Addressing Low Health Literacy

Improve Patient Outcomes Without Adding Time
Learning Objectives

1. Describe communication best practices designed to improve patients’ understanding

2. Adopt time-saving health literacy methods

3. Use plain language as part of good health literacy practices
Introducing Dr. Coleman

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Associate Professor of Family Medicine
Clinical Thread Director for Professionalism, Ethics, and Communication
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ADDRESSING LOW HEALTH LITERACY

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ASSOCIATE PROFESSOR OF FAMILY MEDICINE
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Overview

• Literacy in America
• Health literacy
• Best practices for spoken communication:

1. “Universal precautions”
2. Plain non-jargon language
3. Limit information to “need-to-know” items
4. Elicit questions in an open-ended manner
5. Use “teach back” to confirm adequate communication
“The greatest problem with communication is the illusion it has occurred”

- Attributed to George Bernard Shaw
Literacy in America

43% of English- and Spanish-speaking U.S. adults have limited literacy skills at baseline

(Kutner et al, 2005)
Percentage of U.S. adults (English-and Spanish-speaking) by literacy level

(Kutner et al, 2005)
Literacy domains and examples of associated healthcare-related tasks

- **Cultural & Conceptual Knowledge**
  - Understand concepts:
    - Germ theory
    - Pharmacokinetics
    - Risk
    - Prevention
    - Chronic vs. acute
    - Acknowledge cultural differences
    - Navigate the “foreign” world of healthcare

- **Oral Literacy**
  - Navigate a phone tree
  - Describe symptoms
  - Understand vocabulary
  - Understand verbal instructions
  - Ask questions

- **Print Literacy**
  - Fill out forms
  - Understand consent forms
  - Understand prescription labels
  - Determine medication doses
  - Benefit from brochures
  - Keep appointments
  - Follow signage (navigate)
  - Correspond electronically

(Adapted from Neilsen-Bohlman et al, 2004)
Reading ability vs. comprehension

• Most Americans can read (and write, speak, listen, and use numbers)

• The problem is language comprehension and utilization
Reading ability vs. comprehension

In a study of adults with literacy below the 6th grade level:

• 71% correctly read the instruction to “take two tablets by mouth twice daily”

• Only 35% could demonstrate the number of pills to actually take

(Davis et al, 2006)
Health literacy skills of US adults

- 72% of pre-operative patients misinterpreted the term, “fasting.”
  (Hume et al, 1994)

- 42% of patients misinterpreted directions to “take medication on an empty stomach”
  (Williams et al, 1995)

- 63% of orthopedics patients did not know that a “fracture” means a broken bone
  (Cosic, Kimmel, Edwards, 2019)
Health Literacy

The degree to which individuals have the capacity to obtain, process, communicate and understand basic health information and services needed to make health decisions

(Somers & Mahadevan, 2010)
Low health literacy is associated with...

↓ Use of preventive services
↓ Understanding of medication use and prescription label instructions
↓ Overall health status
↑ Use of emergency care
↑ Rates of hospitalization
↑ Mortality rates among seniors
↑ Racial health disparities

(Berkman et al, 2011)
The Rapid Estimate of Adult Literacy in Medicine (REALM) is a tool used to assess a person's reading level. It consists of a list of words and phrases related to health and medicine. The table below shows the number of correctly pronounced words for different grade levels:

<table>
<thead>
<tr>
<th># correctly pronounced</th>
<th>Grade reading level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-18</td>
<td>≤3rd</td>
</tr>
<tr>
<td>19-44</td>
<td>4th-6th</td>
</tr>
<tr>
<td>45-60</td>
<td>7th-8th</td>
</tr>
<tr>
<td>61-66</td>
<td>≥9th</td>
</tr>
</tbody>
</table>

The average English-speaking U.S. adult reads at the 8th grade level (Kutner et al, 2005)

Source:
The Health Literacy Gap

- Individual Skills & Abilities
- Complexity & Demands of Health and the Healthcare System

Adapted from Ruth Parker: http://www.iom.edu/~/media/Files/Activity%20Files/PublicHealth/HealthLiteracy/Parker.pdf
**Spoken** communication best practices:
5 things you can do right now...
Prioritized Health Literacy and Clear Communication Practices For Health Care Professionals

