

## AVAILABILITY OF MEDICAL SERVICES AS AN INDICATOR OF THE DEVELOPMENT OF AN INCLUSIVE SOCIETY

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### Abstract

It has been revealed how inadequate access to medical services manifests as social exclusion, leading to poverty and limited life opportunities. The way the decentralization reform contributes to improving access to social services is examined. Significant dysfunctions in the healthcare system are identified, particularly due to variability in service accessibility levels across different regions. A methodological approach to assessing the accessibility of medical aid is proposed, including the development of integral indices that consider multiple dimensions of the quality of medical care. The necessity for strategic intervention by the state to reduce social exclusion through improved access to social services is emphasized, especially in light of contemporary challenges such as military actions in Ukraine. The importance of understanding the interconnections between social infrastructure and societal inclusiveness is demonstrated, highlighting the role of accessible social services in forming a more equitable and cohesive society.

**Keywords:** *medical services, territorial communities, inclusive society, exclusion, social infrastructure, decentralization reform.*

**JEL Codes:** *JEL O18, O21, R11.*

### Introduction

The quality of life of the population remains one of the main problems of the Ukrainian reality. Under these circumstances, the welfare of households directly depends on the availability of social infrastructure services. Negative trends regarding the insufficient level of availability of these services in the pre-war period were caused primarily by the processes of inequality and social polarization of the population, the consequences

of which are poverty, unemployment, insufficient participation of the individual in economic life, limited life opportunities and availability of services. These phenomena are manifestations of social exclusion, the essence of which is unequal access to the opportunities that society possesses, that is, it is the process of excluding an individual or a social group from social relations due to their lack of certain rights and the presence of a number

of restrictions on access to institutions that distribute resources and provide social services, participation in economically or socially significant activity and paid work, opportunities to influence management decision-making at the local or regional level, involvement in networks of social relationships and support due to a lack of basic competencies, various types of discrimination and material situation (Shults, 2020).

For Ukraine, these problems remain relevant, especially in the context of the implementation of the reform of decentralization of power, one of the most important goals of which is to improve the population's access to medical, educational and other social services, to meet individual and social needs of a person, as well as to increase the level and quality of their lives.

The concept of social exclusion has evolved, and the study of its various aspects - from the definition of the essence of the phenomenon to the analysis of its manifestations and consequences - is presented in the scientific works of both foreign and domestic scientists. However, despite a significant number of scientific works on the study of this phenomenon, the issue of limited and uneven access of the population to social services, which is a consequence of the exclusivity of the regulation of socio-economic development of individual territories, remains insufficiently studied.

Limited access of the population to social services, primarily to health care, is a characteristic feature of the phenomenon of social exclusion in Ukraine. The level of providing the population with medical services in sufficient quantity and the availability of these services for every citizen is a sign of the appropriate level of development of the state and society in general.

The theoretical basis of the study was the works of domestic and foreign authors devoted to the study of the peculiarities of the development of health care systems in economically developed countries of the world.

Thus, the peculiarities of the organizational structure, the legal basis of the functioning of the health care system in Ukraine, the peculiarities of managing organizational changes in the industry are considered in the works of N. Avramenko (2011), Z. Gladun (2004), O. Vynogradov (2009),

S. Vovk (2017), L. Zhalilo (2020), Y. Radysch (2013), I. Rozhkova (2012), S. Stetsenko (2010), I. Solonenko (2020).

Peculiarities of project and program-target directions in health care management were studied by M. Bilynska (2014), D. Karamyshev (2007), I. Kishchuk (2012), Moskalenko (2002).

A series of studies focused on examining the decentralization process of social services (medical and educational, etc.) are dedicated to the work of O. Hrynkevych (2013; 2020), L. Semiv (2019; 2022), S. Shults (2020), B. Danylyshyn et al. (2023), S. Panchyshyn et al. (2020), I. Khomyshyn (2018), Y. Maksymiv et al. (2021), J. Berezhna (2012), T. Kaminska (2016), Z. Nadyuk (2019), Y. Zhuravel et al. (2021) V. Malichenko (2017), E. Ivanenko (2015), V. Pashkov (2017).

However, despite the significant attention of scientists to the problems of state management of the medical field, the issues of determining the national model of the development of the health care system still remain relevant.

