

CONTROLLING MECHANISM IN THE HEALTH CARE SECTOR: FEATURES AND IMPLEMENTATION IN UKRAINE AND IRAQI KURDISTAN

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1. Introduction

The need for a reform in the health care sector started to be understandable both in Ukraine and in Iraqi Kurdistan on all decision-making levels. The main common feature of medical services in these countries is the predominance of the state ownership and state regulation. In such conditions hospitals face the lack of financing and ineffective managing. But in Kurdistan Regional Government's (KRG) condition the financing problem is more complicated than what can be seen in Ukraine because of overall state budget shortage, which mainly depends on oil revenue from two resources: first, about 17% from federal budget and, second, from the oil export directly by KRG ministry of natural resources. This situation leads to instability of the budget revenue in the region [1–4]. This revenue is not guaranteed due to many reasons (e.g. fluctuation of oil prices in the international market, political and security instability, high ratio of government current expenditure comparing to the investment outlay etc.) and that leads to striking the capability of government to finance the introducing of new technology in this sector which is too essential for KRG to develop medical services and increase both efficiency and productivity which can be obtained through changing the model of the sector from labor intensive to capital intensive one. That can be done only if the region adopts adequate strategic plan for the sector and solves the problem of lack of qualified personnel which significantly depends upon importing from abroad.

The above mentioned strategy needs the reform of management style and organization inherited from long ago time and is not suitable for modern challenges in this sector.

The other specific feature of the health sector in KRG is a very strong competitiveness. In order to be able to play its appropriate role in such market it needs to assure the reason for higher productivity, business efficiency and other market requirements. The features of competitiveness in the region have two dimensions (private and public), that are not equal: comparing to the private health services, the public ones are weaker because of the following reasons:

- miss organization and management;
- lack of incentives;
- low level of cure quality and revenues from medical services provided;
- two times lower the number of skilled health manpower especially doctors and the intermediate personnel;
- the policy of the government is directed to the benefit of private sectors development.

Concerning private hospitals, they have no problems with financing because of their high profitability, and that is obvious when following the increase of private hospitals, which number is about 20, and the investors in hospitals constructing – 25 new one. The second competitive advantage arises from the high quality of medical services in neighbor countries especially from neighbors who conquer both domestic public and private sectors.

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The Ukrainian former minister of Healthcare Alexander Kvitashvili announced new policy in financing of hospitals by the state that already started in 2015:

- state support only for quantity and quality of medical services, not beds which brings competitiveness among medical organizations and doctors;
- implementation of international DRG-system (Diagnostic Related Groups) for calculation of medical service costs that will secure similar price-building in all Ukrainian hospitals (this issue is also very important for KRG in order to guarantee the quality of services provided by private sector as well as to the service prices for each kind which until now is uncontrolled and the medical services do not fulfill their social object correctly);
- private entrepreneurship of basic medicine services in agricultural regions; this issue must be focused on by decision-makers in health sector because of high disproportion of diffusing the medical services between not only the urban and rural areas but also the big cities comparing with the smaller ones;
- legalization of commercial medical services;
- introduction of insurance medicine in the nearest perspective. This issue is also regarded as the main factor for equalizing the right of inhabitant to benefits from the efficient medical services.

The controlling concept offers solutions for optimization of utilizing all scarce resources, informational support for better managerial decisions. That can help hospitals sustainably develop and create new conditions. It is to mention that private entrepreneurs (SME) can rarely benefit from the full controlling implementation. But they can use certain controlling tools for enhancement of their efficiency and profitability.

The structure of the paper is as follows: We introduce the controlling concept with basic definitions and its implementation as medicine controlling in Section II. In Section III we demonstrate core elements of medicine controlling system and medicine controlling mechanism. Then we study the multi-dimensional mechanism in the Ukrainian and Kurdistan health care sector. We conclude with the suitable conclusion and required suggestions in Section IV.

2. Medicine controlling in theory and practice

Before arguing the controlling concept in the health care sector, let us principally define the term “controlling”. In contrast to the terminological roots in the English language and the Anglo-American “controller” tradition, the notion of “controlling” specifies a unique approach to management and beyond it [5]. The controlling concept means therefore good harmony among profitability, growth and risk-taking factors in business. It embraces the fields of management, planning, costs-benefit analysis, control, coordination and organization. Both these statements show that controlling is philosophy and a way of thinking, which can be extended to the decentralized management area also through information management.

