Readability Guide

Take simple steps to increase patient access. Improve the readability of study materials through:

- Text formatting and style
- Symbols
- Visuals
- Reading level

JRP Joint Research Practices

Readability Guide

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Benefits of Readability

Consistency

Efficiency

Ease of translation

Transparency

Accuracy

Trustworthiness

Language

✓

1. Target 6th- to 8th-grade reading level
2. Choose active voice
3. Use consistent and familiar words
4. Make familiar comparisons
5. Pick 1-2 syllable words
6. Shorten phrases
7. Limit sentences to 8-10 words
8. Limit paragraphs to 3-5 sentences

✗

1. Avoid passive voice
2. Avoid jargon, acronyms
3. Avoid technical language
4. Avoid scientific language
5. Avoid statistics
6. Avoid words with multiple definitions

Formatting

1. Use serif font for body text of printed materials
2. Use sans serif font for digital materials & printed titles
3. Use minimum 12- to 14-point font for printed materials
4. Bold for **emphasis**
5. Use left-alignment for text
6. Apply bullets and headers, where possible

1. Avoid ALL CAPS
2. Limit *italics* and underlining
3. Avoid split words across two lines

Symbols & Visuals Part 1/2

Show actions you want your audience to take
- Avoid images that show what the audience should not do

Include photos
- Include 'real life' events, people, emotions
- Avoid background distractions

Use simple illustrations or line drawings
- Highlight key components of an idea
- Simplify complex events or procedures (e.g., depict a person coughing to show COVID-19 transmission)

Symbols & Visuals Part 2/2

Show objects in their context
- Audiences may not understand figures if taken out of context (e.g., to highlight an internal organ, show the entire body for context)
- Contextualize size by using familiar objects
- Draw small objects larger to show detail

Choose inclusive visuals
- Consider gender, race, disability, and other visible characteristics

Pretest any use of symbols

Place visuals near the text to which they refer

Checklist

- ❑ Target 6th- to 8th-grade reading level
- ❑ Choose active voice
- ❑ Use consistent and familiar words
- ❑ Make familiar comparisons
- ❑ Pick 1-2 syllable words
- ❑ Shorten phrases
- ❑ Limit sentences to 8-10 words
- ❑ Limit paragraphs to 3-5 sentences
- ❑ Use serif font (printed body text)
- ❑ Use sans serif font (digital text & printed titles)
- ❑ Use minimum 12- to 14-point font (printed text)

- ❑ Bold for emphasis
- ❑ Use left-alignment for text
- ❑ Apply bullets and headers, where possible
- ❑ Show actions you want your audience to take
- ❑ Include photos
- ❑ Use simple illustrations or line drawings
- ❑ Show objects in their context
- ❑ Choose inclusive visuals
- ❑ Pretest any use of symbols
- ❑ Place visuals near the text to which they refer

Develop Readable Materials

1. Include the intended audience (e.g., local community) in the development and design of materials

2. Review all materials with a consistent checklist
   - See previous slide for an example checklist
   - Check for appropriate reading level of content; see next slide for calculators

3. Revise materials based on review

4. Pilot materials with members of intended audience

5. Revise materials based on pilot

Calculate Readability

Calculators

Multiple calculators:

https://www.wordcalc.com/readability/

Simple Measure of Gobbledygook (SMOG):

https://readabilityformulas.com/smog-readability-formula.php

Fleisch-Kincaid Index:

https://readabilityformulas.com/flesch-grade-level-readability-formula.php

PEMAT:

https://www.ahrq.gov/sites/default/files/publications/files/pemat-p.pdf

Example 1

Original

The nicotine contained in nicotine gum, lozenges, or patches does not contain the chemicals that cause cancer and other diseases. The goal of NRT is to support your transition away from cigarettes or other tobacco products.

Revised

Cigarettes can cause cancer and other diseases. Cigarettes contain nicotine. When you use cigarettes, your body gets used to nicotine.

Patches, lozenges, and gum, have small amounts of safe nicotine. Patches, lozenges, and gum, are also called Nicotine Replacement Therapy ("NRT"). The safe form of nicotine in NRT helps you to quit smoking. With this help, your body will not need nicotine over time.

Example 2

Original

Why am I having hiccups, an upset stomach, or heart burn? If you are using gum, this is usually because you are chewing the gum too much. Chew the gum less. When you are not chewing, place it between your gums and cheek. If you are using lozenges, this is usually from chewing the lozenge or sucking on them. Make sure you do not chew the lozenge. Place them in your cheek and let them dissolve. If symptoms continue, contact your doctor for other ideas to stop these problems.

Revised

Why am I having hiccups, an upset stomach, or heart burn?

If you use gum: This is usually because you are chewing the gum. Chew it only a few times. This will activate it. Then place it between your gums and cheek. Think of it as a wax instead of a gum.

If you use lozenges: You may be sucking on or chewing the lozenge. Place the lozenge in your cheek and let it dissolve.

Example 3

Original

I am bored with it. Write new FutureMe events to keep your texts interesting. This helps you to continue enjoy using FutureMe. Go to your Healthy Lungs portal online to write new events.

I can't think of anything to look forward to. Don't worry, you do not need to picture big life events to use FutureMe. Think about anything positive in the future, small or big. A walk in the sun. Talking to a friend.

Revised

😑 **I am bored with it.**

This can happen when the cues feel out of date. Use the Healthy Lungs website to write new FutureMe cues!

😣 **I can't think of anything to look forward to.**

You do not need to picture big life events to use FutureMe. Think about anything positive in the future, small or big. A walk in the sun. Talking to a friend. A dinner with family. A favorite holiday.

Readability Guide: Summary

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- Transparency
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2. Review all materials with a consistent checklist and check for appropriate reading level of content
3. Revise materials based on review
4. Pilot materials with members of the intended audience
5. Revise materials based on pilot

Symbols and visuals

1. **Show actions you want your audience to take.** Avoid images that show what the audience should not do.

2. **Include photos.** Include 'real life' events, people, emotions; avoid background distractions.

3. **Use simple illustrations or line drawings.** Highlight key components of an idea; simplify complex events or procedures (e.g., depict a person coughing to show COVID-19 transmission).

4. **Show objects in their context.** Audiences may not understand figures if taken out of context (e.g., to highlight an internal organ, show the entire body for context); contextualize by using familiar objects; draw small objects larger to show detail.

5. **Choose inclusive visuals.** Consider gender, race, disability, and other visible characteristics.

6. **Pretest any use of symbols.**

7. **Place visuals near the text to which they refer.**

References

1. CDC: "Simply Put: A guide for creating easy-to-understand materials," https://www.cdc.gov/healthliteracy/pdf/simply_put.pdf

2. Rima E. Rudd, Harvard Health Literacy Studies: "Guidelines for Creating Materials," https://cdn1.sph.harvard.edu/wp-content/uploads/sites/135/2012/09/resources_for_creating_materials.pdf

3. Plain Language Action and Information Network (PLAIN): https://www.plainlanguage.gov/

4. Sameer Badarudeen & Sanjeev Sabharwal, Clinical Orthopaedics And Related Research: "Assessing readability of patient education materials: current role in orthopaedics," https://pubmed.ncbi.nlm.nih.gov/20496023/