AGING SOCIETY AS A CHALLENGE FOR HEALTHCARE IN POLAND

Arkadiusz Przybyłka

ORCID: 0000-0001-9427-6232
University of Economics in Katowice
Department of Spatial Management and Regional Transformation
Department of Labour Market Analysis and Forecasting
1 Maja 50, 40-287 Katowice, Poland
arekp@ue.katowice.pl

Abstract: *The ageing of the population is one of the most significant challenges facing the healthcare system in Poland. The aim of this article is to analyse the implications of population ageing for the functioning of the healthcare system and to describe the scale and structure of healthcare service use among older people. The study utilised a method involving the analysis of relevant literature, legal acts and official statistics derived mainly from publications by the Central Statistical Office, the Ministry of Health and the National Health Fund. Comparative analysis was also employed, along with an analysis of demographic and health data concerning the elderly population in Poland. The research indicates that the ageing of Polish society is accelerating steadily. In 2024, people aged 65 and over accounted for over 20% of the country's population, and demographic forecasts predict a further increase in their share in the coming decades. At the same time, older people are significantly more likely than younger age groups to suffer from chronic diseases and functional limitations, and to use medical services, including primary healthcare, specialist care, hospital treatment, long-term care and palliative care. The growing number of older people is leading to an increase in the demand for healthcare services and a rise in the operating costs of the healthcare system.*

Key words: *aging, demography, health protection*
JEL codes: *I18*

1. Introduction

The progressive aging of Poland's population is an inevitable result of declining birth rates and increasing life expectancy. This phenomenon is leading to a growing demand for health care services and, consequently, to rising costs for the health care system. As these trends intensify,

it becomes necessary to seek new systemic solutions that will enable the effective fulfillment of the growing healthcare needs of older adults. The aim of this article is to analyze the consequences of population aging for the healthcare system, as well as to characterize the current level of healthcare utilization by this demographic group

2. An Overview of the Healthcare System in Poland

The healthcare system is one of the pillars of the functioning of a modern state. Its quality, organization, and availability determine not only the treatment of diseases but also the effectiveness of preventive measures, health promotion, and responses to epidemiological threats. Modern healthcare systems operate in increasingly complex social, demographic, epidemiological, and economic conditions. Aging societies, the growing burden of chronic diseases, as well as patient expectations regarding the quality and availability of services, mean that these systems must constantly change and adapt to an ever-changing environment. They have never before been subject to such strong pressure to improve effectiveness, coordination, and efficiency of action (Kiedik, 2025, p. 55)**.**

The healthcare system adopted in Poland finds its basis in the provisions of the Constitution. Specifically, Article 68 contains a provision stating that everyone has the right to health protection. The Basic Law guarantees everyone the right to health protection and the right to healthcare services financed from public funds. The cited article also stipulates that public authorities are obliged to provide special healthcare to, among others, the elderly (Konstytucja RP. Dz. U. 1997, nr 78, poz. 483). The legal framework for the functioning of the healthcare system is based on several basic legal regulations, namely: the Act of August 27, 2004 on healthcare services financed from public funds (Dz. U. 2025, poz. 1461), the Act of April 15, 2011 on therapeutic activity (Dz. U. 2026, poz. 156), and provisions harmonizing Polish law with EU law. Literature indicates that providing citizens with equal access to health services in Article 68, Section 2 of the Constitution of the Republic of Poland does not specify the actions that public authorities are obliged to take in practice to guarantee citizens the realization of this right. Consequently, "public authority decides how to provide citizens with access to healthcare services financed from public funds. It depends solely on the legislator on what terms healthcare services will be provided and what their scope will be. However, they should define the principles for exercising the right to health" (Nizioł, Peno, 2024, p. 35).

