

## Characteristics of Private Financing of Healthcare: New Challenges and Prospects

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**Aim.** Analysis of features and dynamics of development of private financing of healthcare in the world and in the groups of countries; identification of tendencies, as well as the most suitable areas of development of private healthcare financing.

**Objectives.** Identification of dynamics and structure of expenses for healthcare; study of the factors determining development of the healthcare private healthcare providers; characteristic of the healthcare private sources of financing; analysis of the structure of private healthcare expenses in different groups of countries; detection of the most prospective and effective areas of development of the healthcare private financing; definition of the main criteria of the government policy for raising private funds to healthcare and analysis of the role of state in establishing tendencies of development of the healthcare private financing.

**Methods.** Methods of logic, statistical, comparative analysis; synthesis; deduction and induction were used in the research.

**Results.** Willingness of the government of the number of countries to increase accessibility and quality of the health services rendered to population without violation of the principles of equality and social equity, development of human medicine, enhancement of the social value of health, as well as people expectations from the healthcare system, social and demographic changes in the world result in growth of the absolute and relative indicators of financing of the area concerned. The healthcare private services are enlarged. Increase of expenses for this area is observed in the conditions of both economic growth and economic crisis, though some reduction of expenses to healthcare is obvious for crisis. Analysis of the structural dynamics of expenses allows detecting the most significant growth of private payments in comparison with the state ones in the periods before crisis, after crisis and in crisis. At the same time the state/insurance share of expenses for healthcare is kept constant (about 73 %), the tendency of the private financing expansion is obvious, which is stipulated by the legal changes, revisions of the social package and introduction/enlargement of costs division. The highest growth was detected in private insurance.

The crucial factors for raising private investments in the area concerned include economic development of the country, absolute and relative indicators of the state financing of healthcare; volume, structure, quality of the health services rendered within the national insurance; elasticity of the state and private expenses per revenue; as well as features of the country (cultural, historical, geographical, political, and social). At the same time, specificity of the health services as a product and the market of health services require mandatory state regulation of the private providers operation. Spreading of private payments, according to the experience, reduces access to health services, deteriorates population health indicators creating threats to the national safety and prerequisites for healthcare expenses increase in the future. High expenses for health services, loss of profit can result in financial disasters, which are observed in both developing and developed countries. Analysis of the sources of private financing demonstrates that voluntary health insurance and co-payments are the most aligned and effective types of private payments. Therefore direct and informal payments cannot be an alternative source of financing. They are used as the main mechanism for raising private capital only in developing countries; however, are typical to developed countries to a certain extent. The most reliable and effective types of private payment — private health insurance and co-payments are used in the countries with high and medium level of income.

**Conclusions.** Analysis of dynamics and structure of expenses for healthcare shows that the growth of private expenses for healthcare exceeds the growth of the state expenses, this tendency is the most vivid in the crisis and post-crisis periods. Expansion of private financing is initiated by the state to a certain extent. The government policy in raising private funds includes formation of additional source of financing without violation of the principles of social equity, solidarity, equality and acces-

sibility of the health services for the citizens of the country. This means increase of the share of the government financing and improvement of criteria of setting priorities when selecting health services in the state free package, reduction of the share of direct and inofficial payments and stimulation of expansion of voluntary health insurance and co-payments introducing new mechanisms for improving the social equity and equal access.

**Keywords:** *expenses, healthcare expenses, private expenses for healthcare, co-payments, private health insurance.*

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## Особенности частного финансирования сферы здравоохранения: новые вызовы и перспективы

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**Цель.** Анализ особенностей и динамики развития частного финансирования сферы здравоохранения в мире и по группам стран, выявление тенденций, а также наиболее приемлемых направлений развития частного финансирования сферы здравоохранения.

**Задачи.** Установление динамики и структуры расходов на здравоохранение; изучение факторов, определяющих развитие частного сектора в здравоохранении; характеристика частных источников финансирования сферы здравоохранения; анализ структуры частных расходов на здравоохранение в разных группах стран; выявление наиболее перспективных и эффективных направлений развития частного финансирования сферы здравоохранения; определение основных критериев государственной политики по привлечению частного капитала в систему здравоохранения и анализ роли государства в формировании тенденций в развитии частного финансирования сферы здравоохранения.

**Методология.** В процессе исследования использовались методы логического, статистического, сравнительного анализа; синтеза; дедукции и индукции.

**Результаты.** Желание правительств ряда стран мира повышать доступность и качество предоставляемых населению медицинских услуг, не нарушая принципы равенства и социальной справедливости, развития медицины, повышения социальной значимости здоровья, а также ожидания людей от системы здравоохранения, социально-демографические изменения в мире приводят к росту абсолютных и относительных показателей финансирования рассматриваемой сферы. Происходит расширение частного сектора здравоохранения. Рост расходов на эту сферу наблюдается в условиях и экономического роста, и экономического кризиса, хотя во время кризиса заметно и некоторое падение темпов роста расходов на здравоохранение. Анализ структурной динамики расходов позволяет выявить более значительный рост частных платежей по сравнению с государственными в докризисный, посткризисный период, а также в период кризиса. Вместе с тем средняя государственная/страховая доля расходов на здравоохранение осталась постоянной (приблизительно 73 %), очевидна тенденция расширения частного финансирования, что обусловлено правовыми изменениями, поправками к социальному пакету и введением/расширением разделения затрат. При этом наибольший рост выявлен в отношении частного страхования.

В числе определяющих факторов при привлечении частных инвестиций в рассматриваемую сферу — экономическое развитие страны, абсолютные и относительные показатели государственного финансирования здравоохранения; объем, структура, качество медицинских услуг, предоставляемых в рамках национального страхования; эластичность государственных и частных расходов по доходу; а также особенности страны (культурные, исторические, географические, политические, социальные). Вместе с тем специфика медицинских услуг как товара и рынка медицинских услуг требует обязательного государственного регулирования деятельности частного сектора. Распространение частных платежей, как показывает опыт, снижает доступ к медицинским услугам, ухудшает показатели здоровья населения, создавая угрозу для национальной безопасности и предпосылки для повышения расходов на здравоохранение в перспективе. Высокие издержки при получении медицинской помощи,

потеря дохода могут привести к финансовым катастрофам, что наблюдается и в развивающихся странах, и в развитых. Анализ источников частного финансирования показывает, что ДМС и соплатежи — наиболее солидарные и эффективные виды частных платежей. Поэтому прямые и неформальные платежи не могут быть альтернативным источником финансирования. В качестве основного механизма привлечения частного капитала они используются только в развивающихся странах, хотя в некоторой степени присущи развитым странам. В странах с высоким и средним уровнем дохода широко применяются наиболее надежные и эффективные виды частных платежей — частное медицинское страхование и соплатежи.

