

NNLM Health Literacy Playbook

This resource was developed by [CommunicateHealth](#) and the OET to align health literacy practice in NNLM to those tools and techniques used by NLM.

Last revised March 15, 2022

Introduction

If you are reading this, you probably play an important role in addressing health literacy. Whether you're helping community members access the health information they need, creating plain language health materials, or providing trainings on health communication, the NNLM Health Literacy Playbook can help.

This playbook includes tools and resources to help you create and evaluate easy-to-understand health materials. It also provides health literacy resources that you can use in trainings and funding announcements.

Playbook Contents

Section 1: [What Is Health Literacy?](#)

Section 2: [Health Literacy Training Resources](#)

- [Checklist for Building Health Literacy Principles Into Trainings](#)
- [Sample Health Literacy Slides](#)

Section 3: [Health Literacy Best Practices: How to Write Clearly and Effectively](#)

Section 4: [Assessing Health Education Materials](#)

- [About the Health Education Materials Assessment Tool](#)
- [Health Education Materials Assessment Tool](#)

Section 5: [Tips to Advocate for Health Literacy](#)

Section 6: [Health Literacy Resources](#)

Section 1: What Is Health Literacy?

Table of Contents

Section 1: What Is Health Literacy? 2

- What Is Health Literacy?**..... 2
- Who Has Limited Health Literacy Skills?**..... 2
- Why Is Health Literacy Important?** 3
- How Can We Address Health Literacy?**..... 3

What Is Health Literacy?

According to the U.S. Department of Health and Human Services’ (HHS) [Healthy People 2030 initiative](#), health literacy involves the information and services that people need to make well-informed health decisions. There are 2 parts:

- **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.

Who Has Limited Health Literacy Skills?

Anyone can have limited health literacy skills. Even people with high literacy skills may have low *health* literacy skills in certain situations. For example, someone who is stressed and sick when they’re accessing health information may have trouble remembering, understanding, and using that information.

Nearly 9 out of 10 adults struggle with health literacy at least some of the time.¹ When someone has low health literacy skills, it’s often because of factors outside their control — like systemic racism or the conditions in their environment. Addressing these factors is critical for improving health literacy skills and ultimately advancing health equity.

Research has shown that these groups are more likely to experience low health literacy skills:²

- People with low incomes
- People who don’t have a high school diploma or GED
- Older adults
- People with health problems
- People whose primary language isn’t English
- Some racial/ethnic minority groups

Why Is Health Literacy Important?

Health literacy involves more than reading — it also includes specific skills, like calculating the right dose of a medicine, following directions for fasting before a surgery, or checking a nutrition label to make sure an item is safe for someone with a food allergy. People with low health literacy skills may have trouble doing these things.

People with low health literacy skills are more likely to:

- Have poor health outcomes, including hospital stays and emergency room visits
- Make medication errors
- Have trouble managing chronic diseases
- Skip preventive services, like flu shots

People with higher health literacy skills are more likely to make informed health decisions. That means they're more likely to be healthy — and even to live longer.

How Can We Address Health Literacy?

Communicating clearly with people helps them find and understand health information. And when people understand health information, they can make well-informed health decisions.

We can also consider taking these steps to address health literacy:

- Ensure that people in the community can easily access the health information they need
- Create and provide plain language health materials in different languages
- Provide trainings to teach health professionals and others who provide health information about health literacy best practices
- Create clearinghouses of information about health literacy for health professionals
- Review health materials (like insurance forms and medication instructions) with community members to help make sure they understand the information — and what actions they need to take

-
1. Kutner, M., Greenberg, E., Jin, Y., & Paulsen, C. (2006). The health literacy of America's adults: results from the 2003 National Assessment of Adult Literacy (NCES 2006–483). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <https://nces.ed.gov/pubs2006/2006483.pdf>
 2. Centers for Disease Control and Prevention, Office of the Associate Director for Communication. *A health literacy report: analysis of 2016 BRFSS health literacy data*. Retrieved from <https://www.cdc.gov/healthliteracy/pdf/Report-on-2016-BRFSS-Health-Literacy-Data-For-Web.pdf>

