

Review Paper

Mechanisms of State Management of Personnel Development of the Health Care System

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ABSTRACT

Administrative, managerial, and socioeconomic transformations within the framework of prioritized vectors for integration into the European community necessitate the revision of democratic principles. This involves the formulation of an innovative conceptualization of public administration in the healthcare sector and the enhancement of mechanisms facilitating human resource development in alignment with international norms and standards. The objective of this investigation is to furnish a comprehensive analysis of the mechanisms governing the public administration of human resources development in the healthcare sector in Ukraine. The study employed general scientific methods of cognition, including logical and structural analysis, comparison, abstraction, induction and deduction, specification, generalization, and formalization. The paper delineates the theoretical underpinnings of the state administrative policy regarding staffing within the medical domain and elucidates current trends in its evolution. The investigation has cultivated the conviction that the enhancement of human resource management in the healthcare sector constitutes a primary focus for the transformation of the national medical system. The study affirms that human resources serve as the foundational element for resource provision within the examined industry. It is established that the presence of personnel, coupled with their appropriate qualifications and distribution system, delineates the requisite standard for the delivery of medical services. The primary factors influencing the formation and execution of state personnel policy are identified. The imperative for the high-quality professional training of specialists within the industry is substantiated. Throughout the investigation, it was determined that strategic alterations in the paradigm of public health management serve as a prerequisite for enhancing the overall level of health and well-being among the population. The primary trajectories for the establishment of state policy in the domain of medical care in Ukraine in the future have been delineated. The practical significance of the research findings lies in their potential utility within the context of shaping and implementing an effective personnel policy aimed at ameliorating performance within the studied field.

HIGHLIGHTS

- ① Current trends in Ukraine's healthcare sector require a strategic review of the management paradigm, focusing on human resources as a central element of transformational success.
- ② To solve the problems related to emigration, regional disparities and insufficient training of personnel in the field of health care, a comprehensive approach is proposed, which

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includes strengthening the regulatory and legal framework, the autonomy of medical institutions and the development of a strategic personnel strategy.

- ① It is necessary to modernize the state personnel policy, which meets the requirements of the digital world, in order to contribute to the successful development of the health care system of Ukraine and the effective implementation of the modern paradigm of human resources management.

Keywords: HR management, HR strategy, motivation, staff development, decision support system

Within the contemporary trends of Ukraine's socioeconomic development, the healthcare sector is designated as a focal domain for societal transformation. These changes delineate the dynamics of the ideology governing healthcare services, in addition to the financial, economic, and market mechanisms intrinsic to the healthcare system. Concurrently, the imperative to reconfigure the management system of healthcare institutions is becoming increasingly pressing, concomitant with a shift in the management paradigm of medical staff.

Numerous scientific works by both Ukrainian and foreign scholars are dedicated to the examination of the mechanisms governing public administration in the development of human resources within the medical system. Scholars in this field primarily concentrate on the methodological foundations underlying the implementation of the management paradigm for human resources in medicine (Havrychenko, 2022; Korolenko, 2018). Additionally, attention is directed towards the theoretical and executive facets concerning the application of international standards within the industry, as evidenced by the works of Malihon M. (2020).

The most comprehensive works in the recent period include those authored by Borshch, V. (2019) and Krynyo L. (2020), which expound upon the concept and characteristics of innovative approaches to healthcare management within the framework of sustainable development. Several researchers have delved into issues related to the establishment of organizational, legal, economic, and institutional conditions aimed at enhancing the state regulation of strategic personnel management in the healthcare sector (Vasiuk *et al.* 2022). Modern scientists such as Havrychenko D. (2022), and Yatsenko V. S. (2019), have significantly contributed to the general theory and methodology of the strategic development of medicine.

Nevertheless, the issue of public administration of human resources in medicine remains inadequately explored in national scientific literature. This

deficiency can be attributed, in large part, to the inadequate alignment of public perspectives with contemporary requirements for shaping the labor market for medical specialists and the paradigm of human resources management within institutions in the industry.

The objective of the study is to articulate a conceptual framework for the paradigm of public administration of the human resources potential within a contemporary healthcare institution and to provide a rationale for prioritized areas aimed at enhancing the efficacy of state personnel policy in the realm of research.

