THE ROLE OF PRIVATE HEALTH CARE FINANCING
IN THE CENTRAL AND EASTERN EUROPEAN COUNTRIES

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The economic transformation process in the central and Eastern European (CEE) countries has included, among others, a thorough reform of the previous, centrally planned health care systems. Consequently, the contemporary health care systems functioning in these countries, despite common directions of changes, vary in the area of detailed aspects. The purpose of the paper is to provide an overview of private sources of the health care financing (including out-of-pocket payments and prepaid plans), which are considered to be an important component of each health care system. In the first part of the paper, the results of comparative analysis of total health expenditure incurred by the CEE countries between 2000 and 2004 are presented in order to indicate the main trends, problems and differences among the analysed states. Next, the main types of private health expenditure are described and their contribution to the health care financing is presented. Finally, voluntary health insurance offered in the Polish market, considered as an additional method of health care financing, is characterized.

The obtained results allow to compare and evaluate the range of using private health care funds in the analysed countries during the last few years. Moreover, the results indicate a need for the further development of private methods of health care financing, which in practice can supplement or duplicate health care services delivered by the public sector.

Key words: health care system, health care financing, health expenditure, out-of-pocket payments, voluntary health insurance

Introduction

In the time of economic transformation in the Central and Eastern European countries, significant changes in their health care systems have been initiated. The intention of reforms was to shift away from the centralized model of Semashko toward a decentralized and contracted social health insurance system based on the main features of the Bismarck model applied in Western Europe. Social health insurance was introduced in most of the CEE countries in the nineties of the 20th century; however, the continuation of reforms is currently required because of the inability of existing systems to cover the citizens' health care
needs. In practice, public sources (social health insurance and/or taxation) are not able to cover all of the health care expenditure; therefore, the use of additional private sources is necessary. Consequently, we can observe an increasing contribution of individuals and enterprises in the health care financing, more in the form of direct payments for medical services and user charges than in the form of voluntary private health insurance. Private health sectors in this region are not developed enough to adequately supplement or complement the health care services provided by the public sector. It primarily results from the lack of appropriate statutory regulations, cost barriers and in some cases from the insufficient medical infrastructure.

The main aim of the paper is to describe and analyse the role and contribution of private funding in the health systems of the CEE countries, which in the situation of systematically rising costs of health care services and an insufficient cover of public health care has become more and more considerable. The presented analysis of health expenditure incurred by the CEE countries in 2001–2004 is based on data available from the WHO European Health for All Database (HFA-DB).

Analysis of health expenditure in the CEE countries

The trends concerning the expenditure on health care, its level, dynamics and structure influence the entirety of the organization and functioning of the health care system, as well as they appoint development possibilities of private forms of health care financing. Basic health expenditure ratios calculated for the selected CEE countries between 2001 and 2004 are presented in Table 1.

| Table 1. Total health expenditure in the CEE countries in 2001–2004 |
|---------------------------------------------------------------|
| **Country** | **Total health expenditure, PPPS per capita** | **Total health expenditure as % of GDP** |
|              | 2001  | 2002  | 2003  | 2004  | 2001  | 2002  | 2003  | 2004  |
| Belarus      | 582   | 601   | 665   | 427   | 6.6   | 6.4   | 6.4   | 6.2   |
| Bulgaria     | 476   | 561   | 573   | 671   | 7.2   | 7.9   | 7.5   | 8.0   |
| Czech Republic | 1065 | 1186  | 1302  | 1412  | 6.9   | 7.2   | 7.5   | 7.3   |
| Estonia      | 540   | 589   | 682   | 752   | 5.1   | 5.0   | 5.3   | 5.3   |
| Hungary      | 975   | 1115  | 1269  | 1308  | 7.4   | 7.8   | 8.4   | 7.9   |
| Latvia       | 549   | 611   | 678   | 852   | 6.2   | 6.3   | 6.4   | 7.1   |
| Lithuania    | 591   | 660   | 754   | 843   | 6.3   | 6.5   | 6.6   | 6.5   |
| Poland       | 646   | 732   | 745   | 814   | 6.0   | 6.6   | 6.5   | 6.2   |
| Republic of Moldova | 125 | 146   | 166   | 138   | 6.1   | 6.4   | 6.7   | 7.4   |
| Romania      | 429   | 491   | 540   | 433   | 5.5   | 5.9   | 6.1   | 5.1   |
| Slovakia     | 641   | 716   | 777   | 1061  | 5.6   | 5.7   | 5.9   | 7.2   |
| Ukraine      | 224   | 255   | 306   | 427   | 5.1   | 5.4   | 5.7   | 6.5   |
| EU members   | 1941  | 2078  | 2175  | 2334  | 8.3   | 8.5   | 8.7   | 8.7   |
| EU members before May 2004 | 2293 | 2437  | 2544  | 2729  | 8.9   | 9.0   | 9.3   | 9.3   |

