

Website Accessibility in the Healthcare Marketplace

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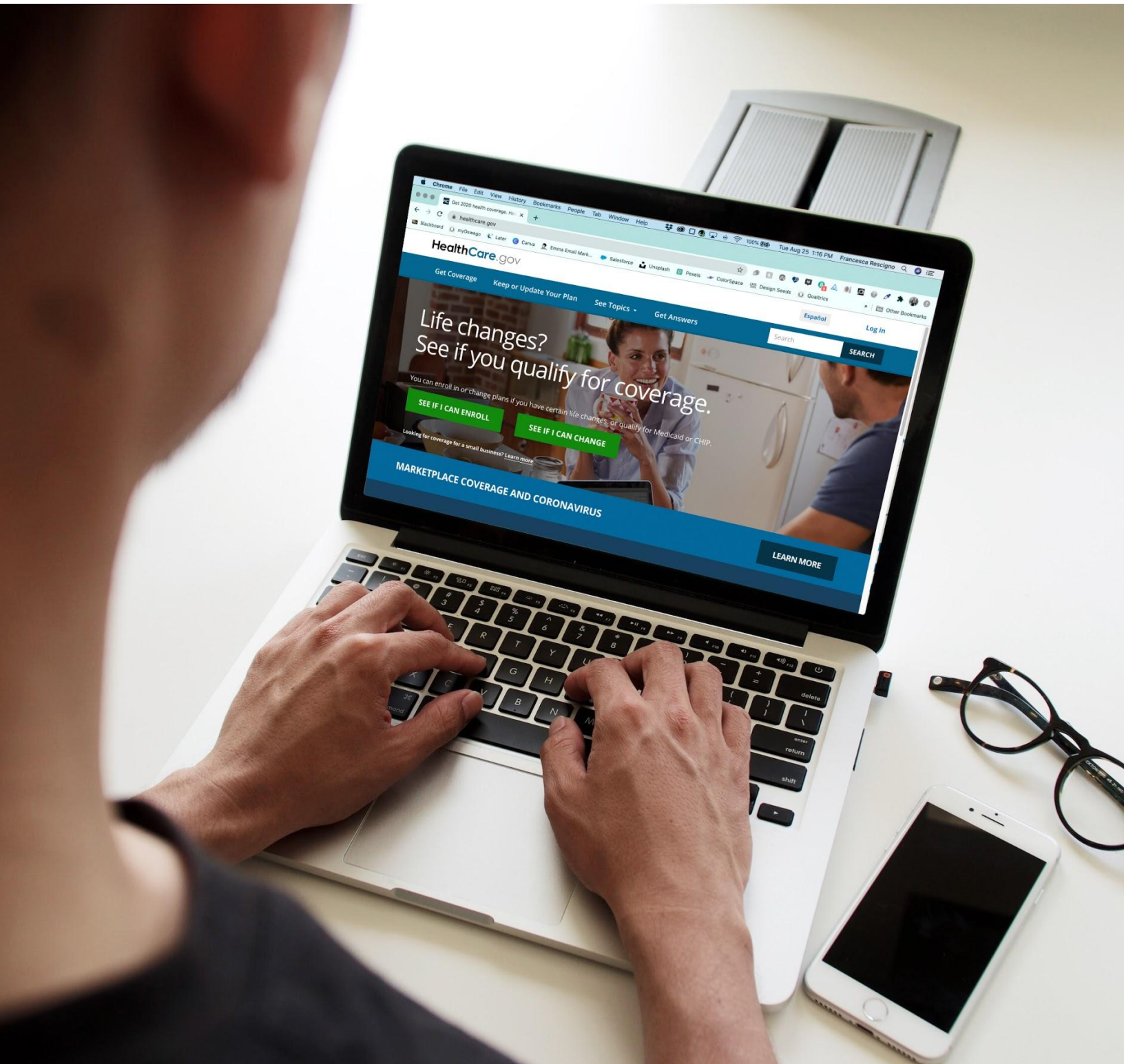


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Acknowledgements

We would like to provide a special thanks to the Office of Research and Sponsored Programs and the Faculty-Student Challenge Grant for funding this work and giving us the opportunity to better understand the struggles faced by those accessing healthcare websites.

