The Veneto Region Experience on Evaluating Integrated Care Using MAST

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ABSTRACT

This article presents the application of a model for the Assessment of Telemedicine (MAST) for the evaluation of the effectiveness of integrated care services in the management of frail multimorbidity patients in the local health and social authority (LHSA) of Feltre, Italy. The assessment was carried out within the European project CareWell, whose aim was to improve and develop a better coordination among the social and healthcare professionals supporting patient centred delivery of care at home using ICT. The multidisciplinary assessment described in this article takes into account the description of the enrolled patients and the services implementation other than safety aspects, clinical effectiveness, patient perspectives, economic aspects, as well as organizational aspects and socio-cultural, legal and ethical aspects. In particular, the assessment results show that people belonging to the intervention group feel better looked after, professionals feel part of a team and the data sharing could lead to a better coordination and resources saving.

KEYWORDS
Assessment Model, Change Management, Effectiveness, EHealth, European Project, Health Technology Assessment, ICT, Outcomes, Telecare

INTRODUCTION

One of the main challenges that EU countries are facing nowadays regards population ageing and the related increasing incidence of chronic diseases within frail patients. These challenges affect the sustainability of the social and healthcare systems and the impact on people’s quality of life (Marengoni et al., 2011) directly.

The CareWell European project (Delivering integrated care to frail patients through ICT, 2017) was conceived in this context. The project, part of the ICT Policy Support Programme of the Competitiveness and Innovation Framework Programme, started in February 2014 for 37 months. The project aimed to improve and develop better coordination among the social and healthcare professionals and support patient centred delivery of care at home. The CareWell services consisted of two pathways supported by ICT: integrated care coordination and patient empowerment. The
pathways were developed in six European regions: Basque Country (Spain), Zagreb (Croatia), Lower Silesia (Poland), Veneto (Italy), Puglia (Italy) and Powys (Wales).

Concerning Veneto Region, the pilot site was the LHSA in Feltre (since 2017 AULSS n.1 Dolomiti) that provides care for a population of about 85,000 inhabitants in 2012, with almost 24% of the population older than 65 years of age. In order to respond to the complex needs of multimorbid patients the LHSA of Feltre developed and implemented a new model of integrated care: an ICT platform called “patient dashboard” to share all the relevant information coming from health and social care, home-care services, and hospital records; inter-consultation among professionals via electronic health record (EHR) and vital signs monitoring services at patient’s home. This new model was tested for nine months by an intervention group of patients and compared with a control group that received the usual care services. Regarding patient empowerment, training materials were uploaded on the website, and the home care nurses provided a training service to patient’s home in order to increase their illness-management.

The overall aim of CareWell project was to evaluate the impact of these integrated services for multimorbid complex patients using MAST, a framework that ensures a multidisciplinary assessment of ICT services in the healthcare sector (Ekeland, Bowes, & Flottorp, 2010; Ekeland & Grøtland, 2015; Kidholm et al., 2012; Kidholm, Clemensen, Caffery & Smith 2017, Kidholm et al., 2017). In this manuscript, the results obtained from the MAST evaluation of the Veneto Region pilot site are reported.

BACKGROUND

Population ageing is one of the most significant demographic and social trends of the 21st century, affecting nearly all the countries in the world (OECD, 2018). Older people are going to represent a proportionately larger share of the total population, presenting social, economic and cultural challenges to individuals, families, public welfare systems and societies. As reported in “World Population Prospect - 2015 revision” by the United Nations, between 2015 and 2030 the number of people in the world aged 60 years or over is projected to grow by 56%, and this figure is projected to more than double by 2050. Meanwhile, the ageing of the societies and other factors such as unhealthy lifestyles have resulted in a dramatic increase in chronic conditions (World Health Organization, 2002). Chronic conditions led to a spiralling demand for healthcare services with the associated costs and deterioration of patients’ quality of life.

In this context the integrated care for the frail elderly people with chronic diseases has taken centre stage among policymakers, planners and providers in several countries (Bergman et al., 1997; Glasgow et al., 2008; Vedel, Monette, Beland, Monette & Bergman 2011; Wilson, Baines, Cornford & Martin, 2007). Several systematic reviews (Eklund & Wilkinson, 2009; Ouwens, Wollersheim, Hermens, Hulscher & Grol, 2005) have been published on the integrated care or disease management programmes for different chronic patient groups. In this field ICT tools could play a key role in better integration of healthcare and social needs (Lluch & Abadie, 2013; Melchiorre et al., 2018).

MATERIALS AND METHOD

The MAST approach was adapted to the needs of CareWell project, focusing on integrated healthcare. The methodology includes the assessment of the outcomes of telemedicine applications divided into seven domains: Health problem and characteristics of the application, Safety, Clinical effectiveness, Patient perspectives, Economic aspects, Organisational aspects, Socio-cultural, ethical and legal aspects (Ekeland & Grøtland, 2015; Kidholm et al., 2017). In order to assess each of the proposed domains, a mixed methodology approach was used. The methodological approaches for each MAST domain are reported in Table 1.
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