Section 2: Health Literacy Training Resources

Table of Contents

Section 2: Health Literacy Training Resources	4
Health Literacy Training Resources	4
Checklist for Building Health Literacy Principles Into Trainings	5
Share Information on Health Literacy	5
Explain what health literacy means and why it matters.	5
Share strategies for addressing health literacy.	5
Stress the importance of identifying and understanding your audience.	5
Explain how to tailor your approach.	5
Explain how to identify resources that follow health literacy best practices.	6
Connect participants to other health literacy resources.	6
Make Trainings Easy to Understand	6
Clearly state the purpose of your training.	6
Design for easy viewing.	6
Divide trainings into short, manageable sections.	6
Use common, everyday language.	7
Choose meaningful visuals.	7
Make sure numbers are easy to understand.	7
Provide clear, concrete action steps.	7
Emphasize and summarize key points.	7
Sample Health Literacy Slides	7
Sample Slide 1	7
Sample Slide 2	8
Sample Slide 3	8
Sample Slide 4	9
Sample Slide 5	9

Health Literacy Training Resources

NNLM trainings and presentations are important educational opportunities for a variety of audiences. Through these trainings, you can help people learn how to improve health literacy in their communities.

In this section, you'll find:

- Tips for integrating clear communication and health literacy best practices into trainings
- Sample PowerPoint slides on health literacy that you can adapt for trainings

Checklist for Building Health Literacy Principles Into Trainings

Use the checklist below when you're creating or updating an NNLM training to make sure the training incorporates health literacy principles. The checklist includes 2 sections:

- Information about health literacy to include in your trainings
- Health literacy and clear communication best practices that will make your trainings easy to understand and use

Print the checklist: https://lor.nlm.gov/op/op.Download_Share.php?documentid=3401

Share Information on Health Literacy

Explain what health literacy means and why it matters.

Start by defining health literacy and explaining why it matters within the context of your training. The idea is to highlight how health literacy affects everyone — and emphasize that participants can address health literacy in their work.

Be sure to explain both personal health literacy and organizational health literacy — you can pull [health literacy definitions from HHS](#).

Check out these sample slides on health literacy that you can adapt for your trainings: https://lor.nlm.gov/op/op.Download_Share.php?documentid=3402

Share strategies for addressing health literacy.

Help people understand strategies they can use to communicate clearly. For example, if you're talking about reference interviews, remind training participants to define medical terms in plain language to make sure people understand health information. Try to explicitly tie strategies back to health literacy!

Stress the importance of identifying and understanding your audience.

Include information about identifying the intended audience early in the planning process. Explain that it's important to learn as much about the audience as possible.

Explain how to tailor your approach.

Offer tips for tailoring communications to meet the audience's needs. Remind training participants that it's important to consider their audience's characteristics — like age, cultural factors, and geographic location — when providing health information. You could note, for example, that teens who live in a neighborhood with limited access to fresh fruits and vegetables need different information about healthy eating than older adults in a high-income community.

Explain how to identify resources that follow health literacy best practices.

Help participants understand what makes resources easy for people to access, use, and understand. Explain how you decide if a resource is reliable and accessible. For example, is it because the content is easy to read, actionable, and from a trustworthy source? Sharing your criteria can make it easier for participants to identify high-quality resources on their own.

Connect participants to other health literacy resources.

Think about the health literacy resources you consider the most useful. For example, would you suggest that participants check out another NNLM training more focused on health literacy? You may also want to refer them to some of these health literacy resources.

Make Trainings Easy to Understand

Clearly state the purpose of your training.

When you promote a training, make sure you clearly explain its purpose and objectives. This will help people in your intended audience understand that the training is relevant to them.

It's also important during the training to make sure participants can tell right away what to expect. Introduce your topic, agenda, and objectives at the beginning.

Design for easy viewing.

If you're leading a webinar:

- Keep slides clean and simple with plenty of white space
- Use bullets to organize information
- Use a sans serif font that's regular weight (not light or bold)

Tip: Remember that website screenshots can be blurry and hard to read. Instead, demo websites during the training, or share the site URL along with key points of what the site offers.

If you're offering a class in Moodle:

- Break content up into chunks with clear, informative headers
- Keep sentences and paragraphs short
- Use bullets — remember to keep lists to 7 or fewer items
- Emphasize key points with bolding and font size

Divide trainings into short, manageable sections.

Even if your training is long, you can help people follow along by breaking up the content into short sections. Limit each section to 1 idea, and look for opportunities to break longer sections into subsections. For example, if you're highlighting 15 resources, organize them into different categories (e.g., resources for parents, resources for teachers, and resources for kids).

Let people know when you're finishing 1 section and moving into the next. Clear headers and divider slides will help.

Use common, everyday language

Use clear, simple words that people hear in everyday conversation. If you need to use unfamiliar words or technical terms, define them in plain language. If you're linking to outside resources, make sure they're written in plain language, too.

