



# 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.



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# Start and completion date:

1 November 2017 – 31 October 2020

# **Collaborating partners:**



# Funded by:

CACHET – Copenhagen Center for Health Technology

DTU Management Engineering



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