

Review

Quality Management – a basic instrument in Healthcare systems

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Summary

In industry and the public sector quality has become the important management challenge of the 21st century. Although quality should be self-understanding in healthcare the reality shows another picture. There are nowadays international standards and models of quality excellence which make the introduction and control of quality management even in healthcare easier and allow a better benchmarking. The Model of Business Excellence of the EFQM with the five enabler criteria and the four result criteria can be used as a basic guideline. Focusing on such main parameters like leadership, people, strategy and policy, resources and processes which are important background criteria for quality it can be easily adapted to the requests of quality in almost all healthcare fields. Definitions of the different quality aspects like quality assurance, quality management, total quality management, quality control show that there are still special quality parameters in healthcare which need to be recognized. Reality in healthcare still shows a lot of deficiencies concerning quality measurements. Quality in healthcare including the mentioned key criteria will only be effective if it is an integrated part of the daily work by all people who are concerned with healthcare.

Key words: Quality management in healthcare, quality control, EFQM, Model of Business Excellence, DIN EN ISO 9001

Introduction

Quality is a management challenge in the 21st century. While in former times quality mostly was a matter of industry and industrial products, in the last years new fields of application and new branches especially in the public sector like administration, finance, healthcare institutions and education make increasing use of the benefits of quality management. Although quality in healthcare seems to be self-evident, there are certain quality criteria which in view of the tremendous development in medical research might have been forgotten or lost. The focusing on quality measures in healthcare therefore seems to be necessary to remind all healthcare workers

to realize that especially in this field quality is a basic requirement. In the meantime, there are many institutions which sell a broad variety of methods which might support the implementation of QM systems. The long lasting experience with the establishment of QM systems has taught, that every institution which wants seriously to go into the matter of QM first has to analyse the own situation, to improve the offered methods and to adapt the chosen ones to the own environment. Quality is based on an ongoing process, it is customer-focused and supportive, and needs a continuous improvement: plan–do–check–act. The establishment of Quality needs time, and one cannot expect fast results [1,2].

Definitions of quality

How can Quality in healthcare with a special concern to the main focus, the patient, be defined? Quality in healthcare is a holistic approach which in its sum includes all parameters which guarantee an optimal requirement for healthcare. Quality Assurance (QA) in healthcare work stands for the continuous commitment of all persons involved in healthcare work to fulfil the expectations of the stakeholders concerned with healthcare and the whole society. Quality Management (QM) stands for the entirety of measures (planning, managing, securing, improving) which are necessary to reach the goals of a healthcare quality policy. QM has to be realized by all leadership levels and have to be concerned with the development of strategies, distribution of money, regulation of quality structures, quality influencing parameters and assessment of quality. Total Quality Management (TQM) is defined as the leadership strategy depending on the cooperation of all members of an institution to put quality in the center of all activities, with the aim to satisfy the customers, for sustained successful results, for the advantage

of the members of the institution and for the whole society. Quality Control (QC) includes the controlling of working methods and measures which have to be installed to fulfil the requirements of a high quality standard in healthcare [1,2,3].

Systems and models for establishing quality

Although the models of establishing quality primarily were focused on industry the main parameters of such models can be adapted to different working fields. This especially counts for the “Model of Business Excellence” of the European Foundation of Quality Management [1].

EFQM Model of Business Excellence

In 1988 the European Foundation for Quality Management (EFQM) was founded by 14 European industrial companies with the aim to support the quality of industrial products in Europe. It has now developed to a not-for-profit membership organization dedicated to increasing the competitiveness and effectiveness of European organizations, whatever their size, sector, function, or structure of incorporation (large international companies to all types of public sector organizations) are [2,3].

Since its founding in 1988, EFQM has developed a comprehensive TQM programme which encompasses the following key features:

- The EFQM Model for Business Excellence
- Self-assessment by EFQM members to identify and facilitate ongoing improvements within their organization in accordance with best practice procedures
- The European Quality Award and Prizes
- Training and educational support [1,2,3]