The sources of financing for the healthcare system are diverse and include:

- Universal health insurance - within the scope covered by NFZ contracts or agreements within the hospital network: primary healthcare, specialist services, and outpatient and inpatient services.
- State budget - specialized medical procedures, health policy programs, medical rescue, public blood service, sanitary inspection, and part of health insurance contributions for persons not earning an income.
- Local government units - organization of healthcare at the local and regional level, including financing investments and further financing of independent public healthcare facilities generating a loss.
- Private expenditures - direct purchases of medications and health services, purchase of commercial health insurance, financing of corporate health services, and the purchase of subscriptions for employees in private healthcare facilities [Kowalczyk, 2015, p. 142].

Management, financing, oversight, and control functions are divided between the Ministry of Health, the National Health Fund (NFZ), and local governments. In Poland, the main public entity responsible for the organization of healthcare is the NFZ. It is a state organizational unit that handles the financing of health services within the universal healthcare system. It is the only entity authorized to manage money from health insurance contributions. The NFZ finances health services and contracts them with public and non-public providers. Supervision over the activities of the NFZ is exercised by the Ministry of Health, while supervision in the field of financial management is exercised by the Ministry of Finance. Furthermore, the Ministry of Health is responsible for setting health policy, financing and implementing health programs, financing selected highly specialized services and larger investments, scientific research, and training medical personnel. It also performs numerous supervisory functions, as well as (in relation to some entities) direct management functions. At every level of territorial administration, local government authorities are responsible for identifying the health needs of their residents, planning the supply of health services, health promotion, and—in relation to public healthcare units for which they are the founding bodies—performing certain functions related to managing facility personnel, financing investments, and supervisory and control functions in this regard (Zarys system ochrony zdrowia, 2012).

Every elderly person using health services provided by the Polish healthcare system, regardless of whether they are healthy or sick, exercises patient rights. Specifically, they have the right to:

- Health services consistent with current medical knowledge.
- Information about their health status.
- The right to report adverse effects of medicinal products.
- The preservation of confidentiality by persons providing health services regarding their treatment.
- Expressing consent or refusal for health services.
- Respect for intimacy and dignity, especially during the provision of health services.
- Access to medical documentation regarding their health status and provided health services.
- Submitting an objection to a doctor's opinion or decision.
- Respect for private and family life.
- Pastoral care in a medical facility performing therapeutic activities in the form of inpatient and 24-hour health services.
- Storing valuables in the medical facility's deposit [Ustawa z dnia 6 listopada 2008 r. o prawach pacjenta i Rzeczniku Praw Pacjenta (Dz. U. 2024, poz. 581)].

It should be emphasized that the legislator in Poland has treated geriatrics as one of the priority fields of medicine (Rozporządzenie Ministra Zdrowia z dnia 27 grudnia 2022 r. w sprawie określenia priorytetowych dziedzin medycyny (Dz. U. 2024, poz. 791)). This is because long-term health problems deepen with age.

3. The Process of Population Aging and Its Consequences

The aging of the population means an increase in the proportion of elderly people while simultaneously decreasing the proportion of children. Since 2013, a natural decrease has been observed in our country resulting from the continued low number of births with a simultaneous slight but systematic increase in the number of deaths resulting from the increase in the number and percentage of elderly people (Cierniak-Piotrowska et al, 2026, p. 13). The death rate in 2024 remained at a level comparable to 2023 and amounted to 10.9‰. In the total number of deceased persons, approximately 52% were men. The median age in 2024 was almost 77 years (73 years for men and 82 years for women), while in 2000 it was 73 years (69 years for men and 78 years for women, respectively). The result of transformations in demographic processes,

and primarily the birth depression observed over the past quarter-century, are changes in the number and structure of the population by age, i.e., the decline in the number of children (0-14 years) observed until 2015 and since 2022, and the continuous growth of the group of elderly people (65 years and older).

The group of people aged 65 and older is constantly growing; in 2024, it increased by 175,000 people to over 7.7 million, which constitutes 20.6% of the total population (in 1990, elderly people constituted 1/10 of the population). This is due to the shifting into the elderly population of increasingly numerous cohorts born in the 1960s. For this reason, the number of people in the so-called adult age (15–64 years) has been decreasing for several years (Cierniak-Piotrowska et al, 2025, p. 39).

