





What is health literacy?



The impact of health literacy



Strategies to improve health literacy



Health literacy case studies



Commitment from Merck







What is health literacy?



An early definition of health literacy

Health literacy is the capacity to¹:



Obtain, process, and understand basic health information and services



Make **informed** health care decisions



Access services and navigate the health care system





The health literacy field has evolved¹

Health literacy includes:

- Skills and abilities of information providers
- Demands and complexities of the health care system
- Demands of the situation or context
- Cultural background, linguistic competency, and cultural beliefs²







Examples of health literacy



A patient reads a medicine label and **understands it**



A provider explains a new diabetes diagnosis and treatment plan in

a way that the patient understands



A health system creates intake and discharge forms that are **easy to understand**



Skills needed for health literacy

- Oral literacy: ability to speak and listen effectively¹
- Information literacy: ability to find and apply health information²
- Print literacy: ability to read, write, and take meaning from information¹
- Digital literacy: ability to use devices, such as a computer, smart phone, and tablet, to find information³
- Numeracy: ability to understand and use numbers²





National statistics on health literacy¹

The 2003 National Assessment of Adult Literacy (NAAL) showed2:

1 2% of US adults had **Proficient** health literacy skills

36% of US adults had *Basic* or *Below Basic* health literacy, which means they cannot:

- Decide a healthy weight range using a graph that relates height and weight to body mass index (BMI)
- Find a definition of a medical term by searching through a complex document
- Interpret a childhood vaccination schedule using a chart



Even more adults struggle with numeracy^{1,2}

The 2016 Program for International Assessment of Adult Competencies (PIAAC) found^{1,2}:

US adults have below basic numeracy skills and can't do tasks beyond:

Counting | Sorting | Adding and subtracting whole numbers

Patients need basic math and comprehension skills to make health decisions, such as knowing their risk of getting a disease³:





1 IN 100 OR 1 IN 1,000





Some groups are more vulnerable to low health literacy¹

People of all ages, races, incomes, and education levels have health literacy challenges.¹

Some groups are more vulnerable to low health literacy such as1:

- The elderly
- People with less than a high school education
- People living in poverty

- Racial and ethnic minorities
- People with limited English proficiency (LEP)





Culture plays an important role in health literacy^{1,2}



A person's understanding and response to health information depends on the patient's and provider's^{1,2}:

- Cultural backgrounds
- Attitudes and beliefs about health and illness.
- Social and family influences
- Communication styles, such as native language and gestures







The potential impact of health literacy



What do you think?

What is the strongest predictor of a person's health status?¹

- A. Education
- B. Income
- C. Employment status
- D. Health literacy
- E. Race





Low health literacy may lead to poor patient health outcomes

- More hospitalizations¹
- Higher use of emergency department²
- Fewer preventive services³
- Medicine non-adherence³
- Lower self-reported health status⁴
- Higher risk of mortality⁵





Low health literacy may contribute to health disparities and health inequity^{1,2}

There is a **strong link** between health
literacy and health
disparities¹

Patients' **cultural and linguistic differences**directly impact their health
literacy levels¹

Low health literacy may lead to more health disparities and poorer health outcomes among vulnerable populations²



Low health literacy may raise health care costs¹

Low health literacy costs the US health care system

an estimated \$106 to \$238 billion²











Adults with low health literacy have

4 TIMES HIGHER health care costs¹







Potential benefits of improving health literacy



- Help patients follow a treatment plan²
- Promote health equity and lower health disparities³
- Raise provider satisfaction⁴
- Use organizational resources more efficiently⁵







Strategies to help improve health literacy

Written communication | Spoken communication | Communicating numbers



Use health literacy strategies with everyone¹

Universal precautions approach assumes anyone may have trouble understanding health information¹

- Use clear communication with everyone¹
- Create an environment where patients of all literacy levels can understand and take part in their health and health care¹
- Benefits patients and providers¹



RESEARCH SUGGESTS THAT1:

Health literacy strategies may have greater effects on those with limited health literacy, but many with higher health literacy levels also prefer and benefit from them.





