

# Chapter 15

## Role of Information Technology in Healthcare Quality Assessment

**Stamatia Ilioudi**

*University of Peloponnese, Greece*

**Athina Lazakidou**

*University of Peloponnese, Greece*

**Maria Tsironi**

*University of Peloponnese, Greece*

### ABSTRACT

*Quantifying and improving the quality of health care is an increasingly important goal in medicine. Because quality of life is difficult to define and even more difficult to measure - particularly with physically and mentally vulnerable people - outcomes from nursing in continuing care are not easily articulated. The focus of the nursing assessment tool is therefore on increasing quality of life, rather than perceiving health gain simply as increased longevity. Assessment is considered to be the first step in the process of individualized nursing care. It provides information that is critical to the development of a plan of action that enhances personal health status. It also decreases the potential for, or the severity of, chronic conditions and helps the individual to gain control over their health through self-care. In this chapter the authors try to describe how important is the role of information and especially of the Information Technology in healthcare quality assessment.*

### INTRODUCTION

Everyone needs to be well informed and concerned about the quality of care. Everyone means patients and their families, consumer agents and advocates, health professionals, administrators of health plans

and facilities, purchasers of health care services, and policymakers at all levels.

Computer-based patient record (CPR) technology is essential for health care. This role begins in the care process as the CPR provides patient information when needed to support clinical decisions and continues as a key information source for

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quality review and improvement. It can be linked to clinical-practice guidelines, clinical alerts, and up-to-date research findings to help patients and clinicians in making choices. The desire to improve the quality and usefulness of health care data is shared by patients, practitioners, administrators, researchers, and policymakers.

Quality assessment and improvement are knowledge-driven enterprises. We know far more today than in the past. Yet we still do not know enough about what works in medicine and health care, for what conditions, under what circumstances, and at what cost to improve the quality of health care to the greatest extent possible. Effectively functioning markets require that patients, employers, and other consumers have good information for decision making, including knowledge about the performance of health plans and the efficacy, effectiveness, and cost-effectiveness of health services, both new and established.

Health-services researchers, government agencies, health plans, purchaser coalitions, and

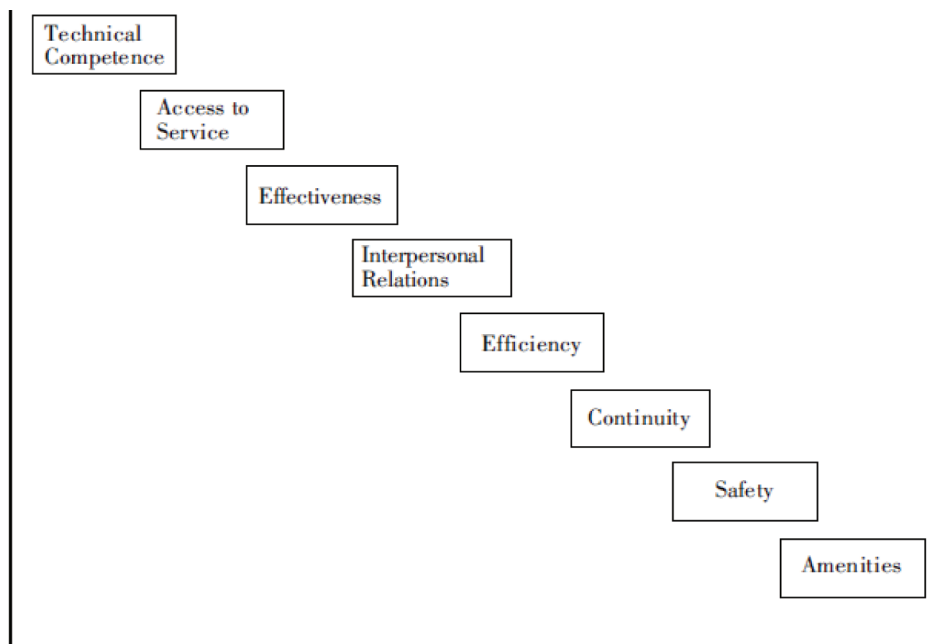
others have done much to improve ways of measuring health outcomes, comparing the outcomes of different health care practices, evaluating the performance of health care providers and practitioners, and developing credible and useful guidance for patients and clinicians in making medical decisions.

### **Dimensions of Quality**

Quality is a comprehensive and multifaceted concept. Experts generally recognize several distinct dimensions of quality that vary in importance depending on the context in which a Quality Assessment effort takes place. Quality Assessment activities may address one or more dimensions, such as technical competence, access to services, effectiveness, interpersonal relations, efficiency, continuity, safety, and amenities (see Figure 1).

These dimensions of quality are a useful framework that helps health teams to define and analyze their problems and to measure the extent to which they are meeting program standards. The

*Figure 1. Dimensions of Quality (Quality Assurance Project, n.d.)*



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