Abstract Submission

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- 1.
- a) Health literacy is important because it allows individuals to access and interpret their health information. It is critical for self-management of health and making informed decisions about one's own health. Health literacy can be defined as the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others. Low health literacy has been linked to poorer health outcomes, such as higher rates of hospitalization and medication errors. By improving health literacy, individuals can better manage their health and make informed decisions about their healthcare. Health literacy also helps individuals navigate the healthcare system, communicate effectively with healthcare providers, and follow treatment plans. When individuals have low health literacy, they are more likely to experience negative health outcomes and have higher healthcare costs.
- b) Health professionals must know how to evaluate health-related websites because patients and their families often turn to the internet for health information. Not all information found on the internet is accurate or reliable, so being able to distinguish between factual and non-factual information is important. Providers must be able to determine the quality of information on a website to make informed decisions about a patient's health and provide resources for patients to understand their conditions. Health professionals can assist patients and their families in assessing the quality of health information by evaluating websites using specific categories. By doing so, health professionals can ensure that patients and their families have access to accurate and reliable health information.
- 2. The condition I chose to focus on is a pulmonary embolism. A pulmonary embolism is a serious medical condition that occurs when a blood clot travels to the lungs and blocks blood flow. It can cause chest pain, shortness of breath, and even death. It is important for patients and their families to understand the symptoms and risk factors associated with pulmonary embolism. One health-related Internet resource that can be used to promote patients' and families' knowledge about pulmonary embolism is the American Lung Association website. This website provides information on various lung diseases, including pulmonary embolism, and offers resources for patients and their families, such as support groups, resources, and educational materials. The website includes information on how to prevent pulmonary embolism and treatment options.
- a) https://www.lung.org
- b) The American Lung Association website is well-designed and easy to navigate, featuring a clean and uncluttered layout with large font sizes, a well-organized and intuitive navigation menu, and minimal but effective graphics. It includes links to various sections of the website, such as "Lung Health & Diseases," "Our Initiatives," and "Get Involved," as well as a search bar to find specific information. Images are used effectively to break up text and increase interest.

3.

a) **Provider/Purpose:** The website is provided by the American Lung Association (ALA), a reputable nonprofit organization dedicated to promoting lung health. The purpose of the website is to provide information and resources related to lung health and lung diseases, including pulmonary embolism. Contact information was readily available, as well as the mission statement dedicated to improving lung health and preventing lung disease. The organization began over 115 years ago to end the threat

of tuberculosis. Today, they are a trusted source for lung health education, research, support, programs, services, and advocacy for other respiratory diseases.

Information Quality: The website provides accurate and reliable information on lung health and diseases, including pulmonary embolism, presented in an easy-to-understand format, and supported by reputable sources such as the National Institutes of Health and the Centers for Disease Control and Prevention. The website's "Research & Innovation" section demonstrates the organization's commitment to promoting accurate and reliable health information.

Privacy: The website's privacy policy is clear and provides information on how visitor data is collected and used. The website does not collect any personally identifiable information from visitors, and the privacy policy is easily accessible from the website's footer. It provides information on how visitor data is collected and used, including the use of cookies and other tracking technologies.

Funding: The American Lung Association website is funded by the nonprofit organization and does not display any advertising or sponsored content. The website's "About Us" section includes information on the ALA's funding sources, including donations, grants, and corporate partnerships.

b)

According to the seven readability formulas used to analyze the selected text, the readability level is considered difficult to read, with a grade level of 12 and a reader's age of 17-18 years old. The Flesch Reading Ease score is 47, which is considered difficult to read. The Gunning Fog and Flesch-Kincaid Grade Level scores are both above 11, indicating that the text is written at a level that is generally reserved for those who have completed high school. The Coleman-Liau Index and Automated Readability Index are both at a grade level of 12, while the SMOG Index is at a grade level of 10.9. The Linsear Write Formula score is the highest at 13.9, indicating that the text is written at a level that is generally reserved for those who have completed a few years of college.

4.

- a) Strengths & Limitations: The American Lung Association website is a respectable nonprofit organization that provides reliable information on lung health and lung diseases, including pulmonary embolism. It is well-designed and easy to navigate, with minimal graphics and images used to break up text and improve visual interest. The text on the website may be difficult for some to read, receiving a low Flesch Reading Ease score, which may make it challenging for individuals with lower literacy levels to comprehend the information provided. This website does not offer enough specialized information on pulmonary embolism for patients and families seeking more in-depth information.
 b) The text on the website may be difficult for individuals with lower literacy levels to read, which could limit its effectiveness for certain patient populations. Improvements could be made to increase accessibility and readability to improve patient literacy. The font is very large and beneficial for people who have need corrective lenses and older populations. Patients and families may use the health website in unintended ways, such as relying solely on it for medical advice instead of following up with healthcare providers.
- c) Health professionals can improve the health and eHealth literacy of patients and families by evaluating websites using specific categories to ensure access to accurate and reliable health information. They can also provide additional resources and support to help patients and families understand their conditions and treatment options.

- d) To improve the health website, it is recommended to increase readability by simplifying language and sentence structure, provide more detailed and specialized information, increase accessibility by adding alternative text and closed captioning, and offer additional resources such as support groups and information on how to talk to healthcare providers.
- 5. The American Lung Association website is a valuable resource for patients and families seeking information on pulmonary embolism and other lung diseases. It is provided by a reputable nonprofit organization, funded by donations and grants, and offers accurate and reliable information. The website's text may be difficult for some individuals to read, particularly those with lower literacy levels. Improvements could be made to increase accessibility and readability. Health professionals can play a critical role in improving the health and eHealth literacy of patients and families by assisting them in assessing the quality of health information and providing additional resources and support. While the American Lung Association website can be a useful tool for patient and family education, it should be used in conjunction with other resources and backing from healthcare providers.

6. References:

Association, A. L. (n.d.). *American Lung Association*. Home | American Lung Association. https://www.lung.org/

Association, A. L. (n.d.-b). *Pulmonary embolism (PE)*. (PE) | American Lung Association. https://www.lung.org/lung-health-diseases/lung-disease-lookup/pulmonary-embolism

Centers for Disease Control and Prevention. (2022, July 20). *EHealth literacy*. Centers for Disease Control and Prevention. https://www.cdc.gov/healthliteracy/researchevaluate/eHealth.html

Readability Formulas. Automatic readability checker, a free readability formula consensus calculator. (n.d.). https://readabilityformulas.com/free-readability-formula-tests.php

U.S. National Library of Medicine. (n.d.). *Evaluating internet health information: A tutorial from the National Library of Medicine*. MedlinePlus. https://medlineplus.gov/webeval/webeval.html

7. Appendix:

Flesch Reading Ease score: 47 (text scale)

Gunning Fog: 14.4 (text scale) Flesch-Kincaid Grade Level: 11.8 The Coleman-Liau Index: 12 The SMOG Index: 10.9

Automated Readability Index: 12.4

Linsea Write Formula: 13.9

Readability Consensus: Based on 7 readability formulas, we have scored your text as "Grade Level: 12, Reading Level: difficult to read, Reader's Age: 17-18 yrs. old (Twelfth graders)."