Therefore, the process of aging of the Polish population is accelerating. This is indicated by trends in changes regarding the share of the post-working age population (women - 60 years and more, men - 65 and more). In the years 2000-2024, the size of this community increased by over 3 million to 8.9 million, and its percentage increased in this period from less than 15% to almost 24%.

In the case of this age group, the difference in shares in the general populations of cities and villages is as much as 5.1 percentage points. In 2024, in cities, the percentage of the post-working age population increased to 25.8%, and in rural areas to 20.7%. Regional diversification is slightly smaller—the oldest in 2024 was the Świętokrzyskie voivodeship with a share of people in post-working age over 26%, while the smallest percentage (less than 22%) was recorded in the Małopolskie and Pomorskie voivodeships. The increase in the number of people in post-working age is influenced by the increase in the size of the group of people in old age (80 and more years). In 2000, the group of people reaching this age numbered 774,000 (2% of the total population), and in 2024 already over 1.6 million and constituted 4.3% of the total population of Poland. This more than twofold increase in this period is mainly due to the extension of life expectancy. Significantly more of the oldest people live in cities; in 2024, they constituted 4.8% of residents, and in the countryside 3.6% (Cierniak-Piotrowska et al, 2025, p. 41).

Population projections show that the aging process will deepen further and we will become one of the oldest societies in Europe. All considered scenarios—both the current population projection and experimental ones taking into account presented changes in demographic components—predict a systematic decline in Poland's population. All demographic projection scenarios predict that by 2060, the number of people aged 65 and older

will increase compared to 2022. The largest increase is estimated in the high scenario (by half), in the medium scenario (by nearly 37%), and in the low scenario (by 22%). Women aged 60 and more in 2060 will constitute 21.7% of the total population of the country, and men will constitute 16.7%. The share of women aged 60 and more in the female population will increase from 29.5% in 2023 to 41.7% in 2060, and for men, this indicator will increase from 22.8% in 2023 to 34.7% in 2060 (Potyra et al, 2023, p. 36).

As indicated, the processes of population aging will be significantly varied territorially, which will affect the scope of activity of individual local government units responsible for meeting the basic needs of local elderly communities, especially in healthcare. The extension of average life expectancy and the growing population of elderly people (Kamińska-Gawryluk, 2022, p. 25), mean that the problem of meeting the health needs of the older population is becoming increasingly visible, and the needs are becoming universal.

Despite the relative improvement in the health status of elderly people in Poland over the last two decades, the population of elderly people experiencing various limitations resulting from poor health is growing. This has a significant impact on the increase in demand for services from the healthcare system (Sowa-Kofta, 2023, p. 202).

As is known, the problem of deteriorating health is inherently associated with population aging. Therefore, elderly people constitute a group of special concern in the field of health protection. A significant part of seniors generally evaluates their health as "so-so, neither good nor bad". In 2024, 47.2% of people aged 60 and more described their health in this way (compared to 47.9% in the previous year). Among seniors, men rate their health status better than women. Good or very good health according to their own assessment was held by 36.0% of men and 31.0% of women. Significant differences in the self-assessment of health of people aged 60 and older can also be seen considering the place of residence. 33.8% of city residents and 31.9% of rural residents rated their health as good or very good (Wyszkowska et al., 2025, p. 51).

In 2024, nearly 35.1% of people aged 16 and older complained of long-term health problems or chronic diseases lasting for 6 months or longer (or predicted to last that long). Among elderly people, 62.0% indicated this type of ailment (compared to 63.2% in 2023). Women signaled this type of problem more often than men (64.1% and 58.9%, respectively). Considering the place of residence of elderly people, city residents indicated such problems more often (62.7%) than rural residents (60.7%).

