

Identifying and Assisting Patients with Limited 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.”¹

What is Health Literacy¹

- Not just the ability to read and process information
- Includes proficiency in the following skills
 1. Ability to locate necessary health info
 2. Ability to analyze available health related information in terms of quality, credibility, and relevance
 3. Ability to read and understand test and lab results
 4. Ability to weigh the risks and benefits of medications, treatment plans, or procedures
 5. Ability to calculate correct dosages for medications, and carry out treatment plans correctly

Effects of low Health Literacy

- Low health literacy is associated with persons having a higher risk of hospitalization, more use of expensive health care services including emergency care, and a general use of more health care services compared to those with higher health literacy.¹
- Persons with low health literacy were less likely to use preventative care and reported an overall poorer health condition.¹
- Patient costs for inpatient care increased by about \$933 for those with low health literacy.⁴
- Individuals with limited health literacy were more likely to have poorer disease outcomes.²
- Health literacy and cognitive abilities are both predictors of mortality. Individuals with lower health literacy have increased rates of mortality.⁵

Effects of low Health Literacy

- In individuals with type 2 diabetes limited health literacy is associated with poorer glycemic control.²
- Low verbal literacy was strongly correlated with lack of knowledge concerning their condition in asthma patients. Low verbal literacy was also strongly correlated with improper dosing and inhaler usage.³

Factors that contribute to low Health Literacy¹

- Cognitive decline (especially true for older adults)
- Low level of education
- Learning disabilities
- Not reading or using verbal literacy skills regularly
- Having different cultural norms/not speaking the native language well where patient is getting care

Symptoms that a patient may have low health literacy¹

- Patient registration forms are not filled out correctly or are incomplete
- The patient says they will fill out forms at home and return them later
- The patient gives a relative their health forms to fill out
- The patient seems withdrawn or absentminded when the healthcare provider is explaining something
- When asked to explain their treatment plan or medication dosages the patient fails to do so correctly
- The patient regularly misses appointments
- The patient is often considered “noncompliant” in that he/she often makes errors regarding medication dosages or proper treatment plan protocol

It is the responsibility of the Healthcare provider

- Patients can not rid themselves of the causative factors of their low health literacy overnight
- Additionally giving them instructions to do something in addition to their treatment plan may make things overcomplicated for such patients since they are likely already having problems in that regard
- Many may have trouble utilizing the available resources for them anyways, which often require good verbal skills, or acquaintance with technology usage
- Patients often are ashamed and try to hide their limited literacy

When should A Healthcare provider advocate these resources

- Patients that present with either the causative factors for limited health literacy and/or if they display the symptoms that may indicate its presence can be given/guided to the appropriate resources.

Newest Vital Sign assessment tool (Pfizer)⁷

- Takes 3 min
- English and Spanish available
- Assesses general health literacy and numeracy
- High sensitivity and moderate specificity for detecting limited literacy⁶
- Acceptable for clinical use, but may yield false positives
- Not associated with health outcomes⁶
- Uses an ice cream label
- Available for free download at
- <http://www.pfizerhealthliteracy.com/physicians-providers/NewestVitalSign.aspx>
- There is also a patient section on the website, the most useful page lays out in simple terms the most important questions for patients to ask their providers
- <http://www.pfizerhealthliteracy.com/patients-and-families/AskQuestion.aspx>

S-TOFHLA

- Shortened version of TOFHLA test which assesses patient health literacy
- 36 questions, 12 minutes, fill in relevant word
- English and Spanish
- More specific than NVS⁶
- Lower sensitivity than NVS⁶
- Correlation between literacy score and health outcomes⁶
- Available in numerous locations online (free)
- http://www.nmmra.org/resources/Physician/152_1485.pdf

REALM

- Rapid estimate of adult literacy in medicine
- 66 common words used in healthcare setting are read by the patient
- Administered in 2 minutes
- More specific than NVS⁶
- Available for no cost at
- <http://chua2.fiu.edu/faculty/haskins/PHT5524/Course%20Materials/Patient%20Education/REALM.pdf>
- Realm-R is shortened version with just 8 words
- Available for no cost at
- http://www.adultmeducation.com/downloads/REALMR_INSTR.pdf

National Patient Safety Foundation⁹

- The National Patient Safety Foundation is an independent nonprofit organization
- Started in 1997
- Goals are to improve safety for patients by providing tools and information resources to patients, educators, and healthcare providers
- Memberships, first and only membership program in patient safety field for providers (American society of professionals in patient safety)
- Membership open to any individual who directly or indirectly supports to improve patient safety, mostly healthcare providers and educators
- Membership includes access to networking, information, discounts on courses offering CME and CE credits, clinical research summaries
- <http://www.npsf.org/membership-programs/american-society-of-professionals-in-patient-safety-2/>

National Patient Safety Foundation⁹

- Online courses for healthcare educators and providers
- Patient safety curriculum
- 10 module online course for healthcare providers/educators that provides key principals, foundational knowledge, and competencies related to patient safety
- <http://www.npsf.org/online-learning-center/patient-safety-curriculum-2/>
- Annual NPSF congress held each year, patient safety experts and practitioners

