# State Regulation of Ensuring the Quality Medical Care During Martial Law in Ukraine: Lessons for the International Community

Olena Korolchuk,\* Inna Semenets-Orlova,\*\* Valeriia Mamka,\*\*\* Olena Chernetchenko,\*\*\*\* and Nataliia Vasiuk\*\*\*\*

ABSTRACT: Background: Nowadays, the quality of medical care and health care measures is considered the main target function of the health care system and at the same time the determining criterion for its activities. Objective: The article examines state regulation of medical care quality post-COVID and during martial law, identifying improvement areas. It emphasizes state roles in healthcare standardization, continuous feedback monitoring, and studying patient satisfaction. Interrelationships among Ukraine's state regulation mechanisms are determined, highlighting the need to enhance tools such as criteria and quality indicators for medical

\*\*\* Taras Shevchenko National University of Kyiv, 01601, 64/13 Volodymyrska Str., Kyiv, Ukraine, valeriiasakal@gmail.com.

\*\*\*\* Department of State and Legal Disciplines, "KROK" University, 03113, 30-32 Tabirna Str., Kyiv, Ukraine, elenapm@ukr.net.

<sup>\*</sup> Department of Health Sciences, Faculty of Health and Physical Education, Uzhhorod National University, 88000, 27 Mytna Str., Uzhhorod, Ukraine, korolchuk8123@sci-univ.com.

<sup>\*\*</sup> Department of Public Administration, Interregional Academy of Personnel Management, 03039, 2 Frometivska str., Kyiv, Ukraine, innaorlova@ukr.net.

<sup>\*\*\*\*\*</sup> Department of National Economy and Public Administration, Kyiv National Economic University named after Vadym Hetman, 03057, 54/1 Prospect Peremogy, Kyiv, Ukraine, kafhealth@gmail.com.

care assurance. Methods: The authors of this article utilize various scientific methods, including analysis, synthesis, induction, and deduction, as well as historical and legal, formal legal, and comparative legal methods to examine the state regulation of ensuring the quality of medical care during martial law in Ukraine. Results: The article considered the interrelationships of mechanisms and instruments of state regulation of quality assurance of medical care in Ukraine. Conclusions: The state should enhance medical care quality regulation, drawing on international experiences from the EU and the USA and adapting best practices to national circumstances. The resilience of the healthcare system depends on effective quality assurance, ensuring preparedness, stability, and ongoing improvement prospects.

Keywords: quality of medical care, quality management, health care measures, social protection, martial law

### Introduction

The issue of providing high-quality, safe, and affordable medical care has become more important with the implementation of the Law of Ukraine "On State Financial Guarantees of Medical Care of the Population" (Law of Ukraine No. 2168-VIII, 2017) and the introduction of a new financing mechanism for healthcare facilities. This was especially intensified in the period after the COVID-19 epidemic and during the war in Ukraine. The main goal of the modern transformation of the health care system is to ensure the provision of high-quality medical care to the population of Ukraine suffering from the war.

In their works, domestic scientists, including M. Bilynska, E. Libanova, O. Korolchuk, O. Shaptala, N. Vasyuk, V. Knyazevych, N. Drahomyretska, D. Karamyshev, T. Yurochko, etc., have addressed topics related to public administration in the field of health care (hence referred to as HC). In the writings of A. Kotuz, I. Kochina, E. Lopina, V. Moskalenko, V. Pasko, A. Galushka, O. Melnyk, F. Shevchenko, etc., the organisation of the treatment and prevention process is given particular attention when the issues of state regulation of the organisation of medical protection of the population in conditions of occurrence of unusual situations are investigated. Issues of state regulation in the field of quality assurance of medical care and its certain aspects were covered by Yu. Voronenko, Z. Gladun, V. Lekhan, O. Lishchyshyna, Z. Nadyuk, N. Yarosh and other scientists.

In recent years, in Ukraine, there has been a significant interest in the problems of state regulation in the field of health care of domestic scientists, who emphasize that the health care sector is in a state of crisis. According to scientists, the main causes of the crisis are changes in the socio-economic system of the state, low remuneration of medical personnel, dissatisfaction of patients and the whole society with the quality of medical care, as well as long-term reform of the health sector (Krynychna, 2015). The modern changing world, producing more and more new risks, threats, shocks—extreme events for the health care system (hereinafter referred to as stressors), also opens up new opportunities—from information technology, innovative management and social media to bionanotechnology, which must be used to respond to stressors in a timely manner, increase strength and resistance to disasters, to build resilience (Korolchuk, 2022).

However, despite significant studies on current problems in the field of quality assurance of medical care, in the current conditions of Russian military aggression against Ukraine the above-mentioned issues remain insufficiently developed. Additional research is needed to create an effective system of medical care quality in Ukraine, improve regulatory support in the field of quality control of medical care, licensing of medical practice, etc. It is also important to analyze the features of state regulation of quality assurance of medical care and health care measures in the post-covid period and during martial law and identify areas for improvement.