In 2024, less than one-fourth of Poland's residents aged 16 and older had a limited ability to perform activities due to health problems lasting at least the last 6 months. Among elderly people, this percentage was almost twice as high and amounted to 42.0%. In 2024, seriously limited ability to perform activities concerned 12.7% of seniors, while limited but not too seriously concerned 29.2%. No limitations were indicated by 58.0% of senior citizens. Men aged 60 and more rated their fitness better than women; among men, the percentage indicating no limitations in performing activities was 60.7%, while among women, it was 56.2%. The percentage of people with limitations increases with age; in the group of 80 years or more, more than half of the population (53.9%) had such limitations (Ochrona zdrowia w gospodarstwach domowych w 2023 r., 2024, p. 3).

People with limited fitness more often experience long-term health problems or chronic diseases and must use medical help more often.

Elderly people signal the occurrence of chronic diseases much more often than younger people. In 2024, seriously limited ability to perform activities concerned 12.7% of seniors, while limited but not too seriously concerned 29.2%. No limitations were indicated by 58.0% of senior citizens. Men aged 60 and more rated their fitness better than women; among men, the percentage indicating no limitations in performing activities was 60.7%, while among women, it was 56.2% (Wyszkowska et al., 2025, pp. 51-52).

The frequency of long-term health problems clearly increases with advancing age. Chronic conditions have a cumulative character—their number and intensity increase over the years, leading to a deterioration of the body's overall condition. Consequently, they become an important factor limiting the ability for independent functioning and satisfying basic life needs. At the same time, they cause a significant increase in the demand for various health and care services.

For this reason, elderly people constitute a special group requiring support in the healthcare system. Their situation is additionally shaped by socio-economic changes that contribute to an increase in health awareness and expectations regarding the quality and availability of medical services. Simultaneously, the dynamic development of medical knowledge, new technologies, and treatment methods makes it possible not only to extend life but also to improve its quality.

As a result, an increase in expectations toward the healthcare system is observed, manifesting in increasingly strong pressure on access to services—not only life-saving ones but also those improving the comfort of daily functioning, such as rehabilitation, long-term care, or

the treatment of chronic diseases. Sometimes this leads to the formation of entitled attitudes resulting from the conviction of a right to a wide range of health services. At the same time, it should be emphasized that meeting the health needs of the elderly constitutes a serious challenge for the healthcare system. Services directed at this group are usually expensive, long-term, and require a comprehensive approach, including treatment, care, and social support. In connection with the process of population aging, this problem is gaining importance, becoming one of the key challenges of modern health policy.

4. Health Services for the Elderly

The frequency of using medical services depends on both the individual approach to taking care of health and the current state of health, especially in the case of treatment services. People struggling with health problems—regardless of whether they are chronic or temporary—show a greater demand for medical care and thus use it more often than people in good health.

Consequently, it can be stated that elderly people, who more often experience various types of ailments, constitute a significant group of patients in the healthcare system. They are numerous in both outpatient facilities and units providing inpatient care, which further emphasizes the growing importance of this group for the functioning of the entire healthcare system.

The growing demand for long-term care services is a trend in every aging society in the world; however, a particularly dynamic growth should be expected in Poland. This is influenced by factors mentioned in the previous section and transformations of the family model resulting in a growing number of single-person households. Hence, an important form of inpatient healthcare directed in particular at the elderly is long-term care, which plays an increasingly important role in the face of the progressive process of population aging. Long-term care facilities include nursing and residential care facilities with a general profile and nursing and residential care facilities with a psychiatric profile. In 2024, there were 618 of them in total. As of December 31, 2024, people aged 65 or more residing in such facilities constituted 82.0% of patients (32.3 thousand people), which was 2.0% more than in the same period of 2023. In the discussed age group, the largest increase concerned patients aged 75–79—by 2.1% (115 people) more than a year earlier (Zdrowie i jego ochrona w 2024 r., 2025, p. 79).

