## Medical Tourism Association as an Instrument of Managing Health Industry Competitivity

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## ABSTRACT

The article presents the classification of medical tourism services based on functional limitations. The distinction between the concepts of health and medical tourism has been made. The objective of medical clinical tourism is to obtain diagnosis, treatment and prophylactic measures, surgical treatment measures. Health tourism includes rehabilitation and sanatorium-resort treatment, balneological, physiotherapeutic and resort tourism. The analysis of healthcare services market has been performed from the perspectives of supply and demand. The foreign practice of medical tourism management by professional associations in the USA and Ukraine has been reviewed. The article analyzes Russian medical tourism associations' activities and structure. These organizations are still taking their first steps and do not significantly contribute to the management of public health sector. A proper management of medical tourism in Russia is impossible without taking into account its regional specifics. Since Russian associations do not have an extensive regional network, it is

advisable to create an organization promoing the development of medical tourism especially in the Southern and North Caucasian Federal Districts. The goals, functions, and members of such organization have been identified, as well as its main advantages, the range of services provided, objects of specialized infrastructure that Russian medical tourism association should run. The article presents the results of the research supported by grant No. 19-410-230059r\_a from the Russian Foundation for Basic Research.

**Keywords:** medical tourism, health tourism, classification, clinical tourism, resort tourism, association.

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#### INTRODUCTION

In Russia, the medical tourism has recently entered a fast track of development, which is due to existing favorable conditions both at regional and federal levels [1]. Meanwhile, this area of public health has no common conceptual framework from scientific perspective, thus, the existing concepts should be updated and systematized.

#### **METHODS**

The study is based on the works of Russian and foreign economists on improving sectoral competitiveness,

regulatory acts of the Russian Federation, guidance materials, materials posted on the Internet. To achieve the objectives of the study, theoretical and empirical research, systematic approach and method of expert estimates were used.

#### **RESULTS**

1. The concept of medical tourism and classification of its services

Figure 1 presents the most typical approaches to the definition of "medical tourism" as an economic concept.

Medical tourism is a term referring to the practice of providing medical services outside the country of residence, combining vacations abroad with obtaining highly qualified medical care[2]

Medical tourism is a field of tourism aimed at the organization of treating citizens' health abroad [3]

Medical tourism is an essential and integral part of national and world market of travel services. In the narrow sense, medical tourism is traditionally defined as the migration of patients to the place of treatment, rehabilitation and recreation. The time of treatment and rehabilitation is limited to one year. [4]

Fig. 1: Definitions of medical tourism

A theoretical review of the existing definitions of "medical tourism" makes it clear that in scientific and practical use, determining the nature of medical tourism as obtaining medical care abroad prevails. At the same time, a broader understanding of medical tourism is becoming more common in economic literature: it refers to health-care services provided not only abroad, but also within the patient's country of residence, but in another region.

Most often, medical tourism is considered as part of a more general concept – health and wellness tourism. Commonly, medical tourism is associated with a fairly radical intervention in the patient's body. From this point of view,

preventive care and recreational services are not related to medical tourism. Therefore, health-resort treatment and recuperation are also outside medical tourism services.

In our view, medical tourism is part of health tourism, along with its other components. However, medical tourism is based not only on clinical procedures, but also on spa treatment.

Figure 2 shows the components of health tourism.

From the perspective of functional limitations, medical tourism is divided into two large groups: clinical tourism and health-resort tourism.

Clinical tourism involves a thoroughgoing treatment.

## Wellness tourism

• It involves not only physical treatment, but also mind-body interventions. Health tourism includes hunting, fishing, aerobics, mountain hiking, horse riding tours, boating, speleotourism; wellness tourism includes yoga, food and spa tourism, and food tourism, in turn, includes wine therapy, herbal medicine, beer and cheese tours.

## Alternative medical tourism

•It includes all areas of medical practice, not officially supported at the state level, but not prohibited. It includes naturopathic treatment: homeopathy, Ayurveda, acupuncture, acupressure (a type of reflexotherapy), osteopathy; non-traditional diagnostics: bioresonance diagnostics, iridodiagnosis, applied kinesiology.

#### Medical tourism

It consists of clinical and health resort tourism.

Figure 2: Elements of health tourism

Figure 3 presents the components of clinical tourism.

## Diagnostics tourism

•includes patient's general health assessment.

#### Preventive care tourism

•presumes preventive care of both physical and emotional health.

## Surgical treatment abroad

•includes: plastic, transplant surgery and other operations, as well as euthanasia.

