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OLDER ADULTS' ADOPTION AND USE OF E-HEALTH TECHNOLOGY

As older adults are living longer and more productive lives, it becomes imperative to give them the tools to track and maintain their health[1]. One tool is the use of the web to access health information, known as e-health, covering a variety of electronic services such as online health information[2]. It is distinguished from traditional paper-based sources by the sheer volume of information, its immediacy of access, and its ability to be up-to-date. For older adults (64+) who are online, 68% have searched for health information[3]. However, only one-third of older adults in the US are online[4]. To increase usage of e-health services in the US, the National Institute on Aging (NIA) and the National Library of Medicine (NLM) have introduced a training guide for libraries and community centers to instruct older adults how to search for health information[5]. A parallel effort must investigate how e-health providers can tailor their services to older adults' unique capabilities and limitations.

Access to health information on the web suffers the same long-standing problems as any other type of online information[6]. Because of the wealth of information, it becomes difficult to discern trustworthy, authoritative information from not. Also, health information may come from parties with a commercial interest and the trust issue becomes critical since older adults may be susceptible to 'illusions of truth'[7]. Information access is made more difficult by basic usability problems combined with limitations of older adults[8]. Presently, we are investigating tailoring the organization of online health information to take advantage of their capabilities. Earlier, we found that organizing the website around flexible keywords instead of rigid categories helped older adults find information more quickly and accurately[9]. The reasoning is that they are able to utilize their wealth of accumulated knowledge to help guide their information search, instead of relying on declining abilities[9].

Older adults may not adopt a new tool or technology merely because it is available, but rather because they perceive the benefits[11]. Hirth et al.[12] found in focus groups that non-users of e-health information were satisfied with their traditional sources. Flynn et al.[13] found that older adults' usage of e-health services was dependent on health status, the timing of the visit to the doctor, and personality variables such as openness to experience. Surveys show that those with a higher stake in health knowledge are more likely to use e-health[4].

The challenge will be to better understand the unique benefits of e-health services and to convey this to older users. Otherwise, they may be even less likely to perceive the benefits of newer, more inter-

active technology such as Internet-based personal health records (PHR): platforms that contain the medical history of an individual and are accessible online by the owner. By combination with prescription drug information and medication schedules, a much more powerful tool becomes available in decision support for important health decisions[14]. Current end-user adoption of Internet-based PHRs is low[15] and we are examining older adults' perceived costs and benefits. Results may also be used in future training efforts that elucidate the benefits of PHRs, design efforts that make it easier to interact with and interpret PHRs, and the creation of unique PHR-based applications to enhance health maintenance. At the same time, a user must concentrate an extraordinary amount of very sensitive and personal information into PHRs which may be owned by commercial parties, so issues of information privacy and security must be examined as well.

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