



IMPORTANCE OF HEALTHCARE ECONOMY ON SUSTAINABLE DEVELOPMENT OF THE COUNTRY

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Received: 22 September 2022 Accepted: 16 October 2022 Online Published: 6 November 2022

ABSTRACT

The subject of our research is the main features of optimizing the process of formation of innovative approaches in private and state hospitals in Georgia.

Objectives: The main aim of the research is to determine the stimulating effect of innovative processes in the development of the health economy and the improvement of the quality of management of local medical institutions; Also, analyze the obstacles to the implementation of the main principles of innovative management and determine the ways to overcome them. On the basis of the mentioned, the perspectives of the formation of innovative approaches in the country should be identified and the practical-methodical recommendations necessary for its development should be developed.

Methods/Approach. The methodological basis of the research is both general-scientific and economic research methods, namely: positive and normative analysis, demand-supply analysis, analysis and synthesis, systematic and logical approaches, grouping, comparison and evaluation methods.

Results: The proposed individual proposals and recommendations will create the desired incentives in terms of innovative development and economic sustainability of the country's medical field. All this will increase the quality of local medical institutions, help them gain a competitive advantage and achieve long-term success.

Conclusions: The paper examines the mechanisms and activities promoting innovative development in the field of healthcare in Georgia, which directly or indirectly contribute to the development of innovative approaches in the country; In addition, on the basis of theoretical materials and practical studies, the basic recommendations necessary for the innovative development of the healthcare economy in Georgia have been formulated.

Keywords: Medical Economics; Human Capital; Positive Analysis; Normative Analysis; Medical Insurance.

JEL classification: I15; P36; Q01

Paper type: Research article.

Citation: Zoidze, G., Abuselidze, G. (2023). Importance of healthcare economy on sustainable development of the country. *Access to science, business, innovation in digital economy*, ACCESS Press, 4(1): 60-70, [https://doi.org/10.46656/access.2023.4.1\(5\)](https://doi.org/10.46656/access.2023.4.1(5))

INTRODUCTION

The current scientific and technological progress in the world, as well as the emphasis on innovation by organizations operating in the field of economy and health care, are directly related to the competitiveness of Georgia in the fields of economy and health care, both in the domestic and international markets.

In order for the health care system of Georgia to be prepared to meet the modern challenges of the economy, it is necessary to conduct a complex study of the modern innovative laws necessary to increase the effectiveness of management (Zoidze, 2021), a continuous study of the experience of countries with an innovative health



economy and countries with a successful medical system (Akenroye, 2012), on the basis of which concrete recommendations with practical value should be developed in this direction.

Many studies of foreign scientists are dedicated to the study of issues and problems related to the effectiveness of innovative approaches in the healthcare economy, among them the following works are worth noting: Akenroye, 2012; Arrow, 1978; Becker, 2009; Berman, 1995; Burns & Burns, 2012; Culyer et al, 2000; Enthoven & Kronick, 1989; Feldstein, 2012; Folland, Goodman & Stano, 2016; Frank & McGuire, 2000; Friedman, 2001; Fuchs, 2000; Getzen, 1997; Ginter, Duncan & Swayne, 2018; Grossman, 2017a, 2017b, 2017c; Henderson, 2017; Hurley, 2000; Kobelt, 2002; Lordkipanidze, 2021a, 2021b; McPake, Normand, Smith & Nolan, 2020; Manning *et al.*, 1987; Menvielle, Audrain-Pontevia & Menvielle, 2017; Newhouse, 1992; Pauly, 1967; Phelps, 2017; Shengelia, 2016; Sloan & Hsieh, 2017; Verulava, 2009, 2019; Williams, 1987; Zweifel, Breyer & Kifmann, 2009, etc. Also, it is possible to obtain important information about this direction in the relevant reports of many international organizations and research institutions.

The most significant event in the creation of the healthcare economics was the American Economic Association conference on "Economics of Medical Care" in 1951. As a result, health economics teaching and scientific publication institutes have been established.

