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**Marketingul Sistemelor de Sănătate în Rusia și România:**

**Perspective de Dezvoltare și Sugestii de Îmbunătățire (română)**

**Marketing of Healthcare Systems in Russia and Romania:**

**Development Prospects and Suggestions for Improvement (engleză)**

**REZUMAT**

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## 1. Goals, objectives and methodology of thesis

The **main purpose** of this thesis is to find out how patients in the two countries studied relate to healthcare, how and what services they receive, how much they pay in terms of their characteristics, with an emphasis on changes in rural and urban environments, in order to develop recommendations for future strategies for proper and high-quality medical care for all people living in currently in Russia and Romania. The aim of the study is to identify effective measures to improve health systems through marketing in Russia and Romania, which improve the quality of life of peoples. It consists in offering those factors that can contribute to reducing barriers to ensuring average quality of healthcare and rational use of financial resources. Achieving the goal, this thesis is written to improve the public health of two observed countries: Russia and Romania. Improving the prospects for development and proposals for further directions in medicine, taking into account the needs of the changing world and the sensitivity of certain social categories, since the existing ways of regulating healthcare in the two countries are at a low and medium level. The resulting information will contribute to the justification that will be carried out in order to formulate proposals and solutions that improve the quality of healthcare and increase the attractiveness of public clinics in urban and rural areas.

The **main objectives** of the thesis:

01. Determine the current level of knowledge about health systems;
02. Identify problems for healthcare systems in Russia and Romania;
03. Monitoring the coordinates of healthcare systems in Russia and Romania;
04. Determine the marketing perspective in healthcare systems;
05. Conduct a qualitative study of experts' opinions on healthcare;
06. Conduct a quantitative marketing study of healthcare in Russia and Romania;
07. Provide marketing proposals for healthcare systems in Russia and Romania.

Research methodology. In the **first chapter** of the thesis there are directions for achieving the first goal – to identify the most common ideas about the marketing of the healthcare system, which were emphasized in the main literature. To achieve this goal, a comprehensive evaluation of the literature was carried out, and numerous competitive advantages and disadvantages of medical models were evaluated, which require special attention from governments. As a result of the results obtained, the quality of life of the population has improved, and life expectancy has increased. These findings have implications for scientists, industry and government, all of whom must work together to improve the healthcare system through marketing proposals.

The **second chapter** of the thesis aims to achieve the second goal – it focuses on determining the best model for financing healthcare by examining the advantages and disadvantages that have been disputed by many scientists. Particular attention is paid to the potential benefits for both the Russian and Romanian health systems. To achieve this goal, a thorough study of the literature was conducted, and numerous competitive advantages and disadvantages of financial models were identified. The main conclusions of the study include that the financing of the healthcare system should be based on hybrid sources and that the funds received should be used appropriately to provide additional value. The quality of life of the population will improve, and life expectancy will increase if sufficient funding is provided. The results of the study have implications for the government, the medical community and the scientific community, all of which should cooperate to improve the health system. A SWOT analysis was carried out.

The **third chapter** of the thesis is aimed at achieving the third goal – to study the current state of the healthcare systems of Russia and Romania, as well as the structure of their functions. Schema administration is evaluated and a statistical array is performed. The long-term viability of the healthcare industry is considered as the main problem of each country. The evolution of the organizational structures of the national health system is investigated using comparative historical methodologies, and this chapter focuses on broad scientific methods of synthesis and comparative analysis, ranking and grouping.

The **fourth chapter** of the thesis is aimed at achieving the fourth goal – the search for the possibility of using marketing tactics to improve the quality of health systems in these countries is discussed in the fourth chapter of the study. Thus, health system administrators can use market orientation to stimulate innovation, efficiency of budget allocation and quality of medical services. Finally, it discusses how to use the marketing mix (7-P).

The **fifth chapter** of the thesis is aimed at achieving the fifth goal, it shows the qualitative extraction of opinions of experts in the field of healthcare. In this chapter, the main attention was paid to complications, since the observed countries have a relatively low health quality index among developed European countries. The result of this chapter is a table of promising hypotheses that should indicate the required shortcomings that need to be improved. Such topics of dialogue with experts as the main problems of healthcare systems in the analyzed countries, healthcare financing in Romania and Russia, general management practices in Russia and Romania, social problems in healthcare in each country, marketing strategies and innovations were touched upon. The results are extracted from the opinions of experts and at the end of each section shows the percentage ratio.

The **sixth chapter** of the thesis is aimed at achieving the sixth goal of the thesis. The chapter is devoted to quantitative research. Due to the existing need to improve the healthcare system, the focus is on the difficulties of healthcare systems in Russia and Romania from the point of view of patients. The purpose of the chapter is to identify the attitude of patients to the main problems of the systems in the two countries and their satisfaction with public clinics. These indications were analyzed depending on the respondents' area of residence. The results of this study can help decision makers identify problems that require specific improvements, adjustments and innovations.

The **seventh chapter** of the thesis aims to achieve the last seventh goal – it offers marketing proposals and actions for the healthcare systems of Russia and Romania, so that they contribute to the achievement of goals based on descriptive analysis and a matrix of satisfaction with public clinics. It is divided into 2 parts: macro-level and micro-level criteria, in which additional marketing offers for both observed countries were predetermined. At the macro level, the text focuses on tips for improvement in the field of innovation and quality of medicine. At the micro level, the results of the analysis (7-P) are considered, in which proposals were identified using an assessment of satisfaction with importance.

## **2. Structure of thesis**

Thesis consists of an introduction, seven chapters, including 21 paragraphs, conclusions and a list of sources used. The main text is presented on 210 pages, contains 39 figures and 42 tables. The list of sources includes 251 items.