Choose meaningful visuals

Use visuals like photos, illustrations, or graphics that support your key points and make information easier to understand. Avoid using “decorative” visuals — make sure any visuals support key messages in your training.

Make sure numbers are easy to understand

Aim to use numbers only when they have a real purpose. Be sure you use simple numbers (like whole numbers rather than fractions or decimals) and numerals (2, 2nd) rather than spelled-out numbers (two, second).

Provide clear, concrete action steps

Tell people exactly what they can do after the training to learn more or take action. Is there something they just learned that you can suggest they start doing right away? Be specific, and break actions into short, manageable steps. It's helpful to share action steps throughout the training and at the end.

Emphasize and summarize key points

Think about what you want people to know when they finish the training. To help them remember that information, include key takeaways at the end of each section — and especially at the end of the training.

Sample Health Literacy Slides

Use this content when you're developing a PowerPoint presentation related to health communication. Consider tailoring the talking points to meet the needs of your audience. You can also download PowerPoint slides that already contain this content.

Sample Slide 1

Slide content:

What is health literacy?

Health literacy involves the information and services that people need to make well-informed health decisions. There are 2 parts:

- Personal health literacy
- Organizational health literacy

Source: U.S. Department of Health and Human Services

Sample Slide 2

Slide content:

How is health literacy defined?

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.

Source: U.S. Department of Health and Human Services

Talking points:

- These definitions are from the U.S. Department of Health and Human Services' Healthy People 2030 initiative.
- Health literacy involves more than reading — it also includes specific skills, like calculating the right dose of a medicine or following directions for fasting before a surgery.
- And health literacy isn't just about people's ability to understand health information. It's also about how well the people and organizations who provide health information communicate.

Sample Slide 3

Slide content:

Who has low health literacy skills?

Low health literacy skills are common:

- Nearly 9 in 10 adults struggle with health literacy¹
- Health literacy is situational
- Groups that are underserved and at risk for poor health outcomes are the most likely to have limited health literacy skills²

¹U.S. Department of Education: <https://nces.ed.gov/pubs2006/2006483.pdf>

²Centers for Disease Control and Prevention: <https://www.cdc.gov/healthliteracy/pdf/Report-on-2016-BRFSS-Health-Literacy-Data-For-Web.pdf>

Talking points:

- Health information can be complex and overwhelming.
- It's important to remember that health literacy affects everyone — even people who usually have high health literacy skills can experience low health literacy skills in some situations. For example, someone who is stressed and sick when they're accessing health information may have trouble remembering, understanding, and using that information.
- In other words, health literacy is a state, not a trait.

- When someone has low health literacy skills, it's often because of factors outside their control — like systemic racism or the conditions in their environment. Addressing these factors is critical for improving health literacy skills and ultimately advancing health equity.
- Research has shown that people with low incomes or education levels, people with health problems, older adults, non-native English speakers, and people in some racial/ethnic minority groups are more likely to experience limited health literacy skills.

Sample Slide 4

Slide content:

What are the effects of low health literacy?

People with low health literacy skills are more likely to:

- Have poor health outcomes, including hospital stays and emergency room visits
- Make medication errors
- Have trouble managing chronic diseases
- Skip preventive services, like flu shots
- Have trouble understanding information in a health news article

Talking point:

- People with limited literacy skills are likely to have worse health overall — and they have higher rates of death.

Sample Slide 5

Slide content:

How can you address health literacy?

- Health literacy is a factor you can help change

- By communicating clearly, you can help people understand health information and services

Talking points:

- Since you provide people in your community with health information, you play an important role in changing health literacy skills.
- When you communicate clearly with people, you can help them understand health information and make well-informed health decisions.

Section 3: Health Literacy Best Practices: How to Write Clearly and Effectively

Before you start drafting any material, take these 3 steps:

1. Identify your audience.

The more you know about the people you're trying to reach, the more you can tailor your content to meet their needs. Get specific — try to identify your audience's age range, gender composition, and racial/ethnic makeup.

Less specific audience	More specific audience	Most specific audience
Teens	Black and Hispanic/Latino teens	Black and Hispanic/Latino teens who have sickle cell disease

Also try to figure out your audience's **health literacy level** — if you're not sure, assume they have low health literacy skills.

2. Define your communication objective.

This is what you want the audience to think, feel, or do after they read the material. The best communication objectives are specific and measurable.

