



# **CAPTURE Falls**

Collaboration and Proactive Teamwork Used to Reduce

## **Best Practices in Health Literacy and Patient and Family Education**

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# Acknowledgement



*Agency for Healthcare Research and Quality*  
*Advancing Excellence in Health Care*

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**C A P T U R E**

Collaboration and Proactive Teamwork Used to Reduce

**Falls**

[http://unmc.edu/patient-safety/capture\\_falls.htm](http://unmc.edu/patient-safety/capture_falls.htm)



# Learning Objectives

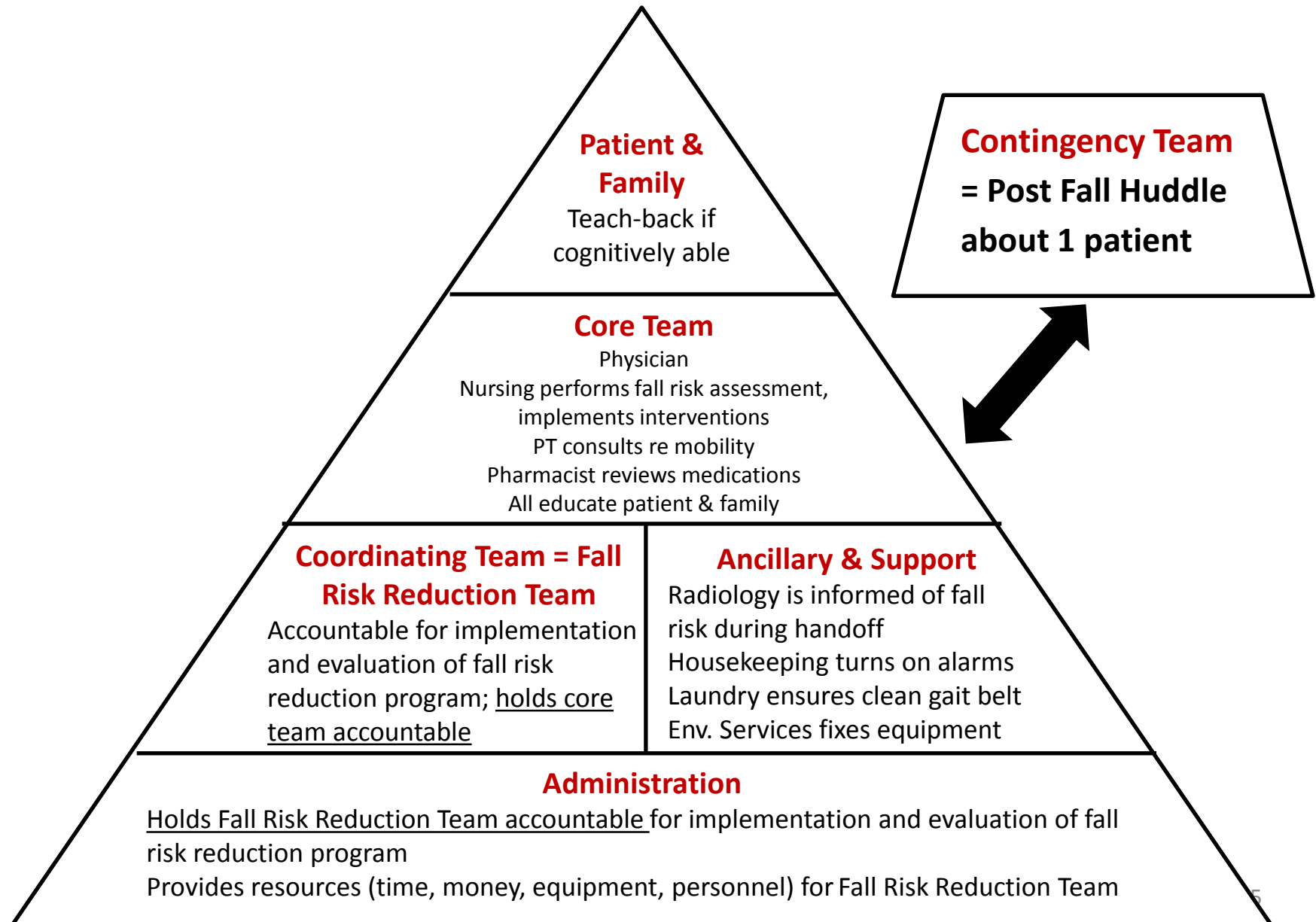
- **Explain challenges identified by the CAPTURE Falls project related to patient and family education**
- **Describe national initiatives intended to improve health literacy**
- **Identify best practices to improve written and verbal patient/family education specific to fall risk reduction**



