

## РЕГІОНАЛЬНА ЕКОНОМІКА

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**SANATORIUM AND HEALTH RESORTS  
IN UKRAINE: VIEW CHARACTERISTIC,  
REGIONAL SPECIFICITY AND DYNAMICS  
OF DEVELOPMENT**

**САНАТОРНО-КУРОРТНІ І ОЗДОРОВЧІ  
ЗАКЛАДИ В УКРАЇНІ:  
ВИДОВА ХАРАКТЕРИСТИКА,  
РЕГІОНАЛЬНА СПЕЦИФІКА ТА ДИНАМІКА  
РОЗВИТКУ**

**Urgency of the research.** The problem of preserving human health in modern conditions is of growing importance in an environment. The main role of solving this problem is played by institutions of sanatorium-resort type. Proceeding from this, there is a need for expanding the spectrum of theoretical-applied researches of the indicated subjects of management.

**Target setting.** To attract the attention of society and academics to the specifics of the sanatorium and resort institutions activities will focus a glance to the problems that can reduce the loss of human capital.

**Actual scientific researches and issues analysis.** The significant contribution to the research of this topic was done by such respected scholars as A. Mazaraki, N. Vedmid, V. Gumenyuk, and others.

**Uninvestigated parts of general matters defining.** On the background of a significant circle thorough scientific researches of the domestic sanatorium and resort area, the need for new research remains high, because, first of all, certain aspects of the regional dimension fell out of the scientists sigh, secondly, it requires deepening the theoretical basis for structuring the subjects of production sanatorium, health and wellness services.

**The research objective.** Based on the purpose of the work, the following tasks are defined: generalize the typology of sanatorium, health and wellness services; to conduct an integrated assessment of the activities of sanatorium and health resorts establishments in the regions of Ukraine; to study the dynamics of sanatorium and health resorts of Ukraine.

**The statement of basic materials.** The article generalizes approaches to the selection of sanatorium and resort activity types. A system of metrics has been formed and used for integrated assessment of their activity. The dynamics of sanatorium and health resorts establishments network is analyzed for the period 2001-2016.

**Conclusions.** Sanatorium and health resorts are important element to ensure the preservation and development of human potential. The public institutions approaches to the typology of these institutions may vary. Regional markets for sanatorium and resort services develop disproportionately, and the network of institutions is decreasing.

**Keywords:** sanatorium and health resorts; typology; system of indicators; integral evaluation; trend.

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**Актуальність теми дослідження.** Проблема збереження здоров'я людини в сучасних умовах набуває все більшої актуальності. Стрижневу роль у її вирішенні відіграють заклади санаторно-курортного типу. Це зумовлює необхідність розширення спектру досліджень вказаних суб'єктів господарювання.

**Постановка проблеми.** Привертання уваги суспільства та науковців до специфіки діяльності закладів санаторно-курортної сфери дозволить сфокусувати погляд на проблемах, подолання яких забезпечуватиме зменшення втрат людського капіталу.

**Аналіз останніх досліджень і публікацій.** Вагомий внесок у дослідження санаторно-курортної справи в Україні зробили такі відомі науковці як А. Мазаракі, Н. Ведмідь, В. Гуменюк, та інші.

**Виділення недосліджених частин загальної проблеми.** На фоні значного кола наукових розвідок вітчизняної санаторно-курортної сфери, потреба в нових дослідженнях залишається високою, оскільки, по-перше, окремі аспекти регіонального виміру випали із поля зору науковців, по-друге, вимагає поглиблення теоретичний базис структуризації вказаних суб'єктів.

**Постановка завдання.** Виходячи з мети роботи, визначені наступні завдання: узагальнити типологію суб'єктів продукування санаторно-курортних і оздоровчих послуг; провести інтегральне оцінювання діяльності санаторно-курортних і оздоровчих закладів у регіонах України; дослідити динаміку санаторно-курортних і оздоровчих закладів України.

**Виклад основного матеріалу.** У статті узагальнено підходи до виокремлення типів суб'єктів санаторно-курортної сфери, сформовано та апробовано систему показників для інтегрального оцінювання їх діяльності. Проаналізовано динаміку мережі санаторно-курортних і оздоровчих закладів за період 2001-2016 рр.

**Висновки.** Санаторно-курортні та оздоровчі заклади є важливим елементом забезпечення збереження та розвитку людського потенціалу. Підходи суспільних інституцій до типології цих закладів різняться. Регіональні ринки послуг санаторно-курортної сфери розвиваються диспропорційно, а мережа закладів тенденційно скорочується.

