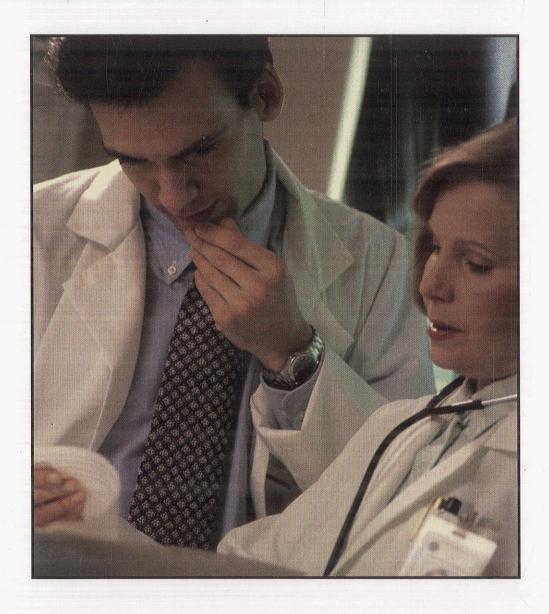
# MEDICAL INFORMATICS

Concepts, Methodologies, Tools, and Applications



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### Section 1. Fundamental Concepts and Theories

This section serves as the foundation for this exhaustive reference tool by addressing crucial theories essential to the understanding of medical informatics. Chapters found within these pages provide an excellent framework in which to position medical informatics within the field of information science and technology. Individual contributions provide overviews of knowledge management in healthcare, health portals, and health information systems, while also exploring critical stumbling blocks of this field. Within this introductory section, the reader can learn and choose from a compendium of expert research on the elemental theories underscoring the research and application of medical informatics.

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### Section 4. Utilization and Application

This section introduces and discusses the ways in which information technology has been used to shape the medical and biomedical sectors and proposes new ways in which IT-related innovations can be implemented within organizations and in society as a whole. These particular selections highlight, among other topics, the implementation of telehealth and the evolution of new, computerized systems in hospitals. Contributions included in this section provide excellent coverage of today's medical environment and insight into how medical informatics impacts the fabric of our present-day global village.

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### Section 5. Organizational and Social Implications

This section includes a wide range of research pertaining to the social and organizational impact of medical informatics around the world. Chapters introducing this section analyze organizational factors in health informatics and patient centric health information systems, while later contributions offer an extensive analysis of the Internet's role in revolutionizing accessibility to medical-related information. The inquiries and methods presented in this section offer insight into the implications of medical informatics at both a personal and organizational level, while also emphasizing potential areas of study within the discipline.

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Chapter 5.22. Gender Differences in Adoption and Use of a Healthcare IT Application / Kai Zheng, Carnegie Mellon University, USA; Rema Padman, Carnegie Mellon University, USA; Michael P. Johnson, Carnegie Mellon University, USA; and Herbert S. Diamond, The Western Pennsylvania Hospital, USA
Chapter 5.23. Social Construction of Gender and Sexuality in Online HIV/AIDS Information / Jing Chong, The Pennsylvania State University, USA; and Lynette Kvasny, The Pennsylvania State University, USA
Chapter 5.24. Community-Based Information Technology Interventions for Persons with Mental Illness / Rosanna Tarsiero, University of Pisa, Italy
Chapter 5.25. The Impact of Professional Certifications on Healthcare Information Technology Use / Neset Hikmet, University of South Florida, Sarasota-Manatee, USA; and Anol Bhattacherjee, University of South Florida, Tampa, USA
Section 6. Managerial Impact
This section presents contemporary coverage of the managerial implications of medical informatics, more specifically related to successful IT governance in the healthcare sector. Particular contributions address the implementation of large IT projects in healthcare institutions and the effective measurement of cost efficiency in healthcare. The managerial research provided in this section allows executives, practitioners, and researchers to gain a better sense of the role of IT in both healthcare and medical research.
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Chapter 6.2. Entrepreneurial IT Governance: Electronic Medical Records in Rural Healthcare / Carla Wiggins, Idaho State University, USA; John Beachboard, Idaho State University, USA; Kenneth Trimmer, Idaho State University, USA;
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Chapter 6.3. Governance Structures for IT in the Health Care Industry / Reima Suomi, Turku School of Economics and Business Administration, Finland
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