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# ECONOMIC AND LEGAL FRAMEWORK FOR ENSURING THE RIGHT TO HEALTHCARE IN THE CONTEXT OF DIGITAL TRANSFORMATION: PUBLIC POLICY AND THE SECURITY DIMENSION

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**Abstract.** This article examines public policies aimed at ensuring economic security and the realisation of healthcare rights in the context of digital societal transformation. It also considers the impact of digitalisation processes on healthcare systems and contemporary legal and economic mechanisms for ensuring the effective realisation of the right to medical care. The *purpose of the study* is to develop a comprehensive approach to defining the content of public policy on the economic security of the healthcare sector, as well as the specific features of its implementation in a digitally transformed healthcare system. The *subject of the research* is the social relations that arise when public policy is formulated and implemented in the field of economic healthcare security, particularly with regard to financing medical guarantees, digitalising medical services, protecting medical data, cybersecurity and adapting national legislation to European standards. *Metodology.* The research employed general and specific methods of scientific enquiry, including dialectical, formal legal, comparative legal and systemic-structural methods. This enabled the interrelationship between digitalisation, the economic security of the healthcare system and legal mechanisms for ensuring the right to healthcare to be examined. *Results.* It has been established that digitalisation of the healthcare system creates a new model for realising the right to healthcare. Within this model, information technologies serve as instruments for improving the efficiency of medical services, as well as mechanisms for optimising public expenditure and strengthening the financial sustainability of the healthcare system. The financial sustainability of the healthcare system, stability of public funding, protection of personal medical data and cybersecurity of digital infrastructure have been demonstrated to be the fundamental components of contemporary public policy in the healthcare sector. Particular attention is given to digital healthcare infrastructure as a critical element of the public system. Its functioning directly affects economic stability, the continuity of healthcare services, the implementation of social guarantees and the realisation of the right to healthcare. The article proposes the following: a) recognising the economic security of the healthcare system as an independent component of public policy aimed at ensuring the right to healthcare; b) improving national legislation in the field of digital healthcare by developing specialised cybersecurity standards and medical data protection requirements; c) strengthening the mechanisms that ensure the financial sustainability of the healthcare system, while also harmonising Ukrainian legislation with European standards of digital governance in the healthcare sector.

**Keywords:** right to healthcare, economic security, public policy, digitalisation, digital healthcare, cybersecurity, medical data, financial guarantees, healthcare system, European integration.

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## 1. Introduction

The realisation of the right to healthcare constitutes one of the fundamental dimensions of the state's social function. This is ensured through an extensive system of public administration, financial guarantees, and appropriate legal mechanisms. The effectiveness of such policy is contingent on the financial sustainability of the healthcare system, the state's capacity to provide an adequate level of medical care, and its ability to maintain the stable functioning of the relevant infrastructure. In addition to its social function, the economic dimension of the healthcare system extends significantly beyond the scope of social welfare. The accessibility and quality of medical services directly influence the reproduction of human capital, labour productivity and the overall resilience of the national economy. As emphasised by the World Health Organization (WHO), the stability of the healthcare system is one of the key determinants of a state's long-term economic capacity (Universal Health Coverage (UHC), 2024).

The digital transformation of society has fundamentally altered the organisational models of healthcare delivery and the legal mechanisms that govern the healthcare system. The introduction of advanced technologies, such as telemedicine, electronic health records, clinical decision support systems, artificial intelligence algorithms and big data analytics, has facilitated the emergence of a new model of legal relations in healthcare. In this context, the quality of medical care is increasingly dependent on the efficiency of digital infrastructure and the timely processing of information (Global Strategy on Digital Health 2020–2025, 2021; Lee, 2024).

Digitalisation is simultaneously transforming the mechanisms of public administration in the healthcare sector. In contemporary conditions, the state acts not only as the guarantor of physical access to healthcare, but also as the regulator of the digital healthcare environment. Public authorities are responsible for ensuring the continuous operation of electronic services, protecting personal data, maintaining cybersecurity and safeguarding the stability of healthcare information systems overall (Boryslavska, 2022; Horban, 2025). The transformation of the traditional governance model has given rise to a new, autonomous dimension of public policy: ensuring the economic security of the realisation of the right to healthcare in the digital environment.

Implementing innovative technologies creates additional opportunities to modernise public administration in the healthcare sector. These opportunities are reflected in the more efficient allocation of public financial resources, the automation of administrative procedures, greater transparency in financial administration and reduced transaction costs (Health Systems Digital Investment Report, 2024). However, large-scale digitalisation also gives rise to specific financial risks, such as the capital-intensive maintenance of technological infrastructure, organising reliable cybersecurity systems, providing technical support for information systems and the need for long-term investment in innovative digital solutions.