**Выводы.** Анализ динамики и структуры расходов на здравоохранение показывает, что рост частных расходов на здравоохранение превышает рост государственных расходов, и эта тенденция наиболее явно прослеживается в кризисный и посткризисный периоды. Расширение частного финансирования в определенной мере инициируется государством. Политика государства в привлечении частных средств подразумевает формирование дополнительного источника финансирования, не нарушая принципов социальной справедливости, солидарности, равенства и доступности медицинских услуг для граждан страны. Это подразумевает повышение доли государственного финансирования и совершенствование критериев приоритизации при выборе медицинских услуг в государственный бесплатный пакет, снижение доли прямых и неофициальных платежей и стимулирование расширения ДМС и соплатежи с введением новых механизмов по повышению их социальной справедливости и равнодоступности.

**Ключевые слова:** расходы, расходы на здравоохранение, частные расходы на здравоохранение, соплатежи, частное медицинское страхование.

## Introduction

Private medicine has ancient traditions and originated much earlier than the state. The first representatives of the medical business were private practitioners who treated for a fee or reward. They were also the first pharmacologists, using their own drugs in the treatment. Only in the VI century there were doctors who were in the civil service and received a certain salary. Pharmacology and pharmacy business start to separate from the medical business and develop independently.

Formation of the national health systems and their financing occurs in the XIX–XX centuries and it was fraught with certain financial problems. The cost of health care grew, and it was found that most of the funds were used inefficiently and irrationally. Thus, the next stage of reforms was aimed at reducing the health care costs, but at the same time, it was necessary to eliminate the financial deficit of the system. Four methods were practiced for this purpose: reducing the costs in general for health care; strengthening the cost control in order to more efficiently distribute and spend funds; reducing state guarantees (in the form of reducing state reimbursement for medical services, introducing patient complicity); reorganizing the health care system. The emphasis was on maintaining the equilibrium of the financial system, as well as compliance with the basic principles — equal access, social justice, and solidarity.

However, despite this, the growth of spending on health continued. The demand for the volume and quality of medical services was growing, while resources were not changing or even declining.

The third stage of the reforms was presented as a gradual transformation of the concept towards what WHO calls the “new universalism” — the high-quality provision of basic assistance, determined mainly by the cost criterion — effectiveness of the services, but not as all possible assistance for the whole population, by the following of the principle “the money follow the patient” [1; 18].

In the WHO conference on health system reforms in Europe, held in Ljubljana in 1996, the fundamental principles of the reforms were formulated and was announced that in all cases where the use of market mechanisms is appropriate, they should promote competition in such aspects as ensuring quality and rational use of scarce resources [2]. This stage involves a clear choice of priorities among interventions with taking into account the ethical principle, a greater emphasis on individual choice and responsibility. Strategies in the healthcare system began to focus on market development: privatization, the creation of systems for charging users or paying fees for the provision of medical services. One of the consequences was the attraction of the private capital.

## The dynamics and structure of expenditure on health, the growth of the share of the private sector

Figure Figure 1 shows the dynamics of health expenditure per capita in the world. As can be seen, the cost of the health care per capita over the past 20 years has increased almost threefold, and in some countries one can get more high results: in South Korea, the cost per person increased more than 5 times; in Poland, Ireland, Norway, more than in 4 times [3].

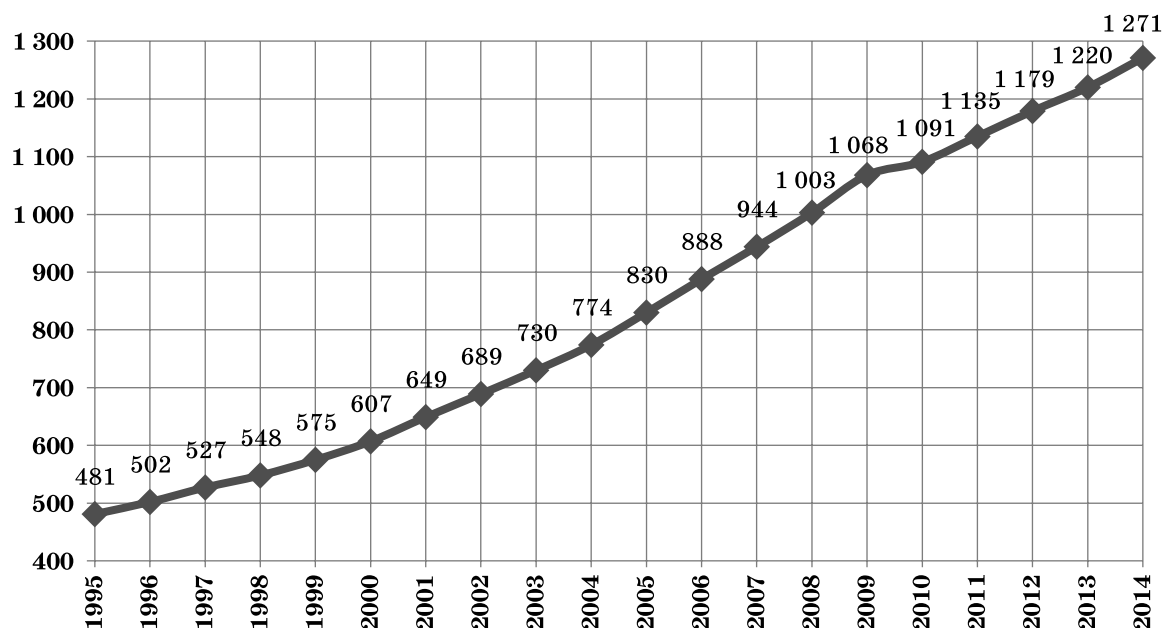


Figure 1. Health Expenditure per capita (current US \$) from 1995 to 2014

Source: World Bank [3].

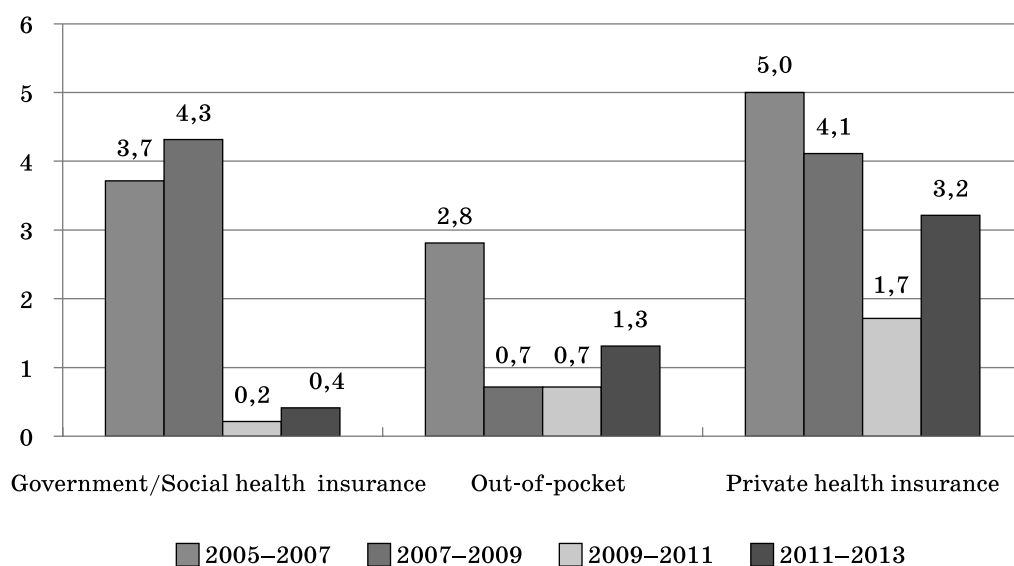


Figure 2. Average annual per capita growth rates by health financing, in real terms 2005 to 2013, %

Source: FOCUS on Health Spending. OECD Health Statistics [4; 5].

