# The Strategic Model of Quality Management in Health Care Organization

Temirkhan Mukhambetov and Farida Yerdavletova

Abstract—The model of quality management in medical organizations based on the process approach is presented in the paper. For this, an overview of the approaches to quality management described in the literature is presented, the definition of the process approach is defined. A methodology for implementing the process approach has been developed, integrated into the management strategy of a health care organization. Based on the methodology, a model of the process approach has been developed which was implemented at the Astana clinic. A combination of the process and strategic approach using a balanced scorecard will help achieve high results for clinics.

Index Terms—Healthcare organization, management strategy of healthcare organization, process approach, features of medical services, polyclinic processes.

#### I. INTRODUCTION

Quality management has become an important issue for healthcare organizations over the past couple of decades. As noted by Schuster, McGlynn and Brook [1] the emphasis on the quality of medical care is relevant and necessary for the effective management of these services. This is due to the fact that the sphere of health policy and management is faced with theoretical and practical problems [2]. Despite decades of efforts to reform, the health care system is "stuck" in its mothballed and frozen 20th century management model [3].

Among the many reasons for this in the literature are noted: (1) the dominance of microeconomic thinking; (2) lack of comparative studies of health organizations [4]. To these reasons should be added the following. First, health care institutions are headed by medical professionals, who often do not have managerial education and experience. Secondly, the current culture of quality management is based on a conservative type of management. Medical institutions are characterized by bureaucracy, strict functional boundaries and obsolete organizational structures built on a functional principle [5], [6].

Analysis of modern polyclinics and hospitals in Kazakhstan showed that they are focused on the structure and result. According to Peter and Ginter [7], such an approach was acceptable for a situation where health care

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had poor resource provision.

As a result, a significant improvement in the structural component through the modernization of equipment, retraining of doctors while maintaining the management system did not lead to a significant improvement in the quality of medical care. At the very least, the improvement was not adequate and proportionate to the improvement of the material and technical base of health care. For example, although mortality has decreased, but it has decreased in proportion to the growth of hospital and clinic equipment [8].

A modern view of the functioning of a medical organization is based on an understanding of the processes that occur within it [9]. According to Fine & Meyer [10], a process-based management strategy should be a promising model for health care.

The purpose of this article is to develop a strategic model for a health care organization in order to help healthcare managers and practitioners improve the quality of services and achieve a competitive advantage. To this end, this study introduces a framework for the implementation of the process concept of quality management, including the definition of a medical organization strategy and a process approach, the development of a methodology for the organizational development strategy of a medical organization.

### II. THEORETICAL BACKGROUND - LITERATURE REVIEW

The development strategy of health organizations is considered by many researchers [11]-[14]. In general, well-known business strategies are applicable to them, such as the Ansoff model [15], the Prahlad and Hamel core competencies model [16], the Greiner growth model [17], the Kay models [18], Treacy & Wiersema model [19], staff development strategy [20], cost increase strategy [21] and many others. All of them require some adaptation to the functions of the medical services market and the functions of the service itself.

The most universal set of strategies is the classification of strategies proposed by Porter [21]. After its classification, it is necessary to determine the following three strategies of medical institutions:

- 1) A strategy to streamline the provision of medical services based on cost leadership in a competitive market. It is the desire to dominate at the market of medical services through high internal productivity and low production costs, which leads to low cost of the services provided.
- 2) A strategy based on differentiating the services provided while improving their quality. This strategy is designed to limit the range and scope of services provided, while paying attention to the quality of new services;

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3) Strategy for the development of innovative technologies.

However, these strategies are poorly applicable for organizations such as medical, as they significantly complicate the management system and do not take into account the peculiarities of medical services.

Among the most important features of medical services should be highlighted:

- 1. Intangibility of medical services. [9].
- 2. Immeasurability of medical services.
- 3. The complexity of the regulatory progress of the service.
  - 4. The strong influence of the personal factor.
  - 5. Impossibility of preserving of services process.
  - 6. Variability of the quality of medical services.
- 7. The range of medical services provided to a medical institution can be very wide from the dental to the surgery.
- 8. Medical services are very different from each other by the time parameter.
- 9. Services differ from each other in composition attracted doctors.

The features affect the choice of strategy for healthcare organization. Some of which act as restrictions, but some of them have a positive influence on the choice of strategy.

Strategy based on Porter's theory not take into account organizational, scientific, psychological and social factors behavior of the enterprise. So little consideration of factors such as organizational structure, social management, resource support organization, motivation system and others factors.

## III. PROCESS APPROACH – DEFINITION, PRACTICE AND PROBLEMS

The process approach is one of the eight quality management principles upon which ISO 9001 of standards is based. In accordance with ISO 9001: 2015, the process is established as an activity for transforming inputs into outputs, and an enterprise as a set of interrelated processes. Some authors, emphasizing the importance of the process approach, identified it as a type of management [22].

Most often, the process approach is considered within the framework of a quality management system based on ISO standards and in the Total Quality Management (TQM) model.

The TQM model which began to be developed in the 80s almost immediately aroused the interest of researchers for the health sector [23. However, despite this, there is still no widespread practice in the health sector. Few organizations that have implemented it are dissatisfied [5]. They consider them ineffective, poorly tailored to the particularities of health services [24], [25].

