

---

**ANALYSIS OF COSTS OF FINANCING TREATMENT ABROAD: CASE STUDY – CIVIL AND MILITARY HEALTH SYSTEM**

---

**Nikola Vidović**

Military academy, University of defence – Belgrade, Republic of Serbia

[nik.vidovic.94.jf@gmail.com](mailto:nik.vidovic.94.jf@gmail.com)**Milenko Dželetović**

Faculty of security, University of Belgrade, Republic of Serbia

[milenkodz@telekom.rs](mailto:milenkodz@telekom.rs)**Hatidža Beriša**

Military academy, University of defence – Belgrade, Republic of Serbia

[berisa.hatidza@gmail.com](mailto:berisa.hatidza@gmail.com)

**Abstract:** Nowadays, many countries in the world face the problem of financing the health care system and the functioning of the health care system, because numerous requirements are put in front of state administration bodies with all line ministries, and the question is whether there are real material and economic opportunities for their realization. The paper examines the issues of financing health care within the health system of the Republic of Serbia through funds in the civilian and military health systems. Special focus is given to the sustainability of financing the growing need for financing the treatment of diseases, conditions or injuries that can not be successfully treated in the Republic of Serbia, for which there are no opportunities, capacities or conditions for adequate treatment, through the newly established budget fund within the Ministry of Health and the existing The Social Security Fund of Military Insured as a legal entity within the Ministry of Defense. The right to health care is in today's time, one of the fundamental rights of every human being, and accordingly, in the civilian and military sectors, in accordance with the possibilities there is a principle of providing a wide spectrum of health services to all patients and health care insurers in the Republic of Serbia. The paper will present an analysis of disproportion that exists between the economic aspect of financial possibilities and the growing need for health care. The research in the work will determine the role of funds as financial institutions in the destination of public funds for the purposes of alternative financing of the costs of treating illness, condition or injury that can not be successfully treated in the Republic of Serbia by the Ministry of Health and the Ministry of Defense. Determining the purpose of financing all activities related to the treatment of health insurance of insured persons abroad will provide adequate conclusions on the validity of the same as potential measures for finding an adequate solution of disproportion between the needs of the defense and the economic capacity of the Republic of Serbia to finance these expenditures. Also, by determining the treatment of financial resources in the Ministry of Health and the Ministry of Defense allocated for the financing of costs of providing health services and treatment abroad, and the impact on the sustainability of financing the costs of this type through funds. On the basis of an analysis of the current state of health care expenditure financing in the Republic of Serbia in the work on the one hand, the current theoretical knowledge and experience on the budget as an instrument for financing health care expenditures is emphasized, and on the other hand, innovative experiences of financing expenditures through allocative mechanisms in the form of funds .

**Keywords:** health care system, financial funds, public finance, budget fund.

**1. INTRODUCTION**

The purpose of the health care system is to preserve and improve the health of people providing health services to the population both modern and traditional medicine in an efficient way, which are at the same time accessible and affordable to people (Healthcare Law, Official Gazzete of Republic of Serbia) Observing globally, the health system of each country is intended to protect the health of people and the treatment of the diseased. Depending on the numerous factors of influence, the health insurance system has the potential to evolve, which chronologically from the aspect of developmental genesis of the state, culture, climatic and geographic factors can greatly contribute to better perception and health care of all citizens of that country. Accordingly, a unique system health care, as well as the regulatory framework that regulates it more closely, and in accordance with the economic possibilities of the country and the fiscal policy and the policy of the contribution to which the system will be financed (Vujovic-Gligoric & Figurek, 2015). Today, one of the fundamental rights of every human being is the right to health insurance. In line with the growing needs of patients, and with debatable issues concerning the amount of funds to finance all these needs, the health care system comes into the issue of economic resilience of all the activities it carries out (Krstic M., 2017). Health policy in its comprehensive domain in the Republic of Serbia is a conscious and responsible activity aimed at achieving numerous healthcare objectives of the insured and military and civil sector, using and applying