### **2.1. The relevance of the topic of the thesis**

Today, healthcare is an integral part of every person's life. But not everyone is happy with this in Russia and Romania for many reasons, some of which are: continuity and obsolescence of the healthcare model, relatively low standard of living, lag in the technological process and staff training. Thus, all the main marketing indicators suffer: "Product, Price, Placement, Promotion, Staff, Process, Physical evidence". From the point of view of the study, the comparison of Russia and Romania is appropriate in this context, since all of the above problems somehow have a strong impact on healthcare in these countries. Despite the fact that today Romania and Russia have fewer common intersections than in the previous century, this direction of the thesis is still applicable. In the last century, state-funded healthcare systems in Russia and Romania influenced the Semashko model. The slow transition to the current health insurance system has occurred for both countries, while the health reform has become an important initiative of the Government and the Ministry of

Health. Russia and Romania are developed and market-oriented countries with their own interests after changing their political and economic directions. Today, there is a need to adapt systems to new conditions, which has led to the separation of various fundamental changes as a result of a large-scale change in privileges in the section per patient and his attitude to healthcare when receiving standard services that are common for a citizen to understand. The experience of countries with advanced healthcare systems can give a chance to improve the treatment of patients, which can be a decisive factor in improving quality in Russia and Romania. This is an opportunity to determine the opinion and attitude of patients in connection with large-scale global events.

## **2.2. Results of Thesis**

This section presents the results of all seven chapters of the thesis, divided into subsections as follows: "The current stage of knowledge about healthcare systems"; "Challenges for healthcare systems in Russia and Romania"; "Coordinates of healthcare systems in Russia and Romania"; "Marketing perspective in Healthcare Systems"; "Qualitative research of expert opinions on healthcare systems in Russia and Romania"; "Quantitative Marketing research of Healthcare in Russia and Romania"; "Marketing proposals for Healthcare systems in Russia and Romania".

### ***2.2.1. The current stage of knowledge about healthcare systems***

The first chapter of the thesis begins with general definitions of health systems. A study of the literature review on the world experience on the topic of the healthcare system and its marketing prospects (Bulatnikov and Constantin, 2021). The findings of various researchers published in specialized journals can provide a scientific context for making administrative decisions in the field of health systems development.

The creation of a functional healthcare system is a large-scale task and a necessary step in achieving the strategic goals of the country's economic growth. It is necessary to create and apply modern scientific tools to evaluate the effectiveness of medical procedures by studying their main components. The state of health is an important characteristic of human potential. Its protection occupies an important place in State policy. In this context, the question of effective healthcare is raised. Creating a system that will ensure optimal returns in terms of preserving and strengthening the health of the nation. Efficiency in the classical sense implies the relationship between the result achieved and the resources used. The extent to which the contribution to the health system in the form of expenditures and other resources is used to maximize the effect, ensure results and achieve goals.

The pandemic has become a new challenge for health systems and a new challenge. This has not only exacerbated a number of issues that need to be addressed to ensure public health, but also highlighted new questions about the need for rapid mobilization in the face of changing epidemiological conditions. As a result, in the context of the coronavirus pandemic, not only existing problems in the health system were solved, but also problems that were not encountered in the usual planned circumstances.

Then the review of financial models in healthcare continued. The construction of effective healthcare systems in developed countries is of increased interest in the modern conditions of reforming domestic healthcare. The health organization systems of different countries are characterized by diversity and national specifics. However, going through many reforms, they are constantly being modified and enriched with ideas borrowed from each other. It is impossible to classify such models strictly.

Over the past two decades, the cost of medical treatment has increased dramatically worldwide. In this regard, many countries are reviewing their health systems, developing alternative strategies for financing and providing healthcare in a more efficient and equitable manner. Actions need funds to ensure proper funding.

In European countries, reforms were carried out under the influence of political changes that occurred in the late 80s. Some countries, for example, France, Belgium, Italy, have not made serious attempts to carry out market reform until recent years. Others, such as the Netherlands, Sweden, Germany, Israel, have begun to implement reforms in a stripped-down form - either at the level of regional experiments (Sweden), or rejecting the most radical proposals (the Netherlands). The planned reform concept has been almost fully implemented in the UK, which has been touched upon in the works. Despite the healthcare reforms, the transition from tax financing to a model in which the emphasis is on "National Health Insurance" (NHI), funded by payroll taxes, the countries of Eastern Europe and Central Asia continue to rely heavily on budget financing.

Using the example of developed countries, it was possible to classify key models of the health system, such as: the national health system, social health insurance, local (regional) direct payment system and the voluntary private insurance model. Each country's health systems are evaluated in the light of its "specific circumstances, history, political life and national identity". The organizational concepts of these systems range from "managed competition" to a strict structure based on a single-payer philosophy, with several intermediate possibilities in between. When any component of the system fails, it has an adverse effect not only on the system, but also on the components, potentially "exacerbating

the problem". Changing the model, which usually requires spending money, can have a significant impact on its overall effectiveness.

The chapter ends with payments in healthcare systems. Firstly, the problem of insufficient financing of the healthcare system is supposed to be partially solved with the help of public-private partnership. Secondly, the problem of insufficient attractiveness of some public organizations for insurance companies can be partially solved by monitoring customer satisfaction and taking actions to increase this satisfaction: "Customer satisfaction has a positive effect on customer loyalty, which will increase the return on investment". The answers to the section on payments are very diverse, but some basic ideas stem from discussions in the literature.

### ***2.2.2. Challenges for healthcare systems in Russia and Romania***

The second chapter continues the review of the literature concerning the problems of medicine in the two countries. All possible healthcare models and financing methods are discussed throughout the chapter of the thesis with competitive advantages and disadvantages that require attention from the management of health systems, discovered during the assessment used in Russia and Romania. Tables with results highlighting the advantages and disadvantages of each financial model are proposed (Bulatnikov and Constantin, 2021). The healthcare system must be improved in modern, progressive financial conditions. Both in the field of prevention and in the field of treatment of diseases, they are a powerful driving force for progress. Their goal is to increase the life expectancy of residents and increase well-being. The sixth technological order, which developed and spread until the second half of the current century, radically changes the nature and structure of society and reveals its fundamental differences from the industrial society that prevailed before.