Analysis shows that the growth of health care expenditure is observed both during economic growth, as well as during the economic crisis, although during the crisis there is a decline in growth rates. Figure 2 allows one to track the structural dynamics of health expenditure in OECD countries, including pre-crisis, crisis and post-crisis periods.

Figure 2 shows that if in the pre-crisis years the average public expenditure on health increased at an annual rate of almost 4%, then since 2009, the growth of government spending has greatly decreased. While private spending is also characterized by lower growth since 2009, reductions in this sector are less pronounced.

The state budgets were maintained at the time of the crisis and immediately after it, but pocket

payments quickly reacted to the situation and their growth was immediately reduced. However, these costs continued to grow, albeit more slowly (about 1.0 % on average per year), partly as a result of measures imposed in a number of countries. They included an increase in co-payments for prescription drugs and an increase in the reimbursement threshold for pharmaceuticals, a reduction in generic reimbursement, a reduction in dental packages, an increase in inpatient costs, an expansion of cost sharing in the primary care unit, and a reduction in benefits for certain population groups. In some countries, most affected by the crisis, the share of cash payments increased much more: in Greece, in Portugal, for example, the share of spending on health increases 4 percent from 2009 to



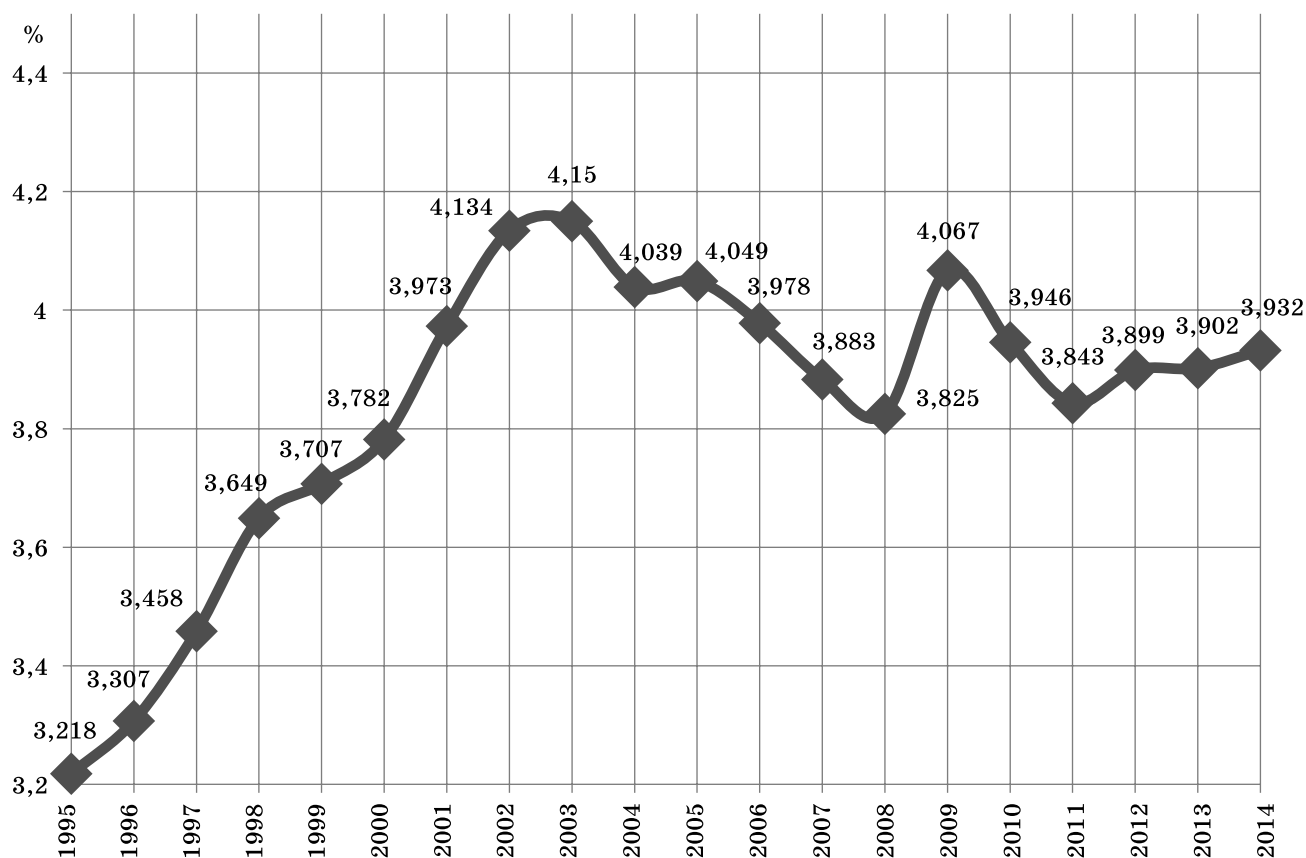


Figure 3. Health Expenditure, privat, 1995–2014, % of GDP

Source: World Bank [3]

31 % and 28 % of total health expenditure, respectively. However, if we consider a longer period, then in some countries we can observe the decrease in the share of cash payments — in Turkey, almost doubling between 1999 and 2013 from 40 % to 22 %, or in Mexico from 55 % to 45 % in the ten years from 2003 to 2013 [4; 5].

Private health insurance can play different roles in health systems: the main health care in the US or in Chile, complementary or replacing in countries such as France, Belgium, Slovenia, Australia, and Ireland. On average across OECD countries, spending for PHI accounts for only 7 % of health spending. For a number of countries PHI plays only a marginal role, but in others it represents a sizeable share, e. g. in the United States (35 %) and Chile (21 [4; 5]. While health care costs through private health insurance slowed in 2009–2011, in the following years they grew by 3.2 %, which is partly due to a change in the cost of medical services and a decrease in the coverage of services in some countries.

Thus, the analysis shows that the average annual growth in health expenditure in OECD countries is still far from the pre-crisis level (1 % vs. 3.4 %). On the other hand, while the average state / insurance share of health expenditure remained constant (about 73 %), there is a tendency to expand private financing through legal changes, amendments to the social

package and introduction / expansion of cost sharing. For example, in Greece and Portugal, the share of private health care expenditures has increased by about 4 percentage points since 2009 and accounts for about a third of total health expenditure.