adequate healthcare instruments, and specific measures that give effective and effective impact, along with rational utilization of available economic resources (Totic I., 2015). In the focus of paper, it is the domain of the health care financing policy in the Republic of Serbia, considering the problem of financing the treatment abroad of insureds of civil and military sector, for which there is no capacity and conditions for the treatment of these specific diseases and diseases in the entities of the country's health institutions. Within the framework of the policy of financing state health care, many factors, functions are included, and at the same time it implements the required procedures that are being implemented and a series of measures focused on obtaining the financial resources necessary for comprehensive health care of both civil and military insureds in the Republic of Serbia. Healthcare includes many segments that involve the provision of services to subjects that include an adequate amount of nursing, equal access to health services, technology and plans for the collection and allocation of financial resources for financing healthcare products, and at the same time clearly defined, correct distribution and rational use of resources (Totic, 2012). Financing of health care in the civil and military sector of the health insurance system has become a priority of the last decade, especially considering from the aspect of the conditions for financing the treatment abroad, for treatments for which there are no adequate capacities in health institutions in the Republic of Serbia.

## **2. FINANCING THE HEALTH CARE SYSTEM IN REPUBLIC OF SERBIA**

Problems of financing the health care system, it is noticed that today the current health care systems differ among themselves in the methods of collecting funds for health care, as well as in the ways of paying health care providers. Depending on the country's development, the level of health care costs varies. Methodology of measurement is reflected in econometric calculation systems by allocating material resources for health per capita, ie by a percentage of the total national income in the observed country. Looking at the sources of financing the health care system, we realize that they are financed from public revenues on the basis of the same, and this is considered as the most representative state budget, which includes general and specific taxes, there are numerous funds in the Republic of Serbia, a mandatory health insurance fund and income in the form of contributions, then voluntary and private insurance, where there are insurance premiums, various participations - personal participation of the health insurer in the costs of using health care services and a lot of payment for the price of the services that are represented in private health institutions (Jovanovic, et al, 2015). There may be donations and voluntary contributions by contributions from institutions, groups and individuals, or voluntary contributions from natural and legal persons. In the Republic of Serbia, public spending has a tendency and a trend of growth, and from the macroeconomic point of view, there is a tendency to properly allocate funds and spend it deliberately, and at the same time provide the necessary health care to the insured persons. By allocating financial resources to the needs of the insured I, in accordance with the optimal capacity utilization, within the available funds, the patient places the patient in the health care center, which is the priority goal of the system. In order to establish and provide quality, accessible, stable and rational health care, without unnecessary wastage of financial resources, there is a tendency in the Republic of Serbia to establish a sustainable system of financing the needs of patient health care in accordance with the principle that, depending on the type and number of services and quality of these services of a healthcare institution and receive cash (Krstic, 2017). The health system entities in the form of health care providers in primary health care receive a standard payment per capita for patients registered with them. The problem that is perceived in the organization of this type of business is that the amount of payment does not change in relation to the quantity and quality of the services provided to the insured, and there is a certain tendency to encourage excessive referral of patients to health institutions in the form of hospitals or outpatient clinics for certain types of specialist care, thus distorting the direction of health care by priority and purposefulness, and at the same time affecting the level of effective and effective care of patients (Gavrilovic & Trmcic, 2012). The paper focuses on the financing of health care in the civilian and military sectors, with a special focus on the financing of treatment abroad for those diseases and diseases for which there are no adequate conditions or capacities for medical treatment in the health care system of the Republic of Serbia. The amount of funds allocated for the treatment of patients and insured persons in foreign health institutions is primarily determined, with an analysis of the potential for creation of institutions of this type, which will reduce the expenditures and enable these persons to provide complete health protection within the health system of Serbia.

## **3. FINANCING OF MEDICAL TREATMENT ABROAD THROUGH FUNDS**

From the perspective of health policy, financing the public health care sector has not only a function to cover the financial risks of illness, but also to ensure the proper distribution of public funds. In Republic of Serbia, the budget fund is a term defined in the Law on the Budget System (Official Gazette of the Republic of Serbia", No. 113, 2017) and is a record account in the Treasury's General Treasury, which is opened by the decision of the Government or the competent executive authority of the local government in order to manage certain budget revenues and expenditures separately achieving the goal that is foreseen by a special republic or local regulation or an international agreement.

