

## Chapter 7.9

# Developing Trust Practices for E-Health

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### ABSTRACT

The number of people turning to the Internet to meet their various health needs is rising. As the prevalence of this form of e-health increases, so the issue of trust becomes ever more important. This chapter presents a brief overview of e-health and describes how and why people are using the Internet for health advice and information. In order to understand the trust processes behind this engagement, a staged model of trust is pro-

posed. This model is explored through a series of in-depth qualitative studies and forms the basis for a set of design guidelines for developing trust practices in e-health.

### INTRODUCTION

E-health is a term widely used by many academic institutions, professional bodies, and funding organizations. Rarely used before 1999, it has

rapidly become a buzzword used to characterize almost everything related to computers and medicine. As its scope has increased, so have the trust issues associated with the term. A systematic review of published definitions identified a wide range of themes but no clear consensus about the meaning of the term e-health, other than the presence of two universal themes (health and technology) (Oh, Rizo, Enkin, & Jadad, 2005). Eysenbach's (2001) commonly cited definition allows a conceptualization that goes beyond simply "Internet medicine."

*E-health is an emerging field in the intersection of medical informatics, public health and business, referring to health services and information delivered or enhanced through the Internet and related technologies.*

Despite an absence of any single definition of the concept, the key themes of health and technology allow a wider exploration of the domain from multiple standpoints. E-health can encompass a wide range of technologies (Internet, interactive television, personal, digital assistants, CD-ROMS), a range of health services and information types (family practitioner's surgeries, public settings, consultations, decision making), and a range of different stakeholders (medical professionals, patients and careers, business).

Sixty two percent of Internet users have gone online in search of health information, and it has been estimated that over 21 million people have been influenced by the information provided therein (Pew, 2000). Given the prevalence and use of Web sites concerned with health, the focus of this chapter is specifically on the use of the Internet for health advice and information. There has been a rapid increase in the use of technology, specifically the Internet, in health information and advice. Worldwide, about 4.5% of all Internet searches are for health related information (Morahan-Martin, 2004). Sieving (1999) lists a number of different push and pull

factors that have led to this increase, at least from an American perspective. These include an increasingly elderly population and a change in emphasis from healthcare providers treating illness to patients having primary responsibility for maintaining and improving their own health. Meanwhile, a range of content providers have recognized the educational and financial benefits of providing online health information.

Given the range of health advice and information available and the possible delivery modes available, patients are faced with decisions about which information, providers, and technologies to trust. How do people make decisions about trust in this context and how can guidelines for trust practices help in this respect? This chapter aims to explore the issue of trust within the context of e-health. The rest of this chapter is organized as follows. In the next section, we discuss the role of technology in the context of health information and advice. In section "Trust and Mistrust in E-Health," we examine the context of trust in relation to e-health, and in particular online or Web-based health advice and information, and present a staged model of trust that helps reconcile differences in the literature. "Validating the Model" presents a validation of the staged model through in-depth qualitative work. "Guidelines for Developing Trust in E-Health" draws together the literature and the results of the qualitative work to present a set of guidelines addressing how trust practices can be promoted in e-health and especially Web-based e-health.

## **THE ROLE OF TECHNOLOGY IN THE CONTEXT OF HEALTH INFORMATION AND ADVICE**

Technology has traditionally played an important role within health care. Through physician focused systems such as telemedicine and more recently the development of an electronic patient record system within the UK to an increase in patient-focused

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