

COMPARING COST-SHARING PRACTICES FOR PHARMACEUTICALS AND HEALTH CARE SERVICES AMONG FOUR CENTRAL EUROPEAN COUNTRIES¹

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The paper reviews the existing cost-sharing practices in four Central European countries namely the Czech Republic, Hungary, Poland and Slovakia focusing on patient co-payments for pharmaceuticals and services covered by the social health insurance. The aim is to examine the role of cost-sharing arrangements and to evaluate them in terms of efficiency, equity and public acceptance to support policy making on patient payments in Central Europe. Our results suggest that the share of out-of-pocket payments in total health care expenditure is relatively high (24-27%) in the countries examined. The main driver of these payments is the

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expenditure on pharmaceuticals and medical devices, which share exceeds 70% of the household expenditure on health care. The four countries use similar cost-sharing techniques for pharmaceuticals, however there are differences concerning the measure of exemption mechanisms for vulnerable social groups. Patient payment policies for health care services covered by the social health insurance are also converging. All the four countries apply co-payments for dental care, some hotel services or in the case of free choice of physician. Also the countries (except for Poland) tried to extend co-payments for physician services and hospital care. However, their introduction met strong political opposition and unpopularity among public.

Keywords: cost-sharing, visit fee, co-payments, out-of-pocket payments, Central-Europe

JEL codes: I11, I18

1. INTRODUCTION

The paper is focusing on the issue of patient cost-sharing in health care in four Central European Countries often called “the Visegrád group”, namely the Czech Republic, Hungary, Poland and Slovakia. These countries have been facing similar challenges during the last decades concerning the transition of the health care systems, the continuous financial problems of the health insurance funds (Bryndova et al. 2009; Hlavačka et al. 2004; Kuszewski – Gericke 2005; Rechel – McKee 2009). To deal with these problems all the four countries apply some kind of cost-sharing to control public spending in health care financing. These payments in a broader context include all types of direct payments that health care consumers make when using health care services or when purchasing health care commodities (e.g. pharmaceuticals and medical devices).

In the examined Central European countries cost-sharing for pharmaceuticals and medical devices have long been applied and constitute a notable share of total health expenditure (Baji et al. 2011a; Rechel – McKee 2009; Tambor et al. 2010). On the other hand the share of cost-sharing for health care services covered by social health insurance remained minor. However, Slovakia, Hungary and the Czech Republic attempted to introduce co-payments for health care services with the objective of controlling public health care expenditure on the macro level through the control of the utilization of health care services as well as the abolishment of informal payments (Tambor et al. 2010). However the introduction of these fees was quite unpopular among the public and became a very sensitive political issue in these countries. In Slovakia and Hungary the political debate even led to the abolishment of these fees a few years after their implementation (Baji et al. 2011a).

In this paper we review the role of cost-sharing in health care financing in the four countries and compare the existing cost-sharing practices for pharmaceuticals as well as experiences with co-payments for health care services covered by the social health insurance. We apply a framework suggested by Robinson (2002) to evaluate these practices from the aspect of efficiency, equity and public acceptance.

The results might help to indentify the main challenges and risks of cost-sharing systems applied in the countries examined and to develop sustainable policies on cost-sharing. First, we present the health care systems of the countries examined, focusing on the structure of health care financing. Then, we examine the role of cost-sharing in health care financing and we review and evaluate the existing patient cost-sharing practices applied for

pharmaceuticals and health care services. Finally we draw a conclusion focusing on policy aspects.

2. BACKGROUND - COMPARISON OF THE HEALTH CARE SYSTEMS

2.1. Health care system

The health care systems of the Central European countries, namely Hungary, Slovakia, Poland and the Czech Republic show similarities concerning the organization, financing and structure of their health care systems. All the four countries have mandatory health insurance systems funded by income-related social health insurance contributions.

In Hungary and Poland health care is financed by single-payer health insurance funds, called National Health Insurance Fund (NHF) in Poland and National Health Insurance Fund Administration (NHIFA) in Hungary. In the Czech Republic and Slovakia financing is divided between more health insurance funds (Bryndova et al. 2009). In these countries, contributions are redistributed among the funds according to a risk-adjustment scheme based on age and gender.

2.2. Health care expenditure

Data on health care expenditure for the four countries are presented in Table 1 (% of health care expenditure as a percent of GDP, the health care expenditure per capita (USD PPP), the repartition of health care expenditure by financing agent and by function). In 2009 Total health care expenditure accounted for 7.4% of the GDP in Poland and Hungary, 8.2% in the Czech Republic and 9.1% in Slovakia. These ratios are below the OECD average (9.5%). In 2009 total health spending per capita was the highest in the Czech Republic and in Slovakia (2,108 USD and 2,084 USD in PPP), and lower in Hungary and Poland (1,511 and 1,394 USD) (OECD 2011).

