

# Your Guide to Improving Patient Safety by Addressing Health Literacy

Marsha K. Millonig, MBA, BPharm
President & CEO
Catalyst Enterprises, LLC





#### **Disclosures**

There are no relevant financial relationships with ACPE defined commercial interests for anyone who was in control of the content of the activity.







Marsha K. Millonig, MBA, RPh
President & CEO | Catalyst Enterprises, LLC

Marsha Millonig is the President/CEO of Catalyst Enterprises, LLC, a health care consulting practice helping clients achieve strategies for improved health outcomes. Marsha is also an associate fellow of the University of Minnesota College of Pharmacy's Center for Leading Healthcare Change.

Her BS in Pharmacy is from the University of Minnesota and her M.B.A. from the University of Maryland. She completed the American Society of Health System Pharmacy (ASHP) Executive Residency in Association Management.

She is a practicing pharmacist and pharmacist immunizer, working in community pharmacy. She's a published author. Her work, "100 MTM Tips for Pharmacists" is available as an e-book at the Apple Store, Amazon Kindle, Barnes and Noble and Kobo Canada.





## Pharmacist and Technician Learning Objectives

- 1. Describe why health literacy is a problem and discuss your team's role in helping diminish its impact.
- 2. Discuss the extent of limited health and medication literacy, its impact on patients' health, and how addressing it fits into the mission of pharmacy.
- 3. List several resources to learn more about limited health and medication literacy.
- 4. Explain tools and techniques to improve communication with patients.





#### What is Health Literacy?

- "The degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others"<sup>1</sup>
- Part of the Healthy People initiative by the Department of Health and Human Services



#### **Quick Poll**

## How many of you are aware of Healthy People?

https://health.gov/healthypeople





#### **Healthy People**

 Healthy People identifies public health priorities to help individuals, organizations, and communities across the United States improve health and well-being. Healthy People 2030, the initiative's fifth iteration, builds on knowledge gained over the first 4 decades.

Ongoing initiative

https://health.gov/healthypeople



#### Healthy People 2030 Priorities

 Advance health equity

 Increase health literacy  Address social determinants

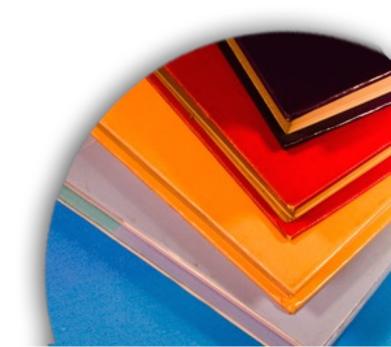
https://health.gov/healthypeople/priority-areas





#### Literacy...

 "Ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential."





#### What is Health Literacy?

- **Personal health literacy** is the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.
- Organizational health literacy is the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.





#### Why the Change?

- Emphasize people's ability to use health information rather than just understand it
- Focus on the ability to make "well-informed" decisions rather than "appropriate" ones
- Incorporate a public health perspective
- Acknowledge that organizations have a responsibility to address health literacy
- Prompt new ways of studying and promoting personal health literacy
- Encourage efforts to address the skills that help people move from understanding to action and from a focus on their own health to a focus on the health of their communities





- National Assessment of Adult Literacy, 2003
- 19,000 adults >16 years in homes
- >1,000 inmates in Federal/state prisons
- Measure health literacy on 0-500 scale on 4 levels





- Proficient—Able to perform complex activities such as searching a document to define a medical term or other information.
- Intermediate—Capable of conducting moderately challenging tasks such as finding the age range for a particular vaccine from a childhood vaccination chart.
- Basic—Able to complete simple tasks such as giving two reasons why a person should be tested for a specific disease, based on information in a clearly written pamphlet.
- Below Basic—Demonstrates the lowest levels of performance such as identifying what is permissible to drink before a medical test, based on a set of short instructions.
- Non-literate in English: those below basic level or who could not take the test because they did not speak English or Spanish.





- National Assessment of Adult Literacy, 2003
- Three information domain:
- Clinical—such as filling out a patient form
- Prevention—such as following guidelines for ageappropriate preventive health services
- Navigation of the health care system—such as understanding what a health insurance plan will pay for





- National Assessment of Adult Literacy, 2003
- To perform the health literacy tasks, individuals need to:
- Be familiar with everyday health-related words.
- Have experience with the type of written material (such as a drug label).
- Have knowledge of how the health care system works.



- 53% had intermediate health literacy (corresponding to 114 million adults)
- Another 12% had proficient health literacy (25 million adults)
- 22% had basic health literacy (47 million adults)

- 14% had below basic health literacy (30 million adults)
- 51% of those with below basic health literacy did not graduate high school

"Those...most in need of health literacy are those with poorest health."





- 89 million Americans lack sufficient health literacy to effectively execute needed medical treatment and preventive care
- Patients with more limited health literacy have less awareness of preventive health measures, less knowledge of their health conditions and self-care instructions
- May not understand link between lifestyle and health outcomes
- 41% of Hispanics, 24% of African Americans, and 9% of Whites have below basic health literacy skills.