The problem of public access to health care services in Ukraine manifests either due to their absence at all (we are talking about a certain territory - district, locality, settlement where a person lives and it is not possible to use these services due to their absence near their place of residence) or due to difficult accessibility of these services or complete inaccessibility for certain categories of the population (pensioners, disabled people, low-income citizens, large families, people with incomes below the subsistence minimum).

According to research conducted by state statistics bodies in 2017-2019, a lower level of provision of medical services to the population was observed in rural areas, where the quality of these services did not meet the needs of the population, including the lateness of their provision (State Statistics Service of Ukraine, 2020).

The availability and quality of medical care are the main indicators that determine the effectiveness of the health care system in any country in the world and the level of development of that country (economic, social, cultural, etc.), that is, its civilization. It is about the opportunity for every citizen to apply for medical help and receive the necessary quantity and quality of

medical services, regardless of his financial capacity, place of residence or time of seeking help. The higher the level of availability of medical care in the country, the lower the level of morbidity and mortality, children and adult disability, postoperative mortality, which, accordingly, leads to a lower level of social exclusion in society, caused by a decrease in the risk for citizens to fall into the category of socially excluded.

The aggression of the Russian Federation will increase the challenges of social exclusion in this area, especially in the territories where active military operations are taking place, which will manifest itself due to the insufficient provision of social services to the population, the inconsistency of the quality of these services with the needs of the population and the untimeliness of their provision, the lack of financial capacity of the population, etc. Such a situation will cause an increase in the loss of the labor potential of the territories, a decrease in the labor and social activity of residents, a decrease in labor productivity, a decrease in the volume of manufactured products and, accordingly, a decrease in GRP.

*The purpose of the article* is to study the peculiarities of the manifestation of social exclusion in terms of limiting the population's access to social infrastructure services, in particular, the sphere of health care.

### **Methodical approach**

In the overhaul of Ukraine's healthcare system, it's essential to delineate the primary stages of reforms along with the fundamental levels (tiers) of medical service delivery to the populace. The division into these tiers hinges on the nature of the medical services, the complexity involved in their delivery, the healthcare provider's level of qualification, and the medical specialization required. A critical evaluation focuses on the foundational reform of the

healthcare provision system—primarily at the primary care level. The expansion of primary healthcare is pivotal to the restructuring efforts, given that currently, only 20% of Ukrainians initially consult at the primary level, whereas a significant 80% directly access services at the secondary or tertiary levels, thereby overloading facilities that are meant to handle complex cases.

The primary analytical approaches include the expert method, which relies on evaluating real economic and statistical indicators, and the method of subjective evaluations.

