With increasing ubiquity of high-speed connections and richness of Web applications and streaming media, the Internet is no longer a place where visitors look at pages that contain static content. Emerging Web 2.0 and Web 3.0 technologies and their propagation through up-to-the-minute information sources like blogs, Wikis, RSS feeds and social-network sites have enormous potential for collaboration and sharing of information. These on-going transformations have been influenced and complicated by the functional convergence of social media in e-health.

The ease of using the Internet meant that people are spending more time on the Internet and using it to search for a variety of health-related topics such as wellness information, and remedy recommendations. The revolutionary nature and global character of digital technology has generated a new lifestyle, new standards of human behaviour, and new values, which are giving rise to a new culture/civilization of interactive systems. However, heightened interest in internationalisation and localisation has not yet been translated into increased usability for interfaces of interactive systems, especially in emergent issues relating to ethics, trust and privacy.

Given the plethora of health information easily available on the Internet, and more people managing their own health by accessing websites that provide health information, it is not surprising that there are growing concerns over the validity and reliability of online health information using social media.

It is, therefore, pertinent that designers/developers and health providers of health sites should ensure quality of information, as failure to do so can lead to dire consequences. With appropriate use of these services and systems, quality of patient care can be improved as well as clinical risk can be reduced.

E-health may mean different things to different people. Generally, E-health includes a range of services or systems on the use of information and communication technologies to meet the needs of consumers (such as patients, physicians, caregivers, health professionals, health providers and policymakers, etc.).
In this special issue, we publish four excellent research papers addressing emergent issues in ethics, trust and privacy in handling social media in E-Health.

Natalie Pang in her paper titled “The Paradox of the Health Commons: The Benefits and Trouble about Participation and Co-Creation” argues that advances in participatory technologies and co-created health information have created both benefits and risks for the everyday consumer of public health information. As people use health information at a greater frequency and depth, more work is required to understand challenges and reduce risks that result from health commons.

In the paper titled “An SOA-based Architecture to Share Medical Data with Privacy Preservation,” Mahmoud Barhamgi, Djamal Benslimane, Chirine Ghedira, and Brahim Medjahed show how data privacy can be preserved when composing and executing Web services. As patient data privacy preservation is an important aspect that must be considered when composing medical Web services, they define query rewriting algorithms to process those queries while preserving users’ privacy. The authors, in proposing a privacy-preserving data integration approach based on Web service composition, aim to take into account users’ privacy preferences regarding the disclosure of their data to avoid privacy issues relating to data use.

Lorraine Goeuriot, Jin-Cheon Na, Wai Yan Min Kyaing, Christopher Khoo, Yin-Leng Theng, Yun-Ke Chang, and Schubert Foo in their paper titled “Textual and Informational Characteristics of Drug-Related Content on Three Kinds of Websites: Drug Review Website, Discussion Board and Hospital Information Portal” report work on textual analysis of user-generated content on drug-related online sites. User postings were harvested from two websites carrying different kinds of user-generated content in the form of drug reviews, discussion board postings and information portal, and compared to information on the same drugs from a hospital information portal. The paper provides a foundation for analyzing the quality of information and criteria to use in the evaluation of health information.

In the paper titled “Adoption and Usage of Healthcare Portals: Examining the Factors Influencing Consumers’ Decisions,” Pallavi Rao, Shalini Chandra, and Yin-Leng Theng examine the factors influencing consumers’ decisions to adopt and continue using healthcare portals. A research model is developed using constructs from past Information Systems (IS) literature. Research hypotheses, derived from a research model developed from past Information Systems (IS) literature, were empirically validated using a field survey. The authors conclude with theoretical and practical implications in the design of healthcare portals.

Finally, I want to thank the authors for their excellent contributions to this special issue. Special thanks go to Dr. Christopher Yang, Dr. Joanna Sin and Dr. Jose Rojas for reviewing and giving valuable feedback on the manuscripts.

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Guest Editor
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