

Health Literacy: What You Need to Know About What Patients Don't Know

Katee Kindler, PharmD, BCACP

Ambulatory Care Clinical Pharmacist – St. Vincent Indianapolis

Assistant Professor of Pharmacy Practice – Manchester University



Conflict of Interest Disclosure

- **This speaker has no conflict of interest to disclose.**

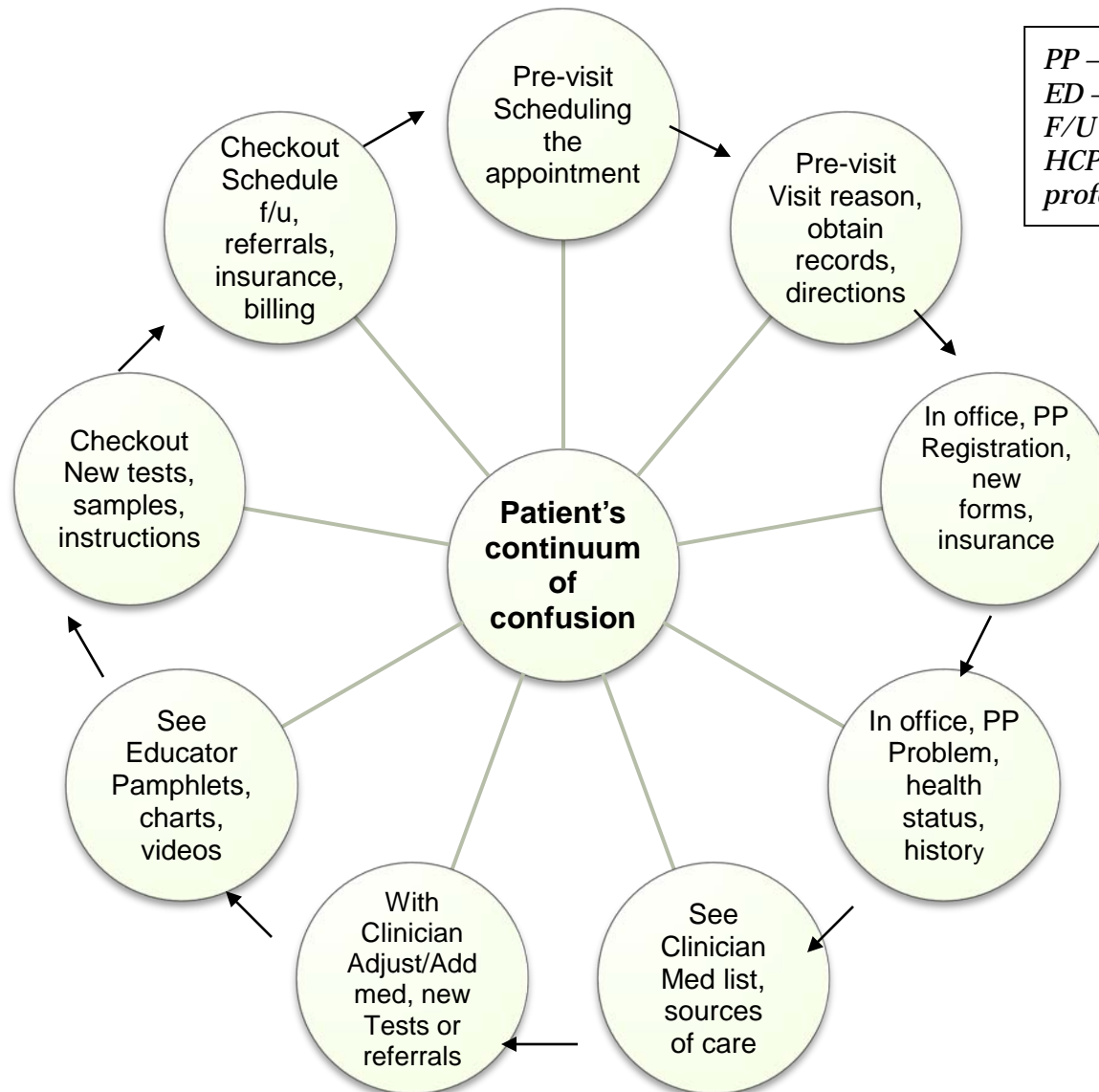
Objectives

- Define health literacy
- List words that may be difficult for patients to understand
- Identify ways to address health literacy

