agree that my doctor may do any extra treatments or procedures he/she thinks are needed for medical reasons during my surgery or procedure.”
Creating an Action Plan

Action Plans identify:

- What can you do by Tuesday?
- **Who** will do **what** by **when**?
- What tools do you need?
- Where can you find patients and families to involve?
“Get Started”
Adapted from Don Berwick, MD

- Get goals
- Build a Health Literacy Plan to improve quality & safety
- Get bold
- Start next Tuesday
- Get together
- Gather a team: involve patients and adult learners
- Get the facts
- Clarify the gap
  - your local needs
- Get to the field
- Your frontlines of care
- Get a clock
- Set a completion deadline
Swiss Cheese Model: Health Literacy

**LATENT FAILURES**

- Failure to see red flags
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- Questions not invited
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**Triggers**

- No trained interpreters
- Failure to involve patients
- Signs hard to read
- Uses jargon, technical words
- Too much info
- Too much info

**The World**

**Staff Preparation**  **Care Environment**  **Interpersonal Skills**  **Written Materials**  **Patient Involvement**

**DEFENSES**

Modified from Reason, 1991
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