# Table of Contents

## Preface

Section 1  
Applications of Online Social Media in Healthcare

Chapter 1  
Twitter and Its Role in Health Information Dissemination: Analysis of the Micro-Blog Posts of Health-Related Organisations  
Dan Dumbrell, The University of Sydney, Australia  
Robert Steele, The University of Sydney, Australia

Chapter 2  
Informatics in Social Services: Research, Developments, and Outcomes from the Finnish Perspective  
Sirpa Kiusisto-Niemi, University of Eastern Finland, Finland  
Kaija Saranto, University of Eastern Finland, Finland  
Sari Rissanen, University of Eastern Finland, Finland

Chapter 3  
A Social Network Framework to Explore Healthcare Collaboration  
Uma Srinivasan, Capital Markets Cooperative Research Centre, Australia  
Shahadat Uddin, The University of Sydney, Australia

Chapter 4  
Privacy Perceptions of Older Adults when Using Social Media Technologies  
Dan Dumbrell, The University of Sydney, Australia  
Robert Steele, The University of Sydney, Australia

Section 2  
User Acceptance of Health Information Systems

Chapter 5  
Perceived Importance of User Expectations from Healthcare Information Systems  
Güney Gürsel, Gülhane Military Medical Academy, Turkey
Chapter 6
Don’t Leave Me Untouched: Considering Emotions in Personal Alarm Use and Development........ 96
Sonja Pedell, Swinburne University of Technology, Australia
Antonio A. Lopez-Lorca, Swinburne University of Technology, Australia
Tim Miller, The University of Melbourne, Australia
Leon Sterling, Swinburne University of Technology, Australia

Chapter 7
User Behavioral Intention toward Using Mobile Healthcare System........................................ 128
Pantea Keikhosrokiani, School of Computer Sciences, Universiti Sains Malaysia, Malaysia
Norlia Mustaffa, School of Computer Sciences, Universiti Sains Malaysia, Malaysia
Nasriah Zakaria, Medical Education Department, College of Medicine, King Saud
University, Saudi Arabia & School of Computer Sciences, Universiti Sains Malaysia
Ahmad Suhaimi Baharudin, School of Computer Sciences, Universiti Sains Malaysia,
Malaysia

Section 3
Emerging Technologies for Healthcare

Chapter 8
Sleep Disorder Diagnosis: An Analytical Approach ................................................................. 145
Jacqueline Blake, University of the Sunshine Coast, Australia
Don Kerr, University of the Sunshine Coast, Australia

Chapter 9
Supporting Physicians in the Detection of the Interactions between Treatments of Co-Morbid
Patients ........................................................................................................................................ 165
Luca Piovesan, Università degli Studi di Torino, Italy
Gianpaolo Molino, Azienda Ospedaliera San Giovanni Battista, Italy
Paolo Terenziani, Università del Piemonte Orientale “Amedeo Avogadro”, Italy

Chapter 10
Radio Frequency Identification Technology as an Analytical Lens and Solution in Hospitals:
A Novel Approach in BPR/BPM ...................................................................................................... 194
Chandana Unnithan, Deakin University, Australia
Bardo Fraunholz, Deakin University, Australia

Chapter 11
Use and Reuse of Electronic Health Records: Building Information Systems for Improvement of
Health Services .............................................................................................................................. 212
Michele Ceruti, University of Turin, Italy
Silvio Genninatti, Catholic University “Sacro Cuore”, Italy & Statistics and Epidemiological
Research, Italy
Roberta Siliquini, University of Turin, Italy
Chapter 12
The E-Learning Experience in Medical School of Casablanca

Ihssane Lembachar, Hassan II University, Morocco
Samir Diouny, Chouaib Doukkali University, Morocco
Zineb Serhier, Hassan II University, Morocco
Mohammed Bennani Othmani, Hassan II University, Morocco

Chapter 13
Knowledge Discovery and Data Mining Applications in the Healthcare Industry: A Comprehensive Study

Iman Barazandeh, Iran University of Science and Technology, Iran & Islamic Azad University, Mahshahr Branch, Iran
Mohammad Reza Gholamian, Iran University of Science and Technology, Iran

Section 4
Applications of Informatics for Aged Care and Chronic Diseases

Chapter 14
Using Narrative with Avatars and Robots to Enhance Elder Care

Lundy Lewis, Southern New Hampshire University, USA

Chapter 15
The Role of Knowledge Management (KM) in Aged Care Informatics: Crafting the Knowledge Organization

Margee Hume, University of Southern Queensland, Australia
Craig Hume, Griffith University, Australia
Paul Johnston, Care Systems Pty Ltd, Australia
Jeffrey Soar, University of Southern Queensland, Australia
Jon Whitty, University of Southern Queensland, Australia

Chapter 16
Ontology for Data Quality and Chronic Disease Management: A Literature Review

Alireza Rahimi, University of New South Wales, Australia & Isfahan University of Medical Sciences, Iran
Siaw-Teng Liaw, University of New South Wales, Australia
Pradeep Kumar Ray, University of New South Wales, Australia
Jane Taggart, University of New South Wales, Australia
Hairong Yu, University of New South Wales, Australia
Chapter 17
A Reconfigurable Supporting Connected Health Environment for People with Chronic Diseases ... 332

Abbes Amira, University of the West of Scotland, UK & Qatar University, Qatar
Naeem Ramzan, University of the West of Scotland, UK
Christos Grecos, University of the West of Scotland, UK
Qi Wang, University of the West of Scotland, UK
Pablo Casaseca-de-la-Higuera, University of the West of Scotland, UK
Zeeshan Pervez, University of the West of Scotland, UK
Xinheng Wang, University of the West of Scotland, UK
Chunbo Luo, University of the West of Scotland, UK

Compilation of References ................................................................................................................................................353

About the Contributors ....................................................................................................................................................399

Index........................................................................................................................................................................412