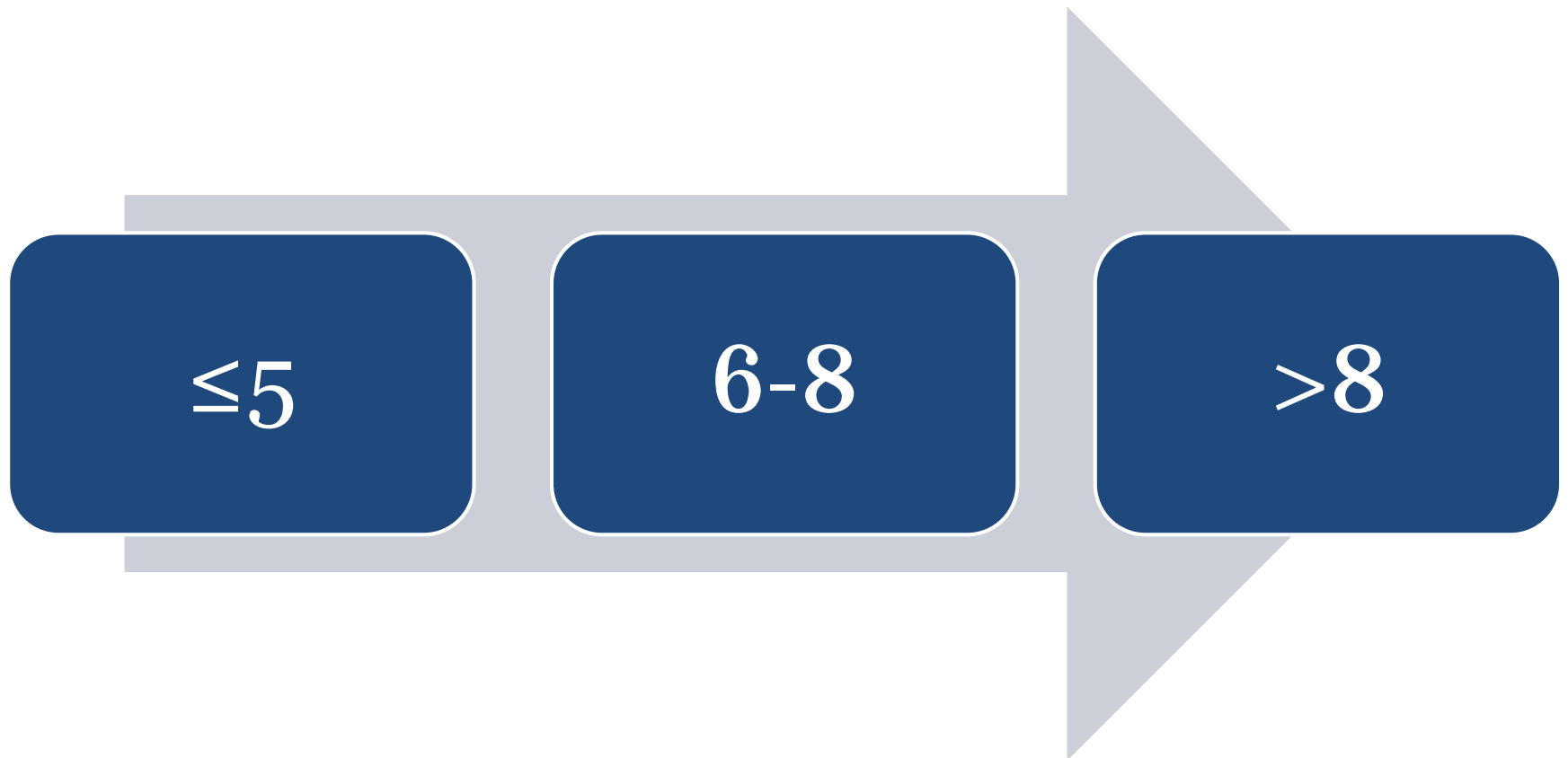
What is health literacy?

