

# PROJECT FINAL REPORT

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## **4.1 Final publishable summary report**

### **4.1.1 Executive summary**

Given the lack of systematic research on the assessment of patient payment policies and the need of evaluating the mechanisms of official patient payments in Central and Eastern Europe (CEE), Project ASSPRO CEE 2007 focuses on these issues. The aim of the project is to identify a comprehensive set of tangible evidence-based criteria suitable for the assessment of patient payment policies and to analyze the efficiency, equity and quality effects of these policies, specifically in CEE countries. The research aim is approached using quantitative and qualitative research methods from a broad range of fields related to socio-economic science and humanities. In particular, quantitative techniques (such as modeling, trend analysis, revealed and stated preference methods) are combined with qualitative data to study the micro and macro outcomes of patient payment policies.

The project aim is directly related to topic SSH-2007-6.2.1 Improved ways of measuring both the potential for and impact of policy, addressed in research area 8.6.2 of Theme 8 in the Seventh Framework Program. The policy of interest in this project is the policy of patient payment, namely the evaluation of policy content, its changes and impacts.

Project results indicate that formal patient charges could be a rational policy choice in CEE countries for improving efficiency in health care provision and the effectiveness of resource allocation, as well as for generating additional health care resources. However, there are major health care system problems that should be resolved before such reforms can be successful.

First, in the CEE region, there are widespread informal payments for health care services. These payments range from 0.1% to 0.5% of GDP depending on the country. The elimination of the informal payment practice prior to the implementation or increase of formal charges will be important in order to avoid the double financial burden to the patients. Informal patient payments present a considerable problem in the health care sector because they negatively affect the overall functioning of the health care system. In case of informal patient payments, the providers of health care services are compensated individually, irrespective of the value of health care provision to the society. A mixture of strategies on the demand and supply side of the health care market is proposed by the project as a plausible solution to informal patient payments.

Second, there is an urgent need to carefully design or redesign the exemption mechanisms that accompany formal patient charges given the catastrophic and impoverishing effects of these charges among the vulnerable patient groups. Although from a macro-level perspective, formal and informal patient payments for health care services seem negligible, they have a considerable impact on the individual patients by creating financial barriers to access health care services. Accumulated patient payments affect the demand for these services forcing some patients to forgo health care. Other patients employ a different coping strategy by borrowing money not only to pay for hospitalizations, but also for visits to physicians. The inability to pay ranges from 30% to 50% of those in need across the CEE countries. Thus, new or increased formal charges should be implemented with precautions taking into account the country specific contextual factors.

The project outcomes are not only relevant to CEE countries but they also help to establish standards in the assessment of patient payment policies around the world. In particular, the project demonstrates the importance of combining qualitative and quantitative policy indicators and of incorporating consumer attitudes, preferences and willingness to pay in the policy-making process.

#### **4.1.2 Summary description of project context and objectives**

##### **PROJECT CONTEXT**

Health policy at the EU level is still in its infancy but health policy issues have gained considerable importance in the EU policy debates during the last decade. High-quality and accessible health care services have been declared a priority and commitment for the European Commission. In view of this, the Commission has attempted to reinforce cooperation between the Member States in the field of health care by clarifying how the Treaty principle of free movement applies to patients. The Member States have also acknowledged that health is an area where the Commission has an important role but the idea of harmonizing the national health care systems has not (yet) received a common acceptance. Therefore, the organization and provision of health care services still remain the responsibility of the individual Member States. Nevertheless, at the EU level, a major objective has been defined to analyze those features of health care services that are of common interest and to clarify their context.