# Ensuring the Quality of Medical Care as a Strategic Priority in the Modern World

The present provokes the urgency of forming and implementing decisions "to preserve and improve the viability of the country in the face of ongoing risks and threats—so that security, economic stability, natural resources and social structures can withstand impacts and continue to function. Modern conditions—the fragility of society, the vulnerability of national infrastructures with the rapid change of the environment, the complexity of society and individualization, the paradox of modern life and the growth of responsibility" (Korolchuk, 2021) negatively affected the lives and health of people and society as a whole and require from public administration clearer approaches and mechanisms to ensure proper quality in all spheres of the country's life, including and especially in health care (hereinafter referred to as HC). This has become especially important in the context of the COVID-19 post-pandemic and in the context of the war in Ukraine, when thousands of people, weakened by the impact of the epidemic, suffer daily from military events, destruction, injuries, and losses. A "hybrid" component of this war, "the destruction of economic potential, industrial, transport, social infrastructures... sabotage groups, terrorist acts... manipulations... spreading panic and disbelief... are oriented also to the general weakening and disorganization of the Ukrainian authorities... and state" (Korolchuk & Bilynska, 2018), which also emphasizes the importance of increased attention to the quality of health care as the basis of social and humanitarian support.

Quality in health care is generally considered as a complex system based on a set of concepts and principles that characterize the adequacy and timeliness, efficiency and effectiveness, economy, and feasibility, sufficiency and scope of all processes related to health care and medical care. "In many countries, quality assurance programs have been adopted and are in place as a basis for national health policy. That is, it is the main mechanism that affects the development of medicine and is determined by a significant number of indicators, in particular the quality of management (purpose, goals, principles, methods, structures, organization, planning), the organization of the process of providing medical care and its resource support (logistical, methodological, personnel, financial, etc.), the implementation of the application of technologies, modern guidelines, standards, clinical protocols, etc." (Yamnenko, 2018; Ivanenko et al., 2018).

Even before the COVID-19 pandemic, health researchers attributed the following to the source of problems and risks in Ukraine: a drop in the level and quality of life, a decrease in social protection and an increase in the social differentiation of the population; negative dynamics of demographic processes and a significant deterioration in the health of the population; the difficulty of adhering to a healthy lifestyle, an increase in sanitary and epidemiological disadvantage, respectively, an increase and change in the spectrum of the population's needs for medical and social protection against the background of the state's inability to fully satisfy them; a decrease in the availability, quality and effectiveness of medical care, medical support; imperfection of measures in the social sphere, migratory outflow of the active part of the population (Korolchuk, 2016). Contemporary Ukrainian socio-geo-political conditions require revision and improvement of the mechanisms of public management, adequate to time and situation. "One of the most important issues in this context is the development and introduction of modern mechanisms of public administration/regulation with the purpose of high-quality and effective implementation of sociohumanitarian policy—organizational principles and corresponding modern tools of state management" (Korolchuk & Bilynska, 2018) especially of the HC (health care) sphere.

The impact of numerous diverse factors, including crises in various spheres (imperfect infrastructure, economic imbalances and instability; inconsistency of policies, dissimilarity of decisions and practices; complex demographic situation and ageing; deterioration of health indicators; growth of the emigration of the count), made it difficult to implement really effective timely changes

in the health care sphere across the country in Ukraine (Korolchuk, 2019). The conditions after the COVID-19 pandemic and the war, which has been going on for more than a year and a half in Ukraine, have posed new powerful challenges for the national health sector, disrupting the quality functioning of the health care system (many institutions have been destroyed, infrastructure has been damaged, some territories are temporarily occupied, and some are in the zone of ongoing hostilities, etc.). "Since the beginning of the large-scale invasion, the health care system has undergone unprecedented stress: hospitals and doctors worked in the hottest spots even in the most acute phases of the war and became the object of Russian attacks: at least 292 hospitals were destroyed or severely damaged, 62 health workers were killed (data as of the end of 2022). In the first phase of the war, access to life-saving medicines and services was disrupted and thousands of doctors and nurses, as well as millions of their patients, fled their homes and places of work" (Kovtonyuk & Korchak, 2023; Kyselova & Nadtochiy, 2020). Medical care in conditions of destruction, rupture or complete lack of communication and information was carried out through temporary relocation of departments, evacuation of patients, involvement of humanitarian aid and specialists, application of online technologies, etc.

However, thanks to the commitment of people working in the health sector, who continued to provide assistance and work in the most difficult times, the decision of the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, the Ministry of Health and the effects of previous steps of the reform, the health system was able to withstand, to be able to perform its functions, and today we can continue the important issue of ensuring proper quality in the health care system. It is worth noting that the national system is in the second stage of the reform, launched in 2017, according to the main two principles: money follows the patient and the emphasis is on prevention, in order to increase the number of years and the average duration of a full active life. This reform stipulates that employees of medical institutions providing quality care will receive higher salaries, the effect of which will manifest itself in the quality and standard of living. Therefore, the strategic way of reforming the sphere in Ukraine is aimed both at improving the quality of health care and medical care in institutions and at improving the quality of life of Ukrainians.

