PRODUCT REVIEW / ANALYSE DE PRODUITS

Medivizor

Product: Medivizor

URL: https://medivizor.com/

Purpose: To provide patients and patient caregivers with targeted, individually relevant research in key disease/ healthcare topics, summarized in plain language for the common consumer.

Intended audience: Patients and patient caregivers interested in targeted consumer health information.

Special features: Current topics are breast cancer, colorectal cancer, prostate cancer, lung cancer, and melanoma; diabetes of all types; cardiovascular diseases such as hypertension, coronary artery disease, and stroke; and infertility and reproductive technologies.

Cost: Currently free

Strengths: "Push" model brings information straight to the consumer; social media integration allows users to share research and treatments; personal dashboard is clean and user friendly, with filtering options; summarizes the evidence into short paragraphs at a more accessible reading level than academic, published research.

Weaknesses: Grade 10 reading level is still too difficult for the average consumer (research shows that the ideal reading level for consumer health information should be Grade 6) [1]; no clear explanation of article selection, review process, or authorship; no critical appraisal of the original research; not clear how the patient's private information is translated into the articles they receive; abstract-like, textual format of summaries may not be comprehensible to some users.

Product Description

Medivizor is an information service that allows a patient or a patient caregiver to sign up for summaries of the latest research and evidence in a number of healthcare topics. It is currently accessible at no cost, although the Medivizor website states that their business model may evolve to include referral-based premium services or licensing to healthcare organizations [2]. Based on the patient's condition(s), they are sent only the articles that are most relevant to their circumstances. To sign up, a user initially gives Medivizor their email address and then receives a link to answer more specific questions about their medical history. After providing their general demographic information such as date of birth, height, weight, ethnicity, and country of residence (Figure 1), they are then asked to provide diagnosis and treatment information on any conditions with which they have been diagnosed. Currently in a beta version, the site can only send information about certain types of cancer, diabetes, cardiovascular diseases, and infertility or reproductive technologies. However, the user is encouraged to enter any medical condition so that the Medivizor team is alerted for future topic development and expansion. The purpose of providing such detailed personal health information is to ensure the user is sent only the most pertinent information, thus fulfilling Medivizor's objective of providing information that is "relevant, understandable, and actionable."

After the user has provided their medical history (to the extent they feel comfortable), they are able to access their personalized dashboard where new summaries of the literature are posted and will receive email alerts when new information is available. This simple dashboard allows the user to read their results, save favourites, contribute to a discussion board for each article, share articles through social media or email, and provide feedback to the Medivizor team. They can also filter their results by the condition type and category of information, which is denoted with an icon. The categories include clinical trials, research, treatment, guidelines, "community" (websites, blogs, forum posts, news items), lifestyle, expertise (information about experts, doctors or institutions), and items original to Medivizor. (Figure 2.)

Features

Article summaries

Each article a user receives is a written summary of recent scholarly literature, formatted like a journal abstract; headings include "In a Nutshell", "Some Background", "Methods and Findings", "The Bottom Line", "The Fine Print", and "What's Next?" These articles are written at a grade 10 reading level; the title of the article is paraphrased for greater clarity, and medical jargon or technical terms are explained in parentheses. Important statements are bolded so that they stand out. The intention is to present an easy-to-understand summary of the latest evidence. As the site attests, many patients find having more information to be comforting in the face of a new diagnosis or chronic condition, and they want to be active partners in their care; however, the average lay person is unable to understand and find meaning in the scientific literature because it is written for practitioners and researchers, not consumers. Having access to a comprehensible summary of the latest scientific research allows them to take a more active role in their own healthcare. A link to the original article is provided, either to the free full text in PubMed Central or to the publisher's site where it can be purchased.

Fig. 1. Medivizor patient information survey.

Medivizor	Mission Values Team News	Solution
Basic Information		
Are you taking care of some	one else? 💿 Yes 💿 No	
My nickname *	Canmedlib	why?
Patient's nickname *	FakeMum	why?
Password *		why?
Gender *	🖲 Female – Male	why?
Date of birth *	Year November	why?
Unit system	● US (lb/ft/inch)	
Weight	170 lb	why?
Height	5 ft 0 in	why?
Ethnicity	Caucasian or European or White	why?
Primary residence	Canada 💌 Zip Code	why?