#### Who Has Limited Health Literacy?









\*\*socioeconomic levels struggle with health literacy" –WSJ, July 2, 2009



#### **Risk Factors**

- Elderly
- Poor
- Minority groups
- Those who do not speak English during early childhood
- Unemployed
- Medicaid recipients
- USA born but limited English at home
- Socioeconomic status





## Reasons for Low Health Literacy Are Complex

- Lack of educational opportunities
- Some people have learning disabilities
- Cognitive decline in the older adults
- (Use it or lose it) Reading abilities drop if people do not keep up, usually 3-5 grade levels below last year of school completed
- Health status
- Many socioeconomic factors (income level, housing, access to care, etc.)





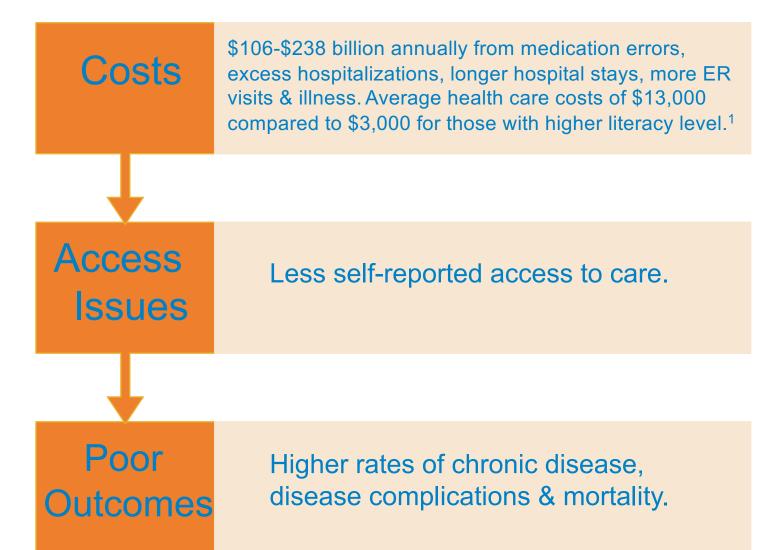
#### Why Important in Health Care?

- Patients with limited literacy have trouble:
  - Reading prescriptions
  - Following physician instructions
  - Interpreting and applying numbers to health situations
  - Communicating with healthcare providers
  - Integrating information





#### What Are the Results?





- Vernon JA, Trujillo A, Rosenbaum S, DeBuono B. Low Health Literacy: Implications for National Health Policy. <a href="https://hsrc.himmelfarb.gwu.edu/sphhs">https://hsrc.himmelfarb.gwu.edu/sphhs</a> policy facpubs/172/
- 2. National assessment of adult literacy 2003. In: Office of the Surgeon General (US); Office of Disease Prevention and Health Promotion (US). Proceedings of the Surgeon General's Workshop on Improving Health Literacy: September 7, 2006, National Institutes of Health, Bethesda, MD. Rockville (MD): Office of the Surgeon General (US); 2006. Available from: https://www.ncbi.nlm.nih.gov/books/NBK44257/

#### Helpful Resources

 Suboptimal or inconsistent communication is one of the top 3 root causes of sentinel safety events.

 Recent data from children's hospital: 156 health literacyrelated safety events in 9 months—4% of total

• Impact: inpatient(59%), outpatient (29%), ER (8%)



#### Helpful Resources

Medication-related were 53%

Health system process-related were 27%

Discharge/transition of care-related were 20%





#### **Medication-Related Events**

- Mistakes on admission due to poor medication reconciliation: patient received double dose for a week
- Unclear discharge instructions: patient returned to home dosing schedule instead of new schedule
- Multiple conflicting instructions
- Clinic administered medications: sibling given medication instead of patient

Morrison AK, Gibson C, Higgins C, Gutzeit M. Health Literacy-Related Safety Events: A Qualitative Study of Health Literacy Failures in Patient Safety Events. *Pediatr Qual Saf.* 2021 Jun 23;6(4):e425. doi: 10.1097/pq9.0000000000000425. PMID: 34235353; PMCID: PMC8225367.



#### **Literacy & Patient Safety**

- "Limited health literacy has been repeatedly linked to problems with the use of preventative services, delayed diagnoses, understanding of one's medical condition, adherence to medication instructions, self-management skills, health status and greater mortality risk."
- "There are many patient safety concerns that stem from whether health information was adequately communicated (or even made available) to patients and subsequently understood for appropriate follow-up."
- "Perhaps the most frequently noted safety issue connected to limited health literacy is the risk of medication errors..."





## Impact of Limited Health Literacy

- Less likely to obtain tests or follow-up
- More likely to have lower quality of life
- More likely to be hospitalized
- More likely to have poorer clinical outcomes
- More likely to hold beliefs that interfere with adherence





#### Why Address Health Literacy?

- In the absence of clear communication and access to services, we cannot expect people to adopt the health behaviors we champion.
- The promises of medical research, health information technology, and advances in health care delivery cannot be realized without also addressing health literacy.
- Limited health literacy is not an individual deficit but a systematic problem that should be addressed by ensuring that health care and health information systems are aligned with the needs of the public.