We wrote in our works of 2018-2020 that "military events and social conflicts in the country have a bitter price, which is measured by the lost lives and health of its citizens. In addition to the direct threat to life during the conduct of hostilities, the inevitable decline in health in the conflict region is facilitated by violations of normal living conditions, lack of necessary medical care, poor-quality medicine and forced non-compliance with the necessary treatment. The population also feels the negative impact due to constant stresses, budget cuts, reduced availability of medicines and medical services" (Ryngach & Korolchuk, 2018; Gresko, 2020). The possibilities of providing high-quality

medical care and health care measures in times of war were affected by: reduced access to medical services and medicines, reduced number and capacity of health care facilities, the emergence of a large number of people in the group of those who suffer physically from combat injuries and injuries (it should be noted that there was no full readiness to work with such injuries), reduced quality and sanitary and hygienic conditions of living and nutrition, inaccessibility/lack of conditions for ensuring a responsible attitude to health as a personal priority, etc.

It is difficult to ensure and maintain the proper quality of mental health care—thousands of people acquire invisible traumas of war from living in a constant overstress state: constant fear for their lives and health; tragic losses of loved ones, property, usual life; forced to leave their homeland, their usual life, being abroad (especially those who were forcibly displaced from the occupied territories), forced family breaks with loss of connection with relatives; inaccessibility of health care services, including psychological support in critical conditions, prevention of self-destructive behavior, suicides; etc. Therefore, against the background of mental exhaustion, the level of psychological and mental problems that affect the majority of people in Ukraine is constantly increasing, post-stress disorders and PTSD are developing, the number of drugs, alcohol and other addictions is increasing, etc.

Ensuring individual healthcare decision-making rights under martial law presents unique challenges. Efforts should be made to uphold informed consent practices to the extent possible, considering the circumstances. Additionally, mechanisms for timely and accessible provision of relevant healthcare information, alternative decision-makers in cases of incapacitation, and avenues for addressing grievances can be incorporated to maintain a semblance of individual agency in healthcare choices even under martial law conditions.

Empowering individuals with the right to make healthcare decisions for themselves and their families is vital. This not only strengthens the ongoing discourse on individual conscience protections but also establishes a necessary equilibrium with the emphasis on public health. The cornerstone of safeguarding conscience rights lies in the practice of informed consent, ensuring that individuals can make informed choices in alignment with their values and beliefs.

# Quality of Medical Care: Aspects, Factors and Importance in the Context of Modern Challenges

Quality is an important multifactorial concept. Its provision is an important task for public administration in all spheres of life, especially in public health, because ensuring health, as a bio-psycho-social category, is the basis for preserving all possible resources and potentials of the nation and the country

as a whole. Quality assurance in health care requires attention and solution—a process that is influenced by a large number of internal factors and external factors, since it concerns the work of both health workers and managers, and all organizations, institutions and employees related to health care, and, in fact, consumers—patients.

Quality is also an assessment of medical care and its effectiveness and results in relation to a particular case of the disease, taking into account the prevention of the risk of its further development. When professional knowledge and scientific achievements provide optimal clinical, functional and psychological results quality is considered as the process of ensuring its components, quality management. The quality of medical care, as an object of management, is a property of the process of interaction between the doctor and the patient, which is due to the qualification of a medical worker who has the knowledge and skills, capabilities and resources to perform the necessary medical procedures/technologies, reducing the risks of progress/recurrence of the disease and the emergence of a new pathological process, optimally using the necessary health care resources with the achievement of patient satisfaction from the interaction with the HC. Thus, it is generally accepted and recommended by WHO that when studying the quality of medical care and measures for health care, especially in the interaction between doctor and patient, four main components of the quality of medical care are taken into account: qualification of the doctor, optimal use of resources, risk to the patient, patient satisfaction with the care received.

Researchers, theorists and practitioners emphasize the importance of ensuring the quality of clinical practice, which is primarily intertwined with the quality of the patient's assessment, directly depends on the satisfaction with the services received. Healthcare practitioners "tend to perceive interventions aimed at improving their knowledge and skills positively: continuing medical education requirements are commonplace today. New quality metrics are continually audited and impact health care providers of all specialties, including hospital and nursing managers, physicians, nurses, medical technicians, medical records specialists, and quality improvement specialists (Aghaei et al., 2014; Griffin et al., 2017; Klein et al., 2023; Koval et al., 2019).

At the legislative level, the concept of "quality of medical care" is defined in Ukraine as "the provision of medical care and other measures to organize the provision of medical care by health care facilities in accordance with standards in the field of health care" (Order of the Ministry of Health of Ukraine No. 752, 2012). We can agree with A. Myronov, who considers the quality of medical care as a complex category that characterizes the assessment of medical care as the relationship between the main standardized expectations from medical intervention and the actually obtained results, which are based on the study of

the personnel, material, technical and logistics potential of the institution of health care, as well as the patient's condition (Myronov, 2019).