## **Introduction and Background: Challenges Related to Patient and Family Education**



# Fall Risk Reduction Multi-Team System





# 2011 Survey of Fall Risk Reduction

- **Baseline survey to examine structures-processes-outcomes related to fall risk reduction**
- **70 of 83 general community hospitals in Nebraska responded (84%)**
  - 56 of 65 Critical Access Hospitals (CAHs) (86%)
  - 14 of 18 non- CAHs (78%)





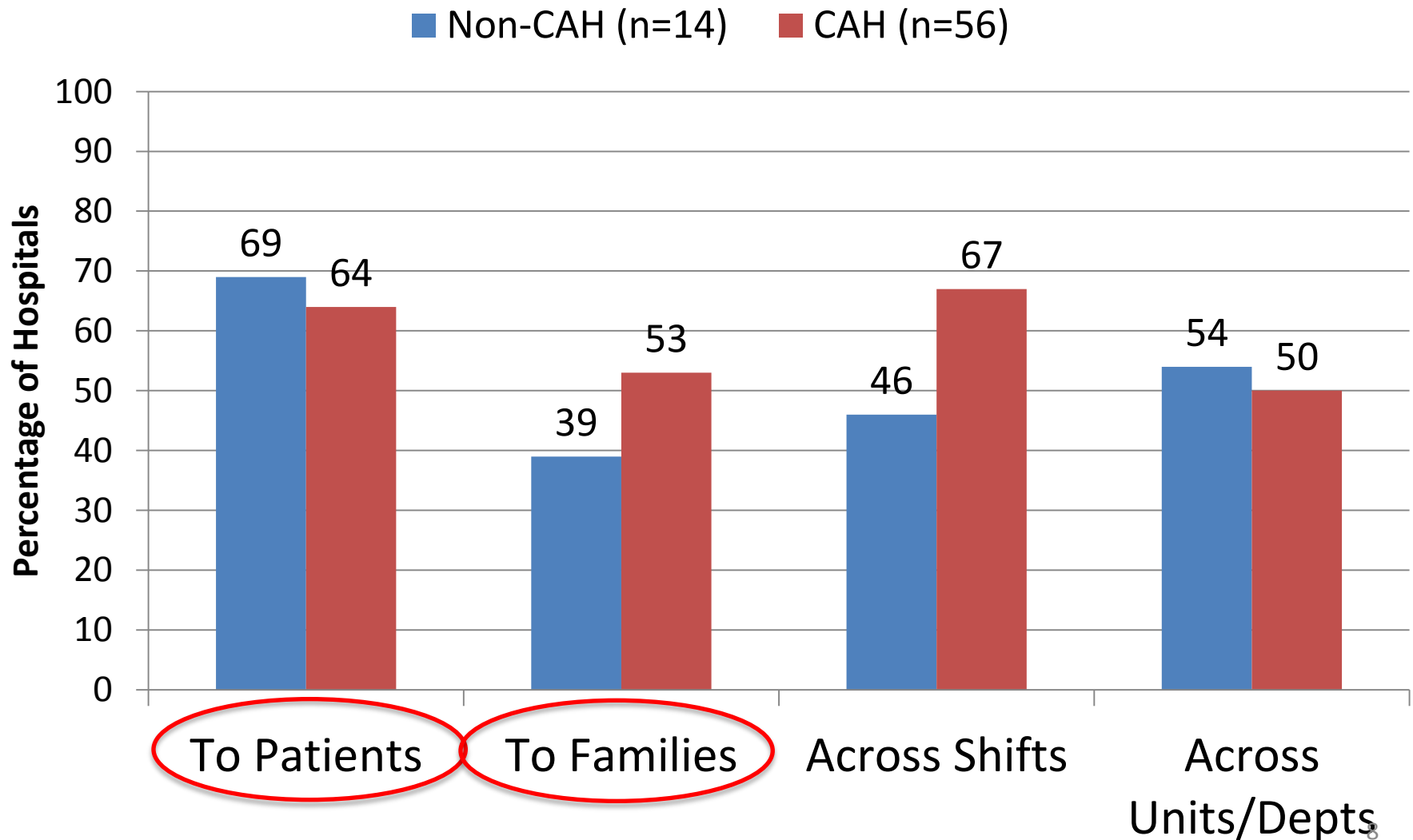
# Fall Risk Reduction Strategies: Processes

Universal Interventions	% Non-CAH (n=14)	% CAH (n=56)
Call Light within Reach	100	98
Document Fall Risk in Chart	93	93
Nonskid Footwear	86	75
Top Bed Rails Up	64	71
Hourly Rounding	71	68
Supervised Ambulation	36	66
Supervised Toileting	43	57
Gait/Transfer Belt	57	64
Supervised Transfers	36	63
Patient/Family Education	86	61



# Role of Communication

Do you communicate fall risk status.....?



