Preface

Improvements in healthcare delivery in recent years are rooted in the continued industry-wide investment in information technology and the expanding role of medical informatics. Endeavors to combine medical science and technology have resulted in a growing knowledge base of techniques and applications for healthcare delivery and information management in support of patient care, research and education. Emerging mobile and ubiquitous computing technologies in concert with recent developments in medicine, physiotherapy and psychology have the potential to provide people, especially the elderly and those suffering from chronic diseases, with great opportunities to improve their quality of life and increase independence in daily living. In effect, more and more healthcare will be provided outside of traditional clinical settings in the patient’s home and in a proactive, rather than reactive, manner. The main goal of this new publication is to provide innovative and creative ideas for improving communication environments in health and to explore all new technologies in medical informatics and health care delivery systems.

The *Handbook of Research on Distributed Medical Informatics and E-Health* provides a compendium of terms, definitions and explanations of concepts, processes and acronyms. Additionally, this volume features short papers authored by leading experts offering an in-depth description of key terms and concepts related to different areas, issues and trends in various areas of distributed medical informatics, e-health and m-health.

The topics of this handbook cover useful areas of general knowledge including information and communication technologies related to health, new developments in distributed applications and interoperable systems, applications and services, wireless telemedicine and communications technologies in healthcare, mobile health applications and new home care telecare systems, wireless lans and data communications for health care networks, virtual learning environments in health (for patient education, medical students or healthcare professionals), hospital information systems & e-health cards, standardization aspects in e-health related communications, socio/ethical & economic advantages of the new m-health applications, ethical issues in e-health and m-health, evaluation of e-health communication systems, security issues of telemedicine, distributed health telematics applications, space telemedicine and satellite applications and other distributed medical applications.

This handbook is an excellent source of comprehensive knowledge and literature on the topic of distributed health and biomedical informatics.

All of us who worked on the book hope that readers will find it useful.

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