

Health Literacy: What do you Mean by Understand?

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Learning Objectives

At the end of the presentation the participant will be able to:

1. Define and understand health literacy.
2. Identify patients with low health literacy.
3. Describe the skills patients need for health literacy.
4. Integrate health literacy skills into patient encounters.
5. Analyze the impact of low health literacy on quality of care.
6. Create ways to enhance patient compliance/adherence.

Definition

Health Literacy = the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways that promote and maintain good health.

World Health Organization 1998



Definition

Health Literacy is a constellation of skills, including the ability to perform basic reading and numerical tasks required to function in the health care environment.

AMA Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, 1999



Definition

Health Literacy is the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions.

RATZAN & PARKER 2000

Definition

Health Literacy is the extent to which people can access, process, understand, use and communicate health-related information **(oral, print and numerical)**, skills and services.

Institute of Medicine of the National Academies 2004



Definition

Health Literacy is a complex set of cognitive, social and navigational skills that encompass language proficiency, reading ability, numerical literacy and the capability to interact with healthcare employees, complete complicated documents, and comprehend risk and probability.

Mattox 2010


Health Literacy Video



<https://www.youtube.com/watch?v=BgTuD7l7LG8> (00:04:31)

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Vulnerable Populations

- Limited English
 - Different culture
 - Different ethnicity
 - Minorities
 - Elderly
 - Lower education
 - Lower socioeconomic status
 - Chronic disease
 - Medically underserved areas
- 

American Medical Association...

“Poor health literacy is a stronger predictor of a person’s health than age, income, employment status, education level and race.”

Statistics...

- 90 million Americans - low skills
- 40% - limited skills
- 9 out of 10 adults - difficulty using the everyday health information routinely available
- Increase in preventable hospitalizations
- Chronic conditions - much less able to manage
- Use services more frequently to treat complications of disease

Impact of Low Health Literacy

1. Costs
 2. Safety
 3. Quality
 4. Mortality
 5. Access
 6. Utilization
 7. Physician/Patient Relationship
- 

Factors Influencing Health Literacy

1. Communication Skills (e.g., illiterate, language)
2. Knowledge (e.g., physician awareness, culture)
3. Culture (e.g., beliefs, traditions)
4. Healthcare and Public Health Systems (e.g., insurance, access)
5. Situation/context (e.g., setting, shame)

Patient Education

- Handouts
- Internet
- Pamphlets
- Pre-procedural preparation sheets
- Explanation of results

Patient Information Flyer

“If we are authorized to use or disclose Personal Health Information about you, you or your legally authorized representative may revoke that authorization, in writing, at any time, except to the extent that we have taken action relying on the authorization or if the authorization was obtained as a condition of obtaining your Health Insurance coverage.”

Informed Consent

- Language
- Terms
- Reason for Procedure
- Who is performing the Procedure
- Benefits
- Risks
- Alternatives to the procedure

Forms

- Answer “NO” to all of the questions
- Incompletely or incorrectly filled out
- Walks out of the waiting room...
- “Will fill them out later”
- “Left their glasses at home”
- Cannot name medications

Medications

- Name of medicine (Brand vs. Generic)
- What it is being used for
- How to take it/give it
- How to store it
- Side Effects
- When to worry or call or return to office

Patient Identification

- Ask patient to read their Rx bottle
- Ask about confidence level to fill out medical forms by themselves
- Rapid Estimate of Adult Literacy in Medicine - REALM
- Test of Functional Health Literacy in Adults - TOFHLA
- Newest Vital Sign

REALM (out of 66 words)

fat	fatigue	allergic
flu	pelvic	menstrual
pill	jaundice	testicle
dose	infection	colitis
eye	Exercise	emergency
stress	behavior	medication
smear	prescription	Occupation
nerves	notify	sexually
Germ	gallbladder	alcoholism
meals	calories	irritation

S-TOFHLA

The X-ray will _____ from 1 to 3 _____ to do.

- a. take
- b. view
- c. talk
- d. look

- a. beds
- b. brains
- c. hours
- d. diets

*Cloze procedure (Taylor, 1953)

(specific instructions given for a pill to be taken every 6 hours):

If you take your first tablet at 7:00 am,
when should you take the next one?