Cliff Coleman, MD, MPH; Stan Hudson, MA; and Ben Pederson, MD

ABSTRACT

Background: Health care professionals need more and better training about health literacy and clear communication to provide optimal care to populations with low health literacy. A large number of health literacy and clear communication practices have been identified in the literature, but health professions educators,
Top 5 Best Practices

1. Practice “universal precautions” for health communication
2. Use plain non-jargon language to facilitate understanding
3. Limit information to 1-3 “need-to-know” items
4. Elicit questions in an open-ended manner
5. Use “teach back” to confirm adequate communication

(Coleman, Hudson, & Pederson, 2017)
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(Coleman, Hudson, & Pederson, 2017)
Low health literacy is ubiquitous

(Kutner et al, 2005)
Shame

• Patients hide their literacy problems
  – “I forgot my glasses”
  – “I’m not going to fill out another one of these stupid forms.”
  – “I’ll read it with my husband when I get home.”

• Over 60% have not told their spouse

(Parikh et al, 1996)
You can’t tell by looking

- Physicians are poor at estimating patients’ health literacy skills.

(Coleman, Hudson, Maine, 2013)
Screening is inappropriate

- Condition is too common.
- Screening is not acceptable to patients.
- Specific interventions are lacking.
- Risks outweigh benefits.

(Paasche-Orlow & Wolf, 2008)
“Universal precautions”

• Treat all patients with the same dignity and respect.

• Assume all are at risk for low health literacy in any given moment.

• Use clear communication best practices, including plain language, as your default style with all patients.

(DeWalt et al, 2010)
Won’t some patients be offended?

- All patients, regardless of education or literacy skills, prefer clear communication.
  
  (Sudore et al, 2007; Davis et al, 1998)

- Clear plain-language communication is not “dumbing down.”
  
  (HHS, 2012)
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(Coleman, Hudson, & Pederson, 2017)
Jargon

Specialized words, phrases, or concepts, which might not be fully understood, or may be misinterpreted by the recipient

(Nielsen-Bohlman et al, 2004)
### Three types of medical jargon

#### Table 2: Medical Jargon

<table>
<thead>
<tr>
<th>Jargon Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technical</strong></td>
<td>Words, phrases or concepts with meaning only in a clinical context</td>
</tr>
<tr>
<td><strong>Quantitative</strong></td>
<td>Words, phrases or concepts requiring clinical judgment or knowledge</td>
</tr>
<tr>
<td><strong>Lay</strong></td>
<td>Words, phrases or concepts with two or more meanings or interpretations, one of which is medical</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jargon Type</th>
<th>Description</th>
<th>Words</th>
<th>Phrases</th>
<th>Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technical</strong></td>
<td></td>
<td>Glucometer</td>
<td>GERD</td>
<td>Follow-up</td>
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<td></td>
<td></td>
<td>Cardiologist</td>
<td>COPD</td>
<td>Referral</td>
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<td></td>
<td></td>
<td>Insomnia</td>
<td>UTI</td>
<td>Chronic</td>
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<td></td>
<td></td>
<td>Abdomen</td>
<td>IV fluid</td>
<td>PRN</td>
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<td></td>
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<td>Cath lab</td>
<td>Advance directive</td>
<td>PCP</td>
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<td></td>
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<td>Ortho</td>
<td>After Visit Summary (AVS)</td>
<td>Contagious</td>
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<td>Hypertension</td>
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<td>Hemoglobin A1c</td>
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<td></td>
<td></td>
<td>Speculum</td>
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<td><strong>Quantitative</strong></td>
<td></td>
<td>Unlikely</td>
<td>Excessive wheezing</td>
<td>Risk</td>
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<td></td>
<td></td>
<td>Increased</td>
<td>Twice daily</td>
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<td></td>
<td></td>
<td>Tablespoon</td>
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<td></td>
<td></td>
<td>High fever</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lay</strong></td>
<td></td>
<td>Stable</td>
<td>Come down with</td>
<td>Take on an empty stomach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abnormal</td>
<td>Break out</td>
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<tr>
<td></td>
<td></td>
<td>Stool</td>
<td>Run a fever</td>
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<tr>
<td></td>
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<td>Frequency</td>
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<td></td>
<td>Course</td>
<td>Stomach bug</td>
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<td>Positive</td>
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<td>Negative</td>
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<td>Tissue</td>
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<td>Tongue blade</td>
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<td></td>
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<td>Admitted</td>
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<tr>
<td></td>
<td></td>
<td>Diet</td>
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<td></td>
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</tbody>
</table>