**Ключові слова:** санаторно-курортні і оздоровчі заклади; типологія; система показників; інтегральне оцінювання; тенденція.

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**РЕГІОНАЛЬНА ЕКОНОМІКА**

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**Urgency of the research.** Qualitative parameters of the country's human potential determine its socio-economic security. They are formed in the process of consumption of a wide range of products, in which the focus is on services aimed at recovery, rehabilitation and vitality restoration. Satisfaction of public needs in services of this kind is promoted by sanatorium and resort sphere. The mentioned issues actualize the scientific study of this sphere.

**Target setting.** The development of the country's sanatorium and resort affairs serves as a guarantee of its human development and helps to prevent the loss of human capital. The significance of therapeutic, preventive and rehabilitation services for the community is traced in programmatic documents of strategic nature, which refer to the basic principles of sustainable development. In particular, the Strategy for the Development of Tourism and Resorts of Ukraine for the period up to 2026 brings up the need for the concentration of public resources on priority tasks of the sanatorium and resort services sphere. The latest research on the specifics of activities of sanatorium and resort sphere allows outlining the problems to be solved, which will strengthen the country's socio-economic security.

**Actual scientific researches and issues analysis.** The importance of health services as a factor in the formation of human capital, sustainable development and the security of social systems is substantiated by the leading scholars, including O. Honta [2], O. Grishnova, V. Ilchuk and S. Scarlet [6]. The latest works by N. Vedmid [1], V. Humeniuk [4], A. Mazaraki [6] are devoted to the study of the specifics of the sanatorium and resort area considering theoretical positions on the sanatorium and resort complex as a system object of scientific knowledge, structural parameters of its development and market situation of sanatorium and resort services.

**Uninvestigated parts of general matters defining.** The analysis of recent scientific studies has shown that the problems of the activity of sanatorium and resort area institutions are constantly in need of deepening. So, they require further elaboration of approaches to the specific composition of these institutions. Due to the fact that regional analysis of the sanatorium and resort activity in Ukraine is mostly limited to the assessment at the level of individual regions, it is expedient to carry out a comprehensive study. It is also necessary to investigate the network trends of sanatorium and resort area institutions in the modern realities.

**The research objective.** The aim is to study the specific composition of sanatorium and health resorts and to estimate parametrically their activity in regional and dynamic dimensions.

**The statement of basic materials.** The unique natural and climatic potential of Ukraine forms a basis for the production of services aimed at preventing the loss of human capital, providing them with treatment, health improvement, disease prevention and medical rehabilitation. The market of such services should be positioned not only as a motive for economic processes, but in the context of an important component of sustainable social development on the basis of strengthening the highest social value – the health of population.

In the updated Ukrainian legislation on health care, sanatorium and resort services are positioned in two functional sections: 1 – sanatorium and resort treatment; 2 – improvement of health (rest). Therefore, the consideration of the subjects of production and trade of these services goes far beyond the medical sphere. This is facilitated by the activation of the private sector, which has no economic subordination, and the development of corporate structures that are multiple-discipline and carry out various activities, and are actually present in different markets. Whereas the CTEA [KVED] 2005 (Classification of Types of Economic Activity) regulated the “activity of sanatorium and resort institutions” at the level of the sub-class defined by Code 85.11.3, which included balneological hospitals, mud clinics, resort polyclinics, sanatoria, sanatoria-preventive clinics, children's health centers, in the CTEA [KVED] 2010, the functioning of sanatorium and resort institutions, children's recreation camps of the sanatorium type is reflected as “the activity of hospitals” (Code 86.10).

Data on the subjects of the production of sanatorium and resort services in Ukraine are published by the State Statistics Service in two ways: both as institutions and means of accommodation (Tab. 1).

On the web-portal in the rubric “Statistical Information” and in the publication of the “Statistical Yearbook of Ukraine”, sanatorium and health resorts are emphasized. Herewith, the typology of these institutions differs. In the yearbook there are six types: sanatoria; boarding houses with treatment; sanatoria-preventive clinics; holiday resorts and boarding houses; holiday camps and other recreation

**РЕГІОНАЛЬНА ЕКОНОМІКА**

institutions; 1-2 day stay establishments. Instead, there are five types of them on the web-portal in the rubric "Statistical Information". It combines the data of sanatoria and boarding houses with treatment, as well as holiday camps and other recreation establishments of 1-2 day stay. Moreover, additional information is provided on children's recreation institutions. In the group "Specialized Means of Accommodation" of the statistical Bulletin "Collective Means of Accommodation", the State Statistics Service of Ukraine publishes the information on ten positions (1 – sanatoria, 2 – children's sanatoria, 3 – boarding houses with treatment, 4 – children's institutions for the improvement of year-round activity, children centers; 5 – sanatoria-preventive clinics; 6 - balneological hospitals, mud clinics, balneological and mud hospitals (including children's); 7 – rest houses; 8 – boarding houses; 9 – holiday camps, other recreation establishments (except for tourist holiday camps); 10 – health improvement establishments of 1-2 day stay).

