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Economic Conditions of the Functioning and Development of Health Resort Treatment within the Health Care System

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Abstract:

Purpose: *The purpose of this study is to analyse the economic conditions of health resort treatment in Poland, with particular emphasis on the structure and dynamics of financing sources. The article aims to identify key trends in public and private funding of spa treatment services and to assess the role of institutional financing in the context of demographic, economic, and systemic changes.*
Design/Methodology/Approach: *The study is based on an analysis of secondary data derived from statistical reports of the Central Statistical Office of Poland (GUS) for the years 2023–2025 and financial reports of the National Health Fund (NFZ) for the years 2022–2024. The research method includes descriptive and comparative analysis of financing structures, budget plans, and final financial outcomes, supported by a review of relevant literature addressing economic, legal, and organizational determinants of health resort functioning.*
Findings: *The results indicate a gradual shift in the financing structure of health resort treatment towards a growing share of public institutional funding, including KRUS and PFRON, accompanied by a relative decline in the proportion of fully paid services. At the same time, NFZ data reveal increasing discrepancies between planned and final financial budgets, particularly from 2023 onwards, when final expenditures exceeded initial plans. These trends suggest rising financial needs and growing pressure on public financing mechanisms.*
Practical Implications: *The findings highlight the need for flexible and adaptive financial management in health resort institutions, as well as for diversified funding models combining public and commercial sources. From a policy perspective, the results may support decision-making processes concerning the allocation of public funds and the development of sustainable financing strategies for spa treatment services at both national and local levels.*
Originality/Value: *The study contributes to the literature by integrating statistical data from GUS with detailed financial analyses based on NFZ reports, offering a comprehensive view of the economic conditions shaping health resort treatment in Poland. The results provide empirical evidence of evolving financing patterns and underline the importance of institutional support for the long-term stability and development of the spa sector.*

Keywords: *Health care markets, health policy, spa treatment.*

JEL code: *I11, I18, H51, C81, L83.*

Paper type: *Study research.*

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1. Introduction

Spa resort medicine constitutes an important, yet often underestimated, segment of the healthcare system, operating at the intersection of medicine, rehabilitation, and health tourism. Literature emphasizes that the development of spa tourism is a response to the aging of the population, the increasing prevalence of chronic diseases, and the growing importance of health prevention and a lifestyle focused on well-being (Królak 2021; Dryglas and Golba 2017).

Spas serve simultaneously therapeutic, recreational, and social functions, becoming an important part of health infrastructure and a factor shaping the quality of life for both residents and visitors (Makała, 2016).

The economic foundations of spa operations are shaped by a complex combination of macroeconomic, institutional, and local factors. Research on healthcare financing shows that crises and turbulence in the global economy, albeit with a delay, have a clear impact on the financial situation of health systems, necessitating, among other things, the search for new funding scenarios for services and the rationalization of expenditures (Ryć and Skrzypczak 2013).

In this context, the structure of the financing model for spa medicine becomes particularly important, where public funds from health and social insurance systems coexist with contributions from local government units and expenses directly borne by patients, determining both the accessibility of services and the financial stability of the centers (Suchecka and Jaworska 2015; Paszkowska 2017).

Economic conditions also encompass the broader spatial, legal, and developmental context of spa municipalities. The status of a spa entails a distinct planning regime and specific environmental protection requirements, which on one hand generate additional costs and constraints, but on the other create opportunities to secure external funding, including EU funds, and to build a strong place brand with high health value (Szromek 2012; Jachimowicz-Jankowska 2024).

Moreover, spa activities generate a multiplier effect in the local economy, stimulating the development of complementary services, improving public spaces, and increasing the investment attractiveness of towns with spa functions (Torres-Pruñonosa *et al.,* 2022).

2. Economic Conditions of Spa Medicine Operations

Spas operate within the context of changing economic conditions, public finance pressures, and growing social expectations regarding the quality and accessibility of healthcare services, which requires treating them not only as medical entities but also as participants in the health-tourism services market (Królak, 2021). This combination of macro- and microeconomic factors means that analysis of the spa sector must

integrate health, financial, and developmental perspectives, taking into account its significance for the local and regional economy (Chojnacka-Ożga *et al.,* 2024).

One of the key factors is the state of public finances, which determines the level and stability of spending on spa services. Fiscal constraints and episodes of economic crises translate into pressure to reduce healthcare expenditures, with effects on the spa sector appearing with a delay, manifested through frozen or slower-growing contracts, longer waiting times, and a limited scope of reimbursed services.

As a result, spa treatment facilities are forced to seek revenue more intensively outside the public financing system, which increases their dependence on commercial demand and the overall income situation of the population (Suchecka and Jaworska 2015).

Demographic and epidemiological processes play a significant role in shaping the long-term demand for spa services. The aging of the population, the growing number of people with chronic diseases, and increased awareness of the need to take care of one's health create a sustained demand for rehabilitation, preventive, and restorative services, reinforcing the importance of spas as part of the care system for the elderly and chronically ill (Królak 2021; Hu *et al.,* 2023).

At the same time, these processes increase the pressure for the efficient use of public funds and the expectation of visible therapeutic outcomes, requiring spas to enhance the quality and effectiveness of the services they provide.

