

## Health Literacy Starter Kit: Basic Information and Resources for the Newcomer

Paul D. Smith, MD, Professor  
UW Department of Family Medicine  
Paul.Smith@fammed.wisc.edu

---

---

---

---

---

---

---

## Disclosure Statement

I have this conflict of interest:  
Consultant for Wisconsin Literacy Inc.

---

---

---

---

---

---

---

## Show of Hands

- First time in Madison?
- First Summit?
- Came to hear about the restaurants?
- Desert first?

---

---

---

---

---

---

---

## Show of Hands

- Involved with:
  - Healthcare?
  - Literacy?
  - Research?
  - Health insurance?
  - Other fields?

---

---

---

---

---

---

---

## Topics today

- General literacy and health literacy information
- Why it matters
- What's going on in health literacy
- Resources
- Where to go in Madison and how to get there

---

---

---

---

---

---

---

Do you know?



Which of the following is the strongest predictor of an individual's health status?

- A. Age
- B. Income
- C. Literacy skills
- D. Employment status
- E. Education level
- F. Racial or ethnic group

Answer:

---

---


---

---

---

---

---



Do you know?

Which of the following is the strongest predictor of an individual's health status?

- A. Age
- B. Income
- C. Literacy skills
- D. Employment status
- E. Education level
- F. Racial or ethnic group

Answer:

**Literacy skills**

---

---

---

---

---

---

---

---

### What is Literacy?

---

National Assessment of Adult Literacy (NAAL 2003)

**“Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.”**

---

---

---

---

---

---

---

---

### What is Literacy?

---

- Literacy is a combination of skills:
  - Verbal                      Listening
  - Numeracy                  Critical analysis
  - Writing                      Reading

---

---

---

---

---

---

---

---

## More than just reading grade level

### ■ Prose Literacy

- Written text like instructions or newspaper article

### ■ Document literacy

- Short forms or graphically displayed information found in everyday life

### ■ Quantitative Literacy

- Arithmetic using numbers imbedded in print

---

---

---

---

---

---

---

## What is Health Literacy?

The Institute of Medicine 2004

**“The degree to which individuals have the capacity to obtain, process, and understand basic information and services needed to make appropriate decisions regarding their health.”**

---

---

---

---

---

---

---

## What is Health Literacy?

The Institute of Medicine 2004

**“The degree to which individuals have the capacity to obtain, process, and understand basic information and services needed to make appropriate decisions regarding their health.”**

---

---

---

---

---

---

---

## What is Health Literacy?

The Institute of Medicine 2004

**“The degree to which individuals have the capacity to obtain, process, and understand basic information and services **needed to make appropriate decisions** regarding their health.”**

---

---

---

---

---

---

---

## But There's More

- Interaction
  - Ability to communicate on health matters
- Evaluation
  - Ability to filter, interpret, and evaluate
- Responsibility
  - Ability to take responsibility for one's health and healthcare decision-making

---

---

---

---

---

---

---

## And More

- Confidence
  - Level of confidence to take action to improve personal and community health
- Navigation
  - Ability to navigate in society and health systems
- Social support
  - Resources one has to assist health decision-making and health management

---

---

---

---

---

---

---

## And Even More

- Rights and access
  - Access one has to information and services
- Trust
  - Trust in health system, information, and providers
- Motivation
  - Motivation to take action
- Mental state
  - Sleep deprived, anxiety, depression, pain

---

---

---

---

---

---

---

## Literacy VS Health Literacy

- Almost everyone will have difficulty with health literacy at some point.
- Much harder for those that do not:
  - Read very well.
  - Speak English as their primary language.

---

---

---

---

---

---

---

## Two Sides to the Equation

- The Info-seekers:
  - Patients, Students, All of us!
- The Info-givers:
  - Health care providers,  
public health educators, health systems



---

---

---

---

---

---

---

## People (Info-seekers) need to learn to:

- Find health information
- Understand it
- Evaluate it
- Communicate their needs and questions
- Use what they learn...act on it...to live healthier!



