Summary: The article deals with the functioning of systems characterized by the compulsory possession of private health insurance. It provides a general overview of how health insurance operates in selected countries, i.e. Australia, the Netherlands and Switzerland. The attention has been paid to active participation in the promotion of compulsory private health insurance and the taking of specific actions aimed at strengthening their participation. It has been indicated that subsidies and obligatory purchase are the most effective tools for promoting them alongside supporting mechanisms such as the offering of standardized products by insurers, co-financing and the imposition of penalties as a fiscal mechanism. The paper presents the features of the systems, the possibilities of their financing through the use of state subsidies and the amount of expenditures for involuntary participation in the health insurance system in relation to GDP in the analyzed countries.

Keywords: health insurance system, private health insurance.
1. Introduction

Conducting the health policy and tackling the health problems of citizens is becoming increasingly challenging. Healthcare in different countries is considered one of the most important tasks of the state apparatus, and in some cases discussions on the place and role of commercial insurance in the health financing system and the need for changes and redevelopment of the systems are still ongoing. More and more countries are involved actively in the promotion of private health insurance through the need to offer standardized products, subsidized grants and the obligation to have such policies. As standardized products usually result in negative selection, the subsidies and the obligation to buy are the most effective tool for promoting private insurances, and the best bet is to combine them.

The aim of the article is to present the essence and basic models, and to compare the functioning of health insurance systems on the example of systemic solutions, which are obligatory to be covered by the universal health insurance of the general public. In pursuit of the main goal, the following objectives have been set:

1) discussion on the characteristics and a comparison of compulsory private health insurance systems on the example of three countries: Australia, the Netherlands and Switzerland;

2) showing the role of the state in financing, overseeing and enforcing compulsory health insurance policies and fiscal constraints affecting participation in the system of additional health insurance;

3) showing the amount of healthcare expenditure together with the presentation of the structure of this expenditure, taking into account the share of state funds in financing health insurance of a commercial nature.

Despite the fact that the analysis included only the health systems that are based on the participatory duty, it should be emphasized that these systems are quite diverse, in addition to coercive products, which may include additional voluntary health insurance or so-called financing of patients to extend protection. In addition, the amount of charges applied, penalties imposed, or government support mechanisms are heterogeneous in these models, hence the structure of the description and characteristics of the selected systems are also varied, as well as the size of funding for selected systems, both by the state and those interested in using health care.
2. The essence and models of health insurance systems

The main problem in the functioning of universal healthcare systems in social policy, both in Europe and in the world, is the issue of securing the right level of medical care and protecting the health of its citizens. Although public systems are often judged by them as insufficient and unsatisfactory, only a few countries are choosing such a bold solution as the introduction of compulsory health insurance. This type of system construction forces the entire society to have a health insurance policy, and in the case of lack of it a person receives a fine. The purpose of compulsory insurance is to increase the population covered by insurance and avoid the need to pay for the treatment of an uninsured person.

In the literature one often points out that the system of compulsory private insurance is only a tool for redistributing health resources between the generation of young and old members of the system [Austin, Hungerford 2010]. From the point of view of operating principles based on sources of funding, the following division of health systems is used [The management of health... 2012]:

a) the Beveridge model,

b) the Semashko model,

c) the Bismarck model,

d) the mixed model.

According to the Beveridge model, the system is funded using fiscal tools and it works most often as a national universal healthcare system. The same principle applies to systems according to the so-called Semashko model, where funding also comes through taxes, the healthcare is common, but the state has more control over funding and management.

The Bismarck-based healthcare system model is financed from contributions to the compulsory social security system. As a rule, they are systems where contributions are funded by employers and employees.

Mixed-model systems are also referred to as private health insurance systems, and their characteristic features are private contributions of participants in the system [Busse, Schreyögg, Gericke 2007].

Another classification based on the criterion of dominant public or private funding is the division of systems into health service providers, thus distinguishing [Przywara 2010]:

a) integrated public model which combines public funding with healthcare providers as state entities. Healthcare professionals are employed in the public sector, and providers are often private or independent contractors. This model facilitates widespread coverage and total cost as healthcare expenditure is included within the general limits of the state budget.

b) public contract model that is a combination of public funding with private healthcare providers (service providers) with which lower prices can be negotiated and better service quality offered;
c) private model which includes private insurers (service providers) with health insurance contracts, and therefore has the potential for the most adaptation to the needs of the scheme.

