SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2025
ORGANIZATION AND MANAGEMENT SERIES NO. 220

HEALTHCARE FINANCING SYSTEM IN POLAND AGAINST THE BACKDROP OF OTHER EU COUNTRIES

Maciej SCHULZ

Bydgoszcz University of Science and Technology; m.schulz@pbs.edu.pl, ORCID: 0000-0002-4324-9266

Purpose: The aim of the article is to outline the healthcare financing systems in Poland and other EU countries, taking the level of budgetary resources and other conditions associated with the financing of healthcare services into account.
Design/methodology/approach: The article draws on a review of literature and online sources. The analysis time frame covers the years 2021-2023.
Findings: The article provides a description of selected models of healthcare financing, as well as presents the basic sources of said financing. Based on the presented analyses, recommendations have been developed, indicating the need to expand the health insurance premium base and eliminate the privileges associated with the obligation to enroll in the National Health Fund [Polish: Narodowy Fundusz Zdrowia (NFZ)] and the premiums paid.
Practical implications: The article presents the characteristics of healthcare financing system evolution in Poland, taking the current limitations involved in sustaining fiscally effective care financing under the changing macroeconomic and social conditions into account.
Originality/value: The results of the analyses carried out are of cognitive value. The article compares healthcare financing models, presenting current trends in the search for sources of healthcare financing consistent with the priorities of national socio-economic policy.
Keywords: healthcare financing, health insurance premium.
Category of the paper: General review.

Introduction

Currently, the healthcare system in Poland operates on the basis of a universal health insurance. The compulsory health insurance premium equaling 9% of the insured's income is paid through the Social Insurance Institution [Polish: Zakład Ubezpieczeń Społecznych (ZUS)] to the National Health Fund, which finances the health services provided to the insured and reimburses the costs of medication. Since the beginning of the systemic transformation in Poland, the healthcare system has been subject to many profound changes and numerous modifications. The key change came on January 1, 1999, when the ‘budgetary’ system was replaced by a new ‘insurance-budgetary’ financing model, with the healthcare system grounded

in the principles of social solidarity, universal health insurance, and equal access to publicly funded healthcare services. The adoption of a mixed source of healthcare financing in no way exempted the state from its obligation to support the healthcare system. The state budget still finances, inter alia, preventive programs (including protective vaccinations), highly specialized medical procedures (e.g. transplants), health policy programs, medical personnel training, scientific research and central investments, blood donation stations and sanitary and epidemiological stations (Gorzałczyńska-Koczkodaj, 2017).

In reforming the Polish healthcare system, an important role was also assigned to local government structures as founders of healthcare facilities, including mandatory transformation thereof from budgetary units into independent facilities. Consequently to this process, healthcare facilities were restructured into independent public healthcare institutions, but also units of a local-government and non-public nature were established. The principle of separating the function of healthcare payer from that of healthcare organizer and provider became binding. The financing of specific packages of health services and benefits was taken over by institutions previously non-existent in post-war Poland, i.e., health insurance Funds. An internal market for services developed, with entities of different legal status (public, private, cooperatives, etc.) applying for contracts. As part of the universal health insurance system, 16 Regional Health Insurance Funds, operating at the voivodeship level, and a Trade Union Health Insurance Fund for Uniformed Services, were established. These were independent and self-governing institutions, pooling and managing funds from the premiums paid by those assigned to a given Fund, entering into agreements with healthcare providers to deliver healthcare services – both preventive and curative (Mitek, 2016).

The changes introduced were intended to ensure that ‘money follows the patient.’ What this meant was that everyone could choose their doctor, clinic and hospital of treatment. Further changes to the healthcare system followed in 2003. After four years of operation, the Health Insurance Funds were transformed into the National Health Fund [Polish: Narodowy Fundusz Zdrowia (NFZ)] (Central Office and Regional Branches). The legal status of the payer also changed: the Health Insurance Fund was a self-governing institution, whereas the National Health Fund is a state organizational unit with legal personality (Mitek, 2016).