Budget Fund for treating diseases, conditions and injuries which cannot be successfully treated in the Republic of Serbia was established in 2014 by the Government decision, in accordance with the growing needs for treating the status of insured persons and patients for whom there are no treatment conditions in the insistence of the health system in the Republic of Serbia. The Fund was established as a record account within the Treasury General Treasury, as an indirect beneficiary of budget funds within the division of the Ministry of Health. The Fund is open to provide additional resources for the treatment of diseases, conditions or injuries, as well as the treatment of those who are ill with certain types of rare diseases that can not be successfully treated in the Republic of Serbia and for which the Republic Health Insurance Fund can not provide sufficient amount of funds for treatment from payment of contributions for compulsory health insurance and from other sources of financing in accordance with the law.

**Table 1. Comparative analysis of financial assets for medical treatment abroad in civil and military sector in recent years**

in millions RSD

Institution		Ministry of Health		Ministry of Defence					
		Total funds of MoH	Budget Fund		Total funds of MoD	Fund for social insurance of military insureds			
Indicators	Total funds		Index (2/1)	Total funds		Index (6/5)	Financial funds for treatment abroad	Index (8/6)	
No	1	2	3	5	6	7	8	9	
Year	2015	12597,214	875,750	6,952	58762,719	6779,021	11,536	56,252	0,830
	2016	13871,945	345,510	2,491	58266,696	4516,175	7,751	40,750	0,902
	2017	11594,666	261,402	2,255	58867,536	4881,175	8,292	33,050	0,677

Source: Authors' calculation

The Fund is financed from the appropriations provided within the current year's budget, donations, legacies, gifts and other earmarked revenues, and other public revenues. Funds from the Fund can be allocated under the following conditions that all treatment options in the Republic of Serbia have been exhausted, that in the foreign healthcare institution where the treatment is proposed there is a possibility for successful treatment of the disease, condition or injury, or diagnosis, that in the case of the engagement of a foreign expert, there is a possibility for successfully treating the illness, condition or injury, or establishing a diagnosis, that the proposed treatment scientifically proven and accepted in practice, and does not represent an experimental form of treatment, that the proposed treatment will lead to an extension or improvement of the quality of life of the patient, that they are healthy in the Republic Health Fund insurance to exhausted the possibilities for making the insured for medical treatment abroad, and hiring foreign experts, in accordance with the regulations governing health insurance.

Financing of the military healthcare system includes the financing of obligations from health insurance of military insured persons realized by the fund for social insurance of military insureds and financing Military Medical Institutions and Health Departments-outpatient clinics Ministry of Defense through the Military Medical Directorate (Miladinovic & Damnjanovic, 2017). The Social Insurance Fund of Military Insureds (SOVO) is a legal entity that has the status of an organization that provides compulsory social security, including the right to compulsory health insurance as well as material security of the beneficiaries in accordance with the law regulating health insurance of military insured persons. The SOVO Fund is the organizational unit of the Budget and Finance Sector within the Ministry of Defense of the Republic of Serbia (Ernst & Young, 2016). The SOVO Fund is an organizational unit within the Sector for Budget and Finance of the Ministry of Defense of the Republic of Serbia. The main activity of the Fund for the social insurance of military insureds, which continues to work, is the exercise of rights and obligations from compulsory health insurance of military insured persons and the provision of funds for health insurance and material provision of rights beneficiaries in accordance with the law regulating health insurance of military insured persons (Miladinovic & Damnjanovic, 2017). Legislation stipulates that military insured persons and members of their families may be referred for treatment abroad if they are ill with a disease that can not be treated within health entities in the Republic of Serbia. Considering the fact that adequate treatment of the condition, diseases and diseases in the Republic of Serbia and the military health care institutions were exhausted, the Social Insurance Fund of military insured persons during the analysis covered in 2015 carried out expenditures for sending insured persons abroad based on invoices service provider from abroad (www.dri.rs). The following table provides an overview of the cost of treatment abroad in 2015, by countries that were providers of health care and treatment services.