Source: WHO European Health for All Database (HFA-DB), http://data.euro.who.int
Health expenditure can be classified into two main groups: public and private expenses. Public expenditure on health includes compulsory social health insurance contributions and/or direct or indirect taxation depending on the health care system established in a given country.

The health expenses from private sources comprise out-of-pocket households' spending on private medical services, various user charges for health care services included in the public health care package, as well as expenditure of the type of prepaid plans, such as voluntary health insurance and prepaid health care subscriptions that can be purchased by individuals and enterprises.

One of the most important problems concerning health care systems in the CEE states is a relatively low level of the health sector financing noticeable in all analysed countries. Total health expenditure per capita expressed in US $ purchasing power parity (PPP) in this region is several times lower than in the case of other European countries belonging to the European Union before its enlargement in May 2004, as well as this level differs significantly from the average level calculated for all present European Union members. The substantial differentiation of total health expenditure incurred by particular considered countries in 2001–2004 reflects differences in the level of economic development and in the area of conducted health policy. As is seen from data presented in Table 1, in the case of Czech Republic, Hungary and Slovakia (in 2004) health expenditure per capita exceeded $ 1000 annually, while during the same time in the Republic of Moldova, Romania and Ukraine this ratio amounted to less than $ 600 annually.

One should stress the importance of a systematic increase of total expenditure on health care noticeable generally all European countries. Moreover, this trend has become a significant worldwide problem and is expected to grow. The main factors that contribute to this situation are the following: increasing costs of health care services, demographic processes resulting in the ageing of population, and the application of advanced medical technology. In the group of the CEE countries, the total health expenditure dynamics ratio calculated for the whole analysed period reached the highest levels for the following countries: Ukraine (increase of 90.63%), Slovakia (65.52%), Latvia (55.19%), Lithuania (42.64%), Bulgaria (40.97%) and Estonia (39.26%).

Total health expenditure measured as a percentage of gross domestic product ranged in 2004 from as low as 5.1% in Romania and 5.3% in Estonia to 8% in Bulgaria and 7.9% in Hungary; however, the last values are still relatively low in comparison with West European countries where during the same period total health expenditure accounted for approximately 8.5–11.6% of GDP (Borda, 2007). The considered ratio calculated for the CEE countries has been increasing gradually, which indicates that for most of the analysed states total expenditure on health increases faster than the growth rate of GDP.

