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ITB14104

This chapter appears in the book, *Web Mobile-Based Applications for Healthcare Management*
by **L. Al-Hakim** © 2007, IGI Global

Chapter II

A Framework for Delivering m-Health Excellence

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Abstract

Medical science has made revolutionary changes in the past decades. Contemporaneously, however, healthcare has made incremental changes at best. The growing discrepancy between the revolutionary changes in medicine and the minimal changes in healthcare processes is leading to inefficient and ineffective healthcare delivery, and is one, if not the significant, contributor to the exponentially increasing costs plaguing healthcare globally. Healthcare organizations can respond to these challenges by focusing on three key solution strategies, namely, (a) access, as in caring for anyone, anytime, anywhere, (b) quality, delivered by offering world-class care and establishing integrated information repositories, and (c) value, which is created by providing effective and efficient healthcare delivery. These three components are interconnected such that they continually impact on the other and are all necessary to meet the key challenges facing healthcare organizations today.

The application of mobile commerce to healthcare, namely, m-health, appears to offer a way for healthcare delivery to revolutionize itself. However, little if anything has been written regarding how to achieve excellence in m-health. This chapter serves to address this major void by presenting an integrative framework for achieving m-health, developed through the analysis of longitudinal applied research conducted by INET in conjunction with academe. After presenting this framework and discussing its key inputs, we then illustrate how the mapping of case data to the model enables the attainment of a successful m-health application to ensue and the benefits of adopting such a methodology.

Introduction

Currently the healthcare industry in the United States as well as globally is contending with relentless pressures to lower costs while maintaining and increasing the quality of service in a challenging environment (Blair, 2004; European Institute of Medicine, 2003; European Union [EU] Health and Consumer Protection, 2005; Frost & Sullivan, 2004; Kulkarni & Nathanson, 2005; Lacroix, 1999; Lee, Albright, Alkasab, Damassa, Wang, & Eaton, 2003; National Center for Health Statistics, 2002; National Coalition on Healthcare, 2004; Organization for Economic Co-operation and Development [OECD], 2004; Pallarito, 1996; *Plunkett's Healthcare Industry Almanac*, 2005; Russo, 2000; Wickramasinghe & Silvers, 2003; World Health Organization [WHO], 2000, 2004). It is useful to think of the major challenges facing today's healthcare organizations in terms of the categories of demographics, technology, and finance. Demographic challenges are reflected by longer life expectancy and an aging population, technology challenges include incorporating advances that keep people younger and healthier, and finance challenges are exacerbated by the escalating costs of treating everyone with the latest technologies. Healthcare organizations can respond to these challenges by focusing on three key solution strategies, namely, (a) access, as in caring for anyone, anytime, anywhere, (b) quality, delivered by offering world-class care and establishing integrated information repositories, and (c) value, which is created by providing effective and efficient healthcare delivery. These three components are interconnected such that they continually impact on the other and are all necessary to meet the key challenges facing healthcare organizations today.

In short, the healthcare industry is finding itself in a state of turbulence and flux (European Institute of Medicine, 2003; National Coalition on Healthcare, 2004; Pallarito, 1996; Wickramasinghe & Mills, 2001; World Health Organization, 2000, 2004). Such an environment is definitely well suited for a paradigm shift with respect to healthcare delivery (von Lubitz & Wickramasinghe, in press). Many experts within the healthcare field agree that m-health appears to offer solutions for

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