УДК 614.2:338.4(470-924.71)

# Strategic healthcare management system formation and its implementation in the Republic of Crimea

I.A. Sukhareva<sup>1a</sup>, O.S. Tretyakova<sup>1b</sup>, Gilbert Mabiala<sup>2c</sup>, E.V. Trusevich<sup>3d</sup>

- <sup>1</sup> Institute "Medical Academy named after S.I. Georgievsky" of Crimean Federal University named after V.I. Vernadsky; 5/7, Lenin Ave, Simferopol, Russia
- <sup>2</sup> Institute of Economics and Management, V.I. Vernadsky Crimean Federal University; 4, Vernadsky Prospect, Simferopol, Russia
- <sup>3</sup> Bratsk State University; 40, Makarenko St., Bratsk, Russia
- "sukhareva\_irina@mail.ru, bolga tretiakova@yandex.ru, gilmabiala@mail.ru, joint@brstu.ru Received 12.04.2022, accepted 16.05.2022

The article is devoted to the current problem of systemic management in the healthcare sector and the search for ways to solve it through an innovative system and balanced strategic concepts in healthcare management. Improvement of management in the healthcare system, both in the field of improving medical services and in the field of socio-economic development of healthcare institutions, will contribute to improving the quality of work. The problematic aspects of the modern healthcare management system are highlighted, and the ways of improving the methodology of strategic management in the context of the application of an evolutionarily balanced management system in the healthcare sector are substantiated. It has been proven that health management is becoming an important problem on a federal scale due to the growing demand for high-quality medical services, and many methods and tools, including digital and informational, are used to achieve this goal. The ways of developing the methodology of health care management from the perspective of balanced strategic concepts for medical institutions, as well as improving the health care management system are scientifically substantiated. The main factors influencing effective health care management in terms of diversification of medical services are identified. The author's interpretation of the concept of "balanced strategic healthcare management" based on the subject-object approach is proposed. The target orientation is identified and the integral components of an effective healthcare management system are clarified. A diagram representing the relationship between functions and methods is proposed, demonstrating an applied model of the organization of the healthcare system depending on the level of management. The prerequisites for the creation of an integrated strategic health management system, the implementation of program measures to standardize the health system, and the implementation of adaptive target functions to achieve effective performance indicators for medical institutions are proposed. The features of the development of a healthcare organization, the strategic management of which is carried out by the tools of a system of balanced strategic management concepts, are revealed. The expediency (effect) is justified by the application of this system in the field of healthcare, which contributes to the achievement of operational excellence and further improvement of the healthcare organization.

**Key words:** management functions, complex healthcare institutions, effectiveness, balanced strategic healthcare management, complex healthcare organizations, analytic hierarchy process.

## Формирование и внедрение системы стратегического управления здравоохранением в республике Крым

И.А. Сухарева $^{1a}$ , О.С. Третьякова $^{1b}$ , Жильберт Мабиала $^{2c}$ , Е.В. Трусевич $^{3d}$ 

- $^1$ Институт «Медицинская академия им. С.И. Георгиевского», ФГАОУ ВО «Крымский федеральный университет» имени В.И. Вернадского», Бульвар Ленина, 5/7, Симферополь, Россия
- <sup>2</sup> Институт экономики и управления, ФГАОУ ВО «Крымский федеральный университет имени В.И. Вернадского», Проспект Вернадского 4, Россия
- <sup>3</sup> Братский государственный университет, Россия, Братск, ул. Макаренко 40, 665709 <sup>a</sup>sukhareva\_irina@mail.ru, <sup>b</sup>olga tretiakova@yandex.ru, <sup>c</sup>gilmabiala@mail.ru, <sup>d</sup>joint@brstu.ru Статья поступила 12.04.2022, принята 16.05.2022

Статья посвящена актуальным на сегодняшний день проблемам системного управления сферой здравоохранения и поиску путей ее решения через инновационную систему и сбалансированные стратегические концепции управления здравоохранением. Совершенствование управления в системе здравоохранения как в области улучшения медицинских услуг, так и в области социально-экономического развития учреждений здравоохранения будет способствовать улучшению качества трудовой деятельности. Выделены проблемные аспекты современной системы управления здравоохранением и обоснованы пути совершен-

ствования методологии стратегического управления в контексте применения эволюционно сбалансированной системы управления в сфере здравоохранения. Доказано, что управление здравоохранением становится важной проблемой федерального масштаба в связи с растущим спросом на высококачественные медицинские услуги, и для достижения этой цели используется множество методов и инструментов, включая цифровые и информационные. В работе научно обоснованы пути развития методологии управления здравоохранением с позиции сбалансированных стратегических концепций управления деятельностью медицинских учреждений, а также совершенствования системы управления здравоохранением. Выявлены основные факторы, влияющие на эффективное управление здравоохранением с точки зрения диверсификации медицинских услуг. Предложена авторская трактовка понятия "сбалансированное стратегическое управление здравоохранением", основанное на субъект-объектном подходе. Идентифицирована целевая направленность и уточнены неотъемлемые составляющие эффективной системы управления здравоохранением. Предложена диаграмма, представляющая взаимосвязи между функциями и методами, демонстрирующая прикладную модель организации системы здравоохранения в зависимости от уровня управления. Предложены предпосылки создания интегрированной стратегической системы управления здравоохранением, реализации программных мероприятий по стандартизации системы здравоохранения, реализации адаптивных целевых функций для достижения эффективных показателей эффективности деятельности медицинских учреждений. Выявлены особенности развития организации здравоохранения, стратегическое управление которой осуществляется инструментами системы сбалансированных стратегических концепции управления. Обоснована целесообразность (эффект) от применения данной системы в области здравоохранения, которая способствует достижению операционного совершенствования и дальнейшего развития организации здравоохранения.