Countries looking for reforming in the health care sector seek through new approaches and best-practice transfer to the sector. Implementation of the controlling concept can be big step forward lead to effective and transparent medicine services. Business success of the controlling implementation in other sectors of national economy as well as in health sector for other countries is regarded as the best source of knowledge and transformation of experience to the countries health sector. In our research we investigated hospitals and other health service organizations in Germany, Ukraine, and Kurdistan. The medicine controlling has already found its place in German hospitals and is absolutely unknown in Kurdistan and Ukrainian ones. In our opinion here is the reason for best-practice transfer in this domain, but with multidimensional theoretical research and adaptation to economic, social, and political conditions in our countries.

Despite its implementation in Western Europe, the medicine controlling is still a new form of hospital management and still is developing its theoretical and practical aspects. Hence the

medicine controlling concept is pretty new; we have met several different practical approaches regarding medicine controlling, depending on region. Thus, Western-European medicine controlling concept – including hospitals in Germany – see the task of medical controlling in successful integration of medical know-how in the controlling function [6]. Certainly it means there can be differences between the techniques used by medical organizations to put it into practice. In Russian Federation they see the medicine controlling as an integrated managerial accounting system for internal control and management. Its main calling is to provide the quality of medical services by monitoring in hospitals following important components: Quality Management System, Quality Standards, Resources, Technologies, Competence, and Security [7]. It is therefore more logical to speak of the TQM (Total Quality Management). Australian approach covers implementation of the DRG-system as a catalogue of 661 services with standard costs and values.

Comparing to industry the starting situation in health care sector is pretty tough for building an effective and profitable controlling. It needs large work for preparing data bank for decision-makers, especially those required for costs and services revenue (benefit) calculations. As far as the state regulates not only external reports, but also the managerial accounting, health care organizations are not so flexible in building own accounting. That is why the DRG-system started to be so popular in different countries where the government was looking for a balance between the state regulation and business independence of the health care organizations.

The medicine controlling as a system of planning, management and control in medicine services requires a managerial accounting of costs and results for accomplishment of the following objectives:

- transparency of certain activities and processes with registration of provided services to single patient (from admission till discharge from the hospital);
- following calculation of total costs of given medical services, efficiency control comparing to value of corresponding position in the DRG-catalogue;
- information for guaranteeing the nominal quality level of treatment with the lowest usage of resources, e.g. influence on personnel behavior.

That is why the process-oriented costs accounting method is the best solution for cost management in the health care sector. An example of process-oriented calculation is presented in Tab. 1. It allows to provide the transparency of processes, results and costs in every department of hospital. This transparency is obligatory for implementation of the medicine controlling.

Tab. 1. Costs and Services Report in Dayk private hospital in Erbil, Iraqi Kurdistan

Items	Operation cost price, US\$	Service, US\$	Total, US\$
Dilation and cartage	232	81	313
Cesarean section	488	162	650
Abdominal hysterectomy	650	162	812
Myomectomy	400	162	562
AP repair	488	162	650
Normal delivery	400	–	400

Another important purpose of the medicine controlling is the analysis of market and competitors, information on personnel, diagnosis and scheduled treatment. This information is to be used for the further development of the medicine organization. Besides controller is a nexus of medicine personnel and management of organization in the field of plan indexes, budgeting, deviation analysis etc.

3. Controlling system and controlling mechanism in the health care sector

Authors writing about controlling mechanism issues often do not make big difference between controlling system and controlling mechanism [8; 9]. Their confidence is based on the fact that as controlling system, so controlling mechanism generally aims to economize on the resources required to operate organizations; to support informatively the decisions-makers; to improve the controllability and efficiency of organization. But are they really identical?

The German academic school [10–13 and many others] unconditionally defines that controlling system is based on controlling core functions – planning, analysis with control, informational support, and regulation. Leonid Hurwicz and Stanley Reither, the winners Nobel Memorial Prize in Economics, see the economic mechanism as a “... mathematical structure that models institutions through which economic activity is guided and coordinated” [14]. Thus, the controlling mechanism is not only a combination of its functions, but a complicated structure that integrates business goals, controlling functions and instruments. And, obviously, the controlling mechanism is impossible without the working and efficient controlling system.

Fig. 1 illustrates general scheme of controlling system in a hospital that is based on controlling theory and hospitals’ business processes. As it was abovementioned, the classical approach to controlling-theory and praxis [15; 10–13 and many others] defines four main functional activities of controlling: information supply for managerial decisions, planning as an essential element of any business activity, result-oriented control with analysis of deviations from plan, and coordination for higher controllability of business-processes in organization. The combination of these four is a core approach to any controlling system with no dependence on sector of economic, size of business etc.