Economic conditions also encompass shifts in the demand structure, associated with the growing role of self-paying patients. Alongside traditional, longer stays financed by the National Health Fund (NFZ) or the Social Insurance Institution (ZUS), there is an increasing importance of shorter, intensive commercial stays aimed at both treatment and relaxation, as well as improving well-being (Górska-Warsewicz *et al.,* 2015).

Studies on patient perceptions show that the choice of a particular spa is influenced not only by health outcomes and the professionalism of the staff, but also by accommodation standards, the quality of additional services, and the overall attractiveness of the town, directly linking satisfaction levels with the economic performance of spa entities (Krzyżanowska 2016; Anaya-Aguilar *et al.* 2021; Karagianni *et al.* 2025).

In response to increasing competitive pressure and financial constraints, spa enterprises are developing innovations. Product, organizational, and marketing innovations allow them to adapt their offerings to the diverse expectations of patients, extend the season, and increase the utilization of treatment and accommodation facilities, thereby strengthening the economic foundations of their operations (Górska *et al.,* 2015; Panasiuk *et al.,* 2016; Szymańska *et al.,* 2016; Tutaj 2018).

Analyses of the development potential of selected spas indicate that the most beneficial effects come from combining traditional treatment methods with modern wellness programs, prevention of lifestyle-related diseases, and cultural tourism offerings, particularly when linked to cooperation with local authorities and investments in infrastructure (Nestorenko *et al.,* 2017; Zajączkowski and Cegliński 2018).

An important element of contemporary economic conditions is the digitalization of services and management processes, which constitutes an integral part of the spa business model. The implementation of solutions such as online booking systems, electronic medical records, and tools for remote communication with patients helps reduce operational costs, improve occupancy planning, and build lasting customer relationships (Tutaj, 2019; Szromek and Polok, 2022).

The concept of "harmonious" integration of virtual and face-to-face interactions suggests that well-designed digitalization can enhance, rather than replace, traditional patient contact, which is important both for service quality and revenue stability (Cristobal-Fransi *et al.,* 2023; Patroni *et al.,* 2025).

The economic conditions of spa operations are significantly influenced by the legal, environmental, and planning framework associated with spa status. Specific regulations regarding climate quality, the protection of natural resources, and land use in spa zones generate additional costs and investment constraints, but at the same time provide a basis for accessing support mechanisms and building the town's image as an area with exceptional health benefits.

Literature emphasizes that the balance of these "costs and benefits" depends on the ability to effectively utilize available legal and financial instruments within a long-term development strategy (Jachimowicz-Jankowska 2024; Ćwik *et al.,* 2024).

Local government units play a significant role in shaping the economic conditions of spas, being responsible for certain healthcare tasks as well as the development of municipal and tourism infrastructure (Mikos-Sitek 2021).

In towns with spa functions, investments in public spaces, recreational and cultural services, and improved transport accessibility enhance the attractiveness of the locality and influence the decisions of both patients and investors, creating a multiplier effect in the local economy (Arsić *et al.,* 2024). The economic condition of spas and the development of municipalities are therefore interdependent, highlighting the need for a coherent, long-term local policy.

An important aspect of economic conditions is the potential for the emergence of new spas, particularly in rural areas, where a spa function can serve as a catalyst for diversifying the economic structure and improving residents' quality of life. Analyses of strategic documents, however, show that the decision to develop such a function

requires balancing the interests of the local community, environmental protection requirements, and economic considerations, making the process of establishing new spas a complex undertaking dependent on the cooperation of multiple public and private entities (Bernat and Harasimiuk 2019; Golba *et al.,* 2021).

The economic conditions of spa medicine operations can therefore be viewed as a multidimensional network of interdependencies between the stability of public financing, the structure and dynamics of demand, the level of innovation and digitalization in spa enterprises, and the development policies of spa municipalities (Suchecka and Jaworska 2015; Tutaj 2018; 2019; Chojnacka-Ożga *et al.,* 2024).

The potential for the stable and sustainable development of the sector in the future depends on the extent to which public and commercial financing mechanisms can be harmonized with infrastructure modernization, the introduction of innovations, and long-term spatial and environmental planning (Żegleń *et al*., 2017).

3. Statistical Overview of Spa Medicine in Poland

Analysis of statistical data from the Central Statistical Office (GUS) for 2023–2025 indicates gradual changes in the structure of service financing by source. During the period studied, services paid for entirely by patients continued to dominate, although their share showed a declining trend compared to previous years. This phenomenon may indicate a gradual increase in the importance of institutional financing.

GUS data confirm a systematic rise in the share of funds from public institutions, particularly the Agricultural Social Insurance Fund (KRUS) and the State Fund for the Rehabilitation of Disabled Persons (PFRON). This trend points to growing state support and an increasing number of beneficiaries utilizing this type of funding.

In the case of the National Health Fund (NFZ), fluctuations were observed in its share of the financing structure, which may be related to organizational changes and the scope of service contracting in individual years. Meanwhile, the share of the Social Insurance Institution (ZUS) showed a declining trend, which could result from modifications in the rules for granting benefits or demographic changes within the eligible group.