Weak communication objective	Strong communication objective
Explain what a rheumatoid arthritis flare is.	Increase the proportion of people with rheumatoid arthritis who understand what a flare is — and what they can do to feel better during a flare.

3. Write your main message.

The main message is the most important thing you want the audience to remember after they read your material.

Weak main message	Strong main message
Asthma attacks in young children can be very serious.	Asthma attacks in young children can be very serious — so it's important to learn how to help prevent them.

Now you're ready to start creating your material! Be sure to follow these health literacy best practices:

- Use plain language
- Make it relevant
- Keep it short
- Focus on action steps
- Break up text
- Make sure numbers are clear and useful

Use Plain Language

Choose simple words that people hear in everyday conversation instead of jargon or technical terms. Use contractions, and refer to readers as “you” when appropriate.

Less clear	More clear
People who eat too much sodium are more likely to have hypertension.	If you eat too much salt, you're more likely to have high blood pressure.

Define unfamiliar words and technical terms that you have to use — like terms people will hear a lot. Write the definition in plain language, and keep it as short as possible.

Less clear	More clear
If you have diabetes, eating certain foods can cause hyperglycemia.	If you have diabetes, eating certain foods can cause hyperglycemia (high blood sugar).

Use a friendly tone so your material is approachable and engaging.

Less approachable	More approachable
You will receive a large amount of information about your diagnosis and your treatment options. You may find it difficult to make a decision. Contact your doctor's office if you need assistance.	You'll get a lot of information about your treatment options. If you have trouble deciding what to do, call your doctor. Together, you can make a choice that's right for you.

Write in the active voice. Active voice makes your content more personal and actionable — and it's often shorter, too.

Passive voice	Active voice
The medicine will be taken once a day for a week. Your symptoms will be tracked by your doctor while you're taking it.	You'll take the medicine once a day for a week. Your doctor will track your symptoms while you're taking it.

Make It Relevant

Include a clear main message — and put it at the beginning of the material. If your audience knows right away what the material is about — and that it's relevant to them — they're more likely to keep reading.

Less clear	More clear
If you have atopic dermatitis, it's important to learn about your condition. It's also important to learn about the steps you can take to manage your atopic dermatitis. If you do, you'll have less itchiness and pain.	If you have atopic dermatitis, you can take steps to help manage itchiness and pain.

Clearly state who the material is for. If people don't think a material was written for them, they probably won't read it.

Less clear	More clear
It's especially important for people who are at high risk of getting very sick from the flu to get a flu shot.	<p>It's especially important to get a flu shot if you:</p> <ul style="list-style-type: none"> • Are older than 65 • Have a chronic disease • Are pregnant <p>That's because you're at higher risk of getting very sick if you get the flu.</p>

Use culturally familiar language and examples. This means choosing inclusive language and examples that are specifically tailored to your audience.

Sample Scenario

You're creating a fact sheet to help members of the Navajo Nation prevent COVID-19. Many Navajo have no running water in their homes and have to travel to a public tap to get fresh water. That means it's important to give action steps that are realistic for Navajo.

Less representative of the audience	Representative of the audience
<p>To prevent COVID-19:</p> <ul style="list-style-type: none"> • Stay home • Always wash your hands with soap and water after using the bathroom and before and after eating or preparing food • If you have to go out, wear a mask and stay at least 6 feet away from other people 	<p>To prevent COVID-19:</p> <ul style="list-style-type: none"> • Stay home as much as possible • Always wash your hands with soap and water after you use the bathroom and before and after you eat or prepare food — if you don't have access to water, use hand sanitizer instead • If you have to go out, wear a mask and stay at least 6 feet away from other people <p>While it may not be possible to follow all recommended safety guidelines, any steps you <i>can</i> take will help protect you and your community from COVID-19.</p>

Choose names and images that represent your audience. Consider your audience's age, race/ethnicity, and gender — and then choose names and images that reflect those traits.

Sample Scenario

You're creating a booklet about heart disease. While heart disease is often thought of as mostly affecting men, almost as many women as men die of heart disease every year in the United States.

Less representative of the audience	Representative of the audience
Most photos are of men.	Photos show an even mix of men and women.

Keep It Short

Write short sentences and paragraphs. Long sentences and paragraphs can look intimidating, and some readers struggle to get through them. Try to write paragraphs that are 3 sentences or fewer — and aim for sentences that are 20 words or fewer.