Taking together the criteria for funding, access to services and the nature of service providers, one can distinguish five models (OECD) [Böhm et al. 2013]:

1. The national healthcare system, which is most domiciled by the state, is financed by public funds and services are provided by public entities.
2. The universal health insurance system, where benefits are provided by contracted private-sector entities.
3. A system of social health insurance, which is not financed directly from taxes but from contributions collected under separate social funds, and services provided by contracted private entities.
4. A private health system that is fully dependent on private financing and the services are provided by private entities; it is based on private insurance or on private spending (from the pocket of recipients).
5. The universal social security system, which is regulated by legal norms, presupposes the existence of a separate fund, and services are provided by private entities based on contracts (like a model operating in Poland).

While analysing the functioning of healthcare systems one determines factors for system classification. These are [Wendt 2009]:

- healthcare expenditure measured as aggregate expenditure and per capita expenditure;
- financing the health system, defining the proportions and relationships between public and private sources;

Figure 1. Healthcare expenditure expressed as a percentage of GDP in the individual countries of the world

Source: [World Health Organisation 2017].
• healthcare providers, divided into public and private ones;
• institutional characteristics taking into account the shape of the system, participants and membership criteria.

Taking into account the structure of the healthcare system and how it is financed, it should be emphasized that only five countries in the world have a system based only on mandatory funding for the health of their citizens. These are Australia, the Netherlands, Japan, the United States and Switzerland. In each of these systems there is also a possibility of private financing of additional health insurance.

Figure 1 presents the countries where the compulsory private health insurance system operates, along with the amount of healthcare expenditure expressed as a percentage of GDP in the individual countries of the world.

According to global WHO data, 15.5% of total public expenditure is spent on healthcare. Nicaragua (24%), Switzerland (22.7%), the United States (21.3%), the Netherlands (20.9%), Japan (20.3%), Germany (19.7%), Canada (18.8%) and Australia (17.3%) are among countries which spend the most for healthcare.

3. Characteristics of compulsory private health insurance schemes in Australia, the Netherlands and Switzerland

The healthcare system in Australia is based on the state healthcare system (Medicare), and publicly available private insurance is designed to relieve the system [Robson, Ergas, Paolucci 2011]. Although there is a widespread health insurance system in the country, it is heavily regulated by the law and the private market plays a significant role. For example, in 2006-11 two thirds of planned operations were carried out within private insurance [Stavrunovaa, Yerokhin 2014].

The characteristic feature of the Australian compulsory healthcare model is that each insurer (fund) operates on the basis of the enacted Private Health Insurance Act 2007. Financial activities are supervised by the Private Health Insurance Advisory Council (PHIAC), which oversees compliance with capital requirements and liquidity. Insurers can operate under two legal forms: non-profit – as a mutual insurance company and a for-profit corporation. Individual funds may be open or closed. Open funds are available to everyone and closed ones can only cover selected professional groups, associations and trade unions [How Health Funds Work]. Some insurers operate throughout the country, while some of them are limited to selected territories. There are currently 37 funds in Australia, of which 12 are closed.

Individual insurers cannot deny anyone insurance sales. In addition, the contribution cannot be different depending on the age of the insured person, sex, health records and previous benefits. Insurers are identified with health funds. If there are more elderly people in the fund, which undoubtedly increases the loss, there is a transfer between individual funds (insurers). In order to level the risk, insurance companies with a lower proportion of older people make payments to funds with a higher proportion of the elderly or chronically ill [Carrington et al. 2011].
The health insurance market is very often segmented according to the age of the insured. On this basis, there is a niche market for young (<31 year olds) singles, young people who are no longer covered by family health insurance, couples expecting children, people over 31 years of age, couples with adult children and the elderly. Another type of segmentation is based on products: available exclusively online, group, low, medium and high income, for customers living in the city or countryside, for tourists from abroad [Competition in the Australian... 2015].