EFQM Excellence Model

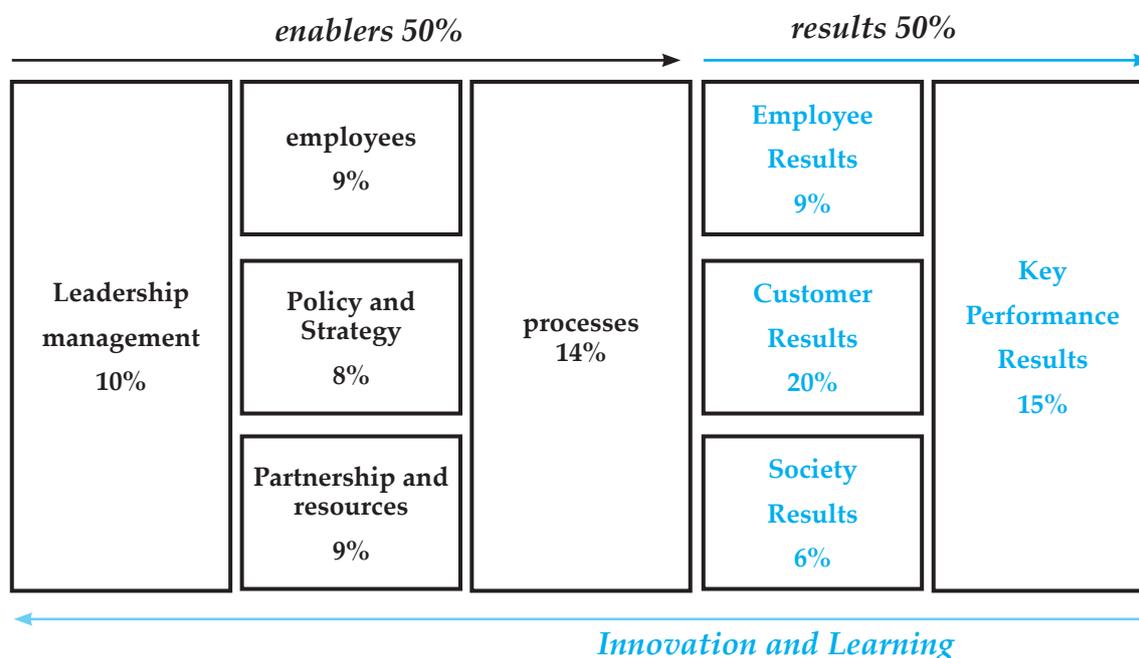


Figure 1. EFQM Model of Business Excellence

The EFQM model is widely recognized as one of the most cost-effective ways of improving performance: as the model is applied and monitored through self-assessment and can be administered by internal quality or change managers (EFQM-Assessors) [1,3].

The basic principle of the EFQM model is that customer and staff satisfaction and integration into society are achieved via the role of the organizational leadership in setting the policy and strategy and the management of staff, resources, and processes, culminating in excellence in business or organizational results [1,3].

The five criteria of the “Enablers” are concerned with how the organization performs various activities. The four criteria of “Results” are concerned with the results the organization is achieving with respect to different stakeholders [1].

The EFQM model is designed to be flexible enough to accommodate the requirements of the organizations at various stages of im-

plementation. It provides controlled self-assessment with organizations having to carry out their own detailed self-evaluation which points out strengths and weaknesses and provides input for improvement. It also allows accreditation and certification processes. The fundamental concepts which underpin the EFQM model can be used to illustrate how the model is applied in the public sector and in healthcare [1,3].

DIN EN ISO 9000

The International Organization for Standardisation (ISO) is an international association of national Institutes for Standardisation. The standards are worked out by a technical committee and should be revised every 5 years. The latest fundamental revision was done in 2015 (ISO 9001:2015) and was based on a customer inquiry/survey [1,3,4].

The ISO 9001:2015 is based on the PDCA (Plan-Do-Check-Act) and is concerned with the model of processing and covers 10 parts [1,2,4]:

Use, notions, references

- Surrounding of organization, responsibility of the leadership, planning
- Management of the Finances, process management
- Evaluation, analysis and improvement

There are certain requirements, which have to be fulfilled by the organization which will be certified according to ISO 9001:2015. The organization has to lay down and to perform those processes which are necessary to satisfy the requirements of the customer. To guarantee this the organization has to establish a QM system which fulfils the requirements of the international standard. This QM system has to be evaluated and improved by the organization [1,4].

The guidelines of the ISO 9004:2000 are based on the following principles [1,4]:

Customer Orientation
Leadership
People Management
Process Oriented Performance
System Oriented Management
Continuous Improvement
Technical Statements for Decision Making
Relationship to Supplier for a common profit

The DIN EN ISO 9000 Family is more or less a catalogue of measures which have to be fulfilled to get a certification of the actual QM situation of the organization which can be used as a comparison with other organization (benchmarking) and with this as a matter of competition for the own products. QA can be reached by the accreditation according to those standards [1,4,5].

Other systems and models concerned with QM

Most of the numerous institutions worldwide which are concerned with the professional business of offering quality management systems are based on the EFQM Model of Business Excellence since this model really covers all the basic parameters which are necessary for the establishment of quality wherever it is needed [1,2].