One characteristic of health care provision within the EU, which is commonly important but shows a great diversity among the Member States, is the level of patient payments. Official patient payments exist in publicly-funded as well as in insurance-based health care systems of the EU. In the Western European Members States, systems of patient payments are implemented mainly as a deterrent against unnecessary overuse of health care services and with the aim to enhance the efficiency of health care utilization. With the rapid increase in health care expenditure, the patient payment mechanisms are also seen in these countries, as a tool to keep collective payments for health care services within the national limits (or at least their growth). This is expected to contribute to macro-level efficiency in the health care sector. In the new Members States of Central and Eastern Europe (CEE), official patient payments are seen not only as an efficiency improvement tool but also as an additional source of health care funding that is expected to enable sustainability in their health care sectors. The implementation of official patient payments in these countries is also a policy response to the widely spread informal payments for health care services. To achieve the specific objectives assigned to patient payment policies within the EU Member States, various mechanisms of direct and/or indirect patient payments are implemented. These mechanisms greatly differ in terms of fees (types and magnitudes), services involved, fee collection, exemption criteria, and physicians' involvement.

Regardless of the diversity in the design of patient payment mechanisms, they influence the health care sector in a similar fashion. The theoretical and empirical evidence worldwide indicates that the prices of health care consumption imposed by the implementation of patient payments, affect the demand for health care services. If health care providers are involved in the process of fee collection, the introduction of patient payments can affect their behavior resulting in an excess supplier-induced demand. These micro-level effects of patient payments on the demand and supply, inevitably affect the macro-level characteristics of the health care sector. In particular, the implementation of patient payments is found to have a major impact on the overall efficiency, equity and quality of health care provision.

For that reason, a systematic analysis of the feasibility and potential impacts of patient payments is often advised as an essential step prior to the implementation or amendment of patient payment policies. Nevertheless, the health policy practice (also that in Europe) is mostly ideological and is rarely rooted in evidence. Therefore, it is not surprising that patient payment policies are usually implemented or amended without any preliminary analyses. Their outcomes are evaluated

afterwards, sometimes for the purpose of policy-making but most often, solely due to a scientific interest in their effects. Despite the scientific interest in these payments however, the literature still does not offer a comprehensive set of tangible evidence-based criteria for the systematic assessment of patient payment policies. The literature also does not offer a functional model of consumer behavior under patient payments that can be used by policy-makers to analyze the efficiency, equity and quality effects of patient payment policies. The lack of ready available analytical tools can explain to a certain extent the limited number of policy analyses prior to the implementation of patient payment mechanisms or their subsequent amendments.

Furthermore, in Europe, the effects of official patient payments on the overall objectives of health care provision, namely efficiency, equity and quality, are not adequately studied. Most empirical evidence worldwide concerns the effect of official patient payments on the consumption of health care services in US. There are also various analyses on the efficiency and equity effects of official patient payments in developing countries, mainly in Africa and Asia. In Europe, the outcomes of patient payment policies are investigated only in some Western European Member States. Overall, data on the effect of official patient payments in CEE Member States, as well as the comparative analyses of their effects are lacking. A plausible explanation for this can be the fact that patient payment mechanisms were introduced in these countries relatively recently after the abolishment of the communist regimes. Given the numerous transition problems outside the health care sector, the evaluation of patient payment policies has not yet come into the focus of CEE policy-makers. There is however, an overall concern that official patient payments in these countries impose a double financial burden to consumers because they have been implemented in a context of persistent informal payments for health care services. Therefore, the evaluation of official patient payment in this European region is urging and it needs to be done by taking into account the pattern of informal payments for health care services.

## **PROJECT AIM AND OBJECTIVES**

Given the lack of systematic research on the assessment of patient payment policies and the need of evaluating the mechanisms of official patient payments in CEE, Project ASSPRO CEE 2007 focuses on these two issues. The aim of the project is to identify a comprehensive set of tangible evidence-based criteria suitable for the assessment of patient payment policies and to analyze the efficiency, equity and quality effects of these policies, specifically in CEE.

Based on the project aim and the specificity of the application area, the research objectives of the project are:

1. To identify a comprehensive set of tangible evidence-based criteria (incl. economic, social, institutional, historical geographical, ethical, cultural, demographic and sector-specific criteria) for the assessment of patient payment policies, and to validate them in an application in CEE.
2. To develop a reliable and valid research instrument for studying the level and type of informal payments for health care services and to apply this instrument in CEE countries to analyze the pattern of informal patient payments, as well as their effect on health care consumption.
3. To study consumer demand for health care services under official patient payments taking into account the potential impact of informal payments for health care services, the behavior of health care providers, and consumer preferences, specifically in CEE countries.

