Health Literacy:
Addressing Barriers and Implementing Strategies to Improve Patient Safety

Oregon Association of Hospitals and Health Systems
August 22, 2013

Barbara Meyer Lucas, MD, MHSA, CPPS
Meyer Lucas Consulting, Dearborn, MI
Objectives:

- Define Health Literacy and Its Implications for Patient Outcomes and Care Transitions
- Understand Major Barriers to Health Literacy
- Review Strategies to Enhance Health Literacy and Improve Patient Safety
Poll Question #1

• **What is your current role at your organization?**

  a. Front-line patient care provider
  b. Manager; nursing, quality, etc.
  c. Physician
  d. Infection preventionist
  e. Other
Poll Question #2

• Who is responsible for health literacy at your organization?
  a. Quality
  b. Marketing
  c. Education
  d. Everyone
  e. I don’t know
Defining Health Literacy

• Health Literacy is the ability to:
  --obtain,
  --understand, and
  --act on health information

• Dependent on clear communication between patient and the medical team
Why is Improved Medical Communication Important?

• Enhances patient-centered, compassionate care
• Improves patient understanding of, and compliance with, chronic disease mgmt
• Improves patient safety, especially with medications
• Reduces unnecessary hospitalizations
• Reduces litigation risk
Patients with low literacy are more likely to be hospitalized

Baker, Parker, Williams, et al. JGIM 1999
Low health literacy affects chronic disease management

Know symptoms of low blood sugar (hypoglycemia)

Know correct action for hypoglycemic symptoms

Low Literate
Marginally Literate
Literate

Percent

### ALL SENTINEL EVENTS 2010-12

#### Most Frequent Root Causes

(www.jointcommission.org/Sentinel_Event_Statistics, released 2/7/13)

<table>
<thead>
<tr>
<th>Year</th>
<th>Count (N)</th>
<th>Year</th>
<th>Count (N)</th>
<th>Year</th>
<th>Count (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>802</td>
<td>2011</td>
<td>1243</td>
<td>2012</td>
<td>901</td>
</tr>
<tr>
<td>Leadership</td>
<td>710</td>
<td>Human Factors</td>
<td>899</td>
<td>Human Factors</td>
<td>614</td>
</tr>
<tr>
<td>Human Factors</td>
<td>699</td>
<td>Leadership</td>
<td>815</td>
<td>Leadership</td>
<td>557</td>
</tr>
<tr>
<td>Communication</td>
<td>661</td>
<td>Communication</td>
<td>760</td>
<td>Communication</td>
<td>532</td>
</tr>
<tr>
<td>Assessment</td>
<td>555</td>
<td>Assessment</td>
<td>689</td>
<td>Assessment</td>
<td>482</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>284</td>
<td>Physical Environment</td>
<td>309</td>
<td>Information Mgmt</td>
<td>203</td>
</tr>
</tbody>
</table>

*Leadership* and *Human Factors* are the most frequent root causes across all years, with *Communication* also consistently appearing.
Barriers to Health Literacy

• Barriers to health literacy are multifactorial:
  --- Healthcare system issues
  --- Patient issues
  --- Physician issues
  --- Nursing issues
Barriers to Health Literacy: Healthcare System Issues

Increasingly complex healthcare system:

- More medications, tests, procedures
- Multiple handoffs between units/providers
- Changing unit environments
  --- Staffing levels and composition
  --- Bedside EMR entry
Barriers to Health Literacy: Healthcare System Issues

Increasingly complex healthcare system:

- Hospitalists/teaching service physicians
- Growing self-care requirements
- Shorter LOS, earlier quicker discharge
## Barriers to Health Literacy: Healthcare System Issues

<table>
<thead>
<tr>
<th></th>
<th>35 Years Ago</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of Acute Myocardial Infarction (AMI)</td>
<td>4-6 weeks bed rest in hospital</td>
<td>2-4 day LOS</td>
</tr>
<tr>
<td>Available Prescription Drugs</td>
<td>800+</td>
<td>10,000+</td>
</tr>
<tr>
<td>Treatment of Newly Diagnosed Diabetes</td>
<td>• 3 weeks in hospital • 2 hrs/day diabetic education</td>
<td>Outpatient classes Handouts Internet/Telemedicine</td>
</tr>
</tbody>
</table>
Barriers to Health Literacy: Patient Issues

General Reading Ability

Aging Population

Emotional Factors
Patient-related Barriers: How Well Do Your Patients Read?

