## KNOWLEDGE – International Journal Vol.48.3

# REFLECTION OF THE MANAGEMENT PRINCIPLES OF THE BUSINESS PROCESS IN THE HOSPITAL PROCESS

## **Darina Mineva**

National Health Insurance Fund, Bulgaria, Sofia, Bulgaria, dariamineva@abv.bg

**Abstract:** The problem of assessing the quality of services is becoming increasingly relevant due to the fact that in economically developed countries the share of services in gross domestic product is growing. This trend is a consequence of the change that the economy and society are undergoing, namely: the transition from the "capital economy" to the "knowledge economy", where the most important resources are qualifications and experience. This trend is related to the quality of health services and their evaluation.

The article presents the main tool for quality management in the hospital - a clinical path, drawing a parallel of the main aspects with the integrated quality system in the economic sphere.

An analogy is made between the set quality requirements in the structure of the clinical path with the established quality standards, namely: the triad of quality.

Keywords: integrated quality system, clinical pathway, processes, quality of medical service

#### 1. INTRODUCTION

The management of hospital processes follows the management principles of the business process. The concept of the clinical pathway was created by the military and aviation industries in 1950, as a technological map for the Polaris US missile system for process control. The concept contains the critical path method in relation to operational work within the PERT (Program Evaluation and Review Tecnique) system.

In 2004 the European Association of Clinical Pathways (EPA) has been established in Italy. They are defined as "multidisciplinary tools for improving the quality and efficiency of medical care" and communication between professionals [4]. Clinical pathways have been developed in a number of countries such as: England [10], Belgium [11], USA [12], Canada [13], Denmark [14], France [15], Germany [16], Japan [17], Australia [18], New Zealand [19], Russia [20], In Bulgaria the clinical pathways with introduction in 2000 [7].

In England, the recommendations for clinical behavior are periodically reviewed and innovations are introduced, which is an expression of the application of the Kaizen method (continuous improvement in small steps - QA / QI) in the field of healthcare.

The article presents the main tool for quality management in the hospital - a clinical path, drawing a parallel of the main aspects with the integrated quality system in the economic sphere.

## 2. QUALITY IN BUSINESS LIFE AND HEALTH

Historically, based on the established principles of research by quality mentors: Feigenbaum, Kano, Juran, Ishikawa, Drucker, Crosby and Deming, several criteria have emerged that serve as a foundation for the content of quality. They are:

ney are:
☐ satisfaction of the consumer's needs;
□ process improvement;
□ consumer value;
□ requirements.
atisfaction of the user's needs is manifested in the

Satisfaction of the user's needs is manifested in the interaction of the user with the product / service. Improving the process in the individual activities of production of the product / service. Third group of opinions - the consumer value. A broader understanding of quality is provided by Crosby 's definition and the DIN ISO standard, which refer to quality in general to "requirements". The requirements (needs or expectations) that the quality satisfies can be divided into three categories: mandatory, which are (established) written in normative documents - laws, standards, etc., stated established requirements of the consumer - contract, terms of reference and usually presumed. requirements. The quality requirement is mandatory and can be submitted by any interested party. This statement finds expression in healthcare and more precisely in the contractual principle between the National Health Insurance Fund and the Bulgarian Medical Union, as well as in medical law.

The above criteria form the quality structure as a three-component category, known as the "Quality Triad" - system, process and result, later enriched with a fourth component - the environment.

The components are in hierarchical subordination and active interaction with each other. The product inherits the properties of the process, and he inherits the properties of the system. The environment plays a role in the quality of the system. The quality triad is embedded in Donabedian and Maxwell healthcare quality concepts.

#### 2. THE STRUCTURE OF THE PROCESS

"Process" means one or more interconnected procedures or operations (functions) that jointly perform a specific task, or a set of interconnected and interacting activities that convert inputs into outputs (ISO 9000: 2000) [3]. The process is composed of subprocesses - procedures. The end of a process is the beginning of a new process (Figure 1).

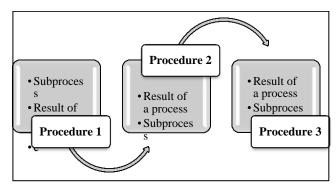


Figure 1 Task of 3 procedures constituting a process. Procedure 1 2 and 3. result

Understanding the process is important for quality assessment. The evaluation of the processes is based on two main systems: The integrated quality system - QMSc, on the basis of which the Concept of Total Quality Management (TQM) is smoothed, their building blocks are the attributes of the process.