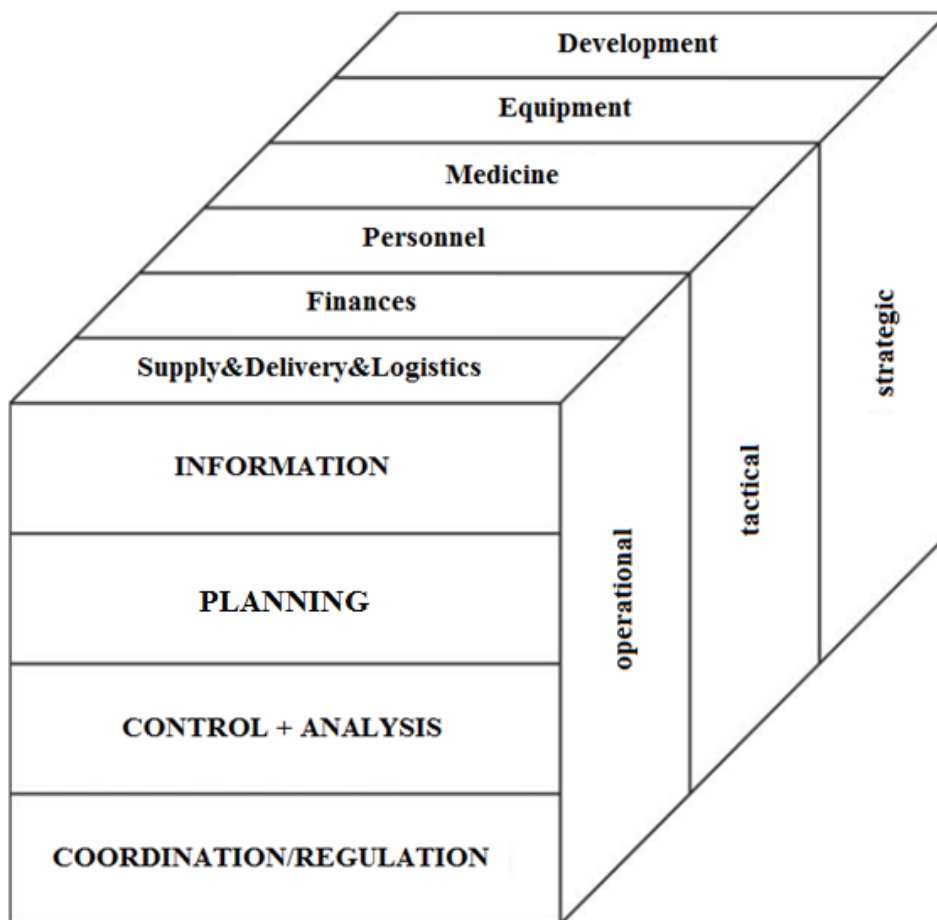


Fig. 1. General scheme of controlling system in hospital

Controlling covers all business processes in organization; otherwise there is no system approach and no controlling system. Therefore another dimension of controlling system in hospital is the

level of decision-making combined with certain group of business-processes. Thus, controlling carries out informational support of managerial decision concerning hospitals' finances, supply, delivery and logistics on operational level. Controllers also plan cash-flow and expenditures, make budgets as generally for entire organization and separately for certain departments (ex. logistics, marketing etc.). Then they control results and analyze deviations from plan in order to find causes and avoid such deviations in future. In order to provide controllability, business transparency, and higher efficiency the controlling system coordinates activities of mentioned dimensions.

Tactical decisions in controlling system cover personnel and medicine issues. Thus, any job in the health care sector requires certain knowledge in the medicine area (control of diagnose codes and provided services, design of treatment programs or deviation analysis), the medicine controlling calls for joint actions of personnel both with medical and with economical background. That means that one department is not able to cover objectives and tasks of medicine controlling, its success depends on cooperation of many employees in different departments.

The last tendency in controlling concept development is using of controlling to make strategic decisions. The first steps here are decisions on real investments and analysis of hospitals strategic development.

The modern economics is obviously the environment that gives opportunity for business companies to combine harmonically the information system and strategic approach. New IT-solutions have already become a part of business-processes, thus many companies made a big jump in their efficiency. That is why integration of information technology and information systems into infrastructure of health care organization is an essential requirement for a high level of its adapting potential.

In conditions of nonlinear economics the classical management methods are not able to provide an adequate result because of the need to operate with a huge amount of empirical data and to handle information with sizeable timetable. Thus, the efficiency of health system and a particular hospital can be achieved through controlling mechanism, which in nonlinear business environment defines trajectory of hospital development and react in time to incipient deviations.