The share of public health care expenditure (financed by social insurance contributions and tax revenue of the government) from total health care expenditure was the highest in the Czech Republic (83%), while lower in Hungary (70%), Poland (72%) and Slovakia (69%), (see Table 1 and Figure 1). The four countries spent the major share of the resources on curative and rehabilitative health care services, 58% and 54% in Czech Republic and Poland,

and 46% in Hungary and 44% in Slovakia. The share of expenditure on medical goods was the highest in Hungary (37%) and in Slovakia (35%).

Table 1
Health care expenditure in four Central European countries

	CZ	HU	PL	SK
Health care expenditure				
% of GDP 2009	8.2%	7.4%	7.4%	9.1%
% of GDP 2008	7.1%	7.3%	7.0%	8.0%
PPP (US \$) 2009	2,108	1,511	1,394	2,084
PPP (US \$) 2008	1,781	1,437	1,213	1,770
Repartition by financing agent 2009				
% of public	83%	70%	72%	69%
% of OOP	15%	24%	24%	27%
% of other private	2%	6%	2%	4%
Repartition by function 2009				
Services of curative and rehabilitative care (%)	58%	46%	54%	44%
Medical goods dispensed to out-patients	22%	37%	25%	35%
Services of long-term nursing care	3%	4%	5%	<1%
Prevention and public health services	3%	4%	2%	5%
Health administration and health insurance	3%	1%	1%	3%
Ancillary services to health care	6%	4%	6%	7%
Other (capital formation of health care providers)	5%	4%	7%	6%

Source: Health Database 2011

2.3. Health care reforms during the last decade - pressure on the public budgets

In the last decade the four countries have been facing similar challenges, namely the continuous deficit of the health insurance funds, and financial problems of health care providers. The countries had similar attempts to deal with these problems and to stabilize social health insurance. The measures expected to solve financial problems mostly considered the changes of the financing mechanism and ownership of the providers (privatization), expansion of contribution payers, the introduction and increase of patient co-payments as well as changes in the system of pharmaceutical subsidies (Bryndova et al. 2009; Hlavačka et al. 2004; Kuszewski – Gericke 2005; Rechel – McKee 2009).

In Slovakia health care reforms in 2004 aimed to stabilize the financial situation of the health care system, control the deficit of the health insurance funds. Measurements aimed to control the utilization of health care services and consumption of pharmaceuticals with the

introduction of co-payments, the definition of the basic health insurance package and the regulation of health insurance funds (Hlavačka et al. 2004).

In Hungary the continuous deficit of the NHIFA was one of the reasons for the Hungarian government to consider health care reforms as a part of the Convergence Program of Hungary in 2006. The main objective of this program was to contain the government deficit and meet the Maastricht criteria of the EU for joining the Euro zone (i.e. the ratio of the annual government deficit to gross domestic product must not exceed 3% at the end of the preceding fiscal year). Reform arrangements concerned the regulation, the structure and the financing of health care system including the expansion of contribution payers, the introduction of 1 Euro co-payments for physician visits and days spent in hospital, the change in pharmaceutical subsidies (decreasing public funding), the structural reform of in-patient care (the cut of acute bed capacity by 27%, the increase of chronic bed capacity by 31% and the establishment of the system of high priority and territorial hospitals) (Hungarian Republic 2006; Vas et al. 2009).²

Reforms in the Czech Republic were carried out based on The Public Budget Stabilization Act in 2007 which included a variety of measures like the establishment of an annual ceiling on social health insurance contributions for all contributors, the introduction of co-payments for health care services and pharmaceuticals, and changes of the system of setting prices and reimbursement rates for pharmaceuticals (Bryndova et al. 2009).

Health care reforms were carried out in Poland in 2003, when the National Health Insurance Fund replaced the regional sickness funds (Kuszeński – Gericke 2005). Recently, twelve health care related acts have been sent to public discussion. These bills consider changes in the drug financing, and pharmaceutical subsidy system, also health care provision - regulation would allow private health care funds to compete with the NHF from 2014 after a pilot period. Some of the bills have been already passed, while the others are still under discussions (Orlewska 2011).

However in all the four countries financial deficits could be controlled only for short periods after the reform arrangements. The decrease of public resources, the financial problems of providers (especially hospitals) and low quality of health care services have still remained challenges for the health care systems (Bryndova et al. 2009; Hlavačka et al. 2004; Kuszeński – Gericke 2005; Rechel – McKee 2009).

3. THE ROLE OF PATIENT COST-SHARING IN HEALTH CARE FINANCING

² Also, see the relevant legislation at <http://www.medimagister.hu/data/upload/docstore/TV06.CXXXII.pdf> (in Hungarian).

The share of out-of-pocket payments³ (including official fees in a form of co-payments, payments for OTC drugs and for private services and also informal payments) in total expenditure is the highest in Slovakia (27%) in 2009, slightly lower in Hungary and Poland (24%) and significantly lower in the Czech Republic (15%), (see Figure 1).

