Beyond Plain Language: Creating Health Resources for People With Intellectual and Developmental Disabilities

March 13, 2024

Center on
**KNOWLEDGE TRANSLATION FOR
DISABILITY & REHABILITATION RESEARCH**

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Beyond Plain Language: Creating Health Resources for People With Intellectual and Developmental Disabilities
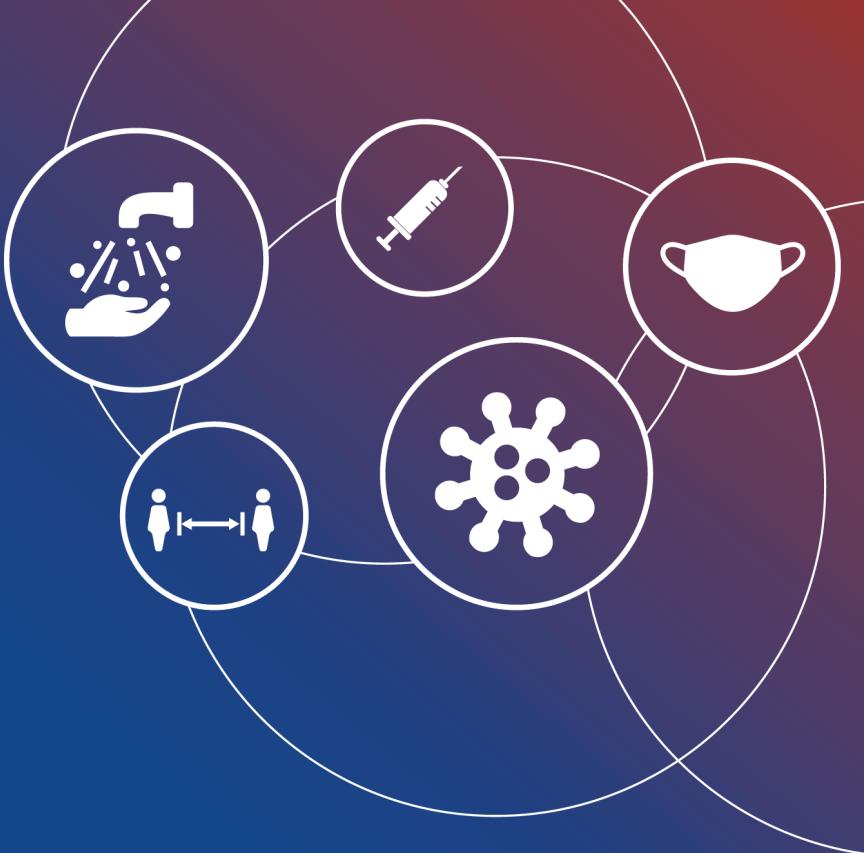
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Today's Learning Objectives

1. Learn about the unique communication needs of people with intellectual and developmental disabilities (IDD).

2. Learn about the Center for Disease Control and Prevention's (CDC's) tool for creating products for this audience, including the evidence base supporting it.

3. Practice applying the principles from the tool.

About the Audience

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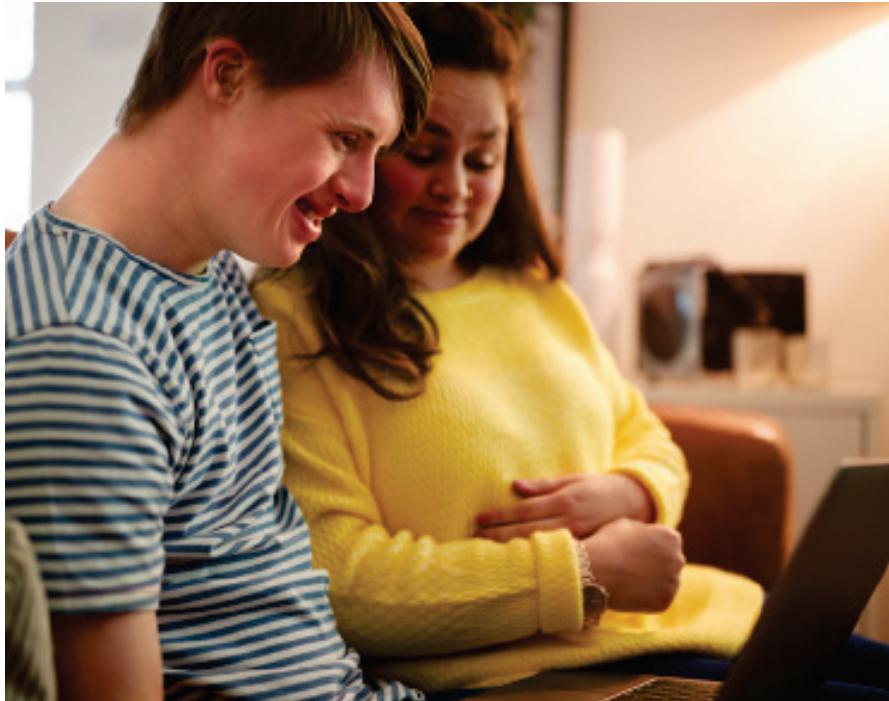
Adults with IDD/extreme low literacy (ELL) are a diverse audience. Before you start creating communication products for this audience, it is important to understand who you're writing for—and how their information needs and preferences may differ from those of other audiences.