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

Complex Process



What is the average reading level of patient handout materials?



Literate ≠ Health Literate

- Most health education materials are “above the heads” of average readers
 - Most adults read at an 8th grade level
- Approximately 45% of high school graduates have limited health literacy
- Optimal reading level of materials for at risk patients is grade 4 to 6

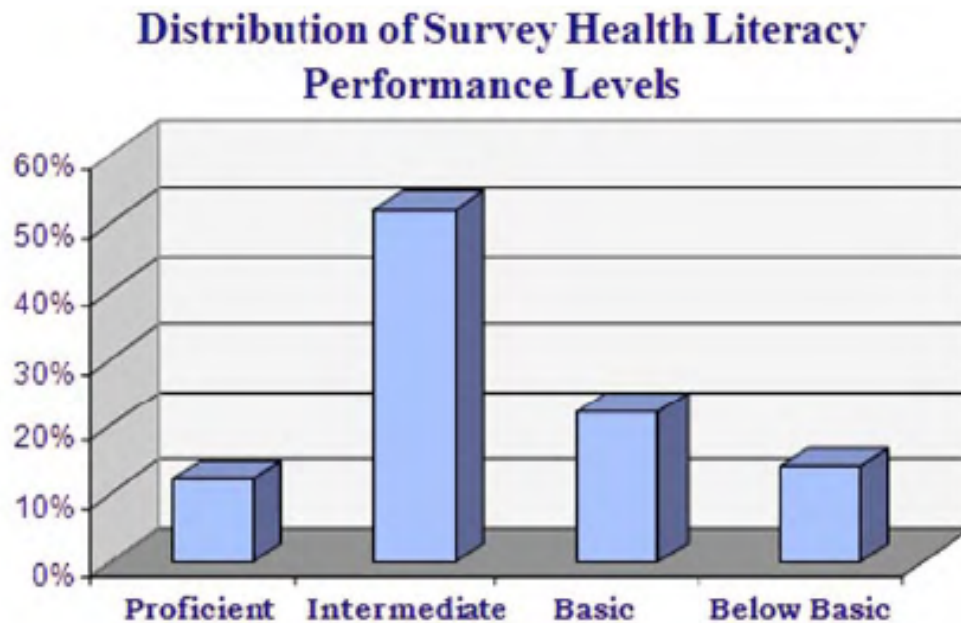
Who is at highest risk?

- Age 65 and older
- Poverty
- Minorities
- Immigrants
- Chronic mental health issues
- Chronic physical health conditions
- No medical insurance

Health Literacy in America

- Proficient: 12%
- Intermediate: 53%
- Basic: 22%
- Below Basic: 14%

Figure 2: Distribution of Health Literacy Performance Levels from the 2003 NAAL Health Literacy Survey



How Big is this Issue

52% say that prescription information and instructions are hard to read and understand

42% are unable to comprehend directions for taking medication on an empty stomach

26% are unable to understand when next appointment was scheduled


60% did not understand a standard informed consent

Impact on Medication Errors

395 patients were each handed 5 pill bottles



Asked: how would you take this medicine?



Overall 46% did not understand instructions ≥ 1 label(s)



Low health literacy: ~70% could read but only ~35% could demonstrate use

Table 2. Percentage of Patients Understanding Primary Prescription Drug Label Instructions and Attending to Auxiliary Labels* by Literacy Level

