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Retirees' Healthcare Needs and Satisfaction with their Coverage

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Abstract:

Purpose: *The main objective of the paper is to assess to what extent the health care needs of the retirees in Poland are satisfied and what role the private health insurance has and might have in satisfying these needs.*
Design/methodology/approach: *We use the data from Household Budget Survey (HBS) conducted yearly by Central Statistical Office as well as own database created on the outcomes of the survey carried out in 2018 on the representative sample of Polish seniors aged 65+ for whose households' the state old-age pension is the primary source of income.*
Findings: *Health care expenditures, according to the HBS database, accounted for almost 9,5% of total expenditures in the years 2005-2016. Differentiation of these expenses is also observed depending on the sex, age of the main respondent and place of residence. In the households of people at the age of 85 and more, they established as much as 12,9% of total spending. It was also found that only 8,9% of retirees' households had supplementary health insurance and most of them rarely use paid health-care services. At the same time, it should be noted that respondents most often indicated free access to medicines and supplementary health care services (rehabilitation) as the most valuable supplement to the health services system in Poland.*
Practical implications: *The analysis of health expenditures of households of retirees can become a basis for building strategies for companies that offer health care services and for financial institutions (insurance companies) that can prepare long-term health insurance products on this basis.*
Originality value: *The study showed the importance of spending on health by asking about the direction of spending a sudden cash inflow of 226.50 Euro (1000 PLN). It was found that the oldest seniors, those with lower education, widows and those from small towns were the most likely to spend the extra money on health, indicating a wide variation in demand for medical services.*

Keywords: *Ageing, health-care expenditures, private health insurance, retirees.*

JEL codes: *I10, I13, G52, H51.*

Paper type: *Research paper.*

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1. Introduction

Seniors will successively comprise a higher percentage of the Polish population, which is a result of the dynamics of population ageing: increases in average life expectancy and simultaneous low fertility rates. According to the AWG2018 demographic projections, percentage of persons aged 65 or more in Poland will double from 16% in 2016 to 33% in 2060 and seniors aged 65+ will represent over 10 million persons (European Commission, 2017). The share of seniors aged 80+ will increase from 4% to 16%, which accounts for 5 million persons (Ibidem). These quantitative and structural changes will highlight social characteristics of ageing, such as feminisation, singularization and longevity (Błędowski, 2012). An effect of materialisation of the social characteristics of ageing will be a change in demands of the future seniors for healthcare and long-term care, among others.

Public spending on health during the last two decades in Poland is stable and accounts for 4.5% of GDP, including 0.4% of public spending on long-term care (OECD, 2019). The level of public spending on health is almost twice less than EU's average (European Commission, 2018). The Polish health-care system is "a heavily regulated public system, in which the budget constraint is particularly stringent, restricted sub-national government autonomy and limited "over-the-basic" insurance coverage" (Bouhol *et al*., 2012). It means that the needs of seniors related to the health and long-term care may not be satisfied.

In this paper, we aim to evaluate the share of the health-related expenditures in the household's budgets of retirees and to assess to what extent the health-care needs are satisfied. We also assess the role of private health insurance in satisfying these needs. The paper comprises of six sections. In section two, we discuss health spending on the macro level and analyse the determinants of healthcare and long-term care spending. Section three presents the trends in health-care spending of one-person households of retirees, considering different types of households by sex, age group and the place of residence. The analysis is based on the Household Budget Survey (HBS) conducted yearly by the Central Statistical Office of Poland on the representative sample of Poles. In section four, using own database being the result of the personal interviews with the questionnaire carried on in 2018 on the representative sample of retirees aged 65 and more, we address the issue of the retirees' healthcare needs and satisfaction with their coverage. Section five presents the utilisation of the health-related private insurance. We also search for the features of such insurance in opinions expressed by the respondents and assess the financial burden for such private insurance. Section six concludes.

2. Ageing Populations and Healthcare Spending

Over the last decades, health-related spending increased considerably in most of the developed countries (Huber, 1999). During 1970-2018 in OECD countries, the total health-care spending almost doubled, reaching levels of 8-10% GDP (OECD,

2020). There are several reasons for such an increase in health-related spending in the most developed countries. Firstly, it is increased longevity and secondly the expansion of the costly technology in medicine (Zweifel *et al*., 1999; Zweifel *et al*., 2005; Breyer *et al*., 2010), which is considered by aforementioned authors as having major influence on health care expenditures.

