



Patient Teaching Strategies and Health Literacy



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10/4/2025




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Objectives

- Define health literacy and numeracy and understand their significance in oncology nursing practice.
- Understand the concept of *Universal Precautions* in health literacy and why it is best practice.
- Leave equipped with practical strategies to communicate complex cancer-related information clearly and effectively to patients and families.

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About Me

- Physical Therapist
- Froedtert Health
- Advanced Pain
- UW Health
- Pelvic Floor

- Patient Education Specialist
- Health Literacy Committee Lead






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Financial Disclosures

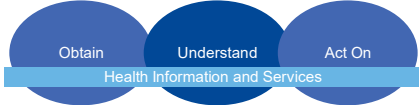
- I do not have any financial conflicts to disclose.






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What is Health Literacy?

- Personal health literacy** – the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others (NIH, 2025¹).



- Organizational health literacy** – the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions. (NIH, 2025¹)

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Impact of Health Literacy

A national survey showed that 88% of U.S. adults do not have the health literacy skills needed to manage all the demands of the current health care system, and 36% have limited personal health literacy. (AHRQ, 2008²)


Low health literacy is considered a key source of economic inefficiency in the U.S. health care system. It is estimated that inadequate health literacy adds \$106-238 billion cost to the health care system representing 7-17% of all personal health care expenditures. (Shahid, 2022³)

Risk vs Asset⁴:

- "Risk"**: explores the impact of health literacy on individual and health system outcomes.
 - Health literacy in this context is used to describe an individual's literacy skills.
 - Low health literacy is seen as a risk factor that must be compensated for.
- "Asset"**: views health literacy as an asset to be built.
 - More than just functional skills (reading).
 - Includes the development of more advanced social and communication skills as a means of increasing patient empowerment.


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Health Literacy Clips

Full Videos:

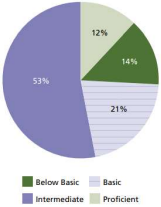
- AHRQ Health TV: Asking Questions: https://youtu.be/MEF_d0KaiQg
- ACP Foundation Health Literacy Video: https://youtu.be/evnevd_2Qeef?m=C-XdMYAULLB9VYZ
- Health and the City: <https://youtu.be/1C0jWV4607h?m=US18VW-846o3a>

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Importance of Health Literacy

Adult Health Literacy Levels: 2003



Health Literacy Level	Task Examples	Percentage
Proficient	Using a table, calculate an employee's share of health insurance costs for a year.	12%
Intermediate	Read instructions on a prescription label, and determine what time a person can take the medication.	53%
Basic	Read a pamphlet, and give two reasons a person with no symptoms should be tested for a disease.	21%
Below Basic	Read a set of short instructions, and identify what is permissible to drink before a medical test.	14%


U.S. Department of Education, Institute of Education Sciences, 2003 National Assessment of Adult Literacy²

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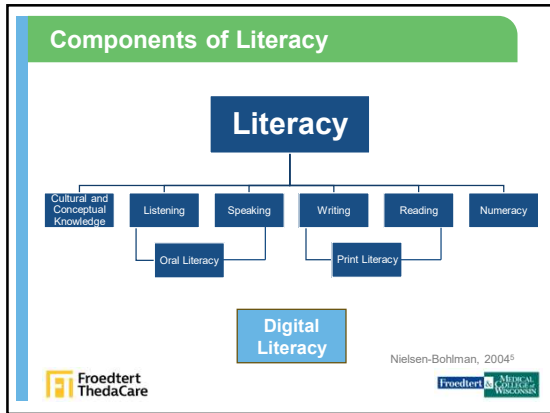
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Myth 1

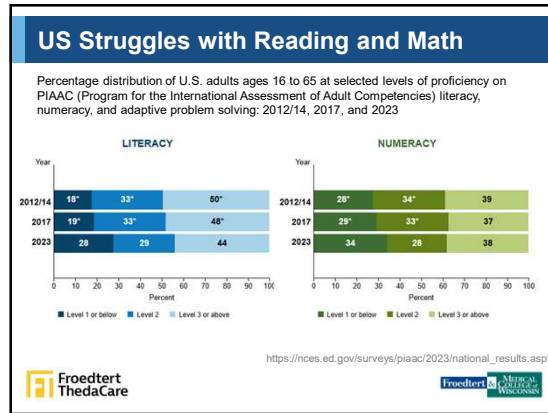
Health Literacy is just about reading.

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Numeracy Example

National Assessment of Adult Literacy 2003

Question:
Refer to the medicine label to answer the following question.
The patient forgot to take this medicine before lunch at 12:00 noon. What is the earliest time he can take it in the afternoon?