What are intellectual and developmental disabilities?

IDDs are conditions that limit a person's ability to learn new or complex information, apply new skills, and function at an expected level in daily life.

An IDD can impact a person's ability to:

o Express their wants and needs.

o Take care of themselves.

o Learn, reason, and solve problems.

Communication abilities among people with IDD vary widely.

These best practices focus on people with IDD who also have ELL.

What is extreme low literacy?

Adults with ELL may fall into any of these three categories:

1. Can read basic books with pictures
2. Can identify sight words only
3. Can identify common signs or pictures only

Sight words are common words that readers may learn to recognize on sight, as opposed to sounding out the letters (e.g., *there, what, water, school, doctor*).
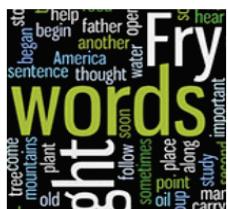
Fry Word Lists

All the Fry sight word lists, divided into groups of 100, also available as printable PDFs. More

Can plain language principles meet the needs of this audience?

Top 6 Plain Language Writing Principles:

1. Highlight main message.
2. Write in everyday language.
3. Define unfamiliar words.
4. Avoid abbreviations and acronyms.
5. Use active voice; make it actionable.
6. Use shorter words and shorter sentences.

Key Principles That Meet the Unique Needs of This Audience

Focus	on a single behavioral recommendation.
Cut	anything that is not essential.
Include	only one idea or behavioral step per page or screen.
Write	short, straightforward sentences with common, literal words.
Keep	images literal and realistic.
Use	social stories, videos, or interactive materials to give step-by-step instructions.

About the Tool
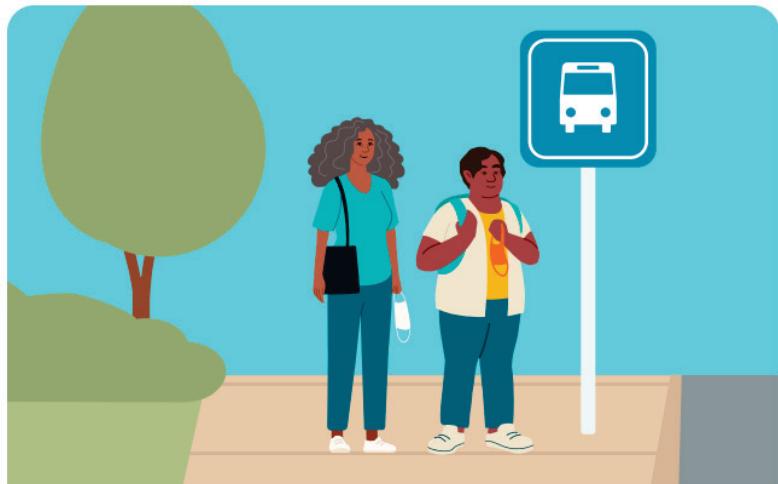
Today we get a COVID-19 booster shot.

My mom and I take the bus.

These guidelines aim to help develop communication products for adults who have IDD/ELL and their caregivers.

The tool contains 27 scored items (yes/no questions) that correspond to evidence-based best practices for communicating clearly with people who have IDD/ELL in the following areas:

A. Behavior

B. Sentences

C. Words and Numbers

D. Text Layout

E. Visuals

Research Conducted to Develop the Tool

Literature review and environmental scan for best communication practices with this audience

Nine interviews with key disability partner organizations

Nine interviews with caregivers of people with IDD and ELL

Two rounds of nine interviews with dyads of caregivers and people with IDD and ELL

Two rounds of nine interviews with caregivers and people with IDD and ELL who speak Spanish

Formative Research

Materials Testing

Methods to Test Best Practices—2022

Interviewer-administered survey of 100 caregivers who support people with IDD and ELL

Testing the Draft Tool

Stay Safe in the Sun

Version A
- Put sunscreen on your legs.
- Put sunscreen on your arms.
- Rub the sunscreen into your skin.
- Put your sunglasses on.
- Put your hat on. Now you're ready to go!

