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CONFERENCE ABSTRACT

Integrating Care in Complex Cardiac Care: the Tech Touch

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Background: The ageing of European population and the steady increasing of complex chronic disease pose substantial challenges to the sustainability of health and social care services and to the quality of life of European citizens . The testing of new frontiers of eCare for outpatient domiciliary monitoring of elderly citizens is essential in order to assess efficacy and sustainability of new technologies for integrated care, including telehealth and telemonitoring platforms. Friuli-Venezia Giulia is an Italian region with the highest aging index in Italy, it has a long standing experience in provision of districts-led integrated care and is the lead pilot partner of SmartCare, a European-funded project for ICT-supported integrated care, which aims to define a common set of standard specifications for an open ICT platform enabling the delivery of integrated care to frail European citizens. A total of 23 regions and their key stakeholders are part of the project, with ten regions piloting integrated health and social care services, the focus being on data-sharing, coordination and communication among formal and informal stakeholders within a person-centered approach.

SmartCare interventions aim to promote cooperative, multidisciplinary delivery of care, as well as self-care across organizational silos, including essential coordination tools such as shared data access, care pathway implementation as well as real time communication support to care teams and multi-organizational access to home platforms. In FVG, this study focuses on providing effective, sustainable, ICT-based home integrated care to complex, fragile, elderly end users suffering from chronic disease or in post-acute care (HF, diabetes, COPD), who require intensive monitoring and present one or more social needs. The ultimate goal being the activation of a systematic implementation of ICT-based integrated care programs.

Methods: Cohort, prospective, randomized study with 1:1 intervention vs usual care ratio (100 users randomized to intervention group and 100 users randomized to usual care group). Within each group, stratification was carried out according to two different pathways (50 users recruited for the short-term care pathway and 50 users for the long-term care pathway). Sensor devices with personalized thresholds for monitoring of blood pressure, glucose testing, weight, etc, together with environmental sensors, fall sensors and a series of self-care features (eg pill reminders, video conferencing) all contribute to keeping end users safely at

home. Integrated, cooperative access to the platform allows for integration of clinical and social data. GPs, specialists, nurses, and social workers may access the platform in real time. Care recipients, family members and Third Sector can also access the platform according to different predefined access levels. Help-desk and Contact Center staff, through an 800-number, provide 24/7 monitoring of alarms, as well as reinforcement to training and tailor-made support to adherence and social inclusion in accordance with multidisciplinary care plan.

Progress report: The European project will end as of August, 2016. 108 males and 92 females were enrolled in the intervention group. Mean age was 81.3 yrs for the users enrolled in the long-term pathway and 74.4 yrs for those enrolled in the hospital-discharge short pathway. A total of 536 formal/informal carers were enrolled on the SmartCare Platform. Final outcome evaluation will focus on the following quantitative and qualitative criteria: difference in number and length of hospitalizations; difference in number and length of admissions in intermediate care or nursing care facilities; difference in planned vs unplanned contacts with healthcare, social care professionals; cost-benefit analysis; changes in organizational aspects relevant to ICT-integrated care interventions; end users' empowerment. Intermediate focus groups and qualitative on-on-one interviews with care recipients, caregivers, as well as health and social care representatives, have highlighted formal stakeholders' perception of greater efficiency of care due to the close, personalized monitoring of care and real-time sharing of clinical and social information. SmartCare integrated platform seems to be allowing domiciliary nurses to more effectively plan their interventions while providing social care providers with real-time updated information on clients' status. In the course of semi-structured, qualitative interviews, end users also reported feelings of empowerment and improvements in knowledge and implementation of self-care routines. Caregiver's burden seems to benefit from sense of security and team involvement.

Discussion & Conclusion: Integrated ICT-supported care may successfully complement complex chronic care pathways by providing tailor-made eCare multidisciplinary home-based interventions for end users with complex chronic and social needs. Technology, if utilized within a beehive- model, can meet both individual and organizational needs so as to enhance the quality of integrated person-centered interventions. Change management requires time, leadership and a vision which should be shared by physicians (notably GPs), nurses and social care professionals alike. Training and education of formal and informal stakeholders, within a social learning framework, require adequate planning and close monitoring. Greater involvement of active citizenship should be fostered to provide better sustainability and to enhance social impact of ICT-supported interventions. The goal is to reconcile the underlying values and guiding principles of person- and people-centered health/social care through individual empowerment, participation and the recognition of the central role played in each European region by the person, the family and the community.

Keywords: complex cardiac care; people-centered; empowerment; beehive model; integrated care