



Healthcare Informatics

Strategies for the Digital Era

Stephan P. Kudyba



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AN AUERBACH BOOK

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Healthcare Informatics

Strategies for the Digital Era


"This book addresses how health apps, in-home measurement devices, telemedicine, data mining, and artificial intelligence and smart medical algorithms are all enabled by the transition to a digital health infrastructure.it provides a comprehensive background with which to understand what is happening in healthcare informatics and why."

—C. William Hanson, III, MD, Chief Medical Information Officer and Vice President,
University of Pennsylvania Health System

Healthcare Informatics: Strategies for the Digital Era focuses on the services, technologies, and processes that are evolving in the healthcare industry. It begins with an introduction to the factors that are driving the digital age as it relates to the healthcare sector and then covers strategic topics such as risk management, project management, and knowledge management that are essential for successful digital initiatives. It delves into facets of the digital economy and how healthcare is adapting to the geographic, demographic, and physical needs of the population and highlights the emergence and importance of apps and telehealth. It also provides a high-level approach to managing pandemics by applying the various elements of the digital ecosystem. The book covers such technologies as:

- Computerized physician order entry (CPOE)
- Clinical Information Systems
- Alerting systems and medical sensors
- Electronic healthcare records (EHRs)
- Mobile healthcare and telehealth
- Apps
- Business Intelligence and Decision Support Analytics
- Digital outreach to the population
- Artificial Intelligence

The book then closes the loop on the efficiency enhancing process with a focus on utilizing analytics for problem solving for a variety of healthcare processes including in the pharmaceutical sector. Finally, the book ends with a current and futuristic view on evolving applications of AI throughout the industry.

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