Version B

Version C
- Put sunscreen on your legs.
- Put sunscreen on your arms.
- Rub the sunscreen into your skin.
- Put your sunglasses on.
- Put your hat on. Now you're ready to go!

Behavior domain
Does the product use both text and visuals to illustrate each step or action?

Material Formats and Samples

Choosing a Format
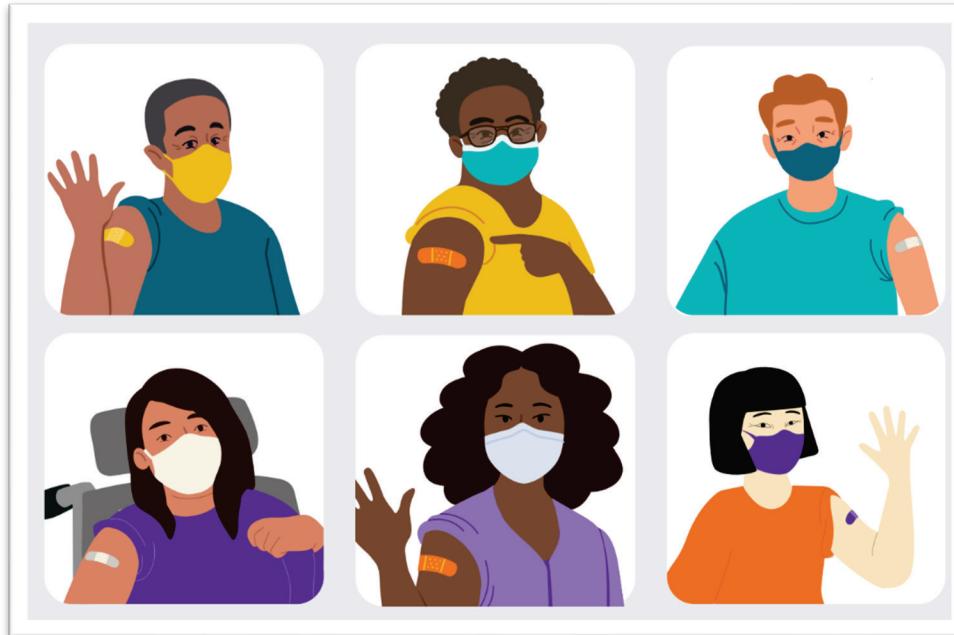
Formats that may work well for adults with IDD/ELL:

- Social stories
- Animated videos
- Interactive activities
- Posters

Example Materials

○ Example social story: https://www.cdc.gov/coronavirus/2019-ncov/downloads/people-with-idd/CDC_RTI_StayHome_SocialStory_508c.pdf

○ Example video: https://www.youtube.com/watch?v=fpB77As0QmA

The Tool

CDC's Clear Communication Index Webpage

https://www.cdc.gov/ccindex/index.html

Developing Products for Adults with Intellectual Disabilities and Extreme Low Literacy

How to Develop Products for Adults with Intellectual Developmental Disabilities and Extreme Low Literacy: A Product Development Tool [PDF – 4 MB] – Use this tool to develop products for adults with intellectual and developmental disabilities (IDD) and extreme low literacy (ELL).
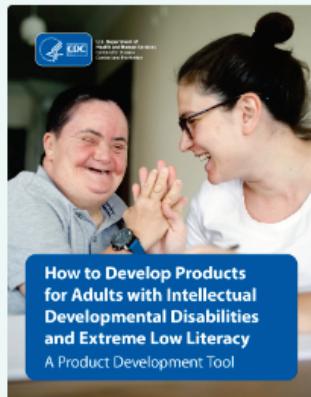
How to Develop Products for Adults with Intellectual Developmental Disabilities and Extreme Low Literacy
A Product Development Tool

https://www.cdc.gov/ccindex/pdf/idd-ell-product-development-tool-508.pdf

How to Develop Products for Adults with IDD/ELL
A Product Development Tool

Part A: Behavior

Description of Items

This section contains descriptions of how to apply each of the 27 items in the score sheet, along with examples where appropriate to help illustrate each item.

In addition to the scored items, we've included tips throughout the document that can help ensure that your communication products are clear and appropriate for your audience.

Part A: Behavior

1. **Does the product include 1 focused behavioral recommendation? For example, "Wear a face mask" or "Get a COVID-19 shot."**
   For adults with IDD/ELL, it's important to make sure every communication product focuses on a behavioral recommendation—the action you want your reader to take. To avoid overwhelming your audience, limit each product to just 1 main behavioral recommendation. If there is more than 1 important behavioral recommendation, consider creating a separate product for each behavior.