## Health treatment abroad

•includes cosmetic, dental, ophthalmic services.

Figure 3: Components of clinical tourism

Health-resort tourism involves presumes consuming medical services of treatment and recovery resorts.

The structure of health-resort tourism includes:

1. Medical rehabilitation and spa treatment.

- 2. Balneotherapy.
- 3. Physiotherapy.
- 4. Resort tourism (Figure 4).

#### Health-resort treatment and medical rehabilitation

•Medical rehabilitation is a set of measures of both medical and psychological nature, aimed at a full or partial acquisition of lost functions and / or functional compensation of diseased organ or the whole body; maintaining the patient's organism in an acceptable state at the end of an acute developing pathological process or exacerbation of the disease, as well as prevention, diagnosis and treatment of disorders in patient's organs or entire systems of his/her organism, prevention of disability or and reduction of its degree, improvement of patient's quality of life, maintaining his working capacity and social integration.

## Balneology tourism

• It consists in using mineral water, medical and health procedures carried out under medical supervision.

## Physiotherapy tourism

• In order to restore the functional capabilities of the patient, physiotherapists prescribe different physical activities, as well as massage. They consult those who need help or their parents regarding the maintenance or improvement of their motor ability.

### Resort tourism

• It includes landscape therapy, climatotherapy, heliotherapy, aerotherapy.

Fig. 4: Components of medical resort tourism

This classification allows identifying the main types of medical tourism and systematizing the content of this economic category, which facilitates business and academic communication.

2. The development of medical tourism in the Russian Federation

According to the Ministry of Health, at the end of 2016 the volume of medical services to foreign citizens amounted to more than 1.5 billion rubles. As part of medical tourism, more than 66 thousand foreign patients used the services of Russian doctors [5]. According to a study conducted in 17 organizations subordinate to the Ministry of Health, in the first half of 2017, 14.2 thousand people came to Russia to obtain medical services, which resulted in a cash flow of 461.2 million rubles [5]. In the first half of 2017, 74% of total services to foreign patients were delivered in hospitals with the average cost of staying equal to 61 thousand rubles (taking into account the medical services performed) [5].

According to data for 2017, approximately 60% of medical tourists were from Central Asian countries, about a third of patients came to the Russian Federation from Europe [5]. The Ministry of Health affirms that the work with foreign patients should be carried out both through the centralized structure of medical tourism (based on the South Korea experience) and through the formation of special international departments at hospitals and clinics (as, for example, in Germany) [5].

An analysis of international practices of intermediary medical tourism organizations shows that they usually perform three functions:

- 1) informing patients and all interested persons, promoting medical tourism services;
- 2) organizing medical care and support for patients at all stages of treatment;
  3) organizing travel itself and leisure activities of patients during their stay in the hospital.

In different countries, the range of mediation services in the field of medical tourism varies widely: from informing (Germany, Belgium) to providing turnkey medical solutions (for example, South Korea, Singapore, and Malaysia). The most comprehensive medical tourism service for patients is offered:

- in Philippines: offices of intermediary companies and clinics operate 24 hours a day, seven days a week;
- in Israel: a full range of services for organizing travel and accommodation, as well as providing remote consultations with specialists;
- in the Dominican Republic: even individual medical concierge services are provided [5].

In the Russian Federation, foreign patients use the services of both federal and private medical hospitals. The medical services in the field of oncology, ophthalmology, cardiovascular surgery and neurosurgery are the most popular in federal institutions. Dentistry, gynecology, as well as assisted reproductive technologies and plastic surgery are greatly on demand in private clinics.

A new hospital rating system based on objective results of patients' treatment, as well as on data on medical equipment and qualification of health care professionals should be established in order to improve quality of services provided within the framework of medical tourism, as well as to increase their demand.

The plans of Russian Ministry of Health put the country among the leaders in medical tourism in terms of number of foreign patients and bring it to a level exceeding 500 thousand people a year. It is planned that within 10 years the Russian Federation will be among the five leaders of international medical tourism. Pursuant to the instruction of the President, a special project office of the Ministry of Health of the Russian Federation was formed in March 2017. Its objectives include the development of medical tourism and implementation of a program for attracting patients from abroad [5].

The program of medical tourism development in the Russian Federation includes the creation of regions- clusters that should become the basis for the formation and development of medical tourism. These will include Metropolitan, Northwest, Novosibirsk (including Tomsk) and other clusters. A list has also been compiled, including 17 pilot federal state budgetary institutions intended to start implementing the program [5].

