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## Correlation Between the Level of Healthcare Financing and The Quality of Medical Services Provided to The Population.

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### ABSTRACT

The paper focuses the dependence of medical services quality on healthcare public financing. It analyses the volume of healthcare system financing and the basic directions of its allocation. People's satisfaction with the quality and affordability of medical services is estimated. The correlation between healthcare financing and people's satisfaction with medical services provided is another issue discussed in the paper. The methods of improving the efficiency of healthcare system, including improving the quality and affordability of medical services not depending on the level of healthcare public financing, are also considered. More than that, key factors affecting the quality and affordability of medical services provided to the population are identified on the basis of the study of international practices for ensuring the effectiveness of healthcare system.

**Keywords:** medical service, healthcare, healthcare market, healthcare facility, financing, public financing.

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## INTRODUCTION

Provision of quality and affordable medical services is an important target of any country, because health and livelihoods of the population are the basis of the socio-economic well-being. Therefore, the developed countries, including Russia, place great emphasis on healthcare system and undertake actions aimed at ensuring its effectiveness, including through provision of quality and affordable medical services to every citizen. At that, much attention is paid to the volume of public financing and directions of its allocation. However, the international experience of healthcare management shows its effectiveness does not depend on the level of public financing. In particular, there are countries demonstrating a very low health performance at significant volume of public financing allocated to the healthcare sector, and vice versa, there are countries providing medical services of high quality and affordability at less volume of funds being allocated from the budget. Therefore, it is necessary to make a more detailed analysis of correlation existing between the quality of medical services provided to the population and healthcare public financing. Such an analysis will identify the main ways of improving the quality and affordability of medical services provided to the Russian population and, thereby, will ensure the efficiency of healthcare system.

### Problem Statement

Continuing with current disbursement method prevents consistency and causes decisions to find correlation between the level of healthcare and quality of medical, which in turn gross services provided to population. Developing a more informed service system could help better implement the consistency of the government's ability to better monitor and evaluate its funds.

This proposed research aspires to explore possible options for a new funds disbursement system that would focus on consistency. To do this, we conduct a state analysis and use it to propose appropriate monetary interventions.

### Research Questions

We pose the following research questions. What is the effect and, from the perspective of the government to analyze healthcare quality components and the factors affecting it? Is healthcare public finance volume in order to determine further healthcare areas can be improved?

### Purpose of the Study

The purpose of the research is to analyze the key components of healthcare quality and the factors affecting it, including the volume of healthcare public financing, in order to determine further healthcare areas to be improved.

## RESEARCH METHODS

In terms of estimation, the cross-sectional or time-series methodology is usually applied for testing the beta-convergence hypothesis. However, these approaches were heavily criticized in the literature for producing biased results (Burmenko, 2013; Chernobaeva, 2013). Therefore, this study employs the most advanced methodological concepts. For estimation purposes, this study uses the concept of healthcare financing in Russia that is characterized by the redistribution of expenditure commitments between the budgets of different levels as defined by Ulumbekova (2014) and applies the direct procedure suggested by Zakharov (2015). Furthermore, the study also uses and compares the results with the budget expenditures in 2012-2014.

### Findings

One of the ways to improve the healthcare system as a whole, including for the purpose of providing the population with quality and affordable medical services, is the use of effective forms and methods of healthcare sector financing, in particular, financing of state and municipal healthcare facilities. According to Polina [10], considering the funding gap the problem of economic component of healthcare is more acute for healthcare facilities.

Therefore, the main area of improving the healthcare system efficiency is to maintain resourcing of healthcare facilities, as well as current state programs and projects [10]. At the same time, the main task in developing and implementing effective healthcare financing mechanisms should be to ensure economic independence and financial stability of healthcare facilities providing medical services, especially those that are free of charge under the state guarantees.

Besides, to improve the efficiency of funds distribution and consumption, attention should also be paid to organizational system improvements both at the level of healthcare management and consumption, including training of the healthcare personnel, as well as introduction of innovations into the development of infrastructure and resourcing. Therefore, let us agree with the fact that to ensure the effectiveness of healthcare system in the country we have to develop all of these interconnected factors [10].