   ! **Important:** Remember, communication products for people with IDD/ELL are most effective when they focus on a clear action step. If you don't have a behavioral recommendation, the information you want to communicate may not be appropriate for adults with IDD/ELL.

✗ Multiple behavioral recommendations in 1 product	✓ 1 product for each behavioral recommendation
Stop the spread of COVID-19 — Keep your physical distance / Cover your nose and mouth / Wash your hands often	Stop the spread of COVID-19 — Keep your physical distance / Stop the spread of COVID-19 — Cover your nose and mouth / Stop the spread of COVID-19 — Wash your hands often

   💡 **Tip:** Wherever possible, use positive words and framing in your behavioral recommendation. For example, "Keep a safe distance from other people" is a more positive message than "Do not get too close to other people."

Behavior—Key Takeaways

- Include only one focused behavioral recommendation and state that recommendation more than one time.

- Provide step-by step instructions on how to perform the behavior.

- Present each idea or behavioral step on a separate page.

5. **Does the product use both text and visuals to illustrate each step or action?**

People with IDD/ELL may sometimes skip over text that doesn't have an accompanying visual. To make sure your audience doesn't miss any key steps, include a simple, realistic visual to illustrate each step. Make sure to include images that illustrate the main message of your product.
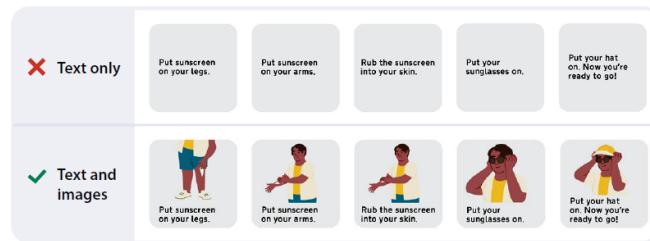
Tip: If you include an explanation about why a behavior is recommended, make sure that it's easy to understand and personally relevant to your audience (for example, "so you do not get sick").

6. **Does the product use one single main character to demonstrate all of the behavioral steps?**

Using a single main character helps to make connections between pages and reinforce the continuity of the behavioral steps. You can include other characters—just be sure to keep the focus on 1 main character.

Tip: While it's important to focus on a single main character, you can still include a variety of characters to represent the diversity of people with IDD/ELL. For example, within a single product, the main character could interact with people of different genders and races or ethnicities with different disabilities. Or if you are creating a suite of products, each product could feature a main character with a different disability and race or ethnicity. Including a diverse range of characters helps to make your products more inclusive.

Behavior—Key Takeaways

- Use text and visuals to illustrate each behavioral step or action.

- Use a single main character to demonstrate the behavioral steps.

Practice

Scoring Practice—Item 1

o Does the product include only one focused behavioral recommendation? **Yes or No**

There are lots of ways to keep your body healthy.

Try an apple at snack time.
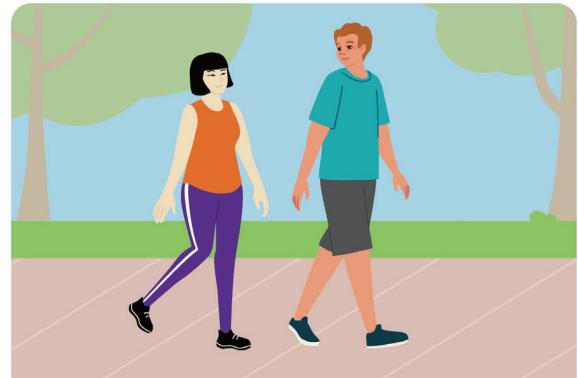
Go for a walk with a friend.

Scoring Practice—Item 3

o Does the product show how to perform the behavioral recommendation by breaking the behavior down into a series of single steps or actions?

Yes or No

I turn the water on.
I get my hands wet.

I put soap all over my hands.

I put my hands under the water.
I rub my hands together until the soap is gone.

