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CONFERENCE ABSTRACT

Evaluation of Organizational Models for Response Centres for Telecare Services of the Future

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Introduction: This study was carried out as a sub-activity for the project Model for Telecare Alarm Services. The project is participated by 8 Norwegian municipalities, the academic partner University of Agder, the research partner SINTEF IKT and the business partner Imatis. Municipalities are facing new challenges in the organization of the future Telecare alarm services in the response centres. Currently, municipal health- and social care services are responsible for 24/7 duties in emergency primary health care, including telephone calls (number 116117). In addition, similar 24/7 duties for Telecare alarm services and Telemedicine services on daytime are carried out. The scope of the project is to gain knowledge in how existing telecare alarm services are tackled and pinpoint important challenges when designing new services for the future. The project aims to identify similarities and synergies for combining existing municipal services as inter-municipal collaborative services.

Context: Welfare technology is expected to have a great potential to improve safety and security for people living at home while increasing the quality of nursing and care, and contributing to achieve cost-effective services. Today, new digital sensor technologies are in pilot evaluations in several municipalities, while the design of Response Centre services models for the future still is under consideration. In order to scale-up new digital services, it is important to evaluate how a combined alert service can be organized, and how such services can interact with the emergency team of home-based services, while including family relatives involved in the process.

Methods: During Autumn 2015 and Spring 2016 health care professionals, representatives from patients and operators at existing alarm centres participated in several workshops focusing on challenges in existing services based on experiences from piloting new digital solutions. Different organizational and future electronic collaboration models between the operator and the emergency home nurse service were evaluated in different lab-test scenarios.

Conclusions and discussion: There is a lack of empirical knowledge from existing operational services, and information tracking actions for actual alarm conditions to necessary actions taken at

the patient's home is not available. How the Telecare alarm services are organized differs between the 429 Norwegian municipalities, and there is a clear need of re-organizing to sustainable services for the future change in digital welfare sensor technologies. The project identified several important aspects of requirements for a qualified Response centre service: 1) Certified medical expertise as the response centre operators, 2) Relational skills (personal suitability), 3) Access to updated information about the user's situation, services and past events (registry information, etc. derived from existing Electronic Health Records stored within all the actual municipalities organized within the Response Centre administration), 4) Standardized procedures for urgency assessment and follow-up, 5) Guidelines for evaluation of user needs for sensors and alarm functions, 6) National guidelines for standardized procedures and quality standards including monitoring of process quality indicators.

There is a huge potential in designing integrated Response Centre services by combining the different 24/7 duties of today, in robust and uniform services with high skills and certified quality.

The project is to be continued in 2016-17 in order to develop methods for effect evaluations, study of possible technical infrastructure solutions, evaluation of legal conditions and guidelines, initiating development of suitable decision support systems tailored to those new services, and giving guidelines on how close relatives and voluntary services could be incorporated in the acute response team.

References:

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