Poland currently maintains a system of universal, compulsory health insurance, regulated by the Act of August 24, 2004 on publicly funded healthcare services. The National Health Fund (NFZ) finances healthcare services and the reimbursement of medication, medical device or orthopedic item costs, inter alia, from premiums and other sources listed in the Act, under contracts concluded with healthcare providers. The financing process is based on the Fund's financial plan. Healthcare services can be financed from two sources: public and private funds. In most OECD countries, healthcare is financed from a variety of sources, in varying proportions (Mitek, 2016). Public sources comprise mainly state, regional and local budgets, public insurance funds and extra-budgetary funds. Private sources primarily consist of individual healthcare consumers' income, private health insurance, employers and charities (Journal of Laws No. 210, item 2135).

Healthcare financing models

Finding the right model of financing such an important area of life as healthcare is extremely difficult. Paradoxically, technological and medical development contributes to this, forcing the use of increasingly better, more effective, but at the same time much more expensive, medical equipment and supplies. The demographic changes (longer life expectancy and aging population) that have been taking place in Poland for many years are not without significance in this matter either. In addition to the income aspect, borne in mind should be that healthcare financing not only entails accumulation of funds for this purpose, but also appropriate allocation and spending thereof, meeting the healthcare needs of the society (Lenio, 2018).

Healthcare constitutes a highly complex element of every country's policy. What is more, healthcare system functioning translates into many other social and economic challenges. In practice, no perfect healthcare system which would solve all the problems of today's societies exists. The following models of healthcare financing are practically implemented (Łuniewska, 2014):

- Beveridge model,
- Bismarck model,
- residual model,
- Semashko model.

The Beveridge model entails the creation of a National Health Service, financed from the taxes paid to the state and local authority budgets. Health care in this model falls under the responsibility of the state, which must facilitate access to a basic package of services for its citizens. Since only basic medical services are provided, voluntary health insurance is necessary. The model originated in the UK and is currently implemented in the healthcare systems of Denmark, Portugal, Spain, Greece, Sweden, Finland and Norway (Borkowska, 2018).

Another health care model is the Bismarck model. The source of funding is the insurance premiums paid by employees and employers to independent health insurance funds. Special-purpose funds are established, not general tax-funded funds, as in the previous model. The party responsible for organizing insurance coverage is the public authorities. Health services are provided by public and private medical facilities. The financing is contract-based. Wealthy individuals are not covered by the insurance system and are referred to private facilities in case of illness. This model underpins the healthcare systems of Germany, Austria, Belgium, the Netherlands, Switzerland and France (Borkowska, 2018).

In the residual model, in contrast, the state is relieved of the obligation to provide citizens with access to health services, with only residual subsidies from public funds. The main source of funding is private insurers, operating under strict supervision by medical organizations. The public takes responsibility for their own health, and only assistance programs for those

with low or no income are available. This model is implemented in the USA (Borkowska, 2018).

The next model is the Semashko model, standing in complete contrast to the residual model, with the state taking full responsibility for the health of the public. The only source of funding is the state budget, healthcare facilities are state-owned, there is no private healthcare sector, and citizens enjoy free access to comprehensive healthcare services. This model prevailed in socialist countries, including in Poland until 1998 (Łuniewska, 2014).

The role of the National Health Fund (NFZ) in the healthcare system

The current healthcare financing system evolved from the many changes it was subject to in the past, with its present form reflecting the systemic reform of 1999. As a result of the aforementioned reforms, universal health insurance was introduced in Poland as the main tool and source of healthcare services financing. The main assumption behind the new concept implemented entailed a decentralization of the healthcare financing system and application of purpose-specific insurance, involving local governments in new responsibilities (Mitek, 2016).