Then I dry my hands.
I am all done!
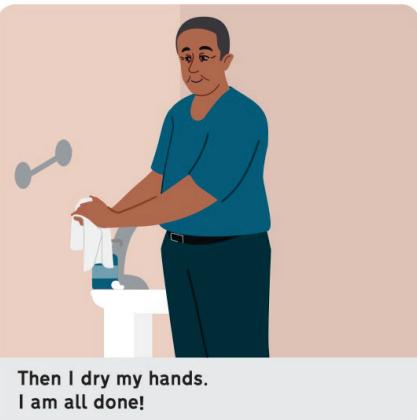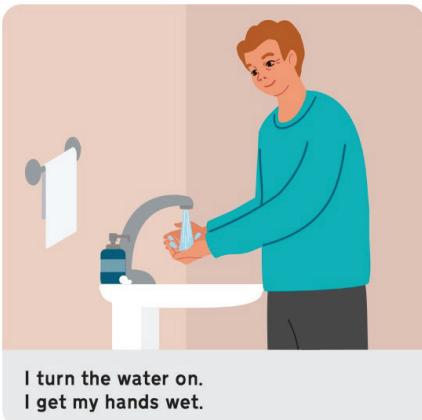
Scoring Practice—Item 5

o Does the product use both text and visuals to illustrate each step or action? **Which version (A, B, or C) would receive a score of "yes"?**

Scoring Practice—Item 6

o Does the product use one single main character to demonstrate all the behavioral steps? **Yes or No**

I turn the water on.
I get my hands wet.

I put soap all over my hands.

I put my hands under the water.
I rub my hands together until the soap is gone.

Then I dry my hands.
I am all done!
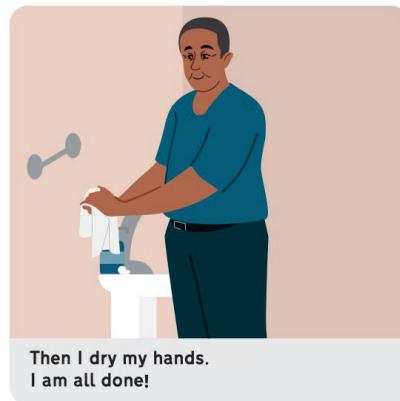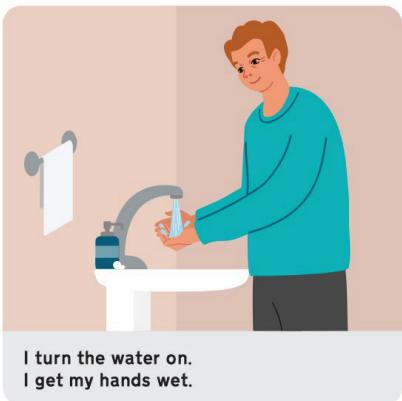
Part B: Sentences

Part B: Sentences

7. Does each sentence focus on 1 key point?

When you are writing for people with IDD/ELL, it's important to keep each sentence as straightforward as you can. Sentences that include multiple ideas can be difficult to parse for this audience — so break out each key point into its own sentence.

✗ More than 1 key point in each sentence	✓ 1 key point in each sentence
My doctor says I need to get a flu shot so I do not get very sick.	My doctor says I need to get a flu shot. The shot helps keep me from getting very sick.
After I get the shot, I feel tired and my arm is sore.	After I get the shot, I feel tired. My arm is sore.

8. Do all or almost all sentences, headers, and titles use 10 or fewer words?

Shorter sentences, headers, and titles are typically easier to understand. They also help to minimize cognitive load. Whenever possible, aim for 10 or fewer words.

9. Are all sentences in the active voice?

Use active voice when writing for people with IDD/ELL. Active voice means that **the subject of the sentence is doing the action**. (The subject is the person that the sentence is about.)

Sentences in active voice are usually shorter, easier to understand, and more conversational.

✗ Passive voice	✓ Active voice
Your heart will need to be checked every year.	A doctor will need to check your heart every year.

In some cases, if you are giving a behavioral recommendation, the implied subject of the sentence is "you." Here's an example of this type of sentence:

✗ Passive voice	✓ Active voice
Vegetables should be washed before they are cut or peeled.	Always wash vegetables before you cut or peel them.

Sentences—Key Takeaways

- Keep sentences short, straightforward, and conversational.

- Each sentence should focus on one key point.

- Keep sentences to 10 words or fewer.

10. **Are all headers and titles informative statements?**

While "question headers" are effective with general audiences, people with IDD/ELL may struggle with them. Choose headers that are informative statements.

Informative statements state facts and/or suggest what to do. They usually include a verb. Most importantly, they communicate the main idea of the content that follows the header.

❌ Question or unclear statement	✔ Informative statement
Handwashing Steps	**Wash your hands to stay healthy**
How do you wash your hands?	

11. **Is a consistent tense used throughout the product?**

Switching between tenses can cause confusion—so choose a single tense and stick with it. Whenever possible, choose a tense that doesn't require extra words, such as the simple present (for example, "I go").

❌ Different tenses	✔ 1 consistent tense
At home, I feel tired.	At home, I feel tired.
My arm is sore.	My arm is sore.
I will feel better in a few days.	I feel better in a few days.

