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Designing effective Personal Health Records for older adults

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Older adults are a growing subpopulation that exhibits substantial healthcare needs. Older adults are often pushed by providers to use consumer health technologies such as Personal Health Records (PHRs) in managing their health; and, arguably, the use of PHRs can help them maintain or improve health status (Kim and Nahm, 2012).

However, PHR use still faces challenges, for instance, older seniors face more difficulties using PHRs than younger seniors (Logue and Effken, 2013; Sakaguchi-Tang et al. 2017). PHRs also support multiple functions such as provision of information or patient-provider communication. Thus, PHRs and the way they support various tasks should be tailored towards the idiosyncratic needs of and challenges that older adults – and age subgroups among them – face.

Extant research has studied PHRs from various perspectives and attempted to propose guidelines on designing these tools tailored particularly for this subpopulation (see e.g., Price et al., 2013). However, proposed PHR design recommendations for this demographic are scant and lack a comprehensive analysis of the features and functionalities needed, targeted for the age subgroups among older adults: younger older adults and the elderly (Sakaguchi-Tang et al. 2017).

Thus, scholarship must still reconceptualize existing features and tailor them specifically for older adults. To address this problem, we aim to answer the following research question: What design features and functionalities should be considered when designing PHRs for older adults?

Our goal is thus to propose general guidelines on PHR design for older adults. These guidelines will be developed based on a qualitative review of research on PHR design and use among this subpopulation.

Our study is anticipated to contribute to PHR research by providing best practices for design, and particularly, customization of these tools for older adults. Our work may also be referenced as a foundation for further participatory design studies focused on these tools.

Our guidelines could help system designers adapt existing PHRs and find innovative ways to design PHRs tailored for older adults. Healthcare providers and caregivers may also find our work useful when evaluating available PHRs and promoting them to older adults.

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