EXSUM Health Management Information Systems:

Mobile Health and a Federal Health Strategy for 2020

Question:

What are the opportunities mHealth presents to the Federal Health System and what are the barriers that exist to its adoption?

Domain/Competencies:

Health Resource Allocation

Performance Measurement & Improvement

<u>Method of research/Model</u>: Research for this paper was conducted by literature review of articles, journals, and books identified through Google Scholar and Baylor OneSource searches based the on key words "mHealth opportunities" and "mHealth barriers to adoption" from 2010 to present. The purpose of the research was to identify areas in which mobile application technology and mobile health (mHealth) will expand by 2020 and to identify the existing barriers to their adoption.

4. Findings – The purpose of this project is to identify areas in which mHealth and mobile application technology will develop and impact healthcare operations. It also identifies barriers to mHealth adoption in an attempt outline key areas in which the federal health system can focus its strategic plan to further implement and capitalize on the benefits of mHealth.

Assumptions:

Information revealed in the literature review relating to global opportunities and barriers to entry can be generally applied to develop a model and strategy for the adoption of mHealth in the US Federal Health System.

Overview:

Advancements in information technology and management information systems act as accelerators in many different industries in terms of improving quality, speed, and cost. Like their counterparts in other industries, organizational leaders in the healthcare industry attempt to balance the three vertices of William L. Kissick's *Iron Triangle* referred to as quality, cost, and access (Kissick, 1994). According to a 2012 research project conducted by the Pew Internet and American Life Project, of the 85% of American adults owning cell phones, 53% own a smart phone, indicating there is a significant market for mHealth (Fox & Duggan, 2012). The information technology innovations in healthcare systems, such as the Electronic Health Record, and potential interoperability with mobile applications, have generated a demand for mobile health technology, and many new applications and developers have emerged to meet this demand (Levin, 2011). Given the rapid expansion of mobile application technology and improvements in interoperability with healthcare platforms, the health care industry and the federal health system are presented with opportunities to capitalize on mHealth's capabilities.

Forecasting mHealth opportunities in 2020 and determining major adoption barriers will help identify strategic initiatives to posture the federal health system and healthcare administrators to use mHealth to impact quality, cost and access. The results of the research defined in this paper will outline a strategic path for our nation's leadership and healthcare organizations to further advance mHealth adoption and implementation to improve healthcare quality, improve efficiencies, and increase access to health services.

Taking the opportunities and barriers into consideration will assist healthcare administrators to establish a strategic plan for implementing mHealth in the federal health system. There are many different strategy models which healthcare administrators can employ. One of which was introduced by Fran Turisco and Mike Garzone in their 2013 publication "Harnessing the value of mHealth in your organization". Turisco and Garzone contend the results of good strategy development are a mobility strategy and roadmap implementation plan, a capability development plan for resources, and documented governance and support models. Should the federal health system have the capability to vertically integrate the production of mobile health applications, a strategy which may make an impact involves selecting beneficial applications; developing the applications and encouraging use; and moving the applications to the end users while encouraging innovation to keep up with technological advancements (Norris et al., 2009). The underlying theme in the strategies presented in the literature is to develop a plan and act while assuming reasonable risk.

Findings:

Taking the opportunities and barriers into consideration will assist healthcare administrators to establish a strategic plan for implementing mHealth in the federal health system. There are many different strategy models which healthcare administrators can employ. One of which was introduced by Fran Turisco and Mike Garzone in their 2013 publication "Harnessing the value of mHealth in your organization". Turisco and Garzone contend the results of good strategy development are a mobility strategy and roadmap implementation plan, a capability development plan for resources, and documented governance and support models. Should the federal health system have the capability to vertically integrate the production of mobile health applications, a strategy which may make an impact involves selecting beneficial applications; developing the applications and encouraging use; and moving the applications to the end users while encouraging innovation to keep up with technological advancements (Norris et al., 2009). The underlying theme in the strategies presented in the literature is to develop a plan and act while assuming reasonable risk.

Lessons Learned:

Current literature addressing opportunities to capitalize on the expanding capabilities of mHealth and mobile health applications are adequate in demonstrating initiatives taken to improve quality, cost, and access in America. Literature attempting to expose the adoption is marginally adequate and tends to focus more on the global market rather than the US federal health system. Although approaches for the strategic implementation of mHealth have been outlined in the in existing literature, the approaches are very general and higher level strategies.

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More research specifically in the area of the opportunities and barriers which will drive employment strategy in the federal health system is desperately needed.