However, there are countries like Latvia, Poland, Estonia, and Hungary in which the health-related spending is close to 6% of GDP, and public health-care spending accounts for 3.5-4.5% of GDP (Ibidem). It put a question of the extent to which the health-related needs, especially of those who are most needy – older people – are satisfied. One of the main challenges for the health-care systems is whether people will age in good health. Good health has different sources. Increase in lifespan derives from the decrease in perinatal mortality, immunization of the human body mainly by vaccines, changes in lifestyle and nutrition, and development of health-care systems and restorative medicine (Wanless, 2004; Ratzan, 2001) from the good response to climate change (Sellers and Ebi, 2018). WHO distinguishes three overarching objectives of the health care system, that is: ensuring the health of the population, satisfying the needs of patients as part of using the services of health-care system entities, and collecting funds for the implementation of the tasks of the health-care system (WHO, 2014; Kieny *et al*., 2017) or in the use of modern technologies (Jandoo, 2020).

We understand the improvement in health literally as extending the life and reducing disease burden with respect to the whole population (Barr, 2001). The financial goal of health care is, therefore, to minimize cases in which the patient, due to poor health, must incur expenses exceeding their abilities (WHO, 2000) or to resign from health-related expenses.

As the results of different research show, the neediest in terms of healthcare are retirees, people with poor health, with lower levels of education (Tille *et al*., 2017). In the EU countries health-care expenditure increase on average from the ages of 55 and more for men and 60 and more for women (European Commission, 2018). Due to the sustainability pressure over public finance systems, the further growth of public health-related expenditures may be at risk. According to the latest European Commission projections (2018), in countries like Poland it may account only for 1 p.p. of GDP. It means that the access to health services and goods offered by the public sector may be limited and the increase in individual responsibility of the access to health-related goods and services may be needed. The awareness of the health-related needs in the elderly ages seems to be limited. There is an evidence, that even in developed and market-orientated social protection systems, the retirees underestimate their health care needs (Chambers *et al*., 2019). In countries like Poland, the additional burden for providing the satisfactory access to health-related goods and services is of the financial nature (decrease in replacement rates of public old-age pensions and low savings).

The current Polish health-care system is the effect of reforms between 1989 and 1998, and further changes in 2004, which aimed at the switch from universal coverage and state budget financed into the public health insurance system. It was assessed as "low spending, a heavily regulated public system with a stringent budget constraint, restricted sub-national government autonomy and a thin private insurance market" (Bouhole *et al*., 2012). The primary public payer in the health-care system is the National Health Fund. It keeps the public spending on healthcare on the level of 4.5% of GDP (one of the lowest among the EU's member states), while overall health-related spending accounts for 6.5% of GDP. Public health-care service in Poland offers services that are part of the so-called guaranteed benefits package. "It mainly includes primary care services, outpatient specialist care, hospital treatment, supply of medicinal products and medical devices, rehabilitation, emergency medical services, preventive and health programs, psychiatric treatment and addiction, therapeutic oncological and non-oncological drug programs, services highly specialized " (Magda and Szczygielski, 2011).

Besides, the basket includes services financed partially, such as dental services, some medicines, and sanitary transport. Non-guaranteed procedures are placed outside the basket, e.g., plastic surgery (except for reconstructions after serious accidents), some vaccines, periodic testing of drivers, in vitro fertilization, sports medicine, and transport medicine, including preliminary and periodic drivers of motor vehicles (Filinson *et al*., 2003). In addition to the National Health Fund, the out-of-pocket direct expenditure of households is of great importance in financing health care, among which private health insurance, unfortunately, plays a marginal role. Over 90% of Poles in 2013 used the services financed by the National Health Fund, but more than half were also forced to make out of the pocket expenses for the health-care services (Table 1).

Table 1. *Percentage of households, in which healthcare services were used according to the source of financing services*

Year of Examination	Public funds	Private funds	Medical subscription
2000	86,4	38,6	4,9
2003	89,6	35,6	4,5
2005	91,2	37,4	4,3
2007	92,4	44,0	5,0
2009	92,0	49,0	5,1
2011	91,3	49,2	6,5
2013	92,4	50,6	7,0