In our opinion, such conceptual foundations are adequate and take into account almost every element of the quality (efficiency and effectiveness) of medical care and other measures for health care. In this form, clients (patients), providers of various health care services and health care managers are included—all the main players that are important in determining the quality of health care and health care activities. For Ukraine, it is important to clearly answer the main questions about what exactly the quality of health care and health care measures means for patients and communities, for health workers at all levels of health care provision and organization, for managers who organize the process and ensure the coherence and effectiveness of the functioning of health care systems. These are the answers to the questions from all three sides that will allow you to get real opportunities and fully assess the quality of medical care, measures for health care.

Speaking about quality in general, it means the level of ability of the service/product to meet the needs of the consumer and/or its purpose, and quality management (QM) is a comprehensive system that is used to achieve quality and manage it, which includes the processes of quality assurance and control, as well as the way of its assessment. Quality was first mentioned when attention was paid to the main tasks or actions that confirmed that the product/service fulfilled its intended purpose (Delis et al., 2017). Historically, the provision of quality services in the field of health care began to be talked about in the most ancient texts concerning the ethical obligations of a doctor (Young & Wagner, 2022; Olejarczyk & Young, 2022).

Quality is a multi-faceted and intangible construct (Charantimath, 2011; Zhang, 2001). Quality is a complex and multifaceted concept. Experts tend to distinguish several different aspects of quality, such as technical competence, access to services, efficiency, effectiveness, interpersonal relationships, continuity, safety and convenience. This structure helps HC teams identify and analyze their own problems and assess how they meet the standards—a synthesis of ideas from different quality assurance experts. Each aspect should be considered in the light of specific programs and determined in accordance with the local context. These quality parameters are suitable for both clinical care and management services (Brown et al., 1993).

## Quality Management in Health Care: A Comprehensive Approach to Ensuring and Improving the Quality of Medical Care

Quality assurance leads quality management (QM)—is a "comprehensive approach to systemic comprehensive quality management and its improvements, it covers all quality assurance processes, refers to the administration of the design of systems, policies and processes that minimize, if not eliminate, harm, optimizing patient treatment and results" (Dodwad, 2013). We support the theses of the QM researcher in health care, regarding: QM in general is to improve quality, by analyzing data and identifying the main causes (independent variables) of events; HC is a service provided to persons who are both patients in the traditional sense and clients in the modern sense; QM, like other scientific methods, today aims to increase objectivity and reduce subjectivity in decision-making (Young & Smith, 2022). Modern QM involves: identifying the problem or issue of concern; quantifying the variables affected by the process or event; analyzing the results after the impact, the implementation of measures; and conclusion that means measurement.

Important in the QM process is the improvement of quality, methodologies that were created to maintain quality in health systems in resource-limited and developing countries, based on the improvement model developed by Associates in Process Improvement to preserve the achievements of improvement, based on the theory of E. Deming (Deming, 2000; Langley et al., 2009; Semenenko, 2015). By the way, Juran and Godfrey emphasized this with a customer-oriented definition of quality as 'fitness for use'. This approach was further elaborated by Deming explicitly addressing the customer when defining that 'quality' should be targeted at the needs of the customer, present and future: Deming and Juran thus pioneered a perspective of quality as being requiredby customers, which was extended later to the idea of service quality. More recent research on Quality Management, incorporating sustainability perspectives, highlights a need for a broader understanding of customer roles, also considering other sta-keholder perspectives (Figure 1) (Martin et al., 2020).

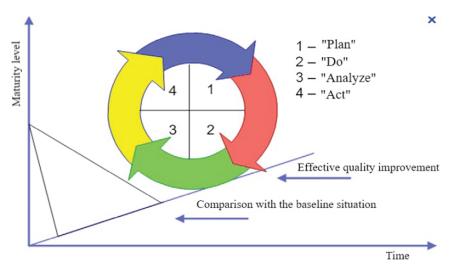


Figure 1. Quality Management Cycle of Edward Deming's Rada (1994)

This model is based on 4 main processes and 3 key questions, the answers to which lay the possibilities for ensuring and, importantly, maintaining improvement (Figure 2) (Semenenko, 2015):

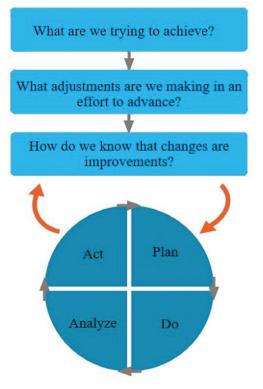


Figure 2. Model of improvement (The Aurum Institute, 2014).

The application of such a health care model strengthens the system itself through the application of evidence-based tools to achieve specific quality improvement goals in the system. Healthcare managers, direct providers, and recipients alike are stakeholders in improving the quality of health care delivery - their involvement in solving QM problems in health care is at the same time a key prerequisite for success and a primary source of understanding of which elements of HC need to be changed and improved.

