GuiMarket:

An E-Marketplace of Health and Social Care Services

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INTRODUCTION

Literature suggest that Assistive Technologies and Information and Communication Technologies (ICT) may improve quality of life, extend length of community residence, improve physical and mental health status, delay the onset of serious health problems and reduce family and caregiver burden (see for example Blaschke, Freddolino & Mullen, 2009; Cunha & Putnik, 2008; Cruz-Cunha, Varajão, Miranda *et al.*, 2012; Cruz-Cunha, Miranda, Lopes *et al.*, 2013; Doukas *et al.*, 2011; Muncert *et al.*, 2012; Ilahi, Ghannouchi & Martinho, 2014).

There is a wide range of assistive technologies that can contribute to this purpose, such as web portals, electronic marketplaces (e-marketplaces) and search engines. The authors proposed an electronic marketplace (e-marketplace) as an integrative environment, to help the match between offer and demand of health and social care services, integration and management, performance monitoring and evaluation, and the enforcement of commitments of both parties involved in the transactions. However, the full exploitation of an electronic service of this nature depends on the broader access to ICT and the ability to use them (Cunha, Putnik & Gunasekaran, 2003; Cunha, Putnik, Gunasekaran & Ávila, 2005). Simultaneously the authors undertook a study aiming the definition and implementation of an e-marketplace for healthcare and social care and well-being services in Guimarães¹: a municipality of the North of Portugal (Cruz-Cunha *et al.*, 2013; Cruz-Cunha, Simões, Varajão & Miranda, 2014). The project, called *GuiMarket*, was developed envisaging people with special needs (elderly or with tempo-

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rary or permanent disabilities), their caregivers, their family and institutions. Additionally, most of the services to be provided by this e-Marketplace can be used by all inhabitants in general.

The effectiveness and efficiency in the delivery of social and health care services and the well-being of the users of these services is based on a correct coordination between the offer (the service providers: individual professionals and organizations) and demand (individuals and organizations) to address their specific needs and expectations. The services include the so-called physical care, such as domestic work, home care, personal care services and wellness, physiotherapy, nursing services, transport, catering, among others.

The Social Development Plan for the Municipality of Guimarães, conceived by the Department of Social Intervention for the period 2008-2011 (Miranda, 2008), considered several pilot actions in order to put ICT at the service of the population, in particular of both elderly and temporarily/permanently disabled people, and their caregivers or potential caregivers. The *GuiMarket* appeared as a pilot project to an answer to this plan.

This article summarises the project, the main results of the above-mentioned study and the main achievements so-far. Thus it makes three main contributions to the state-of-the-art in the field:

- 1. The results of the study confirm the interest and the perceived potential of such a service from an end-user perspective;
- 2. The findings support the advantage of expanding this pilot project to a full scale implementation; and
- 3. The performed analysis improves our understanding of the relations between the characteristics of the inquired population and their perceived interest in such a platform.

After the background section, the article presents the *GuiMarket* users, a short specification of the service, functionalities and services to be offered, some implementation aspects and a prototype. The article ends with some conclusions and remarks for future development. This encyclopedia article was based on earlier publications of the authors (cited in the text) produced along the project development.

BACKGROUND

There are many different aspects that contribute to the increased expenditure in health. A main cause is based on the combined effect of the altered demographics (the projected, and actually observed, increase in the percentage of older people relative to the entire population), and the tendency for health expenditures *per capita* to increase with age (Martins & Maisonneuve, 2006). Some of the main challenges that Europe healthcare systems are facing includes the rising demand for health and social care services, due to an ageing population, with previsions for 2051 pointing to 40% of the Union's population older than 65 years old (Braun *et al.*, 2003), and the increasing expectations of citizens who want the best care available, and at the same time to experience a reduction in inequalities in access (European Commission, 2004).

Local health care and social care units in Portugal have geographically dispersed facilities, covering both urban and rural areas, according to geographic-population criteria. Among these units we can find health centers, hospitals, private and non-profit institutions, non-governmental organizations, community/communitarian institutions and individual professionals active in the health care and social care intervention. Similarly, a wide range of services related to wellbeing, which can be included in the category of social care services, is provided by independent enterprises, organizations and individuals.

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