From Healthy to Happy Ageing: the Power of Self-Management

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Extended Abstract

Background. Healthy ageing is about optimising opportunities for good health, so that older people can take an active part in society and enjoy an independent and high quality of life [1]. In the last 15-20 years, many research projects under FP7, H2020 and AAL frameworks proposed novel solutions aimed at improving good health also ensuring a more independent living and an higher quality of life of the elderly. In particular, several projects were mainly aimed at monitoring elderly people and their homes, most of them relying to the internet of things technology [9] [7] [10]. Further approaches focused more on robots interacting with an assistive environment [4] [2]. A few projects have also addressed social aspects [8]. In our opinion, focusing on the "healthy" aspect of ageing is key to find solutions that really help and give support to the final users (i.e., the elderly). Nevertheless, we claim that also "happiness" issues should be investigated to improve a better independent living taking into account the real needs and interests of the elderly. In that direction, patient empowerment plays an important role.

Methods. We propose to investigate self-management programmes [6], [5] as a way to engage and empower patients; being the final goal to improve their quality a life and to allow a better follow-up by clinicians. In the literature, four kinds of approaches have been identified, depending on the role of the patient: subordinate, structured, collaborative, and autonomous [3]. Subordinate are those tools that provide modest patient discretion through controlling and supervisory technology. Structured tools require more active, though still limited, patient participation. Collaborative ones involve patient drawing on their own knowledge and making decisions jointly with clinicians. Finally, autonomous tools support patients take matters in hand without much participation from clinicians.

Results. With the aim of providing patient's empowering, in the CONNECARE project (ID: 689802)¹ we focus on remotely monitoring patients. In particular, we adopt a hybrid self-management solution that is both autonomous and collaborative. In fact, the autonomous approach performs monitoring relying to wearable, no-intrusive devices (e.g., wristband and medical devices) together with a suitable app installed in the patient's smartphone. Moreover, being interested in improving the follow-up of the intervention, the collaborative approach provides relevant monitoring data to the clinicians. In so doing, the corresponding hybrid approach allows clinicians to set the goals to

¹http://www.connecare.eu/

be achieved by the patient (e.g., number of steps at day) and patients to be continuously monitored receiving suggestions and recommendations to their empowerment. Currently, the system allows monitoring physical activity, self-checked questionnaires, sleeping, and health status. It also gives support in giving notifications, alerts, recommendations, as well as messaging between the patient and the clinicians. According to a co-design approach with clinicians of the 4 sites in the project (i.e., Barcelona, Lleida, Israel, and Groningen), clinical studies have been designed for field-testing the selfmanagement system in real clinical practice. Those studies will be carried out during 18 months starting in March 2018 and will focus on 3 use cases: community-based management of chronic complex patients, integrated management of patients undergoing surgical procedures, and pre-habilitation of high-risk candidates for complex abdominal surgical procedures (the latter only in Barcelona). Currently, a feasibility test with selected clinicians and patients is running in the 4 sites.

Conclusions. In a context of growing incidence of chronic diseases and ageing populations, there is the need to research and find new solutions to shift resources into the community in an effort to deal more effectively with chronic conditions. In that direction, solutions to provide and improve healthy ageing is crucial. With the aim of providing a better support for independent living that take into account the real needs of the elderly, we propose to move from healthy to happy ageing by relying on patient's empowerment solutions. Clinical studies in CONNECARE will be aimed, among further clinical and technical issues, to support this thesis. Thanks to their evaluation evaluation, CONNECARE will help to improve real practice deployment of integrated care in those sites and will be able to bring practical insight to the potential of transferability of new methods and technologies to other regions in Europe and beyond.

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