Table 1

**Typology of subjects of production of sanatorium-health and recreation services according to the data of the State Statistics Service of Ukraine**

Title	Source	Types									
Sanatorium-health and recreation institutions	Web-site rubric "Statistical Information"	Sanatoria and boarding houses with treatment			Sanatoria- and preventive clinics	Rest and boarding houses		Holiday camps and other recreation establishments			Children's health-improving establishments
	Statistical Yearbook of Ukraine	Sanatoria	including children's	Boarding houses with treatment		Rest houses	Boarding houses	Holiday camps and other recreation establishments			
Specialized means of accommodation	Statistical Bulletin "Collective means of accommodation in Ukraine"		Children's sanatoria		Sanatoria- and preventive clinics			Rest houses	Boarding houses	Children's institutions for the improvement of year-round activity, children's centers	Balneological hospitals, mud clinics, balneologica and mud hospitals (including children's);

\* Made up by the authors according to the data of the State Statistics Service of Ukraine

The National Standard of Ukraine "Travel Services. Accommodation Means. Terms and Definitions" (UNS [DSTU] 4527: 2006) subjects of the production of sanatorium and resort services are means of accommodation – this document does not contain the Allocation of specialized means, but provides a general list of thirty one positions. The analysis of the content of this list revealed that accommodation means, which, besides rest, provide health promotion services, include the following ones: rest houses – services of healing and preventive nature; children's camps – health improvement services for children; resort hotels – health improvement services; boarding houses – health services; boarding houses with treatment – medical, preventive and treatment services; preventive clinics – services for general health, preventive treatment of occupational diseases; sanatoria – treatment services. At the same time the National Standard of Ukraine "Tourist Services. Accommodation Means. General Requirements" (UNS [DSTU] 4268: 2003) distinguishes a group of specialized means as part of collective means, and the type of "health-improving means of accommodation" includes medical and health-improving establishments. On the condition of providing health-improving means for hotel services (at least including daily making beds, cleaning of rooms and bathrooms) they are classified as hotels.

## РЕГІОНАЛЬНА ЕКОНОМІКА

The interaction of demand and supply in the market of sanatorium and resort services is a complex and multiform process of market functioning. The supply is formed in the process of multifunctional technological manufacturing of the following types of services: medical and therapeutic, therapeutic and preventive, physical and rehabilitation, etc., which include the potential of restoring health capital, increasing work duration, improving the population's quality of life; those aimed at restoring vital forces of human potential due to diet, rational and balanced nutrition; those that provide customers with safe and comfortable accommodation; on organizing meaningful consumer leisure: engaging in physical activity and cultural development, maintaining a healthy lifestyle, etc. [4, p. 9].

Within the scope of this study, the authors analyze the activities of the producers of sanatorium and health and recreation services in the regions of Ukraine. For this purpose, the method of integral estimation, which involves the construction of a system of indicators, their standardization and averaging, is used. On the basis of processing the data of the Statistical Bulletin "Collective Means of Accommodation" for 2016, the authors have developed the system of indicators ( $x_1 - x_{14}$ ) of the activity of specialized means of accommodation (SMA), integrated into five subsystems. The importance of each subsystem and component indicators within its limits is predetermined (Tab. 2).