(JAMA Feb 15, 2012, V.307, no. 7, p. 653)

Scored on 4 Levels:

- Proficient 12%
- Intermediate 53%
- Basic 21%
- Below Basic 14%
Patient-related Barriers: Aging

Gazmararian, et al. JAMA 1999
Patient-Related Barriers to Health Literacy: A Teachable Moment?

MEDICAL STUDIES INDICATE
MOST PEOPLE SUFFER
A 68% HEARING LOSS WHEN NAKED.
Clear Medical Communication: Physician Barriers

- Physician Attitudes
- Communication Skills
- Time
Physician Barriers:
Attitudes about “Non-compliant” or “Difficult” Patients

Frustrating patients may actually have health literacy issues; watch for these clues:

• Have trouble completing forms
• Be unable to list their medications
• Miss appointments, tests, and referral visits
• Seem angry or demanding
• Have difficulty explaining concerns or have no questions
Physician Barriers: Communication Skills

Not consistently taught/evaluated until recently

Harvard Study, 2008: Surveyed 262 resident and staff radiologists

• Only 29% of staff radiologists said they regularly observed resident communication with patients
• Only 39% of residents said they received feedback on their communication skills with patients

Physician Barriers: Time
How much time is “enough” time?

From Patient’s Perspective:

---Pt. Satisfaction greater for visits longer than 15 minutes

---Satisfaction increases if at least a small part of the visit is devoted to “chatting” about non-medical topics

Physician Barriers: Time
Think about Rounding Time on Your Unit

• Physician Rounds:
  --- When do they happen?
  --- Purpose?
  --- Who Participates?
  --- Added value?
    ---to team
    ---to patient and family
Clear Medical Communication: Nursing Barriers

- Time
- Lack of Clarity of Daily Goals
- Unit culture issues
Nursing Barriers: Time

Patient education time affected by multiple factors:

• Nurse/patient ratios
• Patient acuity on floor
• Ancillary staff availability (assistants, techs)
• What else is going on
Nursing Barriers: Lack of Clarity of Daily Goals

- Nurse/Physician Disconnect
- Lack of Multidisciplinary Rounding
- Different Messages to Patient
Nursing Barriers: Culture Issues

A Common Finding on HSOPS:
% of respondents giving favorable ratings for their unit

- Teamwork within Units: 85%
- Teamwork Across Units: 75%
- Handoffs/Transitions: 63%
Strategies for Improving Medical Communication

System Level: Culture Change
- Prioritize a “Patient Friendly” Unit
- Assess all Patients for Literacy
- Creatively Maximize Pt. Education Time

As Individuals:
- Improve Personal Communication Skills
System Level: Culture Change

Prioritize a Patient-Friendly Unit

Key Strategies:

--- Adopt an attitude of helpfulness
--- Respect patients’ privacy and dignity
--- Convey a safe, non-judgmental setting
--- Welcome and expect family involvement

✓ Treat all patients as if they were your parents!
System Level: Culture Change
Assess All Patients for Literacy

• Initial Patient Assessment
  --- how far did they go in school?
  --- how do they best learn?
  --- social history/support system
  --- initial med review: do they know meds?
  --- watch for subtle clues that they don’t read well
System Level: Culture Change
Creatively Maximize Pt. Education Time

Key Strategies:

1. Engage patient/family early as partners
   --- education starts on day of admission

2. Use a step-wise approach to learning
   --- What is the most important thing they need to know TODAY?
System Level: Culture Change

Creatively Maximize Pt. Education Time

Key Strategies:

3. Be aware of how you present yourself
   ---Patient *perception* of adequacy of time spent is influenced by your behavior:
      ---sitting vs. standing
      ---open-ness to questions
      ---looking at them, NOT the computer
System Level: Culture Change
Creatively Maximize Pt. Education Time

Key Strategies:

4. All team members “own” this role
   --- everyone on same page
   --- reinforce messaging
   --- share patient and family feedback
   --- clarity about daily and discharge goals!
For All Health Team Members: Improving Personal Communication Skills

1. Remember: dialogue, not a lecture
2. Explain things clearly in plain language
3. Focus on key messages and repeat
4. Use a “teach back” or “show me” technique to check for patient understanding
Improving Patient Communication:
Step 1: This is a Dialogue!