As stated by Chernobaeva and Godzenko [14], the main problem of the poor quality of medical services in the country, especially provided by budgetary healthcare institutions, has been the problem of economic and social nature. In particular, beside the insufficient level of financing, there are also other factors having adverse effect on the quality of healthcare, such as lack of incentives for doctors to use resources efficiently and achieve high health performance. In addition, in terms of market relations in the healthcare sector and the development of competitive relationships, the lapses of healthcare facilities, such as low level of information resources, reputation, and insufficient management, are apparent.

The financial system, the main part of which is a budget system, is an important mechanism for the country to regulate healthcare sector [11]. The main objective of the regulation is to improve the quality and resource efficiency of medical (healthcare) service, which leads to improvements in life and health quality.

In general, healthcare financing in Russia is characterized by the redistribution of expenditure commitments between the budgets of different levels, the resources of compulsory health insurance, and the incomes of population [6].

Up to this date, public financing of healthcare system is carried out by:

- making assignments for maintaining healthcare facilities;
- financing the provision of preferential medicines, social payments, and compensations to the population for the loss of health;
- providing payments to the unemployed population for compulsory health insurance [11].

Overall budget expenditures on healthcare in the country are shown in the Table 1.

**Table 1. - Budget expenditures in 2012-2014.**

Source	2012		2013		2014	
	Billion rubles	% to GDP	Billion rubles	% to GDP	Billion rubles	% to GDP
Federal budget	613.8	1.0	502.0	0.8	535.5	0.7
Budgets of state non-budgetary funds	931.4	1.5	1048.0	1.6	1268.0	1.8
Consolidated budgets of RF constituent entities	1358.4	2.2	1250.9	1.9	1316.2	1.8
Budgets of regional state non-budgetary funds	868.1	1.4	1196.8	1.8	1393.2	2.0
<b>Consolidated budget of RF and budgets of regional state non-budgetary funds</b>	<b>2283.3</b>	<b>3.7</b>	<b>2318.0</b>	<b>3.5</b>	<b>2532.7</b>	<b>3.5</b>

Source: estimated by the author on the basis of [7], [13]

As can be seen, a share of healthcare financing from the federal budget is pretty small. The major part of assignments is from regional budgets and about 14.1 to 16.3% is the share of expenditures from consolidated budgets. Given these data, we can generally confirm that funds allocated by the country for the healthcare system are insufficient. In addition, according to the forecasts of the Ministry of Finance of the Russian

Federation, the expenditure level will be reduced/increased by 1.5 times up to 2018, but its share in GDP will be only 3.8% [12, p.12-13].

In view of this situation, to provide free medical services guaranteed to the population in conditions of insufficient financing, public expenditures on health are replaced by private ones [15]. In general, the amount of private payments for medical services is about 50% of all healthcare expenditures. In most European countries, private receipts are only 5-10% of the total amount of healthcare financing [15].

At the same time, scientists believe that since the state budget and the level of healthcare financing in the country are dissatisfactory, the priority in improving the performance of healthcare facilities and the services they provide is the search for additional sources of financing and the engagement in market relations [4]. It should be taken into account that commercialization of healthcare that has been recently observed explains the increased dependence of the system on the overall economic growth in the country. Particularly, the level of financial solvency of the population affects the volume of the paid medical services being provided to this population [15].

In general, the full commercialization of healthcare facilities can lead to both positive and negative results. The use of advanced technologies by healthcare facilities to obtain a competitive advantage in the market would lead to appreciation of medical services. However, market competition will contribute to price stabilization [8].

Gerasimov [3] also admits that the transition of healthcare to the private sector will provoke “civil unrest”, since it jeopardizes the state-guaranteed affordability of healthcare for the population. At the same time, public financing of healthcare is neither effective because of the lack of control over resource allocation. Therefore, neither state nor private financing of healthcare, if discretely, can lead to an optimum performance of healthcare system of the country and provision of the population with the high-quality and affordable medical services. Therefore, most countries make healthcare regulation with a focus on combination of public and private financing.