4. To project the efficiency, equity and quality effects of patient payment policies using the models of consumer demand for health care services under official patient payments, specifically in CEE countries.

The research objectives are approached using quantitative and qualitative research methods from a broad range of fields related to socio-economic science and humanities. In particular, quantitative techniques (such as modeling, trend analysis, revealed and stated preference methods) are combined with qualitative data to study the micro and macro outcomes of patient payment policies.

In addition to the research objectives, the project activities also have the objectives to assure:

- Extensive dissemination of project results among policy-makers, care providers and the public.
- Effective and efficient project management for the prompt delivery of research results.

## **RESEARCH RELEVANCE OF THE PROJECT**

The project aim and objectives are directly related to topic SSH-2007-6.2.1 Improved ways of measuring both the potential for and impact of policy, addressed in research area 8.6.2 of Theme 8 in the Seventh Framework Program. The policy of interest in this project is the policy of patient payment, namely the evaluation of policy content, its changes and impacts. The project outcomes are not only relevant to health policy-making in CEE countries but they also help to establish standards in the assessment of patient payment policies around the world.

There is a growing body of literature on policy analysis and policy assessment that indicates the need of developing new research methods that can facilitate an evidence-based policy-making process. There are three principle approaches that are followed to the development of such methods. The first approach is based on the idea that research should come before the actual policy implementation or policy change. By providing evidence on the potential impacts of alternative policy designs, the most optimal policy option can be identified. The application of this approach however, excludes the possibility to look at actual policy outcomes. In contrast, the second approach refers to the idea that research should take place after policy is implemented. According to this approach, evidence on the actual policy impact should be collected and analyzed in order to improve policy design. The third (most advanced) approach, considers that policy impact is more defused. It assumes that research should continuously add evidence to the knowledge base of policy-makers, who in turn can use this knowledge during all policy phases.

In view of this, the project combines evidence on potential and actual policy impacts, and diffuses this knowledge among policy-makers to enable informed policy-decisions. In contrast to previous research on the analysis of patient payments, the project addresses a broad range of tangible evidence-based criteria (incl. economic, social, institutional, historical geographical, ethical, cultural, demographic and sector-specific criteria). Moreover, the project incorporates new research methods from the field of health economics relevant to policy analysis that have not yet found a wide application due to their complexity or need of further development. This includes modeling, trend analysis, forecasting, projections, revealed and stated preference techniques.

In particular, the project incorporates stated preference techniques (i.e. choice-based conjoint analysis and contingent valuation). These techniques are widely used outside the area of policy analysis to study the purchasing behavior of consumers given hypothetical market scenarios. Their application in this project provides data for an empirical modeling of consumer demand and preferences for health care services. The main advantage of the stated preference techniques is that

they allow experimentation with policy designs without actually being necessary to implement or change this policy. In some instances, actual experimentation with policy design might be unethical and socially unacceptable (e.g. experimentation with expansion and reduction of the fee magnitudes), or might be impossible if policy is still not implemented. Even if actual experimentation is possible, data on the actual consumer behavior might be interwoven with problems related to self-selection and generalization. Individuals who decide for a certain type of behavior are not the random sample of the entire population. Although there are methods to account and correct for the self-selection bias, none of them is completely satisfactory and some of them lead to outcomes that are decidedly disputable. These limitations to the actual experimentation with policy design necessitate the application of stated preference techniques in policy analysis.

The stated preference techniques are broadly applied within the framework of cost-benefit analysis. However, these techniques are often criticized for their potentially low predictive validity. The lack of sufficient empirical evidence on this issue diminishes their attractiveness to policy-makers. In view of this, it is not surprising that there are only few applications of stated preference techniques for the analysis of patient payment policies. In this project, stated preference techniques are combined with revealed preference methods to collect data on both, hypothetical and past consumer behavior. The comparison of the results generated by the two groups of methods helps to establish the extent to which stated preference techniques can be used to make predictions with regard to policy outcomes.