Consequently, ensuring the comprehensive economic security of the healthcare sector has become one of the central objectives of public policy. The stability of public financing, the uninterrupted operation of digital platforms and the safeguarding of state healthcare information resources have emerged as distinct areas of governmental activity within the broader context of ensuring citizens' constitutional rights (Horban, 2025). In the contemporary context, large-scale cyber incidents possess the potential to result in violations of patients' rights and breaches of confidential information. Moreover, such incidents can also lead to direct losses to public finances, disruption of targeted state programmes, and the destabilisation of existing mechanisms for financing medical guarantees.

A separate category of legal challenges concerns the protection of confidential health information. As the healthcare sector becomes more technologically advanced, medical information has become one of the most sensitive types of personal data, requiring a specialised legal framework. In this regard, harmonising national legislation with European standards, particularly the General Data Protection Regulation (GDPR), has become especially significant. This is because the Regulation sets out strict rules for processing and storing such data (European Parliament and of the Council, 2016). Furthermore, the deployment of artificial intelligence-based clinical decision support systems gives rise to further issues relating to algorithmic discrimination, the transparency of digital decision-making processes and legal liability for automated decision-making in the healthcare sector (Lee, 2024).

For Ukraine, these challenges are considerably intensified by the conditions of martial law. The healthcare sector is undergoing transformation alongside the reform of healthcare financing and the development of the national eHealth system. In such situations, the healthcare sector takes on the characteristics of critical infrastructure. The stable functioning of this infrastructure directly impacts national defence capabilities, the restoration of human capital and the state's overall macroeconomic resilience (Boryslavska, 2022).

Despite the growing body of academic literature on digital healthcare, healthcare governance reform and medical law, the development of a coherent public policy framework for the economic and legal

protection of the right to healthcare in the context of digital transformation has not yet been subject to comprehensive theoretical and legal analysis. An integrated study of the relationship between public administration mechanisms, the economic security of the healthcare system, and digital transformation as a new factor in ensuring the right to healthcare is therefore necessary.

This study employs a methodological framework based on a combination of general scientific and specialised legal research methods. The formal legal method was used to analyse the legal regulation of the right to healthcare, as well as the legislative mechanisms that govern the functioning of the healthcare system. Meanwhile, the systemic-structural method was used to examine the interrelationship between the legal, economic and institutional components of public policy in the healthcare sector. The comparative legal method was used to analyse European legal standards, including the European Union's approaches to digital governance, medical data protection and healthcare financing. The functional method was then used to evaluate the effect of digital transformation on the financial sustainability of the healthcare system, as well as its impact on the development of new public policy initiatives designed to ensure the economic security of healthcare provision.

This methodological framework enabled a thorough investigation into the interaction between the legal, economic and institutional mechanisms that underpin the contemporary healthcare system.

This study aims to provide a comprehensive analysis of the economic and legal mechanisms for ensuring the right to healthcare in the context of digital transformation, and to identify the main areas of public policy relating to the economic security of the healthcare system. To this end, the subsequent analysis begins with an examination of the theoretical and legal principles that underpin the development of relevant public policy.

## 2. Theoretical Foundations of State Policy in the Field of the Economic and Legal Safeguarding of the Right to Healthcare

In contemporary legal theory, state policy is understood to be the intentional activity of public authorities that aims to regulate social relations through a comprehensive set of legal, economic, organisational and institutional mechanisms. Broadly speaking, this type of policy involves defining significant social objectives, developing implementation mechanisms, allocating resources, establishing a regulatory framework, ensuring institutional coordination and evaluating the effectiveness of decisions made (Howlett & Ramesh, 2020). In the healthcare sector, this policy is particularly significant as it relates to one of the fundamental social rights and has a direct impact on societal stability.

According to international legal doctrine, healthcare systems are increasingly being examined through the concept of *health governance*. This concept means that the state is responsible not only for financing the health sector, but also for ensuring the accessibility, quality and continuity of medical services (Tracking Universal Health Coverage, 2023). This approach significantly broadens the traditional interpretation of the right to healthcare, shifting the focus from the formal guarantee of this right to establishing an effective institutional framework to realise it.

In contemporary public administration theory, the policy cycle theory has significant methodological value. According to this theory, all public policies undergo successive stages of agenda-setting, policy formulation, practical implementation and evaluation of implementation outcomes (Howlett & Cashore, 2014). This approach enables the healthcare sector to be regarded as a dynamic object of public administration, encompassing legal regulation, institutional support, financial administration, digital modernisation and continuous monitoring of policy effectiveness. The Ukrainian model of healthcare reform illustrates the completion of all these stages, from legislative reform of healthcare financing, through to the gradual implementation of digital infrastructure, and the adaptation of the system to European Union standards.