As for the problems of the Russian healthcare system, it was mentioned that in the last century healthcare in Russia was a model called "Semashko" which was funded by the government. In this century, there has been a gradual transition to the existing system, and the reform of health systems has become a major project for the Government and the Ministry of Health. The change in the direction of politics and economy in Russia in 1991 led it to develop a market economy with its own interests. The study cited in the literature revealed several Russian regions that were previously unknown and showed a significant difference in economic indicators. The "Regional Health Index", which is the most important element of the "integral indicator of the standard of living" for the population and labor potential, draws attention to the underdeveloped economic growth of these areas. The Regional Health Index includes a study of regional socio-economic financial, credit relations

and processes of formation and functioning. It is geographically connected, and the peculiarities of the development of a particular region impose additional conditions. Regional targeted programs will be effective only when they are subject to common views, values, attitudes and ideas prescribed in the socio-economic policy of health development. The study of the model ends with a SWOT analysis of the Russian healthcare system, which is crucial for assessing the relationship between environmental opportunities and threats and the tactical potential of the "strengths and weaknesses" of the sector.

Then there is a study of information about financing in the Russian healthcare system. Since the development of healthcare in Russia follows a unique path, it cannot be applied in its pure form as a borrowed foreign national model of healthcare financing. It examines the problem of informal payment for medical services, which are widely used and characterized by a modest set of institutional forms. Russia has fully felt the consequences of the systemic crisis of the 90s, and attempts to modernize the industry over the past two decades, based largely on foreign experience, have led to a decrease in the quality, availability and volume of medical services. The chapter ends with a table of the positions of Russian authors on financial models with a table of comparative characteristics of models of the healthcare system in Russia, such as Budgetary, Social Insurance and Private.

As for the problems of the Romanian healthcare system: until this century, healthcare in Romania was also "Semashko" funded by the government. The change in the direction of politics and economy in Romania in 1989 led to the fact that it began to develop its market-oriented economy with its own interests. Relations between Romania and Russia have remained at an acceptable level in recent years. A multi-year agreement was concluded on the main political directions. This has been a difficult process due to problems that have arisen in the past. The current health insurance system was introduced here in 1997. She created a hybrid system controlled by the "Health Insurance Fund", also controlled by the government, which led to some distortions in the allocation of resources and even to a certain leakage of funds from the medical system. Since its accession to the European Union (EU), Romania has been making efforts to achieve goals, among which social protection occupies an important place. It defines health insurance as the main way of financing the health system, which provides access to a set of basic services. Medical insurance is mandatory and is paid for by employers and employees. The literature highlights how few locals receive health insurance compared to how many people use medical services. Because of this discrepancy, the system is poorly funded and requires the development of new, effective methods of increasing the budget. Any decision-maker in the Romanian healthcare



system should be very concerned about finding new financial resources, as well as making effective use of the system's limited resources. For the development of the healthcare system, the quality or professionalism of the staff can be a crucial element in order to identify solutions to avoid threats and take advantage of opportunities: "every threat can become an opportunity". You should also pay attention to the strengths, opportunities and problems that have a negative impact on health.

Then there is information about financing in the Romanian healthcare system, where the situation is slightly different from the Russian one. As in other Eastern European countries, the Semashko medical care system operated in Romania until 1997. It was characterized by a discriminatory distribution of assets, a lack of response to the demands of the population and ineffective administrative actions. Currently, there are five ways to finance the healthcare system in Romania: "financing from the state budget; financing through social health insurance; financing through private health insurance; financing through direct payments; public financing". A table of the authors' positions on financial models is presented with a table of comparative characteristics of models of the healthcare system in Russia, such as Budgetary, Social Insurance, Private, Direct payment and Donor models. Where the main claim is that financial systems move resources from the strong to the weak, where the consumer sector earns them for a higher fee, while receiving less benefit covering the costs of other participants in the system. Health insurance and the budget continue to support the system.

### ***2.2.3. Comparison between the Russian and the Romanian healthcare system***

In the third chapter of the thesis, a statistical analysis of the main indicators related to healthcare is carried out, collecting the main elements of the state of the health systems of Romania and Russia and conducting statistical selection (Bulatnikov and Constantin, 2021). In this research part, comments are given, methods of content analysis, information and analytical materials, as well as statistical data are shown. The forms of organization of national health systems are diverse. Each country develops its own unique system, which differs in the methods of attracting financial resources aimed at providing medical care and preserving the health of citizens. The quality, quantity and structure of resources allocated by society, the result of their application in the field of protection are determined by economic and social factors.

Then the comparison of the coordinates of Russia and Romania in the field of healthcare continues. Special journals compile annual special ratings that take into account the key components. It is determined on the basis of three main indicators: average life

expectancy at birth, government spending on healthcare as a percentage of GDP per capita and the cost of medical services per capita. Russia and Romania occupy 53 and 37 places respectively in the ranking, but are still in the 55 list. So, in 2014, Russia took the last place in the ranking, which entered it for the first time, gaining only 24.3 points. Russia was included only in 2014, because before that the average life expectancy in the country was much lower than required. Russia with an efficiency rating of 30.7, which itself decreased by 0.6 compared to 2018 and thus remained in the 55 list. Romania is in the last thirteen, along with countries such as Serbia, Bulgaria, etc. However, compared to the 2018 estimate, Romania dropped by 4 places in 2020, and the efficiency itself decreased by 2.7 points.

The largest amount of healthcare spending is observed in countries such as the United States, Norway and Switzerland. Russia and Romania are outsiders below the 30th place in the ranking along with countries such as Bulgaria, Belarus, Serbia, etc. In Russia, healthcare spending in 2020 will amount to 5.6% of GDP. In Romania, this percentage is 5.0% of GDP in 2020. Russia and Romania are facing those countries whose calculations were presented in the table, but based on information from the statistical Internet service "Worldbank", which in this case is devoted to the total healthcare costs in the countries.

The Numbeo service has published statistics where information is collected based on a survey of residents of the respective countries. A general indicator was compiled — the index of the quality of the healthcare system, which comprehensively reflects how bad or good everything is in the country with medicine. Russia and Romania are among the outsiders, taking 30th place. Here, Russia received only 59.10% of the overall quality of medical care. Romania received 56.20% on the health index, which means a rather low position on the above-mentioned signs of the health system. The Global Health Safety Index is an international health study that evaluates the effectiveness of health systems in all countries of the world. The current version of the ranking of countries on the level of health safety was published in 2021. Russia and Romania are outsiders in terms of mortality and life expectancy. Here, the death rate in Romania in 2021 will be 14 people per 1,000 people, and the average life expectancy will be 76.4 years. In 2021, the death rate in Russia will be 13 people, and the average life expectancy will be 72.9 years. All the considered health indicators for each country were combined by place in each list of revised sources, as a result of which they were distributed, collected and sorted for 2021. For this kind of measurements, the results of 3 different well-known rating companies in the field of healthcare were taken and the arithmetic mean was calculated to get the results "all in one". In this ranking of observed countries, Russia and Romania are outsiders, taking 59 and 55

average places, respectively, in 2021. Outsider countries in this ranking need an overall improvement in healthcare.