Literature Review

A robust scientific and theoretical foundation has been established in the domain of public human resources management in healthcare. This foundation encompasses scientific publications in professional journals, monographs, dissertations, and the outcomes of both theoretical and practical research.

The scientific and methodological underpinnings of the examined issues within the domestic framework are established by researchers whose endeavors center on aspects related to enhancing the paradigm of healthcare personnel policy in the context of social transformations (Krymchak *et al.* 2022). In particular, scholars have extensively developed the fundamentals of a system for identifying, analyzing, and evaluating healthcare functions (Khanina, 2021) and elucidated the components of a healthcare management strategy (Malihon, 2020).

Several studies by contemporary foreign scholars delve into the exploration of priority areas aimed at enhancing the effectiveness of state personnel policy within the field (Yong *et al.* 2020; Mousa *et al.* 2020). The issue of the motivation and incentive system is accentuated in the works of individual scientists (Hamouche, 2023; Amrutha and Geetha, 2020). Specific aspects of the methodology for the strategic development of the healthcare system

are the focus of attention of various contemporary researchers (Kraus *et al.* 2021; Carnevale *et al.* 2020; Berman *et al.* 2021).

Despite the significance of the results derived from the scientific research conducted by the referenced authors, the absence of systematicity and comprehensiveness in the formulation of approaches to the public administration of human resources in healthcare, coupled with the incomplete coverage of issues about the enhancement of the regulatory system for strategic capacity development in the field under investigation, necessitates further exploration of this matter. The development of contemporary methodological support is imperative in actualizing the scientific and practical significance of the present study.

METHODS

During the study, various general scientific research methods were employed, including analysis, synthesis, specification and formalization, abstraction, induction and deduction, and comparison. The theoretical and methodological foundation of this research is derived from pertinent publications in professional industry journals, manuals, and monographs, as well as materials from scientific conferences and dissertation research. Additionally, the conclusions drawn from theoretical, analytical, and practical developments by contemporary scholars contribute to the underpinning of this work.

The article's development adhered to the principles of complexity and systematicity in scientific research. This approach facilitated the analysis of the research object as an integral system with numerous interconnections and interdependencies.

The research process employed methods of analysis and synthesis to identify the principal factors influencing the functioning of the public administration process in the realm of healthcare personnel development. These methods were instrumental in pinpointing the defining elements of the process and the fundamental vectors of influence.

In the research process, the method of abstraction was applied to discern theoretical generalizations, identify main categories and concepts, and formulate conclusions regarding the priority vectors for the

development of the personnel policy mechanism in the medical sphere.

Furthermore, the method of comparison was utilized throughout the study to delineate specific features of the contemporary innovative management paradigm within the sector of healthcare personnel development. This involved a comparative analysis with traditional approaches to the implementation of personnel management policy in the medical sector.

In the study, the inductive method was employed to formulate prognostic directions for the development of the investigated process. Simultaneously, the deductive method was applied in the course of the work to identify areas for the formation of the concept of the state administrative system of personnel support as an effective tool for the transformation of the medical sphere.

In the course of the work, the method of concretization was employed to substantiate the effectiveness of the innovative capabilities inherent in contemporary public administration of human resources development in the medical sector of Ukraine. Additionally, this method was utilized to establish the feasibility of applying a systematic integrated approach to the tools of digitalization and automation of specific processes within the healthcare sector.

The formalization method is employed in the research process to identify priority vectors for the development of the public administration paradigm in the healthcare sector. Additionally, it is utilized to structure the principles, priorities, and functionality of the research object.

RESULTS

The imperative to discern the state and prospects of the development of human resources in the healthcare sector in Ukraine is driven by the dynamics of socioeconomic processes. These processes encompass the democratization of society, the transformation of the economy towards sustainable development, irreversible integration into the European community, as well as destabilizing factors within the healthcare sector, and imbalances in the development of medicine. In such circumstances, there exists a pressing need to introduce novel approaches and optimize existing

strategies for the public administration of human resources in the medical sphere of society.