Within this theoretical framework, the substance of state policy in this area is determined by the strategic objective of ensuring genuine public access to high-quality, timely medical care. However, in the context of digital transformation, this objective cannot be confined solely to its social dimension. The functioning of a modern healthcare system depends directly on fiscal stability, technological infrastructure, the cybersecurity of information systems and resilient financing mechanisms. Consequently, the right to healthcare is becoming an integral part of the state's economic security system (Buzan, Wæver & Wilde, 1998).

The first element of state policy is the set of *principles that govern its implementation*. The fundamental principle is the accessibility of medical care, as enshrined in Article 49 of the Constitution of Ukraine (The Constitution of Ukraine, 1996). The substance of the argument is that the state should be under a positive obligation to establish legal and financial guarantees necessary for the effective realisation of the human right to healthcare. The general legal foundations of state policy implementation in this field are also determined by the Fundamentals of the Legislation of Ukraine on Healthcare, which constitute the basic regulatory framework governing

the functioning of the healthcare system and guaranteeing public access to medical care (The Law of Ukraine "Fundamentals of the Legislation of Ukraine on Healthcare" dated 19.11.1992 No. 2801-XII). Concomitant with this principle, particular importance is attributed to the principle of financial sustainability, which presupposes the ability of the healthcare system to function effectively regardless of economic crises, budget deficits, or emergency situations. This notion is further corroborated by contemporary OECD studies, which regard healthcare systems as long-term investments in human capital and as an integral component of sustaining economic productivity (Fiscal sustainability of health systems, 2024).

The second structural component of state policy is the *system of institutional subjects*. The Verkhovna Rada of Ukraine establishes the general policy framework by adopting sector-specific legislation. Meanwhile, the Cabinet of Ministers of Ukraine determines the practical implementation mechanisms of state policy through budget planning, approval of state programmes and regulatory procedures. The National Health Service of Ukraine is responsible for direct financial administration pursuant to the Law of Ukraine No. 2168-VIII (The Law of Ukraine "On State Financial Guarantees of Medical Service to the Population" dated 19.10.2017 No. 2168-VIII). Accordingly, a multilevel system of institutional responsibility has been established to ensure the realisation of the right to healthcare.

The next structural component comprises the *economic mechanisms that implement state policy*. Contemporary economic doctrine regards healthcare not only as a sphere of social expenditure, but also as a strategic sector of public investment in human capital. The introduction of the Medical Guarantees Programme and the transition to financing medical services based on the principle of 'the money following the patient' represent a transformation of the financial model of the healthcare system. This approach corresponds to the concept *of health financing efficiency*, widely applied within European Union member states, which focuses on financing outcomes rather than maintaining institutional infrastructure (OECD/ European Union, 2022). From this perspective, state policy is directly linked to ensuring the economic security of the healthcare sector, as inefficient allocation of public resources can pose risks that are capable of destabilising the entire system.

A separate structural block consists of *digital governance in the healthcare sector.* Digitalisation is fundamentally transforming the nature of public administration within the healthcare system. The implementation of eHealth, electronic prescriptions, digital registries, telemedicine and automated information processing systems has shifted governance towards a data-driven model based on continuous monitoring and the automated control of resource efficiency. Within the European Union, a similar model has been implemented through the concept of the European Health Data Space, which aims to establish a unified digital environment for the circulation and exchange of medical data (European Health Data Space, 2022). Consequently, digital health infrastructure is gradually becoming an independent subject of state regulation.

An important structural element is formed *by legal protection and cybersecurity mechanisms.* The expansion of the digital healthcare sector is accompanied by an increase in the risk of confidential informati on leakage, cyberattacks against state medical registries, technical failures, and financial losses to the public budget. In this respect, the Law of Ukraine "On Personal Data Protection" (The Law of Ukraine "On Personal Data Protection" dated 01.06.2010 No. 2297-VI) plays an important role. Nevertheless, the ongoing development of digital medicine necessitates the gradual harmonisation of national legislation with the provisions of the General Data Protection Regulation (GDPR) (European Parliament and of the Council, 2016). European practice is demonstrating an increasing tendency to regard medical data not merely as an object of privacy protection, but also as a strategic digital asset of the state (European Health Data Space, 2025).

Concurrently, a thorough evaluation of state healthcare policy is imperative, utilising the framework of the *public interest doctrine*. Within this framework, the government's primary focus is on safeguarding the public interest. In the healthcare sector, this involves preserving public health, ensuring the stable functioning of the healthcare system, and minimising social risks (Feintuck, 2004). Under contemporary conditions, healthcare cannot be viewed solely as a social function of the state, as its stability directly affects macroeconomic stability, the reproduction of human capital, and the state's overall economic resilience.

