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GLOBAL TRENDS IN THE DEVELOPMENT OF PUBLIC REGULATION OF HEALTHCARE SYSTEMS

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Abstract. The authors note that healthcare systems worldwide have developed under the influence of specific historical, economic, social, and political factors and generally fall into one of three main models: the budgetary model (Beveridge system), social insurance model (Bismarck system), and private model. It's emphasized that none of these healthcare models are used in a pure form.

Attention is drawn to the fact that no developed country can meet all healthcare needs, including services, medications, and other technologies, solely through public funds without incorporating private insurance programs and copayments. The scope of state-guaranteed medical assistance programs varies across countries, and specific guarantees for certain types of care, medications, and medical supplies are often either absent or vaguely outlined in regulatory documents.

It's noted that the evolutionary development of healthcare systems is sometimes disrupted by circumstances that necessitate emergency measures and significant adjustments, which may even contradict the social aims of reforms. For instance, in the recent crisis, many governments' anti-crisis strategies highlighted support for primary healthcare, control over the pharmaceutical market, anti-

corruption measures, stricter access to specialized care, and public assistance for the most disadvantaged segments of the population.

Keywords: public administration, healthcare systems, model, Beveridge system, Bismarck system, global trends.

Introduction. Since the mid-20th century, global healthcare development has been marked by intensive reorganization. Despite significant differences in the resource availability, organization, and efficiency of national healthcare systems, the primary reason for necessary changes has been funding shortages.

In the wealthiest countries, objective factors such as medical technology advancements, population aging, and organizational costs have continuously prompted strategic reviews. For poorer countries, low living standards, poor health indicators, high mortality rates, and the threat of infectious disease outbreaks have been the main drivers of healthcare reforms. Political transformations in Eastern Europe and socio-economic upheavals in former Soviet Union countries have negatively impacted public health levels and healthcare systems, necessitating urgent reforms. The global financial and economic crisis (2007–2010) also led to cuts in social programs in many countries, further affecting healthcare.

Thus, crises of various origins in the socio-political sphere have led to a reassessment of healthcare development directions and the search for optimal public regulation strategies within the system. At the same time, the nature of healthcare system transformations has been shaped not only by specific emerging problems but also by the existing theoretical knowledge on reforms and global practices.

International organizations have played a leading role in healthcare reform, implementing strategies that have guided healthcare development globally and continue to do so today. These factors underscore the relevance of this research topic.

Literature review. The review (Iyesatta M Emeli, 2024) relies on the fact that there are currently many shortcomings of health systems. Poor quality and uneven coverage of evidence to strengthen health systems means that evidence of deficiencies is stronger than evidence of remedies. Moreover, the specific

circumstances of individual countries strongly influence both the decisions and the approaches applied in the health system. There is hardly one single plan for a perfect health system design that will automatically address the shortcomings. Strengthening health systems in low- and middle-income countries should be seen as a long-term development process.

The authors of the paper (Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, et al., 2018) propose that health systems should be evaluated primarily on their impact, including improving health and its equitable distribution, based on people's trust in their health system as well as on their economic benefit. The foundations of high-quality health systems include the population and their needs and expectations in health care, health sector management and partnerships across sectors, platforms for health care delivery, workforce size and skills, and tools and resources, from drugs to data. In addition to strong foundations, health systems must develop the ability to measure and use data for learning. High-quality health systems must be underpinned by four values: they exist for people, they are fair, sustainable and effective.

Through a comprehensive review of the existing literature, the study (Epizitone, A.; Moyane, S.P.; Agbehadji, I.E., 2023) presents a critique of the health information system to fill the gap created by the lack of an in-depth worldview of the current health information system from a holistic tilt. From the studies, it was found that the health information system is crucial and the basis for managing information and knowledge for health care. In addition, the studies predicted that the evaluation of the current health information system would affect its final adoption and anchor it in the global space.

This article (Ryan Crowley, Hilary Daniel, Thomas G. Cooney, et al., 2020) is part of the American College of Physicians' policy to achieve a vision for a better health care system where everyone has coverage and access to needed care at a cost they and the country can afford. Currently, the United States is the only rich industrialized country that has not achieved universal health coverage. The country's existing health care system is inefficient, unaffordable, unsustainable and inaccessible

to many people. Part 1 of this article discusses what steps the United States should take to address coverage and costs. Part 2 presents 2 potential approaches – the single payer model and the public choice model – to achieve universal coverage. Part 3 describes how an emphasis on cost-based care can reduce costs.