Sentences—Key Takeaways

- Choose headers that state facts or suggest what to do.

- Choose a single tense and stick with it.

Part C: Words and Numbers

Part C: Words and Numbers

12. Does the product always use words the primary audience understands?

Lists of common sight words (like the **Dolch sight words** or **Fry sight words**) can help you identify words that are more likely to be familiar. Limit the number of non-sight words as much as possible. Use them only when there's no other way to express a concept or when the audience will need to know and use the word later.

Keep in mind that sight words are just a tool, not an absolute rule. Using sight words doesn't guarantee that your content will be easy to understand for all users with IDD/ELL. That's why it's so important to test products with your primary audience.

> **Tip:** People with IDD/ELL may take words literally. Avoid figurative language, figures of speech, and metaphors unless they are very common. For example, you might say "help you" instead of "give you a hand."

13. Does the product clearly define any need-to-know jargon terms using familiar words?

If you need to use a jargon term, be sure to define it in context using familiar words and an image, if possible. When you are using jargon, it's especially important to test key terms and definitions to make sure your audience understands them.

> **Tip:** Find alternatives to medical and public health terms using CDC's **Everyday Words for Public Health Communication** or National Center for Environmental Health/Agency for Toxic Substances and Disease Registry's **Environmental Health Thesaurus**. Remember that general plain language resources are a good place to start but not a substitute for audience testing.

14. Does the product always use the same word for the same concept?

It may be tempting to use different words to try to "mix it up" or keep your product from sounding repetitive. But repetition is helpful for people with IDD/ELL because they may struggle to connect different words that refer to the same concept.

❌ Using different words for the same concept	✔ Using the same word every time
Get a COVID-19 shot.	Get a COVID-19 shot.
The vaccine will help keep you safe from COVID-19.	The shot will help keep you safe from COVID-19.

Words and Numbers—Key Takeaways

- Always use words the audience understands.
  - ❖ If you must use a jargon term, define it with familiar words.
- Use the same word for the same concept.

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15. If the product conveys a quantity or length of time, are whole numbers (e.g., 1 to 10) used?

If you need to use numbers, choose whole numbers. Avoid fractions, decimals, percentages, and other complex ways of expressing numbers.

❌ Decimals	✔ Whole numbers
The surgery will take about 3.5 hours.	The surgery will take 3 to 4 hours.

16. Are all numbers shown as numerals rather than spelled out (e.g., 1, not "one")?

Spelled-out numbers are more likely to blend in to the text, and it takes extra mental effort to interpret them as numbers. Numerals look more distinctive, which can make them easier to identify.

❌ Spelled-out numbers	✔ Numerals
After surgery, you will stay in the hospital for three days.	After surgery, you will stay in the hospital for 3 days.

Tip: Make sure that your numbers are needed. Test them to make sure that they're helping your audience. For people with IDD/ELL, it may be easier to show a concept visually instead of relying on numbers.

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Words and Numbers—Key Takeaways

- Use whole numbers.
- Write numbers as numerals.

Practice

Sight Word Practice—Item 12

o Does the product always use words the primary audience understands?

o Which of the following is a sight word?

- **Doctor**
- **Nurse**
- **Pharmacist**

Sight words are common words that readers may learn to recognize on sight, as opposed to sounding out the letters (e.g., *there, what, water, school, doctor*).

Scoring Practice—Item 15

○ If the product conveys a quantity or length of time, are whole numbers (e.g., 1 to 10) used? **Yes or No**
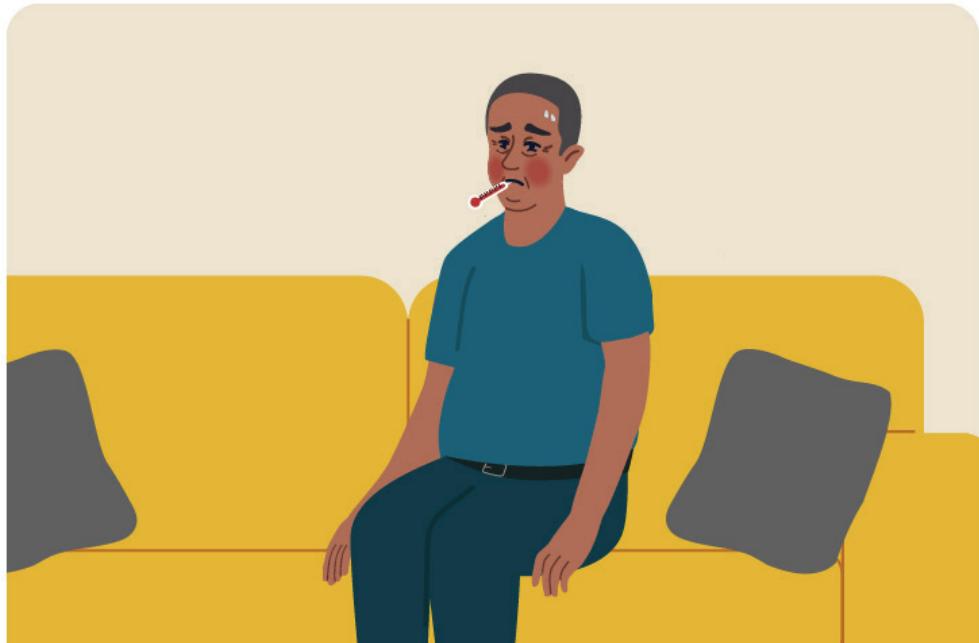
Stay home if you have a fever of 100.4 degrees or more.

