

Less time in hospital and also cheaper treatment thanks to digitalisation

A study completed in five hospitals in Switzerland has shown: The use of telemedicine when caring for COPD patients reduces their hospitalization rate by a quarter and the costs of treating their disease by 44 percent. The electronic health record 'Evita' from Swisscom makes this possible.

In Switzerland, around 400,000 people suffer from the lung disease Chronic Obstructive Pulmonary Disease (COPD). Although drugs can alleviate their symptoms, it is still not possible to cure them. Improving the quality of life of those affected is therefore the primary goal, for example, by avoiding hospital admissions due to acute deterioration as far as possible.

Supervised by a doctor at home

In a large-scale study, the Cantonal Hospital St. Gallen, the University Hospital Zurich and three other Swiss hospitals¹ are taking innovative paths by using Swisscom's Evita electronic health record for monitoring a total of 175 COPD patients. These patients are treated for six months with traditional care methods without telemedical monitoring. For another six months they answer six questions about their state of health every day in Evita with the help of a mobile phone or tablet. All of the information is collected in real time in the participating hospitals. If a patient displays some worrying values, the study team will contact the person immediately and provide advice on the telephone. The objective Those affected are treated quickly and, if possible, at home.

Quality of life increases, costs are lowered

Initial results of the study, which will run until summer 2019, show that the use of telemedicine is promising both from a qualitative as well as a quantitative perspective. Patients who have completed both study phases feel they are getting better care with Evita than without it. With telemedicine care, a quarter of the patients improved their values in the recognized COPD Assessment Test, which assesses their state of health using a standardized questionnaire. The hospitalisation rate due to acute deterioration was a quarter lower than without monitoring. COPD-related treatment costs were 44% lower during telemedicine use than without it.

"So far, we have been able to show that we can improve the quality of life of COPD patients and reduce hospitalisation rates by using the electronic health record," says study director Dr. med. Frank Rassouli from the St. Gallen Cantonal Hospital. Each avoided emergency saves the health service several thousand francs. Prof. Dr. med. Gregor Zünd, CEO and Chairman of Hospital Management at the University Hospital Zurich, is also convinced of the path taken in the study: "We must promote digitalisation in medicine so that patients can increasingly be cared for at home."

Digitalisation increases quality and efficiency

Zünd and Rassouli believe the potential of digitalisation is far from exhausted. "Digitalisation is the key to success if we want to improve the quality of life and safety for our patients and increase the efficiency of our operations," emphasises Zünd. And Rassouli is confident that the final results of the COPD study will

¹ University Hospital Basel, Cantonal Hospital Münsterlingen and Cantonal Hospital Glarus





also confirm the potential of telemedicine monitoring. "And then an extension in the utilisation of Evita for such purposes should definitely be considered."

Study management website:

https://www.kssg.ch/pneumologie/lehre-forschung

Background information on the study:

 $\underline{\text{https://www.swisscom.ch/en/business/enterprise/themen/health/digitales-gesundheits-}\underline{\text{monitoring.html}}$

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