Chapter 9
Quality and Reliability Aspects in Evidence Based E–Medicine

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ABSTRACT

This chapter is a brief survey on some e-medicine resources and international definitions focused on the three main subjects of the healthcare quality – the patient, the costs and the evidence for quality. The patients can find in e-medicine everything that they need, but often without data on the supporting evidence. The medical professionals can learn where to find e-information on cost, quality and patient safety, and, more importantly, how to distinguish claims from evidence by applying the principles of evidence based medicine. The goal is to spread and popularize the knowledge in this field with an emphasis on how one can find, assess and utilize the best present evidence for more effective healthcare. The sites discussed below could assist in the retrieval of information about methods for obtaining evidence along with the ways of measuring evidence strength and limitations. These sites also provide information on implementing the ultimate evidence-based product – clinical guidelines for better medical practice and health service.

INTRODUCTION

The international consensus document (CLSI, HS1-A2, 2004) emphasized that the top in the hierarchy of healthcare quality is the undivided of complete customer satisfaction at minimal cost and highest quality. The customer, who might be unsatisfied by healthcare quality or other reasons, may prefer to search the Internet for some alternative sources of health information. Looking for a solution to her/his own problem amongst hundreds of thousands of Web sites, she/he might find exactly what is needed in "minimal cost" but sometimes with unknown quality. The health professionals can also find scientific basis for continuous education along with answers of almost all practical problems of their patients.

However, information about the evidence strength and quality is not always available.

This chapter shortly considers the three main subjects of total quality in healthcare - customer, cost, and evidence for quality, in the context of e-medicine. The goal is more people to obtain knowledge in this field and use properly the best present evidence. The patient can find in e-medicine everything that she/he needs, but often without data on the supporting evidence. The medical professionals can be assisted to decide what kind of e-resources they are interested in and how they can learn more about evidence in medicine. The information concerning the achievement of basic medical science, specific regulations, laws, accreditation and healthcare audits remains beyond the scope of the chapter.

BACKGROUND

A lot of e-medical information can be easily obtained through Internet and Wikipedia. Its usefulness, however, depends on the users' willingness, behavior, knowledge and skills to distinguish a claim from actual evidence, and to users' ability to use properly e-medical information. Although for some regions the access to e-resources might be a problem, Bratislava Declaration clearly outlined as a priority the validity and quality of electronic health information, education and training (UEMS, 2007).

THE CUSTOMER

Most of us have been, are, or will be patients. The patient, a suffering human being, becomes "customer", one of the numerous external and internal customers of the healthcare system (other patients, suppliers, institutions, factories, agencies, hospitals, doctors, nurses, pharmacists, technicians, and all other staff engaged in healthcare). As a customer, the patient is told that his/her welfare

is paramount for the healthcare system. Thus, the patient-customer expects the best quality of help or, in other words, service. Being a customer and receiving service, the patient obtains the opportunity to actively assist the medical staff regarding his/her personal health. The result, however, is that the customer evaluates the health service rather than his/her health behavior.

However, customer's "satisfaction" with the quality of health service might be far away from the "evidence for quality". Satisfaction is very subjective and cannot be objectively measured hence it is not the best end point for healthcare evaluation. Most patients today are well informed, but some prefer illusions in place of reality. People are not always able to make a clear distinction between personal satisfaction and healthy life style.

The best health strategy for the society is not be the best approach for a single person. Any healthcare system needs money and can be easily destroyed by growing expectations of uncertain nature in an environment of limited and often badly managed resources. An organized group of active, even aggressive, patients might politically impose disproportional distribution of funds that otherwise might be spent more effectively for the advantage of more patients. Attractive new technologies, diagnostic instruments, tools and devices, new curative approaches and therapeutic drugs are often subject of commercial rather than medical interest.

In such a complicated situation, the healthcare customers are looking at the Internet for health information because they want to obtain dependable service, communicate online with their physicians, talk for their health problems, receive interpretation for their laboratory or instrumental records and medications, or arrange an appointment. They are ready to browse pay-for-performance programs in which recognized physicians are committed to providing quality care and service. Such e-Medicine and e-Prescribing sources need support for delivering high quality and efficient healthcare focused on the physician as the core

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The Concept of Knowledge Media: The Past and Future

Katarina Stanoevska-Slabeva (2002). *Knowledge Media in Healthcare: Opportunities and Challenges (pp. 1-16).*

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