Focusing on health equity to build better online health resources for women

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Boston University School of Public Health The COVID-19 pandemic has led to substantially greater use of health-related online resources and more time spent in online environments. More than half of people in the US go online to get health-related information, though what they are looking for and how they engage vary significantly by age, education level and other demographics. Women are the greatest consumers of health care information, and <u>research has shown</u> they make the majority of healthcare-related decisions for themselves and their families. As a result, there are a wide array of women's-health-oriented websites offering education, tools, communities and products that have been created for women by marketers, health care organizations, advocacy groups and federal agencies.

However, "women" and "women's health" are not one size fits all. Women's experiences and health information needs vary by racial and ethnic background, socioeconomic position, geography, education, LGBTQ+ identity, disability status and overall health literacy. As such, women's-health-oriented websites are challenged to be accessible and relevant across a wide range of characteristics to ensure users will see themselves reflected and be able to engage with the site's content. The persistent health inequities experienced by marginalized women highlight the need to consider these women's needs specifically when creating content and considering the degree to which online content is relevant and valuable to them.

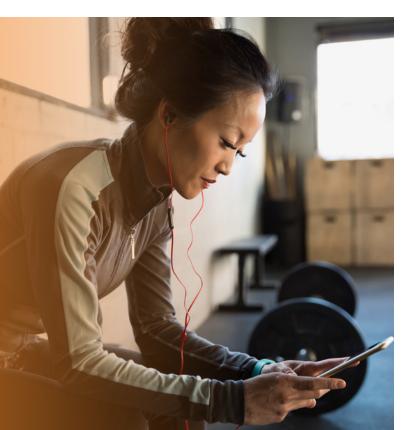
Online content on its own is not enough to overcome the structural barriers that create and maintain health inequities. But if online content is created that acknowledges structural barriers and is designed to be accessible and relevant to those who are most likely to experience health inequities, it could be more effective in addressing the total health care experience. Paying attention to <u>health equity</u> within women's online health environments can engage those most in need, enhance online health information access and improve a business's bottom line.

Mounting research has explored the ways in which individuals navigate, understand and evaluate online health information; however, few have examined what women of diverse identities and experiences may encounter when they are seeking health-related information online. Given that online health information has the power and potential to <u>shape</u> health beliefs, behaviors and outcomes, it is critical to understand what individuals may find when browsing for information. Additionally, the expansion of digital content development and the use of derivative content across sites has the potential to <u>exacerbate existing</u> inequities and stereotypes.

To help businesses become more aware of how to develop online health resources that help promote health equity, there is a need to assess how existing resources do or do not address the health experiences and health information needs of women across a wide spectrum of identities and experiences.

In this formative study, we reviewed women's-healthoriented web-based resources and assessed the presence or absence of health equity language and principles.

This process informed a set of recommendations for businesses interested in <u>advancing health equity</u> in online environments.



The business case for building better online health resources for women

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Women are the greatest consumers of health care information.

Women make the majority of health care decisions for themselves and their families.

Improving health services for women and marginalized populations helps to improve health for all.

Incorporating health services for women and marginalized populations into a company's strategy can grow market share and bottom line.

Assessing women's health websites with a health equity focus

To explore how online health environments do and do not promote health equity among women of diverse identities and experiences, we created a set of criteria and then reviewed 75 US-based websites offering educational or informational content on one or more women's health topics.

Websites were evenly split in their focus on general health for women vs. addressing a specific health topic or concern (49% vs. 51%, respectively). The most common topic discussed was mental health (46 sites, or 61%), followed by breast health (52% of sites), pregnancy and perinatal health (47%), family planning/sexual health (47%) and cancer (45%). We also assessed site landing and "about" pages for keywords that are often associated with women's health, including those that align with stereotypes about women's interests (e.g., parenting, wellness, fitness, nutrition). When assessing these keywords, 91% of websites in this review included text about dieting, 91% about exercise, 84% about weight loss, 84% about wellness, 75% about parenting and 60% about caregiving. These topic areas arose consistently regardless of a website's specific health focus or concern.

Identifying whom websites are trying to reach, either explicitly or implicitly, helps in understanding the relative inclusivity or relevance of the site for different groups. In analyzing the 75 websites, a substantial proportion of them (44%) did not tailor content to a specific subpopulation of women (e.g., by age group, race/ethnicity or location). Almost one quarter of sites (23%) identified their focus audience as women with a specific condition (e.g., menopause, hair loss).