**Ключевые слова:** функции управления, сложные учреждения здравоохранения, эффективность, сбалансированное стратегическое управление здравоохранением, сложные организации здравоохранения, процесс аналитической иерархии

#### 1. Introduction

With the development of the sectoral systems of the Russian economy in general and Crimea in particular, healthcare institutions are also changing the managerial orientation of their strategy towards increasing their resource potential as the main competitiveness factor. As a result, the strategic healthcare management is increasingly focused on the management of assets, and strategic management is moving to a qualitatively new level of development, that is, to the level of balanced strategic management. In contrast to strategic management as a system for development and implementation of a strategy in the interests of all healthcare systems, heads of structural divisions, branch workers and patients, balanced management will be a system for managing a strategy for increasing the resource potential and authorized capital of medical institutions in terms of all groups of objective and subjective factors.

The need for the increase in competitive advantages of organizations is in the center of the problem of creating conditions for increasing the economic efficiency of their activities, which is the result of adequate management strategies. This point of view is supported by a group of researchers led by Rafiq M., who emphasized that "Competition requires form organizations to develop a sustainable, quickly adaptable to market economy, strategic management system to effectively improve the efficiency of the organizations", while emphasizing the importance of the Balanced Scorecard Strategic system proposed by Robert S. Kaplan and David P. Norton [22, 23]. Some authors point to the fact that the effectiveness (efficiency) of organizations largely depends on welldeveloped strategies as a factor in their sustainable development of the organization [3].

Application of the basic concept of balanced strategic healthcare management (BSHM), in our view, will mean the qualitative method of Balanced Scorecard developed in the early 1990s by Robert S. Kaplan and David P. Norton as a management system that enables any organization to translate the vision and strategy into action [1, 15].

Along with the change in the concept of strategic development, the BSHM is being transformed from a traditional method into an integrated strategic management system as a more complex sectoral system. Certain signs of this trend were noted by many Russian [8, 19] and foreign [9, 24, 26] researchers. However, the existing research deals mainly with the subtasks of the evolution of strategic management based on BSHM considering BSHM in a limited methodological scope. The methodological aspects in formation of a platform for managing the resource potential of medical institutions and self-diagnosis of their strategic potential as a necessary condition for the effective formation of its balanced management are imperfect and insufficiently studied [24, 25].

The main attention is paid to BSHM methodological principles development in the process of forming a balanced healthcare management, to integration of methodological approaches and tools of strategic management and the BSHM, to their enrichment with non-traditional methods.

Accordingly, the goals of the study are to generalize and develop scientific and methodological foundations, to develop a methodology for strategic management of the entire healthcare system in the context of its evolution into balanced management, to outline promising directions for its improvement. This includes consideration of the following problems: identification of the main problematic issues and analysis of prerequisites for the integration of strategic man-

agement systems, approaches, methods and BSHM with non-traditional eventological approaches in combination with the analytical hierarchy process; definition of BSHM methodology as a balanced health management system; analysis of the methodological foundations of the formation of an indicator management platform using electronic scoring methods and an analytical hierarchy of the process; substantiation of their possible applications for assessing and adjusting of the medical strategy [10, 15, 22].

The problem of management in the healthcare sector in the modern conditions, improving the strategic management are the most important elements of investment and innovative design, the implementation of which is aimed at ensuring effective transition to an innovation-oriented business model for development of the entire healthcare sector. Implementation of such a model will create conditions for formation of a strategic competitive advantage of the entire local medical system.

Research on this topic remains highly relevant. The solution to the problem of designing the organization of healthcare management in the context of the transition to the knowledge economy lies in the field of improving the existing processes of organizing management, considering the need to improve the efficiency of management of human, information and organizational capital, which are core competencies in healthcare system development [10, 20].

These circumstances confirm timeliness and relevance of the presented study on evolution of management organization processes in the healthcare sector, the main goal of which, undoubtedly, is to introduce an integrated system of planning, organization, motivation, control and coordination in the health sector in the way of minimization of economic loss from morbidity, disability and mortality.

Achievement of this goal presupposes formation of effective systemic activities addressing both the entire healthcare industry and each medical institution in particular. This requires development and implementation of new principles, approaches, methods and models for managing all parts of medical institutions of all forms of ownership. Such principles are aimed at achieving a decent level of feasibility of interrelated tasks, of planning functions, forecasting, organization and control in the health sector. This serves the purpose of growth in the availability of timely and high-quality medical care as well as improvement in the quality of life and health of citizens and the increase in economic efficiency of medical institutions.

