Chapter 66
Health Information Technology and Change

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ABSTRACT

Even in in health healthcare and health information technology change will not vanish or disperse. Technology, civilization, and creative thought will drive this force increasingly forward. Health care managers will continue being judged on their ability to efficiently and effectively manage (Patton & James, 2000). The pace of change has significantly increased since the days of the cave dweller who walked the earth until the "technology convergence" of using the ox and horse as tools. This article is to investigate the background, controversies, and problems surrounding Health Information Technology and change, and will include an overview of current changes. This will be coupled with solutions and recommendations, further research, and conclusion.

INTRODUCTION

One of the most widely discussed areas in the health care field is improving the quality of patient-centered care within Health Information Technology (HIT). HIT allows for the all-inclusive management of medical information and the protected exchange between health care consumers and providers (U.S. Department of Health & Human Services, 2008). Health care comprises of the use and management of a profusion of information that must be collected, managed, reviewed, processed, and mined (McHaney, n.d.). With this in mind, HIT is proclaimed to be the solution to improve patient-centered health care and quality, while reducing cost within the medical industry (Hersh & Wright, 2008). It was not until 1994; the United States healthcare industry established information systems capable of handling a universal delivery system (Accenture, 2001). These Information Technology Systems (ITS) operated along enterprise and system boundaries in the Health care Delivery System (HDS). However, they fragmented by the proprietary business benefits of large vendors that wanted to control patient information (Accenture, 2001). Practical tools, especially computers, continue to be created and rapidly placed in

industry, the ability of organizations to accept, accommodate, and even embrace technology is moving at a varied pace (McHaney, n.d.). The health care industry has been one of the unhurried organizations to embrace the computer revolution in regards to patient care. However, health organizations have been using computers for years in business departments. Research has indicated that HITs represent tools or functions that help patients maintain their health through management of health information (Hudak & Sharkley, 2007). Even though HIT has the potential to transform the delivery of health care effectively and efficiently, health organizations continue to lack in this area.

A health organization has often been treated like a manufacturer who is advised that using cheaper materials can reduce manufacturing costs. The end result is that the manufacturer saves money on manufacturing costs but at the same time defects are accumulating and the results are subpar products. As we relate this to health organizations the ill effects of these short cuts are not externally evident, the health organization gives poor service or makes errors. Ultimately, health organizations fail in any of the countless ways in which organizations fail when they are poorly sustained (English, 1994). When health organizations operate inefficiently without proper funding, the odds become stacked against them.

Several other studies suggest that the adoption of HIT remains limited in certain functions (Poon et al., 2006). There have been limited studies conducted to determine which functionalities of HITs need implementation. Most studies concentrated on certain functionalities such as Computer Provider Order Entry (CPOE) or Electronic Health Record (EHR). CPOE is a set of clinical processes that incorporate technology to optimize physician ordering of medication and other required laboratory testing (Ormond, 2005). During a study by Minnesota Orthopedics Specialist, it was realized that vendor and local support during implementation was critical for success (O'Neill, 2007).

EHR is "related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization" (U.S. Department of Health and Human Services, 2008, p. 17). This definition has been updated to include a digital collection of patient health information compiled at one or more meetings in any care delivery setting and is often used to refer to the software platform that manages patient records maintained by a hospital or medical practice (Health IT News 2013).

This leads us to look at the internal and external change. This is imperative for the change process and implementation of HIT. The internal reaction to change is the key point of discovery that requires learning something new, not just the acquisition of knowledge (Cameron & Green, 2004). Over time health organization management has avoided mentioning patient care and patient-related quality issues in either a positive or a negative framework. Many administrators appeared to focus more on central management than on clinical operations. In doing so, they have missed opportunities to engage patients and families as allies, document patient satisfaction and positive social work outcomes, and identify systemic patient care problems. The Greek Philosopher Heraclitus said that "no man ever steps in the same river twice, for it's not the same river and he's not the same man" (BrainyMedia.com, 2009, para. 1). Some interpret that the river is the external world. The external world is ever changing; the "river" is never the same. Another way to interpret this is that the "man" who stepped in the river today is not the same "man" that steps in the river tomorrow due to change, evolution, or experience that relate to external facts and figures (Cameron & Green, 2004). Technology changes rapidly and maintaining the status quo, actually means falling behind, and health organizations cannot afford to do that in our technology-driven world (Rutsky, 1999).

Change management is a multidisciplinary group activity to provide optimum solutions to health care organization. Those responsible must have to access a wide range of skills and resources to change

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