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 sixth issue of the journal provides an overview of the topics of interest. Specifically, the first article refers to medical translation systems, which present an intriguing research area as language barriers can become life-threatening when health issues come into place. The second article deals with the undoubted growing percentage of senior population (age 65+), which has been obvious in the modern society during the last few decades. Ambient Assisted Living
(AAL) technologies arise as a promising means of elderly care, thereby reducing both carers’ workload and public health services costs. The third article examines quality control, a term which is used to describe the set of procedures used to check that the results of laboratory tests are reliable for the intended clinical use. A laboratory might produce results that are considered unsatisfactory. While the cause for this might be immediately apparent, the identification of the underlying problem is neither always straightforward, nor easy because many factors can affect result quality. Internal quality control (IQC) and external quality assessment (EQA) are two distinct but complementary components of a laboratory quality improvement program.

The fourth article examines the feasibility of developing an external quality control program for cytopathology labs wishing to be accredited according to ISO 15189:2007, by using low cost telemedical applications and solutions. Finally, the fifth article summarizes evidence about the effectiveness of patient–physician electronic communication. The emphasis was on the importance of understanding the potential impact of e-communication on patient satisfaction, and on the quality of health care. A review of literature was performed in the area of patient–physician electronic communication, and references were appraised, and synthesized for an overview of benefits and challenges of this model of communication.

In conclusion, the sixth 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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