#### Reasons to Care

- Legal & Accreditation Requirements
- National Institutes of Health Revitalization Act
- JCAHO
- CMS Regulations

- Professional Obligation
  - Oath of a pharmacist
  - Pharmacist Code of Ethics





#### Legal & Accreditation Requirements

#### Numerous requirements & frameworks

- JCAHO: requirements for providing culturally and linguistically appropriate health care & support National Standards for Culturally and Linguistically Appropriate Services (CLAS)
- CMS: requires Medicaid service providers to render CLAS
- Medicare providers encouraged to provide bilingual services when necessary

#### Legal & Accreditation Requirements

#### CLAS: US Dept HHS Office of Minority Health Legal & Accreditation Requirements

- Framework for healthcare organizations to promote health equity and remove disparities for diverse populations
- 15 standards
- Offer language services to individuals with LEP at no cost
- Inform all individuals of availability of service in their preferred language verbally & in writing
- Ensure the competence of individuals providing those services
- Provide easy-to-understand print & multimedia materials & signage in the languages commonly used by populations served





#### Reasons to Care

- Legal & Accreditation Requirements
- National Institutes of Health Revitalization Act
- JCAHO
- CMS Regulations

- Professional Obligation
  - Oath of a pharmacist
  - Pharmacist Code of Ethics

American College of Clinical Pharmacy, O'Connell MB, Korner EJ, Rickles NM, Sias JJ. Cultural competence in health care and its implications for pharmacy. Part 1. Overview of key concepts in multicultural health care. *Pharmacotherapy*. 2007;27(7):1062-1079. doi:10.1592/phco.27.7.1062





#### Oath of a Pharmacist

Revised 11-2021, adopted by American Association of Colleges of Pharmacy (AACP) and the American Pharmacists Association (APhA)

- "I promise to devote myself to a *lifetime of service to others* through the profession of pharmacy. In fulfilling this vow:
- I will consider the welfare of humanity and relief of suffering my primary concerns.
- I will promote inclusion, embrace diversity, and advocate for justice to advance health equity.
- I will apply my knowledge, experience, and skills to the best of my ability to assure optimal outcomes for all patients.
- I will respect and protect all personal and health information entrusted to me.





#### Oath of a Pharmacist

Revised 11-2021, adopted by American Association of Colleges of Pharmacy (AACP) and the American Pharmacists Association (APhA)

- I will accept the responsibility to improve my professional knowledge, expertise, and self-awareness.
- I will hold myself and my colleagues to the highest principles of our profession's moral, ethical and legal conduct.
- I will embrace and advocate changes that improve patient care.
- I will utilize my knowledge, skills, experiences, and values to prepare the next generation of pharmacists.
- I take these vows voluntarily with the full realization of the responsibility with which I am entrusted by the public."





#### **Pharmacist Code of Ethics**

 Pharmacists are health professionals who assist individuals in making the best use of medications. This Code, prepared and supported by pharmacists, is intended to state publicly the principles that form the fundamental basis of the roles and responsibilities of pharmacists. These principles, based on moral obligations and virtues, are established to guide pharmacists in relationships with patients, health professionals, and society.





### **Pharmacist Code of Ethics**

- Covenantal relationship between pharmacist & patient
- Promote good of every patient with caring & compassion
- Respect patient's autonomy & dignity
- Acts with honesty & integrity
- Respects values & abilities of colleagues and other health professionals
- Serves individual, community & societal needs
- Seeks justice in the distribution of health resources



### Common Vision for Pharmacists...





# Pharmacy Literacy & Numeracy Skills





### **Pharmacy Literacy**

- Patients with low literacy were 3.4 times less likely to interpret prescription medication warning labels correctly
- 78% misinterpret warnings on labels
- Patient understanding of prescription labels ranged from 53% for the least understood to 89% for the most commonly understood label
- 42% don't understand "take medication on an empty stomach"

Davis TC, Wolf MS, Bass PF 3rd, Middlebrooks M, Kennen E, Baker DW, Bennett CL, Durazo-Arvizu R, Bocchini A, Savory S, Parker RM. Low literacy impairs comprehe prescription drug warning labels. J Gen Intern Med. 2006 Aug;21(8):847-51. doi: 10.1111/j.1525-1497.2006.00529.x. PMID: 16881945; PMCID: PMC1831578.



