1. Human-Centric Issues in eHealth App Development and Usage: A Preliminary Assessment

Shamsujjoha, M. (1); Grundy, J. (1); Li, L. (1); Khalajzadeh, H. (1); Lu, Q. (2)

Author affiliation: (1) Monash University, Department of Software Systems and Cybersecurity, Clayton, VIC, Australia (2) CSIRO, Data61, Australia

Abstract: Health-related mobile applications are known as eHealth apps. These apps make people more aware of their health, help during critical situations, provide home-based disease management, and monitor/support personalized care through sensing/interaction. eHealth app usage is rapidly increasing with a large number of new apps being developed. Unfortunately, many eHealth apps do not successfully adopt Human-Centric Issues (HCI) in the app development process and its deployment stages, leading them to become ineffective and not inclusive of diverse end-users. This paper provides an initial assessment of key human factors related to eHealth apps by literature review, existing guidelines analysis, and user studies. Preliminary results suggest that Usability, Accessibility, Reliability, Versatility, and User Experience are essential HCIs for eHealth apps, and need further attention from researchers and practitioners. Therefore, outcomes of this research will look to amend support for users, developers, and stakeholders of eHealth apps in the form of improved actionable guidelines, best practice examples, and evaluation techniques. The research also aims to trial the proposed solutions on real-world projects. (0 refs)

Inspec controlled terms: diseases - health care - human factors - medical information systems - mobile computing - user experience - user interfaces

Uncontrolled terms: human-centric issues - eHealth app usage - app development process - eHealth apps development - home-based disease management - usability - accessibility - reliability - versatility - user experience

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