According to the Global Health Security Index for countries in 2019 and 2021, the top three are the USA (75.9%), Australia (71.1%) and Finland (70.9%). Russia (49.1%) and Romania (45.7%) are among the countries with a low level of medical training. In Russia, the worst indicators were indicators of labor epidemiology, risk awareness, political risks and security risks. In Romania, the worst indicators were emergency preparedness and response planning, financing. At the same time, Russia's biosecurity, real-time reporting, response time and infrastructure adequacy are at a high level. In Romania, all areas of prevention, real-time reporting, rapid response and access to medical care in accordance with international obligations. The main health indicators were analyzed.

Then the average place from all the observed statistical journals was analyzed and the places for Russia and Romania were found. For this kind of measurements, the results of 3 different well-known rating companies in the field of healthcare were taken and the arithmetic mean was calculated to get the results "all in one". In this ranking of observed countries, Russia and Romania are outsiders, taking 59 and 55 average places, respectively, in 2021. Outsider countries in this ranking need an overall improvement in healthcare. When determining the effectiveness of the healthcare systems of Russia and Romania in comparison with the world results and special journals with annual special ratings in this section, it was found that the average life expectancy at birth, government spending on healthcare as a percentage of GDP per capita and the cost of medical services in terms of per capita are quite low for both observed countries.

Based on the analysis, negative and positive trends in the development of the healthcare system in Russia and Romania have been identified. The rating of the main indicators of the development of the healthcare system in Russia and Romania is carried out. The conclusion was described that many financial and economic processes in individual countries depend on the state of the largest economies, and these two countries are no exception. Global processes taking place in the global economy can contribute to overcoming the crisis or, conversely, aggravate existing structural problems, which happened in Russia. An important factor in the destabilization of the Russian economy, which mainly affected the healthcare system, was the political and economic sanctions imposed against it. Thus, Russia has suffered the most from sanctions among the countries that have also suffered from them. However, this is not the main reason for the decline in GDP by almost 20% compared to the level of 2014. In many ways, the situation with the aggravation of the crisis in the

Russian economy was the result of unfavorable conditions of stagnation in the economies of the main European partners. Thus, the leaders of the world economy have been in a very differentiated state in recent years, and the trend of slowing economic growth is reflected in many countries, even in China. The Russian and Romanian economies, which are tied to the supply of natural resources and raw materials, strongly depend on the overall well-being in world trade, so it also finds itself in the zone of influence of its main partners - China, Japan and EU countries, whose economies have not been in the best conditions in recent years. Problems for Russia and Romania have become a catalyst for a number of financial and economic problems that have led to a significant decline in Russia's GDP and stagnation of Romania's GDP to a greater extent than average.

#### ***2.2.4. The marketing perspective in healthcare systems***

In the fourth chapter of the thesis, the review begins with general definitions and aspects that characterize marketing. It is mentioned here that the marketing concept is based on the principle of consumer priority and the translation of the principles of classical economics into operational management: - consumers strive to receive remuneration from life; – remuneration is determined by the needs of individuals, while the financial system is pluralistic and should take into account the most diverse tastes and preferences; – the presence of competition helps to achieve the intended goals in the best way. goals; - consumer priority. Marketing involves working with the market to carry out exchanges, the purpose of which is to satisfy human needs.

After that, the enumeration of various definitions of marketing concepts in healthcare continues, such as: marketing can be described as a set of actions that are used to promote a product or service "a system of criteria, methods and measures based on a comprehensive study of consumer demand and purposeful formation of offers of medical services". Marketing in medicine is a system of studying the market of medical services in order to form and meet the needs of consumers by managing the consumer properties of medical services. Marketing in healthcare is a set of organizational and economic tasks related to the provision of a complex of health, preventive, sanitary and hygienic and medical services, medicines, therapeutic and rehabilitation goods, as well as medicines, therapeutic and rehabilitation goods.

The purpose of marketing in healthcare is to ensure the profitability of the production of medical services and medicines, to achieve economic efficiency from their implementation in an acceptable time within the existing production capabilities. If we take a closer look at marketing in healthcare, we can see that it covers a wide range of activities, such as

research, planning, execution and control, all of which primarily focus on creating, promoting and evaluating results to achieve the goals of a healthcare organization. In this regard, it is important to solve the problem of preserving human health and increasing the active growth of life expectancy of individuals. Thus, the effectiveness of the management of healthcare systems in a particular territory is reflected in such indicators as the availability of medical care, the quality of medical services provided and the achievement of key indicators for the development of the industry. The creation and use of innovations in medicine both in the field of prevention and treatment of diseases and in the field of socio-economic development of medical institutions is especially relevant and is one of the priorities of mankind along with energy efficiency and conservation, nuclear, space and information.

The COVID-19 pandemic has had a significant impact. Digitalization of public life has led to the fact that even after the removal of restrictions, online space plays an important role in human life. "Quarantine has become an occasion for companies to start posting and promoting their products on the Internet". In the field of healthcare, "it is necessary to realize all the advantages and advantages of digital healthcare, a conscious transition from hierarchical principles of control and regulation to online monitoring based on the accessibility of network agents is necessary at all levels".

Innovations in healthcare marketing are one of the most important components. Currently, economic development is based on the transition to an innovation-type economy. It needs intensive research and development aimed at discovering new technologies. Such activities are based on "regional cooperation, coexistence and assistance" aimed at achieving coordinated and solidary development of the country's regions". Innovation is also important for health systems, given the national goal of developing an integrated information infrastructure. Thanks to the combination of micro electromechanical systems, microelectronics and wireless interfaces, it is possible to collect biological data and create machine learning algorithms much faster. Here, aspects of artificial intelligence will be used in such things as "radiation therapy, drug production and medical diagnostics".