Table 2

Integral assessments of SMA activity in the regions of Ukraine, 2016

Regions	Subsystem				
	of network indicators	of labor force indicators	of business activity indicators	of social role indicators	of external economic activity indicators
Vinnitsia	0.4780	2.5853	0.7300	0.5860	0.8271
Volyn	0.6798	0.4116	0.4310	0.8430	0.0164
Dnipropetrovsk	1.6058	1.2381	1.5620	1.9500	0.0000
Donetsk	1.6250	0.8063	0.5860	0.8950	0.0006
Zhytomyr	0.1853	0.4859	0.3990	0.4650	0.0507
Zakarpattia	0.6125	1.5566	0.7460	0.4850	0.6879
Zaporizhzhia	3.4259	1.5408	1.7250	3.0220	0.0277
Ivano-Frankivsk	0.4189	0.9419	0.5330	0.8530	0.0039
Kyiv	0.9982	1.0002	0.5840	1.1190	0.0144
Kirovohrad	0.2728	0.1811	0.2780	0.0880	0.0134
Luhansk	0.0697	0.1288	0.3300	0.0740	0.0000
Lviv	1.1980	3.4346	1.2060	2.8030	8.2560
Mykolaiv	2.5718	0.5707	1.0400	1.3580	2.0463
Odesa	4.6693	3.3142	2.2270	4.6120	12.0151
Poltava	0.5107	1.6391	0.7580	1.3360	0.7455
Rivne	0.2179	0.2995	0.2950	0.4880	0.0257
Sumy	0.2417	0.2512	0.2330	0.2380	0.0000
Ternopil	0.1788	0.3991	0.2720	0.1980	0.0353
Kharkiv	0.8954	1.0762	0.4940	0.4650	0.0208
Kherson	2.2060	0.7101	1.1100	1.3580	0.1507
Khmelnytskyi	0.2229	0.4561	0.3170	0.2900	0.0144
Cherkasy	0.5100	0.3772	0.3420	0.7030	0.0000
Chernivtsi	0.1048	0.1959	0.1800	0.0330	0.0000
Chernihiv	0.2187	0.1870	0.2300	0.2880	0.0000
City of Kyiv	0.8769	1.2126	0.5100	0.4490	0.0481

The first subsystem, (weight – 0.3), combines three indicators characterizing the network of institutions: the number of existing SMAs, units ( $x_1$ ); total area of SMAs ( $x_2$ ); number of beds (accommodations) in SMAs ( $x_3$ ). The weights within the first subsystem are 0.4; 0.1; 0.5 respectively. The second subsystem, the weight of which is 0.2, includes three characteristics of the SMA labor potential (the average number of staff members ( $x_4$ ); the average number of doctors in SMAs ( $x_5$ ); the average number of medical staff ( $x_6$ ), which corresponds to the following weights: .0.25; 0.40, 0.35. The third subsystem (weight – 0.3) includes: revenues from the services provided by SMAs ( $x_7$ ); visitors served by SMAs ( $x_8$ ); the factor of SMA capacity utilization ( $x_9$ ); the number of days actually spent in SMAs