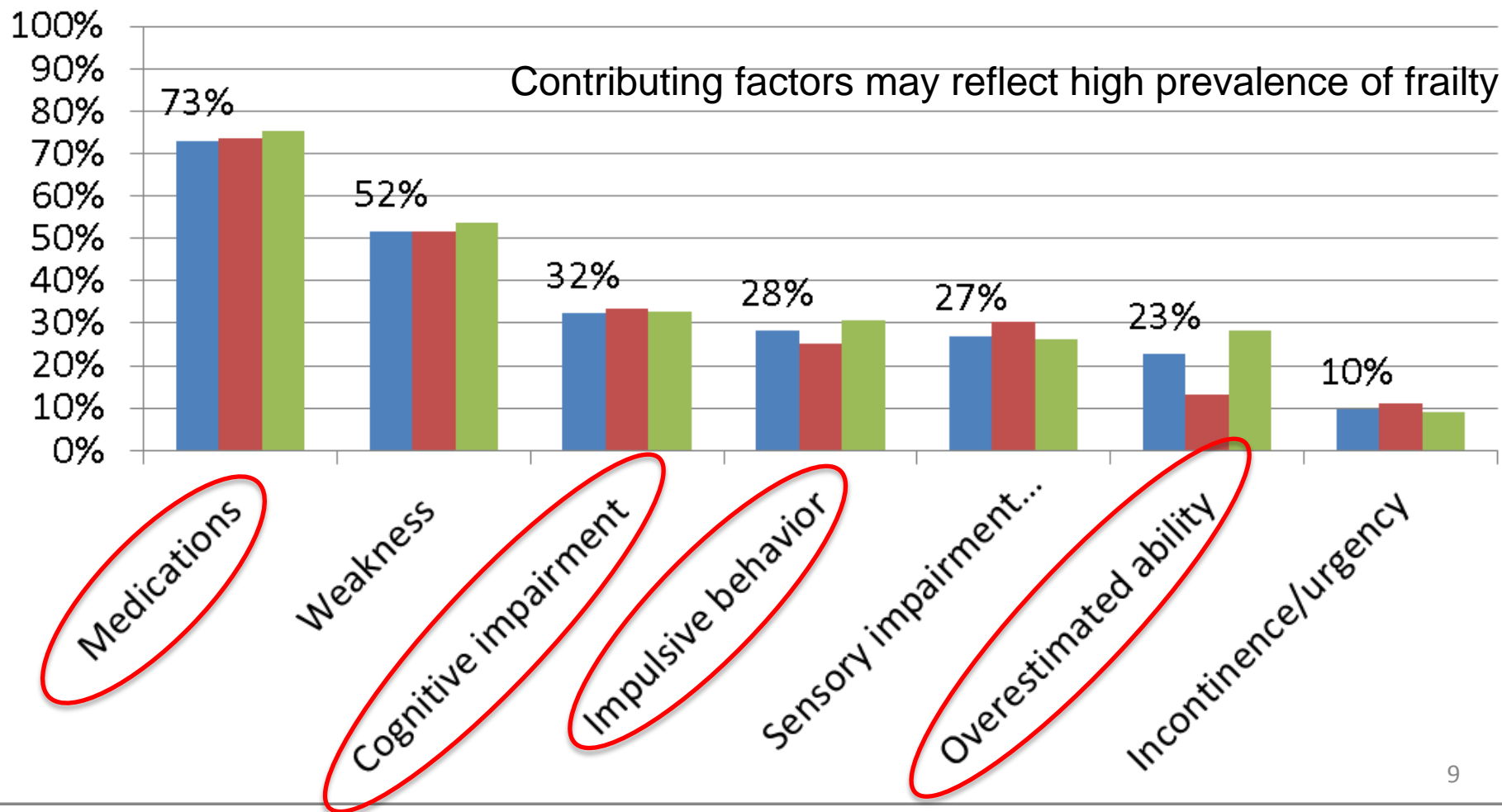




# Data Summary from Fall Event Database

## Association Between Contributing Factors and Physical Injury for 297 Falls Reported by 17 Hospitals

■ All Falls (n=297) ■ Physical Injury (n=99) ■ No Physical Injury (n=198)





# Challenges to Educating about Fall Risk

- Cognitive impairment makes teach-back difficult
- Difficulty assessing health literacy and a given patient's optimal learning style
- Patients are overwhelmed with information, especially on admission, making patient education a challenge



# How Some Hospitals Address Challenges

- Engage community members to review written fall risk educational materials
- Re-educate on days subsequent to admission
- Turn Ask-Me-3 into Tell-You-3:
  - 1) You might fall because your legs are weak.
  - 2) You need to use the call light to ask for help.
  - 3) It is important to do this because you might be seriously injured if you fall.



