



## Factors Influencing Successful Health Information Technology (HIT) Implementation

### Introduction

Increasing numbers of organizations are implementing health information and communication technology (HIT) or are transitioning to more robust information systems that include computer-based order entry and clinical decision support. There are mounting pressures and incentives to deploy and use systems to enhance quality of care and patient safety, along with a growing array of reports about system implementation approaches, successes, and lessons learned. Successful implementation and use of HIT depends on many factors.

### Challenge

There are no easy answers as to what contributes to successful HIT implementation projects. Reaping the benefits of electronic health records (EHRs) is in part dependent on successful implementation and implementation raises a host of technical, sociological and organizational issues that must be addressed before users are likely to accept the new system. Isolating the impacts of these factors is difficult although they can generally be classified into three broad categories: technical, sociological, and organizational. A few of the issues are noted below.

**Technical.** Is the information system intuitively easy to use? Is it easy to do the wrong thing within the system? Interoperability is another important consideration: Can the provider (physician's office or hospital) easily connect or share information from information-based systems that are purchased from multiple vendors? Does the information system support regulatory, accreditation, and legislative reporting requirements?

**Sociological.** Is the organization ready for the implementation? Do the implementers have the technical skills to install the system and have the users been trained to employ it effectively? Organizations cannot afford to have an unsuccessful implementation and the best guarantee against this is a clinical 'champion' (doctor, nurse, or other health professional) who has sufficient informatics training and education to lead the introduction of the EHR into practice.

**Organizational.** Does the facility or practice have access to skilled workers who understand the workflow of the organization and the potential limitations of HIT? Can these workers guide the organization's selection of information systems; integrate the new system(s) with existing systems and databases; train peers on using the systems; identify system limitations; and even help design next generation systems?

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