## Optimizing Audiology Websites to Increase Patient Reach

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From left: Ms. Ratanjee-Vanmali is a PhD candidate at the University of Pretoria (UP) and a clinical research audiologist at the Hearing Research Clinic, a nonprofit based in South Africa. Dr. Swanepoel is a professor of audiology at UP in South Africa and the editor-in-chief of the International Journal of Audiology. Dr. Laplante-Lévesque is an associate professor in the department of behavioral sciences and learning at Linköping University in Sweden.

This article is the second article in a four-part series.

Having an up-to-date website is critical to developing and maintaining an audiology practice in our day and age—even more so with the COVID-19 pandemic and its global entailments. Hearing care professionals and staff members must understand the importance of web design because this affects how a potential client perceives the brand of the audiology practice. A clinic's website is its digital face, setting the tone for the quality of its services. A website must immediately draw interest from a potential client since it takes only 0.05 seconds on average for online users to form an opinion about a website.<sup>1-3</sup>

In the health sector, 94 percent of website first impressions are design-related, with very few website rejections caused by inappropriate or irrelevant content.<sup>4</sup> Negative feedback is almost exclusively due to poor design, including inappropriate website names, poor search options, complex or busy layouts, lack of navigation tabs, unattractive web design and color, pop-up adverts, slow introductions to the site, small print, too much text, and a corporate look and feel.<sup>4</sup> A poorly designed website usually triggers mistrust among online visitors,<sup>4</sup> while a website with a clear layout and interactive features, supported by the authority of the website owner, positively influences the trust of online health information.<sup>5</sup> Patients who search for health care information online are more informed and more engaged in their treatment decision-making, which has been shown to improve patient-clinician relationships when online information is discussed with the clinician.<sup>6</sup>

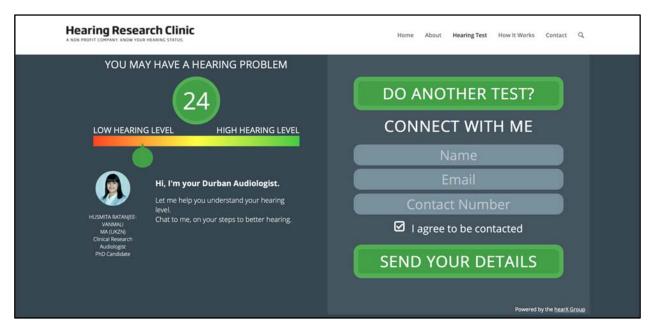
Recent studies have identified the standards for the development of online health information and suggested that accommodations be made to make online information accessible to people with hearing and visual challenges. In a recent U.S. study of 556 individuals with hearing loss, 54 percent reported the internet as their initial source of hearing health care information, while 34 percent consulted a hearing care professional first. While both sources were reported to be easy or fairly easy to access, hearing care professionals were rated as the most reliable source of information. Seventy percent reported spending over 10 hours of internet use a week, with Facebook and YouTube being the most used social media platforms. The findings of this study emphasize the need for audiologists to be present where online seekers of hearing information are spending time and to engage by providing high-quality and relevant information to prepare those ready to seek hearing health care services.

## **DESIGN & CONTENT CONSIDERATIONS**

In our journey to develop and offer hybrid hearing health care services at the Hearing Research Clinic, having an effective web design and digital marketing strategy was critical since online engagement was our initial interaction with potential clients. In particular, our website design needed to appeal to a specific target audience, i.e., adults with hearing difficulties who are seeking advice or health services online. Drawing from our experience, we've outlined important considerations when developing compelling website design and content <sup>10-13</sup>:

- (1) **Brief, concise sentences for readability**: The Flesch–Kincaid readability tests were conducted to measure the ease of understanding of the website text. Our website got an average Flesch-Kincaid grade level of 8.8, which means that people with nine years of formal education can read and understand the website content.
- (2) Large fonts: We used large, clear fonts to improve attention to the content and to assist older adults in reading online texts.<sup>4</sup> This is especially important for people with comorbid conditions such as vision impairment.<sup>14</sup>
- (3) **Website segmentation**: Our website contents were broken down into sections and laid out in five easy-to-understand headings: Home, Hearing Screening Test, How It Works, About Us, and Contact Information.
- (4) **High-quality images**: These were chosen carefully to represent the cultural diversity and age of the South African population. These images also portrayed everyday communication situations with family and loved ones.
- (5) **Upbeat tone:** We wanted potential patients to feel empowered when seeking hearing health care. We tackled the stigma of hearing loss by introducing positive language and focusing on improving one's quality of life.
- (6) **Validated Online Hearing Screening Test**<sup>15</sup>: An English digit-in-noise test highly correlated with the pure tone audiometry average was developed and validated for online use.<sup>16,17</sup> The digit-in-noise test used an adaptive approach to determine a speech reception threshold using a binaural presentation paradigm, reducing test time to within three minutes. This online hearing screening test was embedded on the clinic website as a widget<sup>15</sup> that is also mobile-responsive.
  - Once potential clients complete the free online test and receive their results, they can submit their contact details (Fig. 1) for the clinic audiologist at Hearing Research Clinic to connect with them as they continue their hearing health care journey. Other data collected include the date of birth and loudspeaker and headphone selection.
- (7) **Data collection mechanisms:** All website traffic was monitored and documented using Google Analytics. The validated online hearing screening test was accompanied by the cloud-based leads portal, a real-time password protected data management system. The

Leads portal cloud-based system allowed the clinic audiologist to access the hearing screening test details of each test taker in real-time with signal-to-noise ratios, geolocation, type of devices the hearing test was completed with, the time and date at which the test was taken, and contact details if submitted.



