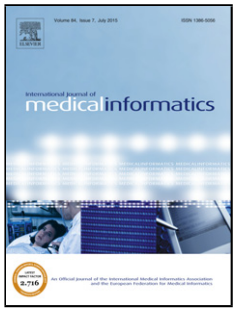

Title: Usability Testing of Existing Type 2 Diabetes Mellitus Websites

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PII: S1386-5056(16)30069-7
DOI: http://dx.doi.org/doi:10.1016/j.ijmedinf.2016.04.012
Reference: IJB 3331

To appear in: *International Journal of Medical Informatics*

Received date: 18-12-2015
Revised date: 25-3-2016
Accepted date: 23-4-2016

Please cite this article as: Dorian Davis, Steven Jiang, Usability Testing of Existing Type 2 Diabetes Mellitus Websites, International Journal of Medical Informatics http://dx.doi.org/10.1016/j.ijmedinf.2016.04.012

Usability Testing of Existing Type 2 Diabetes Mellitus Websites

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ABSTRACT

Background: Given the significant increase in the use of the Internet as an educational tool for diabetes, very little research has been published on the usability of healthcare websites, even though it is a determining factor for user satisfaction.

Objective: The aim of this study is to evaluate and critique the interfaces of existing diabetes websites for usability concerns and provide design solutions for improvement. Emphasis is placed on Type 2 Diabetes Mellitus since it is the most common and life threatening form of diabetes.

Method: A usability test was performed on the interfaces of three existing diabetes websites, American Diabetes Association (www.diabetes.org), WebMD (www.webmd.com) and the National Diabetes Education Program (ndep.nih.gov). The goal was to collect qualitative and quantitative data to determine: (1) if participants are able to complete specified tasks successfully; (2) the length of time it takes participants to complete the specified tasks and; (3) participants' satisfaction with the three websites. Twenty adults, 18 years of age and older participated in the study.

Results: The results from the MANOVA test revealed a significant difference between the three websites for number of clicks, number of errors and completion time when analyzed simultaneously. The ANOVA tests revealed a significant difference for all three variables. The Student-Newman-Keuls (SNK) test shows a significant difference for completion time between American Diabetes Association and WebMD. A significant difference was found for the number of clicks for the National Diabetes Education Program compared to the American Diabetes Association and WebMD. However, no significant difference was found for the number of clicks between American Diabetes and WebMD. Lastly, a significant difference was found between each interface for number of errors.

Discussion: Although, the American Diabetes Association web-interface was most favorable, there were many positive design elements for each interface. On the other hand, the significant amount of information overload experienced for each website left participants feeling perplexed. Thus, innovative solutions are needed to reduce