In the Netherlands as a result of the introduction of the Health Insurance Act (HIA), since 2006 health insurance is entirely organized by private insurers. Services provided in the basic (i.e. statutory) health insurance must be available to all insured. The law also regulates the scope of insurance and defines the insured. Insurance companies are required to cover all persons reporting to them irrespective of their state of health and the premiums charged thereon are equal regardless of age [Healthcare in the Netherlands 2015].

Insurance is in the form of contracts that entitle to use the services of specific providers or all providers. Approximately 90% of the Dutch have an additional health insurance policy. The basic contribution paid to the state fund depends on income and is paid by the employer. In the case of unemployed or self-employed, it is paid by itself. The second part of the contribution (fixed amount) is paid to the insurer [Leu et al. 2009].

There are currently 11 companies in the Dutch health insurance market. Insurers are allowed to change insurance companies once a year if they are not satisfied with them. Government regulations do not specify in what way insurers are expected to meet their obligations, the market mechanism requires effective compliance with their clients’ requirements, so individual insurers must compete with each other.

The health insurance market in the Netherlands is based on a negotiation system between insurance companies and medical service providers. Bidders establish with them quality, price and quantity of services provided. Insurers can choose freely from among the service providers in the market who compete with each other on the quality of service provided. On the other hand, citizens through the government have an access to information about the length of waiting for the visit. Another characteristic of the Dutch health system is the possibility of concluding group contracts for basic insurance. This is because groups of insurers, e.g. employers “associations or patients” organizations can negotiate with the insurance company a premium reduction, usually at a level not exceeding 10% [Ginneken, Schäfer, Kronema 2011].

The Swiss health insurance system is similar to that in the Netherlands. It is based on the principle of universality, and every citizen is required to have health insurance purchased from a private insurance company. The state supports people with the lowest income by contributing to their contributions. Insurers cannot differentiate premiums for clients due to their health condition. The insurance that every citizen is required to purchase is called the “basic package”. It consists of sickness, maternity
and accident insurance, and the insured have the right to change insurers up to two times a year [Daley, Gub 2013].

The healthcare system in Switzerland is managed at 26 cantons whose authorities are responsible for providing health services and partial hospital and contribution financing. The role of central authorities is to legislate, regulate the activities of insurers and to define the scope of health insurance. Healthcare competing lobbies, pharmaceuticals, insurance and healthcare, are competing in the health sector, and enormous competition on the market contributes to maintaining a high level of services [Biller-Andorno, Zeltner 2015].

Table 1 summarizes the basic differences in the health systems of Australia, the Netherlands and Switzerland.

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>The Netherlands</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of introduction</td>
<td>1997</td>
<td>2006</td>
<td>1996</td>
</tr>
<tr>
<td>Healthcare protection system</td>
<td>universal healthcare system working together with mandatory private insurance market</td>
<td>universal compulsory private health insurance</td>
<td>universal compulsory private health insurance system</td>
</tr>
<tr>
<td>Covered by purchase obligation</td>
<td>persons who reach a statutory income limit</td>
<td>persons permanently residing in the country except for children</td>
<td>persons permanently residing in the country</td>
</tr>
<tr>
<td>Financial support from the state</td>
<td>subsidies to private policy for people with the lowest incomes who choose to purchase an insurance</td>
<td>subsidies for people with lower incomes</td>
<td>local financial support for households where health insurance premiums exceed the level of 8% – 10% of the household budget</td>
</tr>
</tbody>
</table>

Source: own research.

It can be stated that the system operating in Switzerland is based on rules of competition regulated at central and local level. Insurers must accept anyone interested in insurance and premiums can vary only by region, e.g. for the same coverage in two different cantons they may charge contributions at different heights but in one canton they must enforce the same contribution for the same coverage insurance [Pletscher 2016].

The presented characteristics of health systems in each country indicate that they are similar in terms of defining the scope of insurance in specific laws, the choice of the insurer, the obligation to accept all those willing by a particular insurance company and the differentiation of contributions depending on age and health. On
the other hand, the differences relate to persons covered by compulsory private healthcare, the principles of financial support from the state and the participation of individual funds in the financing of contributions.