• Encourage patients to have family with them

• Sit down at eye level with the patient

• Let patients know you welcome questions

• Be judicious with bedside EMR use
Improving Patient Communication:
Step 1: This is a Dialogue!

• Ask and listen before you advise
  ---Physicians shown to wait only 23 seconds before interrupting patient’s description of chief complaint

• Make sure you understand and address the patient’s concerns.
  ---21% of visits end with an “oh, by the way” comment by the patient, raising a new issue;
  ---avoid this by asking about patient concerns early on, and frame your time accordingly.

✔ Listen more and speak less
Improving Patient Communication:

Step 2: Use Plain Language

- Talk slower

- Use analogies
  - “Arthritis is like a creaky hinge on a door.”

- Use plain, non-medical language
  - “Pain killer” instead of “analgesic”
EVERY DAY, patient and family should know:

- What do the doctors think is going on TODAY? (status/goals for today)

- What do I need to do TODAY? (patient/family role in meeting daily goals)

- Why is it important that I follow this plan?
Improving Patient Communication:
Example: Daily Focus on Key Messages

*For recovering patient assessed as high fall risk:*

- **What do the doctors think is going on TODAY?**
  (status/goals for today)
  
  You are still a little weak and we are concerned about your balance.

- **What do I need to do TODAY?**
  (patient/family role in meeting daily goals)
  
  Don’t get out of bed alone; ring for assistance

- **Why is it important that I follow this plan?**
  
  You are likely to fall if someone doesn’t walk with you.
At DISCHARGE, patients should know 3 things:

• What did the doctors conclude? (discharge diagnosis)

• What do I need to do about it now? (discharge instructions)

• Why is it important that I follow this plan?
Example:
What’s the Key Message?

Type II Diabetes diagnosed; possible info:

– Sugar level in blood is high
– How the body controls blood glucose
– Self-management of diabetes medications
– Start medicine to lower sugar
– Potential complications of diabetes
– Testing the blood sugar level
– Proper diet
“Take-home” Message for a Newly Diagnosed Diabetic Patient:

• What did the doctors conclude?
  – The sugar level in my blood is high.

• What do I need to do about it?
  – I need to start medicine to lower my sugar and follow a special diet.

• Why is it important that I follow these instructions?
  – I can have serious complications if I don’t take my medication/follow my diet.
Improving Patient Communication:
Step 4: Use the “Teach Back” Method

• Ask patient to demonstrate understanding:
  – “What will you tell your children about your condition when they call?”
    OR
  – “I want to be sure I explained everything clearly. Can you please explain back to me what you need to watch for when you go home, so I can be sure I did a good job?”

    Try not to ask, “Do you understand?”
A Few Words About Written Educational Materials

• “Home-grown” materials are preferable

• Start with very basic handouts; advance as warranted by patient’s abilities/interest

• Websites:
  --- assess patient’s ability to access/use
  --- warn patients about unreliable websites
For Written Educational Materials: Patient-Friendly Guidelines

- For handouts
  ---Simple words (1-2 syllables)
  ---Short sentences (4-6 words)
  ---Short paragraphs (2-3 sentences)
  ---No medical jargon
  ---Headings and bullets
  ---Lots of white space.
“Patient Friendly” Handouts: Additional Hints

• Show or draw only simple pictures
• Focus only on key points
• Emphasize what the patient should DO
• Minimize info about anatomy and physiology
• Be sensitive to cultural preferences.
Applying Health Literacy Concepts

• Medication Reconciliation
• Reducing Re-admission
• CAUTI
• Falls
Medication Review and Reconciliation
Medication Sentinel Events 2004-12  n=378 Events
(www.jointcommission.org/Sentinel_Event_Statistics, released 2/7/13)

<table>
<thead>
<tr>
<th>ROOT CAUSE</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDICATION USE</td>
<td>334</td>
<td>88%</td>
</tr>
<tr>
<td>LEADERSHIP</td>
<td>284</td>
<td>75%</td>
</tr>
<tr>
<td>HUMAN FACTORS</td>
<td>271</td>
<td>72%</td>
</tr>
<tr>
<td>COMMUNICATION</td>
<td>270</td>
<td>71%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td>160</td>
<td>42%</td>
</tr>
</tbody>
</table>
Medication Reviews and Reconciliation

• To ensure that the med list of record is what the patient is actually taking

• At admission, and at discharge

• Addresses numerous safety issues
  --- duplicate meds (brand/generic)
  --- dosing issues
  --- drug-drug interactions
  --- polypharmacy, especially in geriatrics
Medication Reviews Through the Lens of Health Literacy