In the context of this article, aspects of the healthcare management system and principles of effective management of the health service indication system are summarized. We have considered the features of the existing management system in the healthcare sector and its main elements as have we clarified basic principles of effective enterprise management. Main problematic situations in administration and indicative management in the industry have been identified. Directions and recommendations for improving the design of healthcare management institutions have been proposed.

The information base used during the study is theoretical and methodological scientific works of local and foreign scientists who have studied the economic and managerial problems of the healthcare sector. The problems of healthcare management in general, the organization of management in medical institutions have been studied by many Russian and foreign scientists.

The studies concerning modern approaches to strategic management and their implementation in the healthcare sector were reflected in many scientific works [18, 24]. The relevance of such a solution in the existing Russian healthcare system is emphasized in this article. Presently, the problems of management methodology system improvement, innovative and investment-oriented business models for the medical service system evolution have not been sufficiently studied and need further research. It is also required to develop an integrated approach to assessing health management and substantiation of recommendations for its improvement in modern conditions.

#### 2. Materials and methods

The theoretical and methodological basis for the work was formed by individual provisions of economic theory and management science. The used sources of information and the applied methods made it possible to achieve the goal and implement the objectives of this article, that is, the theoretical aspects of medical management are generalized, and its main problems are revealed in the modern conditions of diversification in the medical service provision system.

The following research methods were used: theoretical methods of scientific knowledge (axiomatic method, hypothetical method, formalization, abstraction, logical methods (analysis, synthesis, induction, deduction, analogy) - to generalize the scope and basis of healthcare management; the heuristic method - during the formation of the author's position on healthcare management and informal analysis - for compiling a platform for managing the BSHM; analytical hierarchy process - for structuring the management key performance qualitative parameters (MKQPP), system-logical and lexico-graphic - for modeling systems for making strategic management decisions in healthcare institutions as an organizational and infrastructural environment and development of a proposal for balanced healthcare management; critical analysis - in the formation of comparative, alter-native approaches to the BSHM system for Crimea.

A methodological approach to structuring MKPPs using the results of qualitative analysis and the process of analytical hierarchy is proposed. Its practical significance includes the possibility of achieving the target of BSHM, the ability to determine the degree of performance of healthcare institutions. The ways of implementing the methods of digital analysis and analytical hierarchical process for assessing and adjusting the strategy of the modern health administration system have been studied. Integration of digital analysis with BSHM methodology ensures effective vertical communication as a key principle of our proposed healthcare management concept, which extending the scope of strategic responsibility to subordinate owners of the initiative.

The research design involves collection and analysis of sources (information). For this, a descriptive approach was applied, which made it possible to identify modern problems in the healthcare industry, which, in our opinion, provides for identification of various aspects in areas for improving healthcare management and strategies for their implementation [24, 28].

Therefore, in order to effectively understand the concept of healthcare management and to formulate adequate proposals regarding the issues of its improvement based on the balanced scorecard system, we carried out a structured assessment of peerreviewed local and foreign literature presented in the references highlighting on historical images from the healthcare management textbooks as well as printed or published historical syntheses given by appropriate professional medical researchers. Lastly, in describing the current state of healthcare management, the study drew on parts in available experience of implementation and assessment of the efforts made in management capacity development. And, the review of any relevant references started with detailed searches for healthcare management by assessing various thematic abstracts.

Scientific approaches are systematically applied, which made it possible to generalize the theory and concepts of the strategic healthcare management, and compare different points of view on the problem under study. The vision of the problem and possible ways of its solution are proposed on the base of theoretical analysis.

### 3. Results

The analysis of healthcare management aspects described above indicates the diversity of its levels, which varies depending on the requirements for the qualifications imposed on healthcare managers. In Crimea, there is a clear demand for outstanding healthcare managers, especially with the advent of sensitive healthcare. According to the existing re-

search, the local framework of healthcare management elevates the role of professional management, the standard for healthcare management and the monitor function that ensures that healthcare workers adhere to the standards set [24, 32].

In normalization of the Crimean healthcare sector in accordance with general federal standards, current healthcare management issues reveal the essence of Russian medical services. There are many healthcare management challenges in Crimea [24, 28].

Current regulatory changes have also introduced issues for regional medical institutions. Other challenges in the healthcare sector have appeared more recently as a result of economic changes and technology innovations.