The newly established units became responsible for organizing the provision of services, as well as for contracting and financing these services. Ultimately, the reform led to the establishment of a centralized institution, the National Health Fund (NFZ), which reintroduced central distribution of the funds, collected from health insurance premiums, to the regional branches. Subsequent statutory amendments strengthened the position of the NFZ as a decision-making body and a party in the entire process of contracting health services with healthcare providers (Bromber, 2014). Currently, the NFZ plays a substantial role in financing the healthcare system. Its main task is to finance healthcare services as well as contract these services with public and non-public healthcare providers. The institution primarily functions as the organizer and coordinator of the entire process of healthcare provision and financing. It is also involved in the entire process of financing, and public funding of these services is not possible without its participation (Bromber, 2014).

In addition to the National Health Fund, two other entities play an important role in the system, namely the Ministry of Health and local governments. The main task of the Ministry of Health (in cooperation with the Ministry of Finance) is to control the activities of the National Health Fund and supervise its financial management. Local authorities are responsible for identifying the health needs of the population, estimating the supply of health services, financing investments and exercising control in this area. The health care financing system is partly supervised and managed top-down by the NFZ Head Office and the Ministry of Health. Local problems are more effectively recognized at the voivodeship, county or commune levels, also owing to the activities of the respective local governments. The system is additionally

subsidized from the state budget and local government budgets, but universal health insurance remains the main source of healthcare services financing (Mitek, 2016).

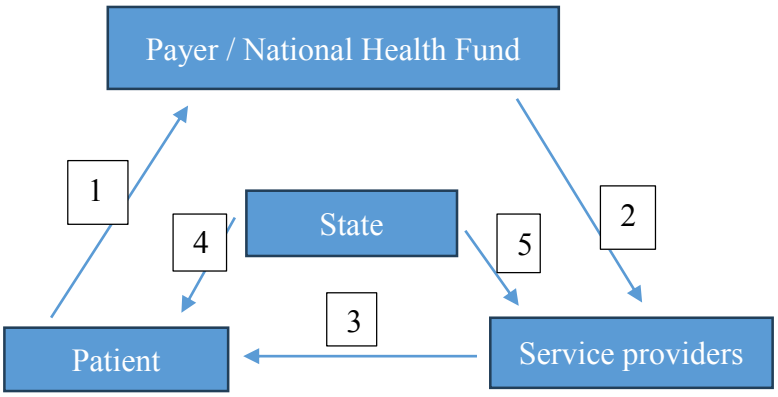
The social security system provides access to healthcare services on the basis of health insurance premiums deducted from wages. In legal terms, insurance is defined as "an institution regulating the rules of health services provision to entitled recipients, in accordance with specific criteria and requirements defined in detail in the regulations" [translation my own] (Journal of Laws No. 210, item 2135). Health insurance entails issues pertaining to a specific dimension of risk, taking the likelihood of illness or loss of health into account. It is therefore imperative to observe the principles of equal rights and social solidarity, as well as to ensure free access to healthcare services and free choice of healthcare providers for the insured (Act, 2003). Thus, the functioning of universal health insurance excludes an individual approach to each type of risk, with a greater focus on the principle of compulsory commonality and solidarity of all insured persons (Journal of Laws of 2003, No. 45, item 391).

In the overall social security system, the risk of illness is covered twofold. The social security system is designed to cover the risk of illness through two spheres: through social security and health insurance. Sickness insurance, operated by the Social Insurance Institution (ZUS), is provided in the form of sickness benefits and serves to protect employees against the loss of part of their income due to incapacity for work, caused mainly by the insured person's illness, without taking the treatment process into account. This function falls within the scope of health insurance providing appropriate direct benefits. Under this coverage, financing is provided for health services mainly, including treatment, rehabilitation services, reimbursement of medication, diagnostics, health promotion and prevention, as well as financing of treatment abroad (Mitek, 2016). The services covered by health insurance include not only direct treatment, but also many other activities affecting health. The main difference between the various insurances consists in the fact that social insurance, administered by the ZUS in the form of a sickness benefit, secures the sphere of the employee's income, while the health insurance sphere directly secures the insured person's state of health (Mokrzycka et al., 2012).