Drug Name	Instruction	Literacy Level			P Value
		Adequate (n = 207)	Marginal (n = 113)	Low (n = 75)	
Amoxicillin					
Correctly interpreted primary label	Take one teaspoonful by mouth three times daily	82.6	65.5	58.7	<0.001
Attended to auxiliary labels		5.3	4.4	0.0	0.130
Trimethoprim					
Correctly interpreted primary label	Take one tablet by mouth twice daily for seven days	73.0	66.4	52.0	<0.001
Attended to auxiliary labels		7.8	7.1	1.3	0.144
Guaifenesin					
Correctly interpreted primary label	Take two tablets by mouth twice daily	89.4	84.1	70.7	<0.001
Attended to auxiliary labels		14.1	7.1	0.0	<0.001
Felodipine					
Correctly interpreted primary label	Take one tablet by mouth once each day	94.7	87.6	86.7	0.032
Attended to auxiliary labels		12.6	10.6	4.0	0.115
Furosemide					
Correctly interpreted primary label	Take one tablet in the morning and one at 5 p.m.	91.3	91.2	82.7	0.092
Attended to auxiliary labels		14.5	8.9	2.7	0.011

* The multicolored labels that provide auxiliary instructions, such as “Take with food” and “Do not chew or crush, swallow whole.”

What does low health literacy feel like?

- GNINAELC – Ot erussa hgih ecnamrofrep, yllacidoirep naelc eht epat sdaeh dna natspac revenehw uoy eciton na noitalumucca fo tsud dna nworb-der edixo selcitrapp. Esu a nottoc baws denetsiom htiw lyporposi lohocla. Eb erus on lohocla sehcuot eht rebbur strap, sa ti sdnec ot yrd dna yllautneve kcarc eht rebbur. Esu a pmad tholc ro egnops ot naelc eht tenibac. A dlim paos, ekil gnihsawhsid tnegreted, lliw pleh evomer esaerg ro lio.

What does low health literacy look like?

- Patient's try to hide it
- Fear that someone will discover
- Incomplete forms or length of time with forms
- Anger when questioned about things they may not know

Healthcare professionals often fail to recognize poor health literacy

“I take a blue, round pill”

- Patients with low health literacy often don't know:
 - Drug Name
 - Dose
 - What it's for
 - Why they are on it



Additional Red Flags for Low Literacy

- Frequently missed appointments
- Incomplete registration forms
- Non-compliance with medication
- Unable to give coherent, sequential history
- Ask fewer questions
- Lack of follow-through on tests or referrals

Impact of low health literacy

- Higher risk for hospitalization
- Less adherent to medications
- Less effective management of chronic diseases
- Less frequent use of preventive services

\$50-73 billion annually in healthcare costs

Health Literacy Assessment

- What tools can be used to assess health literacy?
 - The Newest Vital Sign (NVS)
 - Rapid Assessment of Adult Literacy in Medicine-Revised (REALM-R)
 - Single Item Literacy Screener (SILS)
 - Test of Functional Health Literacy in Adults (TOFHLA)
 - And more...

Single Item Literacy Screener (SILS)

“How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?”

- 1-Never
- 2-Rarely
- 3-Sometimes
- 4-Often
- 5-Always

Newest Vital Sign (NVS)

Nutrition Facts	
Serving Size	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%

* Percent 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.

What terms are hard for patients to understand?