Thus, state policy in the field of economic and legal safeguarding of the right to healthcare constitutes a comprehensive system comprising interconnected elements such as implementation principles, institutional governance mechanisms, financial instruments, digital governance, cybersecurity mechanisms and legal guarantees for the protection of medical data. In the digital era, the effectiveness of such a policy is determined not only by the volume of public funding, but also by the state's ability to ensure the resilience of digital infrastructure and maintain an uninterrupted supply of medical services. Furthermore, the state must recognise the healthcare system as an independent component of its economic security.

## 3. The Digital Transformation of the Economic and Legal Framework for the Right to Healthcare through the Prism of National Economic Security

The practical implementation of contemporary state policy in the healthcare sector is directly associated with the transformation of the provision of medical services, financial resource administration, and public health infrastructure functioning. Digitalisation is the main driver of this transformation under present-day conditions, gradually reshaping not only the organisation of healthcare delivery, but also the model for economically and legally safeguarding the right to healthcare. Whereas the classical model of ensuring the right to medical care primarily relied on public financing of healthcare institutions, digital transformation has given rise to a new system. In this new system, the effective realisation of this right largely depends on the functioning of digital infrastructure, information systems, data management algorithms and the technological resilience of state electronic platforms (Al Meslamani, 2024). Such a transformation necessitates a rethink of the traditional understanding of economic security in healthcare and requires legal mechanisms for state regulation to be adapted.

In these circumstances, digitalisation fundamentally changes the nature of the economic and legal protection of the right to healthcare. Within contemporary digital governance doctrine, digital technologies are not merely regarded as auxiliary administrative tools, but as independent instruments for implementing state policy. They are capable of influencing the efficiency of public financial management, the speed of administrative decision-making and the quality of public services (Health financing in Ukraine: reform, resilience and recovery, 2024). Consequently, in the digital era, the realisation of the right to healthcare is contingent not only on the availability of financial resources but also on the state's capacity to ensure the stable functioning of the digital environment of the healthcare system.

One of the earliest consequences of the digital transformation of healthcare has been the restructuring of the financial architecture that governs the sector. The introduction of the eHealth system has effectively transferred public healthcare financing into a framework of continuous digital monitoring, whereby public funds are allocated directly based on the electronic recording of medical services provided. In the context of the implementation of the Law of Ukraine "On State Financial Guarantees of Medical Service to the Population" (The Law of Ukraine "On State Financial Guarantees of Medical Service to the Population" dated 19.10.2017 No. 2168-VIII), the National Health Service of Ukraine has been endowed with the capacity to exercise centralised control over the utilisation of public financial resources. This development has resulted in a significant reduction in the opportunities for financial abuse and corruption. The advancement of this model is further substantiated by governmental regulation of the medical guarantees programme for 2025, which delineates the mechanisms for financing medical services in the context of the ongoing digitalisation of the healthcare system (The Resolution of the Cabinet of Ministers of Ukraine "Certain Issues Relating to the Implementation of the Programme of State Guarantees for Healthcare for the Population in 2025" dated 24.12.2024 No. 1503). Accordingly, digitalisation serves as a means of reinforcing fiscal discipline within the realm of publicly funded healthcare. Public procurement mechanisms are also important in this process, ensuring the transparent use of public funds allocated for medical services and medicinal products (The Law of Ukraine "On Public Procurement" dated 25.12.2015 No. 922-VIII).

Concurrently, digital transformation engenders a fundamental shift in the very conception of the economic security of the healthcare system. Conventionally, the economic security within the health sector was predominantly associated with adequate public financing, sufficient human resources, and the material capacity of medical infrastructure. However, in the new technological environment, the structure of economic security incorporates additional components, including the continuity of digital services, the resilience of electronic registries, the cybersecurity of information systems and the technical reliability of software solutions (Lianos, 2025). In effect, digital health infrastructure is becoming an independent object of state protection, without which the realisation of the right to medical care becomes impossible.

This transformation has also given rise to a new structure of public financial obligations. In Ukraine, the issue of stable financing for the healthcare sector has become particularly significant in the context of annual budget planning, as this directly determines the scope of state guarantees for medical care (The Law of Ukraine "On State Budget of Ukraine for 2025" dated 19.11.2024 No. 4059-IX). Whereas public expenditure was previously focused primarily on financing medical institutions, staffing and procuring medicines, the contemporary system also requires ongoing investment in server infrastructure, secure information transmission channels, maintaining electronic registries, upgrading software and cybersecurity systems. According to OECD assessments, European Union member states are steadily increasing their expenditure on maintaining digital health infrastructure. This is gradually creating a distinct category of public expenditure within the

health sector (Fiscal sustainability of health systems, 2024).