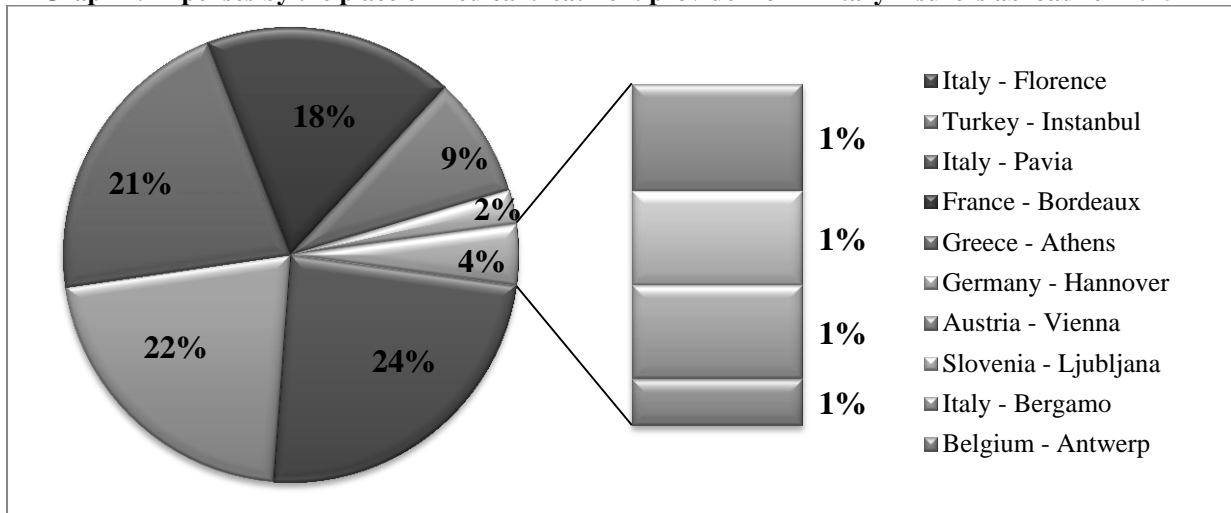
**Table 2. Review of the amount of expenditures for medical treatment abroad in 2015**  
 in thousands RSD

No	Country	City	Social Insurance Fund for military insurants
			Expenditures for medical treatment abroad
1	Italy	Florence	3713
2	Turkey	Instanbul	3321
3	Italy	Pavia	3297
4	France	Bordeaux	2749
5	Greece	Athens	1319
6	Germany	Hannover	373
7	Austria	Vienna	210
8	Slovenia	Ljubljana	185
9	Italy	Bergamo	183
10	Belgium	Antwerp	91
<b>Total <math>\Sigma</math></b>			15441

Source: Report on the Audit of the Final Account and Regularity of the Business of the Social Insurance Fund for Military Insurers for 2015 (www.dri.rs)

By directing part of the revenues from the services of military health institutions to the revenues of the SOVO Fund, from the point of view of military medical institutions in the treatment of these revenues, there will be no significant changes, ie funds will not be available to military medical institutions, but to the SOVO Fund, while on the other hand by leaving a portion of revenues for financing them these institutions create a place for unintentional use of collected funds.

**Graph 1. Expenses by the place of medical treatment provider for military insurers abroad for 2015**



Source: Authors' calculation

If the total funds instead of the SOVO Fund were to be directed to a special budgetary fund for military health, which would be educated within the competence of the Ministry of Defense, there would be a greater impact of military health facilities at the disposal of funds, and on the other hand through the annual program of using funds from that the budget fund would provide control of the dedicated spending of funds, and at the same time provide the conditions for investment investments for creating the capacity of a healthcare system that would involve technologically equipped health institutions whose capacities would be available to civil structures.

#### 4. CONCLUSION

In accordance with the diversity of the civilian and military healthcare system in the Republic of Serbia and the specific nature of the military in terms of organization of military health institutions, it can be concluded that, in

