

# Management Issues\*

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## CHAPTER OUTLINE

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## KEY DEFINITIONS

**Health Insurance Portability and Accountability Act (HIPAA)**—law enacted in 1996 by the U.S. Congress in order to protect patient medical information. Title II of HIPAA, the Administrative Simplification (AS) provisions, requires the establishment of national standards for electronic health care transactions and national identifiers for providers, health insurance plans, and employers to address the security and privacy of health data.

**Change Management**—a discipline in information systems service that seeks to ensure that standard methods and procedures are used when making changes to information technology infrastructure, attempting to balance the need for change with the potential negative impact changes can produce.

**Human Factors**—physical, mental, or behavioral properties of people that may have critical influence on how people interact with technological systems, organizations, or their environment.

**Implementation**—the execution of a plan that, when referring to a technology system, generally encompasses requirements analysis, determination of project scope, integration plan, user training, policy development, and delivery.

**Integration**—in information technology, the physical or functional linking of two separate systems in order to achieve a desired new functionality or capability, often through the use of interfaces. (Note: For the purposes of this chapter, we will use the preceding definition of “integration.” The definition is still a matter of debate in the informatics community.)

**Interface**—internal communication between two separate entities, i.e., hardware or software, that allows information and resources to be shared without affecting how external entities, i.e., a user, interacts with each system.

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\*The views expressed in this chapter are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U.S. Government.

**Patient Care Information System (PCIS)**—technology system used by a health care professional for the provision of care to a patient, either directly through decision support or in a support role such as informational storage or management of information function. PCIS supports the provision of care for patients.

**Medication Management System**—an automated system that is often connected to other healthcare systems, that supports patient safety, and that improves the quality of care by reducing practice errors and misuse. A medication management system does so by providing access to medications only by authorized personnel and (usually) only if a validated order exists within the system.

This chapter will focus in a stair-step fashion on some of the main points to consider when updating or acquiring a new technology for a pharmacy. The sections will highlight some key determinants and areas that might cause the reader to go in one direction or another or in some cases decide not to act altogether. Rather than focus on day-to-day management techniques, the following sections will emphasize the need to know what the problem is and clearly state desired objectives in order to know when success is achieved or more importantly when not try in the first place. In addition, this chapter also contains review of the basic fundamentals of project planning and relationships with people or representative parties that will be useful in the process for the system determination.

## **System Determination**

Today's health care practitioners find themselves in a world of ever-increasing technological advances that seem to be coming at a more rapid pace. Health information technology (HIT) expenditures are estimated to reach nearly \$40 billion by the year 2008.<sup>1</sup> There is a national push to reduce the number of medical errors, including medication errors, through the use of information technology and systems such as electronic

health records (EHR) and computerized provider order entry (CPOE). President Bush has called upon healthcare institutions and organizations to implement electronic health records and systems, designed to improve efficiency and effectiveness of health care delivery, by the year 2014.<sup>2</sup> It is generally recognized that many areas in the health care delivery process could be improved through the increased use of HIT, e.g., automation or CPOE, which increases knowledge or replaces humans in certain situations that have a tendency for errors of commission or omission.<sup>3</sup> In some healthcare settings it is not uncommon to see physicians, nurses, and pharmacists replacing their manual paper methods of the past with various types of HIT, often with handheld or portable versions, to provide real-time data entry and retrieval of information as they care for patients. Regardless of the size, shape or location or whether it is a new system or a change to a legacy system, a successful HIT implementation requires adequate planning in order to ensure that the system becomes a tool not a deterrent or barrier for the healthcare practitioner.

## **Description of the Problem**

Before any system change is undertaken, there should be a clear description of the problem for the technology to solve. The time spent in the determination phase of new system acquisition answering the hard questions of “who, what, when, where and how” is a critical factor in the system's success or failure. This may seem elementary but with all of the benefits of HIT, it is often thought to be a magic solution for the problems (such as staffing shortages) facing many organizations today. Before embarking down the road to new system acquisition, the first question that needs to be asked is “What is the problem we are trying to fix?” Is it actually a problem that is solvable with technology. A technology solution, such as telepharmacy, might address