Scoring Practice—Item 16

o Are all numbers shown as numerals rather than spelled out (e.g., 1, not "one")? **Yes or No**

Sometimes, people need 2 shots.
If I need 2 shots, I go back another day.

Part D: Text Layout

Part D: Text Layout

17. Is text left aligned?

Left-aligned text is usually easier to read than centered, right-aligned, or justified text.

Keep in mind that left-aligned text is a helpful rule of thumb, not an absolute rule. For example, centered text works well in videos. It all depends on the visual design of your product.

❌ Centered or justified text	✓ Left-aligned text
At home, I feel tired.	At home, I feel tired.
My arm is sore.	My arm is sore.
I feel better in a few days.	I feel better in a few days.

At	home,	I	feel	tired.
My	arm	is	sore.	
I	feel	better	in	a	few	days.

18. If the product is on more than 1 page, is the text formatted the same way on each page?

Consistency is helpful for people with IDD/ELL. Make sure to choose a single style for text formatting and image placement across all pages of the product.

19. Does every sentence finish on the same page it starts?

For people with IDD/ELL, it's important to be able to see each sentence all at once. Having to remember the beginning of the sentence or flip back and forth between pages increases cognitive load and makes it more likely that someone will misinterpret the sentence or miss a key point.

Text Layout—Key Takeaways

- Left-align text.

- Use consistent formatting across pages.

- Start and end sentences on the same page.

20. Does the product use a single sans-serif font?

Serifs are the "feet" on the letters of some fonts. Sans-serif fonts are those that don't have "feet." The simplicity of sans-serif fonts can make them easier to read, especially for adults with IDD/ELL. Examples of common sans-serif fonts include Arial and Verdana.

In addition, switching between different fonts can be challenging for adults with IDD/ELL—so choose a single font that works well for both headers and body copy and use it throughout your product.

✗ Multiple fonts	✓ Single sans-serif font
Stay safe from COVID-19.	**Stay safe from COVID-19.**
Wash your hands with soap and water.	Wash your hands with soap and water.

21. Does the product always use a 14-point or larger font size?

This font size is clear and easy to read for most people.

✗ 12-point font	✓ 14-point font
Stay safe from COVID-19.	Stay safe from COVID-19.

22. Is the product free from *italicized* or <u>underlined</u> words?

These types of text styling can be hard to read. Underlined words may be confused with hyperlinks.

It's best to avoid any type of special text styling in products for people with IDD/ELL, but if you need to emphasize a specific word, **bolding** is the best choice.

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Text Layout—Key Takeaways

- Use a single sans-serif font.

- Use a 14-point or larger font size.

- Avoid *italicized* and <u>underlined</u> words.

Part E: Visuals

Part E: Visuals

23. **Is only 1 visual included on each page or screen?**
Multiple images can be overwhelming to people with IDD/ELL. In general, keep it to 1 image per page or screen.

24. **Does each visual have no more than 1 to 2 lines of corresponding text that describe what is happening in the visual?**
It's important to make sure that visuals support the text. Large amounts of text can be overwhelming to people with IDD/ELL. Some people with IDD/ELL may not even want to read or engage with your product if they see that there's a lot of text. Use brief content that supports and directly relates to the visual.

Tip: If you are creating illustrations, it's helpful to include visual elements that provide context clues. For example, if the main character is going to a doctor's office, you could include a sign that says "clinic." If they're in line at the grocery store, you could include other characters in line. These details can help the audience understand what's happening in the picture. But it's best to avoid details that are just for decoration, such as paintings on the wall or background characters who aren't relevant to the story.

25. **Is text supporting the visual positioned directly below the visual?**
In user testing with people with IDD/ELL, text placed directly below the visual was more effective than text placed above or to the side of the visual.