General Criteria of Quality (mainly based on the EFQM Model of Excellence)

Leadership

Leadership is one of the most important parts on the way to establish quality and is more or less the figurehead in an organization or institution. The behaviour and the actions of the executive team and all other leaders of an institution are the background to inspire, support and promote a culture of TQM. Parameters of a convincing leadership are:

- visible commitment and consistent culture including the development of values and expectations for the organization, the ability to lead by example, making themselves accessible by listening and responding to the people from the organization, and reviewing and improving the effectiveness of their own leadership,
- support concerning definition of priorities, fund learning, facilitation and improvement activities, enabling people to participate in improvement activities and use of appraisal and promotion systems to support improvement and involvement,
- involvement with customers and suppliers with the areas of responding to needs, establishing and participating in partnership, participation in professional bodies,

addressing potential conflicts arising from customer-supplier relationship such as the balance between the priorities of different customer groups, recognition and appreciation of people's efforts and achievements, especially of individuals and teams at all levels within and outside of the organization [1, 2, 6].

People Management

Quality management in this field covers all measures which are concerned with the release and the support of the full potential of the employees of an organization. In this context main parameters are:

- improvement of the resources especially using innovative strategies and methods,
- development and sustaining of people's capabilities including the identification, classification and matching of people's competencies with their needs, the establishing and implementation of training plans, the evaluation of the effectiveness of training, the development of team skills and the promotion of continuous learning,
- involvement and recognition of people especially through encouragement and support of individuals and teams participating in improvement,
- communication through an effective dialogue through the identification of communication needs, sharing information, evaluation and improving communication effectiveness, structuring top-down and bottom-up as well as lateral communication,
- caring for people like promoting awareness and involvement in health, safety and environmental issues as well as social and cultural activities, providing facilities and services [5,6].

Policy and Strategy

Quality management in the field of policy and strategy includes a variety of activities mostly concerned with:

- relevant and comprehensive information related to customers and suppliers, community, shareholders, internal performance indicators, benchmarking activities, performance of competitors and best in class organizations, social environment and legal issues, economic indicators, new methods,
- the development of policy and strategy concerning its values, mission and vision, balancing short and long term pressures and requirements, needs and expectations of its stakeholder, identification of present and future competitive advantages and reflecting the principals of TQM,
- the communication and implementation of policy and strategy especially to all levels of the organization using policy and strategy as a basis for planning of activities and setting off objectives throughout the organization and testing, evaluating, improving and prioritizing plans,
- the regularly updating and improving policy and strategy through evaluating the relevance and effectiveness as well as reviewing, updating and improving policy and exploitation strategy [4,5,6].

Resources

To reach QM in the field of resources evidence is needed for the following parameters:

- management of the financial resources by reviewing and improving financial strategies and practices, evaluating investments, managing risks, managing external controls on financial flexibility to allow a maximum of freedom within the organization,

- management of information resources through giving access to relevant information to appropriate users, structuring and managing information to support policy and strategy and assuring and improving information validity, integrity and security,
- management of supplier's relationship and material by maximising the added value of suppliers, optimising material inventories, reducing consumption of utilities, reducing waste,
- managing buildings, equipment and other assets through optimising of exploitation, managing the maintenance and utilisation,
- managing new technologies, teaching methods, intellectual property by identifying and evaluation of alternative and emerging technologies, training modules, information systems, exploitation of intellectual property [5].
- the improvement of processes using innovation and creativity by bringing to bear the creative talents of students and post-graduates in incremental and breakthrough improvements, discovering and use of new designs, technology and operating philosophies, changing organizational structures to encourage innovation and creativity and using feedback from customers and stakeholders to stimulate innovation and creativity in process management,
- the change and evaluation of benefits of the process including the agreement to appropriate methods of implementing change, the communication of process changes, the training of people prior to implementation, the review of process changes to ensure predicted results are achieved [4,5].

Processes

Process management is one of key measurements to establish and to improve QM in an organization. It is concerned with:

- the definition, the conduction of the identification, and the evaluation of the key processes,
- the systematically managing of processes like establishing and monitoring standards of operation, the performance of measurements in process management, implementation of system standards (ISO, health and safety systems), resolving interface issues inside the organization and with external partners,
- setting reviews and targets for improvement with identifying and prioritising methods of improvement, setting standards of operation priorities and targets for improvement according to benchmarking results from extern partners, relating current performance measurements and targets for improvement to past achievement,

Result criteria

Result criteria are concerned with what the organization has achieved and is achieving and should be ideally assessed as trends over a period of at least three years including actual performance, targets, performance of competitors and performance of "Best in Class" organizations. Self-assessment should indicate the extent to which the activities of the organization are covered by, and the relative importance of the parameters chosen to measure results including relevance of the measurements to the various stakeholders. The results presented should include perception or direct feedback data as well as predictor or relevant organization performance measures. The reliability and validity of any survey results presented should be discussed. Results are mainly concerned with [2,5,6]:

- Customer satisfaction: main achievements in healthcare are concerned with the development of new diagnostic and therapeutic measures to treat sick people. Outcome of this development therefore is mainly concerned with the satisfaction of those people, suffering from

diseases which cannot be treated in a right way till then [2,4].