How does health equity show up (or not) in these spaces?

We conducted a preliminary analysis of visual representations of diversity on each website's landing page, including images showing people with a range of skin tones, body sizes, sexual or gender identities (including nonconforming gender expressions) and visible disabilities. Of the 75 sites we reviewed, 23 (31%) included only images of people who appeared to be of White race/ethnicity, 52 (69%) did not include any images of people living in larger bodies, 69 (92%) did not include any images suggesting sexual or gender diversity, and 73 (97%) did not include any images of people with visible disabilities.

We did not search specifically for keywords focused on demographic or identity groups; however, it is notable that, of the 75 sites, only three were specifically for Black women, one was specifically for Jewish women, and none were specific to any other racial or ethnic subgroups of women. Of these four sites focused on specific groups of women, three explicitly stated they were created by and for the communities they were designed to serve.

We conducted keyword searches on each site's landing page, "about" page, and navigating menu for terms related to diversity, equity, inclusion and the health of marginalized populations.

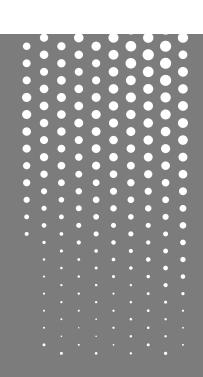
We found that 21 sites (28%) used one of the following terms: "equity", "inequity", "disparity"; 23 (31%) used the term "diversity", 20 (27%) used the terms "inclusion" or "inclusivity", six sites (8%) used the term "vulnerable", and 0 (0%) used the term "marginalized". We also assessed two domains of accessibility: use of alt text and provision of multilingual support. Of the sites, 58 (77%) provided alt text for screen readers to increase access for those with vision impairment, while 20 (27%) offered translation or other multilingual options.



Findings	
Keywords	
Equity, inequity, disparity	21 sites (28%)
Diversity	23 sites (31%)
Inclusion, inclusivity	20 sites (27%)
Vulnerable	6 sites (8%)
Marginalized	0 sites (0%)
Accessibility	
Alt text	58 sites (77%)
Translation, multilingual options	20 sites (27%)
Visual indicators	
White race/ethnicity only	23 sites (31%)
No images of people living in larger bodies	52 sites (69%)
No sexual or gender diversity	69 sites (92%)
No representations of visible disabilities	73 sites (97%)

| Summary

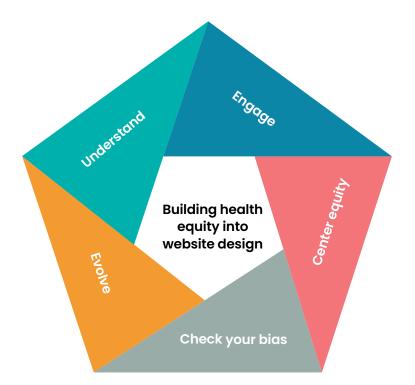
Overall, our findings demonstrate that the majority of women's-health-oriented websites reviewed have not prioritized health-equity-oriented language, content and images. This underscores the need for equity to be more clearly addressed and integrated into women's online health information.



What next? Recommendations for addressing equity

Based on this analysis and associated findings, the following recommendations will help businesses build health equity into their website design process and digital resource deployment more effectively.







<u>Understand the health inequities</u> experienced by your intended audience.

Businesses that take a customer-first approach to understand their audience (e.g., adolescent girls, breast cancer survivors) and the array of factors that may influence their health will be able to create website content and marketing materials that resonate with consumers.

This includes <u>factors</u> at the individual level (such as people's behaviors), community level (such as social media), organizational level (such as health insurance) and structural level (such as health-related laws and policies).

- In designing your customer outreach strategy, including website design, perform research on the health inequities impacting your end users.
- Collaborate with the public health community to leverage this knowledge into actionable recommendations. You can do this by partnering with local public health schools, departments or community health organizations.



Engage with community members when developing your site.

It is vital to involve end users to fully understand and appreciate their needs, priorities and preferences for how content is delivered. By conducting end-user research and content testing, you will increase your chances of impact across a broader group of people.