Less clear	More clear
<p>The doctor who treats your sickle cell disease is called a hematologist (an expert in blood diseases), and they will work with you to make a treatment plan — and adjust your plan if your symptoms change. It’s also important to see a primary care provider for regular checkups that aren’t related to your sickle cell disease. Their job is to treat any health problems you might have — or to refer you to someone who can. Your health care team might also include a social worker, a nurse, a health educator, and other types of doctors.</p>	<p>The doctor who treats your sickle cell disease is called a hematologist. Hematologists are experts in blood diseases. Your hematologist will work with you to make a treatment plan — and adjust your plan if your symptoms change.</p> <p>It’s also important to see a primary care provider for regular checkups that aren’t related to your sickle cell disease. Their job is to treat health problems — or refer you to someone who can.</p> <p>Your health care team might also include a social worker, a nurse, a health educator, and other doctors.</p>

Only include information your readers need to know to take action. Leave out the “nice-to-know” details.

Less clear	More clear
<p>If you have a sore, red throat and swollen tonsils, call your doctor. They may want you to get tested for strep throat.</p> <p>Strep is short for <i>Streptococcus</i>, a type of bacteria. Group A <i>Streptococcus</i> is the type that causes strep throat.</p> <p>Strep throat can be treated with antibiotics.</p>	<p>If you have a sore, red throat and swollen tonsils, call your doctor. They may want you to get tested for strep throat.</p> <p>If you have strep throat, your doctor can give you medicine to treat it.</p>

Focus on Action Steps

Make your content actionable by providing short, specific action steps. People are more likely to take steps that are explained clearly and seem manageable. Bulleted or numbered lists are a good way to present action steps.

Less clear	More clear
<p>It's important to take steps — before, during, and after food preparation — to prevent food poisoning. One of the most important things you can do is always keep your hands and your cutting boards clean. Make sure you're doing this from the beginning to the end of the food preparation process. Thoroughly cooked food is also key to preventing food poisoning.</p>	<p>Take these steps to help prevent food poisoning:</p> <ul style="list-style-type: none"> • Wash your hands with soap and water before and after preparing food • Use separate cutting boards for produce and meat — or wash the cutting board between food items • Cook food to the recommended temperature

Explain the “why.” Give readers the reason for the action step. What’s in it for them?

Less clear	More clear
<p>Keep track of when you have pain, how serious it is, and what you were doing when the pain started.</p>	<p>Keep track of when you have pain, how serious it is, and what you were doing when the pain started. This may help you figure out what’s causing your pain — so you can make a plan to avoid it.</p>

Use positive framing. People prefer a positive tone — and it may help motivate them to take action.

Negative framing	Positive framing
<p>If you don't get physical activity, you're more likely to have a variety of health problems.</p>	<p>Getting physical activity can help you stay healthy.</p>

Break Up Text


Divide the material into short sections with clear, informative headers. That way people can skip to the sections that are relevant to them without struggling through long blocks of text.

Less clear	More clear
<p>Physical activity</p> <p>It's important to get physical activity most days. Getting physical activity helps you stay healthy over the long term. It can also boost your mood, reduce your stress, and improve your sleep in the short term.</p> <p>But when you have joint pain, physical activity can be painful. The good news is that you can do low-impact activities that don't hurt your joints. Try activities like swimming, walking, or cycling.</p>	<p>Why do I need physical activity?</p> <p>Getting physical activity helps you stay healthy over the long term. It can also boost your mood, reduce your stress, and improve your sleep in the short term.</p> <p>What activities can I do without pain?</p> <p>There are several low-impact activities that may not hurt your joints. Try these activities and see what works for you:</p> <ul style="list-style-type: none"> • Swimming • Walking • Cycling

Visually emphasize key points with bolding, color, larger font, icons, or call-out boxes. Make sure to use these cues in moderation — they'll lose their effectiveness if you overuse them.

Avoid	Use (in moderation)
<p>ALL CAPS</p> <p><u>Underline</u> (except in hyperlinks)</p> <p>Decorative fonts</p>	<p>Bolding</p> <p>Larger size</p> <ul style="list-style-type: none"> • Icons <p>Call-out boxes</p>

Use visuals — these can include photos, illustrations, and icons. Make sure your visuals support your main message.

Less clear	More clear
<p>When you're teaching your child to swallow pills, have them practice with something very small, like a cake sprinkle.</p>	<p>When you're teaching your child to swallow pills, have them practice with something very small, like a cake sprinkle.</p> 

Include plenty of white space. White space helps the eye rest and makes a material look less dense or “busy.”