# Mechanisms and Tools of State Regulation of the Quality of Medical Care in Ukraine

Quality control, also an important element of QM, "involves setting standards and maintaining operations within these parameters by verifying and collecting data, emphasizing assurance that quality requirements will be met" (Branca & Longatto-Filho, 2015), which is important for both internal stakeholders such as management and for patients, accreditors and other external stakeholders (Klein et al., 2023). The main mechanisms of state regulation of QM in health care include: licensing, accreditation, standardization, certification, certification (continuous education and training - continuous professional development).

The legislation of Ukraine on ensuring the quality of medical care consists of relevant legislative and regulatory acts that carry out legal regulation in this area. T. Kovalenko emphasizes that one part of it defines the basic principles of legal regulation of the organization and implementation of public administration in the field of health care in general, and the second part is the legislation that defines the procedures for the implementation of state regulation to control the quality of medical care (Kovalenko, 2013). Standardization in the field of health care plays a special role in state regulation of quality assurance of medical care. The system of standards in the field of health care is made up of state social standards and industry standards. State social standards in the field of public health are established in accordance with the Law of Ukraine "On State Social Standards and State Social Guarantees". Legislation defines industry standards in the field of health care, such as the standard of medical care (medical standard); clinical protocol; protocol for the provision of rehabilitation care in the field of health care; logbook of material and technical equipment; medical form (Law of Ukraine No. 2801-XII, 1992).

In order to improve the quality of medical care to the population of Ukraine, the Resolution of the Cabinet of Ministers of Ukraine approved the "Procedure for accreditation of a health care institution", in which the accreditation of a health care institution is defined as "official recognition of the presence in the health care institution of conditions for high-quality, timely, a certain level of medical care for the population, its compliance with standards

in the field of health care, compliance of medical (pharmaceutical) workers with unified qualification requirements" (Resolution of the Cabinet of Ministers of Ukraine No. 765, 1997). Moreover, the legislation stipulates that HCFs can be accredited voluntarily (Law of Ukraine No. 2801-XII, 1992). Accreditation of the institution is carried out after obtaining a license for conducting economic activities in medical practice (Resolution of the Cabinet of Ministers of Ukraine No. 765, 1997).

Economic activity in the field of health care, which is subject to licensing in accordance with the law, is allowed only with a license (Law of Ukraine No. 2801-XII, 1992). We agree with O. Khudoshyna that it is possible to ensure and improve the quality of medical services (medical care) by exercising proper control over the quality of these services, which is carried out at all stages, as well as by improving the activities of this process, when ensuring and improving the quality of medical care is carried out by improving the results of the system as a whole, that is, through constant changes and improvements in this system (Khudoshyna, 2017). In connection with the above, we can determine the relationship between the mechanisms and tools of state regulation of quality assurance of medical care (Figure 3).

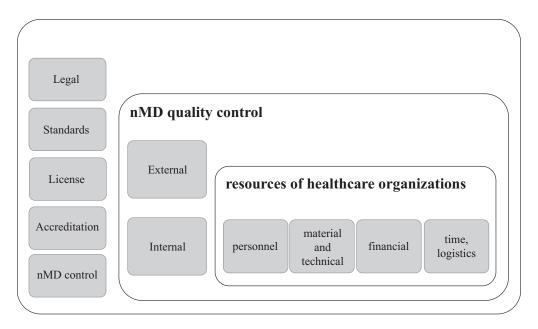


Figure 3. Interconnections of the process of state regulation of provision quality of care

By the Decree of the President of Ukraine dated February 24, 2022 No. 64/2022, martial law was introduced in Ukraine, which was approved by the

Law of Ukraine dated February 24, 2022 No. 2102-IX (Decree of the President of Ukraine No. 64/2022, 2022). In order to improve the quality of primary health care under martial law, the Order of the Ministry of Health of Ukraine dated March 17, 2022 No. 496, "Some issues of primary health care under martial law," primary health care providers need to ensure that records of displaced persons who apply for primary health care are kept in the prescribed form; provision of primary health care and medical care to patients in an emergency from among the displaced persons; vaccination in accordance with the requirements of the schedule of preventive vaccinations (Order of the Ministry of Health of Ukraine No. 496, 2022).

The legislation of Ukraine establishes the boundaries for determining hospital districts in order to ensure the territorial availability of high-quality medical and rehabilitation assistance to the population. "The hospital district is divided into hospital clusters, within which comprehensive access of the population to medical care in inpatient settings is organized. The boundaries of hospital districts and hospital clusters, the procedure for their definition and functioning, as well as the procedure for determining cluster, supra-cluster and other types of health care facilities that are part of a capable network of health care facilities in the hospital district, are determined by the Cabinet of Ministers of Ukraine on the basis of the population's needs for comprehensive medical care in inpatient settings" (Law of Ukraine No. 2801-XII, 1992). Thus, by the Resolution of the Cabinet of Ministers of Ukraine dated February 28, 2023 No. 174, "Some issues of organizing a capable network of health care institutions" approved the Procedure for the functioning of hospital districts and hospital clusters and establishing their boundaries, which "establishes a mechanism for the functioning of hospital districts and hospital clusters and establishing their boundaries and a mechanism for determining supercluster, cluster, general and other types of health care institutions that are part of a capable network of health care institutions of the relevant hospital district" (Resolution of the Cabinet of Ministers of Ukraine No. 174, 2023).