The trend of increasing private spending in the overall structure of health spending is not only in OECD countries. Figure 3 shows the dynamics of the change in the share of private payments in % of GDP over the past 20 years. As can be seen, private spending on health grows dynamically until 2003, the trend continues towards a decrease, however, since 2012 the growth of the indicator has been again observed. According to data for 2014, the maximum share of private spending among OECD countries, not counting the United States was observed in Mexico (48.2 %), the minimum — in Norway (14.9 %). In 2015, the share of direct payments in the overall structure of health care expenditure was at the most 41.6 % in Latvia and at least 6.8 % in France [5].

### The factors determining the development of the private sector in health care

The reasons for the expansion of private payments include:

- conflict between declared and really provided guarantees for free medical care;

**The share of personal expenses of the population in the total amount of costs in individual groups of countries, in percentage terms**

OECD countries (Excludes Hungary, Mexico and Turkey)	24
Developing countries with high income	33
Developing countries with medium income	43
Developing countries with low income	53

Source: Schreiber G. and Maeda A. [6].

- uncontrollable increase in health care costs; patients' desire to reduce financial risks in this area;
- increase in people's well-being;
- increasing the social importance of health;
- expansion of the range of medical services;
- high specialization of the provided services in health care;
- state policy to stimulate the involvement of private capital in the health sector (for example, granting certain benefits to legal entities when concluding collective PHI), etc.

Private financing in all countries of the world to some extent complements public health financing, but its share in the overall funding structure varies widely by country. Comparative characteristics of the share of personal expenditures of the population in the total amount of expenditures in individual groups of countries allow establishing a feedback between the economic development of the country and the participation of private financing in covering the costs of medical care (see Table 1).

For example, in OECD countries, on average, almost three quarters of health expenditure is generated from public sources (either the state budget, social health insurance) [4]. In their works Schreiber G. and Maeda A noted that the ratio of public and private health care costs largely determines the health status of the country [6]. The level of the public expenditure on health is one of the determinants of attracting private payments at the time of receiving medical care. This is reflected in studies by Gottret and Schieber, Kutzin [7; 8].

In many ways, the paid and free services are interchangeable, so it is almost impossible to make sure about the demand and supply of paid services without taking into account the volume of structure, the availability of the adequate free medical services in the region. Both types of services can turn out to be mutually complementary and competitive [9; 18].

The relationship between public health expenditure and cash payments is clearly seen in Figure 4.

However, it would be wrong to think that an increase in state funding in absolute numbers helps to reduce private spending of the population. Studies show that the growth of

state spending in absolute terms stimulates the growth of personal expenses of the population, as payments on co-payments and services that go beyond guaranteed increases. The change in the ratio of state and private expenditures in this case is determined by the comparative elasticity of state and private expenditure on income [11; 12].

Studies show that in low-income countries, public health spending grows in parallel with GDP growth, and cash payments lag behind GDP growth. In middle- and high-income countries, public spending on health is growing faster than GDP, while payments from the pocket are growing in much the same way as GDP [11; 14]. State expenditure on health as a share of total government expenditure reflects the priority of health on the national agenda [8]. Indeed, in 2001, the Abuja Declaration approved that at least 15 % of the total public expenditure should be allocated to health [12]. However, after more than 15 years, only a few countries were able to achieve this.

Along with this, one cannot consider the level of state payments to be the only determinant, determining the volume and structure of private spending. So, Table 2 allows one to reveal the difference in the volume of public and private expenditures, as well as their ratio under practically identical economic conditions. Thus, it is obvious that there are other factors that determine the level of expenditure on health in general, and the ratio of private and public spending in particular.

One of the factors is the importance attached to health care and its financial aspects in different countries. The specifics of the countries determine the priority of certain sectors of the economy in them, as well as the choice of priority areas of activity in them. So, for example, after the collapse of the Soviet Union, where public health financing was funded by the state budget, the country chose various alternative sources: in Georgia, Moldova, Kyrgyzstan, it was cut down.

In some, states the choice of the main source of financing that predetermines the development of the private sphere is explained by historical prerequisites: a return to the social insurance model in Czech Republic, Slovakia, Hungary,

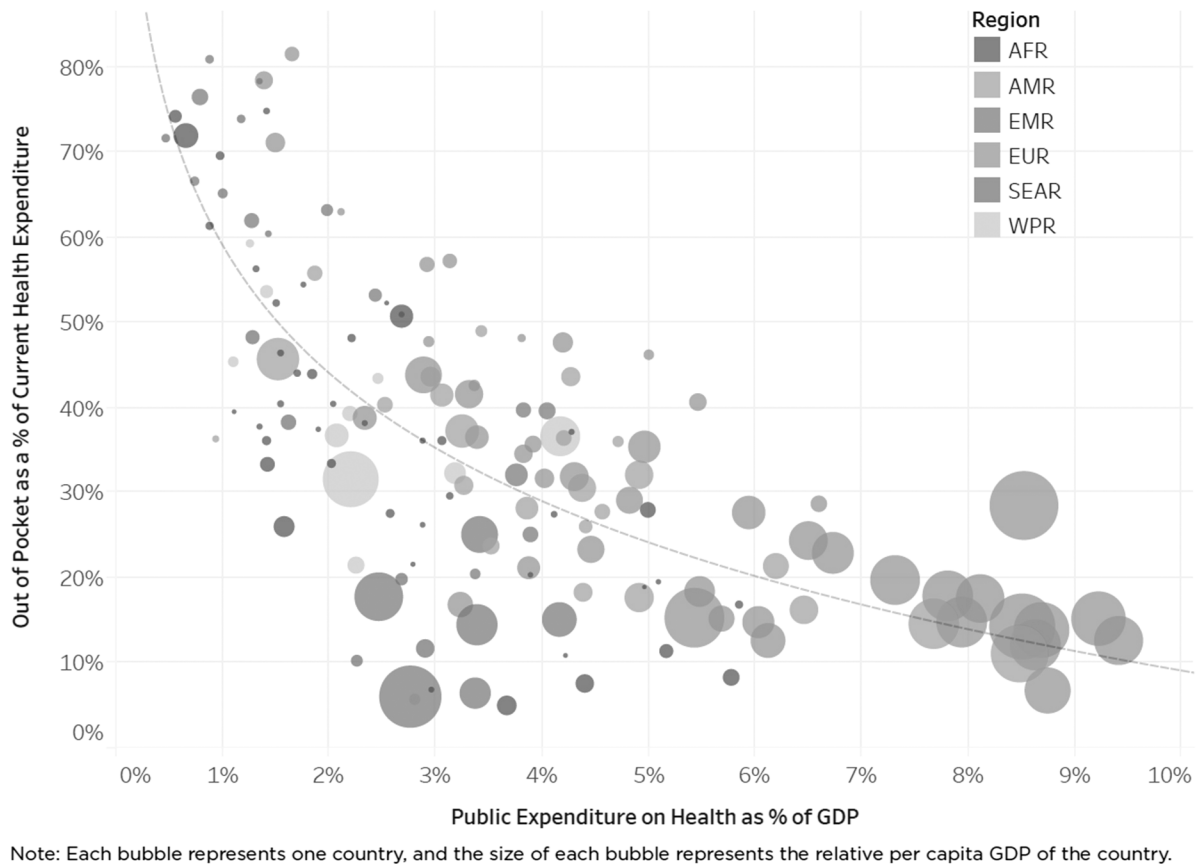


Figure 4. Public Expenditure on Health as, % of GDF

Source: World Health Organization, Global Health Expenditure Database [10].

and Slovenia that were once part of Austria-Hungary and already had experience in applying social insurance systems. The health financing system in the Baltic countries was determined by the proximity of the Scandinavian states, in Poland — with Germany. Germany and the Netherlands are the only countries practicing the choice between compulsory and voluntary health insurance and, which is also related to the historical background.