**DOES PATIENT ALSO UNDERSTAND:**

**WHY** they are on each medication

**HOW** to take their medications correctly
Gold Standard: “Brown Bag” Reviews

If possible, conduct a “Brown Bag” Review:

- Ask patients to bring in all their medications
- Ask them to name and explain the purpose of each one
- Discuss exactly how and when they take each one
- Who helps them with their meds?
- Use this discussion to identify areas of confusion and to answer questions

Family members are crucial to this discussion!
Poll Question #3

• Do you currently provide patients with discharge instructions directly from your electronic medical record (EMR)?
  a. Yes, we use exactly what comes from our EMR
  b. No, we modify what is in the EMR and then provide the discharge instructions to patients
  c. No, we still use paper for discharge instructions
  d. I don’t know
  e. Other
Reducing Re-admissions

• Remember, Health Literacy is the ability to:

  --obtain,
  --understand, and
  --act on health information

• To prevent re-admission, does your team ensure that your patients

  -- have access to information?
  -- understand that info?
  -- have the ability and resources to do what you expect in terms of self care?
Reducing Re-admissions

At discharge, do they **understand**:

- diagnosis
- warning signs to watch for?
- any new self-care techniques?
- follow-up appointments?
- current meds:
  - Purpose? How to take?
Reducing Re-admissions

At discharge, are they *able to act*?

--- pharmacy access?
--- perform self care and take meds?
--- timely access to necessary home equipment?
--- find their way to any follow-up appointments?
--- draw on family members for help if needed?
CAUTI and Health Literacy

• Key concepts for patient education and partnership:
  ---appropriate reasons for use
  ---proper insertion and maintenance
  ---why catheters need to come out as soon as possible
FAQs
(frequently asked questions)

about
“Catheter-Associated Urinary Tract Infection”

What is “catheter-associated urinary tract infection”?
A urinary tract infection (also called “UTI”) is an infection in the urinary system, which includes the bladder (which stores the urine) and the kidneys (which filter the blood to make urine). Germs (for example, bacteria or yeasts) do not normally live in these areas; but if germs are introduced, an infection can occur.

If you have a urinary catheter, germs can travel along the catheter and cause an infection in your bladder or your kidney; in that case it is called a catheter-associated urinary tract infection (or “CA-UTI”).

What is a urinary catheter?
A urinary catheter is a thin tube placed in the bladder to drain urine. Urine drains through the tube into a bag that collects the urine. A urinary catheter may be used:
- If you are not able to urinate on your own
- To measure the amount of urine that you make, for example, during intensive care
- During and after some types of surgery
- During some tests of the kidneys and bladder

People with urinary catheters have a much higher chance of getting a urinary tract infection than people who don’t have a catheter.

How do I get a catheter-associated urinary tract infection (CA-UTI)?
If germs enter the urinary tract, they may cause an infection. Many of the germs that cause a catheter-associated urinary tract infection are common germs found in your intestines that do not usually cause an infection there. Germs can enter the urinary tract when the catheter is being put in or while the catheter remains in the bladder.

What are the symptoms of a urinary tract infection?
Some of the common symptoms of a urinary tract infection are:

Catheter insertion
- Catheters are put in only when necessary and they are removed as soon as possible.
- Only properly trained persons insert catheters using sterile (“clean”) technique.
- The skin in the area where the catheter will be inserted is cleaned before inserting the catheter.
- Other methods to drain the urine are sometimes used, such as
  - External catheters in men (these look like condoms and are placed over the penis rather than into the penis)
  - Putting a temporary catheter in to drain the urine and removing it right away. This is called intermittent urethral catheterization.

Catheter care
- Healthcare providers clean their hands by washing them with soap and water or using an alcohol-based hand rub before and after touching your catheter.
  If you do not see your providers clean their hands, please ask them to do so.
- Avoid disconnecting the catheter and drain tube. This helps to prevent germs from getting into the catheter tube.
- The catheter is secured to the leg to prevent pulling on the catheter.
- Avoid twisting or kinking the catheter.
- Keep the bag lower than the bladder to prevent urine from backflowing to the bladder.
- Empty the bag regularly. The drainage spout should not touch anything while emptying the bag.

