A Review of Barriers to Engaging Consumers in the Use of Healthcare Information Technology

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Abstract. As healthcare costs continue to grow in the United States, one method proposed to help reduce them is through consumer engagement. Using consumer health information technology (HIT) makes it easier for consumers to be engaged in managing their own health. The purpose of this review is to determine why consumers may not be adopting, or engaging in, the use of HIT to successfully improve or maintain their health status. A literature search was completed to find articles related to consumer engagement in the use of HIT. The results of the review show the major barriers related to engaging consumers in the use of HIT.

Keywords. Consumer, usability, HIT, engagement, health informatics

Introduction

To ensure that the communication of information and health outcomes are successful, the consumer must be engaged in using health information technology (HIT) correctly. While many methods have been used in attempt to engage consumers, being able to effectively implement technologies that are adopted can be challenging [1]. Major barriers and issues impeding consumer engagement with HIT will be identified in this review.

1. Methods

This search strategy for this review included literature published between the years of 2000 and 2013. Keyword searches were conducted in PubMed, PsychInfo, Google Scholar, and Academic Search Premier-General databases. Terms used included “mobile applications”, “mobile devices”, “health portals”, “telemedicine”, and ”telehealth.” 1550 articles were returned, and a total of 37 articles were included based on consumer use, focus on health outcomes, and published in a peer-reviewed journal. Articles were excluded if the primary user of the HIT was a provider.

2. Results

The simplest level of consumer engagement with HIT is when the user participates in one way communication [2]. Main issues we found at this level of engagement
consist of accuracy, measurement of quality information, and the ability of the consumer to actually be able to read, find, and understand the information [3,4]. As tools become more personalized, the user must enter information pertaining to them specifically. Tasks found in the articles include online administrative, such as scheduling appointments, refilling prescriptions, e-mailing customer service, paying bills, and viewing electronic records [5]. The main issues at this level of use are associated with designing screens and interfaces to fit consumer needs and cost of the technology [6,7].

Eventually, with more advanced HIT, a consumer not only has the ability to receive information, but they can generate data themselves. Due to the advanced technical capabilities, this level of engagement requires more education of the consumer on how to use the tools.

The use of HIT can also be partnership between providers and patients. Consumers may have various providers, so barriers to HIT use include integration of systems and trust that information is private and secure [8].

At the highest level of HIT use, consumers are able to compare the cost and quality of treatments, providers, and medications, and using e-Visits as a method of on-going care [2]. The main barriers within this level of engagement arise due to the fact that there are many stakeholders and the continuum of care lasts over a longer period of time.

3. Discussion

Consumer preferences and usability testing is often discussed in literature, however, when it comes time to implement and continuously use HIT, there are often barriers to full engagement.

References