The cross-country perspective in this project also contributes to the progress in research focused on the analysis of CEE health care systems and the health policies that drive them. In particular, the project involves the collection and analysis of micro-level data regarding the behavior of health care consumers in CEE countries, which data are generally lacking. Moreover, the countries of CEE offer an interesting context for such analyses, especially when it comes to patient payments. The transition from a state-planned to market economy in these countries has created a mix of contrasting political and social values, and continuously changing socio-economic environment. Thus, although the countries of CEE have a lot in common, they also show some diversity in terms of economic development, demographic patterns, and health status indicators, which is worth special attention. In particular, the unique features of the CEE health care systems allow examining the impact of various factors (including the informal patient payments) on the feasibility and adequacy of patient payment policies as well as on their efficiency, equity and quality impacts. It is expected that the specificity of the country profiles can influence the consumers' perceptions and their spending decisions.

The project also contributes to the analysis of informal patient payments in CEE, their determinants and their impacts. The presence of informal patient payments is an important feature of the health care systems in virtually all CEE countries. Although the importance of data on informal patient payments is universally recognized, the collection of such data is a challenging task given their informal and potentially sensitive nature. Nevertheless, information on informal patient payments is a crucial input for the assessment of patient payment policies implemented. Without this information, the use of official statistics on out-of pockets can be misleading. Therefore, one of the objectives of this project is to critically review previous empirical results on informal patient payments and the research designs applied for their investigation. This provides a crucial input for the assessment of patient payment policies implemented in the CEE countries and for the projection of the effects of patient payment policies. The outcomes are of high research relevance because data on informal patient payments have not been directly applied to assess patient payment policies.

### **4.1.3 Description of the main S&T results/foregrounds**

#### **DESCRIPTION OF WORK PERFORMED**

The project research work consists of five phases: (1) conceptualization, (2) preparation of data collection, (3) data collection, (4) data analysis and (5) exploration of the analytical results for policy-making. All five phases are completed but the exploration of project foreground for the purpose of research and policy-making will continue also after the project end. The achievements with regard to each research objective are briefly described.

The identification of relevant assessment criteria started with a systematic review of secondary data. The results of the review are used to generate a conceptual model for the analysis and assessment of patient payment policy. The model combines evidence on potential and actual policy impacts, and provides information relevant to policy-makers. Based on this model, a provisional set of evidence-based assessment criteria for the evaluation of patient payment policies is outlined. During focused-group discussions and semi-structured interviews, the set of indicators is discussed with policy-makers, health care consumers, and health care providers. Based on this, a comprehensive set of criteria is outlined. Data regarding the value of the criteria in the CEE countries involved in the project are collected during the data collection phase of the project. The values of the assessment criteria are used to evaluate the patient payment policies in these CEE countries.

With regard to the investigation on informal patient payments, the project focuses on informal payments for health care services covered by public health care budgets. The work started by a systematic review of definitions of informal patient payments outlined in the literature, as well as of the methodology aspects of previous empirical studies on this topic. Based on this, a survey questionnaire is developed. The questionnaire is used during the data collection phase (two waves, in 2010 and 2011 respectively). The data collected are analyzed to outline the nature, type and magnitude of the informal patient payments in the CEE countries involved in the project. A comparison between the countries is made. The impact of informal patient payments on the consumption of health care services is analyzed to identify factors that influence the size of these payments and thus, to highlight the mechanism of informal patient payments in the CEE region.

The first analytical step in the project demand analyses was the systematic review of theory, empirical evidence and other secondary data. Based on this review, the demand analyses are framed. A research instrument in the form of a survey questionnaire is prepared. The questionnaire is used during the data collection phase. Secondary data relevant to demand modeling are also collected. The data collected are used to parameterize the demand models for some countries (i.e. service use and payments). In addition to this, a projection module is developed following four basic steps: selection of outputs, selection of inputs, development of an algorithm, and estimation of parameters. To select the projection outputs, the primary effects of patient payments are considered: to reduce unnecessary service use as well as to generate revenues for public health care services. The main inputs of the projection are various covarying factors, such as demographics, type of public health care service, patient payment mechanism, method for paying to providers. The projection module is used to forecast the total size of out-of-pocket payments in the countries. The intention is to continue to develop the module also after the project end.

