Book review

Implementing an electronic medical record system: successes, failures, lessons

*Tim Scott, Thomas G. Rundall, Thomas M. Vogt
and John Hsu*
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Design and introduction of information technology, informatics applications and the Electronic Health Record (EHR)[1] in particular continue to receive much attention in health care. For decades, the visions and expectations to what introduction of informatics can contribute to in health care have been very optimistic [e.g. 1–3]. There is also a growing number of contributions discussing failures or unanticipated consequences [e.g. 4, 5] when informatics applications are implemented in the health care system and appropriated by the health care providers. I agree with Dr. Aarts in the foreword of this book that Scott and colleagues' *Implementing an electronic medical record system: successes, failures, lessons* offers a refreshing, elaborate and different perspective. Scott et al. set out to give a comprehensive and elaborate narrative of what happened in a specific organization when a promising informatics application—an electronic medical record system—was introduced to this clinical setting.

The book has six chapters. In the introduction the reader is presented an elaborate account of the history of the particular organization where the study took place, and the chosen methodology for the study. Chapter 2 'the experience of implementation' presents their respondents' [senior clinicians (i.e. physicians), managers and implementation team members] viewpoints about the EHR and brings their voice forward. In Chapter 3 'accounting for successes and failures' the authors challenge the rhetoric talk about implementation in dichotomies or either or. In Chapter 4 'barriers and facilitators to implementation' and the concluding Chapter 5 'Electronic medical record systems: lessons for implementation' the authors sums up and offer some of their ideas and tentative guidance for implementation of computerized systems.

The book engages the reader in interesting reflections. The main message is that to understand and facilitate

[1] In the literature there are different terms, and I choose the broader and inclusive term Electronic Health Record.

implementation processes of an EHR calls for thorough elaborations of complex interactions and interplay of factors like perceived support to the clinical workflow and influence in patterns of interaction and coordination between providers, providers and their patients, role changes for providers, particularities of different organizational sites and cultures, and responsive leadership processes where the EHR is implemented. They point to the necessity to go beyond the common dichotomy of success and failure and rather portray the complexity in encountered 'non-rational' or unintended experiences. The authors discuss the importance of preparing the organization, and collectively look for how to perform clinical work given the support from the chosen EHR. Drawing from the narrative, the book points to chain reactions of innovation, including importance of supporting the users who make intended or unintended changes motivated and induced by the EHR, and of managing often unpredictable changes surfacing in resistance and conflict by tapping into their reasons because herein there are also fertile grounds for improvements. The authors document complex, interdependent, contextually and ambivalent components at play in such key processes extensively. Therefore, this book does not give simple answers to emerging questions and reported observations, but that is also in my perspective the strength of and main contribution from their story.

From the perspective of integrated care the book points to the challenges and some of the complexities when introducing EHR as information infrastructure in the increasingly information dependent health care environments. They provide a thorough description of the processes of introduction and the 'complex interaction between decisions, expectations, responses, software developments, learning, coordination (p.135)'. The in-depth description of the specific organization's history of innovation, improvements and tensions between physicians and the administration and business side allows the reader to understand the context of implementation. This is important information and context for the discussion in the book. However, the book would have been even more useful for

broader, international audiences in integrative care if the authors had emphasized viewpoints beyond the physicians, managers and implementation team. Their choice leaves me wondering if and how the perspectives and views of other providers (e.g. RNs and Medical Assistants) in the organization could be different, and if the story of introduction of the particular EHR introduction in this organization would be told differently.

Anne Moen RN, PhD
Associate Professor
InterMedia, University of Oslo,
Institute of Nursing and Health Sciences,
University of Oslo, Norway

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