In addition, the initial social determinants play a big role in the formation of the private sector of the country: the sex and age composition of the population, education, incomes, average life expectancy, the structure of morbidity, the rate of natural increase, etc. For example, the increase in the dependency ratio (the ratio of the number of people over 65 and children under 14 to the number of people between 15 and 64) contributes to a decrease in GDP, and government funding, and therefore, allows greater involvement of the private sector.

#### Structure of private expenditure on health in different groups of countries

Private payments include direct payments (purchase of services with payment at the time of receiving services in full), co-payments (covering

part of the costs of treatment of services), private health insurance, and unofficial payments. Any country uses all these financial mechanisms in one way or another. Direct payments allow for a wider coverage of health services; to provide services of the best quality, at the right time, taking into account special preferences; to strengthen competition in the market of medical services. However, the spread of private payments, as experience has shown, reduces access to health services, worsens the health of the population and poses a threat to national security in the long term.

In addition to the above spectrum of negative aspects, they are associated with a number of difficulties associated with ignorance of prices, qualifications of specialists, unpredictability of current and forthcoming monetary costs.

On the other hand, the provider is not informed about the patient's previous health condition, which requires additional time and the use of additional diagnostic methods, which are often duplicated. Ultimately, this affects the quality of treatment and reduces effectiveness. These payments are non-consolidated, regressive, unfair, both horizontally and vertically. In addition, direct payments induce demand for services, and contribute to higher health care costs. Finally, in some cases, there are real op-

Table 2

Countries	Current Health Expenditure (CHE) as % Gross Domestic Product (GDP)		Domestic General Government Health Expenditure (GGHE-D) as % Current Health Expenditure (CHE)		Domestic General Government Health Expenditure (GGHE-D) as % Gross Domestic Product (GDP)		Domestic General Government Health Expenditure (GGHE-D) per Capita in US \$		Domestic Private Health Expenditure (PVT-D) per Capita in US \$		Out-of-pocket (OOPS) as % of Current Health Expenditure (CHE)
	2010	2015	2010	2015	2010	2015	2010	2015	2010	2015	2015
USA	16	17	49	50	8	8	3858	4802	4092	4734	11
Germany	11	11	83	84	9	9	3919	3879	777	713	13
France	11	11	78	79	8	9	3436	3178	949	849	7
Canada	11	10	73	74	8	8	3637	3315	1351	1192	15
Netherlands	10	11	83	81	9	9	4333	3831	916	915	12
Japan	9	11	82	—	8	—	3326	—	734	—	13
Norway	9	10	85	85	8	9	6655	6374	1200	1090	14
United Kingdom	9	10	85	80	7	8	2804	3500	503	855	15
Iceland	9	9	80	81	7	7	2953	3565	719	811	17
Sweden	8	11	82	84	7	9	3633	4685	804	915	15
Italy	9	9	78	75	7	7	2522	2022	693	679	23
Brazil	8	9	45	43	4	4	402	334	489	441	28
Czech Republic	7	7	83	82	6	6	1145	1050	229	226	15
Lithuania	7	7	72	66	5	4	577	608	227	312	32
Azerbaijan	5	7	23	20	1	1	67	74	218	292	79
Algeria	5	7	69	71	4	5	159	206	70	86	28
Russia	5	6	61	61	3	3	348	320	219	204	36
Mozambique	5	5	8	8	—	—	2	2	2	2	7
Turkey	5	4			—	3	—	355	—	99	17
Thailand	4	4	76	77	3	3	131	167	41	46	12
China	4	5			2	3					32
Kazakhstan	4	4	66	60	3	2	240	228	120	150	39
United Arab Emirates	4	3	71	71	3	2	963	999	396	403	18
India	3	4	26	26	1	1	12	16	33	47	65
Angola	3	3	62	48	2	1	60	52	6	9	33
Gabon	2	3	64	59	2	2	138	117	77	80	26

Source: World Health Organization, Global Health Expenditure Database [13].

portunities for involving the patient in shadow relationships.

However, the payment for treatment can be too high for the patient. Financial barriers of a minor degree are also associated with transport costs and lost income associated with disability [14; 15]. All this can lead to catastrophic financial losses. In some countries, 11 % of the population faces such severe financial problems every year and up to 5 % are in poverty. Every year around 150 million people suffer catastrophic financial losses and 100 million people are below the poverty line. Health care expenditure is defined as catastrophic when personal household payments exceed more than 40 % of income after deducting expenses for basic needs [16].

The analysis of household investigations from 59 countries showed a huge range in proportion to those that faced catastrophic payments from their pockets — from less than 0.01 % in France and up to 10.5 % in Vietnam. However, even in

developed countries, this indicator could be more than 0.5 % (Portugal (2.71 %), Greece (2.17 %), Switzerland (0.57 %), and USA (0.55 %)). It is shown that 1 % increase in the share of total health expenditure provided by cash payments is associated with an average increase in the proportion of households that faced catastrophic payments by 2.2 % [17, p. 566–570].

The probability of financial catastrophe and impoverishment drops to a negligible level only if the share of direct payments drops to 15–20 % of total health expenditure. This is an elusive goal, and richer countries may seek to implement it, while others should set themselves more modest short-term objectives. For example, WHO Member States in the region of South-East Asia and the Western Pacific region have set a target to reduce the share of such payments between 30 and 40 % [16].

The danger is that the receipt of revenues from paid services can become a major factor



in the activities of suppliers, especially during a period of declining funding from the state. As for unofficial payments, information about their amounts is severely limited due to the fact that they are usually paid face to face and are prohibited by law. We also have to take into account the corruptness and opacity of the system itself, which not only hides the facts of informal payments, but also in every way promotes their development and dissemination.

The practice of informal payments is most developed in the countries of Central and South-Eastern Europe, the countries of the former Soviet Union. The main reasons for the spread of informal payments are the failure of public funding, low incomes of medical personnel, lack of knowledge of patients' own rights, and in some cases, the connivance of the state, which, in general, is quite such financing of the sphere, which does not require radical measures.