(Schillinger, 2004; Coleman & Hadden, unpublished)
OHSU Family Medicine inpatient whiteboard patient communication
Use “plain language”

• Doctors think they use lay language, but patients say they use medical language about 50% of the time. (Bourhis, Roth, MacQueen, 1989)

• Doctors did not explain 79% of the medical words they introduced. (Koch-Weser et al, 2009)
Use “plain language”

Sometimes called *everyday language* or *living room language*.

<table>
<thead>
<tr>
<th>Jargon</th>
<th>Plain language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>High blood pressure</td>
</tr>
<tr>
<td>PRN</td>
<td>If needed</td>
</tr>
<tr>
<td>Glucometer</td>
<td>Machine to measure sugar in the blood</td>
</tr>
<tr>
<td>Hemoglobin A1c</td>
<td>Hemoglobin A1c</td>
</tr>
</tbody>
</table>
Write at 5\textsuperscript{th}-6\textsuperscript{th} grade level

Messages should be written at the 5\textsuperscript{th}-6\textsuperscript{th} grade level to be accessible to most patients (AMA Foundation, 2007)
Prescriptions often include technical, quantitative, and lay jargon, and require a high degree of numeracy.

- Use time parameters
- Include the reason

Write explicit instructions
Top 5 Best Practices

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(Coleman, Hudson, & Pederson, 2017)
Emphasize 1-3 “need-to-know” items

• Reduce information overload.

• Patients typically retain only 50% of what doctors say; half of what they do recall is incorrect!

  (Kessels 2003; McCarthy et al, 2012)

• Illness and stress lower attention, retention, understanding, and recall

  (Kripalani & Weiss, 2006; Schwartzberg et al, 2007)
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Invite real questions

Don’t ask: “Do you have any questions?”

- Implies that you expect them to “get it.” If they don’t, something must be wrong with them...

- Patients do not answer this honestly.

(DeWalt et al, 2010)
Invite real questions

Don’t ask: “Do you have any questions?”

- Implies that you expect them to “get it.” If they don’t, something must be wrong with them...
- Patients do not answer this honestly.

Ask: “What questions do you have?”

- Implies an expectation that patients should have questions!

(DeWalt et al, 2010)
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(Coleman, Hudson, & Pederson, 2017)
Teach-back to confirm understanding

Don’t ask: “Do you understand?”

- Implies that patients should understand. If they don’t, something must be wrong with them...

- Patients say “Yes”

(Schillinger et al, 2003)
Teach-back to confirm understanding

Don’t ask: “Do you understand?”

- Implies that patients *should* understand. If they don’t, something must be wrong with them...
- Patients say “Yes”

**Use: Teach-back**

- “I want to make sure I have explained things well. In your own words how are you going to use this medicine?”
- “How would you explain this plan to your partner?”
- “Show me how you use this inhaler.”

(Schillinger et al, 2003)
Research on “teach back”

• A “top safety practice.”
  (National Quality Forum, 2003)

• Associated with better glycemic control in people with diabetes.
  (Schillinger et al, 2003)

• Does not take longer than standard care.
  (Schillinger et al, 2003; Kripalani & Weiss, 2006)
Video resources


• “OHSU’s Modified 4 Habits for Patient-Centered Care” – 18-minute idealized clinic encounter demonstrating 15 clear communication techniques https://www.youtube.com/watch?v=7KnxVbUlry4
Provider education on Provider Connection

blueshieldca.com/provider.com

Click this tab to ...

- Register for webinars.
- View tools on topics related to you, your patients, and Blue Shield.
- Read Blue Shield news and announcements.
References


References cont.


References cont.


Schillinger D, Piette J, Grumbach K et al. Closing the loop. Physician communication with diabetic patients who have low health literacy. Arch Intern Med 2003;163:83-90


Somers SA, Mahadevan R. Health literacy implications of the Affordable Care Act. Center for Health Care Strategies, Inc., November 2010