Another significant consequence of digitalisation is the transformation of the legal framework governing medical data. Under the traditional model, medical information was primarily considered an element of medical confidentiality and a matter of patient privacy. Nevertheless, the digital environment fundamentally alters the functional significance of such data. Large-scale health data enables the state to forecast epidemiological trends, analyse demand for medical services, model health expenditure and develop more efficient financial planning mechanisms. Contemporary European scholarship is increasingly identifying health data governance as a distinct area of regulation within the digital economy (European Health Data Space, 2025). As a result, medical data is gradually acquiring the characteristics of a strategic informational resource for the public sector.

Digitalisation also substantially transforms the economic aspects of accessibility to medical care. The development of telemedicine, remote patient monitoring, digital consultations and electronic document management can significantly reduce the administrative costs of the healthcare system. Using telemedicine technologies alleviates pressure on inpatient care facilities, optimises the use of human resources, minimises patients' transport costs and ensures continuity of medical care in situations of geographical inaccessibility or emergency. The experience of the pandemic clearly demonstrated that digital services can function autonomously to maintain the resilience of medical systems during periods of crisis (Global Strategy on Digital Health 2020–2025, 2021).

In the context of digitalisation, cybersecurity is becoming increasingly important and is evolving into an independent component of the state's economic security. Unlike the traditional model, where inefficient use of public funds and corrupt practices were the main financial risks, the digital environment generates new threats, such as cyberattacks, loss of access to state medical registries, disruption to electronic services and technological paralysis of digital infrastructure. A notable international example is the WannaCry cyberattack of 2017, which caused widespread disruption to the United Kingdom's National Health Service and resulted in significant financial losses for the state. This incident demonstrated the direct link between the stability of digital health infrastructure and the economic resilience of the public healthcare sector (European Health Data Space, 2022).

In the context of Ukraine, digital transformation has taken on added significance under martial law. Automating military medical commission procedures, creating electronic registries, digitising social and medical procedures, introducing electronic prescriptions and automating the administration of state health programmes enables more rapid administrative decision-making, reduces public transaction costs and minimises corruption risks. From a financial perspective, implementing such technologies creates the conditions necessary for the more rational use of public resources, thereby enhancing the effectiveness of public administration in the healthcare sector (Horban, 2025).

Analysis of contemporary developments suggests that digital transformation is gradually reshaping the nature of the right to healthcare. Under the traditional model, the state primarily ensured the realisation of this right by financing a network of healthcare institutions and guaranteeing physical access to medical care. In the digital era, however, effectively realising this right increasingly depends on stable information infrastructure, secure medical data, technologically continuous electronic services and the state's ability to finance the digital healthcare environment.

Accordingly, the digitalisation of the healthcare system modernises the provision of medical services and establishes a new economic and legal model for safeguarding the right to healthcare. In these circumstances, the economic security of the healthcare system should be considered an autonomous element of state policy, rather than merely an auxiliary component of budgetary policy. This element should encompass financial sustainability, digital infrastructure, cybersecurity, health data governance and the technological continuity necessary for the realisation of the constitutional right to healthcare.

## 4. European Standards on the Economic and Legal Safeguards for the Right to Healthcare in the Context of Digital Transformation

The evolution of economic and legal mechanisms for safeguarding the right to healthcare, propelled by the advancement of digital technologies, is progressively delineating novel avenues of public regulation, both at the national and supranational levels. These concepts have been implemented most systematically within the legal framework of the European Union, where this area is increasingly extending beyond the traditional understanding of an exclusively social institution and becoming integrated into the broader architecture of public and economic governance. Consequently, within the EU legal order, the healthcare sector is regarded not merely as an object of humanitarian protection but as an integral component of the wider framework of public administration and economic governance (Universal Health Coverage, 2024).

For Ukraine, this approach is of fundamental importance in the context of European integration. In accordance with the provisions of the Association

Agreement between Ukraine and the European Union (Association Agreement between Ukraine and the European Union, 2014), Ukraine is obligated to undertake a progressive alignment of its national legislation with the acquis communautaire in the domains of healthcare, pharmaceutical regulation, digital governance, personal data protection, and the provision of an adequate level of healthcare guarantees. In such circumstances, the process of European integration is characterised not only by the harmonisation of legislation but also by the substantive transformation of the national model of economic and legal safeguarding of the right to healthcare.

