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## DEVELOPMENT OF REGIONAL MEDICAL TOURISM MARKETS IN UKRAINE BASED ON INNOVATION PRINCIPLES

**Abstract.** It is stated in the article that the development of regional medical tourism markets in Ukraine should be based on innovation principles. The types and meaning of innovation technologies according to the medical services provision to tourists (tourist attraction, tourist services, provision of medical services and additional tourist services) have been studied. The characteristic of creation and marketing processes features of medical innovations at regional medical tourism markets were determined. The stages and participants of these processes were selected, which form the support system for the innovation creation.

**Keywords:** innovation technologies; region; medical tourism; services; regional market.

**JEL Classification:** R58, L83, O32

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### **РОЗВИТОК РЕГІОНАЛЬНИХ РИНКІВ МЕДИЧНОГО ТУРИЗМУ В УКРАЇНІ НА ЗАСАДАХ ІННОВАЦІЙНОСТІ**

**Анотація.** У статті обґрунтовано, що регіональні ринки медичного туризму повинні розвиватися на засадах інноваційності. Досліджено типи та змістовну сутність інноваційних технологій за стадіями надання послуг медичним туристам (залучення, обслуговування, надання медичних і додаткових туристичних послуг). Визначено характерні ознаки процесу створення та комерціалізації інновацій медичної сфери на регіональних ринках медичного туризму із виокремленням етапів, а також учасників цього процесу, які формують систему забезпечення генерації інновацій.

**Ключові слова:** інноваційні технології, регіон, медичний туризм, послуги, регіональний ринок.

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### **РАЗВИТИЕ РЕГИОНАЛЬНЫХ РЫНКОВ МЕДИЦИНСКОГО ТУРИЗМА В УКРАИНЕ НА ИННОВАЦИОННОЙ ОСНОВЕ**

**Аннотация.** В статье обосновано, что развитие региональных рынков медицинского туризма должно осуществляться на инновационной основе. Исследованы типы и сущность инновационных технологий на каждой стадии предоставления услуг медицинским туристам (привлечение, обслуживание, предоставление медицинских и дополнительных туристических услуг). Определены характерные особенности процесса создания и коммерциализации инноваций медицинской сферы на региональных рынках медицинского туризма с выделением этапов, а также участников данного процесса, которые формируют систему обеспечения генерации инноваций.

**Ключевые слова:** инновационные технологии, регион, медицинский туризм, услуги, региональный рынок.

**Introduction.** Today medical tourism is considered one of the most prospective tourism forms, since it has significant social and economic potential. The most effective fulfillment of this potential is at the regional level. We define regional medical tourism market as the system of basic and infrastructural institutions of the region that helps to create and develop medical tourism – the source of regional economy's competitiveness increasing at the expense of generated income tourist cash flows.

**Brief Literature Review.** The problems connected with the usage of innovation technologies in different areas of economy for sustaining its competitive capacity are basic in different theories of the leading scientists and experts (M. Tugan-Baranovsky, 1900; J. Hobson, 1909; J. Schumpeter, 1982; C. Freeman, 1987; P. Porter, 1990; P. Drucker, 2006, et al.). In the scientific world, Australian scientist J. Schumpeter (1982) is considered the founder of the innovation theory. He defined the innovation as a substantial change of goods as a result of the introduction of new materials and components, the new methods of production, the opening of new markets and the carrying out of new organizational forms [1].

According to the Law of Ukraine on Innovation activity, innovations are viewed as newly created (applied) and (or) advanced competitive technologies, products or services, and also the organizational and technical solutions of production, administrative, commercial or other nature which are essentially improving structure and quality of production and (or) the social sphere [2].

**Purpose.** Multiple approaches to the innovations study, the analysis of the existing statistical materials on innovation activity in Ukrainian regions allow making the conclusion that the attention is mostly the necessity of using innovation technologies in the material production. However, the developments only indirectly concern the service sphere, especially tourism. A little research of this scientific problem caused a significant slowdown in Ukrainian tourism industry in comparison with the world tendencies. That is why there is an important scientific task of analyzing the problems and finding the activation mechanisms of using innovation technologies when forming and developing regional medical tourism markets in Ukraine.

**Results.** According to The European Innovation Scoreboard (EIS), Ukrainian innovation level falls under Group 4 with the score of 0.23. The group is called «catching up countries». Such countries as Hungary, Russia, Latvia, Poland, Croatia, Greece, Bulgaria, Romania, and Turkey are also the part of this group. In comparison with other EU countries Ukraine needs to improve its performance in more than 3 times in order to achieve the level of «innovation leaders» (Sweden – 0.68), in about 2 times to achieve the level of «innovation followers» (United Kingdom – 0.48), in 1.6 times to achieve the level of «moderate innovators» (Norway – 0.35) [3]. Such results show low innovation potential of Ukraine and its regions. That is an obstacle in the way of development regional medical tourism market.