In Ukraine, the imperative to optimize state personnel policy in the medical sector is influenced by two primary challenges: the absence of a unified strategy for managerial personnel policy in the healthcare sector and, concurrently, the tendency for official reporting on the quality of the country's human resources to deviate from practical realities (Khanina, 2021). To counteract the repercussions of these destabilizing factors, it is essential to undertake a comprehensive analysis of the situation, identifying the principal achievements, challenges, opportunities, and risks associated with the management paradigm.

Broadly speaking, the majority of issues pertaining to human resources in the healthcare sector stem from a decrease in the number of healthcare workers, insufficient staffing levels for both physicians and paramedical staff, regional imbalances in staffing distribution, and insufficient training of healthcare management personnel (Yong *et al.* 2020).

The degradation in the quality of staffing within the field is primarily evident in the low professional competitiveness of graduates from higher medical education institutions in Ukraine. This is underscored by the fact that a substantial number of countries decline to recognize diplomas from Ukrainian medical universities (Krymchak *et al.* 2022). Furthermore, this problem is exacerbated by the widespread outflow of a significant number of skilled workers due to intersectoral and labor migration. According to official data, more than 5,000 medical professionals emigrate from Ukraine annually (Krynychko, 2020). This situation, compounded by martial law resulting from the full-scale invasion by Russia, is deemed a crisis and has the potential to jeopardize the health of the country's population.

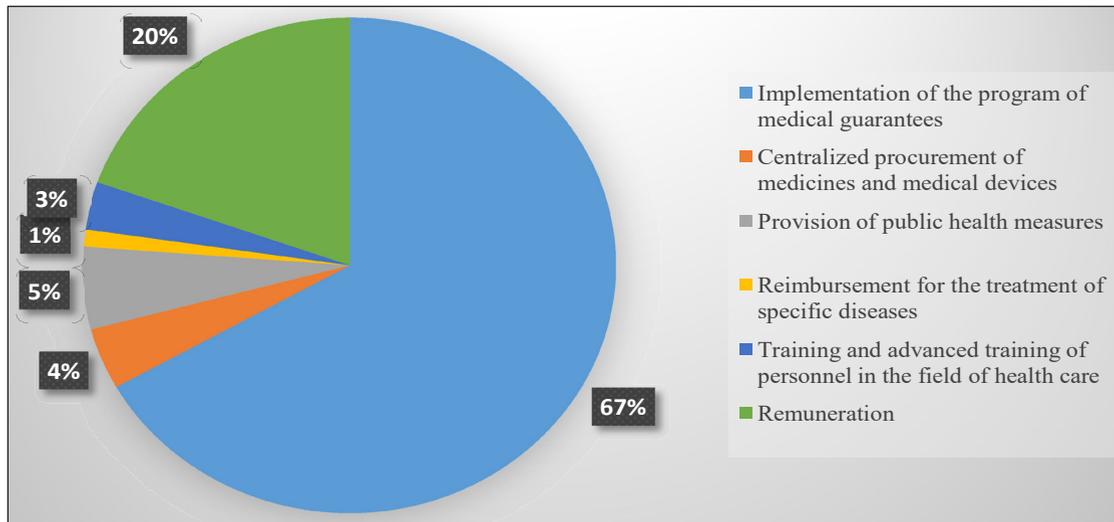
It is noteworthy that the issue of human resources in healthcare engenders various risks, such as the dispersion and irrational utilization of public funding, extensive commercialization of the medical industry, deviation from socially oriented principles of state policy in the field of medicine, and the exacerbation of the demographic situation in Ukraine (Havrychenko, 2022). Therefore, the attainment of effectiveness in reforming sectoral

personnel policy should be grounded in the justification and subsequent fulfillment of the actual needs of the national healthcare sector (Yatsenko, 2019).

Within the mechanisms of public administration of human resources development in the healthcare system, a crucial focus is the enhancement of the regulatory framework. This prioritized area aims to optimize human resources policy in the sector, guided by the identified problems in the medical field, the conditions of its development, and drawing upon recommendations and successful international practices (Hamouche, 2023). The implementation of this strategic direction should be anchored in the principles of coherence and systematization within the existing regulatory framework that governs the process of healthcare staffing in Ukraine.