---

---

---

---

---

---

---

## The Info-givers need to learn to:

- Help people to **find** health information
- Help them **understand** health information
- Assure that we **understand** our patients and their concerns
- **Communicate** clearly with patients



---

---

---

---

---

---

---

## The Info-givers need to learn to:

- **Anticipate** and **encourage** questions
- Help people **evaluate** choices
- **Evaluate** our own programs to assure the outcomes we anticipate
- Make it easier for people to **use** information: remove barriers to people taking action!



---

---

---

---

---

---

---

## In Their Own Words



---

---

---

---

---

---

---

## So What?

- Who's at risk?
- What happens?

---

---

---

---

---

---

---

## 2003 National Assessment of Adult Literacy

- Data released 12/05
- ~17,000 people participated
- Over age 15
- Living in households and prisons

---

---

---

---

---

---

---



### 2003 National Assessment of Adult Literacy

- 4 categories of literacy

- Below basic
- Basic
- Intermediate
- Proficient

---

---

---

---

---

---

---

### 2003 National Assessment of Adult Literacy

- Below Basic literacy – one piece of information

- Can:

- Sign name on a document
- Identify a country in a short article
- Total a bank deposit slip

---

---

---

---

---

---

---

### 2003 National Assessment of Adult Literacy

- Below Basic literacy – one piece of information

- Cannot:

- Enter information on a social security card application
- Locate an intersection on street map
- Calculate the total cost on an order form

---

---

---

---

---

---

---

### 2003 National Assessment of Adult Literacy

- Basic literacy – two related pieces of information
- Can:
  - Identify YTD gross pay on a paycheck
  - Determine price difference between tickets for 2 shows

---

---

---

---

---

---

---

### 2003 National Assessment of Adult Literacy

- Basic literacy – two related pieces of information
- Cannot:
  - Use a bus schedule
  - Balance a check book
  - Write a short letter explaining error on a credit card bill

---

---

---

---

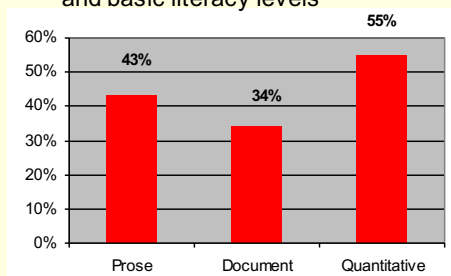
---

---

---

### 2003 National Assessment of Adult Literacy

34-55% of adults are at below basic  
and basic literacy levels



---

---

---

---

---

---

---

## Program for the International Assessment of Adult Competencies

- Acronym = PIAAC
- Conducted 2011–12
- 5,000 adults
- Ages of 16 and 65.
- Results released October 2013

---

---

---

---

---

---

---

## Program for the International Assessment of Adult Competencies

- 22 other countries also conducted PIAAC
- Assessed:
  - Literacy
  - Reading components
  - Numeracy
  - Problem solving in technology-rich environment

---

---

---

---

---

---

---




---

---

---

---

---

---

---

## The United States...

- Literacy skills trends stagnant for 20 years
- 1 in 6 adults lack basic academic skills
- 1 in 20 Japan

---

---

---

---

---

---

---

## 2003 National Assessment of Adult Literacy

- NAAL health literacy assessment
- 28 questions specifically related to health
  - 3 clinical
  - 14 prevention
  - 11 system navigation

---

---

---

---

---

---

---

## NAAL Health Literacy Assessment

- Entire population
  - **Proficient** 12%
  - Intermediate 53%
  - Basic 22%
  - Below basic 14%

---

---

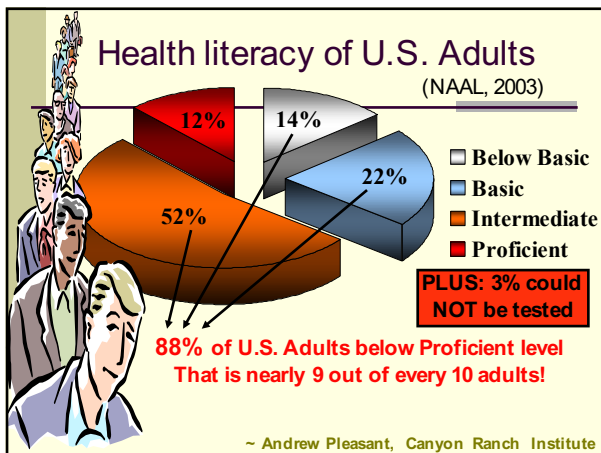
---

---

---

---

---




---

---

---

---

---

---

---

---

### NAAL Health Literacy Assessment

■ Basic and Below Basic Health Literacy	
■ Entire population	36%
■ White	28%
■ Native Americans	48%
■ Blacks	58%
■ Hispanics	66%