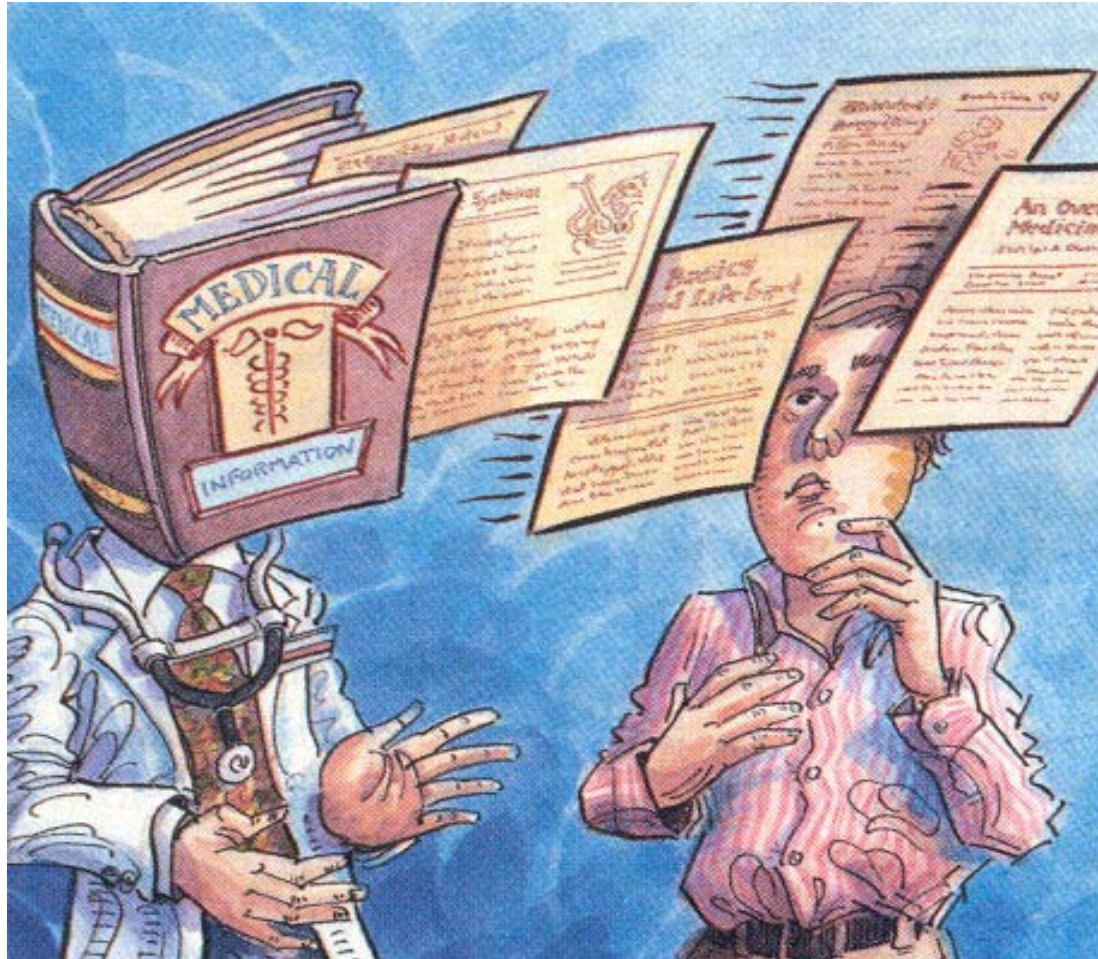


" TAKE WITH MEALS ? NO PROBLEM !
I EAT ALL THE TIME ! "

How can we make words more patient friendly?

- Orally
- Hypertension
- Immunize
- Adjust
- Generic
- Adverse reaction/side effect

Health Literacy Video



Readability

You are being started on a new medication called lisinopril for your hypertension. You will take this medication every day in the morning on an empty stomach. This medication may cause lightheadedness and angioedema. If you have an adverse event, contact your doctor immediately.

- Current average reading level: 11.4
- Goal reading level: <6

Readability

Your doctor wants you to start a new medication. It is called lisinopril. It is for your high blood pressure. You will take this medication one time a day. It is best to take it in the morning. You should take it before you eat breakfast. It may make you feel dizzy. It can also cause swelling of the lips and tongue. If you have a bad reaction, contact your doctor right away.

- Current average reading level: 4.3

On average, how long does a doctor spend counseling patients over new medications?

<60
seconds

1-2
minutes

> 2
minutes

An extra minute can mean...

- Ensure patient understanding
- Improved adherence
- Better health
- Decreased health care cost

*Health Literacy: “Saves Lives. Saves Time.
Saves Money.” - NIH*

Ways to Overcome Low Health Literacy

Encourage patients to “Ask Me 3”

