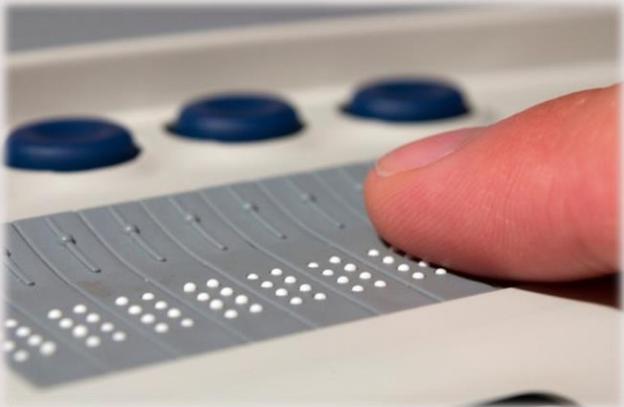




Roundtable Discussion: Accessibility is more than Readability

Patient Education for Those with Disabilities



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Objectives



The objectives for this roundtable are:

- Briefly review definitions of disability.
- List the impairments most often addressed in the accessibility literature.
- Discuss the concerns that medical communicators may have about creating accessible electronic documents.
- Share resources for improving the accessibility of electronic documents.
- Share opportunities for continuing education about accessibility issues for medical communicators.

What is a Disability

"There are no disabled people, only disabling environments. We must strive to enable them for all." Jeffrey Ricker (2021)

"In most languages, terms equivalent to that of disability contain the notions of less value, less ability, a state of being restricted, deprived, deviant. It is in line with such concepts that disability is exclusively viewed as a problem of the affected individual."

From: [Disability: Concepts and Definitions \(2011\)](#)





What Is a Disability?

Defining the Concept of Disability:

- Disability is typically defined for specific purposes (e.g., legal definitions).
- No general definition is possible: many unrelated conditions have been labeled as disabilities (e.g., deafness, blindness, diabetes, arteriosclerosis, autism, depression, schizophrenia, bipolar disorder, epilepsy, multiple sclerosis, HIV, loss of a limb, Paraplegia.).

Approaches to Understanding Disability:

- Medical approach—disability is a dysfunction that is an attribute of the individual.
- Social approach—disability is the interaction between impairment and the social environment.

Reference:

[Wasserman, D. & Aas, S. \(2022, Summer\). Disability: Definitions and Models.](https://plato.stanford.edu/archives/sum2022/entries/disability/) In E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, (forthcoming URL <https://plato.stanford.edu/archives/sum2022/entries/disability/>)

What is Accessibility?

Accessibility is a broad concept that extends across many domains and categories of people:

- Domains—we will focus on the accessibility of electronic documents (e.g., Word and PowerPoint files, web pages and pdfs, multimedia presentations, podcasts, etc.).
- Categories of people—We will focus on people with visual, auditory, motor, cognitive, and learning impairments.

Thus, we are concerned with the ability of people with sensory, motor, and cognitive/learning impairments to navigate through and comprehend electronic documents.





Topics to Discuss

We can discuss any specific topics you want to. But here is a list of some important features to consider when creating accessible documents:

- Keyboard shortcuts
- Hyperlinks
- Visual aspects of document
- Images and graphics
- Tables

Accessibility Example

Visual Impairments

I will use myself as an example.

My impairment limits me in the following ways:

- I cannot navigate with a mouse.
- I cannot visually perceive electronic documents.





In order to navigate through and comprehend electronic documents:

- I use keyboard commands.
- I use assistive technology, such as screen readers and scanners

Demonstration with Word document:

Ricker, J.(2022). "The Jake syndrome": How a Human Genetic Disorder, Williams-Beuren syndrome, May Help Explain Why Our Dogs Love Us So Much. (Manuscript in preparation)

Demonstration with webpage:

Eysenbach, G. (2020). How to fight an infodemic: the four pillars of infodemic management. *Journal of medical Internet research*, 22(6), e21820.

Example 2

Double Impairment (Auditory and Visual)

Steven Wilson, who is 55 years old, has Usher's syndrome, which begins in childhood and leads to progressively worsening hearing and vision loss over time. He is in his final semester at the University of Arizona, where he has been working towards a Master's degree in Rehabilitation Counseling. As part of his degree requirements, Steven currently is interning as a Rehabilitation Counselor with the Arizona Department of Economic Security.

Steven has the following impairments:

- Profound hearing loss
- Poor central vision
- No peripheral vision
- Complete night blindness
- Difficulty discerning colors
- No depth perception



[Click here to read an interview of Steven.](#)



Example 2

Double Impairment (Auditory and Visual)

Steven is not yet completely blind. To read text, he uses magnifiers (e.g., ZoomText) and color inversion (reversing the color of text and background). Steven still can hear when sound is greatly magnified. But multimedia presentations should include transcripts and captioning. Live presentations (e.g., Zoom webinars) should include CART (Communication Access Real-time Translation) Services. CART is an instant translation service that can be read with a refreshable Braille display.



Accessibility Resources

Microsoft Office Resources

[Make Your Word Documents Accessible To People With Disabilities](#)

[Make Your PowerPoint Presentations Accessible To People With Disabilities](#)

Plain Language Resources

[Webaim: Writing Clearly And Simply](#)

[Centers For Disease Control: Plain Language](#)

[National Institutes Of Health: Plain Language](#)

Webaim Articles

[A List Of Articles On Web Accessibility](#)



Accessibility Training

[WebAIM: Accessible Documents \(Word, PowerPoint, & Acrobat\)](#)

This independent-study online training covers principles and processes for Microsoft Office (Word, PowerPoint, and Excel) and Adobe Acrobat.

[WebAIM: Virtual Web Accessibility Training](#)

Join WebAIM's accessibility experts for two days of virtual web accessibility training.... This training session will teach basic web accessibility principles and advanced accessibility techniques.