# Chapter XVIII Improving the Quality of Healthcare Services through Information and Quality Interrelation

P.A. Kostagiolas
Ionian University, Greece

**D. Kaitelidou**University of Athens, Greece

### **ABSTRACT**

The ongoing information revolution calls for the exploitation of new information services that may set to support the traditional quality management approaches in healthcare. The developments in information and communication technologies offer new opportunities, with the need for effective information management growing within it. This chapter addresses the following issues: What might be an approach for quality management considering the rapid advances of information technology and the growth of the "new economy"? What might be the contribution of library and information services in the improvement of the healthcare services quality? In order to study the aforementioned questions, initially the information requirements of well known quality management approaches such as ISO 9001:2000 and EFQM are investigated and thereafter, the role of library and information services is discussed. The design of library and information services for the support of quality is an interesting and innovative area of research within healthcare services.

# QUALITY, INFORMATION, AND HEALTHCARE SERVICES

Quality, communication and information were always in the focus of economies and societies. In healthcare, the human activities and needs are the driving forces for both quality and information services' design and provision. Nowadays, the quality issues are no less important than they were in the 20th century, when quality theories developed (Martínez-Lorente et al., 1998). In that respect, one may assume that a quality management theory has been developed over the years for investigating a "certainty", not for its discovery. A rational prediction requires theory and builds knowledge through systematic revision of prediction with observation, while without a theory one would have nothing to revise, nothing to learn (Deming, 1982). Therefore, the quality management approaches have been adjusted diachronically to the "certainties" or the "needs" of economies and societies, from Quality Control to Quality Assurance, to the unifying Total Quality Management. The ongoing renaissance of information services, together with the burgeoning of novel healthcare services based on information and communication technologies put forward the need for "new" approaches to quality management in a healthcare setting.

This work addresses the following two issues:

- What might be an approach for quality management considering the rapid advances of information technology and the growth of the "new economy"?
- What might be the contribution of library and information services in the improvement of the healthcare services quality?

Novel information resources, new library and information services and new types of information providers are constantly introduced, mainly due to the advent of information and communi-

cation technologies (Dumay & Freriks, 2004). In an "ideal" socio-economic environment, the information services should be managed in such a way as to constantly satisfy the real (expressed and implied) information needs (Wilson, 2006) and fulfil the expectations of the users (individuals and/or legal entities). Nowadays, the management approaches start to comprehend the meanings of data, information and knowledge (PD 7504:2005). In that framework, investments on information technologies are rapidly growing, novel services are added and/or the production practices of "old" services are reevaluated. In healthcare services, in particular, the use of internet as well as information and communication technologies, and advances in biotechnology and genetics, broaden the very content of healthcare. Therefore, developments in information and communication technologies offer hospitals new opportunities (Takeda et al. 2003), with the need for effective information management growing within it. To meet the needs of individuals and to empower healthcare users, an "open" system information services approach needs to be developed. This system should make relevant information easily accessible to all interested parties and at the same time should sustain transparent decision-making procedures and be responsive to changes based on user-originated information (ISO 10012:2003).

Information services management offer a new but essential challenge for quality in healthcare. The following paragraphs provide a study of data and information requirements of ISO 9001:2000 and EFQM quality management approaches and, thereafter, the contributions of library and information services in supporting healthcare quality are discussed through an innovative taxonomy. It is further proposed that library and information services may set to support the traditional quality management approaches. The design of library and information services for the support of quality is an interesting and innovative area of research within healthcare services.

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