BOOK REVIEW

Handbook of Informatics for Nurses & Health Care Professionals, 3rd Edition

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The Handbook of Informatics for Nurses & Health Care Professionals, written by Toni Lee Hebda, Patricia Czar, and Cynthia M. Mascara, embodies a compilation of novel concepts and technologies, along with an array of pertinent information about current and future nursing information systems. The authors not only summarize multiple applications that are of value to nursing practitioners but they have also managed to maintain an important balance that ensures the book will be valuable to other healthcare professionals. The book enlightens the reader on current healthcare applications and presents the reader with the challenges faced by the globally changing environment of health informatics created by the growing popularity of the Internet, wireless evolution, and rapid advances in computing and networking technologies. In general, the 17 chapters of the book can be neatly grouped into three sections. There is no major dependency between chapters; therefore, each chapter can be viewed independently. However, the sequence of the chapters does allow the reader to build knowledge gained throughout the book.

Section I, General Computer Information, examines the basic information common to all information systems, irrespective of usage domain. No prior knowledge or experience of computers is needed. Chapter 1 introduces the reader to the role of informatics in contemporary healthcare. Chapter 2 reviews basic information and terminology related to computer hardware and software; and presents content wireless and mobile computing, which is an important topic in any discussion of modern computer-based healthcare systems. Chapter 3 emphasizes the importance of maintaining data integrity and suggests some practical steps to ensure current, accurate data in healthcare information systems. The final chapter in this section addresses the use of the Internet to support healthcare. The discussion on search tools has been expanded and content has been added on the evaluation of Web sites. Additional information on Internet use and resources are found in the appendices at the end of the book.

Section II, covering Chapters 5 through 14, focuses on information and issues related to
the use of computers and information systems in healthcare. This section aims to bridge the gap between the theory and practice of nursing informatics. Chapter 5 covers basic information on healthcare information systems, including decision support and expert systems. Chapters 6 through 14 discuss all aspects of selecting, implementing, and operating these systems. Chapters 6 through 9 discuss the processes of overall and system strategic planning, system selection, implementation, and training. Chapter 8 contains additional information on testing, system evaluation, and strategies to implement system changes after system installation. Chapter 10 discusses information security and confidentiality, which is a pertinent topic in healthcare. Chapter 11 details system integration and Chapter 12 concentrates on the Electronic Health Record. Chapter 13, Regulatory and Accreditation Issues, has been updated to reflect the implications of the Health Insurance Portability and Accountability Act (HIPAA) and in particular the impact on nursing informatics and healthcare professionals. Chapter 14 covers contingency planning and disaster recovery.

Section III, Chapters 15 through 17, covers three specialty applications of computers in healthcare. Chapter 15 discusses ways that computers can support healthcare education. It contains content on Web-based education as well as the use of wireless and handheld computers in education. Chapter 16 discusses the applications and issues associated with the Telehealth, a growing area of healthcare practice, especially for clinicians. Chapter 17 looks at ways that computers are being used in nursing and healthcare research.

While this text is thoroughly recommended, a few suggestions are made that would improve the readability and pedagogical appeal of the book; however, these suggestions do not undermine the value of the book in any way. This book presents a rich supply of supplementary online material, including multiple choice questions, case studies, review questions and interactive exercises. As a teaching text, the handbook would benefit from more supplementary teaching material within the book as opposed to solely on the Web site. Another minor pedagogical issue that would improve the text as a teaching aid is the use of numbers to identify the case study questions at the end of each chapter.

This book would also gain from a section that describes how to evaluate health information systems. The book provides information about evaluating Request for Proposals (RFP) but a section presenting information on how healthcare practitioners evaluate systems pre- and post-implementation would also be useful. Additionally, the material and examples in this book were written from a North American view of healthcare informatics; the readers would benefit from a discussion of health informatics from a more global perspective.

In summary, this handbook provides an interesting and enlightening discussion of current issues facing nursing and healthcare professionals. The strengths of the various chapters are easily digestible through the writing style and the rich use of illustrative examples and supporting materials, such as the Explore MediaLink sections, which encourage readers to apply what they have learned. The reader is able to separately read each chapter without the benefit of previous readings and the dexterity of chapters contains enough material to educate both the novice and the experts in this field. The authors have researched and compiled a scholarly publication that focuses on a theme that is of growing importance to the healthcare sector.
Dr. Phillip Olla, PhD, is an associate professor at the School of Business at Madonna University in Michigan, USA. His research interests include knowledge management, mobile telecommunication, and health informatics. Over the last decade, in addition to university level teaching, Dr. Olla has worked as an independent information technology consultant. He received his PhD from the Department of Information Systems and Computing at Brunel University, UK. Dr. Olla is a member of the editorial board for the Industrial Management and Data Systems Journal and is currently, the book review and software review editor for the International Journal of Healthcare Information Systems and is also a member of the editorial advisory and review board for the Journal of Knowledge Management Practice.