Foreword

It is tempting to write a book about laboratory information management systems and focus on the laboratory as one “silo” of the healthcare delivery structure. In that case, the book would target an audience of professionals involved in the laboratory services, along with information technology experts seeking to improve the efficiency of the laboratories, their appropriate use of resources, and compliance with ISO standards and other local requirements.

This is not a book about that silo.

The editors and authors of this innovative book offer us a system’s perspective while focusing on the laboratory information management technologies and infrastructure. The audiences of this book are healthcare performance improvement professionals, healthcare information technology experts, and policy makers who increasingly realise that a laboratory is organically part of the entire system of delivery, and that without the appropriate communication between the various parts of that system, improving the processes and outcomes of a laboratory’s performance will be akin to a case-study with little immediate impact on the improvement of the quality, safety, effectiveness, and technological leadership of the healthcare system within which a laboratory functions. In fact, a focus on the laboratory, in isolation from a hospital, a community center, a public health surveillance system, or a cloud-based, electronic medical records re-engineering within a national health care system runs the risk of adopting an academic perspective.

This is not a book about academic research or theoretical debate.

Rather, through the experience of authors from Europe, Asia Minor, and the Far East, the editors have compiled comprehensive, practice-based, and practically guided discussions about the role of a laboratory in promoting performance improvement within the health care system.

The 15 chapters of this book follow a progression of contextualization, economic implications for the use of electronic systems for data collection, storage and mining, quality improvement and its management, effectiveness and efficiency enhancement and monitoring, adoption of information technologies, use of tool and data calibration, the importance of cloud computing, the role of policy changes to promote the building of adequate communication, technology, quality improvement strategies, and the importance of standards. The inclusion of case studies strengthens the message of the authors and step-by-step validates the title of this book.

And perhaps to make the point that the topics and recommendations of this book go beyond the laboratory and in fact beyond the “human medical care systems”, the last chapter shows how the topics covered by this book apply perfectly and seamlessly to laboratory information management systems in veterinary laboratories. It is a most convincing sequence of chapters showing the generic nature of the topics and their readily generalisable applicability to the roles and functions of all healthcare professionals.
This is a book of practical guidance and thoughtful recommendations for healthcare professionals who have already adopted a systems approach and are eager to learn about the interoperability of quality improvement, economic analysis and supporting technologies toward the enhancement of their health care system.

It is also a book for those who are still struggling within a silo-driven infrastructure and wonder how improved communication, electronic health and healthcare data, and adoption of international standards would incorporate the isolated silos into an organic system.

I believe this publication will convince many that such a system can be realized, and will guide the readers through the key dimensions of the process.

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