The economic dimension of European regulation is most comprehensively reflected in the Organisation for Economic Co-operation and Development's (OECD) approaches. OECD documents analyse healthcare systems using the concepts of efficiency-based financing, cost-effectiveness analysis and value-based healthcare. This model evaluates the effectiveness of public policy based on the efficient utilisation of public financial resources, the quality of medical services, and the level of financial protection afforded to the population, rather than on the volume of public expenditure (Fiscal sustainability of health systems, 2024). This approach has become the basis for healthcare financing reforms in most European Union member states.

In Ukraine, the implementation of this model is gradual, occurring in conjunction with the reform of the Medical Guarantees Programme. However, the degree of digital integration of public financial administration and the mechanisms for evaluating the efficiency of public expenditure have not yet reached the level characteristic of most European Union member states.

Another key area of European policy is the digitalisation of healthcare. In 2022, the European Commission began developing the European Health Data Space (EHDS), a common framework for circulating health data. The aim is to ensure the secure use of medical information, promote digital medical services and integrate the digital platforms of member states (European Health Data Space, 2022). Legally speaking, this initiative establishes a new model of digital health governance, whereby digital infrastructure is recognised as a distinct subject of public regulation. Financially, such a system allows for more efficient budget planning, reduces administrative costs and improves transparency in the use of public funds.

An important regulatory element of the European digital policy is the Digital Europe Programme, established by Regulation (EU) 2021/694 (European Parliament and of the Council…, 2021). The Programme promotes the development of artificial intelligence, cybersecurity, digital infrastructure and big data technologies within the public sector. In the healthcare sector in particular, its implementation signifies a significant change in public finance policy: investments in digital infrastructure are now recognised as essential tools for ensuring the state's economic resilience, rather than being viewed as mere administrative expenses.

A separate pillar of European standards concerns the regulation of health data protection. The General Data Protection Regulation (GDPR) introduced a special legal regime for health-related information, classifying it as one of the most sensitive types of personal data (European Parliament and of the Council…, 2016). At the same time, the European Union's contemporary approach provides a significantly broader understanding of this issue. Health data is not only regarded as an object of privacy protection, but also as a strategic digital resource. The proper governance of this resource directly affects the stability of healthcare systems, the efficiency of public budget planning and the cyber resilience of public infrastructure.

Unlike the European model, Ukrainian legislation governing the protection of personal health data has not yet established a specialised legal regime for processing health data as a distinct category of sensitive digital information. This creates regulatory gaps in the functioning of the eHealth system, particularly with regard to cybersecurity, access procedures for medical registries and the implementation of specific safeguards for processing medical information.

The concept of Universal Health Coverage (UHC) is of particular importance for the development of the modern concept of the right to healthcare, and has become one of the fundamental standards of European social policy (Tracking Universal Health Coverage, 2023). The essence of UHC is to ensure that the population has access to necessary medical services without experiencing excessive financial hardship. From an economic perspective, this concept mitigates the risk of impoverishment due to healthcare costs, preserves domestic consumer demand and promotes social stability. Consequently, the right to healthcare is integrated into the state's economic security system.

The cross-border nature of healthcare provision has also had a significant influence on the development of European standards. Directive 2011/24/EU established the right of citizens of the European Union to receive medical care in another member state and be reimbursed for their expenses (European Parliament and of the Council…, 2011). In practice, this has given rise to a new model of transnational health governance. This model is characterised by patient mobility, the electronic exchange of medical data and cross-border financial reimbursement mechanisms, which are all interconnected elements of a unified regulatory framework. For Ukraine to implement European standards, it must further modernise legislation governing eHealth operations, the protection of personal

health data, pharmaceutical regulation, cybersecurity of digital healthcare infrastructure and the development of patient financial protection mechanisms.

Unlike most European Union member states, Ukraine's healthcare system is engaged in reforming both its financing model and its digital infrastructure simultaneously. This significantly complicates the comprehensive implementation of relevant European standards.

At the same time, the European experience reveals a key conclusion: in the modern era, an efficient healthcare system encompasses much more than the traditional concept of a social institution. In the modern model of public governance, healthcare is an essential part of the state's economic security. The stability of public finances, the resilience of digital infrastructure and the long-term competitiveness of the national economy all depend on it.

Accordingly, European healthcare standards establish a new legal framework that safeguards the right to healthcare by combining social guarantees, efficient public financing, digital governance, cybersecurity and state economic resilience. This model is gradually becoming the benchmark for Ukraine's healthcare system transformation in the context of digitalisation and European integration.