Abstract

There have been reports of people with and without disabilities having issues with the accessibility of these state marketplace websites. In 2014, the Affordable Care Act (ACA) was passed, which allowed people that never had insurance, to have insurance for the first time in their lives. Shortly after the ACA was passed, it instructed each state to set up a health insurance marketplace, where people could shop and enroll in health insurance. States that didn't set up their own site, would use the Federal Marketplace website. The states needed to make sure that all people could access the content on these websites. The states were instructed under the Affordable Care Act, to follow the accessibility guidelines in Section 508 of the Rehabilitation Act of 1973. Accessibility is the idea of making websites that can be used by as many people as possible. Identifying accessibility issues with these health insurance marketplace websites before open enrollment has the possibility to help people advocate for their rights and might also make states improve their websites to make it accessible for everyone before the enrollment period. In order to gather quantitative data in terms of how accessible the websites we were studying were, each website was tested using a system of questions to evaluate what was or was not present on the site. Each component of the websites that was tested directly correlated to the Web Content Accessibility Guidelines (WCAG) 2.0 AA Standards. This study aims to consider what accessibility benchmarks are most often overlooked and how that impacts citizens, particularly those with disabilities, looking for healthcare and health insurance coverage.

Research Methods

Quantitative Research Process

In order to gather quantitative data in terms of how accessible the websites were, each website was tested using a system of tests to evaluate what was or was not present on the site. Each component of the websites that was tested directly correlated to the Web Content Accessibility Guidelines (WCAG) 2.0 AA. The websites were evaluated based on whether or not they met the criteria outlined in the WCAG 2.0 AA and were completed using HTML code validation, web developer tools, WAVE and AXE extensions for Google Chrome, and the NVDA screen-reader. A number of the criteria were tested at multiple browser widths, and on a mobile device to ensure that we were considering the multiple ways in which a person would access these sites.

Four categories of pages were tested from each website including the homepage, the page to compare plan prices, finding in-person help and the accessibility statements. Each page was tested using the same set of questions, and each individual page was assigned a score for the four categories of the WCAG 2.0 Standards: Perceivable, Operable, Understandable and Robust. From these scores we were able to gain a better understanding of how accessible each page was, and also observe trends between pages and between states.

Qualitative Research Process

During this project, we used Mendeley to help with the organization of our sources. Whenever we had a new source that we used, it would get imported into Mendeley and then checked to make sure the information was correct. Mendeley also helps with in-text citations, there is a plugin that can be installed on Microsoft Word, and you can insert a citation right from Mendeley. Throughout the project, Mendeley helped to collect our reference materials and organize the citations.

DeDoose was also a crucial part of this project. DeDoose was used to code the state and federal marketplaces accessibility statements. We came up with codes that we thought would be important for accessibility. We created codes such as measures taken, limitations, and then we also had keywords we looked for such as, persons with disabilities, and equal access. DeDoose helped us draw conclusions about the data. DeDoose also provides the option of using the collected data to create graphs and word clouds. Also, DeDoose allows data to be exported to an excel spreadsheet or word document which is helpful when looking for patterns. DeDoose helped with coding and the analysis of our qualitative data.