Not enough white space



Enough white space



Make Sure Numbers Are Clear and Useful

Only include numbers that your audience needs to know — or that help support your main message or communication goal. For example, in a material about risk, numbers may increase a reader's perception of relevance. Or if a material is describing a disease as “rare” or “common,” numbers may lend credibility. If numbers don't serve a purpose, leave them out.

Less clear	More clear
<p>About 1 in 8 women will get breast cancer during their lifetime. Only about 1 out of every 100 breast cancers diagnosed in the United States are in men. That's why it's important for women to follow breast cancer screening recommendations.</p>	<p>About 1 in 8 women will get breast cancer during their lifetime. That's why it's important for women to follow breast cancer screening recommendations.</p>

Use simple numbers — like whole numbers instead of fractions or decimals.

Less clear	More clear
According to CDC, 47.8 percent of people in nursing homes have dementia.	According to CDC, about 1 out of 2 people in nursing homes have dementia.

Use **numerals** instead of spelling numbers out. It's quicker and easier for readers to tell numerals apart from the text around them.

Less clear	More clear
To help prevent cavities, brush your teeth two times a day.	To help prevent cavities, brush your teeth 2 times a day.

Provide context to help people understand numbers. Context can come in the form of words or additional numbers, like a range.

Less clear	More clear
More than 600,000 people die of heart disease in the United States every year.	More than 600,000 people die of heart disease in the United States every year. That makes heart disease the leading cause of death.

Consider using visual metaphors to help readers make meaning of numbers.

Less clear	More clear
A healthy serving of meat is 4 ounces.	A healthy serving of meat is 4 ounces — that looks about the same size as a deck of cards.

Always do the math for readers rather than expecting them to do calculations.

Less clear	More clear
To calculate your BMI, divide your weight in kilograms by your height in meters squared.	To calculate your BMI, use CDC's BMI calculator . Or Figure out your BMI by finding your height in the left-hand column and moving across the row until you come to your weight. The number at the top of this column is your BMI. (Note: The second example would appear with a BMI chart, like this BMI chart from the National Heart, Lung, and Blood Institute.)

Section 4: Assessing Health Education Materials

Assessment tools can help you make sure health education materials are easy for people to read and understand.

Can't I just use a readability formula?

Readability formulas can give you a rough idea of how easy a material is to read. But keep in mind that readability formulas have serious limitations.

Readability formulas work by using the number of syllables, words, or sentences in a material to calculate a score in the form of a grade level. A material with short words and sentences will score well in a readability formula, but that doesn't necessarily mean it's easy to understand.

Why? Because readability formulas don't consider other health literacy best practices. For example, does the material have a clear main message, define medical terms, or use visual cues?

Using NLM's modified version of the PEMAT-P will tell you a lot more about how easy to understand a health material really is.

NLM offers an assessment tool you can use in your work. The tool includes items that are based on the understandability items from the Patient Education Materials Assessment Tool for Printable Materials (PEMAT-P), developed by the Agency for Healthcare Research and Quality (AHRQ).

In this section, you'll find:

- Information about NLM's tool to assess the understandability of health materials
- [NLM's assessment tool](#)

About the Health Education Materials Assessment Tool

In 2019, NLM engaged health literacy subject matter experts (SMEs) to discuss the development of the PEMAT-P and other understandability assessment tools. The ultimate goal was to create an abridged tool that NLM can use to designate health education materials as "easy-to-read." The SMEs helped NLM identify a subset of PEMAT-P understandability items that may be the most useful for measuring understandability. To assess and refine the subset items, NLM conducted a series of qualitative studies with consumers who have limited health literacy skills.

In 2020, NLM completed additional research aimed specifically at increasing understanding of numeracy best practices in health education materials. Based on the results of this research and existing best practices, NLM expanded the numeracy guidance in the PEMAT-P, adding more detailed tips and additional examples.

This multiphase research yielded the items in the tool — and together, they form a tool for reviewers to quickly assess the understandability of health education materials.

Learn more about the PEMAT-P and how it measures understandability in consumer-facing health education materials:

- [PEMAT and User’s Guide](#)
- [PEMAT for Printable Materials \(PEMAT-P\)](#)

Health Education Materials Assessment Tool

Use the items below to figure out if a material can be designated as “easy-to-read.” Look below the tool items to see an annotated sample material that can be designated as “easy-to-read.”