Integrated Quality System - QMSc: Based on three principles: focus on the user, process improvement and total involvement. Focus on the consumer is a process of forming consumer satisfaction. Process Improvement - Continuous process improvement is based on the PDCA cycle (Deming), the Schuhard-Deming Cycle Concept and the Kaizen Concept: management involves two successive steps - stabilizing the process through the SDCA cycle and improving the process through the PDCA cycle. Total involvement of staff (Figure 2)

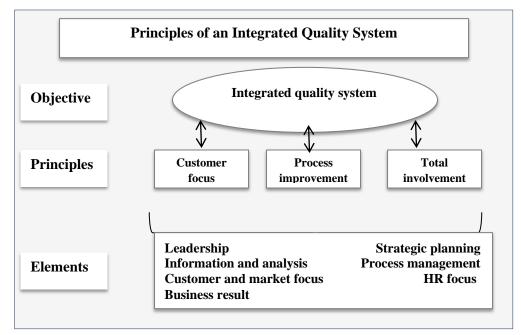


Figure 2 - Principles of an Integrated Quality System, no Grace L. Duffy

The integrated quality system QMSs is a network of interrelated requirements and exists as the two most commonly used models - the Baldridge National Quality Criteria Program and the ISO 9000 2000 family quality management system standards. The models represent the structure of QMSs and define quality by the way it is practiced today. The Baldridge system is used to assess the quality of medical care in the hospital sector in the United States.

# KNOWLEDGE – International Journal Vol.48.3

The idea of TQM is in the continuous improvement and achievement of product / service quality, staff work. The process of continuous improvement is achieved with two causally related mechanisms - QA / QI. QA maintains a level of quality and guarantees quality. OI raises the level of quality and raises the level of quality assurance.

The idea of a process approach in quality assessment in the production of medical services is reflected in the implementation of the diagnostic - treatment algorithm of the clinical path.

Figure 3 shows how the established rules and quality requirements, which are implemented in a clinical pathway by an algorithm, are combined with the two concepts of integrated quality system and total quality management. The control and the finding and elimination of the deviations / discrepancies from the clinical path is expressed in the improvement of the quality and its stabilization in the process - provision - QI and QA (figure 3).

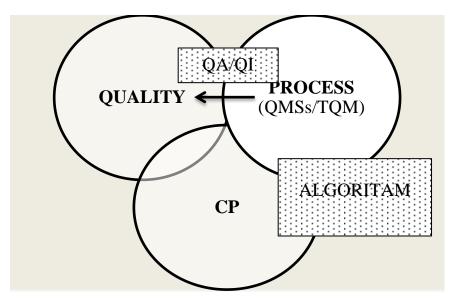


Figure 3 Combination of the clinical pathway algorithm with the two concepts QMSs and TQM. (Quality, CP clinical path, Process.)

The process is important because it adds value - a new quality. In terms of health, this new value may be a level of health improvement, healing, in the opposite direction, but this does not mean poor quality.

This value in economic terms is expressed by the contribution to the gross domestic product. It follows that the process has the property to self-regulate, superimpose, reproduce, which is achieved through the causal links of the "critical" path, which is the engine of each process - the algorithm (author's notes).

#### 3. CONCLUSION

The reflection of the management principles of the business process in the hospital process is based on the same / similar nature of the quality. It is manifested in the approach of quality management - the integrated quality system and the clinical path, with similar tools, due to the fact of systemicity.

## **LITERATURE**

Большая Советсткая Енциклопедия, http://bse.sci-ib.com/article060277.html

Иванов, Г., "Качество на медицинскта помощ – същност, съдържание, оптределяне, осугуряване, управление", https://www.nsoplb.org/doc/quality.doc

http://tuj.asenevtsi.com/BIS09/BIS30.htm

Journal of Integrated Care Pathways, 2006, Vol. 10 Number 1, pp.28-34

Борисов В., Цачев К., Комитов Гл., Генев Стр., Огнянов С., Христов Ем., "Управление на болничните ресурси. Нов болничен мениджмънт", ISBN 978-954-390-146-3, София, 2018

Договор за допълнение и изменение на Национален рамков договор между Националната здравноосигурителна каса, Българския лекарски съюз и Съюза на стоматолозите в България за 2001 г.(ДВ бр. 107 от 2000 г.)

Национален рамков договор между Националната здравноосигурителна каса, Българския лекарски съюз и Съюза на стоматолозите в България за 2018 г.(ДВ бр. 28 29.03.2018г..)

# KNOWLEDGE - International Journal Vol.48.3

Mineva Darina, New Approaches to Assess the Quality of Medical Care, ISBN 978-613-9-41351-5, International Book Market Service Ltd., member of OmniScriptum Publishing Group, Riga, Latvia, EU, 2019, www.morebooks.de

www.nice.org.uk

www.kce.fgov.be

www.guideline.gov

www.cma.ca

www.sst.dk

www.has-sante.fr

www.aezg.de

www.jcqhc.or.jp

www.health.gov.au

www.nzgg.org.nz

www.klinrek.ru

http://www.tuj.asenevtsi.com/TQM2009/TQM012.htm

http://www.asq.org/learn-about-quality/quality-assurance-quality-control/overview/overview.html

http://www.businessballs.com/dtiresources/quality\_management\_gurus\_theories.pdf

www. dti.dov.uk.quality/gurus