

Telehealth in Haemophilia Treatment

Use and recommendation intentions of patients and physicians

P. Alpar, T. Driebe, C. Wermes, W. Mondorf

Introduction

Problem: Many patients document bleeding incidents and their usage of replacement factors on paper although apps exist which make this process easier and more reliable.

Aims:

- 1) To discover the circumstances under which patients consider using the apps.
- 2) To discover what motivates physicians to recommend the usage of these apps.

Study 1: Patients

Sample: 140 Patients recruited via associations of haemophilia patients.

Collected Data: The patients' intention to use apps for documentation and possible influencing factors like perceived severity of bleedings and social influence. Data collected through surveys.

Method: Structural equation modelling (PLS), multiple regression analysis.

Results:

Around 70 patients, half of the sample, did not use apps for documentation. For them, main predictors of their intention to use it in the future were enjoyment of using an app (*hedonic motivation*) and recommendations from their social environment, including their physicians (*social influence*). The model explains 57% of the variance in use intention.

Study 2: Physicians

Sample: 47 physicians who specialize in haemophilia treatment, recruited via haemophilia treatment centers.

Collected Data: Physicians' motivation to recommend and/or use a documentation app, collected through surveys.

Method: Structural equation modelling (PLS), multiple regression analysis.

Results:

Recommendation behavior was significantly influenced by the *perceived process improvements* and the physicians' own *adoption intention* of the app due to the additional functionalities offered by the telehealth system. The intention to use the app is influenced by the *perceived usefulness* of the software. Potential barriers like monetary cost (*perceived fee*) and time expenditure (*perceived technicality*) do not have a significant influence. The model explains 84% of the variance in recommendation behavior.

Summary

The results show that patients pay attention to their social environment where physicians play an important role in case of chronic diseases. However, physicians are willing to recommend the use of telehealth technology mainly if they can make further use of the collected data. Of course, this also benefits patients in the medium run. For developers and supporters (e.g., health insurances) of telehealth software this means, that the likelihood of recommendation and adoption of telehealth software significantly rises if it not only directly benefits the patient, but also provides functions to support the physicians in their work.