Results

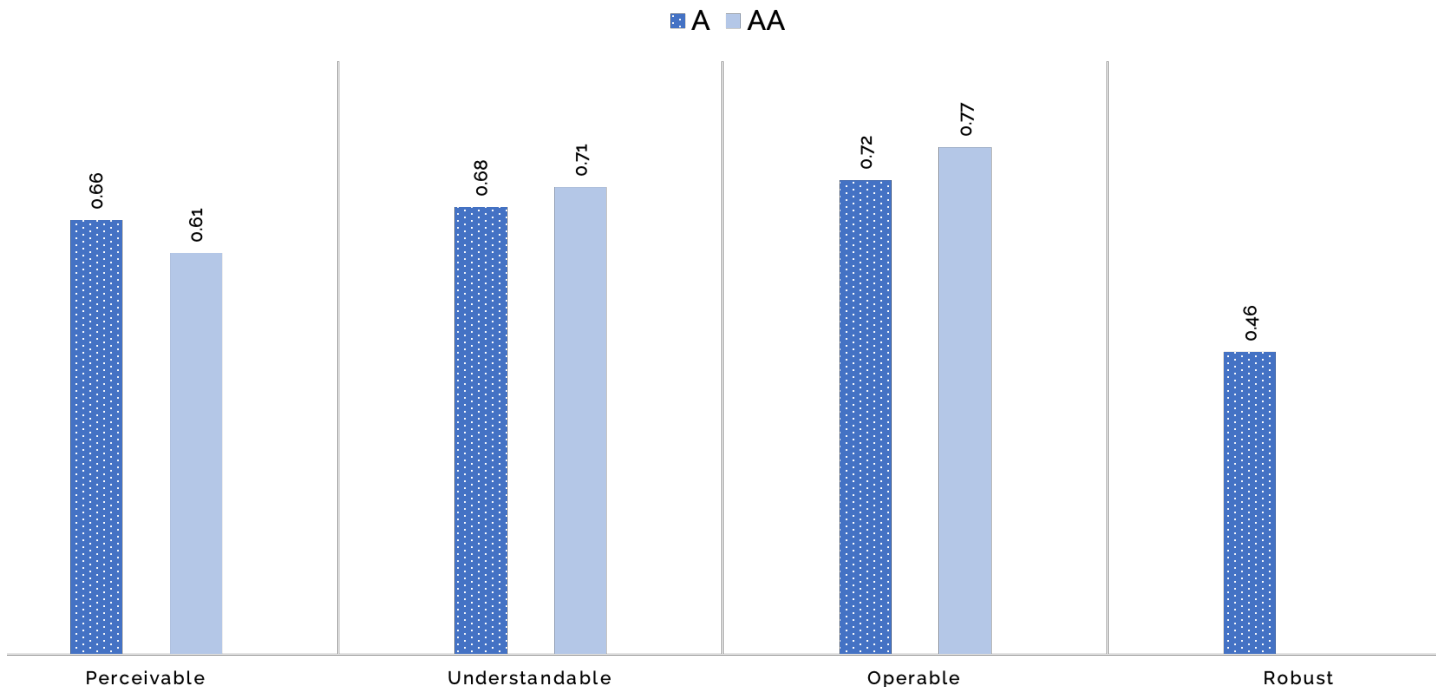
Quantitative Research Findings

After the testing was completed, we were able to convert the testing data to quantitative data and in turn examine trends across different categories of data and draw conclusions based on our findings. In the graph included below, we have provided information about the average score across all homepages for each of the four WCAG categories: perceivable, operable, understandable and robust. Each category has two columns that represent the averages for the WCAG 2.0 A Standards and the WCAG 2.0 AA Standards, with the exception of the robust category which does not have any data for WCAG 2.0 AA Standards. Our scoring was based upon the assumption that a perfect score would equal 1.0. The scoring for each category is as follows: Perceivable A=0.66, Perceivable AA=0.61, Understandable A=0.68, Understandable AA=0.72, Operable A=0.71, Operable AA=0.77, Robust A=0.46. As you can see, all of the averages are below 1.0, and all except one are more than 25% below it. This is particularly concerning for the A standards, as they are quite literally the bare minimum that is required in order to have an accessible web experience.

Aside from the testing results, it is also important to discuss the overall user experience of the website and how easy it is to navigate. This can be an issue with the design itself, how the content is presented, and how the website is coded. Things like hierarchy, functional menus, and the amount of content on each page impact the experience that both disabled and non-disabled users have. Although we think of these as being visual, they are also built into the coding of the website, and how the content is added to the website. This affects

how someone with a screen-reader, or someone navigating with a keyboard would access content.

