Managing technological change in health sciences organizations (most specifically, hospitals) from an organizational perspective is the focus of this very interesting book, part of the Computers in Health Care series. Although most useful to administrators (particularly those in a hospital setting), anyone charged with developing and implementing information systems in health sciences institutions could profit from reading this book.

The book is very readable and provides useful information interspersed with humor, insight, wit, and common sense. It borrows selectively from the organizational theory and management literature. The book is arranged well and includes seventeen chapters divided into five sections. Section 1 begins with problems in health care settings (anecdotal stories are woven throughout the book) and then discusses failures of information systems. This sets the stage for the rest of the book. Section 2 explores organizational issues, structures, and change and delves into the strategies and tools involved in implementing information systems; section 3 discusses people issues associated with implementing informatics systems; section 4 is project-oriented and includes managing project ends, evaluating project success, and how to work in an organization changed by technology; and section 5 takes a peek into the authors’ crystal ball and offers a look at the future.

The book begins by discussing health care from a problem-oriented perspective. The examples seem to be geared mostly to hospitals, although references to integrated advanced information management systems (IAIMS) projects, mostly at Cincinnati and Duke, make it of specific interest to librarians. Project-management and information-system components are examined a little differently than you might imagine, especially if you have been trained in education. Stress and change management are introduced early, and several models and ways of looking at change are introduced. Expecting more of a theoretical discussion from the literature, I found myself intrigued by the authors’ insights and their firm grasp of organizational politics grounded in pragmatism. For example, the argument of “image over substance” is explored: systems must not only perform well, but they must have the image of performing well. The total health care environment is discussed, and, at this point, I began to wonder why managed care had not reared its confrontational head. Up to this point, the impact of managed care on hospitals and the health care field is implicit.

The authors have an interesting way of presenting information, with a different approach to developing a hierarchy of information and thought. The term health informatics is not defined explicitly but rather implicitly within the context of the discussion, and, therefore, one who desires such might have trouble finding a concise definition. However, the definition is woven throughout the book, perhaps better providing information as to what health informatics is all about. It was not until page 186 that a discussion was provided with regard to “medical informatics,” which really was the impetus for the health informatics movement. Although not much space is dedicated to the medical informatics discipline and specific computer applications in medicine, the book does exactly what it purports to do and is a contribution to the literature.

The position is taken that power prevails over everything, and it is necessary to constantly sell, negotiate, and compromise to get ideas or plans approved. This is fundamentally the nature of personalities, values, and agendas of people in organizations. Various health informatics organizational structures (i.e., centralized, decentralized, matrix) are offered, with a discussion of the culture and politics of organizations. I found my- self impressed with the realism of the book, for there was far less formal organizational (and behavioral) theory than I thought would be presented, but this strengthens the book and separates it from the many management books that crowd the bookshelves. Rather, the authors very selectively present studies that pertain to the point at hand. References are included at the end of each chapter.

Major failures occur because organizations do not adequately manage the politics of information. Of course, politics permeates everything in organizations (as most people already know), but, even to those so jaded, an objective perspective can be enlightening. Techno-utopianism (i.e., “if we can, we should”) is discussed, along with the role of the chief information officer (CIO).

Today’s health organizations are under incredible pressure and stress. Various management models are discussed with regard to understanding organizational change and change management. Change management, simply put, means successfully implementing (managing) major changes in organizations; it is the process by which an organization gets to the desired state (i.e., vision).

For some reason, I found it reassuring to read that organizations go through management fads. Total quality management (TQM), continuous quality improvement (CQI), and similar systems were discussed as being in vogue and of
little useful value in the way that they are being implemented in many health care organizations today. Management by objectives (MBO) used to be the rage in many institutions, but, because it was not implemented well, it did not fare well. TQM is faring no better than MBO, because administration is not changing the organizational culture but rather installing a new set of rituals. This kind of perspective provides readers with an objective means of looking at their own institutions. The authors draw analogies to many systems but most strongly embrace the importance of vision, change, and process for meeting end-user needs, as well as the importance of understanding stress in a rapidly changing technological environment.

The book deals extremely well with the impact of information systems and computers on organizations. It presents the bigger picture while providing examples that make it real. As I read on, I began to understand my own organization a little bit better. Various structures, positions, and people took on an almost eerie familiarity, and the book became more real. Certainly, not all of the book has pearls of wisdom, and it can be unnecessarily detailed in parts, but most of it is very good. There are quite a few things that are simply mentioned without much background or depth, and several theories and many management approaches are highlighted, but this seems to work, and there are references in case readers desire more information.

One of the nice features of this book is that a number of questions are posed at the end of every chapter. Usually I ignore questions like this (they remind me too much of high school), but the questions asked are very useful, because they individualize what is presented, and readers can better relate them to their organization and specific situation. In fact, questions are integrated throughout the book to get readers to reflect critically.

The book also helps us understand the stresses inherent in a changing information technology environment and the discomfort caused by new information systems, along with the importance of effectively preparing both the organization (bigger picture) and people (specifically) for organizational change. Organizations have a life of their own, a culture, and a climate, and this book postulates that organizations learn, change, and adapt in order to survive.

Theories and models are presented, along with psychological principles for group dynamics (e.g., how to form good committees). The book discusses the emotions involved within the organizational aspects of health informatics and the importance of emotional commitment on the part of all involved for an information system to succeed. Luckily, the book provides a general blueprint of how to achieve success by taking into account politics, which always consumes a major portion of a change manager's time, and the importance of the change agent's acceptance and input into the power structure.