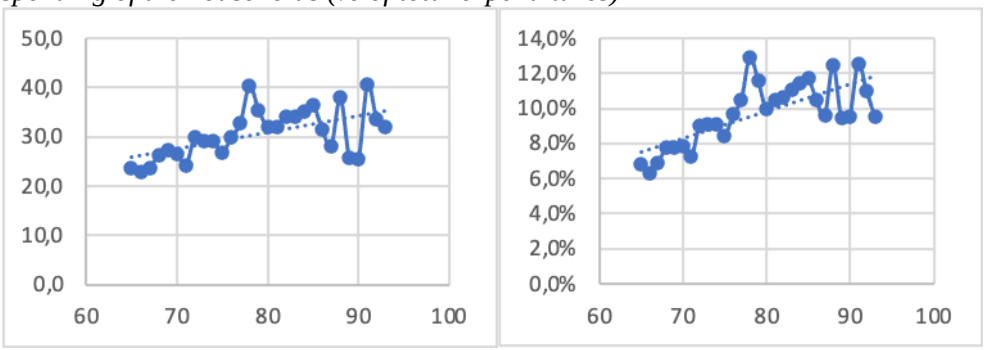
Source: *Own work based on Czapiński and Panek (ed.), (2013)*.

However, the primary disadvantage of the public system - lack of access to benefits - arouses interest in private insurance. The private health insurance market in Poland is associated with the existence of, apart from classic health insurance (supplementary health insurance), para-insurance institutions, i.e., medical subscriptions. Considering the Social Diagnosis study, 7% of households used medical subscriptions (Czapiński and Panek (ed.), 2013). It should be noted that by far the most medical subscriptions were sold in the households of people with the highest incomes, living in large cities.

3. Retirees' Households Spending on Healthcare

For more in-depth analysis of the retirees' household's health spending, we use the data from the Household Budget Survey (HBS), carried on yearly by the Central Statistical Office. We concentrate on the households of retirees aged 65 and more, that is households, whose exclusive or primary (prevailing) source of income is an old-age pension. Spending on healthcare of households with its head aged 65 accounted for c.a. 25 euros (100 PLN), and almost doubled where the head of the household reaches the age of 80 (Figure 1). Similar properties can be observed by analyzing the importance of health-related expenditure in the structure of total household expenditure, wherein some types of households' health expenditure exceeded 12% of total spending. Nevertheless, the lack of unequivocal dynamics in the analyzed trends indicates, that in many cases, we are dealing with an increase in expenditure, which may be random and result from a sudden illness or accident. This clearly indicates the possibility of building an appropriate insurance product in this respect, where the possible premium tariff will consider the randomness of cases.

Figure 1. *Average health-related expenditures (in euro) and its share in the total spending of the households (% of total expenditures)*



Note: ** Exchange rate according to NBP average exchange rate table No. 1/A/NBP/2017 of 02-01-2017 - 1 euro = 4.4157 PLN*
Source: *Own elaboration based on Household Budget Survey in 2016 (CSO 2017).*

To concentrate only on retired persons' expenditures (not an average expenditure of the retiree's household member), we further extracted the one-person households

of retired women and men, living in the urban and rural areas at given age groups (representing different stages of ageing) in the year 2016.

In general, the number of monthly expenditures between retiree's household at age groups decreases with age and is higher in men's households. It results from different methods of calculation of old-pension benefits, different wage levels and length of the working career, as well as its further valorisation. The oldest participants of the survey might have retired more than 30 years ago.

The analysis of the portfolio of expenditures in the single-person households of retirees shows that health-care spending is one of the major positions, accounting on average for 9% of the overall budget. When we compare the structure of the expenditure's portfolio of the single-person household of women (Table 2) and a single-person household of men (Table 3), we can observe several regularities. First, the increase in health-related expenditures doubles between the second (75-84) and first category of age (65-74) and then stabilizes[3]. One of the possible explanations might be the lack of financial resources to cover all needs (see section 4). Presented data confirm, that the health-care expenditures in women's budgets are higher than in men's budgets. The more detailed analysis of the health-related expenditures would reveal, that in two-person households of men, the increase in health expenditures is progressive (over proportionate).

***Table 2**. Health-care expenditures in retired women's household budgets in 2016*

Characteristics of retiree's household	Households of retired women (one-person)					
	Urban area			Rural area		
	Age groups					
	65-74	**75-84**	**85+**	**65-74**	**75-84**	**85+**
Total expenditures (in euro), including:	387,25	359,85	350,34	310,71	293,72	254,32
Health-care expenditures (in euro)	30,12	40,99	39,86	29,67	34,65	33,97
Share of health-care expenditures in total expenditures (in %)	7,75	11,38	11,40	9,52	11,76	13,40

***Note:** * Exchange rate according to NBP average exchange rate table No. 1/A/NBP/2017 of 02-01-2017 - 1 euro = 4.4157 PLN*
***Source:** Own elaboration based on Household Budget Survey in 2016 (CSO 2017).*