As already mentioned, medical tourism involves a travel within the country or abroad in order to receive high-quality medical care, both clinical and therapeutic. Medical tourism is one of the most promising areas of the global tourism

business. In 2015, Russia ranked 34th in terms of the development of medical tourism [6].

One of the key directions for regional tourism development should be the formation of medical services unique to a region, as well as reorientation from mainly seasonal to year-round medical tourism based on a unique balneological component including specialized tours and increasing the interest of largest tour operators to their distribution.

Along with the high level of medical services provided in the region, including high-tech ones, an important competitive advantage of Russian medical tourism industry is a fairly low price level, especially compared to the USA, Canada, Western Europe. This advantage can contribute to increase the demand for medical services from foreign patients. The development of health services export is a new area of great promise and substantial potential for Russia.

According to the president of the Russian medical tourism association, Mr. Onishchenko, inbound medical tourism is rapidly developing [7].

Table 1 presents a comparison of prices for individual medical procedures in Russia and some other countries of the world.

Table 1: Prices on medical services (surgery-based mainstream medical procedures) in different countries in 2019 (USD \$)[8]

7,12					
	USD \$		USD \$		USD \$
Colombia	1,200	Poland	925	Russia	1,100
Costa Rica	800	Singapore	2,700	USA	2,500
India	900	S. Korea	1,350	Malaysia	1,500
Israel	1,300	Thailand	1,720	Mexico	900
Jordan	1,000	Turkey	1,100	Canada	2,350

An analysis of prices on medical surgery-based procedures allows concluding that in Russia, prices on medical services are approximately at the level of Turkey, Jordan, Colombia, that is several times lower than in the United States. This means that in terms of prices Russian medical tourism is competitive on the international market.

3. Foreign medical tourism associations: practices and experience

A scoping review of materials published on websites of USA, Israel, Ukraine, France, Great Britain, and Canada medical tourism associations was performed to summarize the foreign experience in operating medical tourism.

A detailed description of American Medical Tourism Association and Ukrainian Medical Tourism Association is given below.

Ukrainian Medical Tourism Association (UMTA) [9].

The main goal of UMTA is to promote the development of medical tourism as one of the most promising areas of health care industry, to satisfy and protect the legitimate interests of its members.

To achieve the goal, UMTA has set the following tasks: Concerning the patients: «Patients have the right to safe and efficient treatment»:

- assistance in obtaining objective information about the best world and Ukrainian medical institutions and clinics, quality of their medical services, efficiency of treatment;
- facilitating interaction among Ukrainian and international public and charitable organizations;

Concerning the doctors – «A doctor must constantly improve his professional knowledge»:

- Promoting the development of international relations between practicing Ukrainian doctors and specialists from abroad;
- facilitating the exchange of experiences between Ukrainian doctors and the leading foreign experts in the field of medicine;

Concerning medical institutions – «Modern Ukrainian medical institutions must meet international standards»:

- assisting in providing norms, standards and ethics for institutions, companies, organizations involved in medical tourism;
- supporting the development and protection of the reputation of medical tourism in Ukraine in terms of high quality level and compliance with the international standards of treatment and prevention;
- promoting health care reform in Ukraine.

A number of advantages and privileges have been implemented for UMTA members aimed at improving skills, motivation, education, sharing experience, ideas, new

technologies, legal support, ensuring the legitimate rights of UMTA members in Ukraine and foreign organizations.

The doctors - members of the Ukrainian Association of Medical Tourism (UMTA) have unique opportunities in the following areas:

#### 1. Training.

They take part in trainings, master classes and training programs provided by UMTA, including training abroad. Doctors share their experience with world leading specialists in medicine

2. Study tours to foreign clinics.

Accepting applications for visiting clinics and hospitals in Turkey, Latvia, Croatia, Slovenia.

- 3. Conferences. Forums.
- Taking part in ongoing events (supported by UMTA): in Ukrainian and international conferences under favorable terms
- taking part in various Internet development projects for medical tourism.
- taking part in the forums to maintain communication with patients, medical workers, insurance companies and other health care providers.
- 4. Development of medical tourism.
- developing international relations among practicing Ukrainian and foreign doctors.
- receiving support in organizing the patient referral for medical treatment abroad.
- -interacting with Ukrainian and foreign international public and charitable organizations.
- -receiving and providing objective information about the best medical institutions and leading clinics both in Ukraine and abroad, about the quality of their medical care, the effectiveness of treatment.
- receiving support from UMTA in developing and protecting the reputation of medical tourism in Ukraine in terms of provided medical services quality and meeting international standards of treatment and prevention.
- providing access to medical tourism market research, both in Ukraine and abroad.

