

# Quality measurements in health systems

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**Abstract** – This paper is a summary of the keynote presented at the 22<sup>nd</sup> IMEKO TC4 Symposium and 20<sup>th</sup> International Workshop on ADC Modelling and Testing.

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## I. SUMMARY

In recent decades the term quality has been introduced in to the common language as an essential part of health management. As matter of fact it is difficult to give a concise, meaningful, and generally applicable definition of quality in this field.

As in all sectors the use of suitable quality metrics is crucial. Thus the estimation of useful indicators requires a phase of analysis in which statistical techniques must be deployed.

Quality indicators are usually derived from clinical data sets collected in the hospital information systems (HIS) or in the department databases, often for different scopes with respect to quality evaluation and control.

This key note aims to introduce concepts of quality in health systems and its measure.

## II. CONTENT

Nowadays it is not an unique and, and generally applicable rationale for quality in health care. Since 1988 Donabedian states several formulations are possible, depending on the characters of system and/or area of care to be qualified.

There is also a tendency in health care to replace the word “quality” must with “identification and measurement of the component of quality”. This is more properly using a measurement approach.

However the most popular conceptual model is derived from the framework proposed by Donabedian itself, which combines several issues, related to the organizational structure, processes, and outcomes, in a comprehensive clinical model for quality assessment and health system monitoring.

To this in the health services are located four conceptual components—mission, structural capacity, processes, and outcomes.

Taking apart concepts related to general government and social value (macrocontext and mission), quality

control studies can be focused on the elements of the health service delivering the care. Thus the model adopted in our studies is designed upon the structure, processes, and outcomes deriving the process approach and performance improvement of ISO 9000 (fig.1). During the key note some applicative examples of quality measurement will be reported.

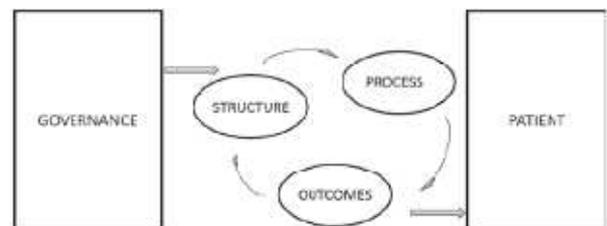


Fig. 1. Model for the elements delivering the care.

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