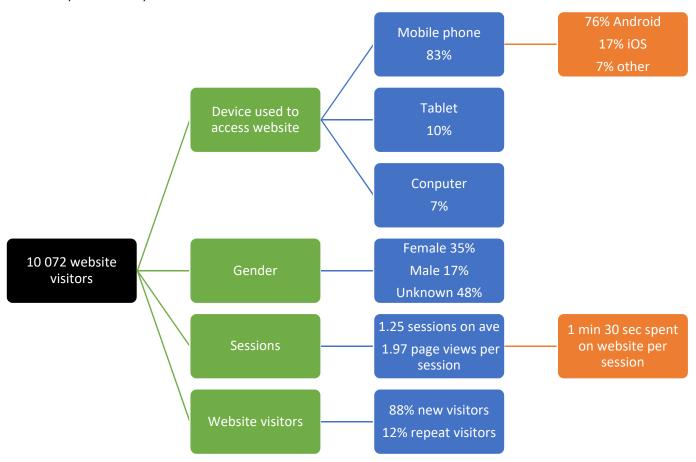
**Figure 1:** Final screen of online hearing screening test and submission of contact details for clinic audiologist to make contact.

## WEB ANALYTICS & DIGITAL MARKETING

Since prior patient database or referral sources were not in place, a segmented digital marketing strategy was implemented to attract potential clients to complete the online hearing screening test on the clinic's website. The digital marketing was focused within a specific target location (here, within a 60 km radius of Durban, South Africa).

Search engine optimization (SEO) concepts informed the website design. SEO drives more traffic to the website by allowing the searcher (a potential client) to receive the most appropriate results for his or her online search. SEO also helps marketers and potential advertisers by displaying their respective adverts to the right people in the right place at the right time.<sup>18</sup>

Online advertising via Facebook, Google AdWords, and Google Display Network, as well as shared online content including images, blogs, and videos, helped in creating awareness of the Hearing Research Clinic.<sup>19</sup> Our goal was to drive potential clients to complete the online hearing test and submit their contact details. Figure 2 shows the anonymized data of visitors on the clinic's website and Figure 3 shows the online hearing tests completed over 12 months from June 23, 2017, to June 22, 2018.<sup>20</sup>



**Figure 2:** Data from Google Analytics website data completed over 12 months (23 June 2017- 22 June 2018).

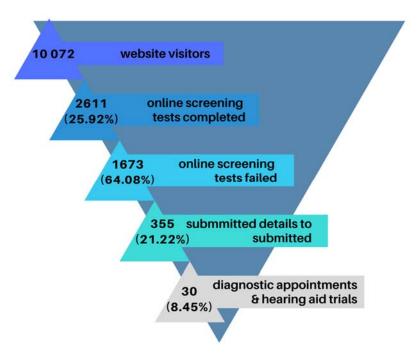


Figure 3: Data from hearDigits completed over 12 months (23 June 2017- 22 June 2018).

The online hearing screening works like a funnel to identify potential clients and ask them to submit their contact details. The clinical audiologist first reaches out by email and then via video/audio call or instant messaging to assess a client's readiness<sup>21-24</sup> to take action and book a face-to-face appointment.

A clinic website that creates a good first impression is essential to successfully engaging with potential clients and encouraging them to take the next step like an online hearing test or provide contact details. However, a beautifully designed website must be strategically promoted for it to serve its purpose, just like an elegant business card tucked in your drawer is useless if never handed out. Digital marketing can be tailored in terms of scale over time and across different social media channels depending on your target audience preferences and interests. Optimizing your website by in-corporating relevant and reliable information and readiness measurements or pre-screening questionnaires enables hearing health care seekers to access asynchronous information and services. This promotes your business to be accessible at a time and place convenient for the online hearing health care seeker, essentially keeping your practice open 24/7 (read part one of this article series: https://bit.ly/3gJsKcT). The use of website tools to gather data is critical to developing a better understanding of the services that an audiology clinic can offer with time. Using online methods to share information before any face-to-face consultation will improve the quality of the time spent with clients in an appointment, resulting in increased patient satisfaction, which we will discuss further in part three of this article series.

In the time of the COVID-19 pandemic, with various levels of restrictions and emphasis on physical distancing, audiologists will greatly benefit from having a well-designed website with a verified asynchronous online hearing test and other helpful features for clients (e.g., Ida Institute Telecare tools),22 along with a targeted digital marketing strategy.

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