Chapter 8
Persistent Clinical Encounters in User Driven E-Health Care

Rakesh Biswas
Manipal University, Malaysia

Joachim Sturmberg
Monash University, Australia

Carmel M. Martin
Northern Ontario School of Medicine, Canada

A. U. Jai Ganesh
Sri Sathya Sai Information Technology Center, India

Shashikiran Umakanth
Manipal University, Malaysia

Edwin Wen Huo Lee
Kuala Lumpur, Malaysia

Kevin Smith
National Digital Research Centre, Ireland

ABSTRACT
This chapter discusses the role of e-health in creating persistent clinical encounters to extend the scope of health care beyond its conventional boundaries utilizing social networking technology to create what the authors term ‘user driven health care’. It points out the necessity to direct the development of health information systems such that they serve as important vehicles between patient and health professional users in communicating and sharing information other than their role in automated alerts and responses. A project is described that plans to create a system of online sharing of health information in a user driven manner that necessarily becomes persistent due to being stored in electronic health records.

DOI: 10.4018/978-1-60566-266-4.ch008
INTRODUCTION

In the pre-globalization motorization era when physical distances mattered, the practice of medicine was confined to individual health care experts who seemed to know all about their individual patients. In the absence of specialists (if at all the only competition was the barber-surgeon) the wise community physician’s knowledge was not just confined to pills and potions (which came in various colors), but s/he also knew all about how her/his patients led their lives. With time all that changed, and now the present day expert dispenses advice to a global consumer and uses findings that may be generalized to all humans (on the basis of quantitative research which is considered to be evidence-objective, absolute and rational).

The resulting fragmentation – resulting from specialization and sub-specialization – characterizing ‘modern medicine’ has reduced each health professional’s knowledge about individual patients to only those fragments he needs to know and that match his area of expertise. In many instances the life of present day health care giver is often far removed from the lives of his patients unlike his know all, do all predecessor who used to share the lives of his patients in more ways than one. It is unlikely that the present day expert can shed a tear for his patient when he dies because he doesn’t know his patient to merit as much but it is still possible with the practitioner who values her knowledge of individual patients derived from her local settings. The wise physicians’ anecdotal wisdom although negligible in a global society was of immense value in their local communities where they were seeped in information about the details of their patient’s lives that gave them a non mathematical but perhaps a grounded narrative and equally fair impression of what suited their individual patient needs (Biswas et al, 2007).

The traditional patient and health professional clinical encounter has evolved into a series of fragmented exchanges of information, often between several professionals. The information exchange between professionals often excludes the patient and is usually limited to a synthesized ‘factual’ written account. The synthesized ‘factual’ written account however fails to convey much of the subtleties gained through the information exchanges in the encounter, and which ultimately build a most valuable tacit knowledge base about a patient. (Sturmberg, 2007) Yet the encounter could actually evolve into an informational collaborative process, persistent in virtual space and time. A persistent clinical encounter has immense potential advantages for the patient as well as health professional.

Medicine is in fact a collaborative effort in problem solving between individual patients and their health professionals. This collaboration also involves others who are directly or indirectly related to the patient and health professional (for example, the patient’s relatives, the practice staff and the physicians’ institutions etc) who provide the necessary support to the two primary collaborators. In this Chapter we suggest viewing such an integrated approach to health care as ‘User driven health care’ that may be defined as:

‘Improved health care achieved with concerted collaborative learning between multiple users and stakeholders, primarily patients, health professionals and other actors in the care giving collaborative network across a web interface’ (Biswas, 2007).

And needs to be differentiated from the presently more ubiquitous ‘consumer driven health care’, which is essentially a strategy for users/consumers to decide how they may pay for their own health care through multiple stakeholders like employers who provide the money and insurance companies who receive the premiums.
Related Content

**Bioinformatics-Inspired Algorithms for 2D-Image Analysis-Application to Synthetic and Medical Images Part I: Images in Rectangular Format**
[www.igi-global.com/article/bioinformatics-inspired-algorithms-image-analysis/73691?camid=4v1a](www.igi-global.com/article/bioinformatics-inspired-algorithms-image-analysis/73691?camid=4v1a)

**Calcifications Attenuation in Left Coronary Artery CT Images Using FDA Domain**

**Computational Fluid Dynamics and Neural Network for Modeling and Simulations of Medical Devices**
[www.igi-global.com/chapter/computational-fluid-dynamics-neural-network/26362?camid=4v1a](www.igi-global.com/chapter/computational-fluid-dynamics-neural-network/26362?camid=4v1a)

**Ubiquitous Healthcare: Radio Frequency Identification (RFID) in Hospitals**
[www.igi-global.com/chapter/ubiquitous-healthcare-radio-frequency-identification/19940?camid=4v1a](www.igi-global.com/chapter/ubiquitous-healthcare-radio-frequency-identification/19940?camid=4v1a)