# Table of Contents

Foreword .......................................................... xvii

Preface ............................................................................... xix

Acknowledgment .............................................................. xxix

Chapter 1
The Role of Total Quality Management Practices on Quality Performance ................................. 1
*Kijpokin Kasemsap, Suan Sunandha Rajabhat University, Thailand*

Chapter 2
Economic Aspects of a Health System Electronization ................................................................. 32
*Vincent Šoltés, Technical University of Košice, Slovakia*
*Antonio José Balloni, Centro de Tecnologia da Informação Renato Archer (CTI), Brazil*
*Beáta Gavurová, Technical University of Košice, Slovakia*
*Míchal Šoltés, Technical University of Košice, Slovakia*

Chapter 3
The Impact of the Electronic Medical Records (EMRs) on Hospital Pathology Services: An Organisational Communication Perspective ................................................................. 50
*Andrew Georgiou, University of New South Wales, Australia*

Chapter 4
Overview of Requirements and Future Perspectives on Current Laboratory Information Management Systems ............................................................................................................. 67
*Viroj Wiwanitkit, Hainan Medical University, China & University of Nis, Serbia*

Chapter 5
An Extensible Cloud-Based Medical Instrument Calibration Mechanism ........................................ 83
*Po-Hsun Cheng, National Kaohsiung Normal University, Taiwan*

Chapter 6
Information Security Policy: The Regulatory Basis for the Protection of Information Systems ........ 95
*Edison Fontes, Faculdade de Informática e Administração Paulista (FIAP), Brazil*
*Antonio José Balloni, Centro de Tecnologia da Informação Renato Archer (CTI), Brazil*
Chapter 7
Interoperability in Laboratory Management Information Systems

Güney Gürsel, Gülhane Military Medical Academy, Turkey

Chapter 8
Quality Management and Quality Assurance in Medical Laboratories

Kyriacos C. Tsimillis, Cyprus Accreditation Body, Cyprus
Sappho Michael, Ministry of Health, Cyprus

Chapter 9

Petros Karkalousos, Technological and Educational Institute of Athens, Greece

Chapter 10
A Practical Approach for Implementing the Additional Requirements of the ISO 15189:2012 Revision

Fikriye Uras, Marmara University, Turkey

Chapter 11
The Use of Information Systems in a Modern Cytopathology Laboratory

Stavros Archondakis, Military Hospital of Athens, Greece

Chapter 12
Innovative Architecture to Enhance Quality of Service for Laboratory Management Information
Systems

Naeem A. Mahoto, Mehran University of Engineering and Technology, Pakistan
Faisal K. Shaikh, Mehran University of Engineering and Technology, Pakistan & University of Umm Al-Qura, Saudi Arabia
B. S. Chowdhry, Mehran University of Engineering and Technology, Pakistan

Chapter 13
A Case Study of a Laboratory Information System Developed at the Institute for Cancer Research at Candiolo

Alessandro Fiori, Candiolo Cancer Institute – FPO, IRCCS, Italy
Alberto Grand, Candiolo Cancer Institute – FPO, IRCCS, Italy
Piero Alberto, Candiolo Cancer Institute – FPO, IRCCS, Italy
Emanuele Geda, Candiolo Cancer Institute – FPO, IRCCS, Italy
Francesco Gavino Brunlu, Politecnico di Torino, Italy
Domenico Schioppa, Politecnico di Torino, Italy
Andrea Bertotti, Candiolo Cancer Institute – FPO, IRCCS, Italy & University of Torino, Italy

Chapter 14
An Evaluation of Laboratory Information Systems in Medical Laboratories in Jamaica

Donovan Mc Growder, The University of the West Indies, Jamaica
Romeo Bishop, The University of the West Indies, Jamaica
Chapter 15
Laboratory Information Management Systems: Role in Veterinary Activities ............................................. 297
Patrizia Colangeli, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Italy
Fabrizio De Massis, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Italy
Francesca Cito, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Italy
Maria Teresa Mercante, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Italy
Lucilla Ricci, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Italy

Compilation of References .......................................................................................................................... 310

About the Contributors .............................................................................................................................. 343

Index ......................................................................................................................................................... 352