- People's (staff) satisfaction: as an example, motivated and committed healthcare workers are the basic potential of a health institution. Support of the healthcare workers and their satisfaction therefore play an important role for the establishment of QM in a healthcare institution. Achievements of the institution in relation to the satisfaction of its people should therefore include people's perception (e.g. surveys, structured appraisals, focus groups, etc) relating to motivation like career development, communication, empowerment, equal opportunities, involvement, leadership, recognition, target setting and appraisal, training and education, and relating to satisfaction like employment conditions, facilities and services, health and safety conditions, job security, pay and benefits, peer relationship, the organization's environmental policy and impact as well as its role in the community and society, working environment [3].

- Impact on Society: every organization needs evidence of its perception through the society and therefore has to achieve in satisfying the needs and the expectations of the local, national and international community at large [1].

- Business results: every organization is assessed according to what it is achieving in relation to its planned business, objectives and especially the quality of the outcome, taking into account the satisfaction, the needs and the expectations of everyone involved in its business. The success can be measured according to the additional measurements of the organizational performance like efficiency and effectiveness measurements, monitoring and evaluation of key services, external and internal audits inspections and evaluations, results of benchmarking measures with other comparable organizations, measurable increase in grants and impact factor points obtained [1,2].

Establishing of Quality in Healthcare

To establish the quality in healthcare institutions, the willingness of the leadership to accept and realize quality management and make it to the important measure in all parts of the healthcare institution is necessary. To reach the intended quality aims, a permanent effort is needed and will be possible if it is done in a holistic manner, which means that all levels of administration and departments will be integrated in the whole quality management concept. Quality in healthcare is the result of complex and all different levels of patient treatment parameters including levels which are determined through existing structures which aim to reach the expected quality standard. Quality with this aim needs a professional quality management which includes the function of a quality manager who is responsible for the leadership of the healthcare institution. Quality management should be realized in the cooperation with all coworkers including permanent analysis and the quality related adaption of all activities in all functional areas. Using this instrument, the quality manager will be able to realize quality measures in all functional areas of the healthcare institution. Very important in the healthcare institution is the establishment of a hygiene commission, consisted of members of all different departments of the healthcare institution. With this interdepartmental membership integrating all important persons responsible for the quality management in the healthcare institution, this commission can be a central instrument to establish, integrate and realize quality in the healthcare institutions [1,2,5].

Conclusion

Quality especially in healthcare is a management challenge in the new century. It has to be produced and not only controlled. Quality

reasoning cannot be conditioned and ordered, it has to be developed through all hierarchical levels and to imply a process which leads to a change of the behaviour. Quality, in spite of fast success in the beginning needs patience

and a climate where it can develop. Quality is a continuous process and will only be effective if it is an integrated measure of a daily work by all people who are concerned with it, especially in healthcare.

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Upravljanje kvalitetom kao osnovnim instrumentom u sistemu zdravstvene zaštite

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U industriji i javnom sektoru kvalitet je postao važan upravljački izazov 21. vijeka. Iako kvalitet treba da bude samorazumijevanje u zdravstvu, realnost pokazuje drugu sliku. Danas postoje međunarodni standardi i modeli izvrsnosti kvaliteta koji olakšavaju uvođenje i kontrolu upravljanja kvalitetom, čak i u zdravstvu, i omogućavaju bolji benchmarking. EFQM model poslovne izvrsnosti sa pet kriterijuma mogućnosti i četiri kriterijuma rezultata može se koristiti kao osnovna smjernica. Fokusirajući se na takve glavne parametre kao što su liderstvo, ljudi, strategija i politika, resursi i procesi koji su važni pozadinski kriterijumi za kvalitet, lako se može prilagoditi zahtjevima kvaliteta u skoro svim oblastima zdravstvene zaštite. Definicije različitih aspekata kvaliteta kao što su osiguranje kvaliteta, upravljanje kvalitetom, upravljanje totalnim kvalitetom, kontrola kvaliteta pokazuju da još uvijek postoje posebni parametri kvaliteta u zdravstvu koje treba prepoznati. Realnost u zdravstvu još uvijek pokazuje dosta nedostataka u pogledu mjerenja kvaliteta. Kvalitet u zdravstvu, uključujući pomenute ključne kriterijume, biće efikasan samo ako je sastavni dio svakodnevnog rada svih ljudi koji se bave zdravstvenom zaštitom.

Ključne riječi: Upravljanje kvalitetom u zdravstvu, kontrola kvaliteta, EFQM, Model poslovne izvrsnosti, DIN EN ISO 9001