Quality is also a suggestion of scientists in the field of health marketing. It is necessary to consider such factors as mass physical education and sports as factors determining the improvement of the quality of life of the population. The economic potential is higher for an organization that uses its quality capabilities more effectively. The quality of medical services is influenced by the qualifications of staff, high-quality physical premises, information and financial resources. The main areas of work to ensure the quality of medical services are "improving the structure, process and result", which is called the "Donabedian

triad". It is obvious that a medical care system with inadequate resources and processes cannot provide quality. Medical services must meet customer expectations using marketing.

A table of conclusions has been compiled concerning the problems of the development of healthcare marketing at the micro level, where public and private clinics are engaged in such stages of marketing activities as: preparatory activities, research and marketing implementation.

Concluding the section, it is stated that the healthcare industry is characterized by trends in the development of marketing organizations, which manifest themselves in more active promotion of medical products and services. Thus, in modern market conditions, due to the active development of the market of insurance medicine and paid medical services, healthcare institutions need to apply marketing strategies in management. Demand analysis, the formation of an optimal package of services, detuning from competitors, pricing and promotion become an integral part of the strategic planning of the organization's activities. Marketing in the field of healthcare is aimed at a medical institution, doctors and services. There are many problems at all stages of marketing activities. To solve them, it is necessary to develop a marketing mix model that will ensure the consistency of marketing in healthcare and increase the effectiveness of marketing research.

The methodology (7-P) is described - a marketing complex tool that will be appropriate for implementation in healthcare. The marketing mix (7-P) complex allows you to take into account 7 main directions for work in the field of marketing: "Product, Price, Promotion, Place, People, Process, Physical evidence" situation, environment in which the service is provided.

#### ***2.2.5. The vision of experts on healthcare systems in Russia and Romania. A qualitative research***

The fifth chapter of the thesis begins the study, which is an empirical qualitative study based on a series of structured individual interviews with participants — experts in the field of health systems. 32 in-depth interviews were conducted with 19 Russian experts in the field of medicine and 13 Romanian experts. The total number of qualitative questions for experts was 15; each individual question required an expert to answer from at least 1 minute to no more than 3 minutes; The interviews were conducted in October 2021 and 17 were conducted using an online platform; 15 face-to-face dialogues that were recorded on the spot; the duration of the interview was up to 18 minutes. The survey results were organized around the main topics that were identified as a result of thematic data analysis. The opinions were concentrated and simplified using 4 content analyses. A thematic analysis was

carried out. Semantic analysis of the interview was combined with latent analysis. Semantic analysis was performed before each category to clarify the hidden analysis.

It is recommended that solutions to the following research tasks be found to achieve the research goal: O1. To identify the existing main problems of health systems; O2. Get information about healthcare financing; O3. For information on social problems in the healthcare of each country; O4. To search for information about marketing and innovations.

In the first task "The main problems of the healthcare systems of Russia and Romania", such problems as:

1. Financing of healthcare as one of the main problems. The main discovered problem of Russian healthcare is financing. Many doctors go to private clinics because they see that the salary there is higher, usually by 2 times, and this despite the fact that the schedule is flexible. Low salaries of medical personnel in public health institutions are not noticed. Another result of underfunding was seen in Romania — outdated tangible assets: buildings and equipment, infrastructure.

2. Management in healthcare as one of the main problems. The situation in Russia is aggravated by the fact that healthcare has been transferred to the jurisdiction of regions whose budgets vary greatly and which sometimes set their own rules. Russia is losing hospitals on the periphery due to insufficient awareness of the ministry and committees. For Romania, the biggest problem mentioned by the respondents is that not enough attention is paid to primary healthcare (family medicine) and prevention programs. The management staff itself degrades for 2 countries — hospital management is weak, there is a need to hire managers based on performance rather than a political or familiar base.

3. Commercialization and competition in healthcare are problematic. Experts focused most of all on doctors, and patients were forced to move to the private sector. Staff turnover is a serious problem in healthcare when competition arises. The Romanian expert noted that it is necessary to monitor private medical activity, since it is growing without adjustments. According to the overwhelming majority of experts, the main trend should be the updating of legislation in connection with the widespread appearance of private clinics. To make it unprofitable to violate the law. Harmonization based on public-private partnership is of concern. It is also necessary to change the laws in order to equalize competition, financing as one of the main criteria of competition, harmonization through public-private partnership.

4. Problems with the quality of medical services in Russia and Romania. Experts from both countries expressed the opinion that, in particular, the characteristics of the quality of services suffer throughout the country and do not allow combining healthcare with those



that have a sufficiently high level of healthcare. These are the quality of services offered in medical institutions, the poor quality of training, which is reflected in the poor knowledge of doctors, the provision of sufficient and well-trained medical and service personnel. Thus, it is proposed to train doctors at specialized universities, including with the participation of patients and caregivers.

In the second part, "Finance in healthcare in Russia and Romania" was discovered: payment methods". On this issue, specialists were divided into three groups: professionals who believe that the compulsory health insurance system plays a good role in the healthcare system, and those who believe that it has a detrimental effect.

1. Experts assessed the compulsory insurance system as positive. As the experts noted, "the CHI is a pillar of the capitalist system for the organization of the same social healthcare". Compulsory health insurance is the only financing system capable of providing free medical care in a capitalist society. Private clinics are gradually concluding contracts with the compulsory health insurance fund in order to increase the customer base. Based on the Romanian experience, this is extremely important for proper functioning. This is justified to ensure a minimum of funds needed by all people in need of medical services. The assessment should be based on the real, not the desired or imagined situation in the country — first of all, the share of the lower society.

2. Experts who called the CHI/CHI system ineffective. An insurance company is a "private intermediary". They avoid issues from the point of view of business and making money, the lack of transparency in the use of the asset is obvious here. There is a shortage of funds for the treatment of really sick patients.

In third part, "The social situation in healthcare in Russia and Romania" the method of excluding various expert comments was used. Thus, this category contains concentrated opinions that most affect the problem. It consists of 4 subcategories: premature deaths, services that patients cannot receive, personnel problems, doctor-patient relations.