Given that the functioning of global healthcare systems has been studied extensively by leading scholars, it should be noted that there is little systematic analysis of this experience. Therefore, the **purpose of this article** is to explore global trends in public regulation of healthcare systems, highlighting best practices.

Research Methods. The methodological and theoretical foundation of the research is based on core principles of public administration theory, as well as insights from other humanities and social sciences, alongside academic works focused on the theoretical and methodological underpinnings of state regulation in healthcare system development and the mechanisms of governmental support for healthcare system advancement.

A systems approach is employed, analyzing all processes and phenomena related to the public regulation of healthcare development in various countries in their entirety and interdependence. The study also utilizes scientific methods that enabled key theoretical findings, particularly through the abstract-logical method. This included techniques of analogy, comparison, induction, and deduction, which were used to formulate the study's general conclusions.

Main Part. The "people-centered healthcare" strategy, as termed by the WHO, is being implemented in the European region. This strategy ensures comprehensive care through a full range of curative, rehabilitative, and preventive services, provided either directly by primary care physicians or through specialized arrangements in other institutions. The 2018 World Health Report outlined distinctive features of "people-centered healthcare" compared to traditional models of care delivery (Table 1) [1; 3; 7].

Table 1

Characteristics of Different Healthcare Delivery Models

Traditional care delivery in outpatient clinics and polyclinics	Disease control program	People-centered primary care
<p>Primary focus is on the illness and its treatment</p> <p>Relationships are limited to the time of the visit</p> <p>Care is provided on an episodic basis</p> <p>Responsibility is limited to delivering effective and safe medical prescriptions and recommendations during the visit</p> <p>Patients act as consumers of the services they acquire</p>	<p>Focus on the priority disease</p> <p>Relationships are limited to the framework of the program's implementation</p> <p>Measures for disease control are outlined in the program</p> <p>Responsibility for achieving target indicators for disease control within the target population group</p> <p>Population groups are the target object of the disease control measures</p>	<p>Focus on health needs</p> <p>Long-term individual relationships</p> <p>Comprehensive and continuous care based on individual needs</p> <p>Responsibility for the health of all community members throughout life; responsibility for influencing the determinants of health issues</p> <p>People participate as partners in addressing health issues—both their own and the health of the local community</p>

Healthcare systems have evolved under the influence of specific historical, economic, social, and political factors. However, with some degree of generalization, all existing systems are divided into three main models:

- 1) Budgetary (Beveridge system)
- 2) Social insurance (Bismarck system)
- 3) Private

This division is primarily based on differences in the sources of healthcare funding (tax revenues, health insurance contributions, private funds), as well as the methods of organizing care (centralized or decentralized) and the forms of ownership of healthcare service providers (state, private non-commercial, and private commercial). The primary source of funding for the budgetary model is the state budget, specifically tax revenues. The state virtually fully covers healthcare services

for the entire population and manages the healthcare delivery system. State-run medical institutions play a dominant role in this model.

A prominent example of the budgetary model is the healthcare system of the United Kingdom, which is primarily funded by citizens' tax contributions. The key provider of medical services is the National Health Service (NHS), which is managed by the Department of Health. The NHS provides nearly all necessary medical services, hospital medications, and medical devices free of charge to residents. For prescription medication provided in outpatient care, there is a balanced reimbursement system, including copayments for the working population. Socially vulnerable and low-income groups are eligible for copayment exemptions. For example, citizens under 16 years of age, those over 60, full-time students under 19, patients with certain specified conditions, military pensioners, and war veterans are fully exempt from copayments for medications. Moderate copayments apply to ophthalmological and dental services. The state covers travel expenses to treatment locations for the poor and provides a range of other important benefits in healthcare services.

Another example of the budgetary model is Australia, where the federal government provides the majority of healthcare resources by funding two leading national public programs—the compulsory health insurance system Medicare and the Pharmaceutical Benefits Scheme (PBS). Medicare covers 75% of the cost of inpatient services and between 85% to 100% of the cost of outpatient services. The PBS provides vaccinations and covers 80% of the cost of prescription drugs. Additionally, the federal government allocates funds for public hospitals, regional healthcare programs, and subsidies for long-term care services for the elderly and disabled. In cooperation with state and territory governments, public health programs, psychiatric care, some dental services, healthcare for rural populations, Indigenous people, and veterans are also funded. The government regulates the markets for medicines, medical devices, and private health insurance. Private health insurance plays a supplementary role, providing access to services in private hospitals and covering a limited number of services not covered by public funding. The state supports citizens

purchasing private health insurance policies through special budget subsidies and tax benefits.