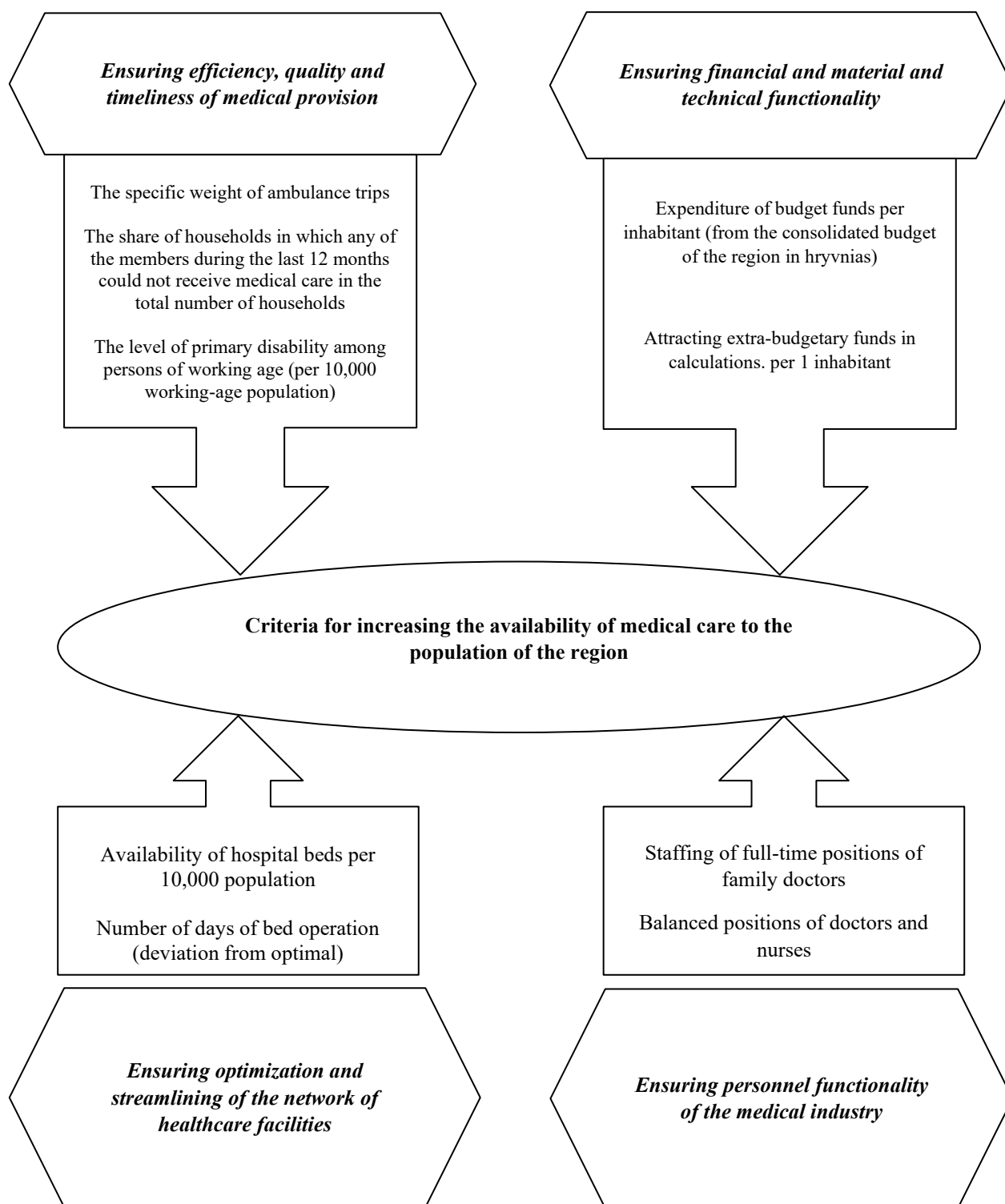
### **Results and discussion**

The level of availability of medical care in the regions of Ukraine reflects the presence of significant dysfunctions in the regulation of the health care system at the national, regional, and local levels. Such a situation leads to an increase in the loss of the labor potential of the territories, a decrease in the labor and social activity of residents, a decrease in labor productivity, a decrease in the volume of manufactured products and, accordingly, a decrease in GRP.

The outlined problems make it necessary to study the specific manifestations of the dysfunction of regional health care systems, which requires the development and approval of appropriate scientific and methodological tools, namely the selection of the necessary indicators for assessing the level of accessibility, the establishment of correlations between them and the determination of integral indices for assessing the level of accessibility medical assistance to the population in the regions of Ukraine.

In view of this, the target function was chosen to increase the accessibility of medical care to the population of the regions.

The most informative indicators that reflect the criteria for the availability of medical care to the population include four blocks (Fig. 1).



**Figure 1. Functional approach to assessing the availability of medical care to the population of the region**

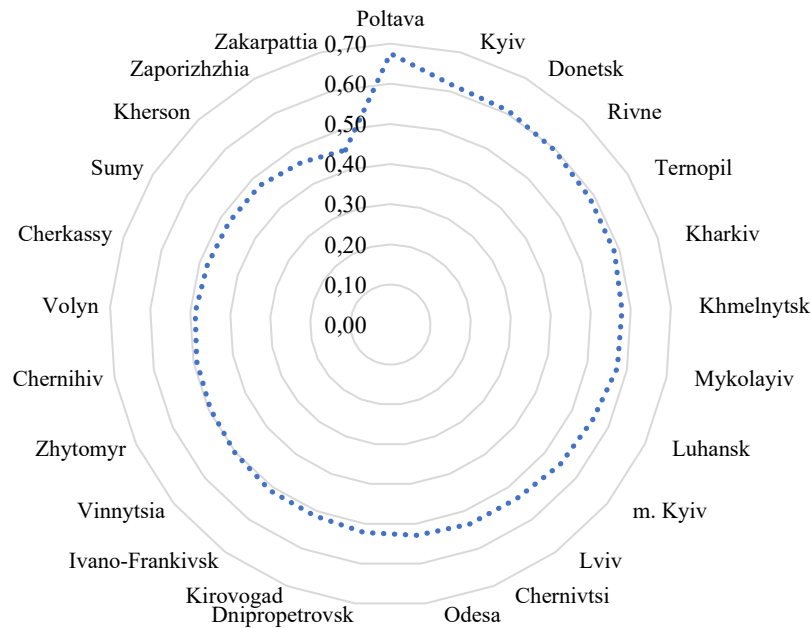
*\*Source: compiled by the authors.*

Since the indicators do not always have the same importance in economic processes, it is necessary to determine their weight both in a separate group (in our case, in the corresponding