1. Leading position on premature deaths. Firstly, premature deaths begin with the fact that the ambulance is working slowly - poor roads, equipment of emergency departments and end with poor time management of the doctor in his place. There is not enough time allocated for the proper reception and treatment of patients. The average doctor spends more time writing diagnoses than caring for a patient. Secondly, it is the lack of a full-fledged medical examination of the population. This leads to the illiteracy of some patients who come at the last moment, and nothing can be done with them. Supervision by a family doctor is also an example of preventing premature death. Thirdly, there is insufficient



funding. In public institutions, the qualification of a doctor is usually lower than in commercial ones, which affects the incorrect treatment of the patient and leads to unexpected death. Insufficient funding does not allow increasing the number of doctors, nurses, and equipment.

2. Services that patients cannot receive immediately. Some experts argue that the countryside in Russia is the predominant threat, not properly examined by doctors, especially in the conditions of a huge territory. The main trend is that services beyond the sponsorship of compulsory health insurance are currently unavailable in both countries. Comprehensive instrumental studies are not available for most regions of the Russian Federation. Laboratory tests in Romania are not easily available and are quite expensive. As a rule, the problem is oncology and help with orphan diseases. High-tech medical care has problems with the passing flow. Finally, due to the high cost of services, many patients are forced to pay for routine appointments and examinations. Experts stressed the failure of the intensive care unit in the face of Covid-19.

3. Lack of medical personnel. It is necessary that the patient feels the result of each visit to the doctor immediately during the session. It is very important to increase the time doctors receive patients, freeing this particular doctor from unnecessary paperwork. Secondly, villages have lost half their staff over the past 10 years, and today this leads to the dissolution of such institutions as a consequence.

4. Problems in the relationship between the doctor and the patient. The following problems were found between Russian medical workers: automation of time for the description of the medical history; introduction of a feedback system with reference to the name of the doctor; the issue of cultural development of the population and training. Romanian experts in the field of medicine discussed the problem of self-education of a doctor. This can be achieved through more effective training, through communication courses for staff. Communication and increasing the duration of consultations are also related to this topic. Correct explanation and informing the patient about the disease, options, side effects, possible complications. Doctors should be available to their patients, and medical professionals should have enough time to "fill in" the problem of each patient.

In the final fourth part, "Implementation of marketing and management strategies", it was found that psychological counseling of hospital staff is required. Medical services should be free of charge, and the facility should be located close to where you live. Government agencies should provide services in such a way that the equipment is at its innovative level.

### *2.2.6. Quantitative research on the problems of healthcare systems in Russia and Romania*

The sixth chapter of the thesis outlines the rationale and purpose of the study. The need to adapt healthcare systems to new conditions, caused by changes in recent years, has led to the separation of various hospitals and the division of patients into groups, which in most cases can lead to large-scale changes in the patient division and attitude to healthcare. The experience of advanced countries during this period made it possible to improve the health of patients so that the healthcare systems of Russia and Romania were of high quality. This opportunity is a marketing challenge that has led to the need for research aimed at identifying the attitude of patients to healthcare in connection with significant global changes in the world. The aim of the study is to determine how the citizens of the two countries relate to the public health system, paying special attention to the differences between rural and urban areas in order to outline some proposals for a future strategy for improving healthcare in Russia and Romania. The overwhelming participation of doctors (about 50%) in the study is an important opportunity to identify and implement such a strategy, as they are best able to express their opinion about the obstacles faced by all patients and their concerns about the various risks that may arise to affect the health of the population. in two countries. The objectives were set: O1. "To measure the attitude of patients to innovations in healthcare systems, paying particular attention to the differences between patients living in urban and rural areas"; O2. "Measure the attitude of patients undergoing treatment in other countries, with an emphasis on the differences between patients living in urban and rural areas"; O3. "To measure patient satisfaction with public clinics and the relationship between the level of satisfaction and living conditions (urban or rural)"; O4. "To measure patient satisfaction with public clinics and the relationship between the level of morbidity and living conditions (urban or rural)";

The questionnaire starts at the macro level. A digital scale is used here. The first question is the most important. The Group includes such categories as: management, financing, quality, innovation. All categories were calculated using the correlation of problems found in the literature and using a qualitative survey of health experts from the two countries surveyed. This prompted us to consider such features as: "Evaluate the regulation of medicine by the Ministry of Health at the national level in Russia": the vastness of medical services offered in state clinics; accessibility of medical services provided within the legal framework of compulsory medical insurance; investments in the country's healthcare infrastructure; quality of medical services offered in the country as a whole;

competence of medical personnel in the whole country; assessment of the quality of foreign technologies and innovations used in Russia; quality of domestic technologies and innovations used in Russia. The scale suggests 5 possible answers, which range from "Problematic" to "Not problematic". The data was transferred to the SPSS database in the form of numeric values from 1 to 5.

A triad of questions of the semantic differential scale type was developed. The questions continue at the macro level. However, they mostly reflect the respondent's personal attitude to the problem. In order to position a person to the question, the method of attitude to the utterance was applied. Statements such as: "Individual contributions to mandatory medical insurance funds from wages are insufficient, they should be expanded to improve the quality of medical services provided in the country", "Even if there is an MHI policy, patients sometimes have to make additional payments to state clinics for emergency services", "If a patient from Russia has a complex disease, in most cases it is cured in other countries with the highest quality medical care". The respondent had the right to answer them with such suggested answers as: "I completely agree", "I agree", "Average", "Disagree", "Completely disagree". Since there are not so many questions, the study did not resort to the variability of the type of questions – this triad tries to ask the respondent rather from a philosophical point of view, so the loop effect is excluded.

Finally, then the questionnaire goes to the micro level of information analysis. But before the recipient begins to answer, there is a question in advance that cuts off the old experience of applying to a public or private clinic with questions: "Have you visited any public (non-private) medical clinic in the last few (1-3) years?", "Have you visited any private medical clinic in the last few (1-3) years?" Thus, information is immediately collected in two directions: old experience is eliminated, statistics about the ratio of visits to public and private clinics in the two countries. These questions are very important, because in this study, these indicators are associated with as many as 2 hypotheses. With their help, you can calculate how often a patient goes to a private clinic as a villager, and also whether there is a connection between the fact that the patient is a chronically ill person (often goes to the clinic) and whether he went to a private one, giving money, or decided to treat for free.