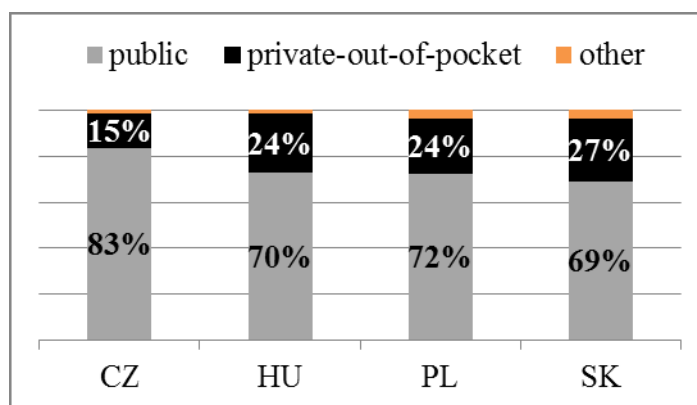
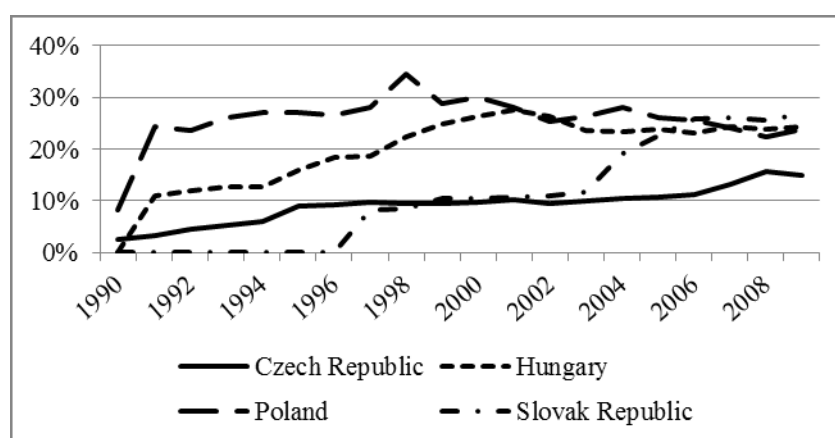


Figure 1. Repartition of the health care expenditure;

Source: Health Database 2011

The share of out-of-pocket payments have been increasing continuously after the change of the communist regimes in the 1990's, where health care costs were mostly covered by public resources (Figure 2). In Slovakia the dynamic increase of the share of out-of-pocket payments in total health care expenditure in 2004 might indicate the effect of financial reforms in 2003. Also, the effect of Public Budget Stabilization Act in 2007 in the Czech Republic is visible.



³ We have to highlight that according to the terminology of the OECD, out-of-pocket payments “comprise cost-sharing, self-medication and other expenditure paid directly by private households.” Thus, this definition is broader than cost-sharing. See: <http://stats.oecd.org/glossary/detail.asp?ID=1967>

Figure 2. Out-of-pocket expenditure of the population 1990-2008 (% of total expenditure);

Source: Health Database 2011

In Hungary, Poland and Slovakia the share of out-of-pocket payments in total health care expenditure is relatively high compared to other OECD countries (Figure 3). The share of out-of-pocket payments in the Czech Republic is comparable to the OECD average.

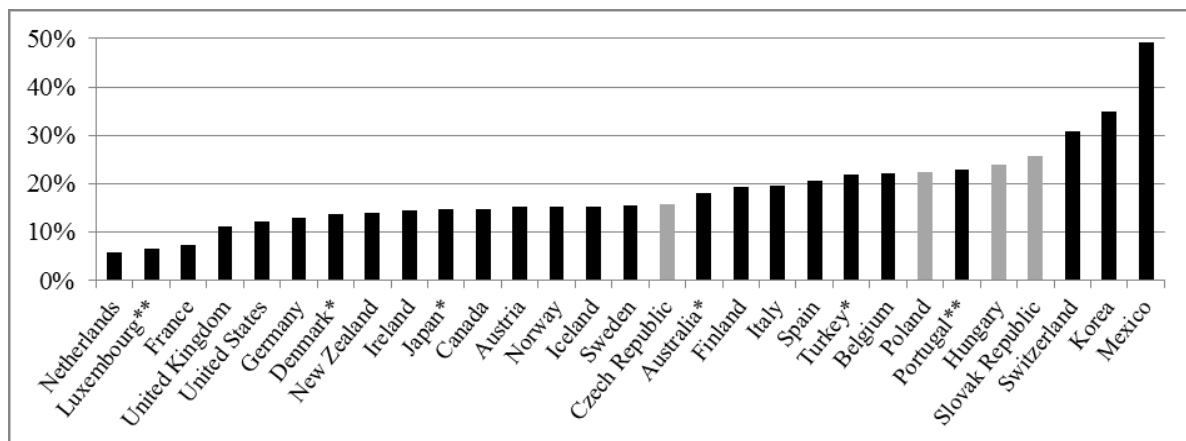


Figure 3. Out-of-pocket expenditure in OECD countries, 2008 (% of total expenditure)