The mechanism aimed at enhancing the regulatory framework for public administration of human resource development in the healthcare system should encompass the formulation of professional standards for medical professionals. This initiative is poised to establish the foundations for a unified approach to setting standards across diverse categories of medical, social, and psychological care. Furthermore, it is anticipated to foster the judicious utilization of human resources in healthcare (Berman *et al.* 2021). Moreover, the mechanism entails the enhancement of regulations concerning the nomenclature of specialties and positions within the field of medicine, along with the corresponding qualification requirements. Substantial focus should also be directed toward refining the accounting and reporting documentation for human resources, establishing criteria for evaluating the quality of work performed by medical professionals, optimizing motivational policies, and instituting a monitoring system (Vasiuk *et al.* 2022).

In 2022, the total volume of expenditures of the State Budget of Ukraine on health care amounted to UAH 215.3 billion. The main groups of expenditures are shown on Fig. 1. It should be noted that a very modest resource is allocated to the component of training and professional development of personnel in the general structure of expenditures. Optimizing the system of state management of personnel potential in the field of health care requires effective decisions regarding the qualification of medical personnel, and therefore, appropriate



Source: Author's development based on data from the Ministry of Finance of Ukraine.

Fig. 1: Groups of expenditures of the State Budget of Ukraine for health care in 2022

financial support. This approach is positioned as the conceptual basis of the management paradigm regarding personnel in the medical field.

This mechanism of human resources management in healthcare constitutes a fundamental prerequisite for the successful implementation of other interconnected mechanisms within the studied system. It involves the enhancement of the information database collection and processing system at both national and regional levels, utilizing the principle of a unified medical space and harnessing innovative digitalization capabilities (Kraus *et al.* 2021). Incorporating indicators from both the public and private sectors of medicine will enable a comprehensive analysis of the industry's situation, improve mechanisms for workforce planning and forecasting in healthcare, and facilitate the monitoring of their effectiveness.

Another crucial mechanism for the transformation of HR policy under the auspices of the public sector is the development and implementation of effective practical methods and tools for executing HR policy. Primarily, this mechanism entails the optimization of information systems and databases, leveraging modern innovative capabilities in digitalization and artificial intelligence (Amrutha *et al.* 2020). A crucial focus for implementing this mechanism involves establishing a national observatory for healthcare human resources. This observatory functions as a hub for collecting informative data, conducting analysis and monitoring, and providing an effective

system for supporting management decision-making. Additionally, essential prerequisites for the successful implementation of the mechanism include creating a digitalized register of medical professionals, extending the education and training of physicians, and fostering collaboration on healthcare human resources with international organizations (Mousa, and Othman, 2020). This mechanism, in synergy with the introduction of professional liability and risk insurance, facilitates a gradual transition toward an optimal system of medical staffing within the healthcare system.

A prospective mechanism for optimizing the system of managing human resource development in medicine in Ukraine involves the autonomy of medical institutions. This autonomy received legislative support through the enactment of the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding the Improvement of Laws on Activities of Healthcare Institutions" in 2017 (Borshch, 2019). The autonomy of healthcare institutions entails the transformation of financial, economic, managerial, and organizational activities. This includes changes in ownership, the broadening of managerial authority to formulate the institution's personnel policy, the selection of forms and methods of remuneration, as well as the establishment of mechanisms for motivation and incentives (Malihon, 2020). Furthermore, following the law, healthcare institutions are authorized to collaborate with other similar entities to collectively optimize resource

utilization (Borshch, 2019). Additionally, medical institutions are legally permitted to engage in cooperation under civil law contracts with medical entrepreneurs holding a license to practice medicine.

Within the context of the aforementioned legislative changes, the potential for realizing a promising evolution in the management paradigm of medicine is achievable. This involves the implementation of principles related to the commercialization of medical services, the introduction of cutting-edge mechanisms and tools for strategic management, and the encouragement of the formation of a competitive environment in the healthcare industry.

The successful implementation of optimization processes in the public administration of human resources development in the healthcare sector necessitates the revision of the long-term human resources strategy. This strategy integrates activities related to personnel management, and the establishment of principles, methods, and norms within the industry, positioning itself as the foundation for shaping fundamental long-term directions in personnel management. The HR strategy functions as an algorithm with primary objectives to ensure an optimal balance between the quantitative and qualitative composition of medical staff. This involves considering current demand, legal requirements, and resource allocation in the labor market (Zakharova *et al.* 2022; Lopushnyak *et al.* 2020).