Health insurance as the main source of health services financing forms part of a system in which various contractual parties interact and different terms and conditions of cooperation apply. The structure of and relations within a universal health insurance system are based on the activities of three main parties: the insured, the insurer and the service provider. The cooperation and activities thereof form the so-called insurance relationship triangle (Figure 1). Each party is subject to obligations and holds rights towards the other parties, which are realized when a risk event occurs, mainly due to illness or an unhealthy condition (Beda et al., pp. 2-15).

The NFZ serves as an intermediary between the insured and the service provider, acting as the payer for the services provided. It accumulates, manages and administers the funds from the premiums paid by the employer as part of the insured's salary. It then covers the costs of the medical services provided by the service providers contracted to deliver the services specified

in their statutes. On this basis, the service providers deliver medical care to the insured under the health insurance program, under the terms of the applicable contract.



1 - Premiums deducted from wages.
2 - Payment for service providers for services provided under contracts with the NFZ.
3 - Provision of services to patients.
4 - State funding of e.g., highly specialized treatments.
5 - Transfer of funds to service providers.

Figure 1. Party-to-party relationships in health insurance system.

Source: own elaboration based on Mokrzycka, Kowalska, 2012, p. 102.

The existing tripartite division of tasks among different parties is an unusual arrangement. The present division of tasks, responsibilities and rights results in one party needing medical care, another party financing it, and yet another party providing it and managing the funds. This can lead to problems and complications in the relations between the parties, as well as in their objectives. Appropriate cooperation between entities and responsiveness to needs is essential, not only in terms of infrastructure and new services, but also in terms of the adequacy of service financing to the needs. Unquestionably, this is problematic due to the human factor, mainly because the subject of insurance is human health, which is difficult to assess and to estimate in terms of optimal and commensurate costs. The important role of the state should also be mentioned, as the state budget finances highly specialized treatments for patients while public funds are allocated to service providers (Mitek, 2016).

The structure of the health insurance system is therefore supported by three different pillars – parties, including the cooperating party or the party providing additional coverage for difficult cases, namely the employer and the state (state budget). The system as a whole is designed to provide comprehensive services. The system as a whole is designed to provide comprehensive services. Nevertheless, it needs to be continually analyzed, adapted to new needs and adjusted to new requirements (Mitek, 2016).

Sources of healthcare system financing in Poland

Formally, the healthcare financing system adopted in Poland is insurance-based. In practice, it has developed into a mixed system, combining features of both insurance and budgetary systems, both in terms of the collection and allocation of funds. The legislator has provided for a number of deviations from the 'classic' insurance-based model of healthcare financing. The most substantial of these are (NIK, 2019):

1) the amount of the insurance premium is not calculated based on the insured person's health risk, but rather on his/her formal ability to pay, although this applies to some professional groups only,
2) insurance premiums for some social groups are covered from the state budget,
3) the financing of wage increases for medical personnel has been increasingly financed from the insurance premiums transferred to the National Health Fund in recent years,
4) the costs of specialist training for doctors are covered by the Labor Fund.

The structure of the National Health Fund's revenues from health insurance premiums indicates that a significant portion of these revenues is transferred by public finance sector entities. This means that the sector largely finances the functioning of the healthcare system, and thus is not significantly different from systems in which services are financed from budgetary funds. Insurance systems are also characterized by a strict correlation between the payment of premiums and entitlement to medical services. This correlation is absent in the Polish system. Entitlement to healthcare services is granted by the very fact of registering with the compulsory health insurance scheme (Supreme Audit Office, 2019).

According to the provisions of the Act, funds in the amount of not less than 7% of the gross domestic product are allocated annually to finance health care, with the reservation that the amount of funds allocated to finance health care in 2019–2026 cannot be lower than (Journal of Law, 2004):

1) 4.86% of gross domestic product in 2019,
2) 5.03% of gross domestic product in 2020,
3) 5.30% of gross domestic product in 2021,
4) 5.75% of gross domestic product in 2022,
5) 6.00% of gross domestic product in 2023,
6) 6.20% of gross domestic product in 2024,
7) 6.50% of gross domestic product in 2025,
8) 6.80% of gross domestic product in 2026.