Source: Health Database 2011 *indicate data from previous years

If we have a closer look at the repartition of out-of-pocket payments, we can observe that the main driver of these payments is the expenditure on pharmaceuticals and medical devices in the countries examined. The share of expenditure on pharmaceuticals and medical devices exceeds the 70% of the total out-of-pocket expenditure in Hungary, Poland and Slovakia (Figure 4). While the share of out-of-pocket payments on health care services (physician visits and hospitalization) is minor. However the repartition of out-of-pocket payments is more balanced in the EU15 countries.

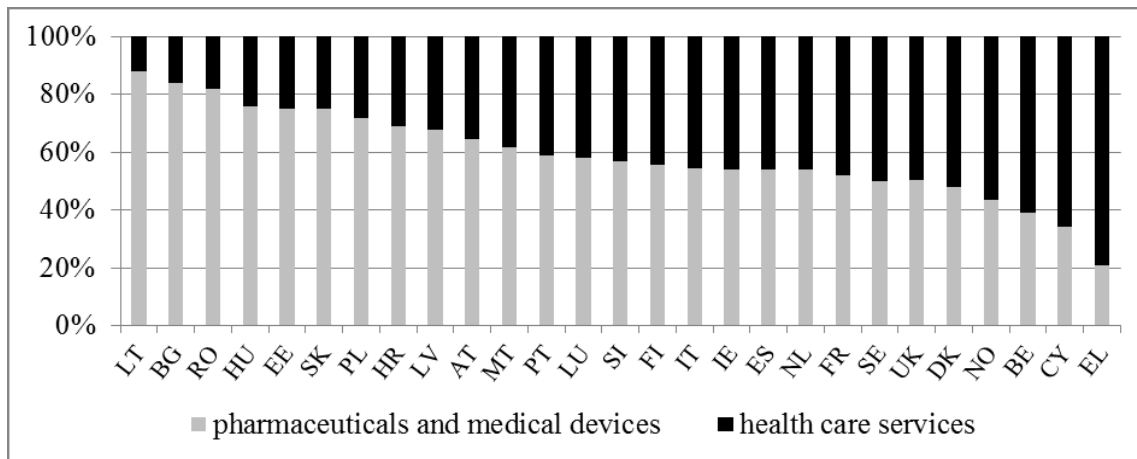


Figure 4. Structure of out-of-pocket expenditure of the population.

Source: Consumers in Europe, Eurostat 2009

4. COST-SHARING PRACTICES IN THE FOUR COUNTRIES

4.1. Cost-sharing for pharmaceuticals and medical devices

In the examined Central European countries co-payments for commodities (e.g. pharmaceuticals and medical devices) have long been applied (Baji et al. 2011a; Rechel – McKee 2009; Tambor et al. 2010). We find converging cost-sharing techniques in the four countries (comparable to those in Western European countries): e.g. partial reimbursement (based on a co-insurance rate denoted as a % of the price of the drug or reference pricing), and all these countries apply fix co-payments for 100% reimbursed drugs. All countries apply reference pricing for prescription drugs – patients should pay the difference of the prices if the actual price of the drug exceeds the reference price. In the Czech Republic and Slovakia the partial reimbursement of pharmaceuticals is based mainly on reference pricing. In Hungary reference pricing is also used such as generic reference pricing and therapeutic reference pricing. In the following we review the application of these techniques.

▪ The Czech Republic

In the Czech Republic the pharmaceutical reimbursement system is mostly based on reference pricing. Thus, for prescription drugs, patients should pay the difference between the actual price and the reference price. In 2008 a flat co-payment of CZK 30 (~1.20 Euro) was also introduced for all prescription pharmaceuticals, thus patients should pay the difference between the reference price and the actual price of the drug or the 30 CZK (~€1.20) flat co-

payment, whichever is greater. In practice, 57% of prescribed pharmaceuticals (in terms of the number of packs distributed) did not require any co-payment beyond the CZK 30 (€1.20) in 2009 (Bryndova et al. 2009). In addition, in 2008 a ceiling was introduced for co-payments (5,000 CZK ~ 200 Euro) and patients, whose expenses (including co-payments for services as well as for pharmaceuticals) exceed this limit, are reimbursed for the additional co-payments by their health insurance fund (Bryndova et al. 2009).