Another form of help for the elderly consists of hospices and palliative care units providing interdisciplinary care for patients in the terminal phase of their lives. Palliative and hospice care services are comprehensive, holistic care and symptomatic treatment for

beneficiaries suffering from incurable, non-responsive to causative treatment, progressive, life-limiting diseases. This care is aimed at improving quality of life, aiming to prevent and relieve pain and other somatic symptoms, and alleviating psychological, spiritual, and social suffering (Rozporządzenie Ministra Zdrowia z 29 października 2013 r. w sprawie świadczeń gwarantowanych z zakresu opieki paliatywnej i hospicyjnej (Dz. U. 2022, poz. 262)).

In 2024, there were a total of 236 facilities of this type. Analysis of the age structure of people staying in these facilities indicates that 82% of patients (32.3 thousand) are people aged 65 and over (Zdrowie i jego ochrona w 2024 r., 2025, p. 79). Long-term care and hospice-palliative facilities had a total of 44.4 thousand beds in 2024 and provided care in inpatient conditions to 118,000 people. In addition to inpatient activities, some facilities also conduct home and/or day activities.

The use of inpatient healthcare is linked to the health status of residents and the age structure of the population. In inpatient care, geriatric wards provide comprehensive medical care and nursing services to elderly people. The number of these wards in 2024 was 66. With age, the intensity of chronic diseases and long-term health problems increases, and self-assessments of health status deteriorate. Relatively most often hospitalized are elderly and very old people. In 2023, 15.3% of people aged 70 or more stayed in inpatient healthcare facilities, while the lowest hospitalization rate (4.5%) occurred among people aged up to 24. Among adults, the number of hospitalizations increases with age and, in older age groups, is higher among men than women. Among men aged 70 or more in 2023, 18.2% were in a hospital or other inpatient care facility. Among women in the same age group, the percentage was lower and amounted to 13.5% (Ochrona zdrowia w gospodarstwach domowych w 2023 r., 2024, pp. 37-38). The reasons for this state of affairs can also be sought in the more frequent neglect of their health by men during their years of full professional activity.

Furthermore, in recent years, a significant increase in the frequency of using cardiology, ophthalmology, and diabetes services in the group of patients aged 55 and over has been observed. For patients over 70 years old, internal medicine hospitalizations begin to dominate, accounting for almost half of all hospital stays. It should also be noted that over the age of 80, every second Pole requires a hospital stay at least once a year. Projections show that over the next dozen or so years, demographic changes in Poland will increase the demand for hospital services used by the older part of the population. This will particularly concern treatment in internal medicine, cardiology, and surgical wards, as well as in ophthalmology (Prognoza korzystania ze świadczeń szpitalnych finansowanych przez Narodowy Fundusz Zdrowia w kontekście zmian demograficznych w Polsce, 2016, p. 7).

Seniors also use spa treatment more often than younger people. In 2024, 500.5 thousand spa treatment patients aged 65 and over were recorded, who constituted 56.6% of all spa patients. After excluding foreigners treated as inpatients, the number of spa patients aged 65 and more was 477.3 thousand. The percentage of people using spas in the elderly population was 6.2%, while among younger people, it was 1.2%. The largest number of people aged 65 and over used spa treatment in the Kujawsko-Pomorskie (23.6%) and Zachodniopomorskie (22.1%) voivodeships, while the smallest number was in the Łódzkie voivodeship (0.2%). In three voivodeships—Lubuskie, Opolskie, and Wielkopolskie—there were no spa facilities located. In 2024, 65.6% of spa patients aged 65 and over used NFZ financing or co-financing, and 32.2% paid for their treatment themselves. The remaining 2.2% used financing or co-financing from ZUS, KRUS, PFRON, or other institutions (Wyszkowska et al., 2025, p. 50).