Famous American economists K. Arrow, M. Pauly and M. Friedman began applying classical economic theory to the healthcare system (Arrow, 1978; Friedman, 2001). The objective was to investigate the possibilities of rational resource allocation using these ideas, as well as to hasten the implementation of social changes using them. Kenneth J. Arrow, Nobel laureate (1972), authored "Uncertainty and the Welfare Economics of Medical Care" in 1978. M. Pauly authored the seminal paper "Efficiency in Public Provision of Medical Care" in 1967 (Pauly, 1967).

The idea of human capital was developed by M. Grossman and it was presented as both an individual and a collective investment, because health benefits both the individual and society and is given greater importance than the various goods and services consumed in modern times (Grossman, 2017a; 2017b; 2017c). Investment in people and society is a contribution to health capital, and its outcome is consumption.

Among the Georgian authors, an interesting work has been published by T. Verulava "Healthcare Economics". The healthcare system in Georgia has altered dramatically as a result of recent reforms (Verulava, 2009). The rigidly centralized paradigm that existed during the Soviet period was replaced with a market-based structure. Current healthcare reforms have highlighted challenges that cannot be handled without a thorough scientific examination of healthcare economics. Among these issues are: efficient resource distribution, medical care quality and availability, selection of priorities in the health care system, pros and cons of health care financing methods, evaluation of different types of medical care, search for innovative market regulation and management mechanisms to reduce adverse events such as information asymmetry and patient uncertainty.

Despite the abundance of scientific works, there are fewer scientific studies in the national economic literature that comprehensively discuss the formation of innovative approaches in health economics.



METHODOLOGY

The methodological basis of the research is both general-scientific and economic research methods, namely: positive and normative analysis, demand-supply analysis, analysis and synthesis, systematic and logical approaches, grouping, comparison and evaluation methods.

RESULTS AND DISCUSSION

The paper discusses the basic concepts of healthcare economics (Williams, 1987; Zweifel *et al*, 2009; Feldstein, 2012), comparative analysis of alternative approaches (microeconomics), issues related to healthcare financing (Veshapidze and Zoidze, 2022) and resource allocation (macroeconomics), shortcomings of the healthcare market, research on the role of insurance in the medical field and insurance risks; Taking into account international experience, timely integration of innovative approaches in the field of health care and gradual optimization of existing priorities.

In microeconomics, it is important to analyze the efficiency of health services (Cullis and West, 1980). From this point of view, the effectiveness of different technologies used in the treatment of the disease is studied according to the resources spent on it. When achieving similar results by treating the same disease in different ways, the costs of its implementation can be compared (minimum costs).

Macroeconomics provides an overall analysis of the health care system. It acquires special importance during the implementation of structural changes during the reformation of the healthcare system (Culyer *et al*, 2000). The overall analysis of the system involves consideration of the following issues: How effectively is the most necessary types of medical care distributed in the existing health care system (allocation efficiency)? How is the principle of access to medical care (equality) ensured in different population groups? How easy is it to control health care costs (cost containment)?

When evaluating different healthcare systems with the mentioned criteria, it is possible to reveal the negative and positive sides of different types of financing (Getzen and Kobernick, 2022; Newhouse, 1992), supply and demand of medical care.

Simultaneously, when restructuring the healthcare system, following another country's model demands extra consideration, because historically developed aspects have a large impact on public opinion (Berman, 1995). The process of reorientation must take into consideration the country's social, cultural, economic and organizational arrangements.

By surveying the population on what priorities the healthcare sector should have, we will get different answers (McPake *et al*, 2020). One part considers the improvement of children's health as a priority. Some - to introduce a healthy way of life, or to prevent diseases and so on. Overall, according to society, healthcare is a basic human right and should be free for all (Sloan & Hsieh, 2017).

A politician makes a statement about how healthcare should be, what he would like to improve the health of the population (normative analysis). An economist makes a scientific statement about what the situation



really is (positive analysis).

Nonetheless, because health concerns are interwoven, it is impossible to separate the positive and normative sides (Hurley, 2000). Our positive attitudes toward the organization of the health-care system influence our normative attitudes. If the economist's assertion that the limited resources allotted to health care result in uneven access to and rights to health care for the entire population is valid, we may reject the politician's claim that health care is a basic human right that should be free. However, we cannot derive normative inferences just from positive analyses. Positive analysis and value weighting are both required for normative findings.