It is well established that medical institutions are complex organisms by their functional structure. Their management presupposes the use of methods and functions adapted to the conditions of activity at each individual institution. This is where the difficulty lies, not only in defining, but also in achievement of healthcare management goals and objectives. Answers to all questions arising in the framework of the healthcare management problem complexity were formulated by A.A. Muratalieva [19]. However, these still require reconsideration. In the formulation of the strategic health management concept, we draw on the opinion of Jim Higgins's team, who focused on three to five affected areas [13]:

- General problems of healthcare management related to the issues in the organization, funding, compulsory health insurance system, etc.;
- Information management (digital, information technology) problems in healthcare facilities, which explain the need for creation of conditions for information security and patient data protection;
- The problem of public health orientation towards the choice of behavior, lifestyle and health of the population, provision and limitation of various diseases;
- Financial Issues in Healthcare Institutions. A major financial issue faced by Crimean Healthcare administrative authorities is the request for offering affordable healthcare services despite their rising prime costs;
- Economic Challenges in the Healthcare Industry. Healthcare management issues are also being mitigated by mergers between providers of all levels.

In this complex healthcare system, many healthcare management problems arise and medical institutions are facing increased costs, regulatory changes, coding updates, inefficiencies, security issues, and disruptive technology[24] (Stolyarov and Gossen 2015). Therefore, the goal of healthcare management is functioning of the regional healthcare sys-

tem. The goal of regional healthcare management imment is to increase medical care system efficiency, that is, to increase the of social, medical and economic efficiency indices in the healthcare sector [9, 11. 32].

In realizing the goals of a balanced strategic healthcare management, an important role belongs to the priority measures aimed at modernizing the healthcare organization. All priorities are focused on solving the problems of financial fragmentation and budgetary imbalances outside; duplication of management functions; lack of administrative vertical, inertia of alternative in making managerial decisions; low efficiency in the use of regulators, forecasting and design methods; lack of information and analytical analysis, etc. [29, 30].

The foregoing indicates the need for structural changes in the industry consisting in introduction of financial and stimulating mechanisms for implementation of the functions of medical institutions. The functions of the healthcare management system in the region are to implement the state regional health policy, monitor the activities of all sectors of the regional healthcare system. It is entrusted with the functions of implementing sufficient, fair and sustainable funding of the sector, productive use of scientific knowledge and technology in development of healthcare in the region. Crimean healthcare system has some drawbacks that impede achievement of its effective functioning and affect its activities.

In addition to financial problems, there are problems of organizational and structural nature. There is no clear separation of powers and functions in the field of public health management. The essence of the characteristics is the availability of healthcare facilities, many of which duplicate each other's functions. The presence of such duplication leads to slowness, uncontrollability and lack of functionality [27, 29].

Besides, there is a number of key problems within the very structure of management bodies, such as the lack of a mechanism for making managerial decisions; the absence of advanced planning methods that would stimulate more efficient use of the healthcare resource potential; the lack of an informational and analytical mechanism for managing the activities of medical institutions; the imperfection of the system for training professional personnel in the field of healthcare, etc. [14, 27].

Consequently, managers must pursue timely policies to address the following tasks: development and implementation of targeted programs; providing a high level of professional training; active financing of scientific research; wide development of the material and technical base of healthcare institutions; equalization of funds of territories through the use of a subsidizing mechanism; improving the system of financial

prove

assistance to medical institutions for socially significant and mass diseases.

Since 2014, the legislation has been gradually developing a new model (the model of controlled "soft" decentralization) of distribution of powers between different levels of government with preference for the practice of long-term and medium-term planning [2, 10].

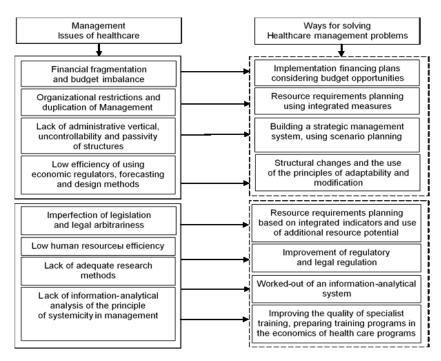
Based on all of the above mentioned and previously published works (Toussaint 2016), systemic issues and problems of strategic healthcare management and ways to solve them can be presented in the figure below (see Fig. 1) [27].

It seems possible to overcome financial fragmentation and budgetary imbalance in the development and implementation of targeted programs, given the capabilities of budgets on various levels. Structural adjustment and the use of adaptability and modification principles make it possible to overcome organizational barriers, duplication of managerial functions and create an administrative vertical.

The design of a strategic management system (BSHM) will provide an alternative in managerial decision-making and help increase the efficiency of using economic regulators. Wherein, in order for regulators to work, it is necessary to plan resource requirements using modern approaches based on the analysis of integral indicators [9, 24].

According to the above-mentioned, the issues of improving the management system in Crimean healthcare should be resolved in the following aspects:

- Improvement of the legislation for adoption of regulatory acts governing the management of the health system is necessary;
- Formation and design of an informationanalytical system is required to improve the process of exchange and processing of information and achieve systematic management;
- Enhancement of efficiency in the use of human resources can be solved by using high-quality training of specialists and planning regarding their needs.
- Proposals for improving the healthcare management should be formed for all factors that have an impact on the system and ensure the effectiveness of its work. That is, in the following main areas: structure, tasks, technologies and personnel, interaction with suppliers of financial resources, intra-system interaction with management bodies, compulsory medical insurance funds, insurance organizations, between patients and medical institutions. Today, primary issues and tasks of the management system is to develop a strategic plan and build a forecast of healthcare development on the basis of a systemic study of the socio-medical and socio-demographic situation in Crimea.