- Hungary

For the vast majority of the prescribed drugs, patients are obliged to pay co-payments. The “Act on the secure and efficient supply of pharmaceuticals and medical aids and on the general rules of pharmaceutical trade”⁴ adopted by Parliament in 2006 defines the current reimbursement categories for pharmaceuticals as well as the subsidy rates for drugs in each category. In the category of “indication dependent drugs” (physicians with a special permit or recognition are authorized to prescribe these medication) there are four subsidy categories: 50%, 70%, 90% and 100% (for drugs for life-threatening chronic conditions and orphan drugs in selected indications), with the co-payments of 50%, 30% and 10% of the full price. For drugs which are 100% subsidized in the category of indication dependent drugs a 300 HUF (~€1.1) fix fee per box should be paid since 2007. Drugs belong to the category of “normative reimbursement” (i.e. drugs for chronic diseases, that all physicians are authorized to prescribe) patient co-payments account for 15%, 45% and 75% of the price. In addition to these categories reference pricing (both generic and therapeutic reference pricing) is also used, where the difference between the reference price and the actual price should be paid by the patients. In Hungary some patients with a special certificate have the right to get prescribed medicine for free, but the amount should not exceed a certain budget (max. 12,000 HUF ~ 44 Euro) per months. Disabled persons and those persons are enabled for the certificate whose medical expenses exceed 10% of the minimum pension and the family income per person does not exceed the minimum pension (in 2010 around 100 Euro) or 150% in case if the person is living alone.⁵

- Poland

⁴ Available at <http://www.complex.hu/kzldat/t0600098.htm/t0600098.htm> (in Hungarian).

⁵For more details see

http://www.oep.hu/pls/portal/docs/PAGE/LAKOSSAG/OEPHULAK_EBELLAT/ACH%C3%8DVUM%202010/KOZGYO_GYELLATAS.PDF (in Hungarian)

According to the new act⁶ on pharmaceuticals, a group of drugs will be guaranteed to be available without patient co-payments (e.g. drugs to treat malignant tumors with proven efficacy, psychiatric disorders and mental disabilities, developmental disorders, diseases posing a particular threat of epidemic, and those for use in therapeutic programs). Co-payments of 50% are applied for drugs that require a course of treatment less than 30 days and co-payments of 30% are applied for drugs which require a treatment more than 30 days. For drugs where co-payments exceed a certain limit defined as a percentage of the average salary patients should pay only a small fixed co-payment (i.e. for drugs with co-payment of 30% if the monthly cost exceeds the 5% of the average salary, and drugs with co-payment of 50% if the monthly cost exceeds the 30% of the average salary in Poland), (Orlewska 2011).

- Slovakia

In Slovakia drugs are divided into three reimbursement categories. The first category consists of essential drugs (e.g. oncology, antibiotics, cardiovascular, respiratory, neurology, and some vaccines), which are fully reimbursed by the insurance funds. For 100% reimbursed drugs a fix co-payment of 5 SK (0.17 Euro) should be paid by the patients (approximately one-third of the reimbursed drugs are 100% reimbursed) (Szalay et al. 2011). Drugs in the second category are partially subsidized and drugs in the third category (drugs on negative list) receive no subsidy at all. In the partial reimbursement category co-payments are based on reference pricing, it is equal to the difference between the reference price and the price of the actual drugs (Kaló et al. 2008; Szalay et al. 2011). In Slovakia so far, there are no exemption categories for co-payments for pharmaceuticals. In 2011 it was planned to introduce a limit for expenditure for vulnerable social groups (a maximum limit of €45 quarterly for co-payments on drugs for selected groups of insured), (Szalay et al. 2011).

4.2. Patient payments for health care services

During the communist period health care services were provided without patient co-payments in the four countries. After the change of the regimes, co-payments were intruded for some services (e.g. dental care, free choice of physician, hotel services like meal and room

⁶ Previously two reimbursement lists existed in Poland. For drugs on List A, the levels of reimbursement is related to the level of drug clinical use 100%, 70% or 50% with the co-payments of 30% and 50% of the full price. A fix fee equivalent of 0.67% of the lowest salary in Poland (currently 3.20PLN ~ 0.77 Euro) per prescribed pack should be paid for 100% reimbursed drugs. For these expenses a limit is introduced, and the total amount spent on these co-payments should not be higher than a certain percent of the minimum salary in Poland. Drugs on List B are only for patients with chronic diseases with the reimbursement categories of 50% 70% and 100% with the same co-payments of 30% and 50%.

facilities), however the use of physician and hospital services remained free of charge. A few years ago Slovakia, Hungary and the Czech Republic tried to introduce co-payments for using health care services (around 1-2 Euro per visit/day). However these implementations were rather unpopular among the public and in Hungary and Slovakia co-payments for health care services were even abolished after a few years of their introduction. In the Czech Republic co-payments still exists, however the reduction of the measure and the expansion of exemptions are still on the top of policy agenda. Poland has not introduced co-payments for health care services yet, but this is a topic of policy discussion (Tambor et al. 2010). However regulations of the four countries define some services for which patient should pay co-payments – or exclude some services from the benefit package guaranteed by the social health insurance, in which case the full price of the service should be covered by the patients – the role of co-payments/user fees in physician and hospital care remained minor in contrast to Western European countries.