However, primary healthcare plays a fundamental role in the care of the elderly because the primary care physician, knowing the patients and their living conditions, can properly direct their care. For an elderly person, the basis of diagnosis and treatment is conducting a comprehensive geriatric assessment, which evaluates fitness in activities of daily living. Among the consultations provided by primary care physicians and family doctors in cities, 36% were for people aged 65 and more. In the countryside, the share was similar at 35.4% (Zdrowie i jego ochrona w 2024 r., 2025, p. 113). An upward trend can be observed, and the share of consultations provided to people aged 65 and over was 15.6 percentage points larger than the share of this age group in the population. The average number of consultations in primary healthcare per 1 resident in Poland in 2024 was 5 consultations, while for people aged 65 and over, the indicator was 8.8 consultations (Informacja o sytuacji osób starszych w Polsce za 2024 rok, 2025, p. 43).

Care for the elderly is also implemented at the level of specialist counseling. Representatives of various medical specialties participate in their treatment. For typical problems with vision and hearing, ophthalmologists, otolaryngologists, and surgeons are needed. The growing number of cancer cases typical for old age (e.g., gastrointestinal and prostate cancer) increases demand for gastrologists, urologists, and oncologists. Neurological diseases such as Parkinson's, Alzheimer's, and multiple sclerosis also require neurologists (Halik, 2002, p. 122). In specialist consultations, elderly people constituted 30.9% of all beneficiaries. Their share ranged from 25.2% (Mazowieckie voivodeship) to 37.8% (Świętokrzyskie voivodeship) (Zdrowie i jego ochrona w 2024 r., 2025, p. 117). Over 70% of

the elderly population has been treated by specialist doctors within the last 12 months. People aged 70-79 used specialist consultations most frequently.

In 2024, 3,153,700 people used health services provided within the State Medical Rescue system out-of-hospital, of which 1,593,600 were aged 65 and over (50.5%). Furthermore, 4,093,000 people used services in the emergency room or hospital emergency department (SOR) in outpatient mode. People aged 65 and more constituted almost 25% of this group consultations (Informacja o sytuacji osób starszych w Polsce za 2024 rok, 2025, p. 47).

The frequency of providing services to an elderly person results more from supply impact (provider capabilities and insurance reimbursement) than from the actual needs of the patient. There are also medically unjustified restrictions on access of elderly patients to modern medical technologies due to uneven regional distribution (Gałuszka, 2013, p. 95).

Defining the basic forms of health services for elderly people requires remembering the specificity of morbidity in this age group. Optimal forms of care should be determined by the tasks they must fulfill, including for the large population of disabled people.

5. Conclusions

When analyzing the health needs of the elderly, one should take into account quantitative changes, the pace of these transformations, and significant qualitative changes. The dynamics of demographic processes are reflected in a wide spectrum of consequences. This phenomenon has a direct impact on the functioning of the healthcare system, generating a growing demand for medical services and long-term care. Consequently, it becomes necessary to increase financial expenditures on health protection while directing them rationally. Special emphasis should be placed on the development of diagnostics and prevention. An important challenge is also ensuring integrated and coordinated healthcare for elderly people who often have co-occurring conditions. This requires a comprehensive approach involving the cooperation of various specialists and institutions. Systemic changes and appropriate financing mechanisms are necessary.

References

Act of 27th August 2004 on health care services financed from public funds (Journal of Laws. 2025, item 1461).

Act of 15th April 2011 on medical activities (Journal Laws 2026, item 156).

Act of 6 November 2008 on patients' rights and the Patient's Rights Ombudsman (Journal of Laws 2024, item 581).

Cierniak-Piotrowska M., Dąbrowska A., Miniatorska E., Potocka M., Stelmach K., Włodarska A. (2025): *Sytuacja*

demograficzna Polski do 2024 r. ZWS GUS, Warszawa.

Cierniak-Piotrowska M., Dąbrowska A., Potocka M., Stelmach K., Włodarska A. (2026): *Ludność. Stan i struktura oraz ruch naturalny w przekroju terytorialnym w 2025r*. ZWS GUS, Warszawa.

