

## EDITORIAL PREFACE

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There is a substantial body of research, describing shortfalls in the current provision of healthcare. Key issues emerging from this literature are significant variations in the quality of healthcare and risk of iatrogenic harm. On the other hand, there has been considerable progress in information technology effectuating a high capacity to exploit technological developments in relation to aspects of healthcare provision. Moreover, glimpses of future healthcare establish a wider use of nanotechnology, individualized drugs, cell-based computing and microchip-enhanced brains.

Notwithstanding the previously mentioned prospects, there has not been a systematic research and evaluation of the empirical literature on e-health applications and their impact on the quality and safety of healthcare delivery. Relevant theoretical, technical, developmental and policy literature has not been synthesized with a view to producing a definitive overview of the interaction.

The *International Journal of Reliable and Quality E-Healthcare* (IJRQEH) exploits a novel framework for revealing, understanding, modeling and implementing appropriate reliability and quality interventions leading to quality assurance and improvement. It addresses a variety of issues which relate to the quality and reliability assurance of e-healthcare, patient

safety, patient empowerment, education on quality, e-medicine, and e-healthcare evaluation. It aims to international leading edge research and best practice with a view to provide an interdisciplinary forum for the international debate on theoretical and practical aspects of quality, patient safety, and e-health interaction.

As a result, it supports students understand the effect of new technologies on health systems, helps healthcare professionals better understand their patients, acts as an assistant for patients to derive more benefits from their healthcare, and encourages e-health systems designers and managers to ground everyday practice on quality principles. Its target audience includes students, healthcare professionals, academics, researchers, managers, policy makers, and non-profit organizations.

The seventh issue of the journal provides an overview of the topics of interest. Specifically, the first article refers to the use of Radio Frequency Identification technology (RFID) in the medical context, which enables drug identification but also a rapid and, of course, precise identification of patients, physicians, nurses or any other health caregiver. Combining RFID tag identification with structured and secure Internet of Things (IoT) solutions, one can establish a ubiquitous and quick access to any type of medical related records, as long

as one can control and adequately secure all the Internet mediated interactions. The second article deals with preventive actions management, which plays a crucial role in clinical applications, not only for those who depend on data to make decisions, but also for those who monitor the operational and financial impact of the systems. This paper presents an open-source platform, named ScheduleIT, capable of managing preventive routines. The third article presents the development of an augmentative system for people with movement disabilities (mostly cerebral palsy people) to communicate with the people who surround them, through a human-computer interaction mechanism. The fourth article argues there is not a biomarker able to detect Alzheimer's Disease (AD) without invasive tests and proposes a new approach to detect EEG temporal events in order to improve the AD diagnosis. Finally, the fifth article compares the pause duration in the disfluent speech and normal speech through an algorithm.

In conclusion, the seventh issue confirms the journal's impact, which could be summarized as follows:

- Probing into the interaction of quality and e-health;
- Providing essential information to assess e-health systems and services;
- Offering information about reliability modeling in e-health networks;
- Inquiring state of the art methods in quality, patient safety, patient empowerment and education in e-health;
- Describing reliable e-healthcare processes and policies.

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