---

---

---

---

---

---

---

---

### NAAL Health Literacy Assessment

■ Basic and Below Basic Health Literacy	
■ Age 16-64	28-34%
■ Age 65+	59%

---

---

---

---

---

---

---

---

## NAAL Health Literacy Assessment

### ■ Basic and Below Basic by education level

- In High School, GED or HS grad 34-37%
- Less than/some High School 76%

---

---

---

---

---

---

---

## NAAL Health Literacy Assessment

### ■ Basic and Below Basic by Self-reported health status

- Excellent 25%
- Very Good 28%
- Good 43%
- Fair 63%
- Poor 69%

---

---

---

---

---

---

---

## The Impact of Low Literacy on Health

- Poorer health knowledge
- Poorer health status
- Higher mortality

---

---

---

---

---

---

---

## The Impact of Low Literacy on Health

- Increased hospital use
- Increased Emergency Department use
- Mixed results for:
  - Use of preventive services
  - Chronic health care
  - Tobacco use

---

---

---

---

---

---

---

## Poorer Health Knowledge

- Understanding prescription labels
  - 395 patients
    - 19% low literacy (6<sup>th</sup> grade or less)
    - 29% marginal literacy (7-8<sup>th</sup> grade)
    - 52% adequate literacy (9<sup>th</sup> grade and over)
  - 5 prescription bottles

Literacy and Misunderstanding Prescription Labels. Davis et al. Ann Intern Med 2006;145:887-894

---

---

---

---

---

---

---

## Poorer Health Knowledge

- At least one incorrect
  - 63% low literacy
  - 51% marginal literacy
  - 38% adequate literacy

Literacy and Misunderstanding Prescription Labels. Davis et al. Ann Intern Med 2006;145:887-894

---

---

---

---

---

---

---

## Poorer Health Knowledge

"Take two tablets twice daily"			
Stated correctly		Demonstrated correctly	
71%	low literacy	35%	
84%	marginal literacy	63%	
89%	adequate literacy	80%	

"Show me how many pills you would take in one day." Counted out 4 tablets-correct

---

---

---

---

---

---

---

---

## Increased Mortality

- Age 70-79
- 2512 participants
- Reading level 8<sup>th</sup> grade or less
- Five Year Prospective Study

Sudore R, et al. Limited Literacy and Mortality in the Elderly. J Gen Intern Med 2006;21:806-812

---

---

---

---

---

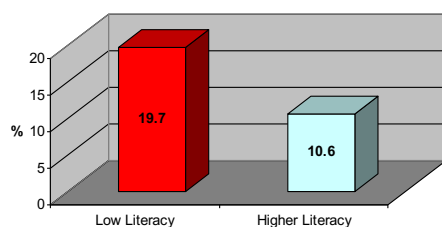
---

---

---

## Increased Mortality

Risk of Death Hazard ratio: 1.75



---

---

---

---

---

---

---

---



## A New Cause for Non-Compliance?

- Medications
- No-shows
  - Testing
  - Referral

---

---

---

---

---

---

---

## Where do we go from here?

Vision:

Every patient or their caregiver understands what the health issue is, what to do about it and why it's important.

---

---

---

---

---

---

---

## How do we get there?

- Education
- Effective Communication
- Universal Design
  - If it works for people with limited literacy or limited English skills, it will work for everyone.