To ensure the comparability of international indicators of healthcare system financing and determine their actual level of state priority, the author calculated the specific weight of medical allocations within the overall public expenditure structure. The calculation was carried out according to the formula:

$$\text{Share of health care} = \left( \frac{\text{Exp}_{\text{health}}}{\text{Exp}_{\text{total}}} \right) \times 100\%$$

Where:

– Share of health care – share (unified weight) of health care expenditures in the total volume of public expenditures, %;

– $\text{Exp}_{\text{health}}$ – total state (public) expenditures on health care for the relevant calendar year. For OECD and EU member states, data on general government sector expenditure from the System of Health Accounts (SHA 2011) was used. For Ukraine, calculations were carried out based on official State Budget and Ministry of Finance indicators due to the lack of fully comparable international data for 2024–2025;

– $\text{Exp}_{\text{total}}$ – total state (public) expenditures for the relevant calendar year. The General Government Expenditure indicator was used for OECD countries, while the total expenditure of Ukraine's state budget was used for Ukraine.

The proposed approach ensures maximum comparability of the indicators between the countries under study. At the same time, the results for Ukraine are interpreted with the peculiarities of the national budget system and the availability of statistical data taken into account. This does not affect the possibility of analysing general trends in public health financing.

The authors' calculation demonstrated that in the majority of the European countries under scrutiny, healthcare was identified as a priority area of state budget policy during the 2020–2025 period (Health Statistics, 2025; Global Health Expenditure Database, 2025). Despite the differences in the models of financing healthcare systems, the share of state expenditures on the medical sector in the total volume of public expenditures is characterised by relative stability.

The highest values during the studied period are observed in the Netherlands (21.8–22.6%), Great Britain (19.9–21.7%), Germany (20.1–20.9%) and Sweden (19.4–20.3%). France is characterised by a stable share of financing at approximately 15%, while Poland demonstrates a gradual increase in financing from 10.88% in 2020 to over 12% in 2024–2025.

The findings suggest that, despite the conclusion of the acute phase of the COVD-19 pandemic, the majority of states have not reverted to pre-crisis models of budgetary policy. Conversely, the financing of healthcare systems remains at a high level, thereby confirming the transition of the medical sector to the category of long-term state priorities.

At the same time, the volumes and structure of budgetary resource use are changing. While a significant proportion of expenditure in 2020–2021 was directed towards overcoming the consequences of the COVD-19 pandemic, including providing vaccinations,

Table 1

**Share of public spending on health care in the structure of public spending, %**

| Country | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Ukraine | 9,8 % | 11,2% | 5,97% | 5,19% | 4,99% | 3,86% |
| United Kingdom | 20,08% | 22,08% | 19,88% | 19,89% | 21,24% | 21,70% |
| France | 15,73% | 15,79% | 15,25% | 14,78% | 14,80% | 14,76% |
| Germany | 20,10% | 20,64% | 20,88% | 20,68% | 20,89% | 20,94% |
| Poland | 10,88% | 12,43% | 11,29% | 11,49% | 12,04% | 12,10% |
| Netherlands | 21,80% | 22,56% | 22,10% | 22,19% | 22,49% | 22,47% |
| Sweden | 19,40% | 20,20% | 20,30% | 19,70% | 20,00% | 20,10% |

*Source: calculated and compiled by the authors based on official data from the State Treasury Service of Ukraine, the laws of Ukraine on the State Budget of Ukraine (2020–2025), OECD Health Statistics, WHO Global Health Expenditure Database, and Eurostat*

developing the laboratory network, purchasing medical equipment, and supporting hospital infrastructure, from 2022 onwards, investment in the digitalisation of healthcare systems, the development of electronic health services, the cybersecurity of medical infrastructure, telemedicine, and integrated medical data management systems will play an increasingly important role (Global Strategy on Digital Health 2020–2025, 2021). Alongside the technological modernisation of healthcare systems, new demographic and social challenges are emerging. These include an ageing population, an increased prevalence of chronic non-communicable diseases, obesity, mental health issues and various behavioural addictions, including those related to the digital environment. There is also a growing need to provide long-term psychological support to the population. These factors are gradually changing the structure of public spending, requiring a shift in focus for healthcare systems from predominantly curative models to those centred on prevention, early diagnosis, rehabilitation, and psychosocial support.

The situation in Ukraine requires separate analysis. The results obtained demonstrate a significant decrease in the proportion of public spending allocated to healthcare, from 11.2% in 2021 to 3.86% in 2025. However, this trend should not be viewed as a reduction in state attention to the medical sector. This is largely due to the unprecedented increase in total state budget expenditure amid full-scale armed aggression, with significant increases in spending on the security and defence sector. Therefore, although there was no absolute reduction in healthcare financing, there was a change in the structure of state priorities under martial law (The Law of Ukraine "On State Budget of Ukraine for 2025" dated 19.11.2024 No. 4059-IX; Health financing in Ukraine: reform, resilience and recovery, 2024).