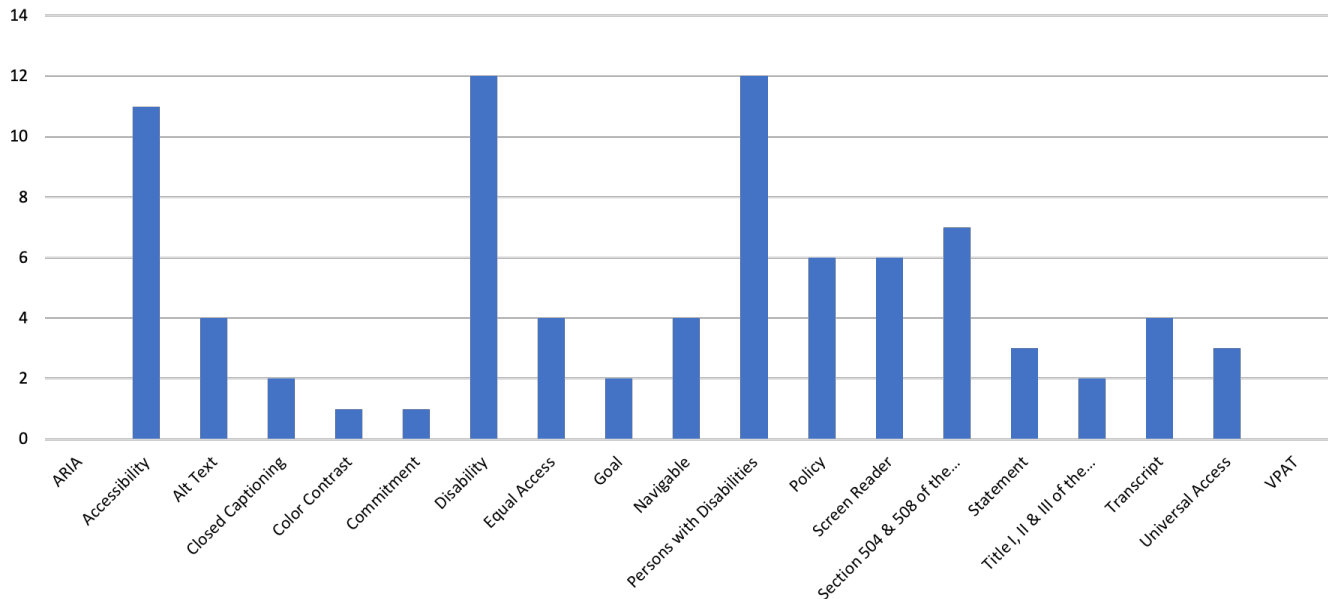
HOMEPAGE SCORES BY WCAG 2.0 CATEGORY



Qualitative Research Findings

Through analyzing the Accessibility statements using DeDoose, we were able to gain a better understanding of the kind of language that is being used on these websites, and what kind of emphasis, or lack thereof, was being placed on accessibility. Out of the fourteen Accessibility statements that we coded, only 8 mentioned WCAG and/or Section 508. Nearly 50% of the accessibility statements had no record of either terms. In the bar graph below, we are displaying how many times the key words were coded in the accessibility statements, and which ones were the highest occurring and lowest occurring. It's clear that accessibility, disability, and persons with disabilities are used in almost every statement. While this is important, it's also important to note that the lack of use for many of the other terms means that these accessibility statements are not addressing the palpable ways in which they are emphasizing accessibility. For example, alternative text, color contrast, and navigability are all key aspects of building an accessible website. If the focus is on the claim of accessibility, rather than how it will be fulfilled, there is no guarantee that any actions are being taken to fulfill this claim.

OCCURRENCES OF KEY WORDS IN ACCESSIBILITY STATEMENTS



Summary

Why is accessibility important? Because everyone should be able to access a website and have the same experience regardless of what kind of device they're using, or if they have a disability. It is extremely important in the world of healthcare because everyone needs health insurance. The process of choosing and enrolling in health insurance can be a confusing process for everyone—adding the barriers of an inaccessible website only complicates this further. It is important to not only address accessibility in words and statements, but also in actions. As we learned by examining the accessibility statements, many of them may address accessibility but do not provide any concrete plans for how to implement features that will improve accessibility. This is proved by the testing results that show that there is still much that needs to be done in order to provide a truly accessible experience to the users of these sites. Creating an accessible website not only allows all users with disabilities to easily access content, it also creates a better user experience for those who are non-disabled.