Certain services in the medical market are characterized by signs of public good. Human resources are the most important resource for any country (Becker, 2009; Shengelia et al, 2022; Gechbaia, 2015), and healthier, able-bodied people equal more economically active people.

The population's sickness, illness, and mortality structure clearly demonstrates the critical necessity for its successful functioning. The building of a contemporary educational system and human resources in the shortest possible period is required for the country's long-term growth (Figure 1).

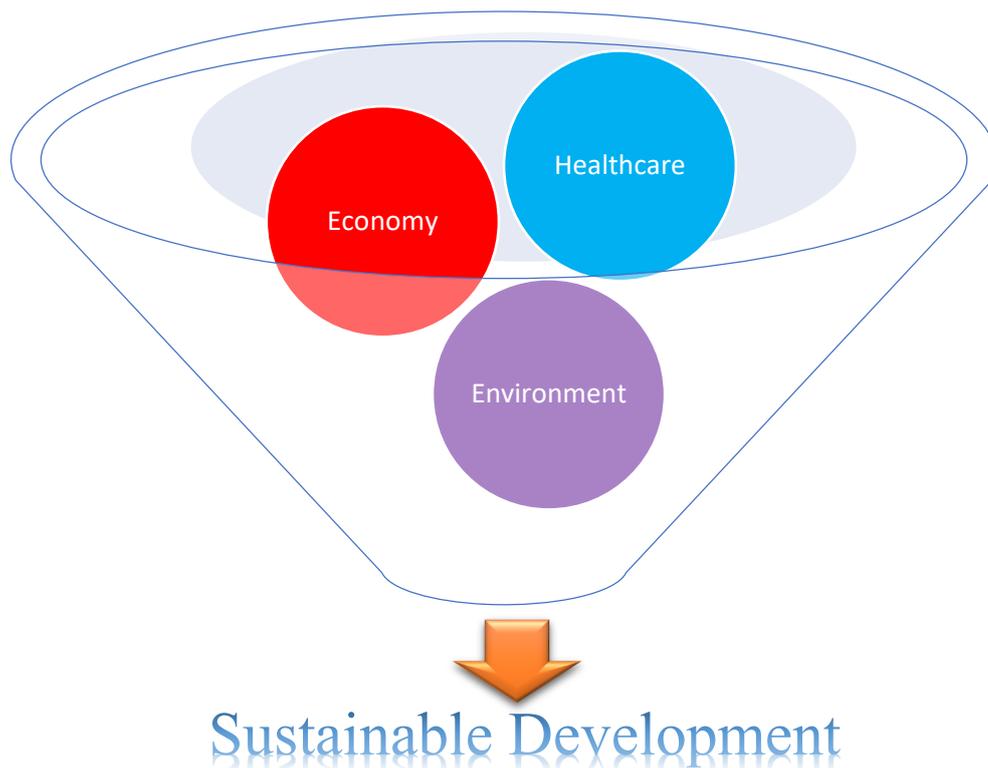


Figure 1: The Correlation Between Health, Environment and Economy

Source: *Compiled by the authors.*

Formation of an innovative policy and subsequent successful management of it is an important task for the management of the healthcare system of any country (Henderson, 2017; Lordkipanidze, 2021a). The uniqueness of innovative management lies in the fact that the area of its competitiveness is very extensive and



is not limited to any specific field. Therefore, a manager who successfully develops innovative processes in his medical institution may become the center of world attention, because in the conditions when humanity is faced with many important challenges (Fuchs, 2000; Menvielle et al, 2017), people are waiting for the implementation of each innovative idea.

It is worth noting that the development of innovations of various global scales in the field of health care is preceded by the tireless work of people and the administrative process full of redundancies of the relevant leaders.

This circumstance makes innovative approaches in the field of healthcare a topic that is interesting not only for healthcare specialists, but also for people working in various fields, including economists. It is becoming increasingly popular in the modern world.