The controlling mechanism is a set of controlling methods, approaches, forms, instruments, and other influence leverages on processes in business organization. Such medicine controlling influences organizational, economic, medical, and informational spots in hospital for the general effect (Fig. 2).

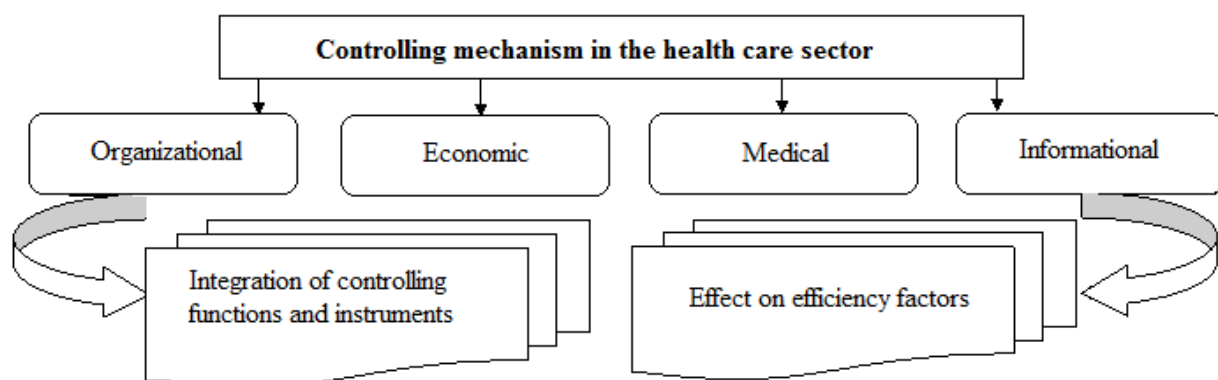


Fig. 2. Core basics of the controlling mechanism in the health care sector

As it is clear from the previous illustration the controlling mechanism system has many advantages on the benefit of development and increasing the efficacy and quality of services in the sector. In spite of it there is no implementation of this system because of:

- Highly centralized management.
- Lack of transparency.

- Bad organization of information system.
- Bad venue and building conditions in private hospitals.
- Unclear regulations.
- Unqualified managerial cadres, in which all this task is carried out by the owner directly.

4. Conclusions

Controlling covers different business sectors and different business directions. Thus, there are industrial controlling, bank controlling, finance controlling, energy controlling etc. It is time to discover the medicine controlling. The medicine controlling is able to become a management information/finance center in hospital, economizing the utilization of human and material resources in order to guarantee the best results embodied in high quality medicine, and rationally using different kind of medicine services inputs in order to obtain optimal efficiency, productivity and goals of plan.

Controlling mechanism is not the same as the controlling system. Controlling system is a more comprehensive system comparing with the first one because the controlling system actually is devoted to one or two objects for example controlling the quality of product or the funding of costs etc., but controlling mechanism is a more complicated system dealing with all the activities related to the management activities.

Ukrainian and Kurdistan medicine environments have common features, that is why the similar controlling mechanism can be implemented in both counties. (Please discover the idea) ex.

The implementation of controlling mechanism in health sector in KRG depends upon many preconditions regarded as the preparation for appropriate environment for that aim, such as:

- Reorganizing management of the sector in modern style.
- Fulfilling the big shortage of the data information and statistics.
- Preparing human skills capable to implement and caring out the issue of controlling mechanism in KRG health sector.
- Focusing on mobilizing and best using of the finance resources and the way of its development.

The adequate implementation of the controlling mechanism is impossible if it is not integrated in the modern planning system taking this into consideration as the wide meaning of planning. Thus, it is also efficient to put the medicine controlling concept into practice in many hospitals in other countries regardless if it is in public or private sector.

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Summary

The health care sector faces many different challenges both in Ukraine and in Kurdistan nowadays. Some these challenges are similar, other reflect the unique path of medical services development in the country. But obviously many environmental changes have led to a much stronger competitive pressure on hospitals both in the field of medical standards, cure conditions infrastructure, state regulation etc. and in the field of managerial efficiency, financial and business transparency of every single hospital. This paper presents theoretical assumptions and practical guidance for creation a controlling mechanism that achieves specified performance, and economizes on the resources required to operate organizations in the health care sector, i.e., informational efficient mechanisms. Our systematic approach is a formation of controlling instruments joined in one efficient mechanism that can help to ensure own survival of hospitals by improving their efficiency and competitiveness.

Keywords: controlling; controlling mechanism; controlling system; medical services; Ukraine; Iraqi Kurdistan.

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