**Figure 1.** Systemic problems of strategic healthcare management and ways to solve them Source: compiled by authors based on J.S. Toussaint's research [27]

On the basis of system-logical and lexical-graphic presentation of organizational and infrastructural environment for balanced strategic health management (BSHM), a diagram can be drawn up (see Fig. 2) [24].

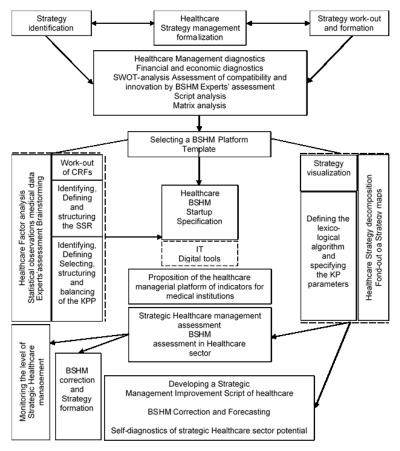
Accordingly, the improved scheme of management methodology in healthcare is presented as the integration of systems, approaches, methods and BSHM with non-traditional eventological methods in combination with the process of graph-analytical hierarchy. And from the point of view of eventology, subjective observations and lexico-graphic apparatus make possible to identify patterns in the implementation of system functions and the management process.

In accordance to the aforesaid, it will quire to outline promising improvement directions for Crimean healthcare including its five important aspects in order to develop a methodology for strategic healthcare management in the context of its evolution [17]:

- Preconditions for integrating the methodology of the eventological analysis with the methodology of balanced healthcare institution management.
- Formation of a balanced management system for the healthcare sector implies the creation of an appropriate organizational and infrastructural environment, which we define as a strategic responsibility (SSR) of functional managers (leaders), tasks that will be performed in the system of three main factors: strategic goals (Critical Success Factors), strategic competencies (Key Performance Indicators) and strategic resources (tangible and intangible), which correlate in the achievement of the target mission, vision and value of medical institutions, which are the core of the strategic healthcare institution management.

- BSHM methodology: in our opinion, the balanced management system of healthcare institutions should be built as a structural and logical model of the BSHM methodology of the modern healthcare system (Fig. 2).
- Formation of the management panel of qualitative indicators using the methods of analytic hierarchy process. We consider the BSHM methodology as a system involving: traditional methods technologies of management functions decompo-(managerial, financial and diagnostics, Script analysis, brain-storming); and non-traditional methods of eventological analysis and analytic hierarchy process. The methodology of the BSHM as a balanced healthcare institution management system combines technics technologies of interrelated structural elements of strategy management.
- Self-diagnosis of the strategic potential of the healthcare sector and its institutions using digital platform. A prerequisite for the effective formation of a BSHM is an appropriate adequate level of the strategic potential of medical institutions, their intellectual capital as the main source of their economic efficiency.

The strategy requires self-diagnosis by healthcare institutions of their potential in the context of BSHM methodology. Such self-diagnosis of strategic potential of medical institutions is based on a combination of information technology and digital platforms, which makes it possible to identify main problems and factors in enhancement of economic efficiency of the entire healthcare system which is the main goal in healthcare management system improvement [27, 29].



**Figure 2.** System-logical and lexico-graphical structure of the BSHM as a system of balanced healthcare management

Source: self-authors' compilation based on S.A. Stolyarov's research [24]

#### 4. Discussion

Improvement of healthcare institution management methods should be based on the principles of integration of traditional and modern methods and forms of management, adequate to the essence of market socio-economic transformations. The opinions and points of view many researchers such as Stolyarov S.A. [24](Stolyarov and Gossen 2015), Giacomelli G. [10], Okumus F. et al. [20], Yurista A.V. [32], Weaver C.A. et al. [31], Begun T.V. [5] on this issue are very different, both objective and subjective. This allowed us to substantiate ways to improve the healthcare management system adequate, to the modern healthcare system.

A feature of managerial functions performance is the need to consider the above-mentioned factors in formation of a support system for healthcare development and the system of medical care with human resources. Additionally, there is the factor of uncertainty and risk in the design of a mechanism for provision of information resources for activities of medical institutions.

The functions of organization and motivation should be performed considering two factors. Firstly, there is an increase in the importance of the needs of self-expression and self-esteem in the structure of the needs of staff. Secondly, there is the need to implement measures increasing staff confidence in corporate values of medical institutions, which is due to an increase availability of information [21, 25].

As part of the control function, a feature of its performance is the need to use measuring instruments that allow adequate assessment of the information space dynamics and the use of human potential. A specific feature in implementation of the regulatory function is the introduction of adaptive tools for regulating the development of healthcare by deviations, which will ensure an adequate response of the management system to changes in internal and external environment [4, 12, 17, 26]. Furthermore, as part of the accounting function, it is necessary to formulate a toolkit that would allow assessment of social and informational effects of development of individual health sectors, which are key characteristics of effective use of human and informational potential.