Table 2 shows the structure of health expenditure according to the main sources of financing in the CEE countries between 2001 and 2004. As is evident, the public sector funds cover the majority of total health care expenditure in these countries. Approximately 70–90% of total health expenses are public-funded. The predominant role of public sector expenditure is especially evident in the case of Czech Republic (90.7% of the total health expenditure in 2004) and Slovakia (88.0%) where the compulsory social health insurance contributions are the main source of he-
| Country                  | Public sector health expenditure as % of total health expenditure | Private out-of-pocket payments as % of total health expenditure | Private prepaid plans as % of total health expenditure |
|-------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------|
|                         | 2001 | 2002 | 2003 | 2004 | 2001 | 2002 | 2003 | 2004 | 2001 | 2002 | 2003 | 2004 |
| Belarus                 | 75.5 | 73.9 | 75.4 | 75.1 | 18.3 | 20.8 | 19.8 | 20.1 | 6.2  | 5.3  | 4.8  | 4.8  |
| Bulgaria                | 56.1 | 56.6 | 54.5 | 55.8 | 43.5 | 42.7 | 44.8 | 43.5 | 0.4  | 0.7  | 0.7  | 0.7  |
| Czech Republic          | 91.4 | 91.1 | 90.0 | 90.7 | 8.6  | 8.3  | 8.4  | 8.6  | 0.0  | 0.6  | 1.6  | 0.7  |
| Estonia                 | 78.6 | 77.1 | 77.1 | 76.0 | 19.0 | 20.1 | 20.2 | 21.3 | 2.4  | 2.8  | 2.7  | 2.7  |
| Hungary                 | 67.4 | 70.2 | 72.4 | 71.8 | 27.7 | 26.3 | 24.5 | 25.1 | 3.3  | 3.5  | 3.1  | 3.1  |
| Latvia                  | 51.2 | 52.1 | 51.3 | 51.6 | 48.5 | 47.6 | 45.9 | 45.9 | 0.3  | 0.3  | 2.8  | 2.5  |
| Lithuania               | 72.6 | 74.9 | 76.0 | 75.4 | 26.6 | 24.6 | 23.2 | 24.2 | 0.8  | 0.5  | 0.8  | 0.4  |
| Poland                  | 71.9 | 71.2 | 69.9 | 70.0 | 28.1 | 25.4 | 26.4 | 26.2 | 0.0  | 3.4  | 3.7  | 3.8  |
| Republic of Moldova     | 48.7 | 51.8 | 51.7 | 56.5 | 49.7 | 44.6 | 46.4 | 41.9 | 1.6  | 3.6  | 1.9  | 1.7  |
| Romania                 | 64.6 | 63.9 | 62.9 | 59.6 | 33.5 | 32.0 | 33.5 | 36.3 | 1.9  | 4.1  | 3.6  | 4.1  |
| Slovakia                | 89.3 | 89.1 | 88.3 | 88.0 | 10.7 | 10.9 | 11.7 | 12.0 | 0.0  | 0.0  | 0.0  | 0.0  |
| Ukraine                 | 60.3 | 62.3 | 65.8 | 66.5 | 30.2 | 28.8 | 26.9 | 26.3 | 9.5  | 8.9  | 7.3  | 7.2  |
| EU members               | 74.7 | 74.7 | 74.7 | 75.0 | 18.3 | 17.9 | 18.0 | 18.4 | 7.0  | 7.4  | 7.3  | 6.6  |
| EU members before May 2004 | 75.7 | 75.7 | 75.9 | 76.3 | 15.7 | 15.7 | 15.7 | 16.0 | 8.6  | 8.6  | 8.4  | 7.7  |

Source: WHO European Health for All Database (HFA-DB), http://data.euro.who.int and the author’s own calculations.
alth care revenue (Mossialos, 2002). Moreover, during the analysed period no considerable changes in the share of public funds in health care financing were noticed. Bulgaria, Latvia and the Republic of Moldova are characterized by a relatively small share of public sector funds in the health care financing (below 60%). It is accompanied by a definitely higher than in other analysed states level of private health expenditure, mainly direct households’ spending on health care services (out-of-pocket payments). In this region, the highest share of private out-of-pocket payments on health care is noted for Latvia where in 2004 this group of private health expenditure accounted for as much as 45.9% of total health expenditure. In general, private out-of-pocket payments tend toward a systematic increase, not because of the newly introduced health care reforms, but because of the insufficient health care financing from public sources.

To study the relationship between total health expenditure and health care spending funded from public and private sources, correlation coefficient was calculated. The results of the analysis show that the strongest positive the correlation exists between the amount of total health expenditure and the amount of public sector expenditure (the correlation coefficient equals 0.97); however, the strength of this relation has decreased gradually during the analysed period. The amount of total health expenditure is relatively weakly related to the amount of private prepaid plans.