Therefore, the issue of improving the quality and accessibility of medical care is extremely relevant. This is evidenced by the fact that WHO has published separate guidelines for the development of the quality of care system, its criteria and monitoring. Creation of quality management systems for medical care is one of the priority areas of transformation of the health care system, determines both the current and strategic prospects for the activities of health care institutions, regardless of the form of ownership. In particular, the Law of Ukraine "On improving the availability and quality of medical care in rural areas" (Law of Ukraine No. 2206-VIII, 2017).

It should be noted that certain measures used during the war helped to ensure a certain level of quality and to withstand the health care system and medical care in times of severe crisis. They became the initial ones to ensure functioning in times of war and to continue recovery afterwards. These included the following activities:

1) The full managerial and financial autonomy of health facilities applied since the beginning of the reform (2018-2021)—when delegated powers and, accordingly, the available opportunities to quickly and independently make the necessary decisions on the ground helped health facilities, especially in the first months of the invasion. Thus, the initiative directors of medical institutions had the necessary legal framework to independently make decisions and temporarily relocate the departments to safer places, evacuate patients, attract humanitarian and charitable assistance, and attract invited specialists, etc.

2) Simplified access of internally displaced Ukrainians to primary health care was introduced, which greatly facilitated the availability of medical care and, accordingly, improved the quality of health care measures—people received the right and opportunity to see a doctor regardless of their place of stay and without submit-

ting a new declaration on the choice of a doctor.

Changes to the Medical Guarantees Program were applied to respond to new health problems that arose under the influence of the war: mental health recovery and rehabilitation services; and new packages of medical services "Support and treatment of adults and children with mental disorders at the primary level of medical care" and "Comprehensive rehabilitation care for adults and children in inpatient settings" were developed and implemented. It was important to resolve the issue of providing people who are undergoing rehabilitation in a health care facility with auxiliary means of rehabilitation (wheelchairs, crutches, sticks, etc.) without the need for long waiting and approval of the State Model Plan for the Rehabilitation of Persons with Disabilities of Daily Functioning and the Features of Drawing Up an Individual Rehabilitation Plan (Resolution of the Cabinet of Ministers of Ukraine No. 1462-2022-p, 2022); and implementation of standardized rehabilitation routes for conditions such as spinal cord injuries, brain injuries, burns, amputations, and complex skeletal injuries (Order of the Ministry of Health of Ukraine No. z1516-22, 2022).

4) In July 2023, the government presented a draft plan for the restoration of the health care system—a list of measures for the post-war reconstruction and development of Ukraine, proposals for priority reforms and strategic initiatives, a list of regulations, the adoption and implementation of which are necessary for the effective restoration and development of Ukraine in the military and post-war periods (Ministry of Health of Ukraine, 2022), where among the nine priorities are also the Strengthening of medical services to meet the special 35 needs of people (including IDPs, war veterans) caused by

the war, Strengthening and strengthening the human resources of the health care system 45, Strengthening the quality management system at the national 101 and local levels, etc.

We agree that ensuring the quality of medical care requires the improvement of relevant tools—criteria and indicators of quality on an evidence-based basis with their monitoring with further assessment of effectiveness and implementation of measures to improve the quality management system (Stepanenko, 2017). It is also important, in our opinion, to stimulate and monitor the level of satisfaction of recipients of health care and health care services in order to further identify the main problems, risks and areas for improving quality management measures in health care. Thus, improving the mechanisms of state regulation of quality assurance of medical care in Ukraine requires immediate solution using the most modern managerial, organizational, economic and legal measures.

### Conclusions

Since maintaining health, as a bio-psycho-social category, is the foundation for preserving all of the nation's resources and potentials, the provision of quality is an important task of state regulation of the health sector. The most accurate definition of quality always depends on the context in which it is considered; different contexts give different meanings to quality.

The health care model proposed in this article may strengthen the system itself through the application of evidence-based tools to achieve specific quality improvement goals in the system. Improving the quality of healthcare delivery involves the collaboration of healthcare managers, direct service providers, and recipients. Their engagement in resolving quality management issues is both essential for success and a primary means of gaining insights into the specific aspects of healthcare that require transformation and improvement.

The analysis of the current state of regulatory support for state regulation in the area of medical care quality assurance provides evidence to support the claim that a number of regulatory legal acts, including those governing standardisation, accreditation, and licencing of healthcare institutions, regulate the quality of medical care. The legislation specifies the establishment of hospital districts and hospital clusters along with the gradual formation of a capable network of healthcare institutions during the martial law in Ukraine in order to ensure the accessibility and quality of medical and rehabilitation care. This maximises the capabilities and efficiency of the healthcare sector during the martial law in Ukraine.

The state's methods for regulating medical care quality should be improved, taking into consideration the EU's and the USA's international experiences while incorporating the best procedures into current national circumstances. The resilience of the healthcare system will be shaped by how

well quality assurance in healthcare functions, ensuring that it is prepared, stable, and operating while maintaining prospects for future improvement.