The studies conducted by Shishkin S., revealed a significantly higher prevalence of shadow payments in health care in regions, where the practice of developing paid services is not encouraged [18; 8]. At the same time, if the policy of distributing funds received on the basis of paid services does not suit doctors, this may become an additional reason for the development of illegal relations. Informal payments are one of the least solidary and effective forms of personal participation of the population. In Kazakhstan, for example, hospitalization of one member of an insolvent family takes 252 % of monthly income, while for affluent people this procedure costs 54 % of the total income [19, p. 38].

One can note the following effect of informal payments on the demand, supply and quality of medical services:

- Increase progress of prices for services and decrease in the volume of services.
- Reducing investment in human capital.
- Reducing government revenues due to large volumes of employees' income through unofficial channels.
- Decrease in the quality of services, qualifications of specialists.
- Slowing services to force the consumer to make unofficial payments.
- Doing the effectiveness of health care financing as a result of erasing the picture of real distribution of funds in health care and introducing practices called creeping privatization or privatization from within.
- Creating an obstacle to the development of a private health care system.

Thus, the increase in the share of informal and direct payments in the overall structure of private spending on health reduces the effectiveness of the health care system, deforms the real picture of the demand for services, efficiency,

breaks down the policy of stimulating the activities of health workers, worsens the health of the population, provokes an unjustified increase in health care expenditure.

However, in some cases informal payments can be more progressive and more solid than formal payments: health workers have the possibility of individual treatment of patients, if these incomes are not recorded anywhere. Thus, formal and informal direct payments are the least socially acceptable and effective forms of private financing. Table 2 makes it clear that payments from the pocket at the time of the provision of medical services act as the main source of funding only in developing countries.

At the same time, voluntary medical insurance is considered as the most solid, fair and effective form of attracting private funds of the population. As can be seen from Figure 5, in all OECD countries, PMI is more common than cash payments. At the same time, the smallest gap is observed in Latvia and amounts to 597 and 610 US dollars, respectively, for cash payments and PMI, the largest — respectively 1 054 and 4 815 dollars (data for 2015). The PMI uses the principles of equivalence and closed damage mapping and reveals a direct relationship between the size of the insurance policy and the volume and quality of the medical services received. VHI is relevant only in the market economic system, where it is a financial mechanism for managing the risks associated with human health.

Insurers are interested in quickly curing a patient with minimal expenses while doing so. Accordingly, they work with the best specialists. Moreover, insurers are interested in a healthy patient. To achieve this goal, a healthy lifestyle is promoted and encouraged in every possible way. Up to the point that VHI can be carried out by the condition, which provides for the payment of the sum insured not only in cases when the insured is sick, but also when he does not fall ill. Payment for a healthy lifestyle is made after the termination of the contract [20, p. 61].

On the basis of interaction with the state health system, are distinguished:

- Additional VHI programs, which include either those types of medical services that are not included in the guaranteed package, or higher conditions for medical care included in the state program. Naturally, these types of insurance imply a clear definition of government obligations;
- Substitute VHI programs, which give the choice between CHI and VHI. These programs are dangerous because wealthy people have the right to exit their public funding system, which undermines the principle of solidarity. As a consequence, substitute VHI programs have a local distribution (in the Netherlands

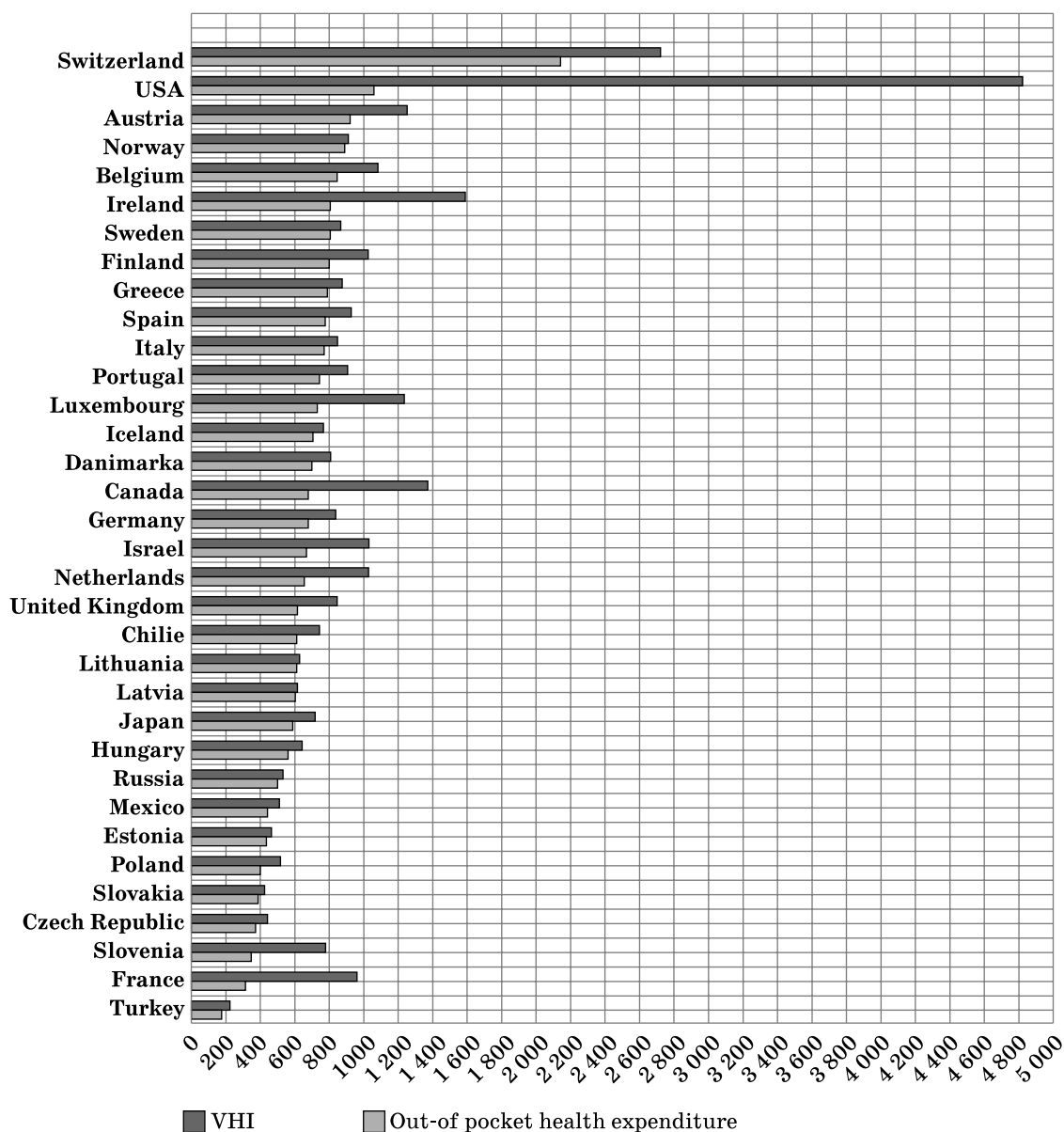


Figure 5. Comparison of the VHI and out-of pocket health expenditure in OECD countries, per capita US\$, 2015

Source: World Bank [3].

and Germany), and that are connected with historical traditions;

- Residual VHI programs are designed to compensate those expenses that are not covered by MHI. These programs are widely used in countries where co-payments are practiced. In France, for example, private insurance is widely used to cover approximately 20 % of the cost of inpatient care, not funded from SMI funds [21, p. 63].