Newest Vital Sign

Nutrition Facts

Serving Size $\frac{1}{2}$ cup
Servings per container 4

Amount per serving

Calories 250 Fat Cal 120

%DV

Total Fat 13g 20%

Sat Fat 9g 40%

Cholesterol 28mg 12%

Sodium 55mg 2%

Total Carbohydrate 30g 12%

Dietary Fiber 2g

Sugars 23g

Protein 4g 8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

Assessments

- **D** Ask patient about **difficulty** reading.
- **I** Ask if they have an **interest in improving**
- **R** Have **referral** information ready for patients
- **E** Ask **everyone** about their literacy skills
- **C** Emphasize that low literacy is a **common** problem
- **T** **Take down barriers** to joining literacy classes and providing effective care

Intervention

What can be done?



Integrating Health Literacy Skills

- Who
- What
- When
- Where
- Why
- How

Who...Vulnerable Populations

- **Limited English**
- Different Culture
- Different Ethnicity
- **Elderly**
- **Minorities**
- **Lower education**
- **Lower socioeconomic status**
- Chronic disease
- Medically Underserved Areas

Who...Stakeholders

- Patients
- Providers
- Hospitals
- Clinics
- Office personnel and staff
- Insurance Companies

What...

- Measure health literacy
- Change readability levels
- Institute health and science content in school curricula
- Public Health alerts
- Communicate clearly
- Improve labeling

Variability in the Message

Take one tablet orally once every day.

Take 1 tablet by mouth every morning.

53 Different Ways to Say 'Take 1 Tablet a Day'

Take one tablet for cholesterol.

Take one tablet by mouth once daily.

Take 1 tablet 1 time daily.

Take 1 tablet one time each day.

Take one pill by mouth at bedtime.

Take one pill by mouth once each day.

...And the Translation

<p>Lipitor 10 mg tabs Take one tab QD Dispense #30 Indication: for high cholesterol No refills</p>	<ul style="list-style-type: none"> - "Take one tablet daily." - "Take 1 tablet by mouth for high cholesterol." - "Take one (1) tablet(s) by mouth once a day." - "Take one tablet by mouth every day for high cholesterol."
<p>Fosamax 5 mg tabs Take one tab QD Dispense #30 Indication: osteoporosis prevention Do not lie down for at least 30 minutes</p>	<ul style="list-style-type: none"> - "Take 1 tablet by mouth daily." - "Take one tablet by mouth every day for osteoporosis prevention. Do not lie down for at least 30 minutes after taking." - "Take 1 tablet every day, 30 minutes before breakfast with a glass of water. Do not lie down." - "Take one tablet every day."
<p>Bactrim DS tabs Take one tab BID Dispense #6 Indication: UTI No refills</p>	<ul style="list-style-type: none"> - "Take one tablet by mouth twice daily for UTI" - "Take one tablet by mouth twice daily for urinary tract infection." - "Take 1 tablet by mouth 2 times a day." - "Take 1 tablet twice daily for 3 days."
<p>Ibuprofen 200 mg tabs Take 1-2 tabs TID PRN pain Dispense #30 No refills</p>	<ul style="list-style-type: none"> - "Take 1 to 2 tablets by mouth as needed for pain." - "Take 1 to 2 tablets by mouth three times daily as needed for pain." - "Take 1 to 2 tablets by mouth as needed for pain ** Not to exceed 4 times a day" - "Take 1 to 2 tablets 3 times a day as needed for pain."

Morning 6-8am	Noon 11-1pm	Evening 4-6pm	Bedtime 9-11pm
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Universal Medication Schedule (UMS)

Take	1 tablet in morning (bedtime)
Take	1 tablet in morning 1 tablet in evening
Take	1 tablet in morning 1 tablet at noon 1 tablet in evening
Take	1 tablet in morning 1 tablet at noon 1 tablet in evening 1 tablet at bedtime
Take	1 or 2 tablets for pain. Wait at least 4 hours before taking again. Stop at 6 tablets in one day.

Reprogramming the R_x Label.

