

Critical Success Factors for Delivering M-Health Excellence

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INTRODUCTION

Medical science has made revolutionary changes in the past decades. Contemporaneously, however, health care has made incremental changes at best. The growing discrepancy between the revolutionary changes in medicine and the minimal changes in health care processes is leading to inefficient and ineffective health care delivery and one, if not the most significant, contributor to the exponentially increasing costs plaguing health care globally.

Health care organizations can respond to these challenges by focusing on three key solution strategies (or the value proposition): (1) access—caring for anyone, anytime, anywhere; (2) quality—offering world-class care and establishing integrated information repositories; and (3) value—providing effective and efficient health care delivery. These three components are interconnected such that they continually impact the other, and all are necessary to meet the key challenges facing health care organizations today.

The application of mobile commerce to health care (i.e., m-health) appears to offer a way for health care 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 academia. 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.

BACKGROUND

Currently, the health care 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; Frost & Sullivan, 2004; Kulkarni & Nathanson, 2005; Kyprianou, 2005; Lacroix, 1999; Lee, Albright, Alkasab, Damassa, Wang & Eaton, 2003; National Coalition on Healthcare, 2004; National Center for Health Statistics, 2002; Organisation for Economic Co-operation and Development (OECD), 2004; Pallarito, 1996; Plunkett, 2005; Russo, 2000; Wickramasinghe & Silvers, 2003; World Health Organization Report, 2000, 2004). It is useful to think of the major challenges facing today's health care 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. Health care organizations can respond to these challenges by focusing on three key solution strategies: (1) access—caring for anyone, anytime, anywhere; (2) quality—offering world-class care and establishing integrated information repositories; and (3) value—providing effective and efficient health care delivery. These three components are interconnected such that they continually impact the other, and all are necessary to meet the key challenges facing health care organizations today.

In short, the health care 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 Report, 2000, 2004). Such an environment is definitely well suited for a paradigm shift with respect to health care delivery (von Lubitz & Wickramasinghe, 2005). Many experts within the health care field agree that m-health appears to offer solutions for health care delivery and management that serve to maximize the value proposition for health care. However, to date, little if anything has been written regarding how to achieve excellence in m-health. This chapter serves to address this apparent void.

INTEGRATIVE MODEL FORM-HEALTH

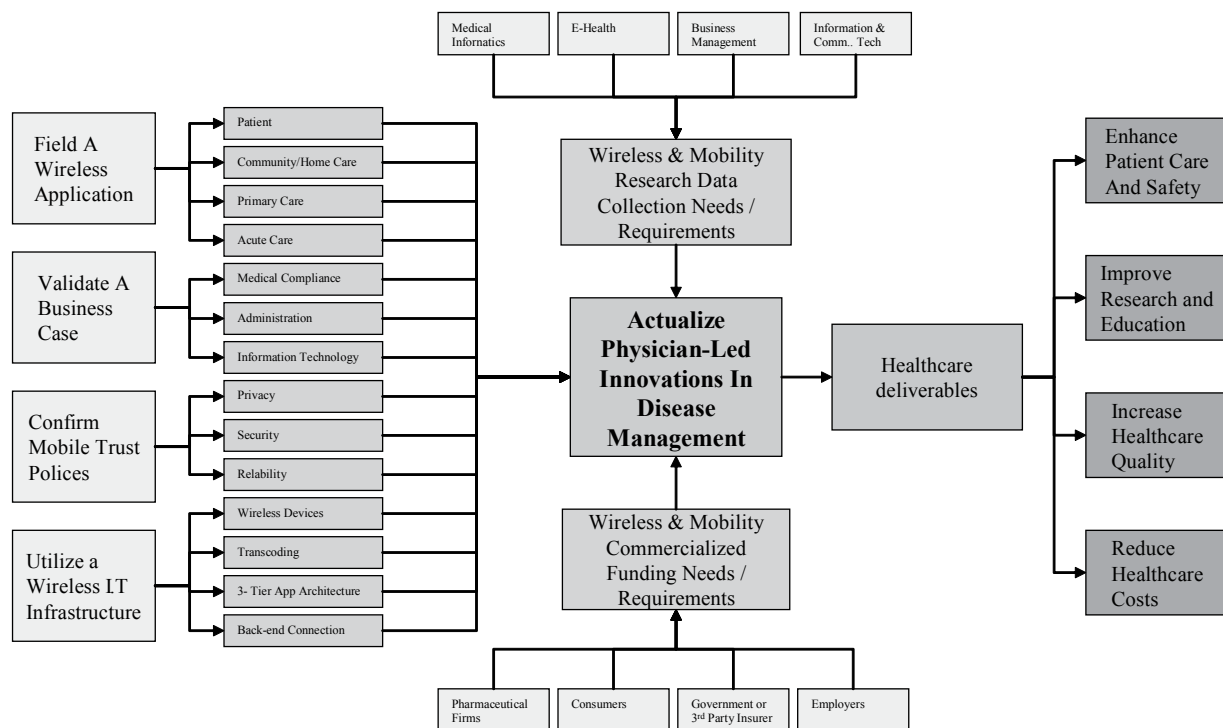
Successful m-health projects require consideration of many components. Figure 1 provides an integrative model that serves to capture all the key factors we have identified through our research. What is highlighted by this figure is the need to address many aspects in

order to achieve m-health excellence upon which we now expand.

Web of Players

The first consideration is the people component. Any health care initiative, be it wired or wireless, must first and foremost be aware of all key actors involved in the delivery of health care. It is useful to think of these various actors as a web of players, because they interact at different levels and degrees, depending on the specific action or procedure. Figure 2 depicts the web of players that must be considered for health care in general and m-health in particular. From this figure, it is possible to see that m-health requires input and coordination between and within suppliers, payers, health care organizations, providers, regulators, and the patient, if excellence is to truly ensue. Further, all these players are represented in Figure 1, where their specific roles regarding any m-health project are also

Figure 1. A mobile e-health project delivery model



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