Taking into consideration the main types of health care expenditure incurred by the CEE countries, it is important to emphasize the dominant share of inpatient expenditure (accounting for approximately 30–35% of total health expenditure). The amount of inpatient expenditure is determined by miscellaneous factors, such as, among others, the number of admissions to hospitals, the length of the stay in hospital, the average cost of one day of the hospitalization (room and board), costs of diagnostic procedures, medicines and remunerations of medical staff. In the last years, in most of the analysed states, decisions aimed at reducing inpatient expenses have been taken. The second position in the structure of health expenditure according to type is taken by the pharmaceutical expenditure. The highest expenses on medicines and other pharmaceuticals are incurred by the inhabitants of Slovakia (as much as 37.3% of total health expenditure in 2002), Poland, Hungary, Estonia and Czech Republic (approximately 25–30% of total health expenditure) (Dixon et al., 2004).

**Private sources of health care financing**

As mentioned earlier, one of the main trends occurring in the CEE countries’ health care systems is an increase of using private funds to cover medical expenses. This phenomenon results directly from the health policy, in particular, the tendency to shift partially the burden of health care financing towards the patients (in the form of partial or total payments for some medicines and health care services not reimbursed by the public system); also, it is related to problems of getting a quick access to the medical services financed from public sources.

In the structure of private expenditure on health care incurred by the CEE countries, out-of-pocket payments are characterized by the dominant contribution. In 2004, out-of-pocket payments accounted for 73–98% of total private health expenditure (Figure 1). Out-of-pocket payments include all costs paid directly by the consumer, including direct pay-
ments, formal cost sharing and informal payments.

Direct payments are for health care services not covered by the public system or to which the access is limited due to a lack of supply or long waiting times. These payments usually concern dentists, physicians for private appointments or hospitals for private treatment, laboratories and clinics for tests (Mossialos, 2002). The application of formal user charges (co-payments, co-insurance and deductibles) may reduce utilization of ineffective health care services. In the last years, formal user charges have been introduced in Estonia, Latvia, Bulgaria and Slovakia (Golinowska, 2006), however, their level and the services to which they are applied vary considerably in particular countries. Most often, formal user charges concern: dental services, medicines, selected ambulatory services, better conditions during hospitalization. Finally, informal payments (also called envelope payments or under-the-table payments) made by patients and their families to supplement the formal coverage are common. The estimated frequency of informal payments in the analysed countries is typically high (Lewis et al., 2000). The percentage of patients reporting that they had been required to make some payment for a health care service was 60% in Slovakia, 70% in the Republic of Moldova and 78% (of inpatients) in Poland. The level of these payments is the highest for inpatient care, while medicines and outpatient care are subject to lower levels (Dixon et al., 2004).

The CEE countries are characterized by a very small contribution of private prepaid plans, including voluntary health insurance, to the private health care funding. The expenditure belonging to the above-mentioned group reached a relatively high but still unsatisfactory level in Belarus, Estonia, Hungary, Poland and Slovakia.

Figure 2 shows that the CEE countries significantly vary according to the dynamics of private prepaid plans per capita, which during
the analysed period changed especially rapidly in the case of the Republic of Moldova, Lithuania and Bulgaria.

Generally, a characteristic feature of the transformed health systems functioning in the CEE countries is a comparatively high variability of the private prepaid plans’ dynamics, contrary to the West European countries in which the considered sources of health care financing, in particular voluntary health insurance, are well developed.

**Voluntary health insurance as a method of health care financing**

Statutory regulations concerning the health care system, in particular the range of public health care financing, have been important determinants of the development possibilities of voluntary health insurance products. We can distinguish three main types of voluntary health insurance according to its function in the health system (Mossialos, Thomson, 2004; Wasem et al., 2004);

- substitutive health insurance – substitutes for cover that would otherwise be available from the state (in practice, this type of health insurance is limited to specific population groups in a handful of West European countries, such as the Netherlands, Belgium, and Germany);
- complementary health insurance – provides a complementary cover for services excluded or not fully covered by the state, including the cover for co-payments imposed by the statutory health care system;
- supplementary health insurance – provides a supplementary cover for faster access and an increased consumer choice.