The question of promotion innovation activity in the regions of Ukraine cannot be solved only by private companies, it mostly the problem of regional and local authorities, the list of which is defined by the Constitution of Ukraine, the Law of Ukraine on Local Self-Government, the Law of Ukraine on Innovation Activity etc. The conducted analysis has shown that functions of regional authorities are limited to designing and implementing the innovations development program that includes scientific and technical developments, but they do not solve the problems connected with the increasing of region's economic development in the long run.

The reasons of such situations are the following: the lack of financial resources for regional and local innovations development programs; including in these programs the projects not connected with innovations; concentrating attention on the projects without strategic significance for the region; underdeveloped financial and lending organization for funding innovation projects; obstacles connected with bureaucracy which refuses to include innovation projects to the region innovation development programs; inefficient budget distribution, which because of the financial shortage, disables local authorities to establish tax incentives for encouraging companies to innovation activity; low

investment attractiveness of the regions that stands in the way of finding funds for local innovation projects; low level of cooperation between private and governmental structures; lack of innovation infrastructure in Ukrainian regions.

According to the Law of Ukraine on Priorities in Innovation Activities in Ukraine, people's health improvement is included into the strategic priority directions of 2013. That implies possibilities to get funds of state and local budgets for innovations development in medicine. However, the low budget potential of the country and its regions indicates that the main funding source of innovations for regional medical tourist markets is the money of medical business, financial and lending organizations.

The obstacles to introducing innovations in tourism are becoming even bigger because of the imbalance between the state of national tourism infrastructure and the international standards; lack of funding; underdeveloped transport infrastructure; obsolete resource and technical base of tourism industry; underdeveloped network of accommodations, catering facilities and entertainment industry; shortage of highly qualified specialists who can implement the innovative tourism forms; the fact that travel agencies are mostly oriented towards external tourism, etc.

Kindryk & Holovinov (2010) above all refer to tourism innovations those that are followed by recovery and development of tourists' spiritual and physical strengths; qualitative changes of tourist products; efficiency of tourist services designing, positioning and consuming increasing; progressive changes of production factors {for instance, decreasing the transportation period at the expense of introducing new high-speed transportation kinds, improving working conditions of employees who work in tourism industry, implementing new progressive methods (mechanisms) of transforming production factors into services} (Kindryk, 2010). In addition to all stated above, innovations on the regional medical tourism markets, in our opinion, should be aimed at using progressive innovation medical technologies in the diagnostics and treatment of different diseases. Taking in account all of the said above, innovations on the regional medical tourism markets should be viewed according to different characteristics, the most significant of which, in our opinion, is their content typology which is shown in the Chart.

The innovations implementation on the regional medical tourism market should be systematic, because using innovation technologies only in one of the market segments will not allow sustaining the competitive capacity of the market as a whole. Along with that, at the stage of the market formation, the implementation priorities of innovation technologies should be specified, since they can change at the different stages of the development of regional medical tourism markets.

That is, on the initial stage in order to ensure the flow of tourists, innovation technologies should be aimed at providing high quality medical services with affordable price. Since such markets are new for Ukrainian regions and they are not the participants of the international medical tourism market, medical innovations should be the priority. They will help to ensure incoming tourists' flows to the regions of the market concentration. The innovations in medical sphere are basic for the formation of such market since the main reason why a medical tourist visits the region is health improving.

The innovations in the process of tourist attraction are the next significant part of the process. Even the high quality of provided medical services at the initial stages of the market formation will not guarantee increasing tourists' flows without the advertisement, the active agitation of potential clients and the other progressive technologies of tourist attraction.

Innovations in medical sphere and in the process of tourist attraction should be considered as the basis for regional medical tourism markets. At the same time, the innovations of the tourist services and additional tourist services should be viewed as secondary. Secondary innovations are not compulsory for the formation of regional medical tourism markets since the high quality of accommodation, catering, and transport services will not necessary require innovative approaches to provide a great service. However, at the following stages of the regional

Chart: The typology of innovations at the regional medical tourism markets according to their content