We believe, that first of all the following issues need to be improved: the personnel mechanism of state regulation of ensuring the quality of medical care by increasing the motivation and remuneration of medical workers, expanding the opportunities for their continuous professional development, as well as the introduction of licensing the activities of doctors with personal responsibility for the quality of medical care; tools for systemic determination and monitoring of patient satisfaction with the received health care and medical care measures at the level with the development and assessment of the state of serviceability of the provision of services in the system (we will present in more detail in subsequent publications). These issues require further research, scientific substantiation and implementation. Prospects for further research are to make proposals for improving the mechanisms of state regulation of ensuring the quality of medical care to specific regulations, including on issues that in our opinion require attention and improvement.

### References

Aghaei H. A., Ravaghi, H., Kringos, D. S., Ogbu, U. C., Fischer, C., Azami, S. R. & Klazinga, N. S. (2014). Using quality measures for quality improvement: the perspective of hospital staff. *PLoS One*, *9*(1).

Brown, L. D., Franco, L. M., Rafeh, N. & Hatzell, T. A. (1993). *Quality assurance of health care in developing countries*. Retrieved from: https://pdf.usaid.gov/pdf\_docs/pnabq044.pdf

Branca, M. & Longatto-Filho, A. (2015). Recommendations on quality control and quality assurance in cervical cytology. *Acta Cytologia*, 59(5), 361-369.

Charantimath, P. M. (2011). *Total Quality Management*. New Delhi: Pearson Education, p. 587

Decree of the President of Ukraine]. 64/2022 (2022). "On the introduction of martial law in Ukraine". Retrieved from: https://zakon.rada.gov.ua/laws/show/64/2022#Text

Deming, W. E. (2000). The New Economics: For industry, Government, Education. Cambridge: The Vit Press.

care in developing countries. Retrieved from: https://pdf.usaid.gov/pdf\_docs/pnabq044.pdf.

Delis, H., Christaki, K., Healy, B., Loreti, G., Poli, G. L., Toroi, P. & Meghzifene, A. (2017). Moving beyond quality control in diagnostic radiology and the role of the clinically qualified medical physicist. *Physica Medica*, 41, 104-108.

Dodwad, S. S. (2013). Quality management in healthcare. *Indian Journal of Public Health*, 57(3), 138-43.

Gresko V. I. (2020). The concept of health care as an object of administrative and legal support. *Legal horizons*, 22(35), 65-69. DOI: http://www.doi.org/10.21272/legalhorizons.2020.i22.p65

Griffin, A., McKeown, A., Viney, R., Rich, A., Welland, T., Gafson, I. & Woolf, K. (2017). Revalidation and quality assurance: the application of the MUSIQ framework in independent verification visits to healthcare organizations. *BMJ Open*, 7(2).

Ivanenko, T., Hrushko, V. & Frantsuz, A. (2018). Optimal investment decision making on the model of production enterprise with limited resources. *Investment Management and Financial Innovations*, 15(4), 61-68. DOI:10.21511/imfi.15(4).2018.05

Khudoshyna, O. V. (2017). Foreign experience of state regulation of licensing of professional activities of medical workers in the context of proposals for reforming the medical sector in Ukraine. *Investments: Practice and Experience*, 20, 102-106.

Korolchuk, O. L. (2016). The relevance of studying issues related to the state management of medical and social security of ATO participants and their family members. *Investments: Practice and Experience*, 15, 47-51.

Korolchuk, O. & Bilynska, M. (2018). Selected issues of the specific development in contemporary Ukraine during the Antiterroristic operation conduction. *Introduction, Journal of Geography, Politics and Society, 8*(1), 5-7.

Korolchuk, O. (2019). *Trends of the public management development in Ukraine*. Association agreement: driving integrational changes. Chicago: Accent Graphics Communications, 72-87.

Korolchuk, O.L. (2021). Citizens and communities as the pillars of the national resilience formation. Warszawa: E-Science Space, 300-309.

Korolchuk, O. L. (2022). Characteristics of health care system resilience: international experience for Ukraine. *Public Management and Administration in Ukraine*, 23, 35-41. DOI: https://doi.org/10.32843/pma2663-5240-2021.23.6.

Kovtonyuk, P. & Korchak, T. (2023). *Through War: What Happened to Health Care in 2022*. Retrieved from: https://life.pravda.com.ua/health/2023/04/3/253632/

Koval, I., Koval, M., Frantsuz, A., Koucherets, D. & Shpiliarevych, V. (2019). Tactical features of use of special knowledge in the investigation of torture committed by Members of the National Police of Ukraine. *Journal of Advanced Research in Law and Economics*, 10(1), 263-273. DOI:10.14505//jarle.v10.1(39).27

Kovalenko, T. Y. (2013). State administration in the field of sanatorium and resort provision for children in Ukraine: regulatory and legal aspects. *Actual Problems of Public Administration*, *Pedagogy and Psychology*, *1*(8), 86-92.