Private health insurance is one of the most solidary and effective mechanisms for financing health care. It is regressive in the cases when it is preferential or compulsory and when the majority of the population uses this for insurance (USA, Australia). Additional private insurance is regressive, especially if middle-income people buy insurance of this kind. An additional alternative or substitute form of health insurance is the least regressive and even moderately

progressive because insurance is bought mostly by wealthier people.

Private health insurance does not comply with the principle of “horizontal” social justice, i. e. the patient in the original pays more than healthy one. In the countries where there exist the options for withdrawing from the CHI system (Germany, the Netherlands, Spain) (for Germany, the transition from CHI system to VHI is allowed only if the annual income exceeds 59,400 euros), most of the remaining people have low incomes and high risks. Therefore, this system is regressive.

However, the possession of broad statistical information creates conditions for the selection of risks, when insurers, based on their material benefits, try to screen out clients with a high probability of disease occurrence — there is a so-called negative selection of risks. Although in many countries such screening is prohibited,

mass media can find a way out by offering, for example, programs that do not include disadvantageous types of health services. It is possible also a positive selection of risks, in which the selection is made by the already insured persons, who can impersonate a relatively healthy person and at the same time know that he, needs serious treatment.

An important factor is the risk of dishonest behavior of patients, when the possibility of free treatment for medical services induces a temptation for repeated unnecessary appeals. This leads to an unjustified increase in expenditures and the irrational use of limited resources. The same problem takes place in the national insurance system, be it a social or budgetary form.

To combat such a manifestation in many countries are introduced co-payments. In the countries of central Europe (Czech Republic, Hungary, Poland, Slovakia) the cost sharing ranges from 24 to 27 % [22], and cover mainly dental care, pharmacology, and ophthalmology.

The co-payments are carried out in the following forms:

- Co-payments of the insurance premium, implying a contribution paid by the employee as an addition to the employer's contribution;
- Co-payment of citizens who are paid for when they receive medical assistance (in the form of a fixed fee or a fee for each service);
- Deductibles — deduction of a certain amount from all insurance payments;
- Balance invoicing — an additional fee charged by the supplier beyond what he receives from a third party payer.

The essence of the co-payments is the joint participation of the state and the population in covering the costs of medical care. This is one of the most fair and effective form of attracting private funds of the population. At the same time co-payment of the insurance premium is better ensured by the principle of social justice, because in the process involved both sick and healthy people. Proponents of charging user charges say that such charges reduce the overall demand for services (initially it was assumed that the number of unreasonable calls is reduced, since completely free services create the temptation of repeated treatment without special need) and increase the income that can be used to expand the supply of medical services.

Co-payments are used to ensure continuity and coordination of treatment, if, for example, visits are made to a specialist without referral of a family doctor. The introduction of co-payments to a more expensive drug contributes to a more rational choice in favor of generics. In addition, the introduction of co-payments makes patients not only more responsible for their health, but

also more observant about the actions of medical personnel.

In the Netherlands in 2013, people had to pay 350 euros (420 USD) before claiming compensation from health insurance. In Switzerland, there is an annual franchise of 300 Swiss francs (211 USD) for all services. However, consumers can choose insurance contracts with lower premiums and higher deductibles (up to 2,500 Swiss francs or 1,756 USD per year). In the United States, many health insurance plans have common deductions. For example, 78 % of employees faced franchises in the framework of health insurance plans funded by employers in 2011. The average total annual deductible for all employees covered is \$ 1,135 [23; 22]. At the same time, as a result of some studies, it appears that cost sharing reduces the intensity of use of both inefficient and effective procedures. Studies of Grady, Christensen, and others allow us to draw an important conclusion that co-payments restrain the use of preventive medical care, especially in risk groups—that is, in elderly patients, as well as in patients with chronic diseases, low incomes and [24; 25].

Another question of interest to us is how important is the role of co-payments in raising the revenues of the health care system. The data allow one to establish that the revenues received from official fees rarely exceed 5 % of the total amount of health care income. At the same time, we should not forget that the introduction of a system of co-payments can be accompanied by huge administrative and time-consuming costs. Thus, in 1999, the Netherlands abandoned the cost-sharing system introduced in 1997 due to the high administrative costs associated with carrying out the life of the new policy [26].

For user charges to be effective, one needs to ensure that the cost of charging fees is lower than the additional revenue. The experience of developing countries shows the need to overcome significant administrative, informational, economic and political obstacles. An example of an unsuccessful policy can be cited Czech Republic, where the introduction of insurance co-payments in the absence of incentives to contain costs both from the supplier and the patient led to the opposite result and contributed to a twofold increase in health care costs in the first two years of medical insurance [27, p. 1872].

On the other hand, those people who have a job spend less time on treatment, moreover, less abuse of treatment. Cost sharing contributes to the violation of the principle of social justice and serious financial problems. A situation arises when those who need treatment and support pay more for their health. Moreover, the same service makes up a different share according to the income, which exacerbates inequality. There-

fore, introducing cost-sharing requires a seriously developed government policy that requires balancing co-payments between individuals with different financial levels and health needs, which includes: mechanisms to protect the financial interests of citizens or households, choosing the right priorities in determining services with a partial payment, choosing the right form of co-payments, involving all actors and taking their opinions into account in the development of public policy, and also the features of co-payments related to the nature of the needs and structure of the health care system [28, p. 557].

### State policy on private sector involvement

Although health is one of the priority areas, health care spending should be within the framework of reality, expediency, rationality. Steady growth in spending in the sphere requires significant diversion of funds from other sectors of the economy. Moreover, these costs, due to a number of healthcare features, can not be naturally regulated by market mechanisms. They require the development of the public sector, state regulation, lead to an increase in taxes with all the ensuing consequences. The high level of health care costs not only withdraws part of the funds from production, but also deforms the market, shifts it from the liberal model to the radical one.

From this point of view, attracting private capital to the health sector allows one to relieve the state budget, to develop other spheres. In addition, it is possible to ensure the timely receipt of treatment; provision of better services; the formation of the necessary infrastructure; increase the incomes of medical workers, introduce new technologies, and innovate in the sphere; strengthening competition in the market of medical services. At the same time, countries that have developed health systems are trying to maximally finance the health sector at the expense of public funds (or social insurance funds). Realizing the complexity of the choice of private capital as an additional source of health financing, the governments of the countries try to maximize the share of state funding, and the involvement of private funds into two socially and financially justified forms — VHI and co-payments.

