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Development Towards Patient-Centered eHealth Services in Finland

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Abstract. The paper analyses the development of public eHealth services from 2014 to 2021 from the patients' point of view. The merits and missing features of the eHealth services were identified with patient interviews in 2014-2015. The list of missing features was again checked against the eHealth services in 2021. The main finding was that all the features wanted by the patients had still not been implemented. The finding of this paper suggests that current Finnish public eHealth services are organizations oriented rather than patient oriented.

Keywords. eHealth Services, Patient portal, Finland.

1. Introduction

In Finland, the eHealth services have been the responsibility of the over 300 municipalities in the country of 5,5 million inhabitants. Due to the large number of organisations providing these services, it is easy to notice the variation in the scope and quality of these services depending on the capabilities of the arranging organisation [1]. This study began in the year 2014 with the attempt to analyse the situation and to approach the eHealth services from the patients' point of view. The second part of the study in the year 2021 reviews how the eHealth services have developed, and do they now fulfil the patients' needs. This paper suggests the indication to continuously capture patients' needs.

2. Methods

The study began with an empiric survey of a number of websites for patients offered by the municipalities and hospital districts. Based on the observations of the websites study, an interview study was planned and performed in the years 2014 and 2015. This study surveyed the awareness of the people of the My Kanta [2] national eHealth service and presented its features to the respondents. Additionally, the respondents were given the opportunity to give feedback about the features of a patient portal based on a given example of a portal sketched by the researchers. In total, 351 people identifying themselves as patients were interviewed with a small number of questions. The 351 patients were informed about the purpose of collecting their feedback and that all information related to patients shall be confidential, their name, gender, age, exact location, and profession will be undisclosed. As result, patients contributed freely and

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showed high interest in this research topic. The interviews were conducted in the streets of a small number of cities in Finland. In 2021, a semi-structured interview was carried out virtually with three Finnish experts from Kanta who are responsible for My Kanta. The interview was used to verify that the collected voluntary feedback from 351 patients between the years 2014 and 2015 is still valid as of the year 2021. The views of Kanta experts are valuable because these experts receive continuous feedback from all users nationwide.

3. Results

The website survey gave the impression, that the offered eHealth services in 2014 were often designed with the top-down approach, i.e. what the organisation can provide instead of asking what the patients might want to have. The user interfaces varied significantly from one provider to another and a person moving to another location in the country would have to familiarize himself with a completely different user interface. Sometimes the websites had links that led to blank pages or errors. It was easy to see that improvements were possible. The voluntary feedback about eHealth services that was collected from the 351 patients was confirmed to be valid by the three experts of My Kanta service in June 2021. These three experts confirmed that they have received the same feedback from My Kanta users nationwide.

4. **Discussion and Conclusion**

Earlier studies [3, 4] have taken a top-down approach in assessing and suggesting solutions to improve Finnish eHealth services from health organizations' point of view. The outcome in the top-down approach aims to meet organizations' needs. This paper took a bottom-up approach where the design of eHealth services is based on patients' needs and the patients are active participants or drivers of the eHealth services. The major finding of this paper is that eHealth services offered by the Finnish public health care did not fully address the collected patients' feedback between the years 2014 and 2015. This study has shown that despite several years of development, the basic public eHealth services do not still fulfil all the central needs of the patients in Finland. This study underlines the importance of including the users of the services already in the specifications of included features of the eHealth service.

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