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# Danish Citizens' Expectations for mHealth Prescription

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**Abstract.** Use of mHealth in Denmark is growing, and prescription structures for mHealth apps are a political goal. In this pilot survey study, respondents generally perceive their mHealth use as beneficial, which correlates with their frequency of use. Willingness to substitute traditional treatments for prescribed mHealth varies based on type of substituted treatment.

**Keywords.** mHealth, smartphone apps, mHealth prescription, citizen expectation

## 1. Introduction

The Danish government's strategy for life science focuses on development of prescription structures for quality-assured mHealth [1], a development supported by increased use of mobile apps among Danish citizens [2]. However, many smartphone apps lack content appropriate for prescribing them to specific patient groups [3]. This short communication examines Danish citizens' expectations for mHealth prescription to develop considerations for such prescription.

## 2. Methods

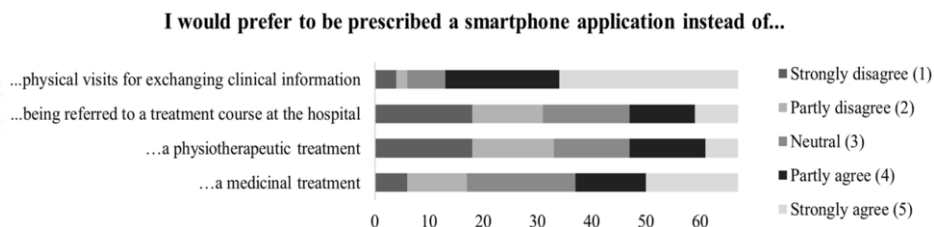
A questionnaire was developed covering: (i) demographic data, (ii) use of mHealth, and (iii) expectations for mHealth prescription from physicians. Likert-scale questions were used for measuring (ii) using perceived usefulness (PU) [4], while (iii) was measured with performance expectancy (PE) [4] and substitutive use (SUB) [5]. Cronbach's alpha was calculated for PU ( $\alpha = 0.86$ ), PE ( $\alpha = 0.82$ ) and SUB ( $\alpha = 0.73$ ). The opt-in Google Forms questionnaire was distributed via QR codes at the event The People's Meeting, LinkedIn, and Facebook. No personally identifiable information was collected.

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### 3. Results

67 respondents participated in the survey, 20 men (29.9%) and 47 women (70.1%), with 53 respondents (79.1%) aged < 60 years. 56 respondents (83.6%) had a higher education  $\geq 3$  years in length. Regarding questions on PU of mHealth, mean PU for respondents using mHealth: once a month or less was 3.49 ( $n = 17$ ); 2-3 times a month was 3.83 ( $n = 10$ ); 1-6 times a week was 4.27 ( $n = 25$ ); once a day or more was 4.33 ( $n = 15$ ).



**Figure 1.** Respondents' willingness to substitute traditional treatments for prescribed mHealth (SUB).

Figure 1 show that 54/67 and 30/67 of respondents prefer substitution of physical information exchange and medicinal treatment, respectively, with mHealth.

### 4. Discussion

Results raise questions about use cases of mHealth prescription which point to substitution of pain-relief medicine and clinical information exchange, the latter possibly via telemedicine. Further, possible connection between frequency of use and PU suggests a possibility of prescribing mHealth often used by citizens. The sample is biased toward younger respondents with longer educations, requiring further investigation for disadvantaged citizens to benefit from mHealth prescription.

Future research should develop indicators for assessment of prescribed mHealth apps already used among citizens. Researchers should also scrutinize the appropriate use cases for mHealth prescription as a pragmatic counter to mHealth prescription hype.

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