The concept of strategic HR policy is articulated in the charter of the healthcare institution, internal regulations, and internal HR policy. An effective concept is recognized as the cornerstone for the innovative transformation of the personnel reserve, with the overarching goal of ensuring the sustainable development of an individual institution and enhancing the overall quality of the healthcare sector (Lopushniak *et al.* 2023).

An essential aspect of the contemporary state administrative paradigm for staffing in medicine is the operation of the motivation and stimulation mechanism for medical personnel. Presently, there is a requirement for adaptive adjustments in the forms and principles of remuneration for medical professionals. Simultaneously, the presence of a high-quality motivation and incentive mechanism is considered one of the most effective management

tools capable of significantly influencing staff, enhancing efficiency, and boosting productivity.

It is noteworthy that the challenge of human resources in medicine extends beyond its initial formation and extends to its ongoing progressive development. The training of medical personnel, aligned with the innovative management paradigm of sustainable development, should ensure the implementation of the principle of continuous medical education, incorporating the latest methods for training medical professionals. The prioritization of lifelong learning should be considered in the HR strategy, serving as an effective tool for motivational policies. Specifically, the opportunity for advanced training and participation in international conferences can be positioned as additional incentives for the most productive staff (Korolenko, 2018).

A crucial component of the human resource management mechanism involves incorporating the principles of teamwork in the delivery of medical services. Simultaneously, the manager's role is to ensure a conducive climate and the development of a cohesive workforce through the utilization of psychological tools and methods to prevent emotional burnout. This approach is anticipated to enhance the social and economic efficiency of medical activities (Havrychenko, 2022).

Therefore, the development of a contemporary paradigm of public personnel management in medicine should encompass mechanisms for strategic personnel management, alongside psychological and socio-economic methods of influence. In synergy, these elements are anticipated to enhance the efficiency of human resources and improve the quality of healthcare services (Carnevale *et al.* 2020; Koliadenko *et al.* 2022). The transformation of the studied management sphere in Ukraine could proceed at a quicker and more intensive pace through the incorporation of successful practical experiences from developed foreign countries. Additionally, leveraging advancements in the optimization of socio-economic processes with the aid of the latest management technologies could further expedite this transformation. The current state of Ukrainian medicine necessitates profound changes in the system of formulating state personnel policy in the sector. This reform should consider global trends in addressing personnel issues while

accounting for the realities of the socio-economic situation and the internal systemic conditions, positions, and features specific to Ukraine.

DISCUSSION

The enhancement of the effectiveness of public administration in human resources development within the healthcare sector is a focal point for numerous contemporary scientists. This emphasis arises from the imperative need for scientific substantiation of directions and measures aimed at ensuring the quality provision of medical personnel. Scholars in recent scientific literature (Farouk *et al.* 2020; Khatoon, 2020) contend that an effective state personnel policy in medicine primarily entails planning and forecasting the formation, professional development, and rational utilization of human resources in the healthcare sector.

In line with the findings of researchers (Vrontis *et al.* 2022), the state personnel policy within the medical field is delineated as a series of governmental measures. These encompass the development of programs for the professional support of the healthcare sector, their implementation, and the monitoring of their effectiveness. Among the principal approaches highlighted by scholars are the mechanisms of regulatory, organizational, scientific, and informational support for state personnel policy. Additionally, there is recognition of the educational and methodological dimension in the optimization of the studied area. These conclusions drawn by researchers encapsulate the primary vectors for optimizing the system of public administration of human resources in medicine, as elucidated in the current study.

The studies conducted by researchers (Macke *et al.* 2019) emphasize the imperative of crafting tools for human resource planning, broadening avenues for continuous learning, and formulating a motivational system for medical professionals to thrive in the contemporary context. In alignment with the views of certain scholars (Buljac-Samardzic *et al.* 2020), this concept should address the phenomenon of imbalance within the field of study, both regionally and in specialized contexts.