block of criteria presented in Fig. 1) and in the overall process. The weighting coefficients allow to take into account the degree of influence of the relevant sub-indices (components of the

availability of medical care to the population according to each criterion) on the integral index. The final stage is the multiplication of the obtained weighting coefficients by the

standardized value of the k-th characteristic of the i-th research object. Thus, as a result, we will calculate the integral index of availability of medical care to the population (Fig. 2).



**Figure 2. Integral indexes of medical care availability of the Ukrainian regions (as of 2020)**

\*Source: authors' calculations (State Statistics Service of Ukraine, 2024).

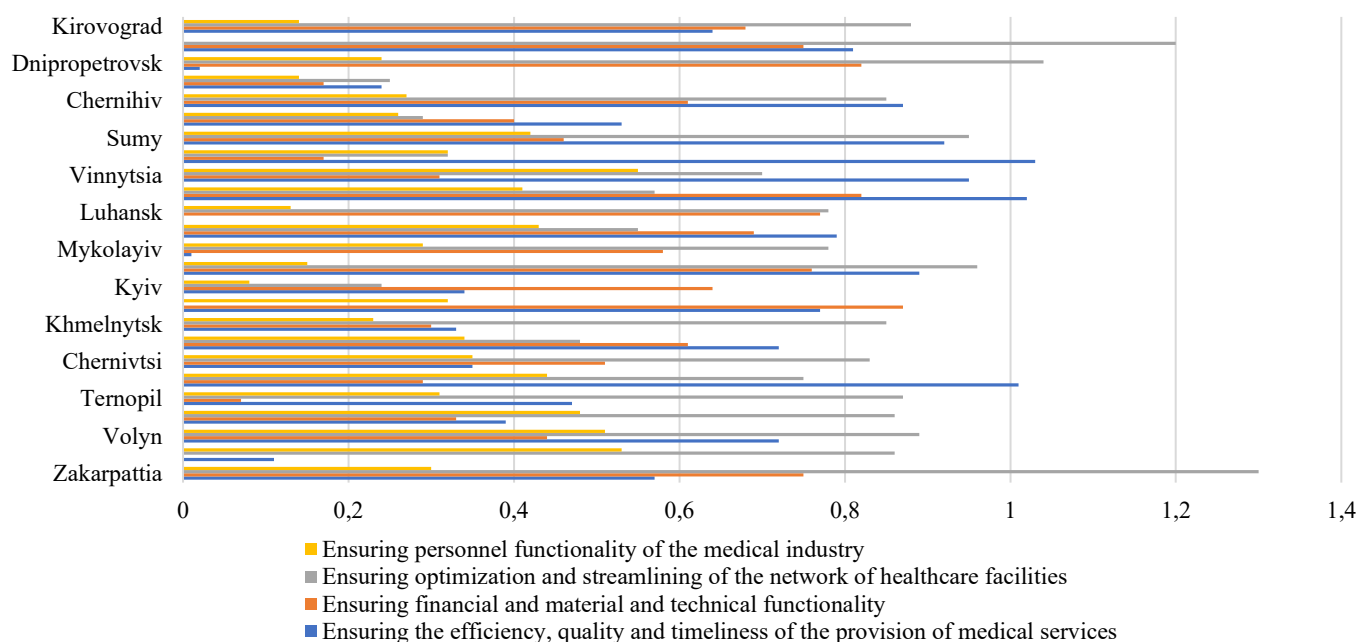
So, as it can be seen from Figure 2, we observe significant regional differences in the level of availability of medical care to the population. The worst situation can be seen in Zakarpattia region (accessibility index 0.45), in particular, which indicates that the level of accessibility of medical care to the population in this region is extremely low. It should be noted that the research carried out in the previous section based on the population's self-assessment of the state of health and the level of availability of certain types of medical care showed a similar situation in the Transcarpathian region - the share of households that could not use medical services when needed was 76% with an average indicator in Ukraine 25% (Schults, Karpyak, 2021).

