TSBM Case Study Plain Language Writing Guidelines

Plain language is communication that is clear, accessible, and useful. Plain language enhances communication about research so that everyday people can access health information and understand the impact of research.

Considerations when editing a case study for readability:

Questions to ask yourself	Considerations
Who is my audience?	• Tailor writing to a broad audience. • The TSBM website audience includes community partners, study participants, researchers, clinical or public health practitioners, and policymakers.
What does my audience already know about this topic?	• Consider what a broad audience might already know, think, and feel. • What else they may need to fully understand the message.
What questions might my audience have?	• Try to anticipate audience questions and construct your narrative accordingly. • Most audience members will not be field experts or frequent readers of scientific research.
How is my audience receiving this information?	• Consider the time, place, and medium in which readers will access the information. • TSBM Case Studies are online, convey an impact story, and encourage understanding and utilization of research benefits.
How accessible is my message?	• Consider language use, technology use, and communication channel access.
How clear, concise, and organized is my writing?	• Use shorter sentences. • Write for your reader. • Highlight primary research benefits. • Stick to your topic. • Use everyday words, limiting acronyms and technical jargon. • Write in active voice. • Only provide necessary detail.

Plain language resources:

- NIH Plain Language website
- Plain language.gov
- Writing Science in Plain English You Tube Video
- Patchwork Paraphrasing

Health equity writing resources:

- AMA's Advancing Health Equity: A Guide to Language, Narrative, and Concepts
- CDC Health Equity Guiding Principles for Inclusive Communication

Example of plain language editing:

Sample paragraph:

Pre-edit:

Cancer is a global pandemic, increasingly burdening individuals, families, and healthcare systems worldwide.[1] Brain tumors, specifically, make up a significant portion of the overall cancer burden. Brain tumors are the fifth most common type of cancer in the United States.[2] Even so, brain tumors cause more sickness and death compared to how often they occur.[2] Brain tumors most frequently occur in children under age 15 years,[2,3] and can have substantial enduring impairments.[4] This is particularly problematic as health during childhood not only has a lasting impact on the individual, but society as well,[5] as children represent the future workforce in an aging US population.[6]

Diagnosing brain tumors typically involves neuroimaging, and subsequent surgical resection, tissue biopsy, or lumbar puncture and blood draw – all of which are extremely invasive and have risks.[1] A noninvasive, inexpensive, and rapid option is a blood-based liquid biopsy, which is a blood test for cancer cells or DNA pieces from the tumor. [1] However, brain cancer continues to be a diagnostic challenge. Brain tumor biomarkers are limited in the blood due to the blood-brain barrier which acts as physical barrier preventing brain tumor biomarkers from entering the blood stream.

Sonobiopsy is an emerging technology that combines transcranial low-focused ultrasound (FUS) with intravenously injected microbubbles to disrupt the blood brain barrier noninvasively and reversibly. By using this noninvasive method, physicians can obtain blood samples with adequate tumor biomarkers to determine the brain cancer type and stage.

Post-edit:

Cancer is a global pandemic, increasingly burdening individuals, families, and healthcare systems worldwide. [1] Brain tumors are the fifth most common type of cancer in the United States.[2,3] Diagnosing and treating brain cancers is complicated by the blood-brain barrier (BBB). The BBB is a physical barrier that prevents the circulation of genetic information such as disease-specific biomarkers from the brain to the circulatory system. Current methods for brain cancer diagnosis include neuroimaging, surgical resections, tissue biopsies, and lumbar punctures. [1] These methods are invasive, risky, and can be uncomfortable. A promising, noninvasive new method to bypass the BBB is sonobiospy. Sonobiopsy combines transcranial low-focused ultrasound with intravenously injected microbubbles to disrupt the BBB. By using this inexpensive and rapid method, physicians can obtain blood samples with adequate tumor biomarkers to determine the brain cancer type and stage and assess whether a treatment is effective.