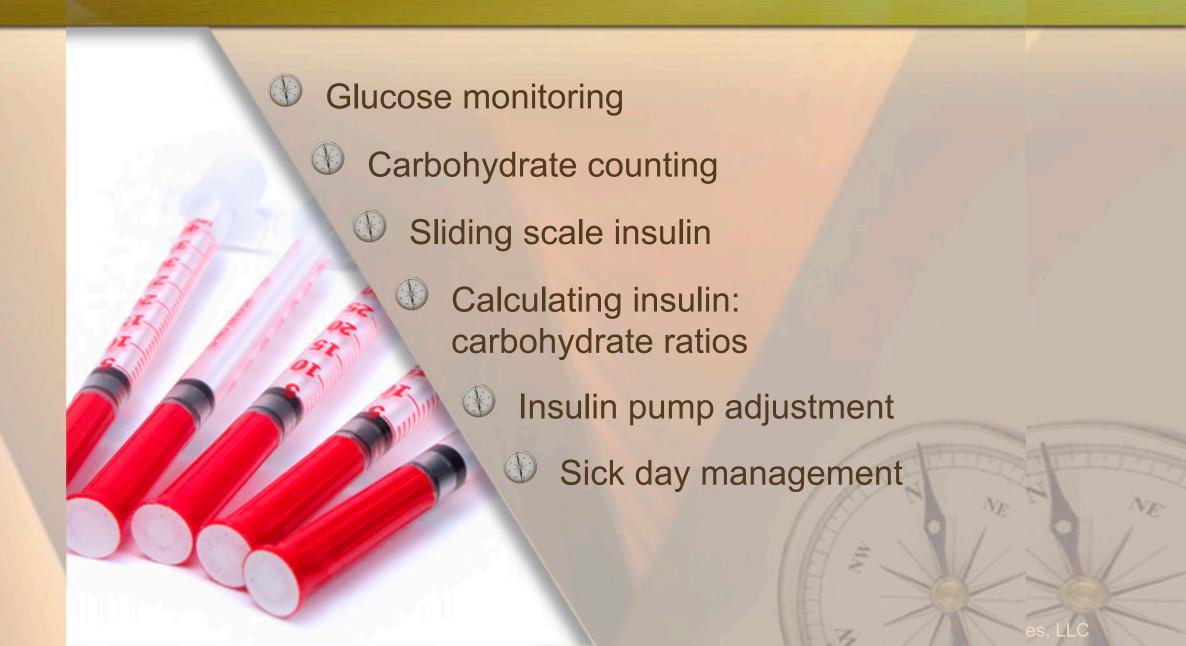
### What is Numeracy?

- Ability to master and use numbers and math skills in daily life
- Appropriate use of medicines and dosing require numeracy skills





### Example: numeracy skills needed in diabetes





### **Examples**

 A two-year-old is diagnosed with an inner ear infection and prescribed an antibiotic. Her mother understands that her daughter should take the prescribed medication twice a day. After carefully studying the label on the bottle and deciding that it doesn't tell how to take the medicine, she fills a teaspoon and pours the antibiotic into her daughter's painful ear (Parker et. al., 2003).



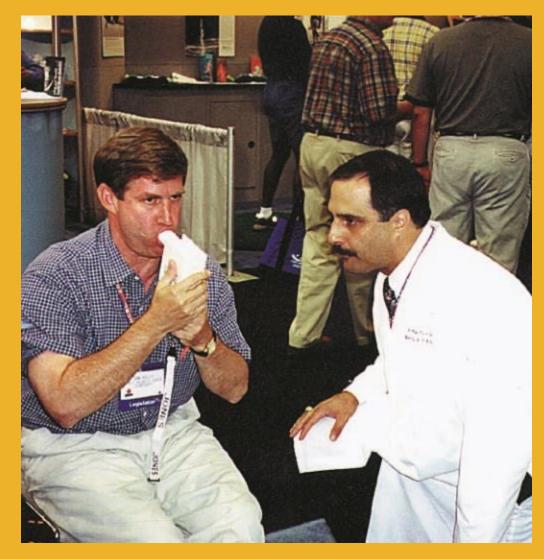


### **Examples**

 Mr. G a 45 year-old Hispanic immigrant, native Spanish language speaker, has a job health screening. He is told his Blood Pressure is high and he can't work until it's controlled. He is given a ß-blocker and a diuretic and is instructed to take each "once a day." One week later he presents to the ED – he is dizzy with a very low BP. Docs can't figure out what going on. A Spanish interpreter asks him how many pills he took each day. "22," says Mr. G. (In Spanish, once means 11.)



# What examples can you share from your practice?







# Patients May Need Your Help with Specific Tasks:

- Evaluating information for credibility and quality
- Analyzing risks and benefits
- Calculating dosages
- Interpreting test results
- Locating health information



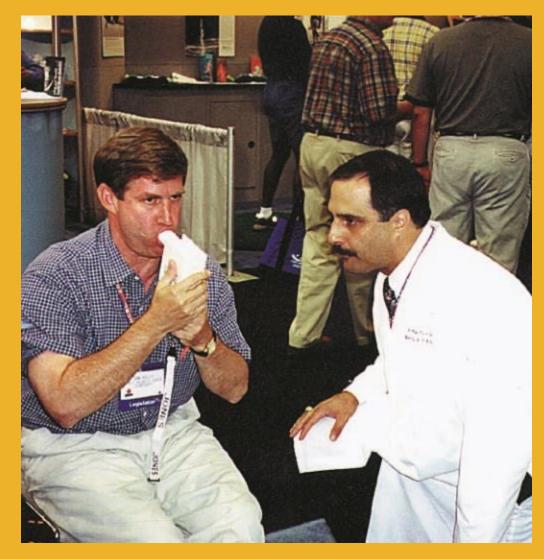


# Clues that Someone May Need Help

- Incomplete or inaccurate forms
- Written materials handed to another
- Noncompliance with medication regimens
- Lack of follow through
- Patients claim taking meds, but tests and signs say otherwise
- "I forgot my glasses, will you read this to me?"
- Inability to name medicine or how to use it



# What examples can you share from your practice?







# Who is Responsible for Improving Health Literacy?

- Public health professionals?
- Healthcare and public health systems?
- The government?
- The prescriber?
- YOU?