The highest level of availability of medical care to the population is observed in the Poltava

region - the value of the indicator reaches 0.68. It is followed by the Kyiv, Donetsk, Rivne, Ternopil, Kharkiv, Khmelnytskyi and Mykolaiv regions (the values of the indicators vary from 0.62 to 0.58, respectively). Thus, compared to others, these regions demonstrate a better level of availability of medical care to the population.

In turn, the Zaporizhia, Kherson, Sumy, Cherkasy, Volyn and Chernihiv regions are marked by the lowest levels of availability of medical care (the value of indicators in these regions varies from 0.45 to 0.49, respectively).

To see what exactly causes this situation, that is, due to which criteria the level of availability of medical care is higher or lower in a certain region, let us turn to fig. 3.



**Figure 3. Partial indices of availability of medical care to the population of the regions of Ukraine**

*\*Source: authors' calculations (State Statistics Service of Ukraine, 2024).*

Thus, from the data in the figure, we can observe a significant amplitude in the indicators of the availability of medical care in the regions. Some areas can significantly dominate with respect to a certain criterion, but at the same time lag far behind others. In order to clearly see which area according to which criterion has dominant values and vice versa, let us group them with respect to each separate criterion (tab. 1).

As it can be seen from the table, Luhansk, Mykolaiv, Dnipropetrovsk, and Rivne regions are the leaders according to the criteria of “effectiveness, quality, and timeliness of providing medical services”. On the other hand,

Kharkiv, Zaporizhzhya, Ivano-Frankivsk and Vinnitsia regions occupy the lowest positions in the rating, and their indices differ from the leading regions twice (0.91 versus 1.94).

On the other hand, the situation regarding the criterion of “financial and material and technical functionality of the industry” is somewhat different. Rivne, Ternopil, Kharkiv and Poltava regions are the leaders in this rating. Therefore, these regions are marked by a better situation in terms of spending on medical care for the population and additional funding for the development of the industry. In turn, Kyiv, Dnipropetrovsk, Zaporizhzhya and Luhansk regions have the lowest indicators in this rating.

**Table 1. Ratings of regions in relation to the criteria of availability of medical care to the population**

	Ensuring the efficiency, quality and timeliness of the provision of medical services	Ensuring financial and material and technical functionality	Ensuring optimization and streamlining of the network of healthcare facilities	Ensuring personnel functionality of the medical industry
<b>Zakarpattia</b>	1.37	0.84	0.07	1.51
<b>Rivne</b>	1.83	1.59	0.51	1.28
<b>Volyn</b>	1.21	1.15	0.49	1.31

<b>Lviv</b>	1.54	1.26	0.51	1.33
<b>Ternopil</b>	1.47	1.51	0.50	1.51
<b>Ivano-Frankivsk</b>	0.92	1.30	0.63	1.37
<b>Chernivtsi</b>	1.58	1.08	0.54	1.46
<b>Odesa</b>	1.22	0.98	0.89	1.47
<b>Khmelnysk</b>	1.61	1.28	0.52	1.58
<b>M. Kyiv</b>	1.16	0.72	1.37	1.49
<b>Kyiv</b>	1.60	0.94	1.13	1.74
<b>Kherson</b>	1.05	0.83	0.41	1.66
<b>Mykolayiv</b>	1.93	1.01	0.59	1.52
<b>Zhytomyr</b>	1.15	0.90	0.82	1.38
<b>Luhansk</b>	1.94	0.82	0.59	1.68
<b>Zaporizhzhia</b>	0.91	0.77	0.80	1.40
<b>Vinnysia</b>	0.99	1.27	0.67	1.26
<b>Kharkiv</b>	0.91	1.42	1.06	1.49
<b>Sumy</b>	1.01	1.13	0.42	1.39
<b>Donetsk</b>	1.41	1.18	1.08	1.55
<b>Chernihiv</b>	1.06	0.98	0.52	1.54
<b>Poltava</b>	1.70	1.41	1.13	1.67
<b>Dnipropetrovsk</b>	1.91	0.77	0.34	1.58
<b>Cherkasy</b>	1.13	0.84	0.17	1.81
<b>Kirovograd</b>	1.29	0.90	0.49	1.67

\*Source: authors' calculations (State Statistics Service of Ukraine, 2024).