- The Czech Republic

In the Czech Republic co-payments for health care services were introduced at the beginning of 2008, regulated by the Public Budgets Stabilization Act. The aim of the introduction of co-payments was to reduce excessive utilization of services and generate additional revenue for the health care system (Bryndova et al. 2009; Eurohealth 2009a, Eurohealth 2009b). The fee was 30 CZK (€1.20) per physician visit, 60 CZK (€2.40) per day of hospitalization, 90 CZK (€3.60) per ambulatory visits. People living below the poverty line, neonates, chronically ill children, pregnant women, patients with infectious diseases, organ and tissue donors, and individuals receiving preventive services were exempted. Moreover, an annual ceiling of CZK 5000 (~ 200 Euro) per person was also established for co-payments (not including co-payments for hospital stays and ambulatory services outside of standard office hours). Above this limit further co-payments are reimbursed by the insurance funds (Bryndova et al. 2009). In February 2009 the government exempted children under the age of 18 from co-payments as well and for people over the age of 65 the maximum ceiling for co-payments were reduced from 5000 to 2,500 CZK (Bryndova et al. 2009; Eurohealth 2009a, Eurohealth 2009b). Co-payments are also applied in dental care, where social insurance covers limited treatments, and only the least expensive options. Thus, most of the health care consumers choose to visit private dentists and cover the full price.

- Hungary

Social health insurance provides physician and hospital services free of charge. Co-payments are charged only in case of the following services:

- Dental care: for orthodontic treatment under the age of 18, for tooth keeping and replacement above the age of 18.
- Free choice of physician (excluding delivery and maternity care). Patients should cover 30% of the cost, maximum 100 000 HUF.
- Using services without referral (excluding urgency care).
- In-patient care: extra meal and accommodation for in-patient and sanatorium treatment, in-patient chronic care.

However, in 2007 as a part of reform arrangements the government introduced co-payments for health care services, 300 HUF (~1.1 Euro) per visit and per day hospitalization. Children under the age of 18 were exempted. Also, users of certain health care services (e.g. emergency care, some chronic care/treatments, prenatal and preventive care) were exempted as well. A limit was introduced for the total amount of payments and defined in maximum 6,000 HUF (22.2 EUR) per year per service type. Limits were applied separately for GP, out-patient and in-patient care, the total amount of payment was limited at 15,000 HUF (55.5 EUR) per year. Patients had the right to ask for the reimbursement of their payments after 20 visits or 20 day spent in hospital per year. The beneficiary of the collected revenue was the provider institution (in case of primary care it means GP practices). The aim of the implementation was to make consumers cost-conscious and to regulate demand for public health care services, as well as to deal with the informal patient payments in Hungary (Ministry of Health 2006). However this “visit fee” was abolished shortly after its introduction in 2008 as a result of a population referendum.

▪ Poland

In Poland primary-out-patient and in-patient services are provided by the social health insurance without co-payments. Dental services which are available in the benefit package are restricted. The full cost of the dental services which are not guaranteed by social health insurance should be covered by the patients. Patients should pay co-payments in dental care, where children and pregnant women are exempted. Co-payments are used for the following services:

- the costs of food and accommodation at chronic medical care homes, nursing homes, medical rehabilitation facilities, and sanatorium;

- the costs of travel to ambulances if there is no need for urgent treatment and to and from a sanatorium;
- a flat price for diagnostic examinations.

The level of co-payments is limited and depends on the income of the insured person, which is the main basis of the limitation (Kuszeński – Gericke 2005). However, there is a prolonged policy discussion on possible introduction of patient cost-sharing for health care services in addition to dental care but there is still no actual policy plans about the implementations (Tambor et al. 2010).

▪ Slovakia

In Slovakia social the health insurance system provides health care services in primary out-patient and in-patient care. Co-payments should be paid only for emergency care services (70 SKK ~1.7 Euro per case), some dental services, and for provision-related services such as food, transport and hotel services. Slovakia also attempted to introduce co-payments for health care services in June 2003 with the aim to decrease unnecessary utilization of health care services and to deal with informal payments. The fee was 20 SKK per physician visit, 50 SKK per day of hospitalization, 60 SKK per ambulatory visits. Patients with chronic illnesses and some vulnerable groups were exempted. The system worked for three years, while in 2006 the new government came to power abolished co-payments for physician visits and hospital care (Pazitny-Szalay 2006; Schneider 2008).