1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

Ways to Overcome Low Health Literacy: Improve Communication

Be alert

Simplify

Slow down

**Plain
language**

Interpreters

Summarize

**Involve
family**

**Teach-back
method**

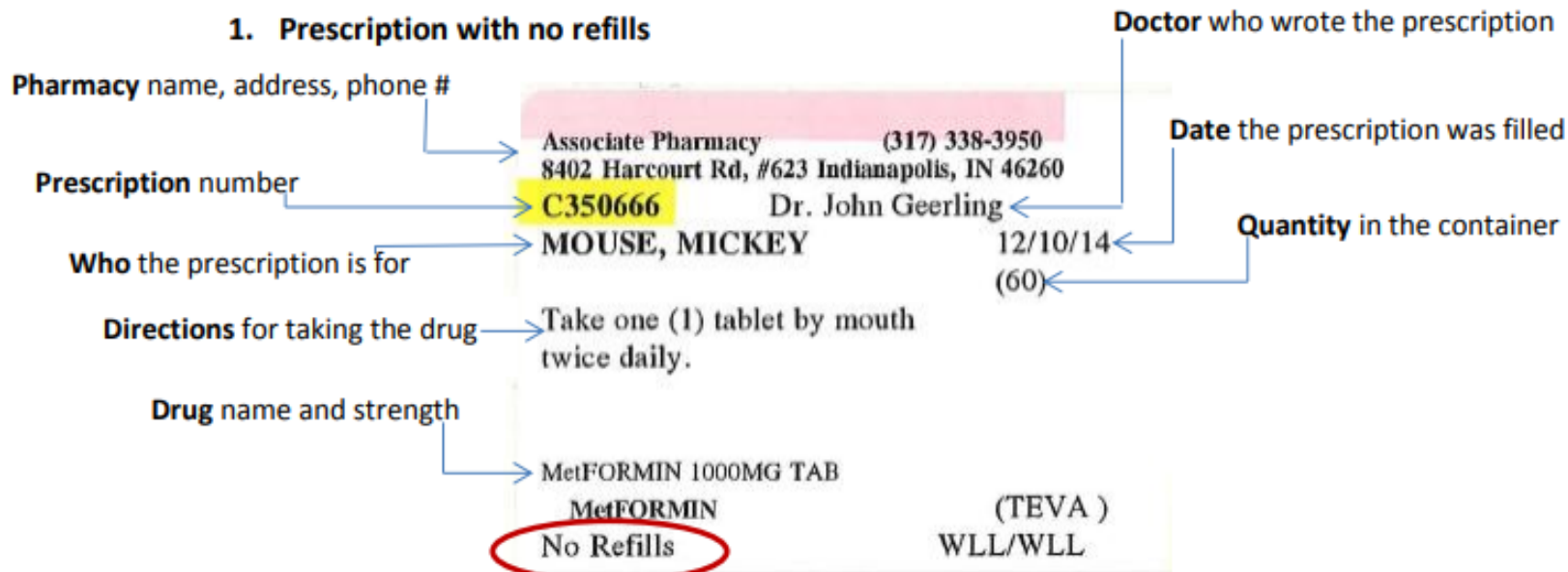
Visual aids

Ways to Overcome Low Health Literacy: Summarize

- **What patients need to know:**
 - **What is the medication for?**
 - **How to take the medication?**
 - **What are the side effects?**
 - **What is the benefit?**