***Table 3.** Health-care expenditures in retired men's household budgets in 2016*

Characteristics of retiree's household	Households of retired men (one-person)					
	Urban area			Rural area		
	Age groups					
	65-74	**75-84**	**85+**	**65-74**	**75-84**	**85+**
Total expenditures (in euro), including:	437,08	421,68	413,98	357,59	297,35	357,59

[3]*Apart from the households of women and men of age 85+ living in rural areas, where it slightly increases.*

Health-care expenditures (in euro)	21,74	33,97	33,29	20,16	25,14	31,93
Share of healthcare expenditures in total expenditures (in %)	4,99	8,08	8,05	5,61	8,49	8,92

Note: ** Exchange rate according to NBP average exchange rate table No. 1/A/NBP/2017 of 02-01-2017 - 1 euro = 4.4157 PLN*

Source: *Own elaboration based on Household budget survey in 2016 (CSO 2017).*

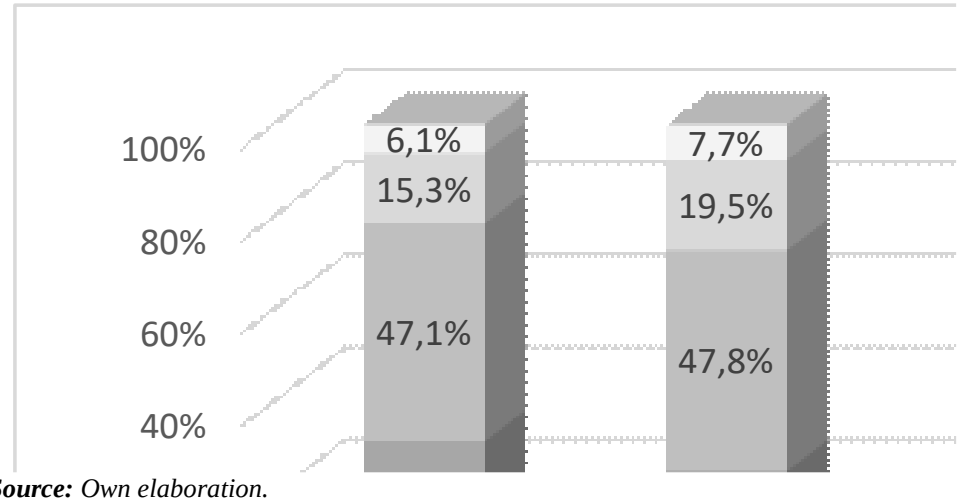
However, it should be noted that in many cases the structure of household spending does not reflect the actual demand for a particular type of service. This is particularly true for healthcare expenditure. Czapiński and Panek (2013) indicated, that over 18% of respondents gave up buying medicines due to lack of cash (in households where the head of the family was 60 years old or more, the resignation rate was over 22 %).

4. Retirees' Healthcare Needs and their Fulfilment

To assess whether the health-related needs of seniors are fulfilled, we use the data from our own research carried out in 2018 on the representative sample of Polish seniors aged 65+ for whose households' the state old-age pension is the primary source of income (1,500 pensioners who retired between 1980's up to 2018). The research was conducted in a form of personal interview with the questionnaire, including questions related to the healthcare needs and their fulfilling.

We asked the respondents to self-assess the status of their health. The results are visible on the Figure 2. Older seniors often reported more miserable state of health (bad or rather bad). Among persons aged 85+, these responses accounted for more than 55%. In the total sample, more than 25% of respondents indicated bad or rather bad health.

Figure 2. *The self-assessed health status by retirees aged 65 and more*



Source: *Own elaboration.*

While asked about the frequency of usage of medical services within public health-care insurance system in the last 12 months, only 9% of respondents declared that they did not use it. 18% of respondents declared 1-2 visits and the rest (over 72%) more than two medical visits during the last 12 months. As age increases, the utilization of public health-care services grows, which is an expected result.

To analyse the uncovered needs of retirees, we asked in the questionnaire about the allocation of unexpectedly donated cash (226,50 euro - 1000 PLN) for different purposes. In terms of health-related expenditure, the share of respondents indicating using the amount for this type of expenses increased by age (Table 4).

