12-13-2015

On the Need for Theory-grounded Guidelines for Designing Senior-friendly Personal Health Records

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ABSTRACT

In Personal Health Records (PHR) have the potential to improve healthcare access and quality while decreasing healthcare cost. However, the usability of PHRs is one of the major factors militating against adoption and sustained use by seniors. While senior-focused usability guidelines for websites exist, there are no usability guidelines for web-based senior-friendly PHRs. General senior-focused website usability guidelines do not cover enough of peculiarities of PHRs that distinguishes it from normal websites like users' input and interaction functions, health information security requirements, and seniors' physiological needs. This paper therefore showcases the limitations of general website usability guidelines when they are applied in the PHR domain. To address this research gap, this paper aims to develop a new usability guideline for the development of senior-friendly PHRs. We do this in steps. First, a content analysis study is conducted on an online discussion forum on the perceptions of currently available PHRs. Second, a usability guideline for senior-friendly PHRs is developed based on Wixom and Todd's Information Systems quality theory, the mental model theory and on the results of our content analysis in step 1. The new theory-grounded and practically suggested usability guideline has the potential to improve PHR design and adoption for seniors. An empirical study to test the proposed usability guideline is called for in future studies.