---

---

---

---

---

---

---

## Re-Designing What We Do

- Someone takes ownership of Health Literacy
  - Grass roots
  - Leadership buy in = resources : people and \$
- Infuse health literacy concepts in new programs and redesign of current materials and processes

---

---

---

---

---

---

---

## Questions?

---

---

---

---

---

---

---

## Trends: What People are Doing

- Research and interventions
- Refining health literacy definition and measurement
- Integrating health literacy into medical education

---

---

---

---

---

---

---

## Trends: What People are Doing

- Policy initiatives
- Regional health literacy efforts
- Effective communication

---

---

---

---

---

---

---

## Research and Interventions

- Literacy research in medicine only goes back about 25 years
- Research idea to published article:  
Foundation funding: 2-3 years or more  
Federal funding: 5-9 years
- Only a few interventions have solid evidence

---

---

---

---

---

---

---

## Definition and Measurement

- Recent comprehensive review
  - 51 measures
  - List which of 11 dimensions measured
- World Health Organizations Health literacy toolkit  
[http://www.searo.who.int/entity/healthpromotion/documents/hl\\_toolkit/en/](http://www.searo.who.int/entity/healthpromotion/documents/hl_toolkit/en/)
- 4 PM breakout tomorrow

---

---

---

---

---

---

---

## Integrating HL into Medical Education

- History

- Curriculum standards published 2013

Health Literacy Practices and Educational Competencies for Health Professionals: A Consensus Study. Journal of Health Communication, 18:82-102, 2013. ISSN: 1081-0730 print/1087-0415

- Cliff Coleman presentation 2013

<http://www.fammed.wisc.edu/wisconsin-health-literacy-summit-2013-media>

---

---

---

---

---

---

---

## Trends: Policy Supports for HL

- Joint Commission standards

■ [http://www.jointcommission.org/assets/1/6/2009\\_CLASRelatedStandardsCAH.pdf](http://www.jointcommission.org/assets/1/6/2009_CLASRelatedStandardsCAH.pdf)

- National Action Plan

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

- Accountable Care Act

■ <http://www.healthcare.gov/law/index.html>

- 10 attributes of a health literate organization

■ <http://iom.edu/Global/Perspectives/2012/HealthLitAttributes.aspx>

---

---

---

---

---

---

---

## Regional Health Literacy Efforts

- At least 19 states have initiatives at various stages of development and reach

- Summit pre-conference meeting

- CDC website + map

■ <http://www.cdc.gov/healthliteracy>

---

---

---

---

---

---

---

## Effective Communication

- Verbal communication
  - Teach Back
  - Shared Decision Making
  - Consumer Assessment of Healthcare Providers and Systems Questions (CAHPS)
  - Communication Climate Assessment Toolkit

---

---

---

---

---

---

---

## Effective Communication

- Written communication
  - It's harder than it looks
  - Reading grade level matters, but much more to making a document understandable
  - Plain Language
    - <http://www.plainlanguage.gov/>
    - <http://www.plainlanguage.network.org/>

---

---

---

---

---

---

---

## Effective Communication

- Patient Education Materials Assessment Tool (PEMAT)
  - More comprehensive-26 items
  - Can be applied to text and multimedia
    - <http://www.ahrq.gov/professionals/prevention-chronic-care/improve/self-mgmt/pemat/>
- CDC Clear Communication Index
  - 20 items
  - Takes about 15 minutes
    - <http://www.cdc.gov/ccindex/tool/index.htm#who>

---

---

---

---

---

---

---

## Questions?

---

---

---

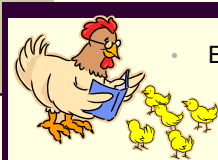
---

---

---

---

Why are Literacy Programs  
a good venue to address  
health literacy?



- Environment
- Population
- Teachers

---

---

---

---

---

---

---

## Trends: Adult Education and HL

- Integrating health literacy into literacy and English instruction
- Empowering people to self advocate
- Addressing health care access

---

---

---

---

---

---

---

## Trends: Adult Education and HL

- Partnering with health centers and other organizations
- Advising health care delivery
- Preparing people and health care for the Accountable Care Act

---

---

---

---

---

---

---

## Partnerships Between Literacy & Health Organizations

- Health curricula in literacy/English classes
- Guest speakers from local health centers
- Mini exams from nursing students
- Health fairs



---

---

---

---

---

---

---

## Newer Partnerships

- Student navigation assessments for hospitals
- Students testing written materials
- Teachers advising health care providers
- Teachers and students consulting to health programs