Tips to help improve written communication



Know your audience¹



Organize information¹



Use simple language¹



Design easy-to-read materials¹





Know your audience¹

Who is this resource for?



Are they in a specific¹:

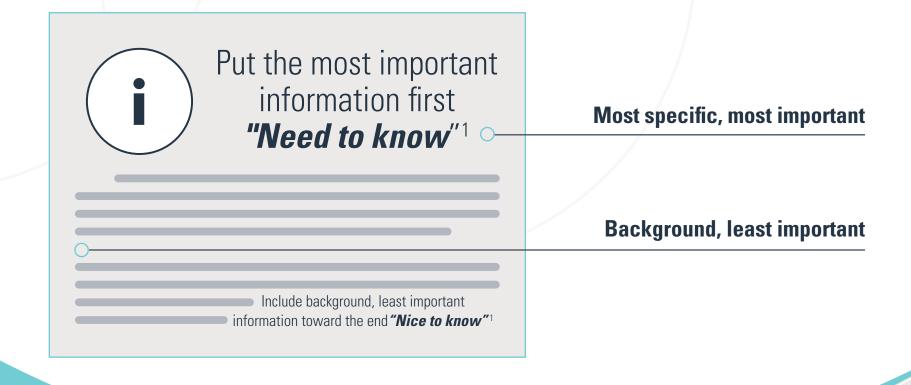
- Age bracket
- Race or ethnicity
- Profession
- Geographic area

Do they have specific needs you should address, such as^{1,2}:

- Low literacy
- Vision impairment
- Cultural differences



Organize your information¹







Use simple language¹

Avoid jargon and technical words¹:



Use words that are **short** and **common**

Define "need to know" words in a **simple** way





Use simple language¹

How would you replace these words to make them more simple?



Benign² Will not cause harm; is not cancer

Oral² > By mouth

Blood glucose³ > Blood sugar

Condition² > How you feel; health problem

Vaccination⁴ > A shot to help protect you against a certain disease



Design easy-to-read materials



National Violent Death Reporting System (NVDRS) FY 2014 Background Document

NVDRS Data Saves Lives

Violence is not inevitable and can be prevented. The National Violenc Death Reporting System (NVDRS) is a state based surveillance system developed by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Centrol (ICC Injury Center). NVDRS collects facts from different sources about the same violent death to provide a more complete picture of the incrumstances of the event. State and local violence prevention practitioners use these data to guide their prevention programs, policies, and practices including:

• Identifying common circumstances associated with violent deaths of a specific type (e.g., gang).

- Identifying common circumstances associated with violent deaths of a specific type (e.g., gang violence) or a specific area (e.g., a cluster of suicides);
- Assisting groups in selecting and targeting violence prevention efforts;
- Assisting groups in selecting and targeting violence prevention error
 Supporting evaluations of violence prevention activities; and
- . Improving the public's access to in-depth information on violent deaths.

Public Health Problem

Preventing violence is a critical public health goal because violence inflicts a substantial toll on individuals, families, and communities throughout the United States. No one is immune to violence. It affects people across the lifespan-from infants to the elderly. CDC liquy Center data indicates:

- . In 2010, violence claimed more than 55,000 American lives, translating into more than six people
- dying each hour from a homicide or suicide.
 In 2010, 38,364 people died by suicide.
- . In 2010, homicide claimed more than 16,000 people in the United States.
- Violence-related deaths, assaults, and acts of self-harm cost the United States an estimated \$84.3 billion in medical care and lost productivity every year.

Strategies that Work

NVDMS data in violence prevention through the creation of a reliable violence surveillance system synthesizing multiple data sources into one uniform system, which can be used to inform decision makers and program planners about the magnitude, trends, and characteristics of violent deaths so appropriate prevention efforts can be just into place. It also facilitates the evaluation of state-based prevention programs and strategies. Capturing data from various sources allows us to link records no violent deaths occurring in the same incident to help identify risk factors for multiple homicides or homicides-suicides, provide timely preliminary information on violent deaths currently data is not available untal 2 years after death, describe in detail the circumstances, which may contribute to a violent death such as job loss, physical and mental health problems, family and other stressors.