A few notes before you get started:

- If it’s your first time using the tool, read through the items before you begin assessing the material
- You may find it helpful to read the whole material before you assess it
- Mark each item as either “yes” or “no”
- You must score all items **except** for number 8, which only applies to materials with numbers
- Materials must get a “yes” on all required items to be considered “easy-to-read”

Download and use the fillable PDF version of the tool:

https://lor.nlm.gov/op/op.Download_Share.php?documentid=3400

1. The material makes its purpose completely evident.

The material must have an obvious main message near the top. Think of the main message as the most important thing for the audience to remember after reading the material. You need to be able to tell at a glance what the main message is.

Yes No

2. The material does not include information or content that distracts from its purpose.

The material includes need-to-know information only — it skips the nice-to-know details. The idea is to focus on key information readers need in order to take action. Ask yourself whether any of the information would distract or overwhelm you if you were unfamiliar with the material’s topic.

Yes No

3. The material uses common, everyday language. Medical terms are used only to familiarize the audience with the terms. When used, medical terms are defined.

The material uses plain language that everyone can understand (e.g., “high blood pressure,” not “hypertension”). When unfamiliar terms are necessary, the material explains them in context and defines them using easy-to-understand language. (Think: a reader just diagnosed with diabetes probably needs to learn the term “glucose.”) Ask yourself whether you’d understand all of the terms in the material if you didn’t know anything about the topic.

Yes No

4. The material uses the active voice.

The material mostly uses active voice and avoids passive voice. Ask yourself: Is the subject of the sentence **doing** the action (e.g., “experts recommend that you get a flu shot”)? If so, it’s active voice. Or is the subject **receiving** the action (e.g., “getting a flu shot is recommended by experts”)? That’s passive voice.

Yes No

5. The material breaks or “chunks” information into short sections.

The content in the material is divided into short chunks of information **with headings**. Think about whether you can quickly scan the material and find the information you’re looking for. Does the amount of content in each section feel manageable, or is it overwhelming?

Yes No

6. The material uses visual cues (e.g., arrows, boxes, bullets, bold, larger font, highlighting) to draw attention to key points.

The material signals where to find important information and emphasizes it with visual elements. Scan the material and ask yourself: Is it clear where you’ll find key takeaways before you even read the words? Also check that the material uses these visual cues selectively — they can become less effective if they’re overused.

Yes No

7. The material uses visual aids whenever they could make content more easily understood.

Visual aids like photos, illustrations, and graphics can make health education materials easier to understand, more engaging, and more relatable. Think about whether a visual aid could help you understand the content better, keep your attention, or help you relate to the material. For example, in a material about nutrition, an illustration of a healthy portion size could improve understanding.

Yes No

8. Numbers appearing in the material are clear and easy to understand.

Check that the material uses simple numbers — like whole numbers rather than fractions and decimals. Keep in mind that frequencies (e.g., 3 out of 10) are generally easier to understand than percentages (e.g., 30%). And make sure the material uses numerals (e.g., 3, 2nd) rather than spelled-out numbers (e.g., three, second).*

Context for numbers — in the form of words or additional numbers, like a range — can also indicate clear use of numbers. So can **visual metaphors** (e.g., “1 ounce of cheese is about the same size as 3 dice”).

Finally, check that the material always does the math for the readers. Make sure it doesn’t ask them to add, subtract, multiply, or divide — or do any other kind of calculation.

Yes No N/A

Material gets a “yes” on ___out of ___relevant items

*Keep in mind that some style guides (e.g., APA style) recommend spelling out numbers under 10. Use your judgment on how to assess materials that include spelled-out numbers for this reason but would otherwise get a “yes” on all items in the assessment tool.

Annotated example

This material gets a “yes” on all items in the assessment tool. The callouts explain why the material gets a “yes” on the items.

The clear main message at the beginning makes it easy to understand the material's purpose (#1)

Includes need-to-know information only — there's no content that distracts from the purpose (#2)

Get Rid of Unused Opioids Safely

Help keep your family and pets safe by getting rid of unused or expired (out of date) opioid medicines as soon as possible. Opioid medicines are prescription drugs used to treat pain.

Why is it so important to get rid of unused opioids safely?

Opioids are powerful medicines, and they can be very dangerous when people use them incorrectly. If a person misuses or accidentally takes an opioid meant for someone else, a single pill could cause death. In fact, opioids were involved in about 47,000 overdose deaths in 2018 — that's nearly 7 out of every 10 drug overdose deaths.



So it's very important to take them exactly as prescribed and get rid of them right away when you no longer need them.

How can I get rid of my unused opioids safely?