Finally, execution of the general function of analysis involves introduction of analytical mechanisms that allow one to study the influence of non-financial effects on the financial result formed by healthcare institutions. Emphasizing the role of functions in the methodology of a balanced health management strategy, an important point is definition of the components in the proposed strategy system [20, 23]:

- Tactical management: a process in which the functions of organization, coordination and control are carried out using organizational, administrative and economic methods.
- Operational management: the process of implementation, mainly, of the motivation function, which consists in encouraging the heads of functional services to achieve goals of maintaining and strengthening public health and increasing of citizens' life expectancy.

All identified functions and methods of the concept of a health management strategy should ensure the functioning of mixed models of health care delivery. Considering the interconnection of functions and methods mentioned above, we can single out the goals, concepts and programs of the model of the proposed strategic healthcare management:

- Basic goals: Preserving the state healthcare system; Improving the level of reproductive health; Reducing mortality and morbidity from manageable causes; Optimizing personnel policy.
- Concept documents: a program for optimizing the medical and demographic situation; a program for stabilizing health and healthcare.
- Complex targeted programs. Resource support of the following programs: jurisdictional, normative, organizational and methodological, financial, personnel, material and technical equipment, digital, IT and informational.

Thus, the implementation of strategic healthcare management has a number of important features that determine the content and essence of general management functions, which, in turn, determines the processes of functioning and development of this sector. The development of adaptive management in healthcare presupposes the need for formation and implementation of modern management organization forms. Such forms would be based on the construction of common chain communication networks both within the organization and with external counterparties of direct influence, which implies the maximum degree of interaction between all participants [16, 19, 32].

This approach to organization of management can be implemented in the digital and information technology format (virtual, network or modular organizational structures), a distinctive feature of which is presence of modern instrumental structures, the responsibilities of which include distribution of powers and responsibilities between members (departments) of medical institution management.

Formation of an organizational structure of management of such types allows you to attract affiliated legal entities and individuals to the implementation of tasks, as well as establish direct and reverse communication links between them, which makes it possible to ensure maximum efficiency of interaction be-

tween the elements of the organizational structure due to reduction of ineffective relationships [12].

It is also very important to provide the core of the management organizational structure. Its presence is to address the reduction in flexibility and adaptability of the health management organization system. It shall increase the efficiency and reliability of communication links between elements of the management organizational structure. An interesting point is the implementation of the principles of the unity of purpose of the entire system of BSHM. Within the context of the healthcare development principles, this is aimed to ensure elimination of information contradicting the strategic and tactical plan of the industry objectives from communication networks [6].

Choice of the indicated priority points in healthcare management enhancement based on improvement of strategic principles shall systematize the sequence of processes within the framework of a unified management system. What has been said thus correlates with the general tasks in development of a set of qualitative indicators for assessment of healthcare management effectiveness in the context of the BSHM system [20, 24].

The foregoing presupposes formation of a project model of BSHM organization, which makes it possible to assess the level of the organizational reserve in the management system of medical institutions, assess the potential for growth in management efficiency while improving the organization of the healthcare institutions management system [1, 7, 10]. The implementation of such an integrated medical care management system as BSHM in Crimea has the ultimate goal of ensuring the of the state guarantees program implementation. The program is balanced in volume with the financial resources planned for its implementation.

It is quite important to say that the quality of healthcare provision in every healthcare institution depends on the level of its management's professionalism. Healthcare management is very important for the patients. The functionalities, roles, and responsibilities are only effective if there are adhered to by healthcare managers.

## 5. Conclusion

The conducted informal analysis of management problems made it possible to establish the prerequisites for creation of an integrated system and strategy for healthcare management. These include the proposed measures to standardize medical services as a necessary step towards creating an effective healthcare management system. The system to be created shall be based on the principles of forming an integrated planning, organization, control and incentives system in order to improve the efficiency of medical institutions. That is, to reduce and limit the level of economic losses from morbidity, disability and mortality.

BSHM methodology as a balanced system of health management strategy unites techniques and technologies of interrelated structural strategic management elements. The integration of information technology and digital tools with the BSHM method ensures effective functioning of vertical communication as the main principle of balanced strategic management in healthcare facilities.

Based on the foregoing, the algorithm for implementation of a systematic approach to improving the control system is to create an ideal design model of the process adapted to modern conditions. One of the stages of systems analysis is modeling of alternative systems of healthcare organization and management. Within the framework of this systematic approach, it is necessary to propose a simulation model of BSHM. The model suggested would be a variation compliant with Crimean practice in the form of a method of structural-situational economic modeling healthcare. This is in line with the principles of the managed healthcare facility concept as part of an integrated systems management approach in healthcare.