---

---

---

---

---

---

---

## Newer Partnerships

- Statewide and multi-state coalitions
- Cross referrals
- Dual Projects



---

---

---

---

---

---

---

## Adult Education Jargon

- ABE = Adult Basic Education
- ASE = Adult Secondary Education
- ESL = English as a Second Language
- ESOL = English for Speakers of Other Languages
- ELL =English Language Learners

---

---

---

---

---

---

---

## What can **YOU** do?

- Learn more
- Find partners
- Start re-designing
  - Processes
  - Forms and other documents
  - Curricula and training

---

---

---

---

---

---

---



## Adult Literacy Curricula

- Health Literacy Wisconsin
  - <http://wisconsinliteracy.org/health-literacy/resources/curricula.html>
- Health Literacy Special Collection
  - <http://www.healthliteracy.worlded.org/curricula-1.htm>

---

---

---

---

---

---

---

## Health Care Access

- Study Circle for Adult Literacy Teachers
  - [ncsall.net/index.html?id=891.html](http://ncsall.net/index.html?id=891.html)
- List of resources & curricula for health care access
  - [healthliteracy.worlded.org/docs/family/easy.htm#healthcare](http://healthliteracy.worlded.org/docs/family/easy.htm#healthcare)

---

---

---

---

---

---

---

## Join the LINCS Community!

Community of Practice for health literacy advocates from all over

- <https://community.lincs.ed.gov/groups>
- Register for free and join the Health Literacy Group
- Share with and learn from over 1,000 others
- Keep up on the latest HL news
- Enrich your HL experience!

---

---

---

---

---

---

---

## More Resources

---

---

---

---

---

---

---

## Learn More

- Wisconsin Health Literacy Wisconsin  
[www.HealthLiteracyWisconsin.org](http://www.HealthLiteracyWisconsin.org)
- Agency for Healthcare Research & Quality  
[www.ahrq.gov/health-care-information/topics/topic-health-literacy.html](http://www.ahrq.gov/health-care-information/topics/topic-health-literacy.html)
- Centers for Disease Control  
[www.cdc.gov/healthliteracy/](http://www.cdc.gov/healthliteracy/)

---

---

---

---

---

---

---

## Collections

- Wisconsin Health Literacy
  - <http://wisconsinliteracy.org/health-literacy/resources/>
  - Health Literacy Special Collection
    - <http://www.healthliteracy.worlded.org/index.htm>
- CDC Health Literacy Page
  - <http://www.cdc.gov/healthliteracy/>
- America's Literacy Directory  
[www.literacydirectory.org](http://www.literacydirectory.org)

---

---

---

---

---

---

---

## Using the National Action Plan to Improve Health Literacy

- Summary and download:
  - [cdc.gov/healthliteracy/planact/](http://cdc.gov/healthliteracy/planact/)
- Planning Guide
  - At link above
- What People are Doing with it
  - [lincs.ed.gov/lincs/discussions/healthliteracy/11actionplan\\_transcript](http://lincs.ed.gov/lincs/discussions/healthliteracy/11actionplan_transcript)

---

---

---

---

---

---

---

## Learn More

- World Health Organization Health Literacy Toolkit For Low- and Middle-Income Countries
  - [http://www.searo.who.int/entity/healthpromotion/documents/hl\\_toolkit/en/](http://www.searo.who.int/entity/healthpromotion/documents/hl_toolkit/en/)
- Health Literacy Universal Precautions Toolkit
  - <http://www.ahrq.gov/qual/literacy/>

---

---

---

---

---

---

---

## AHRQ Summary

- AHRQ Summary of Literacy and Health Outcomes- 2011
  - <http://effectivehealthcare.ahrq.gov/index.cfm/search-for-guides-reviews-and-reports/?productid=671&pageaction=displayproduct>

---

---

---

---

---

---

---

## Prescription Labeling

- Michael Wolf's presentation Wed. AM
  - Spanish, Chinese, Vietnamese, Russian, Korean prescription instructions  
<http://www.pharmacy.ca.gov/publications/translations.shtml>
  - United States Pharmacopeia (USP)
    - New prescription labeling requirements  
<http://www.usp.org/>
  - National Council for Prescription Drug Programs liquid med recommendations
    - <https://www.ncdpd.org/NCDPdmedia/pdf/wp/DosingDesignations-OralLiquid-MedicationLabels.pdf>