Furthermore, differences in income, as well as access to education and employment, are closely related to differences in health and quality of life across countries and socio-economic groups. Only socio-economic status is not a determinant of health (Table 1). A person's health status depends on interactions between health determinants, life events, and individual choices. A poor existence means that when faced with choices or stressful situations, people are at a disadvantage.

Table 1. Main Determinants of Healthcare

1.	Socio-economic and Political	Housing, working conditions, income and others.	50-55%
2.	Biological and Psychological	Heredity, body type, temperament, age, sex, body weight, genetic characteristics.	5-20%
3.	Physical Environment	Location, flora, fauna, climate, air, water, soil and more.	20-25%
4.	Lifestyle	-	-
5.	Healthcare System	-	8-10%
6.	Other Factors	Income level, education, social status, environmental conditions, culture, lifestyle, health.	-

Source: Compiled by the authors based on the analysis of various factors.

Health is highly sensitive to socio-economic status (Folland et al, 2016). The main determining factors include income, education, and employment (Frank & McGuire, 2000; Lordkipanidze, 2021b). In order to improve the health status, it is necessary to support all sectors (multisectoral actions).

The connection between a person's health and his socio-economic status was recognized a long time ago (Getzen, 1997).

Compared to rich countries, low-income countries have lower health indicators. Its reasons are complex (low level of health care management and organization, malnutrition, political instability, low level of



education, accessibility of health systems, etc.).

The causal relationship runs in both directions: poverty causes disease, and disease causes people to become poorer.

Today, the Georgian healthcare system is facing many challenges. Unfortunately, there are cases when people spend all their financial resources to save family members or loved ones (for medical surgery or treatment), sell real or movable property. The situation becomes even more difficult when the sick cannot be saved, and family members and/or relatives are left without any capital. At this time, questions naturally arise:

- Does the modern text of the Hippocratic Oath contain a clause on free treatment?
- Is it ethically permissible to have such a psychological attitude of the healer and the corresponding business, when health workers and specific doctors, in order to obtain profit and subsistence income, are hungry for the multitude of sick people?
- Should the future of healthcare be in business and politics?
- Who and what kind of project should be developed to overcome the challenges in the field of Georgian healthcare?

In many developed and developing countries, there are several forms of ownership of medical organizations: non-profit, for-profit, state, public-private partnership. Such diversity is mainly due to the peculiarities of the medical market. In contrast to the above, in Georgia mainly only two forms of ownership of medical institutions are developed: private for-profit and state (Verulava, Jorbenadze & Dangadze, 2018).

Historically, since the Middle Ages, religious organizations and local community associations have helped the poor and the seriously ill. This category of people did not have appropriate sanitary and hygienic conditions for treatment. This is how one of the most widespread institutions in Western countries today - non-profit hospitals - was formed. Their main source of funding was donations.

Along with changing the function of hospitals, the financing mechanisms of hospitals have changed. If earlier charitable funds and donations were an important source of hospital income, in the later period the share of expenses borne by patients, as well as the state and private insurance, increased. This is how charity hospitals were converted into non-profit hospitals.

The healthcare market is fundamentally different from other areas of the economy (Kobelt, 2002). The behavior of an entity operating in the healthcare market is different from the behavior of entities operating in other markets. In the healthcare market, consumers (patients) are less competent to evaluate the quality of the received service, determine its need, or compare the quality of the received service (Enthoven & Kronick, 1989). As a result, the doctor (supplier) determines the medical and diagnostic services needed by the patient (consumer), unlike in a conventional market, where the buyer determines the supply.

In this way, the demand in the medical market is determined by the supplier (medical staff) due to the asymmetry of information between the supplier and the customer in the medical market (the supplier has more information than the customer), the supplier can use the informational advantage at his disposal to stimulate the demand for as many services as possible for the patient. This phenomenon in health economics is called



supply-driven demand (Verulava, 2019; Steward et al, 2017).

In the medical market, where the patient is little informed about the need for medical services, a relationship based on trust is of particular importance. Unfortunately, in our current reality, there are cases where medical facilities and/or medical facility staff try to gain additional benefits due to the patient's lack of information.