4.3. Informal payments

However, we have to highlight that despite the fact that most of the health care services are provided without co-payments in Hungary, Poland and Slovakia, patients are regularly paying for health care services informally in these countries (Ensor 2004; Gaal et al. 2006; Lewis 2000). These payments represent a significant share of the income of some health care personnel (Gaal et al. 2006). According to the literature patients pay informally to the medical personnel in the hope of getting care faster or with better quality. Other explanation of the origin and reasons of informal payments is based on culture and habit, and inherited experiences rooted in communist regimes (Bognár et al. 2000; Mihályi 2004; Gaal – McKee 2005; Szende – Culyer 2006; TÁRKI 2007).

5. EVALUATION OF COST-SHARING PRACTICES

We use the framework suggested by Robinson (2002) to evaluate cost-sharing practices of the four countries in terms of efficiency, equity and public acceptance.

5.1. *Efficiency*

In the context of the evaluation of cost-sharing policies, the interpretation of efficiency has several aspects. According to Robinson (2002) if the main aim of cost-sharing is to discourage ‘unnecessary’ demand we can analyze the effect of cost-sharing on the utilization of services. However, the aim of cost-sharing might be also to generate revenue for funding health care when alternative funding (such as tax revenue) is not available. In this case we can examine whether the increase of cost-sharing reduces public expenditure on health. Considering the cost-sharing practices in the four countries, the introduction of co-payments for health care services rather meets the first objective, while the practice of cost-sharing for pharmaceuticals serve the second purpose and accounts for relevant resource for health care financing.

The introduction of co-payments for health care services was motivated by the control of utilization in all the three countries. There is evidence in the literature that introduction or increase of co-payments decreases the utilization of health care (e.g. Manning et al. 1987; Newhouse 1997). We have similar experiences in the four countries as well after the introduction of a ‘1 Euro universal fee’. In Slovakia according to estimations in the second half of 2003, after the introduction of co-payments there was a 10% reduction in the number of out-patient visits compared to the same period in 2002 and also the number of emergency visits dropped by 13% (Pazitny and Szalay 2006; Schneider 2008). In Hungary the average monthly number of visits to GP’s decreased by 26%, out-patient visits decreased by 19% and the days spent in hospital by 15% (Boncz et al. 2008; Körösi et al. 2009; Nagy et al. 2008).⁷ In the Czech Republic during the first year of the introduction of co-payments the number of emergency visits dropped by 36%, ambulatory specialist visits by 15% and ambulatory specialist visits in in-patient facilities by 19% (Kossarova 2008; Eurohealth 2009a; Eurohealth 2009b). However there is a concern that the introduction of co-payments has an adverse equity effect as vulnerable social groups are more sensitive to price changes (e.g. Manning et al. 1987; Newhouse 1997).

⁷ However we have to highlight that other changes concerning the referral and prescription system might also affect the utilization in Hungary,

In the case of pharmaceuticals and medical goods, relevant revenue is generated from co-payments. We can observe that the major part of the out-of-pocket payments of the households is co-payments for pharmaceuticals (more than 70%). Based on OECD data presented in Table 1 we can estimate that patient co-payments for pharmaceuticals and medical goods account for a relevant part of the health care expenditure spent on these items.

Besides the objectives above, in the CEE countries the introduction of co-payments was also motivated by their potential to eradicate or formalize informal payments. However we have no clear evidence that the introduction of co-payments does not induce a double financial burden on health care users (Baji et al. 2011; Ensor 2004; Lewis 2000).

5.2. Equity

According to the main policy concepts of equity the need for health care should determine the amount of health care consumed by households and the ability to pay should determine payments for health care services. This implies that the use of services should not depend on the ability to pay, however the distribution of health care payments should be in line with the distribution of the household's income (e.g. De Graeve – van Ourti 2003; Wagstaff – van Doorslaer, 1993).

Concerning the first aspect, the literature suggests that co-payments might induce adverse effects on equity by decreasing the utilization of health care services for those who are not able to pay for them. This might lead to higher morbidity, emergency care admissions and mortality (Atella et al. 2005; Austvoll-Dahlgren et al. 2008).

In the four countries the measure of cost-sharing is high especially in the case of pharmaceuticals. Thus, if the exemption mechanisms for vulnerable social groups are not adequate, the equity in access might be questionable. We can observe that the Czech Republic applies a ceiling for the total yearly amount of co-payments paid by a patient and in Poland co-payments for a certain medication cannot exceed a certain percentage of the average salary. However the role of protection mechanisms seems to be minor in Hungary and Slovakia. For co-payments for health care services all the three countries applies/applied both exemption of certain services or social groups and also a ceiling for these payments. However we have no information about the effectiveness of these protection mechanisms. For example in Hungary exemption categories were mostly formulated based on the type of care rather than the income situation of the patients.

As for the financial distribution of these payments out-of-pocket payments are a regressive means of financing health care (e.g. De Graeve – van Ourti 2003; Wagstaff – van Doorslaer, 1993). Thus, lower income households pay a relatively higher share of their income on health care than better-off households. The literature also suggests that in Hungary, Slovakia and Poland worse-off households spend relatively higher share of their income on health care as well (Hlavačka et al. 2004; Kuszewski et al. 2005). The situation might be better in the Czech Republic, where the share of out-of-pocket payments in health care financing is lower, and the burden is quite evenly distributed across households (Bryndova et al. 2009).

