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# Chapter VIII Trust in Patient–Centered E–Health

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### ABSTRACT

Patient-centered e-health (PCEH) offerings see the emergence of divergent, new third parties, through initiatives, including (a) medical content aggregation, (b) health-based online communities, and (c) patient-physician Internet-based portals. Here, the product is digital and heterogeneous for medical content aggregators; virtual and heterogeneous for online communities; and digital, context-specific, and asynchronous for patient-physician portals. With patients expressing privacy and confidentiality concerns in communicating personal health information electronically, growing numbers of PCEH initiatives give rise to many unique issues with respect to patient trust. Existing electronic commerce research focuses on trust in online vendors, potentially providing an incomplete picture with respect to patient trust in PCEH. An accurate and holistic understanding of patient trust encompasses different combinations of cognitive processes, disposition to trust, and institution-based trust, all shaping trusting

### INTRODUCTION

E-health encompasses "the use of emerging information and communication technology, especially the Internet, to improve or enable health and healthcare" (Eng, 2001, pp.20). Surveys estimate that 40% of Internet users go online to obtain medical information (Baker, Wagner, Singer, & Bundorf, 2003). Accordingly, Internet-focused firms, such as WebMD (http://www. WebMD.com/), are among the fastest growing in the healthcare industry (Wareham & Klein, 2003). Vendors have developed and subsequently deployed Internet-based IT innovations increasingly aimed at patients and their caregivers (Eudes, 2006). The growing use of the Internet within this industry gives rise to many unique and emerging issues with respect to patient trust.

Consider that within the United States, the debate over national electronic health records has

cited concerns with privacy and confidentiality (Dixon, 2007). Patients have expressed similar privacy and confidentiality concerns in communicating personal health information electronically (Bernhardt, Lariscy, Parrott, Silk, & Felter, 2002; Hassol, Walker, Kidder, Rokita, Young, Pierdon, Deitz, Kuck, & Ortiz, 2004). Accordingly, patient trust emerges as a complex issue with respect to growing uses of the Internet and Internet-based technologies. Furthermore, patient trust constitutes a critical success factor for patient-centered e-health (PCEH) initiatives, including (a) medical content aggregators, (b) health-based online communities, and (c) patient-physician Net-based portals, noted in Figure 1. As more patients turn to the Internet in managing their medical conditions; healthcare providers, medical content aggregators, as well as Internet-based solution vendors must understand the factors that affect patient trust with respect to different trustee constituencies.

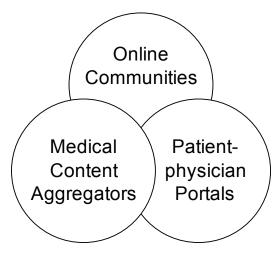
In years past, trust has been perceived as a traditional and simple patient-physician dyad. This trust still exists in face-to-face environments such as doctors' offices and hospitals. However, with the addition of multiple third parties in Internet-based environments, the potential exists for divergent levels of trust and for different constituencies to influence actions.

Medical content aggregators, such as Dr. Koop (http://www.drkoop.com/), must garner the trust of patients in order for their services to provide value, promoting use that ultimately translates into greater performance through advertising revenues and/or subscription fees. Additionally, patients must trust the author of the content provided. If patients do not have the requisite trust in the source of the content, it will likely go unused as patients turn to alternate outlets.

Increasingly, patients have the opportunity to participate in a variety of online communities and interact with virtual support groups, such as Caring4Cancer (http://www.caring4cancer. com/). However, patient involvement may be dependent upon trust in the vendor hosting the online community. Moreover, patients would have little impetus to participate in an online forum in which the other group participants are judged untrustworthy.

Finally, patient-physician Internet portals have the capacity to securely manage personal medical information for online access by patients. Medfusion (http://Medfusion.net/) and other such portals, however, must garner a requisite level of trustworthiness in controlling and protecting sensitive data. Given the confidential nature of

Figure 1. Patient-centered e-health initiatives



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