The budgetary healthcare model is also used in Greece, Denmark, Ireland, Spain, Iceland, Italy, New Zealand, Norway, Portugal, and Sweden [2; 10].

In contrast to the budgetary model, the social insurance model is financed not by taxes but by contributions from employers and employees for health insurance. Like the budgetary model, it provides access to healthcare services for all or nearly all of the population. The difference lies in the involvement of organizations with various forms of ownership in providing medical services, while the state plays a role as the guarantor of these services. In Europe, the social insurance model is most developed in Germany and France, but it is also used by other countries, including the Netherlands, Austria, Belgium, Switzerland, Canada, and Japan [3; 6].

In Germany, 90% of the population is covered by the national system of compulsory health insurance (SHI, Statutory Health Insurance), which consists of approximately 150 health insurance funds (sickness funds). The main sources of funding are contributions from employers and employees, amounting to 15.5% of the insured's income, with this total contribution split almost equally between them. Every resident has the right to change their insurance provider at least once a year without any administrative hassle or waiting periods. The principle of solidarity is strictly adhered to, meaning that a healthy person pays for the sick, a young person pays for the elderly, and the employed pay for the unemployed. The SHI system covers virtually all necessary services, medications, and medical devices, with copayments from the population being minimal [2; 9].

In France, the entire population, including even undocumented immigrants, is covered by the compulsory health insurance system (Assurance Maladie Obligatoire, AMO). This system is financed 90% through social insurance contributions, with the remainder covered by taxes and excise duties. France strictly adheres to the principle of freedom of choice for patients: every resident has the right to be referred to any specific specialist of their choice. There are several sub-systems (schemes) of health insurance. The largest of these (covering about 80% of the population) is the general

scheme, which covers salaried employees and their families. There are also schemes for private farmers, individual entrepreneurs, and civil servants [3; 8].

The distinctive feature of the private model is the absence of a unified system of state healthcare or insurance. Medical care is provided primarily on a paid basis, either through private insurance or out-of-pocket payments by the consumer, with the market being the main tool for meeting healthcare needs. The state only finances the healthcare needs of society that cannot be met by the market, such as medical services for the underprivileged, pensioners, and the unemployed. The most well-known example of this model is the United States, where there is no national healthcare system covering the entire population. The U.S. remains the only industrialized country where state guarantees in the field of medical care are provided only to a limited group of citizens, and access to healthcare services is fragmented. The foundation of the U.S. healthcare system is paid medicine, with a dominant role for private health insurance, which is characterized by a wide variety of plans. Government health insurance is provided to specific categories of the population through federal and mixed federal-state programs such as Medicare and Medicaid. A significant portion of the population (50 million people, or 16%) is not covered by any form of health insurance [5; 9].

No model exists in pure form anywhere. Despite both the French and German models being social insurance-based, the state in both cases allocates significant funds for healthcare directly from the national budget, which has become especially important in recent years due to the lack of healthcare resources. In the United Kingdom, not all NHS needs are financed from general tax revenue: 76% of its budget is formed from taxes, while the remaining 24% comes from contributions from employers and employees for health insurance (19%) and other contributions and fees (5%).

Another characteristic example of combining two different approaches is the Canadian healthcare model. It is typically considered a social insurance model, but it shares many similarities with the state model. In Canada, universal access to healthcare services for 99% of the population is provided by the publicly funded

universal health insurance system, Medicare, which is managed by insurance health plans in the ten provinces and three territories. The main source of funding for Medicare is not employer and employee contributions to health insurance, but tax revenue from the federal and provincial governments, as in the budgetary model [2; 6].

An important feature of healthcare systems based on the Bismarck and Beveridge models is that countries using these models (European countries, Australia, Canada, and Japan) spend very large amounts on healthcare—no less than 9-11% of their GDP. At the same time, 70% or more of the total expenditure is financed from public funds, allowing for the provision of guaranteed medical services of appropriate quality to the entire population. To improve efficiency and eliminate duplication of expenses, primarily single-channel funding (budget or health insurance funds) is used, but to ensure financial sustainability, various additional sources of funding are utilized everywhere [1; 3].

In the United States, over 17% of GDP is spent on healthcare, but the share of government funding in healthcare does not exceed 50%. The low proportion of public funding is compensated by the system of private health insurance for the working population, which relies heavily on financial support from employers. The U.S. is a leader in funding, developing, and producing innovative drugs and medical technologies. In terms of the number of magnetic resonance imaging (MRI) machines per 1 million residents, the U.S. ranks just behind Japan, and for the number of diagnostic procedures involving MRI, it holds the top position globally, ahead of Germany. However, the U.S. significantly lags behind most European countries in terms of healthcare efficiency, showing lower indicators of healthcare quality, such as life expectancy and infant mortality, compared to Europe. At the same time, the U.S. ranks first in terms of the five-year survival rate for breast cancer patients, one of the key healthcare quality indicators used by the OECD [4; 5].

