

Point of Care Solutions: Implementation of Sustainable Service Models

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Abstract

Recent health reforms and strategies have urged Norwegian municipalities to re-organize their services to prepare for new ways of combining traditional home-based services with technology-assisted point of care interventions. This paper presents the outcomes from a qualitative study on modelling the municipal health care services for the future. The aim was to study the organisation and operation of point of care solutions and identify critical factors for how to model the services of the future.

Keywords:

Point-of-Care Systems, Telemedicine, eHealth

Introduction

In Norway, recent health reforms and strategies have urged municipalities to re-organize their services to prepare for new ways of combining technology-assisted interventions and traditional home care services. Many municipalities are establishing telecare alarm services to handle alarms as there are increasing numbers of associated welfare- and telecare technologies in citizens' homes. There are also several national projects on telemedicine interventions for carrying out specialised care for diabetes, chronic obstructive pulmonary disease and heart failure patients at home. In addition, municipalities are testing out virtual home nurse visits with the aim to replace some of the physical visits. What these three approaches have in common, is a need for implementing technical point of care solutions at the patients' homes and in many cases re-organisation of the existing health care services to facilitate the follow up. Telecare alarms have an acute nature and there needs to be a response to alarms from sensors or physical alarm button within an acceptable time. Telemedicine is usually planned consultations supported by technology, with the patient at home and a health care professional at a telemedicine centre, or municipal office. The virtual home visits are a kind of routine conversations to follow up the home conditions and the welfare of the patients living at home, executed by a nurse in a municipal office.

In this context, the research project *Models for Telecare Alarm Services* (2015-2017) studied point of care technologies in collaboration with 18 municipalities. The aim was to collect experiences on the organization and the operation of point of care solutions integrated with traditional home care services. Critical factors were identified for how to design new models of the services of the future. The research question stated was: *How to integrate point of care solutions into municipal health care services in terms of interoperability and sustainable implementations?*

Materials and Methods

Qualitative methods were used for data collection, including workshops, simulations [1] and interviews. The interviews were both individual and in groups, targeting the integration of point of care solutions with traditional home-based health care services. The Norwegian Centre for Research Data has approved the study with project number 44494.

Results

The innovation and implementation of new point of care technologies, needs to be organized as sustainable solutions and be integrated into the daily operation of municipal health care services. There is a risk that the technical installations are proprietary solutions, meaning that the operators of the solutions need to log into separate systems with different user names and password to use the service. There is also a risk for "new silo" organization regarding operation of point of care solutions, and there is a need for an information flow that includes traditional home-based services, as patients might be receivers multiple types of services.

Conclusions

The study concluded that point of care services need to be implemented as sustainable solutions, and integrated with traditional home-based services based on evaluation of the user's needs and relevant interventions with technical alarm service support, as they imply a complex long-term collaboration.

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References

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