
CONFERENCE ABSTRACT

mHealth data-sharing system to improve communication during consultations: Type 1 diabetes patients' perspective during the FI-STAR study

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Intro: Commercial data-communication systems, such as those provided by Epic and Cerner, offer options to integrate patients' app-gathered data into health care systems. However, clinical research related to how patients and communication are impacted by this during consultations, is scarce. These concepts are important, especially for those with chronic illnesses, because patients' and clinicians' ability to identify daily issues and discuss solutions during consultations, is key to the improvement of patient self-management and, thereby, the success of care. In the FI-STAR project's Norwegian Study, funded by EU's FP7, FI-PPP Programme, we surveyed patients' expectations and reactions to a patient-initiated mHealth data-sharing system.

Methods: Patients were provided a novel system that allowed them to securely share their own gathered data from their Diabetes Diary and DeSA smartphone apps (available on Google Play and App Store), to the clinician's web-based portal, the Diabetes Share Live. Patients shared blood glucose, physical activity, diet and insulin registrations from the app, which were displayed on a set of interactive screens that allowed the clinician and patient to select and discuss specific situations and data sets together. Questionnaires about consultations, as well as general impact of the tested system, were distributed and interviews were conducted at baseline and 6-months.

Results: Baseline surveys revealed that, of the n=20 respondents, oral communication was the primary way to share data (n=13), whereby 9 patients desired an easier way to share data and 7 patients wanted more analysis of their data. The majority expected the tested system to improve feedback from clinicians (n=8). Post-trial surveys revealed that 12 of 13 respondents used the tested system to share their data with their clinicians. Reported benefits included that sharing data was easier (n=11), communication during consultations was improved (n=11) and there was more discussion of the shared data (n=9). Interviews revealed common positive sentiments, e.g. i) "When all data are presented...then you can start working with things, instead of just trying to remember and guess. Now the focus is on "what can be done"" (translated from Norwegian, see Figure 1 for more detail).

Conclusion: The data-sharing system appeared to meet patients' expectations, with the goals of improving patient-clinician communication and patients' ability to relate to their own data both during and outside of consultations. Thus, the study argues for similar systems to be investigated and considered implemented as part of consultations.

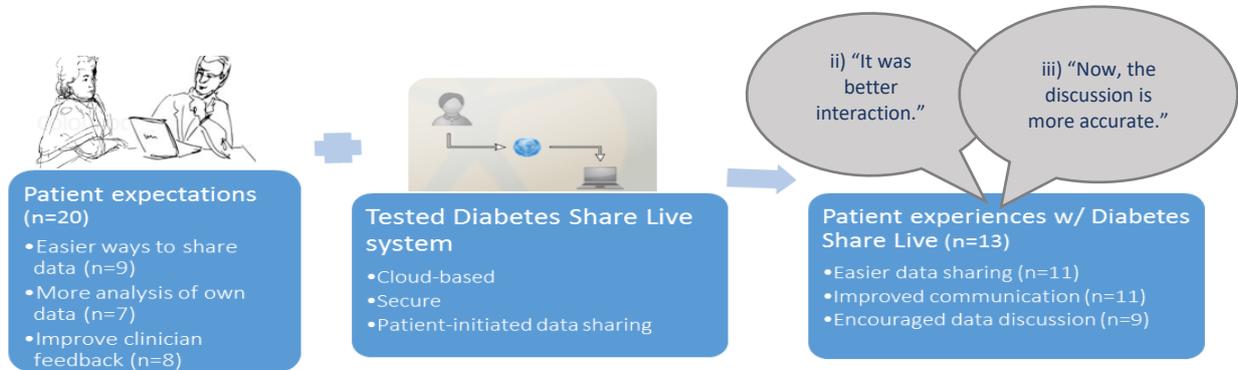


Figure 1: Results of patients' baseline expectations and post-study review of interaction with the Diabetes Share Live system in combination with the patient apps during consultations.

Keywords: apps; mHealth; consultation; communication; diabetes