Fig. 2. Personal dashboard.

 All (8) Unread (3) Starred (3) Discussion (2) 	40	stroke [Research] Treatment [21 pages] source. Cochrane database of systematic reviews [Added Mar 30, 2014 Cilostazol versus aspirin for prevention of additional vascul This review article examined the safety and efficacy of a drug called <i>cilostazol (pletal)</i> , compared to the commnly used <i>aspirin</i> , in patients who had an ischemic stroke or a transient ischemic attack (TIA). Efficacy was judged by the prevention of another stroke or other serious vascular	10
All hypertension stroke	4	hypertension Research Lifestyle 15 pages source: BMJ Added Mar 30, 2014 Even modest salt intake reductions can assist in reducing bl In this study researchers examined how modest reductions in salt intake can affect blood pressure.	*•
Category Ali Clinical Trial Ali Treatment	43	hypertension Research Lifestyle 7 pages source: Diabetes Care Added Mar 28, 2014 The most important meal of the day indeed This study evaluated the relationship between frequency and quality of breakfast consumption and the risk of metabolic conditions.	

Condition "refreshers"

Medivizor also provides fairly extensive "refreshers" on each of the user's conditions, describing the condition, diagnosis, symptoms, tests and procedures, treatment, recovery, and other pertinent information. The written summary includes links to videos and images, some of which are credited to consumer health information providers such as the A.D.A.M. Illustrated Medical Encyclopedia [3]. However, neither authorship nor references are supplied. The refresher gives the patient a concise and informative overview, which not only brings a patient up to speed on the details of their condition but also lays a solid foundation for the subsequent articles that may be sent.

Group discussion and sharing

Part of Medivizor's mission is to "effectively apply software and the social web to the field of health for the betterment of humanity" [4]. They partly accomplish this through group discussion and sharing features. Every article includes the ability to start or join a discussion with others who were sent the same article, meaning the user can discuss the article with people who face the same medical challenges. Users might ask a question regarding their treatment course or how to use the article information in their own care and receive support and feedback from other users and the Medivizor team.

Users also have the option of sharing articles online through Facebook, Twitter, or email. If they choose to share through social media, a link to the full text of the Medivizor article is created, and the user can add their own comments. Presumably, this open access sharing is meant to encourage others to sign up for the service. The email function will also send a copy of the article; Medivizor encourages the user to send articles directly to their care provider, thus enabling communication and engagement in their treatment plan.

Content and review process

From the information specialist's perspective, one major failing of this product is that there is no transparency as to the content selection and review process. Many questions remain unanswered: Is selection based on a subject search algorithm through a database or through alerts from key journals? Which journals are included, and why? How are articles judged for quality, methodological soundness, currency, validity, or significance? Is there a particular critical appraisal process being followed? And most importantly, who reviews the literature, selects the studies, critically appraises the research, and writes the summaries? Are they medical experts or researchers themselves, or are they copy writers with no medical background? Is there a peer-review process before a summary is published? Though there is a Chief Medical Officer on the executive team, article authorship remains murky. This is worrisome, as the quality and validity of the articles depends on the author's interpretation and understanding of the scientific literature. Interestingly, the Terms of Use specifically states "[w]e do NOT offer any medical advice or diagnoses and do NOT practice in medicine" [5], calling into question the reliability of their analysis of the evidence. It's not necessary that article authors be medical professionals, but there should at the very least be some level of expert review. As with most online services, Medivizor does not take responsibility for any of the content they create or the use of such content.

Conclusion

Medivizor is a unique product in a crowded consumer health landscape. It aims to improve people's healthcare experiences by giving them a critical tool-a better understanding of recently published scientific literature. Often, patients and their caregivers must manage with either patient education handouts that are frequently light on details or complex scientific research that they may struggle to understand. Medivizor's article summaries translate research into digestible information that the user can then discuss with their healthcare provider, giving them a measure of control over, and participation in, their treatment. The product dashboard and articles are easy to navigate and cleanly presented, although perhaps in need of more visual cues and colour for those who are not textual learners. The content of the articles remains troublesome, however, with no clear explanation of the method through which articles are created. Patients should be advised to use Medivizor with caution, in combination with other reliable sources such as MedlinePlus to inform their care, at least until the article review process is made more transparent by the Medivizor team.

References

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Morgan Truax

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