The situation is further complicated by the fact that the medical field in general is a rather difficult market to control. Since in many cases it is difficult to accurately determine/evaluate the purposefulness and effectiveness of decisions made by individuals in the field of medicine (treatment or surgical cases).

As a result, recently, in the conditions of increased mistrust of Georgian medical institutions on the part of the public, alternative markets have been sought, mostly in high-tech clinics of neighboring Turkey, whose staff is distinguished by more experience and high professionalism, and the prices of medical services (including medicinal drugs) are quite low and acceptable (Zoidze & Veshapidze, 2022).

Taking into account the existing challenges, we offer the representatives of the healthcare system and authorized persons desirable initiatives:

1. In the healthcare market, the state should promote the development of non-commercial and public-private partnership institutions.

2. Medical institutions were fully or partially exempted from state taxes (Verulava, 2009).

3. A medical city should be created, preferably in the geographical center of Georgia, so that patients in a critical condition can be transported from all areas of the country more or less on time and complete services can be provided.

4. In order to increase the availability of health system services, the creation of a charitable electronic help portal for those who need urgent treatment, of course, with the active involvement of the Ministry of Labor, Health and Social Defence of Georgia, mass media and private businesses (Burns and Burns, 2012).

5. Periodic retraining/upgrading of medical staff abroad (Phelps, 2017), especially in areas that are problematic for Georgian medicine, but priority areas; Also, development of mobile short-term programs for increasing the competence of professional personnel.

6. Bringing highly qualified foreign healthcare specialists to Georgia (on the basis of exchange programs), employing them and sharing the knowledge they have accumulated with the local medical staff (Rice *et al*, 1998; Shengelia, 2016).

7. A real increase in the effectiveness of the Institute of Health Insurance (Manning et al, 1987).

8. Development of national long-term (and short-term) strategies for health and social protection. In addition, the increase of state spending on health care should not become the main task of the health care financing policy, and in this direction, a periodic study of the purpose and effectiveness of the funds allocated from the budget should be carried out (Ginter et al, 2018; Abuselidze, 2021).

9. Increasing transparency in terms of medical services.

10. Stimulation of the development of medical tourism.

Overall, it should be noted that nonprofit hospitals should primarily serve poor and low-income patients.



Their activities should be considered as charitable. Accordingly, their income and property should be mostly exempt from state tax. The main source of their financing should be public donations, which will strengthen the social responsibility of the society and give them a unique motivation to provide medical services to socially vulnerable groups. It is possible to introduce an effective financing system of state and private insurance in the revenues of the mentioned type of hospitals.

CONCLUSION

The lack of development of non-profit institutions in the medical market in Georgia proves that there is no sufficient motivation for hospitals to operate in a non-profit way. It is necessary to establish tax incentives for medical institutions.

We think that the implementation of the mentioned initiatives and making the most rational decisions in the field of health care will require more detailed discussion, research and analysis in the future. In this regard, it will undoubtedly be interesting to study the experiences and challenges of small countries with a successful health care system and their harmonious transfer to the Georgian health care system.

Also, it is advisable to increase the role of non-profit hospitals in the medical market of Georgia. This will increase the competition between the forms of ownership of medical organizations, which will help increase the population's access to healthcare services and, most importantly, bring the Georgian healthcare system closer to the experience of smaller Western countries with a successful healthcare system.

Author Contributions: Conceptualization, G.Z, G.A.; methodology, G.A.; formal analysis, G.A.; investigation, G.Z.; project administration, G.A.; data curation, G.Z.; resources, G.Z.; supervision, G.A.; validation, G.Z.; writing—original draft preparation, G.Z, G.A.; writing—review and editing, G.Z, G.A.

All authors have read and agreed to the published version of the manuscript.

Institutional Review Board Statement: Not applicable

Informed Consent Statement: Informed consent was obtained from all the participants involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy issues.

Conflict of interests

The authors declare no conflict of interest.



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ACCESS Journal:

Access to Science, Business, Innovation in Digital Economy
2023, 4(1), 60-70, [https://doi.org/10.46656/access.2023.4.1\(5\)](https://doi.org/10.46656/access.2023.4.1(5))

ISSN 2683-1007 (Online)

<https://journal.access-bg.org/>



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