

Series Preface

This series is directed to healthcare professionals leading the transformation of healthcare by using information and knowledge. For over 20 years, Health Informatics has offered a broad range of titles: some address specific professions such as nursing, medicine, and health administration; others cover special areas of practice such as trauma and radiology; still other books in the series focus on interdisciplinary issues, such as the computer-based patient record, electronic health records, and networked healthcare systems. Editors and authors, eminent experts in their fields, offer their accounts of innovations in health informatics. Increasingly, these accounts go beyond hardware and software to address the role of information in influencing the transformation of healthcare delivery systems around the world. The series also increasingly focuses on the users of the information and systems: the organizational, behavioral, and societal changes that accompany the diffusion of information technology in health services environments.

Developments in healthcare delivery are constant; in recent years, bioinformatics has emerged as a new field in health informatics to support emerging and ongoing developments in molecular biology. At the same time, further evolution of the field of health informatics is reflected in the introduction of concepts at the macro or health systems delivery level with major national initiatives related to electronic health records (EHR), data standards, and public health informatics.

These changes will continue to shape health services in the twenty-first century. By making full and creative use of the technology to tame data and to transform information, Health Informatics will foster the development and use of new knowledge in healthcare.

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Preface for the 2nd Edition

In 2004, the textbook “Strategic Information Management in Hospitals – An Introduction to Hospital Information Systems” appeared in this Health Informatics Series of Springer. The book was received well and belongs – according to the publishing house – to the top selling books of this series.

Five years after its appearance, both Springer and we as authors felt the need to prepare a 2nd edition. In this 2nd edition we wanted to consider the progress in our field and also the lessons learned from our students, when using the book in our lectures, e.g. in the international “Frank van Swieten Lectures on Strategic Information Management in Hospitals” (International Journal of Medical Informatics 2004; 73, 97-100 and 807-15). Also, due to the changed perception of information systems in healthcare, which are no longer limited to single institutions like hospitals, but can embrace several healthcare institutions within healthcare networks, this revision has become necessary.

With this book on “Health Information Systems – Architectures and Strategies” we have prepared a substantially revised and elaborated 2nd edition.

What are the major differences from the 1st edition, which appeared in 2004? We shifted the focus from hospital information systems and their strategic management to strategic information management of health information systems. However, information systems in hospitals still play a major role in the book. All contents have been carefully updated. The book has been restructured in order to improve the use as a textbook for lectures on health information systems.

In addition to the four authors of the 1st edition, two new authors (N.H., F.J.) have also contributed to this edition. For the 2nd edition we also invited an international board of experts – CIOs and researchers in the field of health information systems – to give us their advice and comments, including examples and use cases.

All authors have been either directly or indirectly influenced by the visionary views on health information systems of Claus O. Köhler. Dr. Köhler was Professor of Medical Informatics at the German Cancer Research Center in Heidelberg, Germany, and long-term faculty member at the Heidelberg/Heilbronn Medical Informatics Program. His book on the ‘integrated hospital information system’, which appeared in Germany in 1973, significantly influenced the development of health information systems at least in Germany. Claus passed away in 2008. We want to dedicate this book to him.

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Health Information Systems

Architectures and Strategies

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