American Medical Tourism Association [10].

The American Medical Tourism Association has been operating since 1847, promoting scientific and technological progress in the field of medicine, improving public health, and establishing close and fruitful relations among doctors and consumers of medical tourism services.

The American Medical Tourism Association provides its members with the full access to the information they collect and publish.

The membership is regarded as the credibility of a doctor or medical organization, as the association provides a guarantee of the quality of medical services provided by its members.

The Association allows getting special discounts on medical goods, facilitating access to insurance and financial services, and benefits for tourist trips.

The Association has created a medical reference book containing answers to clinical issues in many medical disciplines and maintains it up-to-date. The access to the directory is free within first 18 months, then it is necessary to pay an annual subscription of \$ 50 for members of the association (non-members pay \$ 100).

Members of the association get unlimited access to 11 specialized journals through the electronic library system.

They help in organizing the participation of members in grantmaking, provide adaptive assistance to young doctors, support a national medical network, maintaining communication among association members from different parts of the country.

The results of fundamental and applied research in the field of medicine are presented at the annual symposium organized by the Association.

The Association takes an active part in organizing medical students training, their practices and research activities, contributes to discover young talents among medical students.

The association cooperates with bookstores, providing a 25% discount to the members.

The association participates in developing medical standards, protecting the interests of the industry in government circles. The association is constantly extending its outreach efforts. Foreign experience has shown that medical tourism associations play an essential part in public health administration as well as in forming competitive advantages of health industry. American Medical Tourism Association is one of the most representative institutions of the kind. Associations include medical tourism centers, clinics, analysis laboratories, diagnostic and rehabilitation centers, higher and secondary medical education institutions, medical research institutes, individual practitioners, students of medical universities and colleges, young specialists, etc. Foreign medical tourism associations solve a wide range of tasks posed by monitoring the medical tourism market; they protect the interests of their members in government bodies, form training systems for specialized industry personnel, carry out medical research, ensure the compliance of services with the international standards; elaborate organizational forms of medical tourism functioning, contribute to achieve the greater export orientation of medical tourism organizations; organize trade fairs and exhibitions, etc. At the same time, medical tourism associations play a huge role in improving the quality of medical services and ensuring their consistency. The accumulated experience in the management of foreign medical tourism associations can be used in medical tourism development in Russia.

Thus, in order to overcome the competitive weakness of the Russian medical tourism organizations, which is due to their low controllability, it is necessary to organize a national association of medical tourism, increasing the role of this association in forming effective mechanisms for creating competitive advantages of health industry.

# 4. Russian medical tourism organizations: experience and challenges

The domestic practice of managing the medical tourism industry by the professional community shows that the management mechanism has not yet been formed. However, some significant steps in this direction have already been taken. Three professional associations in the field of medical tourism have been created in the Russian Federation:

1. Association of medical tourism agents was created in 2015 and headquartered in Moscow.

- 2. Russian health care travel council (RHTC) 2015, Moscow.
- 3. Russian Medical Tourism Association (RMTA) 2017, Saint-Petersburg.

However, Russian associations are still taking their first steps and do not significantly contribute to the management of the sector. Here, the regional specifics must be taken into account. Since domestic medical tourism organizations do not have an extensive regional network, it is advisable to create a specialized association aimed at promoting the medical tourism in the South of Russia.

In this regard, a conceptual model of Russian medical tourism association has been developed based on foreign experience in this field. The work of medical tourism associations in a number of countries, in particular, in the USA, Israel, Ukraine, France, Great Britain, Canada has been studied

Thus, in most countries there are national medical tourism associations, which collect and summarize information, carry out market research, maintain constant communication with both consumers and intermediaries, identify global trends in the development of scientific and technological progress in the medical field, have representation in international professional organizations whose activities are aimed at developing requirements for medical tourism services, new health standards and other general documents for medical tourism. The Government bodies cannot carry out this work in a proper manner, thus, professional medical tourism associations should create the relevant structures, able to administer all the activities in this field.

#### **DISCUSSION**

The association should act as a non-profit partnership. An expanded list of goals and functions of Russian medical tourism association has been drawn up, the participants and financing mechanism have been identified, and a number of other issues have been raised in the current study.