4. The role of the state in financing and enforcing compulsory health insurance policies and the size and structure of healthcare expenditure in Australia, the Netherlands, and Switzerland

The rules of operation and the shape of healthcare systems are, to a large extent, dependent on state policies. It usually acts in several directions. On the one hand, the state enforces certain schemes for basic protection providers by setting and harmonizing the coverage offered by insurers and medical institutions, as well as standardizing contributions. On the other one, the state has an impact on market participants who should be protected by applying subsidy schemes or imposing sanctions for the lack of health insurance. As a consequence, a network of interconnections is created between the state and individual market participants, as illustrated in Figure 2.

In different countries, various actions are taken to increase the share of private insurances in healthcare systems. For example, in order to strengthen the share of private insurance the Australian government introduced a Medical Levy Surcharge for not having a private policy that equates to 1% of annual income or applies a 30% co-contribution to young people.

![Figure 2. The role of the state in the private health insurance systems](image)

Source: own research.

It is worth mentioning that the cheapest insurance services cost roughly as much as the lowest MLS penalty rates. The amount of payments and penalties applicable in Australia depending on the amount of income is shown in Table 2.
In addition to applicable reductions and penalties, the Australian government introduced another tool in 2000 to increase public participation in private health insurance. This is the so-called Lifetime Health Cover, a legal structure that is designed to encourage health insurance as early as possible. Persons who are insured before 1st July of the year in which they are 31 years old will be paid the normal premium [Macintosh 2007]. Those who do so after this date will pay a premium of 2% for each year of delay\(^1\).

On the healthcare market in the Netherlands every citizen and legal resident in the Netherlands over 18 years of age is obliged to pay their insurance premium. This is an annual amount of about 1200 euros and the obligatory from 2011 supplement of 385 euros\(^2\). It works as a franchise or an excess. This is so-called *eigen risico* (own risk) for situations that require help in the hospital or specialized treatment. This amount should always be paid from your own pocket (if you have only a basic insurance package). It is only when the cost of such services is higher, the rest is financed by the insurance company under the policy.

The underage do not pay contributions. Their insurance is financed by public funds, by employers who pay their employees’ wages, and for the poorest the state has envisaged the possibility of applying for healthcare subsidy [Healthcare in the Netherlands 2015].

In recent years, the government has changed the structure of subsidies for the benefit of retired and unemployed people, as shown in Table 3.

\(^1\) For example, a 40-year-old person who first joins for insurance will pay a premium 20% higher than their peers who have been insured for at least 10 years. Such an increase can reach a maximum of 70%. After 10 years of uninterrupted pay, the premium is lifted.

\(^2\) As of the end of 2016.
Less affluent people receive subsidized contributions. The scheme is financed by 50% of contributions from wages (including those from unemployed, pensioners, etc.), 45% from contributions to insurers and 5% from government subsidies. In order to eliminate the lack of health insurance in the Netherlands, the supervisory body (Nederlandse Zorgautoriteit) has been authorized to impose fines [Ginneken, Schäfer, Kronema 2011].

The prevalence of private health insurance in Switzerland is achieved firstly by imposing compulsion on all citizens regardless of age, otherwise they must pay penalties; secondly, insurers must collect contributions in equal amounts from insured persons for protection under the same and thirdly, people who cannot pay their own contributions receive the subsidy from the budget of a canton where they live. Approximately 30% of citizens benefit from such subsidies. Insurers have the right to change the insurer up to two times a year [Daley, Gub 2013].

The size of funding for the health insurance system in Switzerland is presented in Table 4.

**Table 3.** Percentage of contributions to private income-based health insurance in 2015-2016

<table>
<thead>
<tr>
<th>Contributions</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributions that depend on income (employers)</td>
<td>6.95</td>
<td>6.75</td>
</tr>
<tr>
<td>Contributions that depend on income (unemployed, pensioners)</td>
<td>4.85</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Source: own research based on [Healthcare in the Netherlands 2016].

**Table 4.** Contribution of state funds to health insurance financing in Switzerland

<table>
<thead>
<tr>
<th>Subsidies to contributions (in mln chf)</th>
<th>Contribution of cantons in subsidies (In %)</th>
<th>Number of beneficiaries (in mln)</th>
<th>Contribution of beneficiaries in the number of insurees (In %)</th>
<th>Average annual amount per person (in chf)</th>
<th>Number of households benefiting from subsidies (in mln)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 967.70</td>
<td>45.8</td>
<td>2.31</td>
<td>29</td>
<td>1 719</td>
<td>1,318</td>
</tr>
</tbody>
</table>

Source: [De Pietro et al. 2015, p. 100].