# What Skills are Needed to be Better Health Literates Today?

- Visually Literate: Able to understand graphs or other visual information
- Computer Literate: Able to go to web sites where someone sends them
- Information Literate: Able to obtain relevant information
- Numerically Literate: can calculate or reason numerically
- Orally Literate: Can articulate and ask accurately as well as understand spoken medical advice
- Can make reasonable decisions in an era of shared responsibility





### **Assessing Literacy**

- Don't ask directly or ask educational status
- Quick techniques
  - Ask to read pill bottle and explain how to use
  - Can sign name?
- Validated techniques
  - REALM (Rapid Estimate of Adult Literacy in Medicine)
  - TOFHLA (Test of Functional Health Literacy in Adults)





### Some Tools

- https://www.ihi.org/resources/Pages/Tools/Ask-Me-3-Good-Questions-for-Your-Good-Health.aspx
- What is my main problem?
- What do I need to do?
- Why is it important for me to do this?





### The "Newest Vital Sign"

https://www.pfizer.com/products/medicine-safety/health-

### A Health Literacy Assessment Tool for Patient Care and Research

The Newest Vital Sign (NVS) is a valid and reliable screening tool available in English and Spanish that identifies patients at risk for low health literacy. It is easy and quick to administer, requiring just three minutes. In clinical settings, the test allows providers to appropriately adapt their communication practices to the patient's health literacy level. Researchers have used the instrument to measure health literacy and evaluate the impact of low health literacy on a variety of health outcomes.

The *Newest Vital Sign* is one of Pfizer Inc.'s most important contributions to the health literacy movement and has been researched extensively by health literacy experts. In a recent systematic review<sup>1</sup>, the NVS performed moderately well in identifying patients with limited literacy.

### How Does the *Newest Vital Sign* Work?

The *Newest Vital Sign* is based on a nutrition label from an ice cream container. Patients are given the label and then asked 6 questions about it. Patients can and should refer to the label while answering questions. The questions are asked orally and the responses recorded by a health care provider or researcher on a special score sheet, which contains the correct answers. Based on





## Are You Ready?

Nutrition Facts Serving Size Servings per container	1/2	cup 4
Amount per serving		
Calories 250	Fat Cal	120
	9	6DV
Total Fat 13g	2	20%
Sat Fat 9g	4	10%
Cholesterol 28mg	4	12%
Sodium 55mg		2%
Total Carbohydrate 30	g 1	12%
Dietary Fiber 2g		
Sugars 23g		
Protein 4g		8%
*Percentage Daily Values (DV 2,000 calorie diet. Your daily v be higher or lower depending of calorie needs. Ingredients: Cream, Skim Sugar, Water, Egg Yolks, Brow	values may on your Milk, Liquid	07





### Questions

- If you eat the entire container, how many calories will you eat?
- If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have?
- Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day?





### Questions

- If you usually eat 2500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving?
- Is it safe for you to eat this ice cream?
- (Ask only if patient says "no" to question five. Why not?)





### What Can You Do?

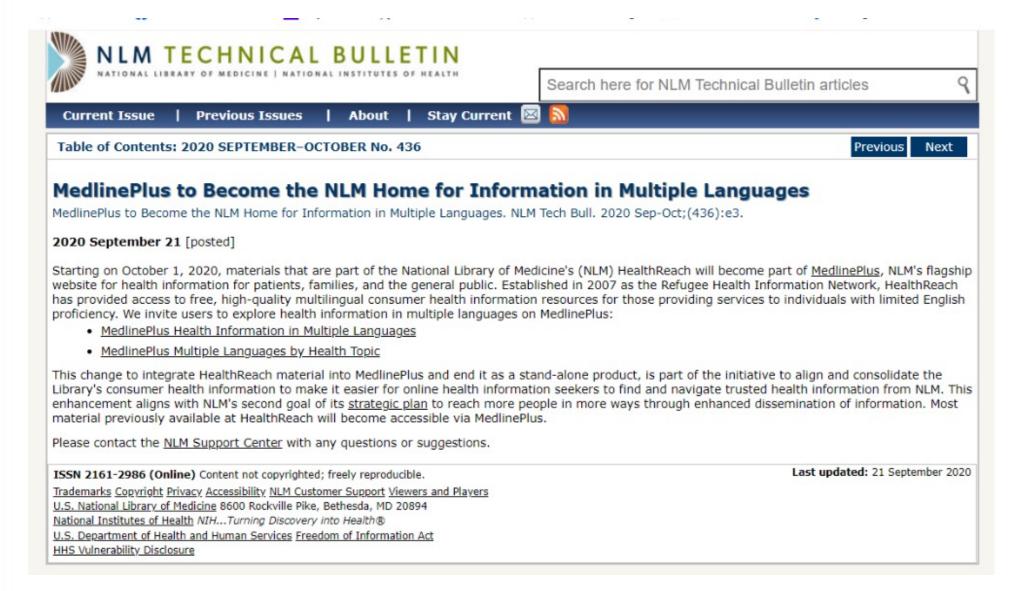
- Use limited literacy and picture-based materials
- Provide individualized education
- Teach concepts simply
- Use teach-back techniques
- If patients agrees, include family members and/or caretakers