<p>Do not drink alcoholic beverages while taking this medicine</p> <p>Carry or wear medical identification stating you are taking this medicine</p> <p>You should avoid prolonged or excessive exposure to direct and/or artificial sunlight while taking this medicine</p>	<p>Michael Wolf 04/29/71</p> <p>Glyburide 5mg</p> <p>Take for Diabetes</p>	<p>Rx #: 1234567 9/8/2009</p> <p>You have 11 refills</p> <p>180 pills</p> <p>Discard after 9/8/2010</p>							
	<p>Take:</p> <p>2 pills in the morning 2 pills in the evening</p>	<p>Provider: RUTH PARKER, MD Emory Medical Center (414) 123-4567</p>							
	<table border="1"> <thead> <tr> <th>Morning 7 9 AM</th> <th>Noon 11 1 PM</th> <th>Evening 4 6 PM</th> <th>Bedtime 9 11 PM</th> </tr> </thead> <tbody> <tr> <td>2</td> <td></td> <td>2</td> <td></td> </tr> </tbody> </table>	Morning 7 9 AM	Noon 11 1 PM	Evening 4 6 PM	Bedtime 9 11 PM	2		2	
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CORRESPONDENCE



Risk of Confusion in Dosing Tamiflu Oral Suspension in Children

TO THE EDITOR: The medical community should be made aware of the serious potential for dosing errors in children prescribed Tamiflu (oseltamivir) oral suspension, as illustrated in the case described below.

After the diagnosis of novel H1N1 influenza, a 6-year old received a prescription for Tamiflu (oseltamivir) oral suspension (12 mg per milliliter) at a dose of 3/4 teaspoon PO BID. However, the parents, one a primary care physician and the other one of the authors, had great difficulty determining the correct dose to administer to their child. The medication bottle was accompanied by a prepackaged syringe with markings of 30, 45, and 60 mg (Fig. 1). The label attached by the pharmacy specified the dose in volume units ("3/4 teaspoonful") but the syringe provided only markings in mass units (milligrams). Despite



Figure 1. Tamiflu Package, Label, and Syringe Included in Box.

ing and measurement calculations¹ will be re-



CORRESPONDENCE

¾ teaspoon dose:

5 ml (volume of teaspoon) x .75 x 12 mg per ml Tamiflu suspension =

45 mg on syringe

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Figure 1. Tamiflu Package, Label, and Syringe Included in Box.

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When...should these interventions happen?

Every time the patient has contact with a health care setting or provider.