accordance with insufficient capacity utilization, there is a real potential for employing them, which would contribute to the development of the entities health system. There is no problem in the military health system with the efficiency of collecting health insurance contributions, and at the same time, the receipts of all taxpayers are transparent, unlike the civilian healthcare system, where there is a low level of efficiency of collection of contributions, because there is a population of employers who contribute for employees in the minimum amount in accordance with the application. The potential for building a more efficient and effective health care system, with a special focus on more adequate treatment of diseases and diseases for which there are no capacities and conditions in the institutions of the health system of the Republic of Serbia, observing the civilian and military sector exists, but certain measures need to be implemented. Adequate measures would include a change and a more detailed definition of normative and legal regulations, which is outdated, especially in the military health care system, by adopting a single law, by increasing the level of engagement of all health entities by providing services to health care providers and preventing the prevention of the onset of disease and illness, which are used in military-health institutions based on the provision of health services to finance the military healthcare system for the procurement of new apparatus and staff development, which would also finance projects for creating own capacities for the treatment of diseases and diseases for which there are currently no conditions in the overall health system of the Republic of Serbia, and thus directly contributed to the competitiveness of the health system of Serbia, and at the same time increased the rate of effectiveness of treating such conditions.

#### REFERENCES

- [1] Vujnovic-Gligoric B., Figurek A. Financing health care in Republic of Srpska, 3<sup>rd</sup> International Conference on Sports Science and Health, Banja Luka, pp. 308-313, 2015.
- [2] Totic I. Some questions regarding the financing of health care in member states of the European Union, Medical Gazzete of the Special Hospital for thyroid gland diseases and metabolic diseases "Zlatibor", Vol. 17, Issue 43, pp. 54-68, 2012.
- [3] Krstic M. Exercising mandatory health insurance rights in a combined financing system in Republic of Serbia, Pravni zapisi, Vol. 8, Issue 2, pp. 283-295, 2017.
- [4] Jovanovic S., Milovanovic S., Mandic J., Jovovic S. Health care systems, Engrami, Vol. 37, Issue 1, pp. 75-82, 2015.
- [5] Gavrilovic A., Trmcic S. Health insurance in Serbia – financially sustainable system, International Scientific Conference Management Mladenovac, Serbia, 2012.
- [6] Totic I. Policy financing health insurance and health care in the United States, Medical Gazzete of the Special Hospital for thyroid gland diseases and metabolic diseases "Zlatibor", Vol. 20, Issue 59, pp. 31-62, 2015.
- [7] Law on the Budget System, Official Gazette of the Republic of Serbia, No. 54/09, 73/10, 101/10, 101/11, 93/12, 62/13, 63/13 - correction, 108/13, 142/14, 68/15 - other law, 103/15, 99/16 & 113/17.
- [8] Madžar Lj. Mechanisms of mobilization and alternative allocation of public funds, Study No.1, Belgrade, pp. 1-60, 2008.
- [9] Miladinovic S., Damnjanovic R. Financing of military health insurance, 7<sup>th</sup> International Scientific Congress Palic, pp. 75-97, 2017.
- [10] Ernst & Young, Possible directions for increasing the efficiency of the healthcare system in the Republic of Serbia, 2016, Retrived from [https://www.amcham.rs/upload/HC%20Studija\\_SPRSKI\\_FINALN\\_A%20VERZIJA.pdf](https://www.amcham.rs/upload/HC%20Studija_SPRSKI_FINALN_A%20VERZIJA.pdf) on 10<sup>th</sup> April, 2018.
- [11] State Audit Institution of Republic of Serbia, Report on the Audit of the Final Account and Regularity of the Business of the Social Insurance Fund for Military Insurers for 2015, pp. 72-81, 2016. Retrived from
- [12] Decree on jurisdiction, scope, organization and method of operation of the Social Security Fund of Military Insurers, Official Gazette of the Republic of Serbia, No. 102/11, 37/12, 107/12 & 119/13
- [13] Healthcare law. Official Gazette RS, Belgrade, No. 107/05, 72/09, 88/10, 99/10, 57/11, 119/12 & 45/13.
- [14] Law on the budget of the Republic of Serbia for 2015, Official Gazette of the Republic of Serbia, No. 142/14.
- [15] Law on the budget of the Republic of Serbia for 2016, Official Gazette of the Republic of Serbia, No. 103/15.
- [16] Law on the budget of the Republic of Serbia for 2017, Official Gazette of the Republic of Serbia, No. 99/16.
- [17] Review of disposed and consolidated means for financing the Ministry of Defense in 2016, 2017 & 2018, Retrived from [www.mod.gov.rs](http://www.mod.gov.rs) on 3<sup>rd</sup> April 2018.