

A Digital Care Pathway to Access Healthcare Without Time and Place Restrictions

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Abstract. A digital care pathway is a secure digital service channel for patients in a care relationship with a specialized health care hospital in Finland. It is part of the Health Village portal built in co-operation with the Virtual Hospital project by five Finnish university hospitals led by Helsinki University Hospital. Health Village services make healthcare services available to all Finns regardless of place of residence and income level, thus improving the equality of citizens.

Keywords. Digitalization, e-Health, Healthcare services, e-Welfare

1. Introduction

The Finnish national eHealth and eSocial Strategy 2020 emphasizes the active role of citizens in promoting their own wellbeing by improving information management and implementing online self-care services [1]. Perceived utility and ease of use of e-services and savings in time and money promote the use of e-services and the intention to use them [2-3]. In the Virtual Hospital project (2016–2018), co-funded by the Finnish government and five university hospitals, the development of eHealth services goals to promote equal access to health information and services for citizens has been supported [4]. The Virtual Hospital includes the Health Village portal that is open for all, a portal for healthcare professionals, and Digital Care Pathways (DCP) for patients having a care relationship with a hospital unit. The aim of this paper is to demonstrate the development of DCPs in the Oulu University Hospital (OUH).

2. Methods

The Virtual Hospital project established the eHealth Development Model, which includes training and material to effectively implement new DCPs. The development of DCPs is divided into different stages: exploration, definition, content, and deployment.

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The process always starts with a critical description of the current state and an assessment of what tasks could be handled digitally. Through these steps, the digital pathway is designed to meet the needs of a selected group of patients, both functionally and in terms of content. Patient-centered development and the integration of digital services as part of our day-to-day operations are in the focus.

The technical solutions, a modular platform and generic service development processes, enable scalability and rapid digital transformation [4]. The DCP application enables patients to interact online with professionals and to get information about specific disease or symptoms, help for self-care, access frequently asked questions, various exercises, queries and a tool for monitoring personal health values. To be able to access the DCP requires strong identification using banking codes or mobile ID. A doctor's referral or a care relationship is required.

3. Results

By the end of May 2021, 21 DCPs have been implemented in OUH for patients with different diagnoses such as coronary artery disease (CAD), spinal cord injury, need of neuromodulation care, sleep apnea, acne, rheumatoid arthritis, and hysterectomy. In addition, 18 DCPs are in progress. An example of these is the DCP for working-age CAD patients. In this nurse-led digital intervention, patients receive reliable information, support and guidance to self-care. The path, which begins right after discharge from hospital, covers the period of one month before the patient is enrolled in primary health care. Patients fill in a digital diary for blood pressure and risk factors at home. The contact with a professional in the DCP includes checking the values filled in, blood test results, and evaluating drug therapy. In case medication adjustment is needed, the nurse consults a cardiologist. With the message function patients and nurses have the opportunity to ask questions and give feedback. The goal is that 90% of all follow-up controls of working-age CAD patients are performed in the DCP

4. Conclusions

In all five Finnish university hospitals, over 150 different DCPs have been produced and new ones are in the pipeline. Expectations for the cost-effectiveness and impact of digital transactions are high and evidence of benefits has already been obtained [3]. Professionals are required to be willing to change and abandon the old ways. Digitalization frees up resources for patients in need of demanding hospital care [4].

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