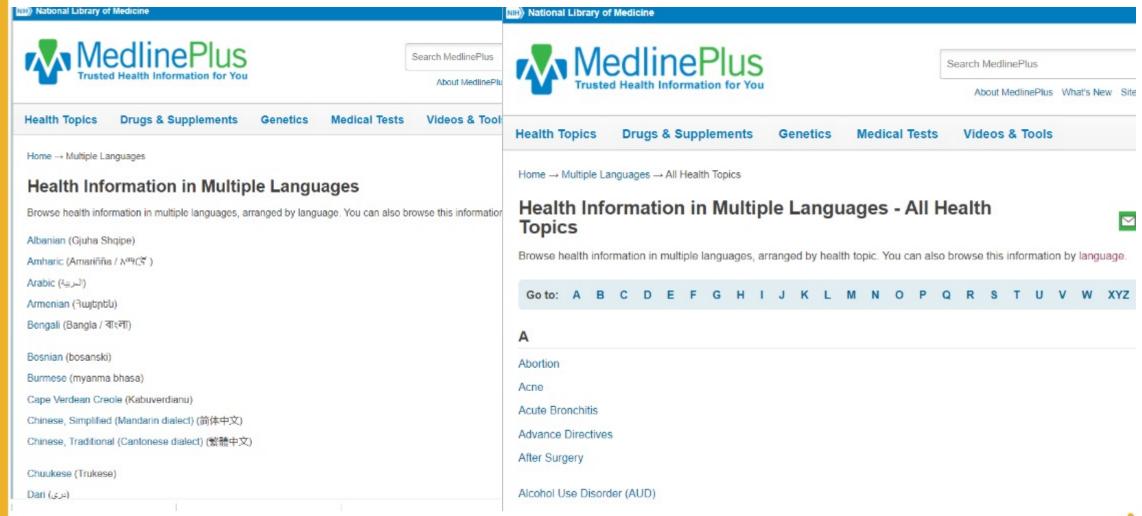
### **Medline Plus**







### **Medline Plus**



https://medlineplus.gov/languages/languages.html https://medlineplus.gov/languages/all\_healthtopics.html





### **AHRQ**

For more information about the AHRQ-funded trial of patient-centered labels that used these instructions, view the article, "Rationale and design of a randomized trial to evaluate an evidence-based prescription drug label on actual medication use." The abstract is available from <a href="http://www.ncbi.nlm.nih.gov/pubmed/20647058">http://www.ncbi.nlm.nih.gov/pubmed/20647058</a>.

ENGLISH	CHINESE
Take 1 pill at bedtime	睡前服一粒藥丸
Take 2 pills at bedtime	睡前服兩粒藥丸
Take 3 pills at bedtime	睡前服三粒藥丸
Take 1 pill in the morning	早上服一粒藥丸
Take 2 pills in the morning	早上服兩粒藥丸
Take 3 pills in the morning	早上服三粒藥丸
Take 1 pill in the morning and 1 pill at bedtime	早上服一粒藥丸和 睡前服一粒藥丸
Take 2 pills in the morning and 2 pills at bedtime	早上服兩粒藥丸和 睡前服兩粒藥丸
Take 3 pills in the morning and 3 pills at bedtime	早上服三粒藥丸和 睡前服三粒藥丸
Take 1 pill in the morning 1 pill at noon and 1 pill in the evening	早上服一粒藥丸 中午服一粒藥丸和 傍晚服一粒藥丸 Back to Top 🔷





### LaRue



**(**612) 760-0905

Home ESL Print Materials

Classroom Materials

Math Materials

LaRue Reading Ski

Basic Literacy Skills

Adult Phonics Stories

**Environmental ESL Exercises** 

Health Lit

#### Printable Medical Literacy Learning Activities:

Nutrition:

- 🖪 English
- Arabic
- 🖪 Hmong
- o 🖟 Somali
- o 🔁 Spanish

Diabetes:

- English
- Arabic
- 🖪 Hmong
- 🔁 Somali
- 🖪 Spanish

High Blood Pressure:

- English
- 🖟 Arabic
- 🖪 Hmong
- o A Somali
- o 🖟 Spanish

Quiz:

- Ouiz 1 Nutrition
- Quiz 2 Nutrition

- o 🔁 Quiz 5 Diabetes
- Diabetes

- Quiz 7 High blood pressure
- Quiz 8 High blood pressure





### **CMS**

#### ةيبرعلا Arabic

Topic	Resource Type	Туре
Coverage to Care-Consumer Resources	5 Ways to Make the Most of Your Health Coverage (PDF)	PDF
	A Roadmap to Better Care and a Healthier You	PDF
	A Roadmap to Better Care and a Healthier You - 8.5" x 11"	PDF
	Coronavirus and Your Health Coverage: Get the Basics (PDF)	PDF
	Stay Safe: Getting the Care You Need, at Home (PDF)	PDF
Health Insurance Marketplace: Publications (brochures, posters, fact sheets, etc.)	The Value of Health Insurance (brochure)	PDF
	Things to Think About When Choosing a Plan (handout)	PDF
	Get Help in Your Language	PDF