---

---

---

---

---

---

---

## RED: Discharge Project

- ReEngineering Discharge project (RED)
  - Decrease 30-day rehospitalization: 20% to 15%
  - Decrease Emergency Dept. use: 24% to 16%
  - <https://www.bu.edu/fammed/projectred/>

---

---

---

---

---

---

---

## Evaluate Current Environments

- American Medical Association Communication Climate Assessment Toolkit (C-CAT)
  - <http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics-and-legal-for-communication-climate-assessment-toolkit-051514.page>
- Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care: A Roadmap for Hospitals Joint Commission  
[http://www.jointcommission.org/assets/1/6/A\\_Roadmap\\_for\\_Hospitals\\_October\\_2013.pdf](http://www.jointcommission.org/assets/1/6/A_Roadmap_for_Hospitals_October_2013.pdf)

---

---

---

---

---

---

---

## Agency for Healthcare Research and Quality (AHRQ)

- Health Literacy Universal Precautions Toolkit  
<http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/files/ultrac Toolkit/>
- Consumer Assessment of Healthcare Providers and Systems Questions (CAHPS)
  - Health literacy supplement [www.cahps.ahrq.gov](http://www.cahps.ahrq.gov)
  - 31 items, with rigorous development and validation
- Pharmacy Health Literacy Assessment Tool & User's Guide. pharmacy and staff  
<http://www.ahrq.gov/professionals/quality-patient-safety/healthcare/literacy/hltm/#to-ol>

---

---

---

---

---

---

---

## Newer Assessments

- Literacy Audit for Healthcare Settings. 5 attributes, 57 items, no validation  
[https://www.healthpromotion.ie/hp-files/docs/HSE\\_NALA\\_Health\\_Audit.pdf](https://www.healthpromotion.ie/hp-files/docs/HSE_NALA_Health_Audit.pdf)
- Health Plan Organizational Assessment of Health Literacy Activities- Insurer assessment  
<https://www.ahip.org/Issues/Documents/2010/Health-Plan-Organizational-Assessment-of-Health-Literacy-Activities.aspx>

---

---

---

---

---

---

---

## Newer Assessments

- Health Plan Organizational Assessment of Health Literacy Activities- Insurer assessment  
[https://www.ahip.org/uploadedFiles/Content/News/Press\\_Room/2010/Resources/HealthPlanOrganizationalAssessmentofHealthLiteracyActivities.pdf](https://www.ahip.org/uploadedFiles/Content/News/Press_Room/2010/Resources/HealthPlanOrganizationalAssessmentofHealthLiteracyActivities.pdf)
- Enliven Organisational Health Literacy Self-Assessment Resource 10 attributes, 85 questions, limited development or validation  
<http://www.enliven.org.au/Documents/Library/Resources/Health%20lit%20Resources/Enliven%20Health%20Literacy%20Audit%20Resource.pdf>

---

---

---

---

---

---

---

“Action expresses priorities.”

“Be the change that you want to  
see in the world.”

---Mohandas Gandhi

---

---

---

---

---

---

---

Questions?

---

---

---

---

---

---

---

### The Really Important Information

- Madison Restaurants
- Isthmus.com
- Handout
- Paul's picks
  - Candinas Chocolatier
  - UW Memorial Union- Babcock ice cream
- Mad Faves

---

---

---

---

---

---

---

## Places to check out

- State Street
- Capitol building
- International Crane Foundation- rent car
- Olbrich Botanical Gardens
- Henry Vilas Zoo
- Chazen Museum of Art
- Madison Children's Museum
- University of Wisconsin Geology Museum

---

---

---

---

---

---

---

## How to get there

- Bike trails/rental
  - Madison B Cycle- \$5/day, \$7.99/mo for members
  - <https://madison.bcycle.com/>
    - 22 West Wilson Street
    - 38 East Wilson Street
    - 103 South Carroll Street
    - 242 South Pinckney St.
- Green Cab of Madison
  - (608) 255-1234

---

---

---

---

---

---

---

## Questions?

---

---

---

---

---

---

---



---

---

---

---

---

---

---