



Improve the Usability of Health Information

Consider the following questions as you develop and deliver health information:

- Is the information appropriate for the users?
- Is the information easy to use?
- Are you speaking clearly and listening carefully?

🎯 Is the information appropriate for the users?

The information below is a summary of best practices in health communication that can aid in improving health literacy. Many of these concepts are discussed in depth in the National Cancer Institute's *Making Health Communication Programs Work* (a.k.a. the "Pink Book") and in the Centers for Disease Control and Prevention's tool *CDCynergy*.

Identify the intended users of the health information and services.

Identify the intended users based on epidemiology (who is affected?), demographics, behavior, culture, and attitude. This is known as segmentation.

Be sure the materials and messages reflect the age, social and cultural diversity, language, and literacy skills of the intended users. Consider economic contexts, access to services, and life experiences.¹

Attention:

These principles also apply if you are using existing resources. Be sure to select materials that are accurate and appropriate for the intended users.

Beyond demographics, culture, and language, consider the communication capacities of the intended users. Approximately one in six Americans has a communication disorder or difference resulting in unique challenges.² These individuals will require communication strategies that are tailored to their needs and abilities.



Evaluate users' understanding before, during, and after the introduction of information and services.

Talk to members of the intended user group before you design your communication intervention to determine what information they need to know and how they will use it. Then, pretest messages and services to get feedback.

Test your messages again, after they have been introduced, to assess effectiveness. Refine content when necessary. Use a post-test to evaluate the effectiveness of the information.

Acknowledge cultural differences and practice respect.

Cultural factors include race, ethnicity, language, nationality, religion, age, gender, sexual orientation, income level, and occupation. Some examples of attitudes and values that are interrelated with culture include:

- Accepted roles of men and women
- Value of traditional medicine versus Western medicine
- Favorite and forbidden foods
- Manner of dress
- Body language, particularly whether touching or proximity is permitted in specific situations¹

Ensure that health information is relevant to the intended users' social and cultural contexts.

Is the information easy to use?

Limit the number of messages, use plain language, and focus on action.^{3,4}

Keep it simple. The number of messages will depend on the information needs of the intended users. As a general guideline, use no more than four main messages. Give the user specific actions and recommendations. Clearly state the actions you want the person to take. Focus on behavior rather than the underlying medical principles.

Use familiar language and an active voice. Avoid long or run-on sentences. Organize similar information into several smaller groups.

Many of the same plain language techniques that make the written word understandable also work with verbal messages, such as avoiding jargon and using everyday examples to explain technical or medical terms the first time they are used.

For more information on plain language, visit www.plainlanguage.gov.

Supplement instructions with visuals.

Individual learning styles differ. For many people, visuals are a preferred style, especially for technical information.³ Simple line drawings can help users understand complicated or abstract medical concepts. Make sure to place images in context. When illustrating internal body parts, for example, include the outside of the body.

Use visuals that help convey your message. (Don't just "decorate," as this will distract users.) Make visuals culturally relevant and use images that are familiar to your audience. Show the main message on the front of the materials.

For print communication, use captions or cues to point out key information.³

Make written communication look easy to read.³⁻⁵

Use at least 12-point font. Avoid using all capital letters, italics, and fancy script. Keep line length between 40 and 50 characters. Use headings and bullets to break up text. Be sure to leave plenty of white space around the margins and between sections.

Improve the usability of information on the Internet.

Studies show that people cannot find the information they seek on Web sites about 60 percent of the time.⁶ This percentage may be significantly higher for persons with limited literacy skills.

Remember

Refer to the Office of Management and Budget (OMB) *Policies for Federal Public Websites* for further guidance.

Many of the elements that improve written and oral communication can be applied to online information, including using plain language, large font, white space, and simple graphics.⁷ Other elements are specific to the Internet. These include:

- Enhancing text with video or audio files
- Including interactive features and personalized content
- Using uniform navigation
- Organizing information to minimize searching and scrolling
- Giving users the option to navigate from simple to complex information

A critical way to make information on the Internet more accessible to persons with limited literacy and health literacy skills is to apply user-centered design principles and conduct usability testing.

Usability is a measure of several factors that affect a user's experience interacting with a product, such as a Web page. These factors include:

- How fast can the user learn how to use the site?
- How fast can the user accomplish tasks?
- Can the user remember how to use the site the next time he or she visits?
- How often do users make mistakes?
- How much does the user like the site?