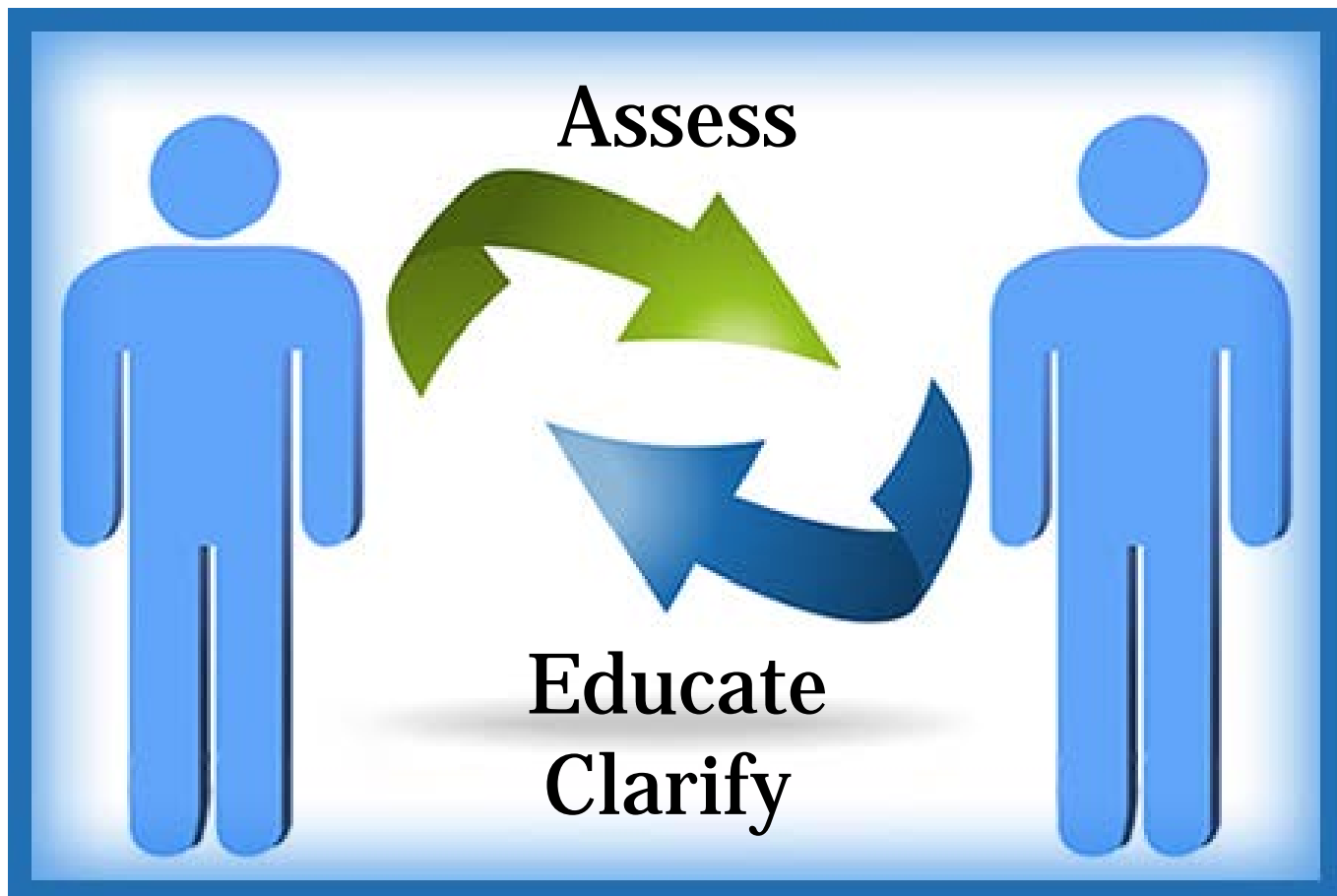
Ways to Overcome Low Health Literacy: Visual Aids

How to Read a Prescription Label



No Refills: This means that you or your pharmacy must contact your doctor's office to get a new prescription before you can pick up more of this drug

Ways to Overcome Low Health Literacy: Teach-Back Method



Ways to Overcome Low Health Literacy: Teach to Goal

- Self-management training for low health literacy
- Educational interventions that are literacy-sensitive
- Teach patients skills to reach their goals
- Repetition = mastery

Teach to Goal

1. Define a limited set of the most important learning goals and eliminate all information that does not directly support the learning goals
2. Present information in discrete, identified units (“chunks”)
3. Determine the optimal order for teaching the topics
4. Develop simple, plain language text to explain essential concepts for each learning goal and use graphics to help increase comprehension and recall whenever possible
5. Confirm understanding after each unit, perform corrective or remedial instruction until mastery is attained, and review previously learned concepts until stable mastery is achieved
6. Link all knowledge to a specific attitude, skill, or behavioral goal

Conclusion

- Huge issue that affects many people
- Patients are not doctors
- Recognize health literacy challenges
- Use strategies to overcome

Resources

- American Medical Association. *Health Literacy and Patient Safety: Help Patients Understand: Reducing the Risk by Designing a Safer, Shame-Free Health Care Environment*. 2nd ed. American Medical Association; 2007.
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