## Part 2

# The Role of Health Literacy: National Initiatives





# Health Literacy Definitions (17 + published to date...)

1. 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 (2000)
2. The degree to which individuals have the capacity to read, understand, and act on basic health information. AMA (2007)
3. ...allows the public and personnel working in health-related contexts to find, understand, evaluate, communicate, and use information.  
Calgary Charter (2008)



# Predictors of Health Status:

- ★ Literacy Skills
  - Age
  - Income
  - Employment Status
  - Education Level
  - Racial or ethnic group

National Patient Safety Foundation, Partnership for Clear Health Communication



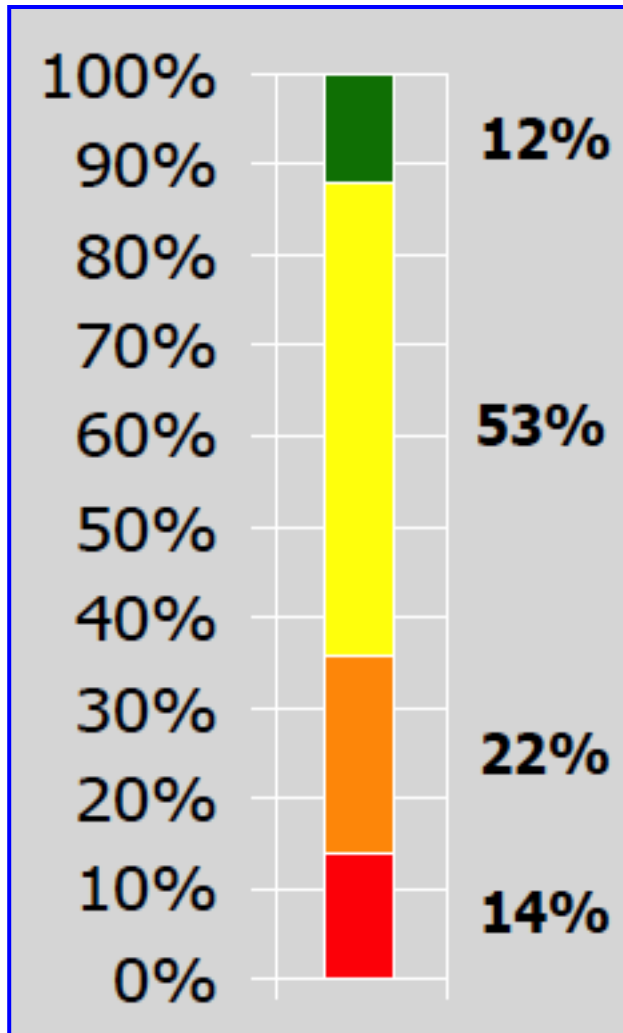
## Low level HL skills contribute to health disparities

- People with low health literacy are more likely to:
  - report poor health,
  - have an incomplete understanding of their health problems and treatment,
  - be at greater risk of hospitalization, readmission, and death.





# Health Literacy in America (NAAL 2003)



**Proficient (12%):** Define medical terms from complex document, calculate share of employee health insurance.

**Intermediate (53%):** Determine healthy weight from body mass index (BMI) chart, interpret prescription and over-the-counter drug labels.

**Basic (22%):** Understand simple patient education handout.

**Below Basic (14%):** Circle date on appointment slip. Understand simple pamphlet about pre-test instructions.



- **Goal --- Health Communication and Information Objective # 11-2:**  
(Developmental)  
Improve the health literacy of persons with inadequate or marginal literacy skills.



# National initiatives

- CLAS Standards (2007); Enhanced in 2011
- National Action Plan to Improve Health Literacy (2010)
- Plain Language Act (2010)
- Health Literacy Universal Precautions Toolkit
- Ten Attributes of Health Literate Health Care Organizations (IOM, 2012)
- Calgary Charter on Health Literacy (2012)
- CDC Clear Communication Index (2013)
- PEMAT (AHRQ, 2013)



## National Standards on Culturally and Linguistically Appropriate Services (CLAS)

- The 14 standards are organized by themes:
  - Culturally Competent Care (Standards 1-3),
  - Language Access Services (Standards 4-7),
  - Organizational Supports for Cultural Competence (Standards 8-14).
- Within this framework, there are three types of standards of varying stringency: mandates, guidelines, and recommendations.