Klein, T. A., Seelbach, C. L. & Brannan, G. D. (2023). *Quality Assurance*. Treasure Island (FL): StatPearls Publishing.

Krynychna, I. (2015). State regulation of reforming the healthcare industry in Ukraine: analysis of expected results of reform implementation. *State Administration and Local Self-Government*, 2, 137-147.

Kyselova, O. I., & Nadtochiy, K. O. (2020). The health care system: an overview. Legal horizons, 25(38), 25-33. DOI: http://www.doi.org/10.21272/legalhorizons.2020.i25.p25

Langley, G., Moen, R., Nolan, K., Nolan, T., Norman, C. & Provost, L. (2009). *The Improvement Guide*. Retrieved from https://www.perlego.com/book/1014563/the-improvement-guide-a-practical-approach-to-enhancing-organizational-performance-pdf

Law of Ukraine No. 2801-XII (1992). "Fundamentals of Ukrainian legislation on health care". Retrieved from: https://zakon.rada.gov.ua/laws/show/2801-12#Text

Law of Ukraine No. 2206-VIII (2017). "On increasing the availability and quality of medical care in rural areas". Retrieved from: https://zakon.rada.gov.ua/laws/show/2206-19#Text

Law of Ukraine No. 2102-IX (2022). "On the introduction of martial law in Ukraine". Retrieved from: https://zakon.rada.gov.ua/rada/show/2102-20#Text

Martin, J., Elg, M. & Gremyr, I. (2020) The many meanings of quality: Towards a definition in support of sustainable operations. *Total Quality Management & Business Excellence*. DOI: 10.1080/14783363.2020.1844564

Ministry of health of Ukraine *The government presented a draft plan for the restoration of the health care system.* Retrieved from: <a href="https://www.kmu.gov.ua/news/uriad-predstavyv-proekt-planu-vidnovlennia-systemy-okhorony-zdorovia">https://www.kmu.gov.ua/news/uriad-predstavyv-proekt-planu-vidnovlennia-systemy-okhorony-zdorovia</a>?

Myronov, A. H. (2019). State control as a means of ensuring the quality of medical care. *Public Law*, 4(36), 98-110.

Olejarczyk, J. P. & Young, M. (2022). Patient Rights and Ethics. Treasure Island (FL): Stat-Pearls Publishing.

Order of the Ministry of Health of Ukraine 752 (2012). "On the procedure for monitoring the quality of medical care". Retrieved from: https://zakon.rada.gov.ua/laws/show/z1996-12#Text

Order of the Ministry of Health of Ukraine No. z1516-22 (2022). "On the approval of the Procedure for providing rehabilitation assistance on rehabilitation routes". Retrieved from: https://zakon.rada.gov.ua/laws/show/z1516-22#Text

Order of the Ministry of Health of Ukraine 496 (2022). "Some issues of providing primary medical care in the conditions of martial law". Retrieved from: https://zakon.rada.gov.ua/rada/show/v0496282-22#Text

Resolution of the Cabinet of Ministers of Ukraine No. 765 (1997). "On approval of the procedure for accreditation of a health care institution". Retrieved from: https://zakon.rada.gov.ua/laws/show/765-97-%D0%BF#Text

Resolution of the Cabinet of Ministers of Ukraine No. 174 (2023). "Some issues of organizing a capable network of health care institutions". Retrieved from: https://zakon.rada.gov.ua/laws/show/174-2023-%D0%BF#Text

Ryngach, N. & Korolchuk, O. (2018). Assessment of the health losses resulting from the internal armed conflict in Ukraine and public health tasks. *Journal of Geography*, *Politics and Society*, 8(3), 18-24.

Resolution of the Cabinet of Ministers of Ukraine No. 1462-2022-p (2022). "Some issues of the organization of rehabilitation in the field of health care". Retrieved from: https://zakon.rada.gov.ua/laws/show/1462-2022-%D0%BF#Text

Semenenko, I. (2015). *How to do better: A guide to improving quality.* Kyiv: Polihraf plus, 192 p.

Stepanenko, A. (2017). *Quality control of medical care in Ukraine is the naked king?* Retrieved from: https://www.vz.kiev.ua/kontrol-yakosti-medychnoyi-dopomogy-v-ukray-ini-golyj-korol/

The Aurum Institute (2014). How to guide for quality improvement. Johannesburg: Aurum House,  $216\,\mathrm{p}$ .

Yamnenko, T. M. (2018). Medical reform: Realities of Ukraine and international experience. *Legal Bulletin. Air and Space Law*, 2, 116-120.

Young, M. & Wagner, A. (2022). Medical Ethics. Treasure Island: StatPearls Publishing.

Young, M. & Smith, M. A. (2022). Standards and Evaluation of Healthcare Quality, Safety, and Person-Centered Care. Treasure Island (FL): StatPearls Publishing.

Zhang, K.H. (2001) Does Foreign Direct Investment Promote Economic Growth? Evidence from East Asia and Latin America. *Contemporary Economic Policy*, 19, 175-185.