From Patient Data to Medical Knowledge aims to provide an introduction to the theories, problems, and applications that make up the field of health informatics. The target audience is anyone who wishes to learn more about the use of informatics in healthcare. It is written clearly and simply so there is no need to be an expert in information, information technology, computer science, or healthcare.

Unfortunately, no information is given on how this resource was compiled or how it will be maintained. Evidence is cited, but there are no explicit criteria for the selection or evaluation of the content. However, the selection of the content suggests adherence to some evidence standards.

The book comprises 3 parts. The first includes an introductory chapter and 3 further chapters that discuss what the author identifies as the 3 grand challenges in health informatics: reading and writing patient records, creating medical knowledge, and access to medical knowledge by clinicians.

The second part addresses the techniques used in informatics and their underlying theoretical bases. These include a brief introduction to logic and the application of logic for representing clinical concepts and knowledge in computer programs, ontologies, and informatics standards. Surprisingly, one also finds a discussion on probability in terms of decision analysis and statistical probability, which has relevance to machine learning and data mining.

The third part discusses the application of health informatics technologies to practice and includes a chapter on theories of organization. Brief chapters look at achieving changes in clinical practice through improving dissemination of information as well as through information technologies.

The book provides a broad introduction to the field of health informatics. It is not intended to provide answers for day-to-day clinical practice or to be a primer on improving the electronic patient medical record, writing a computer program, accessing health data or health knowledge, or implementing a decision-support program. As always, the devil is in the details.

However, we are increasingly using computers for recording patient consultations, undertaking electronic transactions and other communications, and accessing evidence and guidance for the care of our patients. It is likely that we will be increasingly involved with information technology projects, including those that provide decision support and link patient records across different service providers. This book provides an easily readable insight into the issues and complexities of health informatics. If we gain greater understanding of this field, we will be more able to contribute to the development of technologies and systems that will support us and our patients.

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From Patient Data to Medical Knowledge: The Principles and Practice of Health Informatics. This book can be obtained from www.blackwellpublishing.com for $72.95.