

ULRICH BOTHNER

University of Ulm
Ulm, Germany

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QUALITY INITIATIVES

Delivery of high quality, continuously improving healthcare requires a meticulous systematic management approach. It does not happen without conscious effort. Unfortunately, current quality concepts and terminology can appear bewilderingly vague, mysterious and strange to the practicing clinician.

Quality initiatives can be comparative among different providers (external) or focused at an institutional level (internal). The benchmarking system (which ranks one provider's performance among other comparable providers in a local, regional or national setting) is an example of an external assessment. External quality evaluations are often based on statistical comparisons of outcome indicators such as incidents, events, complications or patient satisfaction. It is difficult to find agreement on quality indicators and a common dataset or database.

Another problem is establishing valid, reliable and comprehensive risk adjustments for differences in organisational structure and the patient population. This can be done using complex statistical models, but these may not always be easily understood by clinicians. There is no common plan for benchmarking systems as they depend on the peculiarities of the individual health care environment and its goals.

The final problem for the individual provider is delivery; turning confirmed quality (or lack of it) into institutional efforts to maintain or improve quality. This is where internal quality management comes into play.

The general principles of an internal quality management system should be applicable for any provider. Comprehensive internal quality management starts with self assessment. The system proposed by the European Foundation for Quality Management (EFQM) or the ISO (International Organisation for Standardisation) 9001 standards are excellent examples. This assessment may be verified by an independent agency for certification or accreditation, e.g., by the Joint Commission of Accreditation of Health Care Organizations (JCAHO).

The lecture will give examples of both external and internal quality ideas in anaesthesiology. The focus will be on features of a successful and pragmatic anaesthesiology quality management system and how to implement Standard Operating Procedures (SOPs) as they apply to anaesthesia, intensive care, pain therapy, or rescue medicine.

As a starting point and reference, the following text provides a glossary of terms and definitions as given by the ISO 9001 norms mainly for institutional quality management. ISO 9001 uses a process oriented approach that may be translated into the culture, thinking and behaviour of health care professionals.

DEFINITIONS OF QUALITY CONCEPTS

ISO 8402 defines quality as: "The totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs". Normative guidelines such as the ISO apply to products and services from all industries, so descriptions and definitions in the ISO vocabulary are not particularly user-friendly for health care professionals. An entity, in this regard, could be a product, process, person, activity, machine, service, system, department, company, institution or organization. Nevertheless, normative systems may facilitate transfer of successful experiences to the health care "industry". Provision of health care mainly deals with services. Basically, a service should be courteous, efficient and effective, all of which need to be defined in a measurable way.

Quality is all about meeting requirements. These requirements (such as needs, expectations, or obligations) have to be implied or stated in advance by all interested parties (stakeholders) involved in the process of delivering anaesthesiology services. Customers can be grouped into "internal" (patient, surgery, hospital administration, etc.) or "external" (insurance payers, suppliers, local or regional society bodies). Customer satisfaction is often a perception and not easy to measure. It can vary from high satisfaction to low satisfaction on an ordinal scale.

Continuous quality improvement is a set of activities that a provider routinely carries out in order to enhance its ability to meet agreed requirements. Continuous improvement can be achieved by carrying out internal audits, performing management reviews, analyzing data, and implementing corrective and preventive actions.

QUALITY MANAGEMENT SYSTEM

Quality management includes all activities that a provider and its staff carry out in an effort to implement a quality policy in general. A quality policy statement defines or describes an organization's commitment to quality. A quality plan explains how a provider intends to apply the quality policy, achieve quality objectives, and meet quality system requirements. A quality management system is a network of interconnected processes. Each process uses resources to turn inputs into outputs. All of these processes are interconnected by means of many input-output relationships. Every process generates at least one output, and this output becomes an input for another process.

Quality management follows an iterative or circular process: planning, acting, checking, and controlling. Quality planning is defined as a set of activities whose purpose is to define quality system policies, objectives, and requirements, and to explain how these policies will be applied, how these objectives will be achieved, and how these requirements will be met. It is always future oriented. Monitoring is performed in the management review. The purpose of a management review is to evaluate the overall performance of an organization's quality management system and to identify improvement opportunities. These reviews are carried out by the organization's top managers and are done on a regular basis.

Quality management must not invent or implement a separate administrative structure. Rather it is supposed to support and enhance the existing organizational structure. The structure of an organization is the ordinary pattern of responsibilities, authorities, and relationships that control how people perform their functions and govern how they interact with one another.

One advantage of a quality management system according to the ISO standards is its ability to subdivide, design, describe and measure processes in a modular approach. Processes use resources to transform inputs into outputs. In every case, inputs are turned into outputs because some kind of work, activity or function is carried out. Processes can be productive or administrative. Provision of anaesthesia or intensive care to the patient is the key process for any anaesthesia provider. However, many supporting activities can be thought of as processes as well: purchasing supplies; documentation and record keeping; writing, providing and updating documents; planning, scheduling and staffing; training and education; internal communication; customer communications with patients and relatives and many more. Basic types of processes are defined within an ISO 9001 quality management system.

A standard is a communicated document. It is a set of rules that control how people develop and manage services, products, materials, technologies, processes and systems. Standards are agreements. ISO refers to them as agreements because all people and parties involved must agree on content and give formal approval before they are published.

Standard operating procedures (SOPs) control practical processes or activities. A well defined procedure controls a logically distinct process or activity, including the associated inputs and outputs. Such a procedure defines the work that should be done, and explains how it should be done, who should do it and under what circumstances. In addition, it explains what authority and what responsibility has been allocated, which supplies and materials should be used, and which documents and records must be used to carry out the work. ISO usually expects quality procedures to be documented.

A quality manual documents an organization's entire quality management system. It can be in paper or electronic form. Each employee should receive or have access to a copy of this manual at any time.

The monitoring and controlling of a quality management system is accomplished with internal and external quality audits. Quality audits examine the elements of a quality management system in order to evaluate how well these elements comply with the local quality system requirements. Internal quality audits are carried out by the provider's own personnel. External quality audits are facilitated by a qualified independent third party. External quality audits examine the elements and results of the whole quality management system in order to evaluate how well these comply with general quality system requirements such as the ISO standards. Certification and accreditation is the confirmation that the quality management system as a whole complies with these standards.

The executive part of a quality management system consists primarily of corrective actions and preventive actions. Corrective actions are steps that are taken to remove the causes of an existing nonconformity or to make quality improvements. Corrective actions address actual problems. In general, the corrective action process can be thought of as a problem solving process. Preventive actions are steps that are taken to remove the causes of potential nonconformities or potential problems that have not yet occurred. In general, the preventive action process can be thought of as a risk analysis process.

INFRASTRUCTURE AND RESOURCES

Quality in health care services does not come for free. Serious quality efforts require investment in infrastructure and resources. Infrastructure includes buildings, workspaces, equipment, hardware, software, utilities and support services such as communication. Resources include people, money, information, knowledge, skill, energy, facilities, machines, tools, equipment, technologies and techniques. Quality management should aim to save resources by streamlining processes, ensuring reliable and predictable outcomes, and adding value in the customer relationship. Waiting for the return on investment, however, needs patience, endurance and tolerance of frustration.

TOTAL QUALITY MANAGEMENT

The ultimate goal of a quality management system is Total Quality Management. Total Quality Management is defined as a management approach that tries to achieve and sustain long-term organizational success by encouraging employee feedback and participation, satisfying customer needs and expectations, respecting societal values and beliefs, and obeying governmental statutes and regulations.