Regarding the rating of regions according to the criterion of “optimization and streamlining of the network of health care facilities”, the leaders here are the cities of Kyiv, Kyiv, Poltava and Donetsk regions. Instead, Zakarpattia, Cherkasy, Dnipropetrovsk and Kherson regions occupy the lowest positions in this rating (from 0.07 to 0.41). Thus, the network of health care institutions in these regions needs optimization, in particular, it is necessary to ensure the rational use of beds, reduce the number of idle beds and achieve the optimal number of bed days in accordance with the normative value.

The final criterion is “ensuring personnel functionality of the industry”. The rating of the regions according to this criterion is as follows: Cherkasy, Kyiv, Luhansk and Kirovograd regions are the leading regions here (1.81-1.67), while Vinnysia, Rivne, Volyn and Lviv regions close the rating (1.26-1.33).

Thus, we can summarize that the Rivne region is twice marked by the highest values of

indicators of availability of medical care, in particular, according to the criterion of “efficiency, quality and timeliness of the provision of medical services” and “financial and logistical functionality of the industry.” Poltava region also leads the rating twice according to the criteria of “financial and logistical functionality of the industry” and “optimization and streamlining of the network of health care institutions.” Luhansk region twice leads in the criteria of “effectiveness, quality and timeliness of the provision of medical services” and “personnel functionality of the industry”. Also, Kyiv region twice takes the highest positions according to the criteria of “optimization and streamlining of the network of health care facilities” and “personnel functionality of the industry.”

Among the regions with the lowest rating of indicators of the medical care availability, we can observe Zaporizhzhia region (twice closes the rating according to the criteria of

“effectiveness, quality and timeliness of the provision of medical services” and “financial and logistical functionality of the industry”), Vinnytsia (twice marked by the lowest indicators according to the criteria “efficiency, quality and timeliness of the provision of medical services” and “personnel functionality of the industry”) and Dnipropetrovsk region (twice takes the last positions in the rating according to the criteria of “financial and material and technical functionality of the industry” and “optimization and streamlining of the network of health care facilities”).

As mentioned above, in relation to the regions that can lead the rating of the availability of medical care according to one criterion, and close it according to another, we can note the Rivne region, which is marked by the highest values of indicators according to two criteria (“efficiency, quality and timeliness of providing medical services” and “financial and material and technical functionality of the industry”), and along with this, according to another criterion, it takes the last positions (namely, according to the criterion of “personnel functionality of the industry”). We observe a similar situation in the Luhansk region - it twice takes the highest position in the rating according to the criteria of “efficiency, quality and timeliness of the provision of medical services” and “personnel functionality of the industry”, on the other hand, according to the criterion of “financial and material and technical functionality of the industry”, it is marked by the lowest value of the indicator.

### **Conclusions**

We believe that increasing the availability of medical care to the population and improving medical services for citizens in the conditions of post-war reconstruction will become one of the priorities for the development of Ukrainian statehood and civil society. In the conditions of the continuation of the decentralization reform, the local government should become an active participant in these processes, which should

implement effective regulatory measures in accordance with the reform of the health care system. It is necessary to have a clearly defined strategic vision of the prospects for its development, and not only in the context of increasing the efficiency of the functioning of medical institutions and the quality of medical services provided to the population, but also in the context of improving the quality of personnel support, the introduction of innovations and modern technologies, the formation of the foundations for the introduction of insurance medicine, improvement of social justice and protection of the rights of the Ukrainian citizen.

The post-war economic policy of the state should be based on the strengthening of measures for the development of the social sphere and the support of human capital, in particular, its effective strategic management in the processes of forming the priorities of foreign economic activity and the Euro-Atlantic perspective. Due to this, we consider the implementation of the following measures to be the main ones:

- Creation of conditions for effective retraining of persons who have lost their jobs, and implementation of an effective and efficient information campaign to support a change of profession (apparently with financial incentives from the state).
- Introduction of a separate initiative involving public-private partnership called “Live and Work.”
- Introduction of government subsidies (or interest-free loans) for business while creating new jobs.
- Creation of a system of communication with Ukrainians living abroad. Provide for the possibility of creating Ukrainian mass media for regions where there are centers of the Ukrainian diaspora.
- Using the diaspora to promote goods. Create a communication system for embassies, the Chamber of Commerce and Industry or other structures responsible for the promotion of Ukrainian goods on foreign markets.



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