5.3. Public acceptance

The introduction of co-payments for health care services met strong political opposition and unpopularity among public in the countries examined. Co-payments for health care services become a very sensitive political issue and had an important role in policy discussions as well as in politics, which divided political parties (Baji et al. 2011a; Baji – Gulácsi 2010; Hall 2009). In Hungary and Slovakia co-payments for health care services were even abolished after a few years of their introduction. In Slovakia the opposition party argued that user fees violate the constitutional right to free health care provision and asked for a constitutional inspection of this issue. The Constitutional Court ruled that user fees are in accordance with the Constitution. However, the government elected in 2006 abolished co-payments in accordance with their election campaign (Szalay et al. 2011). In Hungary the opposition party initiated a popular referendum, where more than 80% of the participants voted against co-payments. This led to the abolishment of the payments in April 2008. In the Czech Republic co-payments still exist, however the reduction of the measure and the expansion of exemptions are still on the top of the policy agenda. The opposition party called for the complete abolition of all co-payments in their campaign at the regional elections in 2008. Due to this pressure, exemption categories were extended and the government reduced the maximum ceiling of the co-payments for the elderly as well (Bryndova et al. 2009; Eurohealth 2009a; Eurohealt 2009b).

However at the same time co-payments for pharmaceuticals have long been applied in these countries and seem to be more acceptable for the public, nevertheless these payments constitute the major share of household expenditure on health care.

6. DISCUSSION AND CONCLUSIONS FOR POLICY MAKERS

Our paper reviews the existing cost-sharing practices in the context of four Central European countries namely the Czech Republic, Hungary, Poland and Slovakia, focusing on patient co-payments for pharmaceuticals and for medical services covered by the social health insurance. We examine the role of cost-sharing in health care financing, and the differences, and convergences of cost-sharing policies and evaluate them in term of efficiency, equity and public acceptance. We believe that our results might support policy making about patient payments in Central European countries. Our findings should contribute to establish sustainable cost-sharing policies acceptable for the public.

The main conclusions of our study are summarized below:

- 1) The share of out-of-pocket payments in health care financing is relatively high in Hungary, Poland and Slovakia (24-27%) compared to other OECD countries. However in the Czech Republic the share of out-of-pocket payments is significantly lower (15%). The main cost driver of out-of-pocket health care expenditure is expenditure on pharmaceuticals and medical devices, which accounts for more than 70% of these payments in Hungary, Poland and Slovakia.
- 2) We find that the four countries apply similar cost-sharing practices for co-payments for pharmaceuticals as well as for health care services. However we identify differences concerning the measure of exemption mechanisms for vulnerable social groups.
- 3) We find that the introduction of co-payments for health care services leads to a significant decrease in the utilization of services, which might lead to unequal access for health care. The lack of protection mechanisms in the case of pharmaceuticals especially in Hungary and Slovakia might hurt the principles of equity. Furthermore, the introduction of co-payments is rather unpopular among the public and leads to political debates.

Based on our findings we recommend some points concerning cost-sharing policies for further consideration:

- Protection mechanisms in the case of out-of-pocket payments for pharmaceuticals and medical devices should be reconsidered especially in Hungary and Slovakia (i.e. the introduction of ceilings for co-payments for medicine and the expansion of exemptions for vulnerable social groups) to reduce negative effects of these payments on equity and access which might lead to higher morbidity.
- It should be taken into consideration that the introduction of co-payments for health care services might lead to adverse equity effects. If co-payments are introduced, the

exemption mechanism for the vulnerable social groups should be carefully defined. However this might lead to difficulties in administrative processes and abuses.

- Furthermore, the introduction of co-payments is a hot political issue. Thus, consensus among political parties and support of the public is inevitable for successful implementation. This requires open policy discussions and strong communication with the public.
- When considering the introduction of co-payments for health care services the existence of informal payments should be taken into consideration. Thus, the introduction of co-payments might induce a double financial burden for health care services. Policies which aim to formalize informal payments should consider the origin and the reason of these payments (e.g. patients might pay to get services with better quality and better access or personal attention) as well as the possibilities to compensate the beneficiaries of informal payments (otherwise this small group of physicians might have the power block health care reforms).
- Other ways of increasing private resources (private insurance) should be also considered to be able to maintain the quality of health care services. From previous studies we know that some population groups are willing to pay for the improvement of health care services (Baji - Gulácsi 2010; Baji et al. 2011a). First of all, health care services guaranteed by the social health insurance for the whole population should be clearly defined as well as the quality standards of these services. However policies should be careful not to hurt the principles of equity.

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