# National Plain Language Act (2010)



**Popular Topics**  
Regulations  
Health Literacy  
Financial  
Before-and-After

**Federal Plain Language Guidelines**  
*March 2011 - Rev. 1, May 2011*

**Plain Language – It's the Law**  
Agency Requirements  
Agency PL Webpage  
PL in Federal Agencies

**Plain-Language Training**  
Training Resources

**Tips & Tools**  
Starting a Plain-Language Program  
Planning a Plain-Language Website

**Examples Database (beta)**

**Examples**

**Site Highlights:**  
**Designated Senior Officials and Agency Webpages**  
We are adding officials and webpage addresses as we get them. If we're missing one, contact us and let us know.  
**U.S. Citizenship and Immigration Services videos**  
Watch on YouTube (all links external)  
Acronyms | Active Voice | Proofreading | Tables  
Download video files  
in Flash and Windows Media Player formats

**What is Plain Language? | Why Plain Language?**  
**Where do we use Plain Language?**

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## 2010 National Action Plan to Improve Health Literacy

1. Develop and disseminate health and safety information that is accurate, accessible, and actionable
2. Promote changes in the health care system that improve health information, communication, informed decision-making, and access to health services
3. Incorporate accurate, standards-based, and developmentally appropriate health and science information and curricula in child care and education through the university level



4. Support and expand local efforts to provide adult education, English language instruction, and culturally and linguistically appropriate health information services in the community
5. Build partnerships, develop guidance, and change policies
6. Increase basic research and the development, implementation, and evaluation of practices and interventions to improve health literacy
7. Increase the dissemination and use of evidence-based health literacy practices and interventions



- **The Calgary Charter on Health Literacy:**  
Rationale and Core Principles for the  
Development of Health Literacy Curricula



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## The Calgary Charter on Health Literacy:





# Health Literacy Universal Precautions Toolkit

## **Tools to Start on the Path to Improvement**

Tool 1: Form a Team

Tool 2: Assess Your Practice

Tool 3: Raise Awareness

## **Tools to Improve Self-Management and Empowerment**

Tool 14: Encourage Questions

Tool 15: Make Action Plans

Tool 16: Improve Medication Adherence and Accuracy

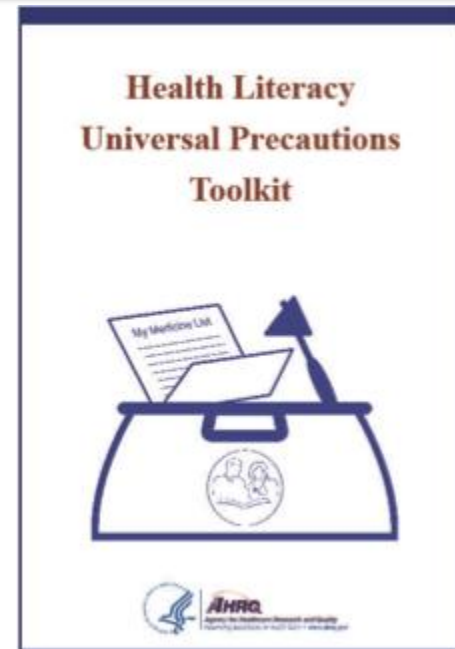
Tool 17: Get Patient Feedback

## **Tools to Improve Supportive Systems**

Tool 18: Link Patients to Non-Medical Support

Tool 19: Medication Resources

Tool 20: Use Health and Literacy Resources in the Community





This graphic reflects the views of the authors of the Discussion Paper "Ten Attributes of Health Literate Health Care Organizations" and not necessarily of the authors' organizations or of the IOM. The paper has not been subjected to the review procedures of the IOM and is not a report of the IOM or of the National Research Council.



# Ten Attributes of Health Literate Health Care Organizations

**Cindy Brach, Debra Keller, Lyla M. Hernandez, Cynthia Baur, Ruth Parker, Benard Dreyer, Paul Schyve, Andrew J. Lemerise, and Dean Schillinger\***

June 2012




# **CDC Clear Communication Index**

A Tool for Developing and Assessing  
CDC Public Communication Products

User Guide



# PEMAT (AHRQ)



Agency for Healthcare Research and Quality  
Advancing Excellence in Health Care

Health Care Information

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Primary Care Practice-Based Research Networks

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Resources

Quality & Patient Safety

## The Patient Education Materials Assessment Tool (PEMAT) and User's Guide

Publication # 14-0002-E

An Instrument To Assess the Understandability and Actionability of Print and Audiovisual Patient Education Materials

Version 1.0

The Patient Education Materials Assessment Tool (PEMAT) is a systematic method to evaluate and compare the *understandability* and *actionability* of patient education materials. It is designed as a guide to help determine whether patients will be able to understand and act on information. Separate tools are available for use with print and audiovisual materials.