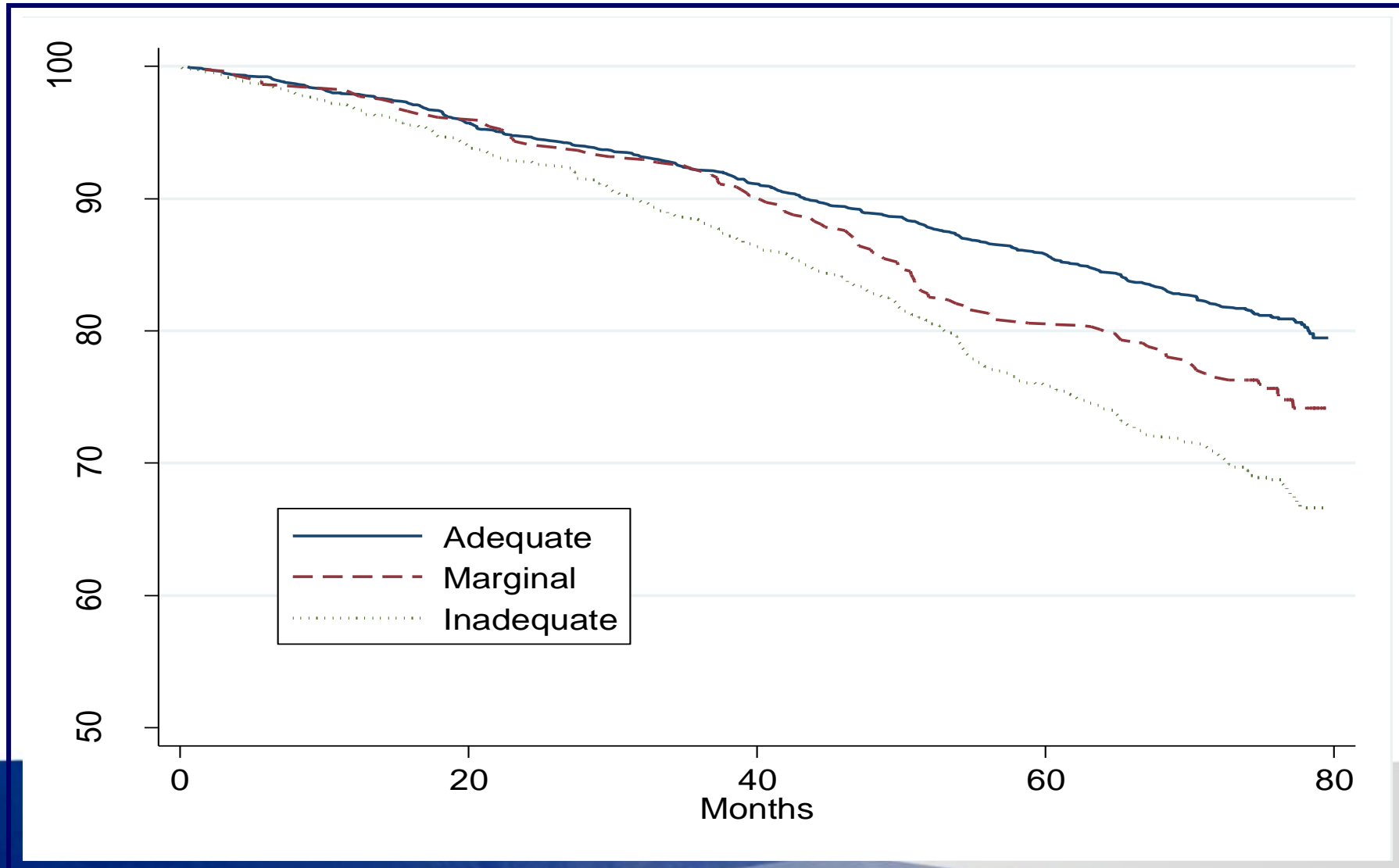
Where

- Office -
- Hospital – multiple docs & workers/consents
- Pharmacy – medication instructions
- Insurance companies - forms

Why...should these interventions happen?

- Patient Safety
- Better health status
- Fewer medication and treatment errors
- Lower Health-care Costs
- Improve Health Outcomes
- Lower rates of hospitalization
- Shorter hospital stays
- Fewer office visits
- Greater resource use
- Improved skills to obtain services
- Increase use of preventive services

Literacy and Mortality Risk



How...

What methods should be used to implement these changes?

- **Teach-back** method
- **Teach-to-goal**
- **Guided Imagery** (Implementation Intention)
- **Ask Me Three**
- Improved prescription **labeling**
- Simplified medication **information**
- Plain language **forms and pamphlets**

“Ask Me Three”

- WHAT IS MY MAIN PROBLEM?
- WHAT DO I NEED TO DO?
- WHY IS IT IMPORTANT FOR ME TO DO THIS?

Teach-Back

- Method to make sure the health care provider explained information clearly
- Asking a patient or family member to explain **in their own words** what they need to know or do
- A way to check for understanding, and, if needed, re-explain and check again
- A research –based health literacy intervention that improves patient-provider communication and patient health outcomes.

TEACH-TO-GOAL

- Repetition until learning goals are achieved
- Teach according to literacy level
- Will need reinforcement over time
- May use several different modalities to succeed in patient understanding how to successfully do self-care

Patient education should be more than reading a brochure...



You Have a New Medication

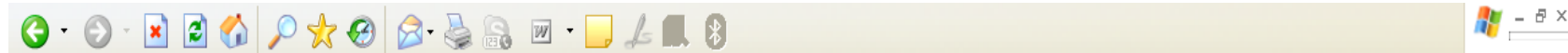
Date: August 1, 2008

Name: John Doe

Doctor: David Baker, MD

Please read the information below. This tells you how to take your medicine.