To learn more about usability, visit www.usability.gov.

Are you speaking clearly and listening carefully?

Ask open-ended questions.

Ask questions using the words “what” or “how” instead of those that can be answered with “yes” or “no.” For example, “Tell me about your problem. What may have caused it?”³ Try asking “What questions do you have?” instead of “Do you have any questions?”

Use a medically trained interpreter.

Plain English will not necessarily help individuals who do not speak English as their primary language and who have limited ability to speak or understand English. To better ensure understanding, health information for people with limited English proficiency needs to be communicated plainly in their primary language, using words and examples that make the information relevant to their potentially different cultural norms and values.

Check for understanding.

The “teach-back” method is a technique that healthcare providers and consumers can use to enhance communication with each other. The person receiving the health information is asked to restate it in their own words—not just repeat it—to ensure that the message is understood and remembered. When understanding is not accurate or complete, the sender repeats the process until the receiver is able to restate the information needed.⁸ Consumers also can be asked to act out a medication regimen.³

Tip: Checking for understanding

Summarize what the patient needs to do. Consider using a handout or written brochure in plain language. Explain what each medication is for, along with the dosage and side effects. Make sure the patient knows where the information is written down.

Then check for understanding:

“I want to be sure I didn’t leave anything out that I should have told you. Would you tell me what you are to do so that I can be sure you know what is important?”

(Source: Doak CC, Doak LG, Root JH. 1996. *Teaching Patients With Low Literacy Skills*. JB Lippincott Company: Philadelphia, PA.)

Participate in plain language and cultural competency training.

Encourage colleagues to do the same. Consider organizing a training for health professionals and staff in your organization.

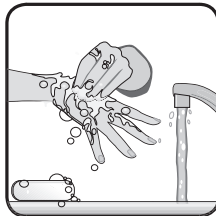
Example:

Wash Your Hands

After a disaster, staying clean can be hard to do. You may not have running water. But staying clean helps you stay healthy.

Things you can do to stay clean and healthy

- Wash your hands with soap and clean water. If you don't have soap and water, you can use hand cleaners with alcohol in them.
- Wash your hands many times each day.



Times to wash your hands are

BEFORE

- making food
- eating
- touching a sick person
- touching a cut, sore, or wound.

AFTER

- using the bathroom
- blowing your nose, coughing, or sneezing
- touching things that may carry germs, like
 - diapers or a child who has used the toilet
 - food that is not cooked (raw food)
 - animals or animal waste
 - trash
 - things touched by flood water
 - a sick person
 - cuts, sores, and wounds.



Recommendations from the Centers for Disease Control and Prevention

Easy-to-read flyer developed by the Centers for Disease Control and Prevention. The flyer was developed in multiple languages.

Checklist for Improving the Usability of Health Information

- Identify the intended users
- Use pre- and post-tests
- Limit the number of messages
- Use plain language
- Practice respect
- Focus on behavior
- Check for understanding
- Supplement with pictures
- Use a medically trained interpreter or translator

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- ¹ National Cancer Institute. *Making Health Communication Programs Work*. Washington, DC.
 - ² National Institute of Deafness and Other Communication Disorders. Improving Health Literacy. Available at <http://www.nidcd.nih.gov/about/what.asp>.
 - ³ Doak C, Doak L, Root J. 1996. *Teaching Patients With Low Literacy Skills. 2nd Edition*. JB Lippincott Co.: Philadelphia, PA.
 - ⁴ Plain Language Action and Information Network. Available at www.plainlanguage.gov. Accessed on October 21, 2005.
 - ⁵ American Institute for Research. 1981. *Guidelines for Document Designers*. Washington, DC.
 - ⁶ U.S. Department of Health and Human Services. Usability Basics. Available at <http://www.usability.gov/basics/index.html>. Accessed on October 13, 2005.
 - ⁷ Baur CE. 2005. Using the Internet To Move Beyond the Brochure and Improve Health Literacy. In *Understanding Health Literacy*. Schwartzberg JG, VanGeest JB, Wang CC, Editors. AMA Press, 141-154.
 - ⁸ Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, Leong-Grotz K, Castro C, Bindman AB. 2003. Closing the loop: Physician communication with diabetic patients who have low health literacy. *Archives of Internal Medicine*. 163(1): 83-90.