

## Chapter 1.13

# The Core Governmental Perspectives of E-Health

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### INTRODUCTION

Public healthcare is facing huge future challenges in order to deal with rising costs, growing demands of customers, information flow, demographic changes, and aging population. The healthcare service sector can be seen as an information intensive area during an era of innovation and information technology (cf. Bellamy & Taylor, 1998). According to McLaughlin, Rosen, Skinner, and Webster (1999), it is common to assume that technological interventions are almost inevitable and it is humans' duty, at least to some extent, to follow the suggested development. In the organizational level of public healthcare, high expectations about the technology and its new possibilities are introduced. Additionally, the customers can seek support and advice for their healthcare needs from thousands online connections at any time of a day (e.g., Silber, 2003). The European Commission (2004) states how "eHealth

offers European citizens important opportunities for improved access to better health systems" (p. 22). This trend has implications to human beings and governments.

The electronic health services produced by the information and communication technology (ICT) belong to the era of e-government. The e-government can be seen as an electronic exchange of information and services between different actors (cf. Mätkiä, Anttiroiko, & Savolainen, 2004; Oliver & Sanders, 2004). The development of information society throughout the last decades has brought up possibilities to adapt, modify, and reorganize healthcare practices and services (e.g., Gallivan, 2001; Turner, Fraser, Muir Grau, & Toth, 2002). The ICT has been used as a tool to reorganize best organizational practices, information management, and government. The ICT has also given a possibility to produce tailored healthcare services and to gain improvements in cost-effectiveness, access, safety, and quality

of public healthcare services (Bates et al., 2001; Whitten et al., 2002).

In the future, the healthcare organizations in public sectors will confront many challenges by means of the ICT implementation. This situation is considered here both as the function of healthcare organizations and as the supply of knowledge intensive public health services. The current viewpoint presumes a paradigm that is structured on the basis of specific conceptualization. The purpose of this article is to conceptualize the complex topic of e-health from the governmental viewpoint and to clarify the best organizational practices. Special notation is also given for human resources, information management and the ICT implementation. Finally, some future trends are shortly discussed.

## BACKGROUND

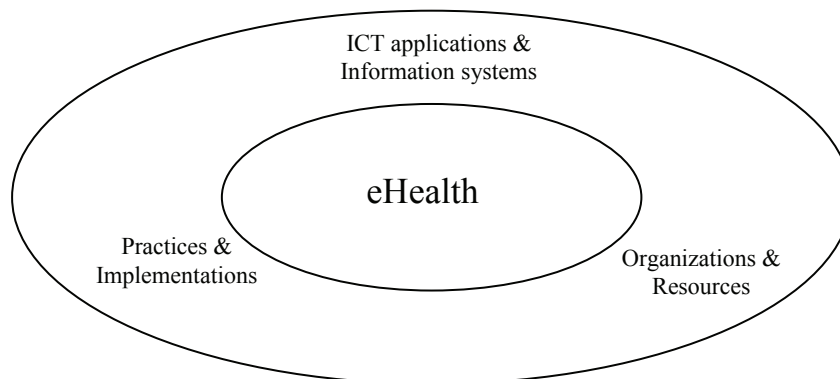
Experts define e-health differently and the term has some overlapping conceptual views. The term “e-health” is derived from the term “electronic commerce” (i.e., e-commerce), which was introduced in the mid-1990s to reflect the growing commercial use of the Internet. The e-health (cf. Eysenbach, 2001; European Commission, 2004; Silber, 2003), when recognized as a governmental issue, refers to the use of ICT applications or in-

formation systems to improve or enable health and healthcare services. Now it also refers to the main organizational and resource based factors before, during, and after an introduction of ICT. Finally, the term refers to best practices and implementations produced or needed to confront and manage with the ICT-based healthcare. The e-health concerns customers, patients, professionals, but additionally the whole primary healthcare, home care, and organizations like hospitals. It engages the terms like telemedicine, telematics, telehealth, medical and health informatics, interactive health communication, and so forth. To conclude, the e-health as a governmental concept give good reason for to describe the abovementioned combination by the means of three conceptual dimensions.

## CONCEPTUAL DIMENSIONS OF THE E-HEALTH PARADIGM: THE GOVERNMENTAL PERSPECTIVE

In the first dimension, the e-health connection can be found by referring to ICT applications and information systems in healthcare and in supporting functions (cf. McGinnis, 1997; Turban, McLean, & Wetherbe, 1999). In many cases, this has included telemedicine and health informatics as patients have been informed, examined and treated over distance by using appropriate applications (e.g.,

*Figure 1. E-health concept according to the core governmental dimensions*



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