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**Contents**

An Introduction to the Patient Education Materials Assessment Tool (PEMAT) and User's Guide  
How To Use the PEMAT To Assess a Material  
**Domain: Understandability**  
Topic: Content



Go to Online Store



# Part 3

## **Best Practices in Written and Verbal Patient and Family Education**



# General to patient education

- Plain language principles
- First language if possible/interpreters
- Prioritize the NEED to know from the Nice to know
- Limit the number of points
- Keep it simple / 5<sup>th</sup>-8<sup>th</sup> grade reading level
- Check for understanding early and often
- Make the points focus on action and reinforce the desired behavior (not the negative behavior)



“Official” Term	User-Centered Term
Hypertension	high blood pressure
Insomnia	can’t sleep
Benign	not cancer
Hazardous	dangerous
Disorder	problem
Option	choice
Routinely	often
Adverse	bad



# Tools to Improve Written Communication

- Tool 11: Design Easy-to-Read Material
- Tool 12: Use Health Education Material Effectively
- Tool 13: Welcome Patients: Helpful Attitudes, Signs, and More





# Specific to verbal communication

- Specific to verbal communication
- With handout to reinforce information

HEALTHY ROADS MEDIA LLC

English - Preventing Falls in the Hospital

Created by: HEALTHY ROADS MEDIA LLC

Text adapted from the SAFE FROM FALLS Tool Kit by the Minnesota Hospital Association



**Preventing Falls in the Hospital - Tips for Patients and Visitors**

A video for use on Healthy Roads Media websites.

Video

Audio

Handout

Terms of Use

Close Window

This material adapted from text created by: SAFE FROM FALLS Tool Kit by the Minnesota Hospital Association

## Preventing Falls in the Hospital Tips for Patients and Visitors



### Tips for patients:

- Do not hesitate to call a nurse for assistance when you need to get out of bed if you have been instructed to or if you are feeling weak or dizzy. (Some medications may have side effects that make you feel weak or dizzy.) Sit at the side of the bed for a few minutes before you get up.
- If you use a walker, cane, or wheelchair at home, let the nurse know or bring in yours to use while hospitalized. Keep these devices within reach and remember to use them.
- Wear properly fitting shoes or slippers when up.
- Pay close attention to any tubing, such as oxygen, catheters, etc. that may interfere with walking.
- The side rail at the bottom of the bed towards the door will be kept down unless you request that it be kept up. Please do not attempt to climb over or through the rails. Call the nurse for assistance.
- Use only unmovable objects to help steady yourself. Don't use your IV pole, tray table, wheelchair or other objects that can move.
- Notify the nurse of any spills or wet areas on the floor so they may be cleaned up quickly.



- A bed alarm may be used to remind you to call for help when getting out of bed.
- Use the handrails in the bathroom and hallway.
- Ask for help to go to the bathroom. Make sure the path to the bathroom is clear.
- If you wear glasses or hearing aids, use them.
- Keep important items within reach. This includes your call button or call bell.

### Tips for family members or visitors:

- Before you leave the room, we ask that you make sure the nurse call light and the bed stand is within reach of the patient. (Items such as the phone and Kleenex should also be in reach.)
- Some medications may have side effects that produce weakness or dizziness. If you notice these symptoms please notify the nurse.
- Consider staying with your family member if they are at a high risk for falling or confused.
- Notify the nurse before leaving a confused or disoriented patient, so appropriate safety measures can be taken.
- Reinforce to the patient the need to ask the nurse for help when getting up.



Text adapted from materials from the SAFE FROM FALLS Tool Kit by the Minnesota Hospital Association. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs License <http://creativecommons.org/licenses/by-nc-nd/3.0/us/>.

A Healthy Roads Media project [www.healthyroadsmedia.org](http://www.healthyroadsmedia.org)  
Preventing Falls - English (Last reviewed 2011)

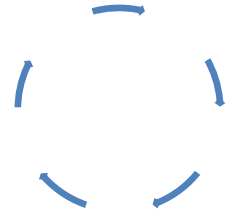


# Tools to Improve Spoken Communication

- Tool 4: Tips for Communicating Clearly
- Tool 5: The Teach-Back Method
- Tool 6: Follow-up with Patients
- Tool 7: Telephone Considerations
- Tool 8: Brown Bag Medication Review
- Tool 9: How to Address Language Differences
- Tool 10: Culture & Other Considerations



## Interactive communication loop



- Start the loop by helping the patient feel safe.
- Ask early and ask often. **Listen** and pay attention.
- Tailor your message to be more consistent with what the patient says.
- Use other ways of communicating.
- Consider why the message is not understood.
- Feel confident that you have done your best to communicate.