Project planning and management are of course heavily examined, as is managing client expectations. The authors look at how the players' personalities permeate information technology projects, politics, and interpersonal actions, thus affecting the entire project. Checklists are provided for estimating project timetables and user expectations. Tongue-in-cheek project management guidelines are offered to provide chuckles but also to cause the reader to critically reflect on the germ of truth inherent in graffiti and other anonymous written pieces that one often finds near photocopy machines and distributed by colleagues. One of the authors' conclusions is that your situation (whatever that may be) is not necessarily unique when looked at from an organizational perspective.

Chapter 9, dealing with the politics of information technology, was my favorite chapter. The book is interspersed with the kinds of irreverent witticisms you might find tacked to a faculty member's door. In one section, the classic "How to Swim with Sharks: A Primer" (p. 169-73) is presented from the original 1973 article. This is a great parable on organizational politics, and it illustrates the authors' perspective and should make perfect sense to most who read it.

Remember the old management aphorism, "People in new positions are given six silver bullets and must use them wisely"? By reading this book, we can learn how not to waste the few silver bullets (i.e., chips) we are given. Many of these statements will be most meaningful to seasoned administrators and people who have had experiences similar to those discussed in the book.

Section 3 deals most strongly with the people issues involved in implementing health informatics systems, including the critical role of leadership. In chapter 10, readers finally receive a discussion of medical informatics. Some readers may feel that this discussion should have been included earlier, but the context would be different. For example, the authors state that compared with computer professionals, librarians are fewer in number, usually earn less, and suffer from an external perception of powerlessness. Few words are minced. From there, it's on to leadership styles, stages of growth, and how to prepare the staff to embrace new technologies. The very real needs of people are highlighted with organizational needs. Remember when hospitals went through a buying frenzy for hospital information technology and how many purchased technology that did not work or became obsolete? Both Lorenzi and Riley draw from their
experience but have obviously done their homework by providing rich examples from other sources. The role of the change agent and the importance of clear communication and building effective teams of health professionals transcend several chapters. The message of the book, which we all recognize, is that times are changing quickly in health care. The roles of physicians and informatics initiatives are being redefined in many ways. Physicians are acutely aware of the information explosion and play an important role regarding health informatics systems. There are now 60,000 health-related journals published annually, and it is impossible for health care providers to keep up. Managed care, which I thought would be introduced early, doesn’t appear until page 225, but then the authors discuss the impact on nurses, pharmacists, and other professional groups, as well as conflict between these professionals on health care teams.

The book discusses the personal stress involved in change and how to cope with it. The authors provide a good perspective (e.g., “remember, it’s only a game”) and offer standard stress-fighting methods (e.g., exercise, attitude, relaxation techniques), because (as they point out) new health informatics systems are stressful! No new coping mechanisms for handling stress are introduced.

The last section is on project end stages; how to determine when the project is really over in order to get closure and when to proceed with appropriate training and support. Then comes evaluating the project’s success, using outcomes research techniques, taking into consideration baseline analyses, system expectations, and performance expectations. But what do you do with all this information? The authors recommend continuing quality control via process-oriented action evaluation teams to assess the value of the system. They offer suggestions for managing the altered organization. (Remember the way electronic mail changed our business communications?) If there is one recurring theme, it is the importance of effective communication. Examples from IAIMS projects provided should be of particular significance to librarians.

The book concludes with a look into the future. Obviously, health care systems cannot continue to operate as they have in the past, and thus we will see new alliances between health care organizations. The quality of business arrangements will determine new alliances between former competitors. People and the way they do business will change with an ever-increasing reliance on new technologies. The authors look further into their crystal ball and discuss organizational and personal preparation for the future, stating that the critical issues we face today will seem trivial in future years. The authors predict the emergence of “Know-Bots,” who will help people navigate knowledge networks and webs. Trends are predicted in health informatics, such as mega-technologies (cable networks integrated with interactive technologies). You may not agree with everything that is said, but the book will cause you to think. And thinking about health informatics might help you to critically reflect on your organization, your job, and your future.

In summary, this book offers concrete suggestions for successfully implementing informatics systems within complex health care organizations, taking into consideration the key players, overcoming behavioral resistance to change, and developing the skills and strategies necessary for successful information systems.

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Most librarians have not studied the law and are dependent upon works that are specifically designed to help readers understand legal principles. Just such a work is Libraries and Copyright: A Guide to Copyright Law in the 1990s. It is fortunate for librarians that authors Laura N. Gasaway and Sarah K. Wiart are both librarians and lawyers. Their understanding of library issues and knowledge of the law are combined to give library practitioners a readable and definitive source on copyright in the library.

Copyright is not going away, and it is not going to become easier. The advances in electronic applications are coming so rapidly that what is published today may be out of date tomorrow. Nevertheless, this publication contains so much basic information on copyright law and how it is relevant to the work in and by librarians and their users that it should be required reading. The whole volume (with perhaps the section on music an exception) is applicable to health sciences libraries and librarians.

Two areas of this work are particularly valuable. The first is the section on fair use, a principle that every librarian needs to understand and utilize (p. 26-31). Fair use doctrine is described as a mechanism to ensure that copyright does not stand in the way of learning. It is the need to maintain the balance between the rights of authors and users that makes determining fair use difficult. The purpose of fair use is to provide copyrighted materials freely to individuals engaged in criticism, news reporting, scholarship, and re-