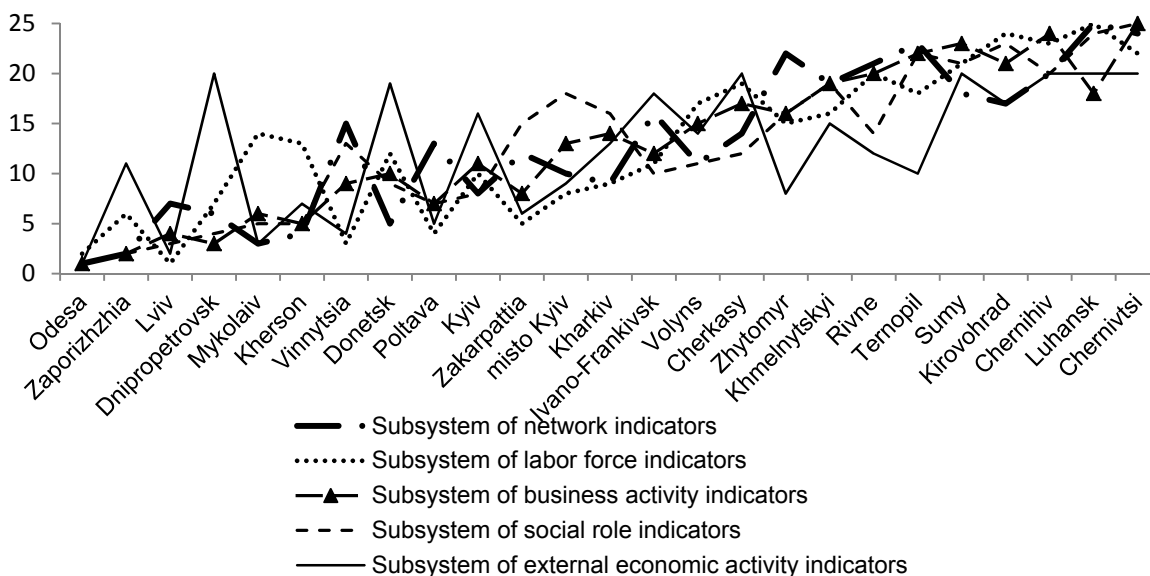
**РЕГІОНАЛЬНА ЕКОНОМІКА**

( $x_{10}$ ). Their weights make 0.3; 0.3; 0.2; 0.2. The fourth subsystem characterizes the social dimension of SMA activities and includes the data on the provision of SMA services to people who have suffered as a result of Chernobyl accident ( $x_{11}$ ) and children aged 0-17 ( $x_{12}$ ). The fifth subsystem includes the indicators related to the external economic component of the SMA activity: the number of foreigners serviced ( $x_{13}$ ); the days actually spent by foreigners ( $x_{14}$ ). The weights of each of the last two subsystems are 0.1 each, and within their limits, the indicators are 0.35; 0.65 and 0.6; 0.4 respectively. On the basis of the studied system of indicators, the integrated assessments of the development of the SMA services market within each subsystem are identified. On the basis of them the integral estimation of the general complex of indicators ( $IO$ ) is calculated according to the following formula:

$$IO = \sum_{i=1}^5 \left( \sum_{j=1}^{k_i} S_{ij} \times w_{ij} \right) \times w_i \tag{1}$$

where  $S_{ij}$  is the standardized value of  $j$ -indicator of  $i$ -subsystem;  
 $w_{ij}$  is the weight of  $j$ -indicator of  $i$ -subsystem;  
 $k_i$  is the volume of  $i$ -subsystem.

The range of the variation of the integral index of SMA activity is 3.065, and the quadratic coefficient of variation is 88.17%. This indicates the asymmetry of the regional development of the sanatorium and resort area. The results of ranking the regions according to the obtained integral estimate and ranks within each subsystem of the indicators are shown in Fig. 1. The network of sanatorium and resort complex institutions and their capacity is characterized by a declining trend (Tab. 3).



**Fig. 1. Ranking of Ukraine's regions by the integral assessment of SMA activity and their ranks in terms of subsystems of the studied indicators, 2016**

The narrowing of social infrastructure began in the period of the formation of market relations. After privatization, some institutions of the sanatorium and resort sphere changed the field of activity, some went bankrupt. The lack of financial resources forced industrial giants to adjust the network of departmental institutions. Most of this was the case of sanatoria-preventive clinics. After the occupation of the Crimea and parts of Donetsk and Luhansk regions, the direction of the dynamics of the indicators given in Tab. 3 has not changed.



## РЕГІОНАЛЬНА ЕКОНОМІКА

Table 3

## Analysis of the dynamics of the number and capacity of sanatorium-resort and health-improving establishments of Ukraine for 2001-2016

Indicators	2016			Trend for 2001-2016	
	value	change, % on		equation	R <sup>2</sup> , %
		2001	2014		
1	2	3	4	5	6
Sanatoria and boarding houses with treatment, total	291	-47.57	-9.06	-15.1t+60.7	67.0
including beds, thous.	70	-53.64	-11.39	-0.679t <sup>2</sup> +6.87t+135.6	86.5
Sanatoria-preventive clinics, total	63	-82.35	-46.61	-0.922t <sup>2</sup> -2.62t+342.6	98.4
including beds, thous.	10	-65.52	-41.18	-1.109t+29.9	95.1
Rest and boarding houses, total	73	-73.26	-18.89	-2.683t <sup>2</sup> +32.85t+224.4	85.3
including accommodations, thous.	14	-77.05	-17.65	-0.543t <sup>2</sup> +6.38t+49.2	83.4
Holiday camps and other recreation establishments, total	1,295	-35.73	-7.50	-39.6t+2185.6	69.3
including accommodations, thous.	146	-38.14	-7.01	-5.418t+257.1	77.4

**Conclusions.** Sanatorium and health resorts produce a number of socially significant services, providing human development, increasing the labor force capacity and improving the population's life quality. Approaches to the typology of sanatorium and health resorts in Ukraine differ in various regulatory and legal acts, and the institutions themselves belong both to the sphere of health care and to the sphere of tourism. The territorial closeness to the seaside (Odesa, Zaporizhzhia, Dnipro, Mykolaiv, Kherson regions) and the developed network of sanatorium complexes (Lviv, Vinnytsia, Poltava, Kyiv, and Zakarpattia regions) serve as engines of the development of sanatorium and health resort services market. The downward trend in the development of institutions of the sanatorium and resort area, rooted in the time of transformational changes in the economy towards the market relations formation has not changed the direction in recent years.

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