The choice of the structure and volume of free medical services defines a field that is free for the development of the private sector. From this point of view, it is very important to choose the right criteria when forming a state package and to improve this process. In Switzerland, for example, personal expenses for dental care that are not included in the guarantee package constitute about 5 % of total costs, and for the

whole spectrum of primary care, funded mainly by the SMI — only about 4 % [29].

There are several models of prioritization. The Dutch model of prioritization, for example, used four criteria: the need, effectiveness, cost-effectiveness of treatment and the possibility of paying for treatment by the patient. The Swedish model is based on three basic ethical principles, the sequence of which determines the order of priority:

- The principle of human dignity: all people have equal dignity and equal rights, regardless of their personal qualities and functions in society.
- Principle of need and solidarity: resources should be directed to the areas of maximum need. It should also pay attention to those groups of the population who are not aware of their human dignity, those who have less opportunity than others to force themselves to hear or use their rights.
- Principle of economic efficiency: the choice of field of activity or methods should depend on a reasonable correlation between costs and economic effect, which is measured by improving health and quality of life. This principle should be used only when comparing different methods of treating the same disease [30, p. 6–9].

The specificity of medical services as a commodity, as well as the medical services market, requires mandatory state regulation of the private sector. Intervention by the state implies both direct and indirect regulatory measures. To direct it is possible to carry obligatory participation in system of division of expenses; the choice between CHI or VHI systems; the introduction of certain restrictions and prohibitions for insurers on VHI; establishment of the order of the provision of VHI and paid services, co-payments; wider use of licensing and certification; rarely a ban on the introduction, for example, of private payments. Indirect changes include public health financing, the size and structure of the proposed MHI aid, health infrastructure, etc.

Analysis shows that private payments can act as an additional, but not an alternative source of health financing. The policy of the state in attracting private funds implies the formation of an additional source of financing, without violating the principle of social justice, solidarity, as well as the equality and accessibility of medical services for all citizens of the country.

In order to stimulate VHI, tax privileges are granted to insurers and insureds, the choice is possible between MHI and VHI, the introduction of public VHI. The Governments of Germany, the Netherlands and, to a lesser extent in Belgium, are actively intervening in the replacement VHI



market to ensure the availability of this type of insurance for people with low incomes, pre-insurance illnesses and for the elderly. The governments of Germany and the Netherlands also seek to prevent the consequences of selecting applicants according to the degree of risk, within the framework of legally approved and voluntary health insurance schemes. Measures are being taken to increase the availability of private insurance. In France, in 2000, free extended LCA was introduced for people with low income, so coverage of the VHI population increased from 85 to 94 % [31, p. 18–22].

One of the main problems in the VHI market is the price increase, the more this applies to individual VHI. It was assumed that the system for the formation of a single VHI market, approved in 1994 by a Council of Europe directive, would increase competition between insurers, while expanding the choice of types of insurance for the consumer and reducing its cost. However, the increase in competition did not affect the amount of contributions, in particular for individuals. Conversely, individual insurance prices often increase faster than health care costs in general. Therefore, the insurer is required to inform potential customers of the likelihood and scale of the increase in contributions, and it is also recommended to publish data on the increase in contributions in recent years (Mosialos & Thompson, 2004).

As for co-payments, they are subject to a narrow range of medical services — as a rule, medicines, dental and ophthalmologic care. Inpatient and outpatient primary health care, as well as laboratory tests and diagnostic studies, are covered by the public health system at a higher level. In general, the share of private expenses related to participation in payments under state insurance is insignificant. In Germany, for example, the amount of co-payments paid by patients in the social insurance system is less than 5 billion euros, which is only one-seventh of all cash payments [32, p. 133].

At the same time, the necessity of the service, to which the co-payment will be applied, its effectiveness, efficiency will be strictly taken into account. Thus, in the group of medicines, the most necessary medicines — for the treatment of life-threatening diseases — are subject to a smaller amount of co-payment for the patient. An analysis of the survey conducted in Ireland showed that in relation to treatment for dentists, the most well — off 20 % of the population accounted for more than 28 % of applications [33, p. 17].

Nevertheless, in order to maintain the principle of social justice, in almost all countries there are groups of exceptions from co-payments — children, the elderly, pregnant women, patients

with low incomes, with disabilities. They are either generally exempted or are paid at reduced rates. Annual maximums for co-payments are introduced, after which the insurance organization begins to pay services at full cost. Thus, co-payments in developed countries are used not so much to attract additional funds, but to rationalize the funds used, as well as to reduce cases of dishonest treatment.

## Conclusion

Health care is one of the priority spheres of any state. Not surprisingly, health spending in many developed countries is faster than their economic growth. At the same time, growth in health care expenditure is observed both during economic growth and during the economic crisis; although during the crisis there is a drop in growth rates. But an analysis of the structural dynamics of expenditures reveals a more significant increase in private payments in the pre-crisis post-crisis period, as well as in the crisis period. With the overall structure of expenditure, a more significant increase is observed in private insurance. In part, the private sector has expanded as a result of measures introduced in a number of countries. They included an increase in co-payments for prescription drugs and an increase in the reimbursement threshold for pharmaceuticals, a reduction in generic reimbursement, a reduction in dental packages, an increase in inpatient costs, an expansion of primary cost-sharing, and a reduction in benefits for certain population groups.

The determining factors in attracting private sector are: economic development of the country, absolute and relative indicators of public health financing; volume, structure, quality of medical services provided in the framework of national insurance; the elasticity of public and private expenditure on income; and also cultural, historical, geographical, political, social features of the country. At the same time, the specificity of medical services as a commodity and the market of medical services require mandatory state regulation of the private sector. The spread of private payments, as experience has shown, reduces access to health services, worsens the health of the population and creates a threat to national security and the prerequisites for increasing health care costs in the long term. The high costs of obtaining medical care, loss of income can lead to financial catastrophes, which are observed in both developing countries and developed countries.

Analysis of the forms of private fundraising shows that payments from the pocket at the time of receiving medical care are the most unacceptable: out-of-pocket payments and unofficial

payments. They are characterized by a violation of continuity, coordination in treatment; uninformed about their rights; unpredictability of current and forthcoming monetary costs, inefficiency. These payments are non-consolidated, regressive, unfair, both horizontally and vertically. They contribute to increasing health care costs, deform the real picture of the demand, the effectiveness of medical services, disrupt the policy to stimulate the activities of health workers and create conditions for involving the patient in shadow relationships.

That is why direct and informal payments cannot be an alternative source of financing, and as the main mechanism for attracting private capital is used only in developing coun-

tries, although to some extent they are also inherent in developed countries. In the high and middle income countries, the most solid and efficient types of private payments are widely used — private health insurance and co-payments. The policy of the state in attracting private funds implies the formation of an additional source of financing, without violating the principle of social justice, solidarity, as well as the equality and accessibility of medical services for all citizens of the country. This implies reducing the share of direct and unofficial payments, and encouraging the expansion of VHI and co-payments with the introduction of new mechanisms to increase their social equity and fairness.

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