

PREFACE

The challenges of healthcare quality, cost, and access have been with us for more than half a century. Despite the rapid changes in information technology and its application to healthcare problems—and despite healthcare leaders’ continuing struggle to come up with economic, political, and technological solutions—the problems persist even today.

With every “fix,” we create additional challenges. Developments such as the electronic health record (EHR) as a repository for digital health information and the enhanced ability of providers, payers, and patients to share that information among them have appeared as solutions. Prior to the passage of the American Recovery and Reinvestment Act (ARRA) of 2009, which provides significant incentives for both hospitals and physicians to adopt EHRs, movement toward those solutions had been slow and challenges related to data privacy and security made some organizations reluctant to implement those solutions. In this era of the Patient Protection and Affordable Care Act (ACA), we are forced again to reexamine and update the use of information technology to support operational, management, and clinical decision making.

The study of healthcare information technology should no longer be delegated to a small subsection of the health administration curriculum. It has become central to all that a healthcare practitioner does and a healthcare management instructor teaches. The chief information officer (CIO) now is part of the executive staff of many healthcare delivery organizations. Fortunately for those in the field, new information technologies have raced far ahead of their utilization in healthcare. Such technologies present the CIO and the rest of the leadership team with challenges related to understanding their potential applications and implications, strategically planning their selection and implementation, ensuring that users receive sufficient training on their proper use, and finding a way to pay for them.

This eighth edition of *Information Systems in Healthcare Management* provides a comprehensive overview of healthcare information technology (HIT), including the effects of the external environment and government policies on its evolution; the expanded role of the CIO; the basics of hardware, software, and communication systems; the types of operational,

management, and clinical applications; and the value HIT brings to the enterprise. The concepts included in the book reflect our broad vision of HIT management as a combination of technology, information, and manpower leadership.

The book is intended for current healthcare management students as well as practicing healthcare executives and managers. Although many of these readers may not fill a CIO role or be in charge of information systems, they will benefit from having a basic understanding of this expanding element of healthcare delivery. The book is suitable for a one-semester graduate or advanced undergraduate course in health information systems. It is also an extensive reference for healthcare managers and others involved in selecting and implementing HIT systems. Links to Internet sources are included to provide additional or supplemental information on the major topics covered in each chapter.

All chapters have been updated to reflect mandates of the ACA and other new federal laws as well as discuss the current (and potential future) challenges that HIT leadership and users face. Also new in this edition are current examples, an updated glossary, and a list of abbreviations. The three sections in this edition address those changes:

- **Part I: HIT Strategic Alignment.** The five chapters in this section reflect our view that successfully managing HIT today requires leaders who understand the influence of the external environment, including government interventions and policies. The same can be said about the internal HIT activities and strategies. More than ever, achieving an alignment between HIT strategic plan and the organizational strategic plan is critical. These chapters include a discussion of the implications of the ACA and ARRA, two laws that were not in existence in the previous editions.
- **Part II: Operational Effectiveness.** The five chapters in this section center on the crucial elements that enable HIT to operate effectively and efficiently. New to this part is a chapter called “Systems Selection and Contract Management,” a function of HIT management that is growing in importance.
- **Part III: Strategic Competitive Advantage.** To better organize the content, we moved the HIT project portfolio management chapter to this section.

Instructor resources are available to professors who adopt this textbook. Please visit hapbooks@ache.org for more information.