Source: Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, Leong-Grotz K, Castro C, Bindman A. "Closing the Loop: Physician Communication With Diabetic Patients Who Have Low Health Literacy." *Arch Intern Med*, Vol. 163, January 13, 2003: 83 – 90



# Teach Back

Provides an opportunity to check on understanding with the patient and re-teach if necessary.

- Re-phrase if a patient is not able to share the information accurately.
- Ask the patient to share the information again, until you are comfortable they really understand it.
- If they still do not understand, consider other strategies (pictures, videos, analogies).



## Ask patients to demonstrate understanding...

- “What will you tell your family about your condition?”
- “I want to be sure I explained everything clearly, so can you please explain it back to me so I can be sure I did.”
- “Show me what you would do.”



- Simple content = Easier for medical interpreters.
  - Start with your three points.
  - What do you want the patient to do?
- Show, ...don't tell.
  - Use models, visuals, pictures
  - Avoid jargon
  - Use “prescription” sheets even for Over The Counter
  - Role play
  - Watch the total physical response/ non-verbal cues



# Examples of available tools

- **Ask Me 3:**

<http://www.npsf.org/askme3/>

- **Teach back method**

- Audio & Visual aids:  
diagrams, photos, videos,  
analogies, 3-D models,  
audiotapes / CD-ROMs

## Free Readability Level formulas available:

1. [The Flesch Reading Ease formula](#)
2. [The Flesch-Kincaid Grade Level](#)
3. [The Fog Scale](#) (Gunning FOG Formula)
4. [The SMOG Index](#)
5. [The Coleman-Liau Index](#)
6. [Automated Readability Index](#)
7. [Linsear Write Formula](#)

- commercial health literacy software is also available



# Innovations in Health Literacy

## Electronic Health Records (EHR)

- EHRs can expose potential safety problems when they occur, helping providers avoid more serious consequences for patients and leading to better patient outcomes. For example, increased completion of daily fall assessment helping to avoid prolonged hospital stays.





# Innovations

## MedlinePlus Connect

- ***Linking Patient Portals and EHRs to Consumer Health Information***





# Additional resources



Stopping Elderly  
Accidents, Deaths & Injuries

- STEADI (CDC) pocket guide for providers

[http://www.cdc.gov/homeandrecreationalsafety/pdf/steady/pocket\\_guide\\_preventing-falls.pdf](http://www.cdc.gov/homeandrecreationalsafety/pdf/steady/pocket_guide_preventing-falls.pdf)



# Summary

- **Health literacy is complex and multifaceted**
- **Research shows everyone appreciates and benefits from plain language and simple, straightforward health messages**
- **We shared information on 8 national health literacy initiatives**
- **We provided evidence-based recommendations on developing health education materials**
- **We encourage making communication an interactive loop**
- **We provided some existing tools and some new innovations**



# Contact Information

Contact the CAPTURE Falls Research  
Team at:

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[Denise.britigan@unmc.edu](mailto:Denise.britigan@unmc.edu)

(402) 552-7257



## **Health Literacy Out Loud Podcasts**

<http://www.healthliteracy.com/podcast.asp>

## **Simply Put**

<http://www.google.com/search?q=scientific+and+technical+language+simply+put&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a>

**Plain Language** <http://www.plainlanguage.gov/howto/index.cfm>

**Ask Me 3:** <http://www.npsf.org/askme3/>

**Help Your Patients Succeed:** Includes teach back.

<http://www.pfizerhealthliteracy.com/public-health-professionals/tips-for-providers.html>



**Healthy People 2020:** [www.healthypeople.gov](http://www.healthypeople.gov)

**National Health Literacy Action Plan**

<http://www.health.gov/communication/hlactionplan/>

**Institute of Medicine's 10 Attributes of a Health Literate Organization**

[http://www.iom.edu/~media/Files/Perspectives-Files/2012/Discussion-Papers/BPH\\_HLit\\_Attributes.pdf](http://www.iom.edu/~media/Files/Perspectives-Files/2012/Discussion-Papers/BPH_HLit_Attributes.pdf)