1





Tips to help improve spoken communication



- Use the **Teach-back** method¹
- Encourage patients to take an **active role** in their health¹



The Teach-back method¹



What is it?

- A way for health care professionals to **confirm** they explained information **clearly**¹
- Not a test of a patient's knowledge¹



The Teach-back method¹



Why use it?

- Patients forget 40%-80% of medical information when they leave the doctor's office¹
- Half of what they remember is incorrect¹



How to use Teach-back

1. Plan your approach¹

"We covered a lot today, and I want to make sure that I explained things clearly."

2. Ask the patient to explain back in his or her own words¹

"How will you take this medicine when you get home?"

OR "What 3 things will you do at home to take care of your diabetes?"

3. If there is a misunderstanding, explain things using a different approach "I don't think I did a read inhount in a that I at making a misunderstanding."

"I don't think I did a good job explaining that. Let me try again."

4. Ask the patient to explain back again¹

"Show me how you'll take your medicine when you get home."



Patient understanding is confirmed when they can explain it back correctly.1





Encourage patients to take an active role in their health¹

Encourage patients to ask questions¹

- Remind patients to write down and bring questions when scheduling and confirming appointments
- Ask patients "What questions do you have?" to create the expectation that questions are normal

Create action plans with patients¹

- Ask patients "What matters to you?" to help them explore their goals
- Break down goals into small, specific action steps





Encourage patients to take an active role in their health^{1,2,3}

Build patient-provider relationships¹

- Ask patients for permission before offering information
- Show empathy:
 - Make eye contact²
 - Sit down with patients instead of standing²
 - Identify and reflect patient feelings using phrases such as "I'm hearing that you're feeling..."







Tips to communicate about numbers

2+2=4

Do the math for people¹

7.054

Use only necessary numbers¹







Do the math for people¹

Calculate or convert numbers

To lose weight, eat 1,800 calories a day, for example.

MEAL	CALORIES
Breakfast	350
Snack	100
Lunch	600
Snack	100
Dinner	650
Total for day	1,800





Use only necessary numbers¹

Too much information can be overwhelming



Reprinted from Julep.²

Give enough information to make an informed decision



women who have a mammogram will be diagnosed with breast cancer³

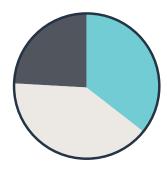




Be visual to give meaning to numbers¹



Line graphs are better to explain trends over time¹



Pie charts compare a part to a whole¹



Icon arrays can show quantity and percentage of a whole¹

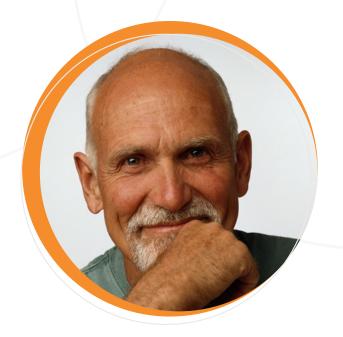






Health literacy case studies

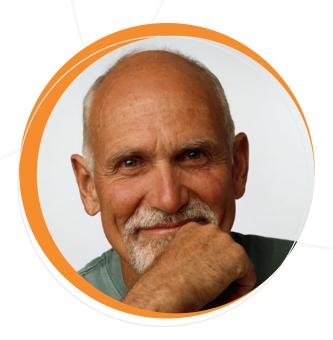




- Recently retired 69-year-old man
- Both his mother and father had type
 2 diabetes
- 5 years ago, his doctor told him his blood sugar levels were "borderline diabetes" and to lose at least 10 pounds
- He started playing golf and gardening to be more active, but has gained 22 pounds since retiring



Arthur comes to your clinic about his recent weight gain¹



The nurse:

- Tests his A1C
- Measures his seated blood pressure

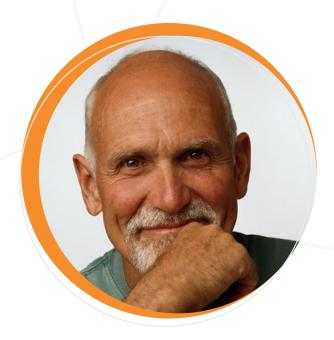
The doctor:

- Prescribes medicine to take each morning for diabetes and high blood pressure
- Gives him a meter to test his blood sugar at home
- Refers him to a registered dietitian





Next month, Arthur meets with the registered dietitian¹



Arthur doesn't understand why he has diabetes. He tells the dietitian that he:

- Has never been sick a day in his life
- Never eats sugar
- Eats 8 to 10 pieces of fresh fruit each day at meals and at snacks
- Prefers fish and chicken, usually served with a tomato or cream sauce and pasta



Next month, Arthur meets with the registered dietitian¹



Arthur also:

- Stopped taking 1 medicine because it made him dizzy and sweaty
- Doesn't test his blood sugar level at home because "the doctor already knows his sugars are high"



For discussion

- What health literacy barriers led to this situation?
- If you were Arthur's doctor or dietitian, what health literacy strategies would you apply to communicate with him?
 - Written strategies
 - Spoken strategies
 - Communicating about numbers







- 55-year-old African American woman
- Works as a school bus driver
- Single and lives alone
- Has a daughter who lives close by and visits once a week
- Quit smoking 3 years ago, but smoked 1 pack per day from age 18 to 52 (34 years total)
- Has a friend of the same age, who was recently diagnosed with lung cancer after visiting the doctor for a cough that wouldn't go away





Violet has a routine exam¹



The doctor:

- Does a routine lung exam to listen to her breathing, and tells her it's normal
- Hands her a referral for a lung cancer screening test called low-dose computed tomography (LDCT)
- Tells her to go to the front office to make an appointment with radiology

The front office:

- Asks her preferred appointment time
- Confirms she has transportation





Violet was surprised to get a lung screening referral¹



Violet didn't understand why she needs a lung cancer screening if her lung exam was normal and she doesn't have a cough.

On the day of her lung screening appointment, she:

- Decides not to show up for her lung screening
- Doesn't talk about it with her doctor





For discussion

- What health literacy barriers led to this situation?
- If you were Violet's doctor, what health literacy strategies would you apply to communicate with her?
 - Written strategies
 - Spoken strategies
 - Communicating about numbers







- 24-year-old married mother of 2 children ages 2 years and 9 months
- She is busy with her kids and works2 part-time jobs
- Her husband travels for work and has an irregular work schedule
- She and her husband may want another baby, but not until a few years from now







Simone comes to your clinic to ask for birth control



The nurse:

- Measures her blood pressure
- Weighs her at 180 lbs, which means she is overweight for her height

The doctor:

- Learns she is not interested in having more children at this time
- Tells her about birth control options





The next month, Simone returns to your clinic



Simone tells the nurse that:

- She is not interested in having more children at this time
- She has trouble remembering to take the pill daily
- She wants to switch to a different method, but is concerned about whether it would work

For discussion

- What health literacy barriers led to this situation?
- If you were Simone's doctor or nurse, what health literacy strategies would you apply to communicate with her?
 - Written strategies
 - Spoken strategies
 - Communicating about numbers



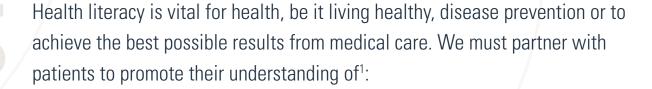




Commitment from Merck



Merck's commitment



- Their medical condition or disease
- The reasons they are being treated
- The appropriate use of medications and other treatments

We are committed to improving health literacy as part of our mission to improve health.



Review

- Health literacy includes the skills and abilities of patients and providers, demands of the situation and health care system, and cultural background and beliefs^{1,2}
- Low health literacy may lead to poor health outcomes, higher health care costs, and health disparities^{3,4}
- Health care professionals can apply strategies to help improve:
 - Written communication avoid jargon, know your audience, organize your information, and design easy-to-read materials⁵
 - Spoken communication use Teach-back and encourage patients to take an active role in their health⁶
 - Communication about numbers do the math, use necessary numbers, and use visuals⁷
- We are committed to improving health literacy as part of our mission to improve health



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