Conference Abstract

Epital Health – a disruptive and research based approach to service transformation of health care systems

Klaus Phanareth,

Anders Skovbo Christensen,

Søren Vingtoft,

Lars Kayser,

*Correspondence to: **Klaus Phanareth,** E-mail: phanareth@gmail.com*

Abstract

Introduction: Many telehealth projects and initiatives loose their pace when facing the barriers of traditional healthcare organization. During the latest years, the concept of disruptive innovation has received increased attention as a method to overcome barriers by introducing new whole system designs as alternative to existing systems.

Aims and Objectives: The Epital Health (EH) project is a disruptive implementation aimed at redesigning the healthcare system within chronic conditions, based on co-creation and combined operation, development and research. It demonstrates how a citizen centered service transformation can take place resulting in provision of healthcare and secondary prevention of co-morbidities, in a personalized and tailored environment. EH uses a disruptive approach to overcome organizational barriers and replace them by telehealth and –care services, to be controlled by the informed and active citizen in true collaboration with the health professionals.

The Innovation: The EH technology is based on three major components, a health navigator which is a tablet-PC with apps comprising a video communication channel, a personal planner, a catalogue of relevant health services and a tool to monitor own condition, including relevant tele-monitoring equipment. The citizen is connected to the 24/7 call center for direct assistance, sent assistance or referral to needed services, including specialists. This will result in instant home treatment in case of worsening conditions. An underlying it solution provides data storage, management and interpretation in order to follow the conditions of the connected users and assists in provision of services.

Process: The project and results are used to continuously develop ways to empower citizens in relation to their health. All project iterations are driven by the goal of simultaneous progress in citizen experience, health outcome quality, and economy. Every design element is evaluated against a predefined empowerment model. There is a continuous pursuit of service orientation of healthcare provision, combined with decentralization and –specialization in the offering. EH is designed for scaling the number of participating citizens (exponentially), morbidities and services, in tune with growing operational experience amongst citizens as well as professionals and

organization. The project is followed by a research consortium providing documentation of processes, evaluations and clinical evidence on the project iterations.

Results to date: The staffed EH call center is implemented in a municipality in the Copenhagen Region. It has started with 5 COPD GOLD Level 3-4 patients included with home technology, and has until now within a year been scaled up to 50. Business cases are developed based on the designed scaling rates, the economic goals and predicted health outcome. Mobile clinical teams are in operation for active prevention of hospitalization.

Conclusions: It is important to rethink needs and incentives for all the involved partners, including citizens, in order to enable collaboration under the radical changes, without feeling threatened by savings or reductions. It is a challenge to create a common language and understanding among actors, regarding how the patients turn into active citizens and even consumers in relation to their conditions. Providers must consider changing from a patriarchal behavior to a collaborative one, and accepting the existence of disruptive and competing alternatives within their healthcare system. These initiatives have large impact and promise – but must start small due to their disruptive nature.

Keywords:

chronic conditions, disruptive innovation, mobile health, telehealth, service transformation

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