Table 4. *Share of the donated cash of 226,50 euro (1000 PLN) that would have been allocated to health-care expenses by retirees*

Sociodemographic features of respondents	Categories of respondents	Percentage of response
Gender:	Woman	29,4%
	Man	26,1%
Age groups:	65-74 years	22,7%
	75-84 years	27,5%
	85 and more years	60,6%
Education level:	primary	45,0%
	basic vocational	38,0%
	secondary	26,4%
	post-secondary	30,3%
	tertiary	21,1%
Marital status:	single	18,8%
	married	26,0%
	in a partnership	25,0%
	widow / widower	33,0%
	divorced	5,6%
Place of residence:	city with over 500,000 inhabitants	22,1%
	city with 200-499 thousand inhabitants	23,9%
	city with 100-199 thousand inhabitants	24,8%
	city with 20-99 thousand inhabitants	19,8%
	city with less than 20,000 inhabitants	40,4%
	village	29,8%

Source: *Own work.*

As showed in Table 4, the demand for the additional financial resources for health purposes more than doubles in the group of the oldest respondents (it reaches 60% of responses in this age group). Slightly more women than men would allocate extra money for the health-related purposes. Considering the marital status, the highest needs (33%) were noticed among widowed persons. The size of the community also played a role: the highest response rates for utilizing the extra money for health purposes characterized retirees living in small towns. With respect to the level of education, the interest in utilizing extra money for the health-

related purposes increases as the level of education decreases. It confirms the thesis, that the share of health-care expenditures in their households' budgets is limited by the lack of financial resources which are often the function of education.

5. Utilization of Supplementary Health Insurance by Retirees

Considering the growing demand for additional sources of financing benefits from the health care system, it is necessary to consider whether and to what extent households of pensioners are ready to use private insurance. Within our research, we asked respondents whether they have any private health insurance that might cover the health-care expenses. In the total sample, 9% indicated possessing such insurance, with the higher shares between the youngest retirees (aged 65-74). While asked from the perspective of time, what insurance product would be in their interest, respondents aged 65-74 showed the highest demand for the health insurances, while the oldest (75 years and more) pointed out the care insurance as the one more desired (63%).

We also asked about the interest of respondents in purchasing additional health-related insurance at a specific premium amount, up to c.a. 25 euro (PLN 100) and above 25 euro (PLN 100) per month. In the group of retirees, 21.9% of respondents showed interest in additional insurance (of which 18.7% was ready to pay a premium of up to 25 euro (PLN 100) and only 2.2% above 25 euro (PLN 100) per month. In other household types, except for retirees' households, the propensity to buy additional health insurance is higher than among pensioners (Czapiński and Panek, 2013).

Consequently, in the study, we also asked the question about how many respondents would be willing to pay monthly for insurance, which in the future (at the earliest after two years insurance period) would cover all expenses related to the necessary long-term care increased expenses on medicines or costs of purchasing rehabilitation equipment.

Table 5. *Interest in the new type of health insurance*

Age group	Specific amount provided	I am not interested in such insurance	I cannot afford any additional expenses for insurance
65-74	46,2%	24,1%	29,7%
75-84	38,5%	37,5%	24,0%
85 and more	33,3%	51,5%	15,2%

Source: *Own study.*

The results in Table 5 indicate interest in supplementary health insurance in the first age group of retirees (65-74 years). In the remaining groups, this interest was lower but still exceeded 30%. The average premium that the respondents would be

willing to pay was dependent on age. For persons aged 65-74, it was, c.a. 25 euro (PLN 100.78), for households aged 75-84 it was c.a. 30 euro (PLN 118.60), while in the oldest group of respondents the average was c.a. 20 euro (PLN 80.57).

6. Conclusion

The seniors in Poland will comprise a more significant part of the population. Singularization, feminization and longevity of the retirees' households of retirees bring concerns about the possibility to cover all primary need, including those related to the health and long-term care. Current health-care expenditures of the households of retirees amount up to 12% of the monthly budget. In the one-person households of retirees aged 75-84 they double in comparison to the households of younger retires (aged 65-74). At the same time, the healthcare and long-term care needs are not satisfied by the level of available public service and allocated private expenses. According to our research, more than 60% of the retirees aged 85+ reported, that if granted c.a. 250euro (1000 PLN) cash they would allocate it for health-related expenditures. The highest deficiencies in health-related expenditures were also reported by retirees with lowest levels of education, living in small towns and divorced. The private health and long-term care insurance are not developed, only a few per cent of retires (mainly aged 65-74 years) declare having such insurance.

The most significant barrier to the development of private health insurance in Poland is the lack of appropriate legislation, including tax incentives, which will include this type of insurance in achieving the goals of the health insurance system. The conducted research indicates that health expenditure is one of the essential pensioners' households in the structure of spending. Their variable nature and lack of planning mean that they may be both random in terms of quantity and quantity and should constitute the scope of additional health insurance. It should be emphasized that pensioners over the age of 65 are still ready to transfer part of their funds for health insurance and these older ones are particularly interested in long-term care insurance.

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