Voluntary health insurance is designed to be a supplement to the public health care system, and it mainly covers the costs of health services excluded from the basic benefits package. In most of the CEE countries, the insurance companies are allowed to offer supplementary and/or complementary health insurance products for individuals and for enterprises; however, in this region, the health insurance market has been developing slowly.
There is some demand for private health policies to supplement or duplicate public health care coverage, owing to the inadequacy of access, but potential consumers are not encouraged enough by the state to purchase health insurance products. In practice, the main problem is that the boundaries between public and private insurance are not clearly defined, partly because of the failure of many countries to define a basic benefits package (Dixon et al., 2004).

On the example of the Polish market, it is important to underline that one of the factors reducing the demand for group health insurance is the activity of private medical services providers which offer a comprehensive medical care in the form of prepaid subscriptions more and more often purchased by employers for their employees.

In Poland, voluntary health insurance can be offered by both the life insurance companies (in the form of accident and sickness riders added to the basic life insurance policy) and the non-life insurers (in the form of separate accident and sickness insurance products, at present usually sold in packages). Table 3 presents the market share of accident and sickness insurance expressed in the percentage of gross premium written in life and non-life branch, respectively.

As results from data presented in Table 3, the Polish health insurance market is still underdeveloped. Accident and sickness insurance supplementing life insurance products are more popular than similar insurance offered by non-life insurance companies. It mainly results from the easier access to the customer (while purchasing the life insurance policy), as well as from the greater activity of life insurers in this segment of the insurance market. Accident and sickness insurance, belonging to the non-life insurance branch, accounted for only 5.27-6.12% of the property and casualty insurance portfolio in 2000-2006.

The further development of the voluntary health insurance market in Poland depends, above all, on the following factors:
- increase of the inhabitants’ incomes;
- continuation of the reform of the public health care system, including an explicit defining of the guaranteed health care package;
• increase of the insurance awareness of society and disseminating the habit of covering various health risks on one's own (beyond the public system);
• extending the insurance companies' offer in the area of health insurance products providing direct health care services, which at present are better designed and sold by the private providers of medical services.

Conclusions

Taking into account the systematic increase of health expenditure and, on the other hand, the insufficiency of public sources, it seems to be reasonable to increase the contribution of private funds in the health care financing. The results of the analysis of total health expenditure incurred by the CEE countries indicate a relatively low level of the health care sector financing in comparison with other European countries, where mixed (public and private) sources of health care revenues have been used simultaneously for a long time.

Another trend observed in the CEE countries is an increase of using private funds to cover health care expenses partially or totally not reimbursed by the public system; however, voluntary health insurance and other prepaid plans do not play a significant role in the private health care financing. Expenditure on the prepaid plans as a proportion of the total private expenditure on health care is much lower than direct out-of-pocket payments. This situation shows that governments have tended to rely on other methods of shifting health care costs onto the consumers (such as direct payments, co-payments) rather than promoting and subsidizing private insurance markets. Consequently, out-of-pocket payments have a dominant share in private expenditure on health care.

At the present stage of the transformation process of the Polish health system, the possibilities of the development of voluntary health insurance exist mainly in the area of health care services partially covered by patients and health care services with limited access. The further development of the mentioned insurance products could give considerable advantages, such as stimulation of the insurance market's activity, reducing the long waiting time in the case of some medical services, and improving the quality of health care services. Despite the growing interest in the private health insurance sector, the main factors reducing the demand for these products are the following: high insurance premiums, the lack of tax incentives and the low level of the insurance awareness.

Generally, if private health insurance markets in the CEE countries are to operate effectively, clear boundaries need to be set between the public and the private health sectors, as well as the proper regulations concerning their activities are needed to protect consumers. It is also important to underline that the experience of West European countries in the functioning of private forms of health care financing, especially voluntary health insurance, can be useful for this region where there is a need for a more intensive development of the private methods of health care financing.
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