At the same time, war puts a significant long-term strain on the healthcare system. The widespread occurrence of psychological distress, traumatic experiences, disability and the need for rehabilitation among the military and civilian populations, as well as the increase in chronic diseases and mental health complications, creates a new spectrum of medical needs.

## 5. Conclusions

In the context of digital transformation, the study concludes that the right to healthcare is gradually acquiring a new meaning and can no longer be considered an exclusively traditional social right. Its implementation is increasingly dependent on the effectiveness of public policy, the financial sustainability of the healthcare system, the degree to which public administration is digitised, and the continuity of the functioning of the medical infrastructure.

The study found that digitalisation is transforming public policy in the healthcare sector. It is evolving from a technological tool into an independent public management mechanism that affects the efficiency with which budget resources are used, the transparency of financing and the quality of public administration.

It has been substantiated that the economic security of the healthcare system should be considered a distinct area of state policy, in order to ensure the right to healthcare. In the context of digital transformation, the traditional approach of reducing the stability of the medical industry to the volume of budget financing has been found to be insufficient. The established model of such security encompasses the financial stability of the industry, the continuity of the functioning of the digital infrastructure, the cyber resilience of information systems, the appropriate level of protection of personal medical data and the ability of the state to maintain the technological autonomy of the healthcare system.

Another outcome of the study was confirmation that digitalising healthcare creates new opportunities and systemic risks for the state. Electronic services, telemedicine, electronic document management and automated financial flow management, for example, contribute to reducing administrative costs, increasing the efficiency of public funds and expanding the availability of medical care. However, dependence on digital infrastructure creates new cybersecurity threats, such as technical failures and the leakage of sensitive medical data, as well as the risk of digital inequality within the population.

An analysis of the European experience has revealed that the modern healthcare regulatory model in the European Union is founded on integrating social guarantees with economic efficiency principles, digital governance, and the protection of public interests. The implementation of the acquis communautaire, the development of digital health governance and the introduction of European standards for the protection of medical data, universal health coverage and financially oriented models of medical management set a benchmark for the further transformation of the Ukrainian healthcare system in the context of European integration. Concurrently, the analysis demonstrated that the Ukrainian model of legal regulation in this domain necessitates further adaptation to European standards of digital health governance and specialised regulation of medical data.

In the context of Ukraine, these transformation processes are of particular importance in the context of martial law, in which the healthcare system actually functions as a component of the critical infrastructure of the state. In such circumstances, the stability of digital medical platforms, the continuity of eHealth, the protection of information systems, and the stability of financing medical guarantees become elements of

the overall system of national and economic security of the state.

A comparative analysis of the dynamics of public healthcare financing in 2020–2025 confirmed that the majority of European countries are characterised by the preservation of a consistently high share of budget expenditures on the medical sector, even after the conclusion of the acute phase of the COVD-19 pandemic. This finding suggests that healthcare is being prioritised as a long-term concern in state policy. Concurrently, it was determined that in Ukraine, the diminution in the proportion of healthcare expenditures within the state budget is predominantly attributable to a substantial augmentation in funding for the security and defence sector under martial law, as opposed to a reduction in the significance of the medical sector for the state.

The findings of the study provide a robust foundation for the argument that the advancement of the Ukrainian healthcare system should be predicated on a triad of economic sustainability, digital transformation and effective legal regulation. In this context, the priority areas of state policy should be as follows: firstly, maintaining a sufficient level of public funding; secondly, increasing the efficiency of its use; thirdly, improving the mechanisms of the National Health Service of Ukraine; fourthly, developing the digital eHealth ecosystem; fifthly, ensuring the cyber resilience of the medical infrastructure; and sixthly, harmonising national legislation with the law of the European Union. Concomitantly, contemporary global and national challenges underscore the imperative for augmented focus on the development of mental health systems, medical and psychological rehabilitation, the prevention of chronic non-communicable diseases, and the further implementation of digital medical services. These services are becoming increasingly pivotal in ensuring the accessibility and quality of medical care. The implementation of these areas will contribute to the strengthening of the economic security of the healthcare system, the increase in the efficiency of the use of financial resources, and the assurance of the proper implementation of the constitutional human right to healthcare.

Thus, the research conducted substantiates a comprehensive economic and legal model for ensuring the right to healthcare. According to this model, digitalisation is considered not only as a technological process, but also as an independent mechanism for ensuring economic security, financial sustainability and the effectiveness of the public management of the healthcare system, particularly in the context of European integration and military challenges.

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