EDITORIAL PREFACE

Anastasius Moumzoglou, P.A. Kyriakou Children's Hospital, Athens, Greece

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 that 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 providing 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 health care, 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 thirteenth issue of the journal provides an overview of the topics of interest. Specifically, the first article presents EXEMED v2, a system that allows the evaluation of clinical practice guideline indicators. EXEMED v2 includes a knowledge base that supports the definition of executable rules applied over Electronic Health Records (EHR) in order to measure its compliance with a specific clinical guideline. Taking into account that an EHR may include structured attributes and narrative text attributes, EXEMED v2 analyzes both types. The functionality of EXEMED v2 was validated applying it in a case study of Acute Myocardial Infarction. The second article presents an algorithm for reading common numbers,

until one million, in Portuguese language. The system has the ability of simulating the human speech sound production in the task of reading numbers. It is based in the concatenation of carefully recorded, edited and selected speech segments corresponding to digits. The third article argues that although the healthcare industry has widely adopted Electronic Medical Record (EMR) systems, consents are still obtained and stored primarily on paper or scanned electronic documents. Integrating a consent management system into an EMR system involves various implementation challenges. Accordingly, it shows how consents can be electronically obtained and enforced using a system that combines medical workflows and ontologically motivated rule enforcement. The fourth article is a follow up to the article 'Semi-Automatic Systems for Exchanging Health Information: Looking for a New Information System at Fixed E-Healthcare Points for Citizens in Greece' presented in Volume 3, Issue 4 of the journal.

In conclusion, the thirteenth 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

Anastasius Moumzoglou
Editor-in-Chief
IJRQEH