❌ Text to the side of the visual	✓ Text directly below the visual
My doctor says I need a COVID-19 test. The test will help me know if I have COVID-19.	My doctor says I need a COVID-19 test. The test will help me know if I have COVID-19.
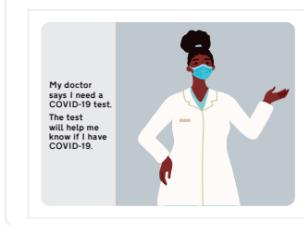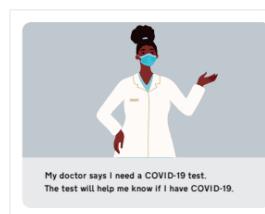
Visuals—Key Takeaways

- Show only one visual per page or screen.

- Include one or two lines of text below the visual to describe what is happening.

- Use literal images with at least minimal facial features.

Practice

Scoring Practice—Item 27

o When using an illustration of a person, are at least minimal facial features included (eyes, nose, and mouth)?

Yes or No
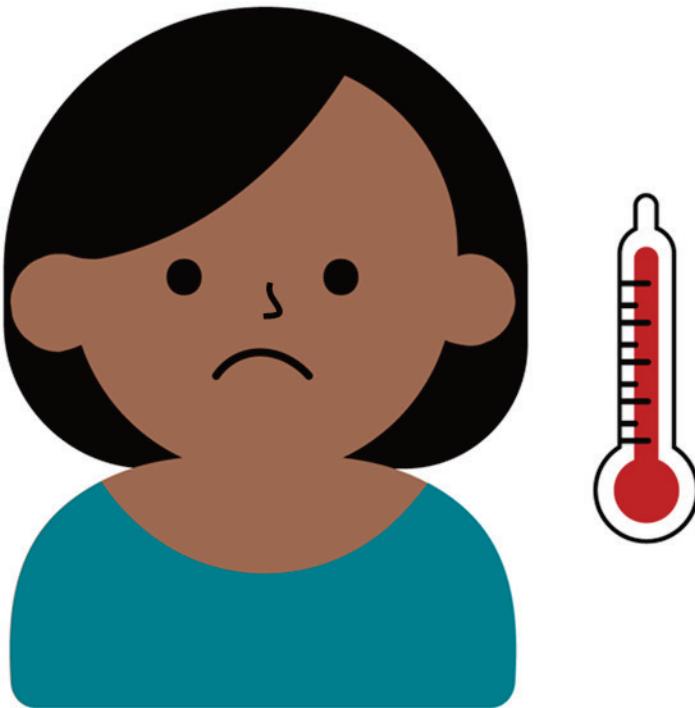
Scoring Practice—Item 26

○ Are all visuals literal images of the item or action rather than abstract symbols?

Yes or No
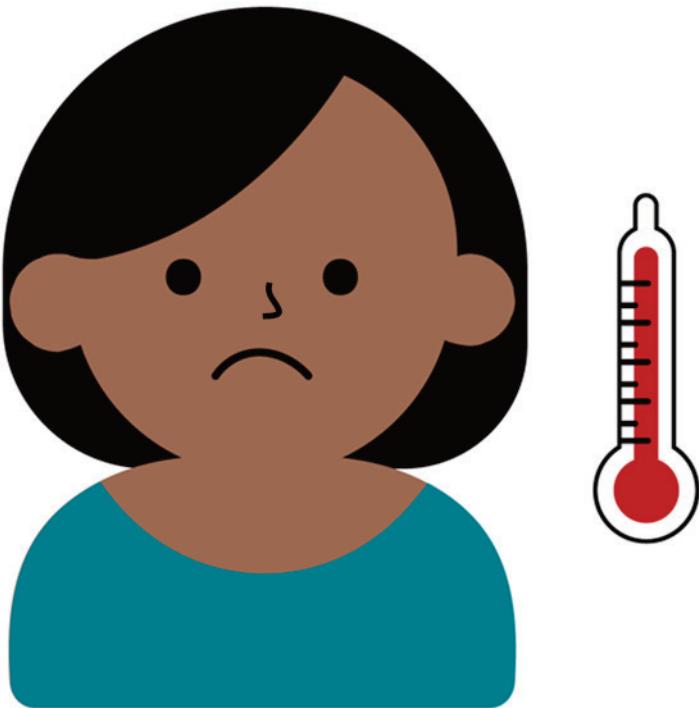
Thank You!

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Evaluation Survey Link

https://survey.alchemer.com/s3/7751167/Evaluation-Webcast-Beyond-Plain-Language

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