Thus, management of medical institutions involves transformation of individual functions. For example, the chief physician must have the entire arsenal of functions and management methods supplemented with systematic qualification of medical specialists. Lack of economic and managerial training of a number of managers in medical institutions determines their low competence in making managerial decisions, which in turn leads to a decrease in healthcare management efficiency. Healthcare management involves management of labor, financial and material resources of medical institutions. Most obvious and understandable in its essence, personnel management is associated with a huge number of problems and contradictions. Conclusions:

- To ensure effective management in healthcare, it is necessary to be guided by extended content of managers' general functions.
- Formation of a rational management structure is associated with the need to introduce adaptive

## References

- 1. Akbarzadeh, Farshad. 2012. "The Balanced Scorecard (BSC ) Method: From Theory to Practice." Oman Chapter of Arabian Journal of Business and Management Review 2 (5): 88-98. https://doi.org/10.12816/0002273.
- 2. Angheluta A, Mihoreanu L, Costea C, and Stefanescu A. 2016. "The Health System Management in Countries with Financial Needs (CFN)." Innovation, Entrepreneurship and Digital Ecosystems. PubMed PMID: WOS:000390841500007., 98-109.
- 3. Ardito, Lorenzo, and Rosa Maria Dangelico. 2018. "Firm Environmental Performance under Scrutiny: The Role of Strategic and Organizational Orientations." Corporate Social Responsibility and Environmental Management 25 (4): 426-40. https://doi.org/10.1002/CSR.1470.

- management structures with increased indicators of flexibility and adaptability including BSHM into management practice.
- Rational management of healthcare sector development should be based on implementation of a priority organizational management structure, the selection procedure of which is algorithmized.
- Effective management of medical institutions' activities within the management of deviations should be based on implementation of practice for assessment of effectiveness and quality of management processes. Such assessment practice would, in turn, be formed within the context of basic, auxiliary and management processes.
- Rational healthcare management presupposes the need to form a system of limitations in resource provision for implementation of management processes aimed at performing the general function of development management in the healthcare sector.

As a result of the study on the existing models of the healthcare management system organization in the Republic of Crimea, considering our views on functions and methods of management, a diagram presenting relations between functions and methods is proposed, demonstrating an applied model of the healthcare system's organization depending on the level of management as a balanced strategy for managing healthcare institutions.

Thus, for the proposed balanced strategic management of healthcare, the most characteristic functions are forecasting and planning. These make it possible to carry out goal-setting and establish forecast (planned) values, while the main methods on this level would be legal, organizational and administrative ones. Greater understanding of complexity of the researched issues will expand the significance of educational, research and practical activities in the field of healthcare management in order to improve the quality of medical care and public health.

- 4. Azarova T.V., and Abramova L.A. 2003. "Ethical and Psychological Aspect of Entrepreneurship as a Prerequisite for Sponsorship." Kirovograd.In CPTI. Vol. 1.4, pp 26-31.
- 5. Begun T.V. 2017. "Modern Problems of Management in Healthcare." Young Scientist 22 (156): 416-18. https://www.elibrary.ru/item.asp?id=29314269.
- 6. Bresnen, Mike, Damian Hodgson, Simon Bailey, Paula Hyde, and John Hassard. 2017. "Managing Modern Healthcare: Knowledge, Networks and Practice." Managing Modern Healthcare: Knowledge, Networks and Practice, January, 1-207.
  - https://doi.org/10.4324/9781315658506.
- 7. Dash, Sabyasachi, Sushil Kumar Shakyawar, Mohit Sharma, and Sandeep Kaushik. 2019. "Big Data in Healthcare: Management, Analysis and Future

- Prospects." Journal of Big Data 6 (1): 1-25. https://doi.org/10.1186/S40537-019-0217-0/FIGURES/6.
- 8. Diveeva AA. 2017. "Health Care Management Problems: Regional Aspect." Multilevel Social Reproduction: Theory and Practice 13 (29): 99–105.
- 9. Ergin S.M., Trusevich E.V., Cherutova M.I., Kopaenko I.V. (2021) Socio-economic determinants of changes in the regional entrepreneurship environment development. European proceedings of social and behavioural sciences EPSBS. II International conference on economic and social trends for sustainability of modern society, 19-21.05.221. ISO London Limited European Publisher, pp 287-300.
- Giacomelli, Giorgio, Francesca Ferré, Manuela Furlan, and Sabina Nuti. 2019. "Involving Hybrid Professionals in Top Management Decision-Making: How Managerial Training Can Make the Difference." Health Services Management Research 32 (4): 168–79. https://doi.org/10.1177/0951484819844778.
- Ingram, Tomasz, and Wojciech Glod. 2016. "Talent Management in Healthcare Organizations - Qualitative Research Results." Procedia Economics and Finance 39: 339–46. https://doi.org/10.1016/S2212-5671(16)30333-1.
- 12. Issel, Michele L. 2020. "Value Added of Management to Health Care Organizations." Health Care Management Review 45 (2): 95. https://doi.org/10.1097/HMR.0000000000000280.
- 13. James Ryan Reblando Google Scholar." n.d. Accessed January 11, 2022. https://scholar.google.com/citations?user=AU6jeVwA AAAJ&hl=en.
- 14. Kamalova M., and Marasulova M. 2020. "Modern Problems of Management in Healthcare." World Science 1 (34): 246–49.
- 15. Kaplan, Robert S, and David P Norton. 1991. "The Balanced Scorecard-Measures That Drive Performance Harvard Business Review. vol 70, 1:71–79.
- Ketelhöhn, Niels, and Luis Sanz. 2016. "Healthcare Management Priorities in Latin America: Framework and Responses." Journal of Business Research 69 (9): 3835–38.
  - https://doi.org/10.1016/J.JBUSRES.2016.04.008.
- 17. Kwamie, Aku. 2015. "Balancing Management and Leadership in Complex Health Systems Comment on 'Management Matters: A Leverage Point for Health Systems Strengthening in Global Health." Kerman University of Medical Sciences 4 (12): 849–851. https://doi.org/10.15171/ijhpm.2015.152.
- 18. Len' LS, and Nikulina TN. 2016. "Management of a Medical Institution in Modern Conditions: Problems and Solutions." Vestnik AGTU Ser: Economics 2 (February): 76-
  - 80.https://www.elibrary.ru/item.asp?id=26210369&
- 19. Muratalieva AA. 2018. "Innovations and Modern Trends in Healthcare Management in the Republic of Kazakhstan and the Russian Federation." Scientific Works of the Moscow University for the Humanities 5 (May): 65–74.
- Okumus, Fevzi, Mehmet Ali Köseoglu, Alfonso Morvillo, and Mehmet Altin. 2017. "Scientific Progress on Strategic Management in Hospitality and Tourism: A State-of-the-Art." Tourism Review 72 (3): 261-73.