The methodology of calculating healthcare expenditure used by the Ministry of Health has been strictly defined in Article 131c of the Healthcare Benefits Act (Journal of Law, 2004). The above limits are accounted for by the Council of Ministers in draft budget acts or draft acts on provisional budget, and in no way correspond to the SHA 2011 methodology, upon which the National Health Account [Polish: Narodowy Rachunek Zdrowia (NRZ)].

Since April 2003, the main source of financing for the healthcare system has been the National Health Fund (NFZ). It covers more than 80% of public healthcare expenditure and almost 60% of total expenditure. The second main public source of funding is the state budget and local government budgets. The second main public source of funding is the state budget and local government budgets. The funds, available to the National Health Fund (NFZ), come mainly from the insurance premiums collected by the Social Insurance Institution (ZUS) and the Agricultural Social Insurance Fund [Polish: Kasa Rolniczego Ubezpieczenia Społecznego (KRUS)]. Capital expenditures are primarily covered by local government units and the state budget. Account data, current public expenditure on the healthcare system amounted to PLN 241.6 billion in 2023 (7.1% of GDP) and were higher than in 2022 by approximately PLN 45.4 billion - compared to preliminary data for 2022, amounting to PLN 196.2 billion (Polish Central Statistical Office). An increase in expenditure was observed in public spending, with a decrease in private spending. Table 1 shows healthcare spending and its GDP share between 2021 and 2023.

An increase in current expenditure was observed in public spending, which amounted to PLN 197.8 billion in 2023 and was PLN 53.2 billion higher than in 2022, with a GDP share of 5.8%. Current private expenditure (including household expenditures) decreased by 7.8 billion PLN and amounted to 43.8 billion PLN in 2023, despite an increase in direct household expenditures amounting to 38.6 billion PLN, i.e., 1.6 billion (4.4%) more than in 2022.

Healthcare expenditure is the largest or one of the largest items within the structure of public, and often private, expenditure in European countries. This will certainly not change in the coming decades, due to current demographic, epidemiological, technological and cultural trends, and securing a fiscally efficient and stable means of financing health expenditures will remain one of the most important challenges for modern societies. The solutions implemented in different countries vary mainly, though not exclusively, in the dominant streams feeding the system. Many European countries have decided to finance healthcare expenses from central taxes (e.g., the UK) or local taxes (e.g., Scandinavian countries), supplementing the funds from these streams with funds from private health insurance and direct household expenses. Others (e.g., Germany, Austria, the Netherlands) have based their systems on the model of universal health insurance, with the payer institution detached from the public finance system. This model, called the Bismarck model, has also been implemented in Poland (Rudawska et al., 2023).

There is no clear answer as to whether the tax-based or Bismarck-based insurance approach to healthcare financing is more advantageous, although the insurance system seems more resistant to macroeconomic shocks and crises in the sphere of public finances. In assessing the financing system, however, one cannot be limited to evaluating its stability and efficiency. No less important is its compatibility with the declared normative principles, and the principle of social solidarity in particular, as emphasized in numerous scientific and expert studies. Article 65 of the Act on publicly funded healthcare services also states: “Health insurance is

based, in particular, on the following principles: equal treatment and social solidarity". Although the specific nature of this principle is not specified, it can be inferred from the structure of the health insurance contribution that the Polish legislator is referring to two basic dimensions of social solidarity discussed in scientific literature: risk solidarity and income solidarity. The first is expressed through implementation of the premium regardless of individual risk of illness. People with a higher health risk (e.g., due to previous illnesses or age) do not have to pay higher insurance premiums (as with private health insurance). People with a lower health risk receive no premium discount. Income-based solidarity, in turn, links the amount of individual premium obligations to the amount of individual income (Rudawska et al., 2023).