GARFIELD, Robert M. 16 Apr 01
Dr. LUBIN, Michael
DOXYCYCLINE
100 MG

Take one tablet on an empty stomach one hour before a meal or two to three hours after a meal unless otherwise directed by your doctor.

40% got this wrong.

<https://nces.ed.gov/NAAL/sample.asp>



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Numeracy

The ability to understand and use numbers and data.

- Don't choose precision over reliability.
 - ✗ 25.7% of patients experience X side effect.
 - ✓ 1 in 4 patients experience X side effect.
- Make it personal – there is a natural tendency to exclude ourselves from risk.
 - ✗ There is a 33.3 % chance of X with your condition.
 - ✓ You have a 1 in 3 chance of X with your condition.
- Avoid large abstract numbers.
 - ✗ 82.5 million U.S. males may get X.
 - ✓ Half of the males in the U.S. may get X.

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Myth 2

Not *my* Patients.




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What about Oncology Patients?



Patients with cancer are expected to understand complicated information about their diagnosis and management.

They must:

- learn a new language of health terminology.
- provide consent for treatments and procedures.
- arrive at the right time and place for their appointments.
- seek help in an appropriate way and in a timely manner.

Health literacy is integral to this.



Holden, 2021⁴

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The Role of Health Literacy in Cancer Care



- Mixed Studies Systematic Review
- Holden CE, Wheelwright S, Harle A, Wagland R. The role of health literacy in cancer care: A mixed studies systematic review. *PLoS One*. 2021 Nov 12;16(11):e0259815. doi: 10.1371/journal.pone.0259815.⁴
- 66 papers related to 60 studies met criteria:
 1. Patients aged ≥18 years with cancer
 2. English language publication
 3. AND health literacy measured with validated tool and measured outcome associated with health literacy
 - OR qualitative study exploring the role of health literacy as patients make decisions about health.

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The Role of Health Literacy in Cancer Care

<p>Lower HL associated with:</p> <ul style="list-style-type: none"> • Lower ease of understanding • Poorer quality of life • More grade 3 and above adverse drug reactions with chemotherapy • Increased number and length of hospital admissions • Lower levels of physical activity • Significantly increased upper extremity disability after breast cancer • Higher cancer-related and unexpressed needs • Increased likelihood of need for psychological support • Increased fear of progression, higher fear of recurrence • Greater treatment regret • Increased cancer treatment related financial hardship • Lower self-care management scores 	<p>Higher HL associated with:</p> <ul style="list-style-type: none"> • Higher information recall • Greater disease specific knowledge • Greater prostate cancer knowledge in patients with the disease • Trials knowledge and chemotherapy knowledge • Increased odds of receiving adjuvant chemotherapy for stage III/IV colorectal cancer • Increased likelihood of reconstruction after mastectomy • Higher treatment continuity • Higher levels of adherence with medications • Greater preference for patient-centered care • Increased patient engagement and self-efficacy • More likely to report willingness to participate in a clinical trial if one was offered • Reporting significantly fewer practical concerns
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Health literacy in cancer care: systematic review

- C. Ryman, C. Warnicke, S. Hugosson, A.-B. Zakrisson, K. Dahlberg, Health literacy in cancer care: A systematic review. *European Journal of Oncology Nursing*, Volume 70, 2024, 102582, doi.org/10.1016/j.ejon.2024.102582⁵

<p>Inclusion criteria (15):</p> <ul style="list-style-type: none"> ▪ Patients aged ≥18 years with current cancer ▪ Used a validated HL instrument ▪ Written in English ▪ Conducted between Dec 2009 and Sept 2023 ▪ Peer Reviewed, available in full length ▪ Conducted as a randomized controlled trial or observational study 	<p>Exclusion criteria (From 5, 751 unique studies):</p> <ul style="list-style-type: none"> ▪ Qualitative Studies and systematic reviews ▪ Studies concerning public health or health promotion ▪ Studies including cancer survivors (> 5 years) and terminal patients
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Health literacy in cancer care: systematic review

- Oncology patients at higher risk of limited HL, those with:
 - several comorbidities
 - advanced cancer stage
 - educational attainment less than college
 - economic vulnerability
- Elderly patients (≥65 years) seem to have higher risk of limited HL compared with younger patients.
 - Correlation weakens in multivariable analyses when including education and annual income.
 - Risk of misclassification exists among elderly because of age-related disabilities such as hearing and vision loss, and/or higher incidence of comorbidities that may negatively influence HL.
- Limited HL is prevalent in the cancer population and should be acknowledged in everyday practice to meet health equity.
- Awareness about sociodemographic factors and its association with HL, may enhance adherence to cancer treatment and quality of life, and lower physical and emotional distress.