# Resources to Help Addressing cross-cultural communication

- What are your organization's specific resources?
- Translation services?
- Example of on-demand translating service: Martti, https://www.martti.us/
- Multilingual staff, telephone or internet translation, patient's family or friends
- Prescription label and information options?
- Pictograms: USP has library of standardized graphic images that help convey medication instructions, precautions, and/or warnings to patients and consumers.
- https://www.usp.org/health-quality-safety/usp-pictograms





### **Communication Tips**

- Use open-ended questions (e.g. like the Ask Me 3)
- Be empathetic-try to see the situation from the patient's point of view



- Avoid jargon, especially with medical terms:
  - Instead of "prior auth" say the doctor needs to provide more information to your insurance company
  - Instead of endocrinologist say the doctor you see for your diabetes
  - Instead of statin say medicine to lower your cholesterol
  - Other examples in your day to day practice?
- Use the teach-back technique and look for patient understanding





### Teach-Back Technique

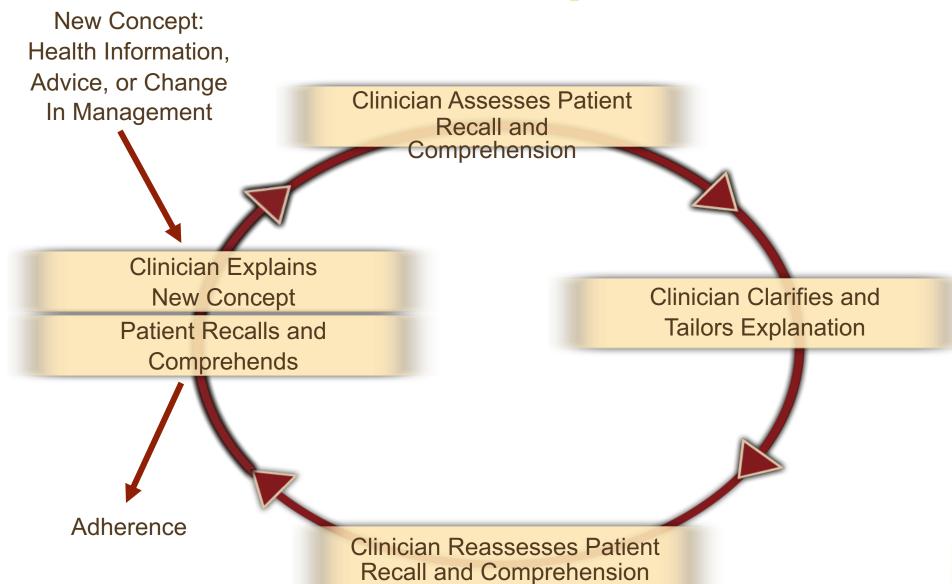
- Ask patients to repeat instructions
- It's not a test of them, but of you
- If patient can't repeat, then rephrase







### Teach-Back Technique





### Individualized Education...

- Limit advice to key concepts
- Focus on behaviors and actions
- Simplify concepts
- Details:
  - One concept at a time
  - Partition information
  - Use concrete terms and examples
  - Make info culturally relevant and personal







# Teach Concepts in a Simple Manner

- Beware of words with multiple meanings
- Avoid acronyms or new words
- Use idioms carefully
- Provide a context for numbers







### Use the LEARN Technique

- Listen: assess patient understanding of their health condition, causes & possible treatments
- Explain: your perceptions of the condition
- Acknowledge: respect differences between views and try to predict any therapy issues
- Recommend: treatment plan for patient
- Negotiate: reach agreement on plan together





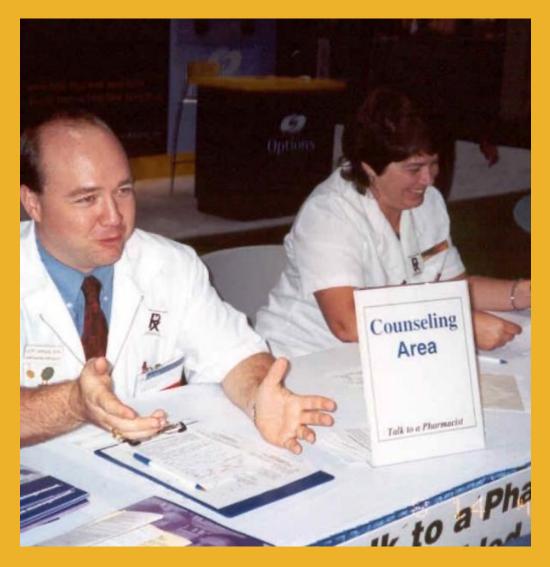
### Other Tips...