According to the authors of a study on the search for additional sources and mechanisms of healthcare system financing at the Polish Academy of Sciences [Polish: Polska Akademia Nauk (PAN)], it is urgently imperative to introduce changes within the scope of defining the insurance obligation and calculating the health insurance premium base. At least three main arguments speak in favor of the proposed changes (Rudawska et al., 2023):

1) the need to maintain a fiscally effective method of healthcare financing even under changing macroeconomic and social conditions,
2) strengthening of the principle of income solidarity,
3) the need to minimize the adverse allocation effects of income-based premiums.

Each of these arguments indicates the need to expand the health insurance premium calculation base and eliminate the privileges associated to the obligation of enrolling with the National Health Fund (NFZ) and the premiums paid. Currently, the National Health Fund does not cover all Polish residents, and some social groups are excluded from the benefits and/or obligations defined by the principle of social solidarity. Such exceptions to the insurance obligation are not substantively justified. Although the number of these exceptions has decreased over the past decades, it remains significant. Even if those who are not insured with the National Health Fund are entitled to certain basic health services in some cases (which should be paid for by the state budget), they are still excluded from the principle of social solidarity within the National Health Fund.

The argument of income solidarity likewise represents a key argument in favor of extending the health insurance premium calculation base to include capital and asset income. This is also justified for reasons of basic fairness, which in essence indicates individual (or household-related) financial capacity as the basis for calculating individual health insurance premiums. Financial capacity certainly does not hinge on the origin of the insured person's income, but rather on the amount of disposable income. A fair premium should be charged equally to all income of the insured persons, and not only to income from paid employment (and derivatives - pensions, etc.) or self-employment, as is the case in Poland. The extension of the health insurance premium calculation basis to include capital income, and thus the strengthening of the financial foundation underpinning the functioning of the healthcare system,

are also justifiable by the changes observed over the past decades in the technologies of goods and services production, as well as by the demographic changes leading to a growing deficit of qualified production personnel the changes leading to a significant increase in the share of capital in the functional distribution of national income (Rudawska et al., 2023).

An urgent reform is needed with regard to the rules of premium payments by individual farmers. The current solution practically exempts this large occupational group (and their family members) from the obligation to pay premiums, with full entitlement to benefits financed by the National Health Fund. A contribution of PLN 1 per hectare of land owned (collected from farmers for a minimum of 6 so-called 'equivalent hectares') can hardly even be considered symbolic. Other professional groups, such as clergymen, have also been granted unjustified privileges in Poland when it comes to the obligation to pay health insurance premiums, privileges that need to be abolished. The only premise for exemption from paying health insurance premiums while retaining the right to benefits should be inability to pay, i.e., lack of sufficient disposable income. Introduction of universal insurance and extension of the health insurance premium calculation basis to all sources of income would relieve the state budget of the obligation to finance the premiums of those who have no income (Rudawska et al., 2023).

Lastly, this extension of the insurance obligation and the health insurance premium base is also justifiable by an allocation argument. Every fiscal burden – be it a tax or a compulsory social security premium – affects the taxpayer's decisions regarding the commitment of his resources, especially labor resources. The higher the marginal tax rate, the stronger the expected negative reactions from the taxpayer and the lower the motivation to contribute to the national income. Although an isolated health premium of a few to several percentage points should not generate negative allocation effects, analyzing these effects, it must be recognized as part of a larger whole, which includes income tax and other social security premiums. The marginal tax rate in Poland is very high, forcing many self-employed people to cease their business activities. Further increases in the marginal tax rate through higher health insurance premiums should therefore be considered a serious threat to the country's economic development. This threat can be mitigated by substituting a broader tax base for further increases in the premium rate (Rudawska et al., 2023).