Drug Name	Lipitor®				
Generic Name	Atorvasatin (a TORE va sta tin)				
Purpose	This medication can lower "bad" cholesterol.				
Benefit	It can help prevent a heart attack or stroke.				
How to Take	Take 1 tablet by mouth at bedtime.	Morning 6:00-8:00	Noon 11:00-1:00	Evening 4:00-6:00	Bedtime 9:00-11:00
For How Long	You may need to be on this medication for the rest of your life.				
Call Your Doctor	If you have any of these symptoms for more than <u>1 week</u> : <ul style="list-style-type: none">• Headaches• Stomach pain• Diarrhea				
Stop Taking and Call Your Doctor	If you ever have: <ul style="list-style-type: none">• Muscle pain• Muscle weakness• Joint pain				
Important!	<ul style="list-style-type: none">• Take this medicine only the way your doctors tells you.  Tell your doctor or pharmacist if you are pregnant, think you are pregnant, or breastfeeding. You should not take this medicine. <ul style="list-style-type: none">• If you take over-the-counter medicines every day, tell your doctor.• Limit how much grapefruit juice you drink every day.				
Please call NoVA ScriptsCentral Pharmacy at (123) 456-7890 if you have questions or concerns.					
These websites can tell you more about your medicine: www.ahrq.gov/consumer and www.nlm.nih.gov/medlineplus					



Patient Education Tools

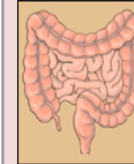
Welcome

Improving health communication is one of the most important missions for the Division of General Internal Medicine and its Health Literacy and Learning Program. This is not just an academic goal. We strive to put our research into practice by making the multimedia and print materials we have developed available free of charge. This page provides a list of these materials. You can watch videos online and download print materials.

> [Learn about our development process](#)

> [How you can use our tools](#)

Get Screened for Colorectal Cancer



Explains the options for CRC screening. Covers Stool Cards and Colonoscopy. **6 minutes.**

Available in Spanish.

[PLAY VIDEO](#) [MORE](#)

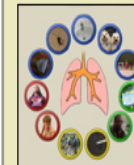
Get the Flu Shot



Targeted at African Americans over 65. Explains process and importance of the flu shot, framed by questions. **5 minutes.**

[PLAY VIDEO](#) [MORE](#)

Asthma 1-2-3: Triggers



How to manage asthma by controlling or avoiding common asthma triggers. **4 minutes.**

[PLAY VIDEO](#) [MORE](#)

Asthma 1-2-3: Medicine



How to use a quick-release inhaler. **4 minutes.**

[PLAY VIDEO](#) [MORE](#)

Diabetes Series



A 7-part series discussing how diabetes is

Action-Oriented Self Care.

ACP Guide:

a Low literacy, print self-care tool


- Brief, plain language messages
- Supportive pictures, graphics
- Patient narratives
- Chunked information
- Non-linear approach




You Can Do It!

Choose one of these easy ideas or write down 1 or 2 things you will do for the next few weeks. Remember, little changes in your eating can make a big difference in your blood sugar.

- ☐ I will switch from juice or soda to diet soda.
- ☐ I will eat breakfast every morning.
- ☐ I will order regular size instead of super size at fast-food restaurants.
- ☐ I will pack a healthy lunch some days instead of eating out.
- ☐ I will keep healthy snacks on hand, like cottage cheese, carrot sticks, hard-boiled eggs, unbuttered popcorn, or sugar-free popsicles.
- ☐ I will eat slowly, and wait before getting a second serving.
- ☐ _____
- ☐ _____
- ☐ _____



"It was hard to stop drinking regular soda, but now I like diet drinks and water."



This Guide Will Help You:



1. Get started



2. Eat right



3. Be active



4. Check your blood sugar



5. Take your pills



6. Learn about insulin

Learning Objectives

At the end of the presentation the participant will be able to:

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4. Integrate health literacy skills into patient encounters.
5. Analyze the impact of low health literacy on quality of care.
6. Create ways to enhance patient compliance/adherence.

Take Away Message

- ❖ Identify patients with low health literacy.
- ❖ Describe the skills patients need for health literacy.
- ❖ Integrate health literacy skills into patient encounters.