What can I do to help prevent catheter-associated urinary tract infections if I have a catheter?
Example: Key Message for a Patient regarding catheter maintenance

- **What’s wrong?**
  - I need a catheter for a short time to drain the urine from my bladder.

- **What do I need to do about it?**
  - Watch to be sure that the staff and I always keep the drainage bag lower than my bladder.

- **Why is it important that I follow these instructions?**
  - I can get a serious infection if the bag is not positioned correctly.
Example: “Teach Back” regarding catheter maintenance

• “Can you show me how you will manage your drainage bag when you go for a walk in the hall?

• “I want to be sure I explained everything clearly about your catheter, so can you please explain it back to me, so I can be sure I did a good job?”
Know when to ask for help.

You will do more and more walking as your health improves. To avoid falling and hurting yourself, please follow these guidelines.

• Wear shoes or nonskid slippers every time you get out of bed.
• Call your nurse if you feel dizzy, weak, or lightheaded. Don’t get up by yourself.
• Ask for help to go to the bathroom. Make sure the path to the bathroom is clear.
• Use only unmoving objects to help steady yourself. Don’t use your IV pole, tray table, wheelchair, or other objects that can move.
• Use the handrails in the bathroom and hallway.
• If you wear glasses or hearing aids, use them.
• Keep important items within reach. This includes your call button or call bell.
Fall Prevention Patient Education: Need to Apply Health Lit Principles

Used a step-wise approach, based on patient’s status TODAY:

*Example:*

Right now, you are still recovering.

- Do not get up by yourself
- Ring for the staff to help you to the bathroom
- We will tell you when it is ok to start walking alone

We want to make sure you don’t have a fall.
Fall Prevention Patient Education:
Need to Apply Health Lit Principles

Later, can advance patient education:

Example:
You are ready to walk for short distances alone

Always wear your slippers or shoes
Wear your glasses and hearing aid
Get up slowly and get your balance
Use the handrails in the bathroom and hallway
Tell us right away if you feel unsteady or not well

Together we can keep you safe from falling.
SUMMARY: Health Literacy and Patient Safety

• As many as 35% of your patients may have health literacy issues

• Limits their ability to obtain, understand, and act on health information
SUMMARY:
Health Literacy and Patient Safety

- **Impact of limited health literacy:**
  - poor compliance with medical management
  - increased risk of:
    - poor outcomes
    - re-admits and unnecessary hospitalizations
    - medication errors
    - falls/adverse events
    - patient/family anxiety
SUMMARY:
Health Literacy and Patient Safety

Barriers to health literacy are multifactorial:

• **System issues:**
  --- complexity of care/multiple transitions

• **Patient factors:** reading ability, aging, emotions

• **Physician issues:**
  --- attitudes, communication skills, time

• **Nursing issues:**
  --- time, clarity of daily goals, unit culture
SUMMARY: Health Literacy and Patient Safety

Improving patient understanding depends on

- **Unit culture change** to prioritize a “patient-centered” approach
- **Your team’s commitment** to:
  - sharing patient education responsibility
  - improving their individual communication skills
  - continuous improvement of patient education materials and processes
Poll Question #4

• I plan to share the content from today’s webinar with the disciplines below: (check all that apply)
  
a. Nursing
b. Medical staff
c. Quality
d. Infection prevention
e. Other
Next Steps: Challenge Your Team

• Think about your unit and team:
  --- Do we assess literacy on admission?
  --- Do we have multidisciplinary rounds?
  --- Can we speak freely across disciplines?
  --- Do we have clarity of daily goals?
  --- Is there common messaging to patients?
Next Steps: Challenge Your Team

• Think about your patient education process:
  --- Does it start at admission?
  --- Do we use a step-wise approach?
  --- Do we check for understanding?
  --- Do we review handouts/discharge instructions in light of health literacy?
  --- Do we encourage family involvement?
Next Steps: Challenge Your Team

• Look at one patient safety issue or high risk patient population through the lens of health literacy:
  -- What do you think of your current approach, in light of what you learned today?
  -- Should you adjust your strategies?
  -- How will you know you are making a difference?
Resources

• American Medical Association

• Agency for Healthcare Quality and Research

• National Patient Safety Foundation
  http://www.npsf.org/for-healthcare-professionals/programs/ask-me-3/
For further information, or training at your practice site

• Contact:

Barbara Meyer Lucas, MD, MHSA, CPPS
Meyer Lucas Consulting
meyerlucas1@aol.com