Healthcare Design for Collaborative Care

Julie Falck Valentin-Hjorth, PhD project

Designing Collaborative Care – increasing engagement for chronic patients

Recent empirical evidence suggest benefits of collaborative care in treating chronic disease, in particular by the use of ICT platforms favoring patient-provider collaboration. However, what constitutes this kind of collaboration is not consistent in research. This project aims to rationalize the principles of patient participation, of patient apprenticeship (patient-situated learning of their health status and treatment) and of shared-decision making between patient and providers that can promote behavioral change in chronic patients towards their increased engagement in therapy. This will result in a conceptual framework that supports the design of collaborative care models in healthcare, with focus on chronic diseases and multimorbidity.

Research questions

• How can engineering design promote the development of ICT solutions supporting a collaborate care model for chronic patients in Denmark?

• What aspects of patient participation and shared-decision making are most essential to favor patient engagement and improved treatment outcomes?

• How can these principles be translated into design guidelines or specifications for novel chronic care ICT (incl. mobile) platforms?

• What is the effect on treatment outcomes for patients with chronic diseases, when using a prototype of a developed novel chronic care ICT platform?

Methods

• A literature review of patient-provider collaboration and accompanying taxonomy will provide an overview of the current research on the subject and give an answer to which areas design can make a positive impact on the concept of Collaborative Care in healthcare design.

• Empirical studies in-situ at Frederiksberg Hospital will provide an overview of current hypertension treatment models and patient needs, and will be conducted as a qualitative study, consisting of observations and interviews with patients and healthcare providers.

• As a proof of concept, an ICT prototype developed on the base of the suggested framework will be tested in a mixed method study with a test group. As a mix of qualitative and quantitative methods, patient interviews will be conducted and analysed, as well as increase in engagement and health status will be measured and analysed.

Expected results

Formalization of conceptual framework to support the design of collaborative care models, as well as a prototype of a collaborative care-IT platform for hypertension.

Contact:
Julie Falck Valentin-Hjorth
Produktionstorvet, Building 424
DK-2800 Kgs. Lyngby
+45 6022 2753
julf@dtu.dk
www.man.dtu.dk

Supervisor/co-supervisor:
Professor Anja Maier, DTU
Post-Doc François Patou, DTU
Clinical Ass. Prof. Helena Dominguez, KU

Start and completion date:
1 November 2017 – 31 October 2020

Collaborating partners:
cachet
Copenhagen Center for Health Technology

Funded by:
CACHET – Copenhagen Center for Health Technology
DTU Management Engineering

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