Developments in Healthcare Information Systems and Technologies: Models and Methods

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Joseph Tan (Ed.)
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398 pp.
$245.00

Healthcare information systems are imperative for patient safety and the quality of care as part of maintaining Value-Based Healthcare. In this context, relevant design and successful implementation require a well-informed approach towards the balanced consideration of needs and opportunities.

This book holds a collection of updated, inspiring contributions designed for guiding management decision-making as much as it can serve as an effective roadmap for researchers and practitioners in the field.

The book takes a two-faceted approach, examining core innovations, trends and services on the one hand, and patients and provider's requirements and needs, on the other hand. Consequently, this book could be regarded as a valuable research, management and practice tool.

An indication to the thorough approach of this book is manifested by the significant emphasis on evaluation considered from the various perspectives of involved stakeholders: patients, staff and management. Examples are the patient perspective, reflected through the selection of services (first chapter); complemented by the methodological evaluation of staff satisfaction (chapter 4), which can be further generalized for the assessment of hospital- and healthcare services. Additionally, the book includes an inclusive and exhaustive evaluation of IT services - opportunities and threats (chapter 5) based on strategic-management tools (i.e., SWOT). Also in this context is the discussion of the potential

DOI: 10.4018/jskd.2012040105
unfolded in advanced technologies for service prediction (chapter 7).

An example for the book attendance to current trends which are also service innovations, is considering E-health. Two major and interrelated considerations: IT architecture and patient education are discussed in light of yet another important consideration, which is service adaptation to best fit with patient needs. The dedicated chapters constitute a comprehensive reference framework - theoretically and empirically.

Having set the discussion of healthcare services to include a multi-perspective view of patients and providers, the book attends to innovations to include not only IT advancements (chapters 9, 10, 14, and 15) and methodologies (chapters 12 and 13), but also the development of innovative practices towards care plan and control (chapters 8, 14, and 16).

The reader of this book is likely to appreciate the examination of emergent issues such as complexity and the personalization of care. The book concludes with four chapters (18 through 21) which together consider this issue from design (using an example modelling approach, i.e., UML) to application (based on the utilization of such as data mining techniques and decision trees) as part of advising pervasive architecture.

In this the book suggests for the reader a scholarly, updated approach to healthcare information systems. As such, the book is highly recommended for libraries of hospitals and Healthcare research centres as much as it is recommended for IT developers specializing in this field.

The significance of this book can also be regarded in the context of previous publications of which we mention two: Integrating Healthcare with Information and Communication Technology (Currie & Finnegan, 2009) and Healthcare Information Systems: A practical approach for Healthcare management (Wagner et al., 2009). For the former, this book presents a strategically comprehensive and updated view. The latter is a text book, lacking the design to practice stance of the current book.

For healthcare organizations, this book holds reference to nucleus innovative models and methods. Strategists, management and practitioners, designers and providers as well as scholars and researchers would benefit from its subject relevancy and clear and understandable writing. From the methodological perspective, contributions in this book use valid methods, which understandably could not be exhaustive yet are inspiring and helpful - balancing fluent writing with useful, applicable diagrams and tables.

REFERENCES


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