According to GUS data, the smallest share in the financing structure was attributed to other institutions, whose significance remained marginal throughout the analyzed period. Despite minor fluctuations, their share did not have a substantial impact on the overall financing structure.

In summary, GUS data from 2023–2025 indicate a gradual shift in the financing structure toward a greater role of public institutions, while maintaining a significant, though decreasing, role for self-paying financing. These trends may reflect the

growing importance of systemic support mechanisms and changes in the accessibility and methods of funding services (GUS 2023; 2024; 2025).

Analysis of data from National Health Fund reports shows changes both in the planned level of financial resources and in their final allocation in individual years. Differences between the financial plan and the final financial plan indicate the need for ongoing budget adjustments to respond to current needs and systemic conditions.

In 2022, the financial plan amounted to PLN 1,205,869, while the final financial plan was set at a lower level of PLN 1,163,604, representing a decrease of PLN 42,265 compared to the original assumptions. In 2023, an increase was recorded in both categories.

The financial plan reached PLN 1,365,348, while the final financial plan amounted to PLN 1,507,989, an increase of PLN 142,641 compared to the original plan. The highest values were observed in 2024. The financial plan was PLN 1,695,295, while the final financial plan reached PLN 1,748,403, representing an increase of PLN 53,108 compared to the financial plan.

In summary, a rising trend is visible in 2022–2024 for both the planned and the finally approved financial resources. At the same time, it should be noted that from 2023 onwards, the final financial plan exceeded the original plan, which may indicate the need to increase financial allocations during the budget implementation (NFZ 2021; 2022; 2023; 2024).

4. Barriers and Factors Supporting the Development of the Sector

Analysis of the functioning of spa medicine in Poland indicates that the sector develops under complex economic, demographic, and legal conditions. The main barriers to development include:

Financial constraints – pressures on public finances, caused, among other factors, by economic crises, result in limited availability of funds from NFZ, ZUS, or KRUS. This leads to slower growth of contracts, a limited scope of reimbursed services, and the need to generate revenue from the commercial market (Suchecka and Jaworska 2015).

Demographic and epidemiological changes – an aging population and the growing number of people with chronic diseases increase demand for spa services, requiring effective planning and adaptation of the offer to patients' needs (Królak 2021; Hu et *al.,* 2023).

High regulatory and environmental costs – the status of a spa involves a separate planning regime and environmental protection requirements, generating additional

costs and investment constraints (Jachimowicz-Jankowska 2024; Bernat and Harasimiuk 2019).

On the other hand, several factors support the sector's development:

Development of innovation and digitalization – the implementation of modern online booking systems, electronic medical records, and communication tools with patients helps reduce operational costs, improve occupancy planning, and increase patient satisfaction (Tutaj 2018; Tutaj 2019).

Growing public health awareness – an increasing number of people focusing on prevention and well-being creates sustained demand for spa services, including shorter commercial stays (Oleszczyk and Dominiak 2021).

Access to external funding – EU funds and local investment support programs for spa infrastructure and health tourism increase the possibilities for modernization and development of facilities (Bernat and Harasimiuk 2019).

Multiplier effect on the local economy – spa activities stimulate the development of complementary services, improve public spaces, and enhance the investment attractiveness of spa municipalities (Wójcikowski 2015; Chojnacka-Ożga *et al.,* 2024).

In summary, the development of the spa medicine sector in Poland is shaped simultaneously by limiting factors, which require appropriate financial and planning policies, and by supporting factors, which can be leveraged to increase efficiency, competitiveness, and the quality of services offered.

5. Conclusions

Analysis of statistical data from GUS and reports from the NFZ allows for the identification of several key trends in the functioning of spa medicine in Poland. On one hand, there is a gradual increase in the share of public financing, particularly from KRUS and PFRON, indicating the growing role of institutional support for patients using spa services.

On the other hand, the share of funds coming from self-paying patients remains significant, although it shows a declining trend. These findings confirm the conclusions of previous studies, which highlighted the need to diversify sources of spa financing and to improve the efficiency of public fund management.

Comparisons with both international and national literature indicate that similar financial mechanisms operate in other healthcare systems, where public support for spa facilities correlates with service accessibility and sector financial stability. At the same time, the Polish spa market is characterized by a specific demand structure – a

significant portion of patients use short, commercial stays, highlighting the need to adapt offerings to customer expectations and to introduce innovative wellness and rehabilitation programs.

The analysis also reveals the main barriers to sector development: financial constraints resulting from public budget pressures, demographic and epidemiological changes requiring effective planning, and high costs associated with meeting legal and environmental requirements in spa municipalities.

On the other hand, the spa sector possesses significant development opportunities, including growing public health awareness, access to EU funds, the expansion of health and wellness tourism, and the implementation of digitalization in management processes and patient services.

Further research should focus on assessing the effectiveness of different financing models, analyzing the impact of new forms of health tourism on sector stability, and evaluating public policies supporting the development of spa medicine. Integrating economic, health, and developmental perspectives will enable the creation of coherent strategies to support the sustainable growth of the sector in Poland.

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