There are a few ways you can get rid of opioid medicines that you no longer need:

- The best way to get rid of medicines is to **use a medicine take-back program**. At medicine take-back sites, professionals will take your medicine and get rid of it safely. You can find a take-back site near you by calling 1-800-882-9539 or visiting <http://disposemy meds.org>.
- Depending on what type of opioid you need to get rid of, you may be able to **flush it down the toilet**. Ask your doctor or pharmacist about what's safe to flush.

Where can I learn more about getting rid of medicines safely?

If you want to learn more about how to safely get rid of medicines in your community, call your doctor, pharmacist, or local police station.

Remember, it's important to get rid of unused opioids safely as soon as you no longer need them.

Uses common, everyday language, and key terms like "opioid medicines" are clearly defined in easy-to-understand language (#3)

The visual makes the material easier to understand (#7)

Uses active voice (#4)

Uses whole numbers and numerals — and numbers support a key message (#8)

Information is "chunked" into short sections with headings (#5)

Visual cues like bullets and bolding help draw attention to key information (#6)

Section 5: Tips to Advocate for Health Literacy

Want to help make sure people at your organization consistently follow clear communication and health literacy best practices? Take these steps to be a health literacy advocate!

Know the facts. It's easier to build your case for health literacy if you can share meaningful statistics and information. Use these talking points:

- Nearly 9 in 10 adults struggle with health literacy³
- People with low health literacy skills are more likely to make medication errors, have trouble managing chronic diseases, skip preventive services, and have poor health outcomes
- Even people with high literacy skills have low *health* literacy skills in some situations — like when they're stressed or sick
- Groups that are underserved and at risk for poor health outcomes are the most likely to have limited health literacy skills — this includes racial/ethnic minorities, non-native English speakers, and people with low incomes or education levels⁴

Form a health literacy team. Find allies in your organization — ideally people with different roles and skill sets — and work together to advocate for health literacy.

Seek leadership support. When your organization's leaders understand the importance of health literacy, it's easier to make changes across your organization. If leaders aren't already supportive of your commitment to address health literacy, you could:

- Demonstrate how health literacy best practices can fit into existing initiatives at the organization so they aren't seen as “extra” work
- Emphasize how using health literacy best practices can support organizational goals
- Collect stories from people at your organization that illustrate the positive effects of using health literacy best practices — or negative outcomes that might have been prevented by using health literacy best practices

Include health literacy in trainings and presentations. Teaching staff about health literacy will raise awareness of its importance and help improve their ability to follow health literacy best practices. Here's how:

- Include information about health literacy in staff orientation
- Discuss health literacy at all-staff or team meetings
- Distribute research reports and articles on health literacy to staff members
- Include health literacy resources on your organization's intranet — or somewhere else where staff can easily access them

Incorporate health literacy into goals and objectives. If you can, include goals and objectives related to improving health literacy in strategic plans, programs, and initiatives. This will help make health literacy part of the organization's culture.

3. Kutner, M., Greenberg, E., Jin, Y., & Paulsen, C. (2006). The health literacy of America's adults: results from the 2003 National Assessment of Adult Literacy (NCES 2006–483). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <https://nces.ed.gov/pubs2006/2006483.pdf>

4. Centers for Disease Control and Prevention, Office of the Associate Director for Communication. *A health literacy report: analysis of 2016 BRFSS health literacy data*. Retrieved from <https://www.cdc.gov/healthliteracy/pdf/Report-on-2016-BRFSS-Health-Literacy-Data-For-Web.pdf>

Section 6: Health Literacy Resources

For more information about creating plain language health materials and incorporating health literacy best practices throughout your organization, check out the following resources:

- [The Agency for Healthcare Research and Quality](#) offers health literacy resources and tools that are intended to help health care professionals make health information easier to understand — but these tools and resources are useful for anyone who creates or provides health information.
- [The Centers for Disease Control and Prevention](#) offers information and resources to help public health professionals — and others who provide health information — use clear communication and health literacy best practices.
- [Health Literacy Online](#) is a guide for developing easy-to-access, easy-to-understand health websites and digital tools.
- [Healthy People 2030](#), a U.S. Department of Health and Human Services initiative, provides definitions of both personal and organizational health literacy and features national objectives related to health literacy.
- [The Institute for Healthcare Advancement's Health Literacy Solutions Center](#) provides a variety of health literacy resources.
- [plainlanguage.gov](#) offers guidelines for writing clearly to help people find, understand, and use the information they need.
- [Ten Attributes of Health Literate Health Care Organizations](#) describes the steps organizations can take to make it easier for people to navigate, understand, and use health information and services.