**National Culturally and Linguistically Appropriate Services (CLAS) Standards**

<http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=15>

**CDC Clear Communication Index**

<http://www.cdc.gov/healthcommunication/ClearCommunicationIndex/>

**The Patient Education Materials Assessment Tool (PEMAT) and User's Guide**

<http://www.ahrq.gov/professionals/prevention-chronic-care/improve/self-mgmt/pemat/index.html>



# References

- Slide 5: Agency for Healthcare Research and Quality. TeamSTEPPS: Strategies and tools to enhance performance and patient safety. Available at: <http://teamstepps.ahrq.gov/>. Accessed May 22, 2014.
- Slide 14: Healthy People 2010; Archive accessed via <http://healthypeople.gov/2020/default.aspx>  
American Medical Association; Coleman, C., Kurtz-Rossi, S., McKinney, J., Pleasant, A., Rootman, I., Shohet, L. (2009). The Centre for Literacy : Calgary Charter on Health Literacy (2012) [http://www.centreforliteracy.qc.ca/sites/default/files/CFL\\_Calgary\\_Charter\\_2011.pdf](http://www.centreforliteracy.qc.ca/sites/default/files/CFL_Calgary_Charter_2011.pdf)  
Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H; (HLS-EU) Consortium Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. [BMC Public Health](https://doi.org/10.1186/1471-2458-12-80). 2012 Jan 25;12:80. doi: 10.1186/1471-2458-12-80
- Slide 15: National Patient Safety Foundation, Partnership for Clear Health Communication
- Slide 16: Baker, D.W.; Parker, R.M.; Williams, M.V.; et al. The relationship of patient reading ability to self-reported health and use of health services. *American Journal of Public Health* 87:1027-1030, 1997.
- Slide 17: Kutner, M., Greenburg, E., Jin, Y., & Paulsen, C. (2006). The health literacy of America's adults: Results from the 2003 National assessment of adult literacy. NCES 2006-483. *National Center for Education Statistics*, <http://eric.ed.gov/?id=ED493284>
- Slide 18: Healthy People 2020, <http://healthypeople.gov/2020/default.aspx>
- Slide 20: DHHS Office of Minority Health CLAS Standards (2007, 2011);  
<http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=15>
- Slide 21: Plain Language Act (2010), <http://www.plainlanguage.gov/plLaw/>



# References, cont.

- Slides 22 & 23: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2010). National Action Plan to Improve Health Literacy. Washington, DC: Author. <http://www.health.gov/communication/hlactionplan/>
- Slide 24: The Centre for Literacy : Calgary Charter on Health Literacy (2012)  
[http://www.centreforliteracy.qc.ca/sites/default/files/CFL\\_Calgary\\_Charter\\_2011.pdf](http://www.centreforliteracy.qc.ca/sites/default/files/CFL_Calgary_Charter_2011.pdf)
- Slides 25, 32, 34: Health Literacy Universal Precautions Toolkit. November 2013. Agency for Healthcare Research and Quality, Rockville, MD.  
<http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html>
- Slide 26: Ten Attributes of Health Literate Health Care Organizations (Institute of Medicine, 2012),  
<http://www.iom.edu/Global/Perspectives/2012/HealthLitAttributes.aspx>
- Slide 27: CDC Clear Communication Index (2013)  
<http://www.cdc.gov/healthcommunication/ClearCommunicationIndex/>
- Slide 28: The Patient Education Materials Assessment Tool (PEMAT), Agency for Healthcare Research and Quality (AHRQ), 2013), <http://www.ahrq.gov/pemat>
- Slide 33: Healthy Roads Media,  
<http://www.healthyroadsmedia.org/titles/EngFallsHosp/EngFallsHosp.htm>





Slide 38: Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, Leong-Grotz K, Castro C, Bindman A. "Closing the Loop: Physician Communication With Diabetic Patients Who Have Low Health Literacy." *Arch Intern Med*, Vol. 163, January 13, 2003: 83 – 90

Slide 39: Readability Formulas: [www.readabilityformulas.com](http://www.readabilityformulas.com)

Slide 40: Benefits of EHRs, Improved Diagnostics & Patient Outcomes

<http://www.healthit.gov/providers-professionals/improved-diagnostics-patient-outcomes>

Slide 41: MedlinePlus Connect: *Linking Patient Portals and EHRs to Consumer Health Information*

<http://www.nlm.nih.gov/medlineplus/connect/overview.html>

Slide 42: CDC, Stopping Elderly Accidents , Deaths, and Injuries (STEADI)

[http://www.cdc.gov/homeandrecreationalafety/Falls/steady/index.html?s\\_cid=tw\\_injdir154#download](http://www.cdc.gov/homeandrecreationalafety/Falls/steady/index.html?s_cid=tw_injdir154#download)



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