Using micro-level questions, a marketing mix (7-P) was used. In this regard, the questions were divided into 3 groups: public - satisfaction, importance, private - satisfaction. Each of them consists of such categories as: "Product", "Price", "Placement", "Promotion", "Physical evidence", "Process", "Personnel". In them you can find such questions as: "How important is priority for the quality of emergency services?", "How important is it to have a

wide range of secondary medical services?", "How important is the relatively cheap price of the entire list of paid medical services?", "How important is it to continue to have a list of free services in medical institutions?", "How important is it to book medical services?", "How important is the ease of use of websites and mobile applications of medical institutions?", "How important is the accuracy of information about the services offered by medical organizations?", "How important is information about the location of medical organizations around you?", "How important is the condition of medical equipment?", "How important are the conditions inside medical organizations?", "How important is the condition of buildings and premises in clinics?", "How important, first of all, is the quality of medical services?", "How important is the time spent on full recovery?", "How important is the organization of the treatment process?", "How important is the interest of staff in treatment?", "How important is the relationship between doctors and patients?".

Macro level. There are variables such as "Management", which was conducted from 2 questionnaire questions: "Lack of specific medical services offered by the state system" and "Regulation by the Ministry of Health at the national level within the country as a whole". The variable "Financing", which was carried out from 2 questions of the questionnaire: "Accessibility of medical services for patients offered through the compulsory health insurance system" and "The amount of funds invested in the country's healthcare infrastructure as a whole". The variable "Quality", which was conducted from 2 questions of the questionnaire: "The quality of medical services offered by your country as a whole" and "Skills of medical personnel employed in public institutions as a whole". And finally, the variable "Innovation", which was conducted from 2 questions of the questionnaire: "The number of applications of global innovations in medicine in the whole country" and "The use of domestic technologies in healthcare". The macro categories "Quality" with an average score (2.76 out of 5.00) and "Innovation" (2.78 out of 5.00) are the most problematic in healthcare among other macro categories for Russia. It is noteworthy that the "Financing" category is the least problematic for Russia (2.38 out of 5.00). However, in Romania it was revealed that it is "Quality" and "Management" that are problematic, respectively, rating (3.08 out of 5.00) and (2.71 out of 5.00). It is "Innovation" in Romania that is the least problematic category than in Russia (2.44 out of 5.00).

Micro level. The results of this study are presented in subsections for each goal. Specific hypotheses were established for each goal, which were tested using the Student's t-test using the SPSS system (Bulatnikov and Constantin, 2022c).

### ***2.2.7. Marketing suggestions for healthcare systems in Russia and Romania***

The final seventh chapter of the thesis begins with marketing proposals on the criteria of macro-level health systems. Quantitative analysis at the macro level is considered for each issue, which were grouped into groups: "innovation in the whole country", "quality in the whole country", "management in the whole country", "financing in the whole country". The groups and their average values were compared with reference to the country of residence, but without reference to any population parameter. Thus, it was found that the main problem in Russia is innovations in medicine, while in Romania, survey respondents preferred to focus more on the "quality of medical services in the country" as a key issue of their healthcare system. The Russian problem can be viewed as the fact that the country works only within itself and must develop innovations for itself. An interesting fact is that if you remove the problem of innovation for Russia, you will get the same rating of problems as in Romania, namely: quality, management and financing. Accordingly, it is necessary to describe in more detail the proposals for improving innovations for Russia. In addition, it is required to fully outline recommendations for improving the quality of medical care in Romania and Russia. Below is a rating of health problems at the macro level identified by quantitative analysis.

Then the criteria for health systems at the micro level continue. Here, the importance-satisfaction matrix was derived, in which "The results of the importance-satisfaction matrix in Russia" and "The results of the importance-satisfaction matrix in Romania" were determined. For Russian clinics, the problems are as follows: I. The internal state of state clinics; II. Quality of services in public clinics; III. Placement in public clinics; IV. Organizational process. For Romanian clinics, the problems are as follows: I. The quality of services in public clinics; II. The condition of equipment in clinics; III. The condition of the internal premises of state clinics; IV. Placement in public clinics.

### **2.3. Conclusions**

In conclusion, it can be stated that healthcare is an important component in the life of every nation. Every year more and more people, both urban and rural residents, are involved in the process, nevertheless, Russians and Romanians are dissatisfied with their healthcare. Continuity of historical heritage, low standard of living, low level of technological process and poor training of personnel are the main problems for the systems. Improving the prospects for development and proposals for further directions in medicine is a debatable issue. The world has been changing dramatically lately, as well as the characteristics of the two

countries surveyed, and the sensitivity of certain social categories is especially growing, since the existing ways of regulating healthcare in the two countries are at a low level.

In the course of the literature review, it was found that the comparison of Russia and Romania is appropriate in the context of the topic raised, since the countries faced quite similar problems that have a strong impact on healthcare in these countries. Some authors admit that Russia and Romania have similar healthcare models to each other, which they also had in the past. There has been a slow transition to the current health insurance system. Adaptation of systems to new conditions is extremely necessary, which has led to the separation of various fundamental changes resulting in a large-scale change in privileges in the sector for one patient and his attitude to healthcare when receiving standard medical services that are common for a citizen to understand. Theories concerning the marketing of health systems, highlighted in the literature, should lead to an increase in quality and an increase in life expectancy.

In the course of the study, the most appropriate financial model of healthcare was analyzed, focused on the results of SWOT analysis, taking into account the pros and cons noted by scientists. The resulting model uses the potential benefits for both the Romanian and Russian healthcare systems. Here, the financing of the healthcare system should be based on hybrid sources, and the funds raised should be better invested in order to create added value for the systems. An important national task is to launch a plan for the socio-economic development of healthcare. Strengthening the healthcare system will improve the level and quality of people's lives. Providing high-quality services and management is a major challenge.