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Myth 3

I only need to worry about Health Literacy with my lower educated patients.

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Use Clear Communication with Every Patient

Health Literacy in the United States

Level	Percentage
Below Basic	12%
Basic	21%
Intermediate	53%
Proficient	14%

Nearly 9 out of 10 adults have difficulty using everyday health information.

Limited health literacy affects:

- All racial and ethnic groups.
- People of all ages.
- Highly educated people.

Source: U.S. Department of Education, Institute of Education Sciences, 2003 National Assessment of Adult Literacy*

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Universal Precautions



Structure health information and the delivery of care as if everyone may have limited health literacy.

- You can't tell by looking who is understanding. (Coleman, Hudson, Maine, 2013⁹)
- People hide their lack of understanding due to shame. (Parikh, 1996¹⁰)
- A promising way to reduce systemic inequities and disparities. (Coleman, 2023¹¹)

Like blood safety, precautions should be taken with EVERY patient as we do not know who is challenged by health information even if they typically manage it well.


- **Health Literacy is a state, not a trait.** Patients may have a harder time if they are tired, sick, anxious, overwhelmed, etc.

Everyone appreciates information that is clear and easy to understand.

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Clear Communication



- Use plain, non-medical language (no jargon).
- Slow down.
- Be specific and concrete.
- Use pictures.
- Show how it's done.
- Use teach-back.
- Get a qualified interpreter.
- Engage with your patients.
 - Be respectful and caring.
 - Invite patient participation.
 - Listen actively.
 - Encourage questions.
- Limit content and reinforce key points.

[Communicate Better with Patients FINAL - YouTube](#)


AHRQ Health Literacy Universal Precautions Toolkit, Tool 4¹²

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Pause, Listen, and Do Not Interrupt


Listen for 60 seconds.





Patients are interrupted by their providers in the first 11 to 18 seconds of telling their story.

79 percent of diagnostic errors are related to the patient-clinician encounter.

(Singh Ospina, 2019¹³)




Toolkit for Engaging Patients To Improve Diagnostic Safety



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Do Not Use Technical Terms, Acronyms, Medical Jargon



Say	Not	Say	Not
Pain killer	Analgesic	Use	Utilize
Swelling	Inflammation	Enough	Sufficient
Feverish	Febrile	Helpful	Beneficial
Wound	Lesion	Make worse	Exacerbate
Injury	Insult	Come back	Recur
If you need it	PRN	About	Regarding
High blood pressure	Hypertension	Flare up	Exacerbation
		Not changing	Stable

Plain Language Resources: [Plain Language Medical Dictionary](#)
[Plain language thesaurus for health communications](#)

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Limit Content: Stop Information Overload



What to know

- On average patients remember **50%** of information shared.
- So, **50%** is immediately forgotten.
- Half** of hospitalized patients don't know what their main problem is.

What to do


- Limit yourself to **1-3 key points** and reinforce them.
- Focus on what patients **need** to know and do.


Kessels 2003¹⁴, McCarthy 2012¹⁵, Chappuy 2012¹⁶, Horwitz 2013¹⁷, Makaryus & Friedman, 2005¹⁸, Olson & Windish, 2010¹⁹






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Write Effectively and Use Easy-to-Understand Materials





Messages


Directions




Instructions


Forms


Educational Materials

Hallmarks of easy-to-understand writing:



- Clear purpose, logical flow.
- Everyday language, no jargon, active voice.
- No distracting content, visuals reinforce messages.
- Make numbers easy.
- Short sections, informative headings, large font size, bulleted lists, short lines, white space.

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Myth 4

Teach-back takes too much time.

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Teach Back Does NOT Take More Time.

Teach back takes 1 minute on average – same as usual care.



Teach back is associated with improved:

- Knowledge and understanding
- Adherence to treatment
- Self-management
- Control of diabetes
- Self-efficacy

And decreased readmissions by 45% (Oh, 2023²⁰)

Among cancer patients:

- Increased happiness
- Decreased uncertainty
- Increased self-efficacy
- Increased self-management behavior
- Improved symptom experience
- Less distress, anxiety
- Improved health literacy (Choi, 2021²¹)

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Some of Our Recent Quality Improvement Projects



Prostatectomy Pre-Op Educational Video Series:
Patients watch a video series before their scheduled RN education visit.

Early Results:

- Decreased RN appt duration (freeing up time for other tasks) without measurable adverse effect in call volume, ED or IP stay
- Improved quality of conversation, more teach-back opportunity/time

Pre-op CHG Wipe use with standardized workflow:

- Including instructions with clear communication and QR code to video
- Improved compliance with CHG wipe use

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Thank You!
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