- Take a pause
- Be an active listener
- Address quizzical looks
- Create supportive environment
- http://aspiruslibrary.org/literacy/PfizerPrinciples.pdf





# What tips do you have to share?



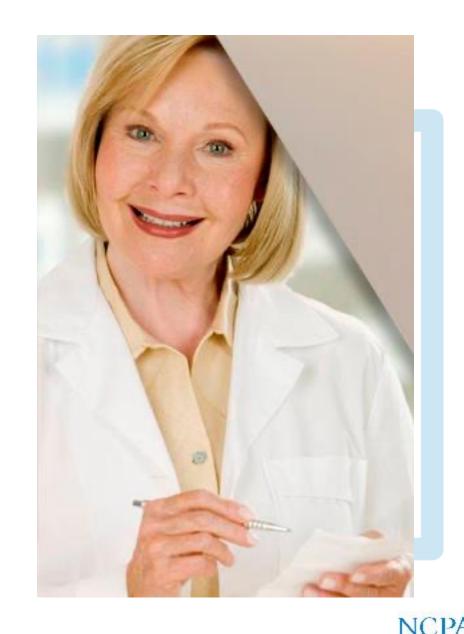


## Game Plan

Understand the issues

Have an action plan

Share the plan with the pharmacy team





### Let's take 5 to start a plan!

- Take a minute
- Write down one goal related to health literacy you want to implement in your practice
- Write 1-2 action steps with measurable time frames



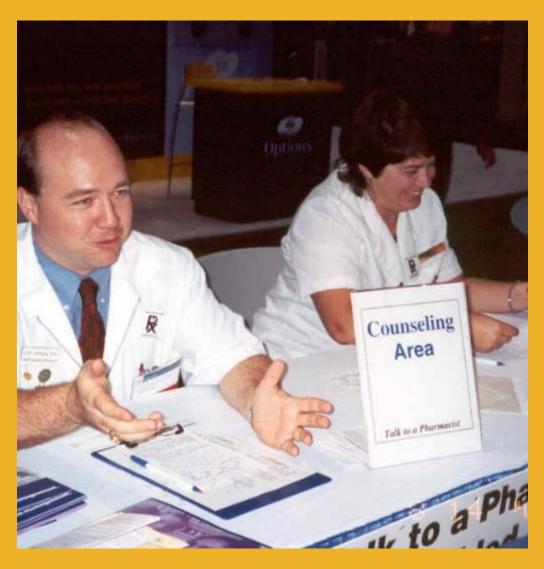


### **Incorporating Health Literacy...**

- ...into your professional practice
- Sample action plan: health literate care model
- https://health.gov/our-work/ national-health-initiatives/health-literacy/ health-literate-care-model

- Health Literate Care Model A Universal Precautions Approach al Improved Outcomes
- Clear communication: <a href="https://www.nih.gov/institutes-nih/nih-office-director/office-communications-public-liaison/clear-communication/resources-effective-health-communication">https://www.nih.gov/institutes-nih/nih-office-director/office-communications-public-liaison/clear-communication</a>
   Clear communication: <a href="https://www.nih.gov/institutes-nih/nih-office-director/office-communications-public-liaison/clear-communication/clear-communication/clear-communication/effective-health-communication</a>
- Select the project
- Craft 1-2 goals

# Who is willing to share?







### Other Helpful Resources

- https://www.nih.gov/institutes-nih/nih-office-director/officecommunications-public-liaison/clear-communication
- https://health.gov/our-work/national-health-initiatives/healthliteracy
- https://health.gov/our-work/national-health-initiatives/healthliteracy/consumer-health-content
- https://health.gov/our-work/national-health-initiatives/healthliteracy/consumer-health-content/free-web-content
- Ten Attributes of Health Literate Health Care Organizations, <a href="https://www.ahrq.gov/health-literacy/publications/ten-attributes.html">https://www.ahrq.gov/health-literacy/publications/ten-attributes.html</a>





### Helpful Resources

### https://www.cdc.gov/healthliteracy/

Welcome to CDC's health literacy website. This site is for health communicators, public health professionals, and community leaders who seek information and tools on health literacy research, practice, and evaluation.

We aim to bring you timely information about the work of CDC and other organizations to improve health literacy. CDC's work aligns with the goals and strategies of the <u>National Action Plan to Improve Health</u> <u>Literacy</u>, CDC's <u>Action Plan to Improve Health Literacy</u> and the federal <u>Plain Writing Act</u> .

Sign up for our weekly health literacy updates. Please visit us often and let us know what information you'd like to see on the site.

#### CREATE A PLAN

Planning tools and examples, including the National Action Plan and CDC's action plan...

#### **COLLABORATE**

Resources for working with health care providers, libraries, schools, community organizations & cooperative extensions...

**GUIDELINES, LAWS, & STANDARDS** 

#### **DEVELOP & TEST**

Audience research, culture, plain language resources, visual communication...

#### RESEARCH

Federally funded research, evidence reviews, and research summaries...

#### **EVALUATE**

#### Connect with Us

Subscribe to Health Literacy Weekly update

Email Us

#### **Health Literacy Activities by State**

Alabama Minnesota

Alaska Missouri

Arizona Montana

Arkansas New Mexico

California North Carolina



### Marsha K. Millonig, MBA, BPharm

President & CEO
Catalyst Enterprises, LLC
mmillonig@catalystenterprises.net





# The *voice* of the community pharmacist.

www.ncpa.org

Follow us on social media