The results showed the need for qualitative extraction of opinions of medical experts in Russia and Romania. The observed countries have a relatively low indicator of the quality of healthcare among European countries. In the context of this thesis, problems were discussed with healthcare experts from Russia and Romania on the following topics: healthcare financing in Russia and Romania; general management practices in Russia and Romania; social problems in healthcare in each country; marketing strategies and innovations had a great impact on the direction of research. Completing the survey process, it was found out what patients in two countries think about healthcare. With the help of the questionnaire, it became clear how and what services patients receive, and how much they pay in terms of cross-section characteristics. The issue of determining the attitude of patients to the main problems of the systems in the two countries and their satisfaction with public clinics was raised. The analysis of the microlevel in Russia showed the result that the

Russian problem of the healthcare system is that patients evaluate urban and rural clinics differently. For Romania, the rural population is more concerned about problems than urban ones. The analysis of significance-satisfaction with public clinics revealed the opposite results for Romania. In this thesis, a marketing package (7-P) was implemented with all the main marketing indicators that revealed weaknesses for both countries. The study highlighted factors such as: poor innovation in healthcare at the country level; poor quality at the country level; poor health management at the country level; poor funding at the country level; low competence of staff; unsatisfactory internal condition of clinics; unsatisfactory condition of equipment in clinics; unsatisfactory placement of information about what clinics offer; few websites and mobile applications of clinics.

### **3. Original results, conclusions, contributions to science and relevance**

The literature review identifies two areas: on the topic of marketing of healthcare systems with an emphasis on challenges for Russian and Romanian healthcare systems (Bulatnikov and Constantin, 2021) and on the topic of which financial models of healthcare are best followed in Russia and Romania (Bulatnikov and Constantin, 2022d). The results of the study were published in the journal "Healthcare". They are indexed in databases: Science Direct, Scopus, Web of Science.

- In the review of the literature on marketing in healthcare, the scientific contribution consists in collecting 170 scientific references on the topic, which were put together and correctly formulated in connection with the study and gave the result of a broad analysis of the subject of the problem, expanding knowledge in the scientific field, and also helped to conduct a SWOT analysis, which highlights the advantages and disadvantages of both systems healthcare;

- In the review of the literature on financing models in healthcare, the evaluation revealed numerous competitive advantages and disadvantages that require attention from the management of health systems to be used in Russia and Romania. The contribution consists in collecting 80 publications, so that in the thesis they can tell specifically about the financing of healthcare systems both in the world and in the context of the views of Russian and Romanian authors in the field of healthcare on existing financial models. As a result, tables are proposed that reflect the advantages and disadvantages of each financial model for Russia and Romania.

Statistical analysis of the main indicators related to healthcare consists in collecting the main elements of the state of the health systems of Romania and Russia, and statistical selection is carried out over a long period of time (Bulatnikov and Constantin, 2021). This



study provides comments on the methods of content analysis, information and analytical materials of Russian and Romanian analytical materials and statistical data databases.

The research survey consists of collecting the opinions of a wide range of experts on the issue of healthcare systems in Romania and Russia and presents the results of questionnaire interviews with Russian and Romanian medical professionals, which highlight important topics. In October 2021, 32 in-depth interviews were conducted with 19 Russian medical specialists and 13 Romanian specialists. To add novelty to the discussion about healthcare in Russia and Romania, the interview results are grouped and discussed around the key topics that arose as a result of the "thematic analysis". The main result of the study is a compressed collection of 4 content analyses.

The quantitative survey consists of conducting a survey among 500 people from Russia and Romania, in which topical issues related to the healthcare systems of Russia and Romania were highlighted. One of them is to identify the relationship between the environment and the attitude of people to the healthcare system on the example of Russia and Romania based on 4 different statistical hypotheses (Bulatnikov and Constantin, 2022c). This study focuses on the problems of healthcare systems in Russia and Romania from the point of view of patients in connection with the current requirements for improving healthcare systems from the point of view of clients.

Development of marketing strategies for healthcare systems in Russia and Romania.

- Macro-level proposals are based on the statistical results of quantitative survey questions about general health problems in the country. 4 different groups of problems found were listed here and discussed suggestions;

- Micro-level proposals based on importance analysis. Satisfaction with public clinics revealed general results in which the study approached the (7-P) marketing complex. The results of a quantitative survey with all the weaknesses of marketing indicators are collected. The matrix clearly revealed the problems associated with the micro-level.

Dissemination of results. Based on the results of the study, six publications were published in specialized journals to draw the attention of the academic community to important conclusions (2 MDPI articles, 1 BUT article, 2 ICBE conference proceedings and 1 ISEG conference). In addition to influencing the scientific environment with the help of these publications, one can also talk about social, economic or cultural impact, based on the results and proposals, strategies for the development of marketing-oriented healthcare systems in Russia and Romania that contribute to socio-economic growth can be developed.



#### 4. Author's publications on the topic of the thesis

The main provisions of the thesis are reflected in the following author's publications:

1. Bulatnikov, V.; Constantin, C. Coordinates of healthcare systems in Russia and Romania. Proceeding of the 15th International Conference on Business Excellence, Digital Economy and New Value Creation, 18-19th of March 2021, Bucharest, România. <https://doi.org/10.2478/picbe-2021-0019>
2. Bulatnikov, V.; Constantin, C.P. Systematic Analysis of Literature on the Marketing of Healthcare Systems. Challenges for Russian and Romanian Healthcare Systems. Healthcare 2021, 9, 656. <https://doi.org/10.3390/healthcare9060656>
3. Bulatnikov, V.; Constantin, C.P. Qualitative analysis: Expert views on healthcare systems of Russia and Romania. Presented in the conference ICBE "International Conference on Business Excellence", 24-26th of March 2022, Bucharest, Romania.
4. Bulatnikov, V.; Constantin, C.P. Quantitative analysis: Customer opinions about healthcare systems in Romania and Russia. Presented in the conference ICBE "Inclusive and sustainable economic growth. Challenges, measures and solutions" (ISEG 2022), 27th of May 2022, Braşov, România.
5. Bulatnikov, V.; Constantin, C.P. The Relationship between the Living Environment and People Attitudes towards Healthcare System. Case of Russia and Romania. Bulletin of the Transilvania University of Brasov. Series V: Economic Sciences 2022, 15, 9-14. <https://doi.org/10.31926/but.es.2022.15.64.1.1>
6. Bulatnikov, V.; Constantin, C.P. Systematic Analysis of Literature on the Healthcare Financial Models to Follow in Russia and Romania. Healthcare 2022, 10, 1086. <https://doi.org/10.3390/healthcare10061086>