According to Shtukert & Shtukert [15] and Ulumbekov [12], insufficient financing of the healthcare sector leads to reduction in its quality and affordability for the population, which results in deterioration of people’s health, accentuation of inequality between different social groups, and dissatisfaction with medical services.

However, we cannot accept this position in full. In particular, the research of Burmenko and Tarkhanova [1] on the level of financing of healthcare in different countries demonstrates that countries with both low and high healthcare financing level may show different performance indicators of healthcare systems. Scientists have come to the conclusion that the performance of healthcare system depends on the efficiency of distribution and consumption of financial resources rather than on the volume of financing. This depends on the institutional environment, the extent of corruption, the existence of shadow economy in the healthcare system, and the economic and political state of the country.

Therefore, all actions of the country towards regulation of healthcare system should be based both on its economic support and organizational improvement. Results of regulation methods and means applied, including indicators of people’s satisfaction with the quality and affordability of healthcare in the country, should also be taken into account.

In particular, an assessment of medical services’ affordability and quality by the population can be considered as an essential characteristic of the state of the country’s healthcare system, the performance of healthcare facilities, and the quality of medical services provided.

According to the data, a large part of the population (72%) sought medical services in public hospitals in 2013 [2]. Much greater priority given by the population to public healthcare facilities was observed in 2014 (92%) [5]. At the same time, the share of patients satisfied with the quality of medical services provided by public health facilities from 2013 to 2014 increased significantly (from 39% to 50%), while satisfaction with the quality of medical services in private facilities increased slightly (from 69% to 70% of patients) [2]. Thus, public healthcare facilities in Russia provide a wide range of high-quality medical services.

It should also be noted that the major part of the population receives free medical services [5]. At the same time, survey results [5] confirm that even in terms of free services the population is often forced to pay in order to overcome the barriers existing due to limited resources and get services of better quality. If we analyze patients' demands on choosing a healthcare facility, the first thing taken into account is the cost of services and then goes the location of healthcare facility [9]. The extensive network of public healthcare facilities and the major part of free medical services being provided in the country explain the priorities of the population in selecting medical services provided by public healthcare facilities.

According to the data of 2014, the Russian population was generally dissatisfied with the conditions of healthcare in the country: 32% of the respondents seeking medical aid in 2014 observed deteriorating healthcare organizations' performance (in 2013, this estimate was given only by 19% of patients) [5].

According to the data on public financing of healthcare (Table 1), the increased financing in 2014 did not lead to an increase in public satisfaction with the quality and affordability of medical services. Thus, we can confirm that the quality and affordability of medical services depend not only on public financing, but also on the healthcare system's organization and operation, as well as on directions and ways of distributing and consuming the available resources.

Taking into account the fact that the level of public financing of healthcare in the country is insufficient and cannot fully cover the costs associated with medical services actually provided by the healthcare facilities to the population [6], we still cannot blame only insufficient public financing for the poor condition of the healthcare system and the poor quality of medical services.

In particular, lack of funds can be compensated by (a) the provision of certain services on a fee basis [6], (b) the use of leasing services to improve material and technical base of healthcare facilities, and (c) the use of rental payments as an additional source of funding [15]. Besides, the level of organization and management in a facility, staff motivation, management methods and forms, marketing ploys, etc. play a significant role in improving the performance of healthcare facilities and the quality of medical services provided by them.

## CONCLUSION

Given the results of the research, we can state that the effectiveness of healthcare system as it is, including the quality and affordability of medical services, depends on the effectiveness of distribution and consumption of financial resources rather than on financing. This depends on many things such as institutional environment, economic and political state of the country, organization of healthcare system as a whole, and arrangement of the work of healthcare facilities.

Different frustration is linked with the place of innovation while current level in health system which is combined with the lack of a vision. Effort of a resources from the arises from attempts of changing health care model now being asking of it. The argue a possibility of changing thinking approaches within healthcare drive possible innovation at the delivery information. Of course, the right of necessary changing of healthcare needs to change thinking frameworks offers, designing old and new community needs this conditions to built capacity for recognizing patients needs and desire and allows testing possible solutions with the community we are living with.

Future health care delivery system will be little different than institution built it. The integration of this design framework offers to respond for todays and future changes.

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