Low- and middle-income individuals may be eligible for contributions. Consumers choose from a variety of insurance ranges, from minimum statutory requirements to very extensive ones. Insurers oversee the Federal Office of Public Health, which approves premiums. Contributions in a given area (e.g. in a canton) must be equal for all insured persons. Insurance costs should not exceed 8-10% of the household budget. Local authorities are, therefore, required to pay contributions. This is justified by the prevailing doctrine of equal access of all citizens to health services [Biller-Andorno, Zeltner 2015].
The mechanisms used to promote and enforce health insurance in the individual countries are undoubtedly effective solutions that effectively enforce healthcare coverage. Mandatory health systems, including mandatory private health policies, are funded by both public and private funding. Expenditure on healthcare systems, including private expenditure in Australia, the Netherlands and Switzerland, is presented in Table 5.

Table 5. Size and structure of expenditure on health in Australia, the Netherlands and Switzerland

<table>
<thead>
<tr>
<th>States</th>
<th>% GDP</th>
<th>Within the general health system (in %)</th>
<th>Additional from “the pocket” (in %)</th>
<th>Expenditure per capita (in USD)</th>
<th>Expenditure per capita according to purchasing power parity (in USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>9.4</td>
<td>67</td>
<td>18.8</td>
<td>6 031</td>
<td>4 357</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>10.9</td>
<td>87</td>
<td>5.2</td>
<td>5 694</td>
<td>5 202</td>
</tr>
<tr>
<td>Switzerland</td>
<td>11.7</td>
<td>66</td>
<td>26.8</td>
<td>9 674</td>
<td>6 468</td>
</tr>
</tbody>
</table>

Source: own research based on [Global Health Observatory 2017].

In Australia, expenditure per year for health is more than 9% of GDP, nearly 11% of GDP in the Netherlands, and almost 12% of GDP in Switzerland. More money in the world on healthcare is allocated only in the United States (over 16.4% of GDP). Health expenditure in the analyzed countries is significantly higher than the OECD average, which is about 8.9% of GDP. In the analyzed countries, there are also quite significant private funds (so called from patients’ “pockets”), which is due to universal and socially acceptable co-payment of patients for received health benefits. The subsidies applied as well as fiscal instruments have an impact on such a situation. It should be emphasized that the relatively low share of public funds is in Australia and Switzerland. The average share of public funds in the OECD countries’ health financing structure is 72.7%. It is significantly higher than the one in Australia (by almost 6%) and in Switzerland (by almost 7%).

By analyzing the amount of health expenditure per capita, it is important to point out that it is the highest in Switzerland, where it amounts to 6468 USD, in the Netherlands − 5 202 and in Australia − 4 357 USD per person per year, which is significantly larger than the average for the OECD countries, i.e. 3 453 USD.

5. Conclusions

The compulsory private health insurance, which is becoming more and more popular, is a legal construct whose primary purpose is to cover the general health insurance of the general public in a country through which governments delegate some of their competences to provide health services to private providers.
The functioning of the systems in the three selected countries indicates that such a solution cannot be perceived as a fully operating free-market health insurance scheme. The scope of the activities of societies and healthcare providers is limited by a rigid legal framework. Although insurers have full discretion in choosing an insurer who cannot refuse to accept insurance, the state regulates coverage and premiums that are subject to close supervision.

Insurers’ actions are dictated by the need to provide all citizens, even in market situations, with equal access to medical care, which in effect results in the complete waiver of state healthcare competencies, primarily because of its exclusivity in terms of legislation and the obligatory policy of providing citizens with social security.

An analysis of participatory healthcare systems measured by the magnitude of expenditure on private healthcare indicates that systems in Australia, the Netherlands and Switzerland turn out to be somewhat differentiated. Undoubtedly, the success of such health systems extends the use of additional voluntary health insurance alongside compulsory health insurance or co-payment for extended protection.

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