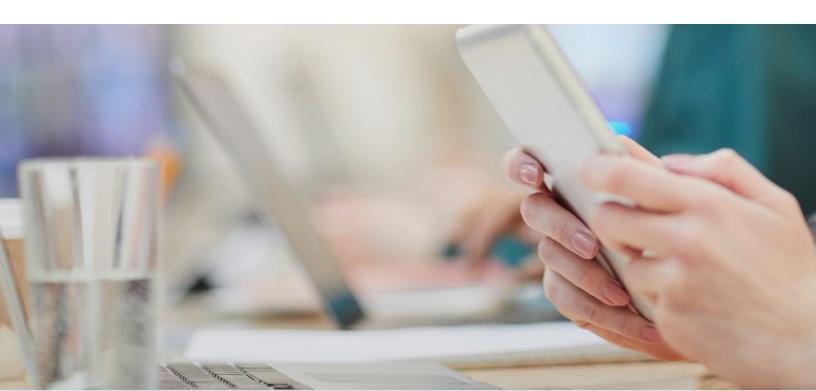
- > There are many frameworks that offer a valuable set of tools to guide decision-making and implement community-focused, equity-driven design and content. Examples include:
 - **Equity-centered design**
 - <u>"Liberatory" design</u>



Center health equity in websites and marketing materials.

The overall goals of digital communication platforms (education, access, <u>inclusion</u>, community building, etc.) should be considered alongside the best ways to provide content that is relevant, accessible and meaningful to all members within your intended audience. In the women's-health-oriented sites we reviewed, the majority did not include representation of racial, ethnic, sexual, gender, body size or disability status. While no website should be all things to all people, a few relatively simple steps can have a meaningful impact.

- Base content development on what you learned in steps 1 and 2 about the health inequities facing your intended audience and community needs. Specifically seek to address the needs of historically oppressed members of your intended audience.
- Recognize that your audience includes diverse experiences, perspectives and needs and build features that address them. Websites should use plain language and include a range of accessibility features for those who are visually impaired, multilingual or have other accessibility needs (e.g., alt text, text to speech, translation options).
- Choose a variety of images that reflect the full diversity of your focus audience, which may include diversity in terms of ethnicities, ages, backgrounds, body sizes, skin tones, hair types, gender expressions, family composition, disabilities and religions. Diversifying your imagery will appeal to a larger market of potential customers.





Check your biases about what women want in their online health resources.

Bias is inevitable. For health-oriented sites, it is critical that content not reinforce harmful biases or norms. For example, it is notable that the vast majority of sites, regardless of health condition addressed, brought up topics that align with stereotypes about women's interests: dieting, weight loss and childcare. That 91% of sites mentioned dieting and 84% mentioned weight loss reinforces the idea that women's health is inseparable from the pursuit of gendered appearance ideals. By recognizing potential areas of bias, content development teams can be more effective in how they present information, what is prioritized, and where content inclusion could create unintended consequences.

- > Develop a team culture around naming and addressing biases when observed.
- Seek out an independent evaluation of website content and design with community members and public health professionals to review for potential biases and opportunities to promote health equity.



Evolve online content regularly.

Design and content deployment should be a cyclical and iterative process with ongoing feedback from end users and community experts. It is essential to explicitly commit to continuously prioritizing equity, inclusion and representativeness and incorporating community needs and perspectives (see <u>Lawrence [2022]</u> and <u>Chang [2020]</u> for in-depth discussions of how these points apply specifically to the development of equitable digital health tools).

- Stay abreast of new and evolving approaches to incorporating inclusion and equity principles in website design (see frameworks noted above, such as Liberatory Design).
- Create an ongoing evaluation plan to assess website reach by capturing user analytics, as well as whether you are adhering to your health equity goals. Ongoing evaluation should be done with community stakeholders or external input. Integrating these evaluations into the next iterations of strategic planning help build on strengths and determine where additional resources may be needed.

The final word

While health-related websites are only one component of the resources needed to support the overall health of people and populations, they give us an important lens into how to improve development and deployment of health-equity-focused digital health content. Digital education and engagement resources, such as the women's health websites reviewed, can be a meaningful accelerator of health equity goals if built with intent and consciousness. Leveraging the process recommendations above, especially to meet the specific needs of marginalized or otherwise underrepresented people, will help companies develop web content that moves the needle more effectively on equitable health outcomes.

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