- https://doi.org/10.1108/TR-03-2017-0047.
- 21. Querstret, Dawn, Katie O'Brien, Debra J. Skene, and Jill Maben. 2020. "Improving Fatigue Risk Management in Healthcare: A Systematic Scoping Review of Sleep-Related/Fatigue-Management Interventions for Nurses and Midwives." International Journal of Nursing Studies 106 (June).
  - https://doi.org/10.1016/J.IJNURSTU.2019.103513.
- 22. Rafiq, Muhammad, Xingping Zhang, Jiahai Yuan, Shumaila Naz, and Saif Maqbool. n.d. "Impact of a Balanced Scorecard as a Strategic Management System Tool to Improve Sustainable Development: Measuring the Mediation of Organizational Performance through PLS-Smart." https://doi.org/10.3390/su12041365.
- Roberts, Jess P., Thomas R. Fisher, Matthew J. Trowbridge, and Christine Bent. 2016. "A Design Thinking Framework for Healthcare Management and Innovation." Healthcare (Amsterdam, Netherlands) 4 (1): 11–14. https://doi.org/10.1016/J.HJDSI.2015.12.002.
- 24. Stolyarov, S.A., and I.E. Gossen. 2015. "Management in health care is an actual component of modern administration."

  СовременныеПроблемыНаукииОбразования (Modern Problems of Science and Education), no. № 5 2015. https://doi.org/10.17513/SPNO.128-22473.
- 25. Sukhareva, I.A. 2018. "Management of Mechanism Design as an Important Way to Improve Public Health." Medical University 1 (1): 44–46. https://doi.org/10.2478/MEDU-2018-0007.
- 26. Tishchenko T.A., and Sabirova Z.E. 2015. "Features of State Management of the Healthcare Sphere at the Present Stage in Russia." Vestnik UGUES. The Economic Series 4 (14): 45–49.
- 27. Toussaint, John S. 2016. "Healthcare Improvement Can't Happen without Better Management." Healthcare 4 (3): 127–28. https://doi.org/10.1016/j.hjdsi.2016.02.008.
- 28. Tretyakova O.S., and Mogilevsky A.A. 2015. "Healthcare of the Republic of Crimea: A Year Later." Journal for Continuing Medical Education of Doctors. ARGSTEV: News, Opinions, Training 2 (February): 145–46.
- 29. Valuev Yu. M. 2019. "Problems of Public Procurement Management in the Sphere of Health Care of the City of Moscow." Scientific Works of the Moscow Humanitarian University. 2 (February): 33–37.
- Voelker, Kathleen E., Jonathon S. Rakich, and G. Richard French. 2001. "The Balanced Scorecard in Healthcare Organizations: A Performance Measurement and Strategic Planning Methodology." Hospital Topics 79 (3): 13–24. https://doi.org/10.1080/00185860109597908.
- 31. Weaver, Charlotte A., Marion J. Ball, George R. Kim, and Joan M. Kiel. 2015. "Healthcare Information Management Systems: Cases, Strategies, and Solutions: Fourth Edition." Healthcare Information Management Systems: Cases, Strategies, and Solutions: Fourth Edition, September, 1–600. https://doi.org/10.1007/978-3-319-20765-0.
- 32. Yurista A.V., and Belikov D.V. 2016. "On the Effectiveness of the State Program for the Development of Healthcare in the Republic of Crimea." In the Collection: Young Science Collection of Scientific Papers of the Scientific and Practical Conference for Students and Young Scientists., 290–92.