The main objectives of the association would be: - protection of interests and optimization of the activities of medical, resort and other organizations involved in medical tourism by providing support in the information exchange between participants;

- improving the quality and safety of medical, spa and tourism services by taking into account rapidly changing ecosystem, modern technologies and procedures for providing medical tourism services;
- formation of industry-specific competitive advantages and ensuring the competitiveness of the medical tourism industry as a whole, as well as medical tourism services and organizations providing them;
- ensuring the effective development of medical tourism by accelerating innovative and investment processes, increasing the use of modern information technologies;
- assistance in creating a favorable image of medical tourism, promotion of domestic medical tourism industry;

The medical tourism association represents the interests of a wide range of actors: medical tourism centers; organization of specialized medical tourism infrastructure; medical clinics; hotel practitioners; students of medical universities and colleges; medical universities and colleges; health resort

institutions; travel agencies; marketing specialists; transport intermediaries; insurance companies and others.

An association may establish specialized infrastructure facilities to serve all members of the association, in particular, medical laboratories, diagnostic and rehabilitation centers. In order to implement its statutory provisions and tasks, the medical tourism association should focus on funding sources such as contributions of the association's members; revenue from the services provided; funds accumulated for collective financing. In particular, a trust fund for the so-called collective financing of R&D should be established; state subsidies, sponsor contributions and other legal sources of funds can also be used.

An association of medical tourism can organize an investment bank, a leasing company to solve the problems of innovative development in medical tourism.

To improve the medical tourism management, a systematic approach to the process of ensuring its competitiveness should be used. In particular, a competitiveness management system has been developed for medical tourism sector.

An important stage in creating competitiveness management system (CMS) for the medical tourism is its isolation from the environment, i.e. determination of external environment of the system.

The components of the CMS external environment are the following: input, output of the system, communication with the external environment and feedback.

The CMS macro environment is represented by factors that have an indirect influence on it and the components of the microenvironment of the system including political, legal, international, economic, scientific, technical, socio-cultural, demographic and environmental factors.

The components of the CMS microenvironment include suppliers, consumers, marketing specialists, competitors, related industries.

With respect to the influence on the industry competitiveness, suppliers can be divided into three groups in descending order of their importance: Group 1: Suppliers of specialized medical infrastructure, including providers of mediation services in scientific, technological and engineering spheres. This group provides enterprises of the sector with material and information resources needed for proper functioning of medical tourism industry (medical laboratories, diagnostic centers, rehabilitation centers, sanatoriums etc.), as well as with high-skilled human resources (medical universities, colleges).

Group 2: Suppliers of specialized material and natural resources (suppliers of medical equipment, pharmaceutical companies).

Group 3: Suppliers of basic production and social infrastructure, providing industry enterprises with material, natural, labor, financial and information resources.

The main competitors of health enterprises are manufacturers of import-substituting products present in the Russian consumer market.

In medical tourism competitors are, first of all, centers of alternative medicine, physical education organizations (fitness centers, etc.), dietetics organizations, etc.

In general terms, the structure of medical tourism competitiveness management includes the following

subsystems: managing subsystem; managed subsystem; supporting subsystem; subsystem of scientific support; marketing subsystem.

The management subsystem plays a key role in the industry management system.

The managing subsystem is based on the principle of hierarchy. Four levels of hierarchy are distinguished in the structure of this subsystem.

The subjects of the first level management are government bodies in public health care system: the Ministry of Health of the Russian Federation, the Federal Service for Supervision of Healthcare (Roszdravnadzor), the Federal Biomedical Agency, the Ministry of Culture of the Russian Federation (Ministry of Culture), and the Federal Agency for Tourism (Rostourism).

The second level is represented by different associations in the field of medical tourism.

The third level consists of umbrella organizations of medical tourism associations.

The fourth level includes managing entities of specialized medical infrastructure.

It should be noted that under a free market economy, the control actions of both the first and second hierarchy levels should be of regulatory and monitoring nature. Moreover, only public health facilities can be subject to direct control by the first level bodies.

The managing entity of the third level has a greater impact on the lower level, which is determined by the organizational form of corporate entity. Here, in addition to regulatory function, direct management activities are also implied.

At the fourth level, the industry competitive advantages are realized. The success of medical tourism organizations is largely determined by the ability of the fourth level managers to use the potential competitive advantages and key success factors and to properly combine them with the internal potential of medical tourism organizations, their experience and knowledge, organizational culture.

## CONCLUSION

Using a systematic approach to the formation of competitiveness in the field of medical tourism will streamline this process, provide systematic and comprehensive solutions to the problem of increasing Russian medical tourism competitiveness.

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