Innovation type	Innovation content	Specification according to the stages of providing services			
		At the stage of tourist attraction	At the stage of tourist services provision (transfer, accommodation, catering)	At the stage of medical services provision	At the stage of additional tourist services provision
Production	Creation of new services of medical tourism	Development of new segments of tourism market	Creation of new tourist products	Development of new medical services	Development of new tourist and recreational territories
Technological	Aimed at the creation and development of new technologies, equipment modernization, facilities reconstruction, measures to save environment	Introducing Internet technologies, creation interactive multilingual website version of region's tourist potential	Modernization, reconstruction of accommodation and catering facilities, innovations in the transportation system aimed at improving comfort and shortening transfer time	Introducing new medical technologies of tourists' diagnostics and treatment, equipment modernization, reconstruction of medical facilities	Advancing the regional tourist potential via Internet, introducing new resources to the tourist segment
Economic	Aimed at changes in methods and ways of planning all the kinds of industrial and economic activities, decreasing losses, improving the promotion, rationalization of accounting system	Joining the famous world information-retrieval systems, reservation and booking systems (World hotel, ABC travel Centre, Voyage Office Pro, etc.)	Using logistic approaches to the routs formation, improving the diet of tourists (e.g. introducing/refusing from buffet), etc.	Optimizing the size of inventories and the number of tourists	Development of new routes, forming new cooperation conditions with the providers of tourist services
Marketing	Using new methods in the price policy, new forms of cooperation with customers, providing and receiving financial resources in the form of loans, etc.	Development and introducing new approaches to discounts for regular customers or for customers who pay in advance, etc.	Development and introducing new approaches to discounts on days-long staying, discounts on food, etc.	Development and introducing new approaches to the discount system for tourists who receive medical services	Including the price of additional tourist services, souvenirs in the tour price, etc.
Management	Aimed at improving the organizational structure, style and methods of decision-making	New methods of implementation the marketing cycle in tourism, new methods of information and documentation processing	The formation of the cluster of regional medical tourism markets, promoting private and state partnership in the organization of region medical tourism	Introducing online record of tourists, using the cluster approach to the formation of regional medical tourism markets	New methods and forms of management of the participants of tourist and recreational activity

Source: Developed by the Authors

medical tourism markets development, secondary innovations play more important role, supporting positive image of regional medical tourism markets.

The process of the innovation creation on the regional medical tourism markets takes a couple of stages. During each stage different market participants join the process.

At the formation stage of regional medical tourism markets in Ukraine an emphasis should be made on the innovations in the development of the medical sphere, and it is necessary to study the process of the innovations creation and marketing of the medical sphere on the regional medical tourism markets

and the participants of this process that together form the system for the innovation creation.

Based on the conducted research (Vakhovych, 2013; Tymoschchuk, 2010; Fedulova, 2005; Hicks, 2001), in our opinion, the process of innovations creation has four stages that can be divided into two cycles: the first is the research cycle and the second one is the production and marketing cycle. The research cycle includes two phases: preliminary and growth.

The preliminary phase is aimed at working on research and development. The result is: understanding the process of providing medical services on regional medical tourism markets. Basically, it is the stage of the innovations creation, when only a trial is made to implement innovation to the market. The market on this stage is the most capital-intensive.

The losses of medical companies as the result of the innovations development can be shown by a curve that will be placed below the starting zero point.

The growth phase is characterized by the gradual market entry of the innovation, when medical companies are moving from the losses zone to the income zone and start to increase the sales of innovative medical services. This phase can be called the innovation diffusion that shows the increasing amount of sales.

The production and marketing cycle of the innovation creation includes two phases: maturity and decline. The maturity phase gives regional medical companies the maximum effect from the innovation introduction. It will be reflected on sales amount of the innovative services and companies' income. The duration of this phase depends on the innovation value and competitors' actions.

In order to provide the maximum duration of this phase, the intellectual protection of innovations should be introduced at the research and development stage. That is why medical facilities should concentrate their efforts on the improving the provided services, if they do not want to return to the losses zone. In other words, the medical facilities should keep introducing new innovative suggestions. In this case, at the next stage the presiding innovations will get into the sales decline phase, which means losses for the medical facilities, however, new developments will help the business to avoid losses.

Thus, with the purpose of supporting profitability of a medical facility that is the basic component of the regional medical tourism market, the innovations production should be continual process that will allow sustaining competitive capacity of medical services and increase income tourists' flows to the region. The implementation of this process requires accumulation and effective usage of intellectual, financial, personnel, material and technical resources that in total constitutes the system of sustaining the innovation development of the regional medical tourism markets.

The research cycle of the innovations creation, in the first place, requires involvement of highly-qualified specialists that will form the intellectual basis for the innovation production. Such subsystem can be represented by specialized research institutes, medical facilities, medical higher educational establishments, individual innovators and developers, international scientific organizations. These same structures mainly provide informational support for the innovations creation system.

**Conclusions.** Therefore, for the development of the regional medical tourism markets in Ukraine, it is necessary to implement modern innovative technologies. In order to increase income tourist flows, medical services providers must solve effectively medical problems on the innovative basis. That would become the reason for tourists to visit the region. That is why using medical innovations in business and considering the innovation's life cycle is the basic requirement for the formation of the regional medical tourism markets in Ukraine.

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