No developed country in the world can meet all healthcare needs, including medications and other technologies, solely from public funds without involving private insurance programs and co-payments. The scope of government guarantees

for healthcare services varies between countries, and often, guarantees regarding specific types of medical care, provision of medications, and medical devices are either not specified or poorly defined in regulations. However, in all developed countries, equal access to necessary healthcare services is provided to all citizens in practice, with benefits offered to wide groups of socially vulnerable populations.

For instance, in Germany, the government guarantees citizens access to a legally established package of medical services and high-quality products. The insurance plans of the health funds (sickness funds) are standardized, and their cost is regulated by the government. Health funds that are more efficient can use freed-up funds to return a portion of insurance premiums or expand the coverage beyond the standard package of services and products.

In Sweden, after the adoption of the Health and Medical Services Act in 1982, the entire population (except for undocumented immigrants) gained equal access to healthcare services financed by the state. There is no legally approved package of medical services that must be covered by public funds. However, within the public healthcare system, a wide range of services are paid for. Since the coverage of public healthcare services is significant, only 4% of Sweden's population purchases additional private insurance plans [3; 8].

In Canada, there is also no legislatively approved package of medical services that must be covered by public funds. At the national level, under Medicare, necessary services for the entire population are covered, including family doctor services, most specialized medical care, as well as medication and inpatient treatment. However, the range of services and technologies reimbursed under the public system is narrower: dental services, eye care, andrologist care, home care, and outpatient prescription drugs are not covered. As a result, these services and medications are paid for through private insurance plans, patients' own funds, and charitable organizations.

Conclusions. Thus, to date, there has been a wealth of international experience in implementing healthcare reforms. The traditionally established forms of healthcare management have, at some point, stopped meeting the demands of the times. Over

many years, the economic models of healthcare systems (Bismarck, Beveridge, and Semashko), which at various times have faced crises, have been widely used around the world. Existing systems of financing and organizing healthcare were not yielding the maximum benefit in terms of improving the health of the population. The further development of healthcare, besides activating the role of the state and ensuring an intersectoral approach to solving population health issues, emphasized the healthcare delivery system. Providing healthcare services is perhaps the most visible and widely discussed function, which has received significant attention during healthcare reforms over the past decade. This attention is reflected in the priority given to primary healthcare development, increased investments, improving the economic efficiency of healthcare institutions, and the formation of integration structures that promote enhanced medical care quality while rationally utilizing resources.

During the evolutionary development of healthcare systems, circumstances sometimes forced the implementation of urgent measures and significant adjustments, which occasionally contradicted the social orientation of reforms. For example, during the recent crisis, the specificity of the anti-crisis strategies of many countries' governments manifested in the predominant support for primary healthcare, control over the pharmaceutical market, the introduction of anti-corruption measures, stricter control over access to specialized care, and ensuring state assistance for the most disadvantaged groups of the population.

Discussion. Assessing the outcomes of healthcare reforms (especially in Eastern Europe and the CIS countries), many foreign experts have concluded that the specifics of these countries, their long-standing experience, and the established traditions and mentality of the population were often overlooked.

An analysis of the various healthcare development strategies worldwide has shown that there is an intensive search for the most effective ways of government regulation in healthcare. Historical experience in healthcare reform suggests that development mainly occurs in two directions: strengthening centralized management mechanisms at all levels and reinforcing patient-centered care models. At the government level, priority is given to strategies for regulating various sectors of the

economy and social sphere to consider their impact on public health. These strategies aim to align public sector interests with individual citizens' interests in maintaining healthy lifestyles and ensuring fairness in access to medical care.

In the field of healthcare management, there is a growing trend towards regulation (both government and self-regulation) of the medical services market based on mechanisms of "regulated competition," resource distribution strategies, and increased roles for primary healthcare in funding subsequent stages of medical care. Additionally, there is a spread of contractual obligations and a broad use of various forms of self-organization within integrated structures.

The emphasis on an individualized approach to patient treatment is realized through strategies such as the implementation of "disease management programs," "patient-centered primary care," "humanitarian health models," and the formation of "therapeutic communities." These data indicate a global shift in the management of healthcare development, moving away from classical liberal models (prioritizing market mechanisms) towards stronger state regulation mechanisms.

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