In general, poor implementation of the process approach is due to a number of reasons. There are critical success factors for TQM: leadership, vision, measurement and evaluation, control and improvement of processes, employee participation, reward, education and training.

However, in practice, significant emphasis is placed on specific control instruments. Some of them are quite suitable for use in health care organizations. These include Root-cause analysis, Failure modes and effects analysis (FMEA) [26]. However, in general, the labor processes of the organization of health care are difficult to compare with industrial processes.

Also, as shown by our content analysis of 53 articles on quality management in medical organizations, researchers prefer to develop such aspects of the concept of TQM as continuous improvement, education. Even private models are being developed, for example, continuous quality improvement model, Quality Management for Health, Care Delivery model, quality assurance model, Cost control [27].

Another disadvantage is the lack of significant emphasis on integration with the management strategy - this is one of the weak points and is a gap in theory.

### IV. METHODOLOGY

This study proposes the development of a model for integrating the process approach into the strategic management system of a health organization. A quality management system based on process management is an important factor that contributes to a development strategy.

A tool for integrating strategy and process approach is the balanced scorecard.

Key management processes, such as business planning, forecasting, budgeting, and others, should be linked to a balanced scorecard based on a health organization strategy. A tool for integrating processes into an organization's strategy is the KPI.

In the analysis it is necessary to analyze the economic, financial and social factors affecting the work of a particular unit. The methodology of balanced assessment of indicators will allow to evaluate the effectiveness of the process control system in a medical organization.

One of the first stages of building an organization process and managing an enterprise is the identification and classification of business processes. As a rule, the basis of the classification of a business process consists of four main categories: - main business processes; - ensuring business processes; - business development processes; - Business Process Management.

# V. RESULTS – THE PROCESS-ORIENTED INTEGRATED MODEL OF QUALITY MANAGEMENT

Fig. 1 shows the enlarged group of processes that are present in almost any healthcare organization.

Conceptual approaches and methodological principles for the implementation of quality management system allowed the introduction of process-oriented quality management system at the hospital No1 of Astana.

Below in Fig. 2 is shown the general scheme of the process-oriented approach to quality management at the Hospital №1 (a process landscape).

### VI. CONCLUSION

The quality of health care services can be greatly improved through the right quality management strategy in an organization. Analysis of well-known industrial strategies demonstrated the impossibility of their use in

medical institutions without taking into account the specifics and features of medical services.

The methodology of the integrated model of the process approach and strategic management is most appropriate for health organizations. Sequential implementation of this strategy involves some phasing.

The proposed model of quality of medical services allows

healthcare organizations to implement a quality system based on the integration of ISO and TQM standards into strategic management. In this case, the patient becomes not only the client, which is usually developed in the concepts of TQM and ISO, but also is a direct strategic partner involved in the decision-making process.

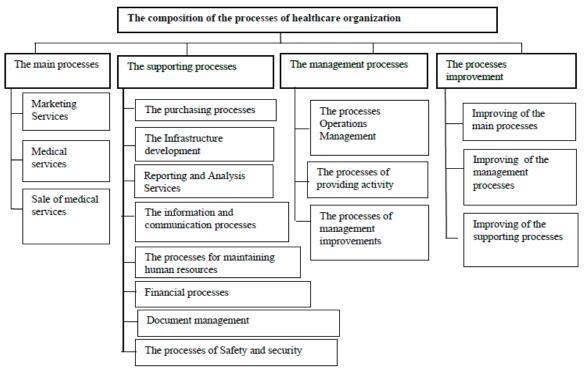


Fig. 1. The composition of the medical organization processe.

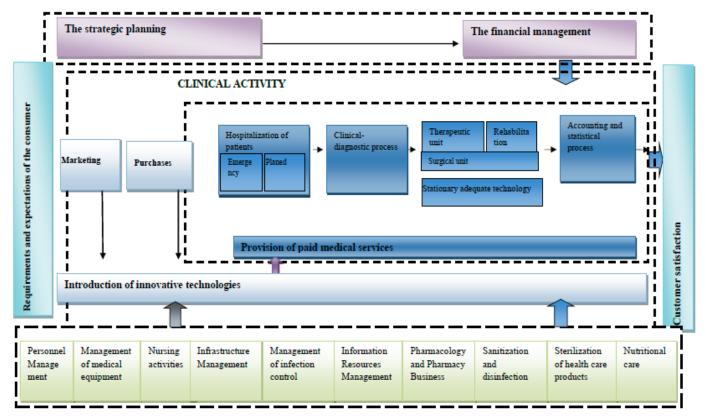


Fig. 2. The process-oriented management system in the polyclinic №1 Astana.

### VII. LIMITATIONS AND RECOMMENDATIONS FOR FATHER RESEARCH

We have encountered in practice that the successful implementation of a process-oriented approach requires the active participation of all parties involved in the provision of services. But it takes a lot of time for the individualistic aspirations of doctors to transform into a single aspiration of the whole team of doctors.

A significant brake is the tendency of separation of polyclinics into outpatient and inpatient departments, which consider themselves to be independent units. Finding ways to overcome such contradictions is both the task of managers and directions for future research.

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