Certain scientific works explore the potential of engaging international experts to optimize the healthcare management system and introduce a competitive system among institutions (Pinzone *et al.*

2019). The outcomes of scientific research by scholars align with the findings of this study regarding the viability of incorporating management tools from countries with a high level of development in the healthcare sector.

Research by contemporary scientists underscores that the functional attributes of the paradigm of public personnel management in medicine involve its establishment based on the examination of social development trends, as well as ensuring legitimacy and alignment with the challenges of social and economic development (Sovold *et al.* 2021). According to these scientists, the formulation of an effective human resources policy necessitates a comprehensive analysis of the current state, identifying its effectiveness, problems, opportunities, and associated risks for implementation.

The outcomes of recent scientific research (Boniol *et al.* 2022) indicate a trend toward the reorganization of approaches to planning and allocating human resources. Additionally, as highlighted by scientists, the enhancement of human resources policy in the medical field should center on the reform of graduate medical and pharmaceutical education, along with the training of specialists in emerging disciplines (Petrigna *et al.* 2022). These scientific conclusions align with the findings of the current study, prompting further investigation into the functionality of existing state standards for medical and pharmaceutical education and the development of new educational and qualification characteristics for specialists.

Researchers (Shi *et al.* 2023) underscore the imperative of aligning employees' qualifications with the contemporary requirements of socio-economic development. Additionally, contemporary scholars emphasize the efficacy of incorporating teamwork principles in the provision of healthcare services (Zeeshan *et al.* 2020; Paais *et al.* 2020). Concurrently, certain scholars (Hasselgren *et al.* 2020) stress the potential of advancing personnel policy in healthcare by advocating for the widespread adoption of employment contracts with all healthcare workers. This, they argue, will enhance the productivity and quality of human resources in the industry.

Hence, the scientific stance of the majority of contemporary scholars aligns with the conclusions drawn in this study, emphasizing the establishment

of a cadre of qualified, purpose-driven, and respected healthcare professionals as an essential prerequisite for attaining both national and global objectives in the realm of healthcare. However, despite acknowledging the scholarly contributions of these researchers, it is essential to recognize that, within the context of ongoing dynamic influences from internal and external factors, there exists a gap in research focusing on the practical functionality of the mechanisms inherent in the state administrative paradigm as a pivotal, long-term component of personnel policy in the field of medicine. Several facets of the examined issue remain inadequately explored and warrant further investigative efforts.

CONCLUSION

A key objective for the advancement of a prosperous state lies in the establishment of an efficient healthcare system and the enhancement of the population's health. Within the priorities of healthcare transformation in Ukraine, a focal point is the refinement of the sector's human resources policy, given that human resources constitute a decisive factor in the resource provision of the healthcare system.

The article scrutinizes human resources concerns within the medical sector in Ukraine, delineating various risks and challenges in the research domain. Drawing from the analysis outcomes, the author advocates primary avenues for optimizing personnel policy within the national healthcare sector. This proposition is founded on the premise that an effective personnel policy serves as a potent instrument in guaranteeing the efficient functioning of healthcare.

The research has established that human resources wield a pivotal role in addressing challenges related to the development of the healthcare sector. The findings suggest that facilitated by governmental intervention, tangible prospects for the transformation of the quality of medical services can be envisaged in the future. The imperative to consistently elevate the level of professionalism among healthcare personnel is underscored.

The study advocates for contemporary approaches to the paradigm of the public administration system for the human resources potential within the healthcare sector. This paradigm is envisioned to integrate modern human resources management tools, the realities, potential, and capabilities of Ukraine's healthcare sector, along with insights from developed

countries' healthcare systems. The proposed paradigm is grounded in the principles of sustainable strategic management, encompassing innovative personnel policies, reassessment of remuneration systems, enhancement of motivation and incentive tools, and the implementation of mechanisms for personnel formation and development.

The research prospects outlined in the present work underline the imperative to refine and modernize the state personnel policy within the healthcare system, aligning it with the challenges of the contemporary digitalized world. The measures articulated in the study have the potential to constitute a structured system of state incentives aimed at optimizing human resources policy in medicine. This, in turn, would facilitate the successful and progressive development of the healthcare system in Ukraine and the effective implementation of a modern paradigm of human resources management.

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