Gałuszka M. (2013): *System opieki zdrowotnej w Polsce wobec potrzeb seniorów: priorytety, racjonowanie i dyskryminacja ze względu na wiek*. Przegląd Socjologiczny, vol. 62 nr 2.

Halik J. (2002): *Zdrowotne skutki starzenia się społeczeństwa polskiego.* W: *Starzy ludzie w Polsce*. Praca zbiorowa pod red. J. Halika, Instytut Spraw Publicznych, Warszawa.

Kalbarczyk M., Mackiewicz-Łyziak J. (2019): *Physical Activity and Healthcare Costs: Projections for Poland in the Context of an Ageing Population.* Applied Health Economics and Health Policy, vol. 17.

Kamińska-Gawryluk E. (2022): *Osoby starsze w ujęciu statystycznym i terytorialnym.* W: *Niesamodzielna starość.* Red. J. Hryniewicz, M. Halicka, ZWS, Warszawa.

Kowalczyk M. (2015): *Ochrona zdrowia w Polsce w latach 1999-2015*. Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie, nr 20.

Kiedik D. (2025): *System ochrony zdrowia*. W: *Edukacja zdrowotna.* Red. J. Grzebieluk, A. Basiak-Rasała, B. Grabowska. UM, Wrocław.

Kurek S. (2011): *Double transitions? regional patterns of population ageing in Poland*. Geografiska Annaler: Series B, Human Geaography, vol. 93.

Kolbarczyk M, Mackiewicz-Łyziak J. (2019): *Physical Activity and Healthcare Costs: Projections for Poland in the Context of an Ageing Population.* Applied Health Economics and Health Policy, vol. 17.

Nizioł K., Peno M. (2024): *Zdrowie i prawo – socjologiczno-prawna analiza systemu ochrony zdrowia w Polsce.* US. Szczecin.

Ochrona zdrowia w gospodarstwach domowych w 2023 r. (2024): ZWS GUS, Warszawa-Kraków.

Polak P., Świątkiewicz-Mośny M., Wagner A. (2019): *Much Ado about nothing? The responsiveness of the healthcare system in Poland through patients' eyes.* Health Policy, vol. 123.

Potyra M., Góral-Radziszewska K., Waśkiewicz K., Gawińska-Drużba E. (2023): *Prognoza ludności na lata 2023-2060*. ZWS GUS, Warszawa.

Prognoza korzystania ze świadczeń szpitalnych finansowanych przez Narodowy Fundusz Zdrowia w kontekście zmian demograficznych w Polsce (2016): NFZ, Warszawa.

Regulation of the Minister of Health of 27 December 2022 on the designation of priority areas of medicine (Journal of Laws of 2024, item 791).

Regulation of the Minister of Health of October 29, 2013 on guaranteed services in the field of palliative and hospice care (Journal of Laws of 2022, item 262).

Sowa-Kofta E. (2023): *Rozwój usług pomocy i wsparcia dla seniorów oraz opiekunów osób niesamodzielnych.* W: *Pandemia a seniorzy. Wyzwania-działania-rozwiązania*. Pod red. E. Bojanowska, R. Czekalski. WKSW, Warszawa.

Tobis S., Jaracz K.,Kropińska S., Talarska D., Hoe J., Wieczorkowska-Tobis K, Suwakska A. (2021): *Needs of older persons living in long-term care institutions: on the usefulness of cluster approach.* BMC Geriatrics, vol. 21.

Wrotek M., Kolbarczyk M. (2023): *Predictors of long-term care use - informal home care recipients versus privateand public facilities residents in Poland.* BMC Geriatrics, vol. 23.

Wyszkowska D., Gabińska M., Romańska S. (2025): *Sytuacja osób starszych w Polsce w 2024 r.* ZWS GUS, Warszawa, Białystok.

Zarys systemu ochrony zdrowia (2012): NFZ. Warszawa.

Zdrowie i jego ochrona w 2024 r. (2025): ZWS GUS, Warszawa-Kraków.