Chapter 7
Information and Communication Technologies in the Spanish National Healthcare System:
Current Status

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ABSTRACT

The implementation of information and communication technologies (ICT) for health in Spain is described. In the framework of the Healthcare Online program put into operation by the Spanish government, a series of initiatives have been undertaken at the regional level in Spain, in order to address the demand from both citizens and healthcare professionals for better, more efficient, and cost-effective care. This chapter focuses on the results of a study at the national level on the current status of basic healthcare services based on ICT, such as the individual health card, interoperable electronic healthcare records, e-prescription, etc. During recent years, strategic projects carried out by the Spanish government, in collaboration with the Regional Departments of Health, have demonstrated significant progress towards the adaptation of the National Healthcare System to current information technologies, by optimizing the

utilization of available resources, controlling healthcare expenditures, and consequently offering more efficient and sustainable healthcare services and tools for professionals and citizens for easy access to better and more structured information for their healthcare-related decisions.

INTRODUCTION

Health care represents one of the fundamental elements of what in Europe is called a "Society of Wellbeing." In a recent poll carried out by the Spanish National Institute of Statistics (Instituto Nacional de Estadística, 2008), health is considered as the most important service for citizens, ahead of other significant issues such as housing and education, and well ahead of issues such as public safety, and retirement.

According to the World Health Report 2000 (WHO, 2000), Spain's health care system ranked 7th worldwide. In fact, Spain has, as most countries in Europe do, a well developed public health system that is intended to provide universal and free health services. There are nevertheless a small, but significant, number of private insurance companies that provide health services to complement the public system.

The Spanish National Healthcare System (*Sistema Nacional de Salud*, SNS) offers a very high standard of healthcare services to all residents of the country. Given however the importance that these have in the citizens' lives, there is a continuous social demand for the further improvement of the services offered. Among the challenges asked of the SNS therefore is the provision of high quality services to all residents and citizens, independently of their place of residence, gender, or nationality. The use of information and communication technologies (ICT) in this area constitutes one of the key elements to promote better administrative and management processes within the SNS, optimize resource utilization, control healthcare expenditures, and consequently offer more efficient and sustainable healthcare services.

Spain is currently experiencing a global process of technological transformation in its National Healthcare System, promoted by the ever increasing demand for better efficiency and efficacy, which calls for the development and implementation of eHealth initiatives. This trend is further highlighted by the continuously increasing mobility patterns of both healthcare professionals and citizens/users and an increasing rate of immigration during the past years that stress the necessity for ubiquitous and seamless healthcare services and information.

This chapter starts with a brief description of the SNS structure and some of its costs, with reference to the country's primary demographic features. The most important strategies followed currently by the SNS in the development and implementation of eHealth services are described, with emphasis on the current status of nation-wide ICT initiatives such as individual healthcare cards, electronic healthcare records, e-prescription, etc.

HEALTH CARE IN SPAIN AND THE SPANISH NATIONAL HEALTHCARE SYSTEM

In the Spanish Constitution, passed in 1978, there are three basic administrative levels: the National Administration (Central Government, that takes care of issues common to the whole country, for example, defense or foreign affairs); local administration (City Council, that takes care of issues at the city level, e.g. public transport); and an intermediate level, by the administrative division of the country into 17 autonomous regions and 2 autonomous cities (Ceuta and Melilla, in the northwestern Mediterranean coast of Africa). These communities (*Comunidades Autónomas*) were created to provide a greater degree of autonomy to the different regions that geographically

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