Ask Me 3⁸

- Patient education program from National Patient Safety Foundation, simple and easy to follow
- Patients need to know answers to
 1. What is my main problem?
 2. What do I need to do?
 3. Why is it important for me to do this?
- Has a section with free downloadable educational materials and studies for healthcare providers
- This includes a plain language translation chart
- <http://www.npsf.org/for-healthcare-professionals/programs/ask-me-3/ask-me-3-resources/>

Ask Me 3⁸

- Has a section with brochures, posters, key tags and notepads that healthcare providers can buy for their offices
- All these materials contain simple educational printing, that is easy to understand
- <http://www.npsfstore.com/categories/Ask-Me-3-Products/>

AMA¹⁰

- Have guest speakers that can travel and speak on health literacy to a desired audience of choice
 - Toolkit/patient safety monographs
 1. For healthcare professionals and patient advocates, contains educational materials, studies, and focuses on effective caregiver patient communication strategies
 - Patient safety tip cards
 1. Available for purchase for office for patients
- <http://www.ama-assn.org/ama/pub/about-ama/ama-foundation/our-programs/public-health/health-literacy-program.page?>
- Partnership with National Patient Safety Foundation

Strategies to assist patients with limited health literacy¹¹

- According to REALM at a 3rd grade or below level literacy use video tapes, pictures, audio, or oral instructions
- If between 4th to 6th grade literacy level may not be able to read prescription labels
- If 7th to 8th grade literacy level will struggle to correctly use most patient education materials
- If at a high school or above literacy level will be able to correctly use most patient education materials
- Provide materials in multiple languages
- Make complex materials simpler
- 2 way communication

Plain language

- Want to organize information so the most important points are listed first
- Break down complex information into understandable smaller sections
- Use the active voice
- Use simple terms

What materials could you provide to the agencies

- Pfizer Health literacy Risk prevalence calculator⁷
- <http://www.pfizerhealthliteracy.com/physicians-providers/PrevalenceCalculator.aspx>
- Can also report to National Patient Safety Foundation how well patients with limited health literacy used their brochure protocols for their treatment plans.

Further educational materials for Healthcare providers

- Free online course on health literacy for healthcare providers, from US department of health and human services
<http://www.hrsa.gov/publichealth/healthliteracy/>
- University of MD health literacy research center page, offers courses, has related publications available
<http://www.healthliteracy.umd.edu/>

Bibliography

1. Institute of Medicine and Nielsen-Bohman L, Panzer AM, Kindig DA. *Health Literacy: A Prescription to End Confusion*. Washington DC: The National Academies Press; 2004. Available at: <http://www.nap.healthliteracy.org/>
2. Schillinger D, Grumbach K, Piette J, et al. Association of Health Literacy With Diabetes Outcomes. *Journal of the American Medical Association*. 2002;288(4):475-482. Available at: <http://jama.ama-assn.org/proxy.wrlc.org/article.aspx?articleid=195143>
3. Williams MV, Baker DW, Honig EG, Lee TM, Nowlan, A. Inadequate literacy is a barrier to asthma knowledge and self-care. *Chest*. 1998;114(4):1008-15. Available at: <http://search.proquest.com/proxy.wrlc.org/docview/200455437?accountid=27975>
4. Howard DH, Sentell T, Gazmararian JA. Impact of health literacy on socioeconomic and racial differences in health in an elderly population. *Journal of General Internal Medicine*. 2006, Aug;21(8):857-61. PDF attached
5. Baker DW, Wolf MS, Feinglass J, Thompson JA. Health literacy, cognitive abilities, and mortality among elderly persons. *Journal of General Internal Medicine*. 2008;Jun;23(6):723-726. Available at: <http://search.proquest.com/proxy.wrlc.org/nursing/docview/875685639/13D6A04873468726102/1?accountid=27975>
6. Osborn CY, Weiss BD, Davis TC, et al. Measuring Adult literacy in Health Care: performance of the Newest Vital Sign. *American Journal of Health Behavior, suppl. SPECIAL ISSUE ON HEALTH LITERACY*, 2007;31(4): 36-46. Available at: <http://search.proquest.com/proxy.wrlc.org/nursing/docview/211803480/13D6A04873468726102/1?accountid=27975>
7. Pfizer. The Newest Vital Sign: A Health Literacy Assessment Tool for Patient Care and Research. *Pfizer Health Literacy*; 2012. Available at: <http://www.pfizerhealthliteracy.com/public-policy-researchers/NewestVitalSign.aspx> DOA: 4/16/2012
8. National Patient Safety Foundation. Ask Me 3: For Health Care Professionals. *National Patient Safety Foundation*. 2013. Available at : <http://www.npsf.org/for-healthcare-professionals/programs/ask-me-3/> DOA: 4/16/2012
9. National Patient Safety Foundation. About Us. *National Patient Safety Foundation*. 2013. Available at: <http://www.npsf.org/about-us/> DOA: 4/17/2013
10. American Medical Association. Health Literacy Program. *American Medical Association*. 2013. Available at: <http://www.ama-assn.org/ama/pub/about-ama/ama-foundation/our-programs/public-health/health-literacy-program.page> DOA: 4/17/2013
11. Davis T, Crouch M, Long S. REALM PDF. FIU department of Physical Therapy. 2012. Available at: <http://chua2.fiu.edu/faculty/haskins/PHT5524/Course%20Materials/Patient%20Education/REALM.pdf> DOA: 4/17/2013