Conclusions

Regardless of the adopted model of healthcare financing, the system should primarily aim to maximize the health effect with the effective use of available treatment funds. To achieve this goal, priorities for the development of the entire healthcare system in Poland, arising from demographic and epidemiological challenges, must be defined. Apart from activities within the scope of prevention and education, the system should be restructured to increase transparency,

better meet the healthcare needs of patients, and improve financing. For many years, experts and the Supreme Audit Office [Polish: Najwyższa Izba Kontroli (NIK)] have been emphasizing the need for a comprehensive, coherent, and long-term strategy of healthcare development in Poland. Adoption of a strategy will discontinue the practice, widespread over the last 20 years, of making often random and ad hoc changes leading to, for instance, contradictory regulations and difficulties in their interpretation. Lack of a strategy may adversely affect the functioning of healthcare institutions and discourage healthcare investment decision. In this context, it is crucial to properly plan the increase in healthcare expenditure in Poland, which for years has fallen short of the levels observed in most European countries, both as a GDP share and in comparison to per capita spending.

References

1. Będą, K., Czyżowska, E., Grabowska, I., Liniewicz, B, Rusiecka, A., Szymańska, B., Tyc, A. (2015). *Koordynacja a Dyrektywa - podobieństwa i różnice w korzystaniu z opieki zdrowotnej w aspekcie transgranicznym*. Warszawa: Narodowy Fundusz Zdrowia, p. 9.
2. Borkowska, I. (2018). Ocena kondycji publicznej opieki zdrowotnej w Polsce. *Studia i Prace. Kolegium Zarządzania i Finansów, z. 165,* Warszawa: SGH, p. 30.
3. Bromber, P. (2014). Rola i funkcjonowanie NFZ w systemie ochrony zdrowia. *Zeszyty Naukowe Uniwersytetu Szczecińskiego, nr 802, Finanse, Rynki Finansowe, Ubezpieczenia, nr 65.* Szczecin, p. 547.
4. Gorzałczyńska-Koczkodaj, M. (2017). Finansowanie służby zdrowia w Polsce na przykładzie SPZOZ. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, nr 485.* Wrocław, p. 180.
5. GUS. *Wydatki na ochronę zdrowia w latach 2021-2023*.
6. Jasiński, Ł. (2023). Współpłacenie za leczenie. *Menedżer zdrowia, nr 11-12*.
7. Lenio, P. (2018). Źródła finansowania ochrony zdrowia w Polsce i w Wielkiej Brytanii. *Studenckie Prace Prawnicze, Administratywistyczne i Ekonomiczne, 23*.
8. Łuniewska, P. (2014). Finansowanie systemu ochrony zdrowia w Polsce. *Współczesna Gospodarka (Modern Economy), Vol. 5*, Warszawa, p. 69.
9. Mitek, A. (2016). Publiczne finansowanie świadczeń zdrowotnych a wpływ procesu starzenia się społeczeństwa polskiego. *Finanse, Rynki Finansowe, Ubezpieczenia, nr 4(82), cz. 2.* Warszawa, pp. 792-794.
10. Mokrzycka, A., Kowalska, I. (2012). *Podmioty lecznicze w Polsce w perspektywie reform zdrowotnych*. Warszawa: Difin, pp. 101-102.
11. *Publicly funded healthcare services* (2004). Journal of Laws No. 210, item 2135.

12. Report of Supreme Audit Office [NIK], *System ochrony zdrowia w Polsce. Stan obecny i pożądane kierunki zmian*, Nr ewid. 8/2019/megainfo/KZD.
13. Rudawska, I., Sowada, Ch., Węgrzyn, M., Wierzba, W., Więckowska, B. (2023). *Rekomendacje strategiczne na lata 2023-2027: Poszukiwanie dodatkowych źródeł i mechanizmów finansowania systemu ochrony zdrowia – Polskie zdrowie 2.0*. Warszawa: Polska Akademia Nauk, p. 7.
14. *Universal insurance with the National Health Fund* (2003). Journal of Laws No. 45, item 391.