

Cross-sectoral collaboration by telehealth for prevention of acute admissions in elderly

Abstract

Introduction

High age is associated with an increased risk of hospital-demanding disease. In only 20 years, the number of 80+ in Denmark will double from approximately 238,000 in 2015 to 470,000 in 2035. Despite the increasing number of aged persons, the number of hospital beds in Denmark are being reduced as new 'super-hospitals' are built across the country. In response, health care delivery organisations and authorities have focused their efforts on avoiding acute short-term (< 48h) hospitalisations. Acute admissions are by nature non-planned, nevertheless some of them are considered both inappropriate and preventable. A recent Danish study found a significantly increased utilization of primary care services in two months leading up to an acute short-term admission of an elderly. This indicates that early detection and targeted intervention have the potential to prevent acute admissions. To date, there is no evidence showing that a pro-active detection with subsequent telehealth intervention for elderly patients in risk of developing acute illness can reduce acute admissions. However, a Danish study did find evidence for preventive home visits after discharge reducing re-admissions of elderly patients.

Description of care practice

Consequently, there is a demanding need for rethinking current practices and finding alternative ways by which it is possible to diagnose potentially acute patients quickly and initiate proper treatment. Building on the existing collaboration and practises in the Danish healthcare system between general practices, home care delivered by the municipalities and secondary care (hospitals) and the technological infrastructure available in Region of Southern Denmark, PAATH (Prevention of Acute Admissions by Telehealth) will facilitate new cross-sectoral procedures that strengthen the collaboration for the benefit of patients (70+). PAATH's aim is to demonstrate if by utilising existing technological solutions, we can develop and demonstrate a complete process from home-monitoring of patient's vital signs to remote specialist consultation that can ultimately prevent acute admissions to hospital. Acute team nurses in Svendborg Municipality are equipped with a "GERI-suitcase" containing a range of devices to measure vital signs, blood tests, bladder scan etc. The data from the devices are automatically transferred via a tablet (which also enables real-time video consultation) to a joint IT platform, where the GP, hospital, home care and the patient all have access and are able to see the data. The treating doctor will thus have immediate access to the data and a much clearer picture of the patient's current situation and thereby a qualified foundation for deciding the treatment and next steps, i.e. if the patient can be treated at home, at the geriatric outpatient clinic or admissions is required. The GERI-suitcase concept is tested for an eight-month period between July 2016 and February 2017.

Conclusion and discussion

With the intention of demonstrating the potential in new cross-sectoral work procedures and telehealth supported home-monitoring by acute team for the prevention of acute admissions of elderly medical

patients, PAATH began in January 2016 and is in the process of testing the GERI-suitcase in real-life settings. The purpose of PAATH is to demonstrate if it is technically, medically, organisationally and culturally feasible. Effectiveness (reduction in acute admissions, contacts to GP and home care services) will be far more scientifically and rigorously evaluated in further studies that are planned to succeed PAATH.

Location

Denmark

Year

2016

Related Integrated Care keywords

- DIGITAL HEALTH: ICT (INFORMATION AND COMMUNICATION TECHNOLOGY) SOLUTIONS, DEVICES, MONITORING

Pervasiveness

Small scale in a local jurisdiction

Status

Complete

Links

Ramussen J, Andersen-Ranberg K, Fournaise A. Cross-sectoral collaboration by telehealth for prevention of acute admissions in elderly. *International Journal of Integrated Care*. 2016;16(5):S34. DOI: <http://doi.org/10.5334/ijic.2583>

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