Book review

Integrating health care with information and communication technology

The book '*Integrating healthcare with information and communication technology*' presents a collection of essays that discusses a set of challenges that arise when attempts are made to integrate Information and Communication Technology (ICT) into health care services. Interoperable information systems are paramount for efficient integrated care, and contributions to explore ICT in the ongoing transformation processes towards seamless care should be of importance for the integrated care community.

Implementation of large scale, comprehensive, and interoperable ICT is a preferred tool to transform health care delivery systems across Europe. Embedded in this transformation is the goal of integrated services and integrated care. The authors contribute to this discourse through their critical analysis of experiences from studying the NPfIT (the National Programme for IT). NPfIT is an ongoing, centralized effort to introduce ICT in the British Health Care, NHS. The main message of this book is that current approaches do not sufficiently tackle the challenges of the complex, often ambiguous and highly distributed, health information utilized in care delivery by many actors. Of particular importance to integrated care are the authors' efforts to unpack the inherent complexity of the introduction of ICT and the thought-provoking examples of lessons learned in this process.

The book has 11 Chapters organized in three parts: Transforming Health Care Services using ICT, Electronic Health Records (EHR) and Global ICT Adoption and Implementation in Health Care. The first part of the book introduces four broad perspectives: information systems (IS) and technology, clinical work, medical/ health informatics and management and organization. These perspectives are necessary for a critical review

of approaches to IS implementation, and they explore core aspects of the complexities of integrating health care using ICT. In the second part, the contributors zoom in on adoption of the Electronic Health Record (EHR). The EHR is an essential tool for integrated care, and the identification of the challenges of integrating information systems into mature socio-technical systems of everyday health care has important implications for design and processes to introduce the systems. The third part of the book presents three different cases: EHR integration in distributed medical practice, specifics of health care systems, and consumerism, which are all related to experiences from the introduction of large information systems outside the UK.

The contributors to this book come together in their overall claim—'one-size does not fit all'. The challenges and hurdles experienced in the NPfIT relate more to the social practices and organizational characteristics than to the technical capabilities as such, and the authors provide many examples demonstrating the reasons for this. Their elaborations of the complexities inherent in decentralized and centralized approaches to the transformation of health care, institution-specific logics, foreseen problems of affordability, changing care requirements due to new practice models, and consumer engagement support their claims. Their call for a multi-strategic approach targeting socio-technical and professional issues to deal with identified challenges is also important in the transformation to integrated care.

In the analysis of a national or local initiative, like the NPfIT, the authors provide many interesting and important perspectives of relevance to other efforts to integrate care through the introduction of ICT. This book is, in fact, an interesting and informative resource to better understand the potentialities for the use, uptake and utility of the identified experiences in comparable endeavors in other contexts. The main

message is that the characteristics of this system need to be further understood to achieve interoperability and information sharing across facilities. Ongoing transformations and integration with ICT is about intervening in a complex, multifaceted and distributed healthcare system.

I think this book will be enlightening to readers interested in the many aspects of integrated care, and to those who are involved in large-scale information systems projects at many levels.

Anne Moen,
Institute of Health and Society,
Department of Nursing and Health Sciences,
P.O. Box 1153, Blindern, N-0318 Oslo, Norway
E-mail: anne.moen@intermedia.uio.no