Furthermore, the project obtained access to relevant databases collected by others. The analysis of these datasets allows the inclusion of other CEE countries. The key project results are briefly described further in this report.

## ASSESSMENT OF PATIENT PAYMENT POLICIES IN CEE COUNTRIES <sup>1</sup>

### *Content, context and effects of patient payment policy*

Project ASSPRO CEE 2007 focuses on the assessment of patient charges for publicly funded health care services (i.e. services funded via the general tax revenue, payroll taxes and/or social health insurance contributions) provided by either public or private health care providers. This group of patient charges comprises official (formal) charges for health care services and commodities (known also as user fees, user charges or patient cost-sharing), but also quasi-formal charges (official fees set by the health care providers in the absence of clear government regulations), and informal patient payments, which could be either in cash or in kind. The project takes into account quasi-formal and informal patient payments as they can have negative effects on both efficiency and equity of health care provision. Special attention is paid to charges for health care services, but charges for health care commodities (such as pharmaceuticals and devices) are also addressed in some instances.

We define patient payment policy as the set of policy regulations and instruments deployed by health policy-makers in a country that result in official patient charges. To analyze the content of patient payment policy related to public health care services, we distinguish between policy objectives and policy design operationalized via a specific patient payment mechanism.

Policy-makers assign various objectives to the implementation of patient charges. Overall, patient charges are seen as prices for health care consumption and as such, they are expected to affect the quantities of health care service demanded by the consumers. Thus, if designed properly, patient charges may offer policy-makers the opportunity to influence the pattern of health care consumption toward an efficient allocation of the health care resources and to stimulate a healthier life-style. Patient charges, if collected and retained at the point of service provision, may also stimulate quality improving competition. At the same time, the opportunity to generate revenues from patient charges turns them into an additional source of health care system funding for the improvement of system sustainability when public health care resources appear insufficient. The possibility to increase providers' income by allowing health care providers to charge patients directly, is also seen as a way to deal with informal patient payments, especially in countries where these payments are directly requested by providers.

The policy objectives assigned to patient charges, are found to influence the designs of patient payment mechanisms implemented. However, variations in these designs also exist when countries assign the same objectives to the implementation of patient charges. For example, this is the case of Western European countries where the introduction of patient charges is primarily focused on the improvement of efficiency in health care, while the designs of the patient payment mechanisms implemented greatly vary across the countries. Although differences in the designs can be explained to a certain extent by the specificities of the country health care sectors, broader contextual factors may also play a role. Societies differ in terms of importance that they attach to values like efficiency, equity and solidarity, as well as in terms of perceptions about the eligibility of citizens for receiving free-of-charge health care services. Therefore, patient payment designs, which could allow achieving certain policy goals, might not be always socially acceptable and for this reason, health policy-makers might opt for another less effective design. Social perceptions might be a reason for not implementing patient charges even when policy-makers expect potential benefits of their introduction.

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<sup>1</sup> Related to project objective 1



Regardless of the diversity in the policy objectives and the differences in the patient payment mechanisms implemented, patient charges have similar micro-level effects. The price of health care consumption imposed by the implementation of patient charges, reduces the quantities of health care demanded although the exact degree of reduction varies between countries and health care settings. This overall reduction in service use could be a result of diminished moral hazard on the side of the health care consumers including a reduction in both ex-ante moral hazard (less services needed due to a healthier life-style and prevention) and ex-post moral hazard (forgoing unnecessary curative services). However, there is no convincing evidence so far that utilization is reduced because of prevention or because services are unnecessary. In fact, patient payments mainly reduce the utilization of service by children, poor individuals and in areas where other costs (e.g. travelling costs) are significantly high.

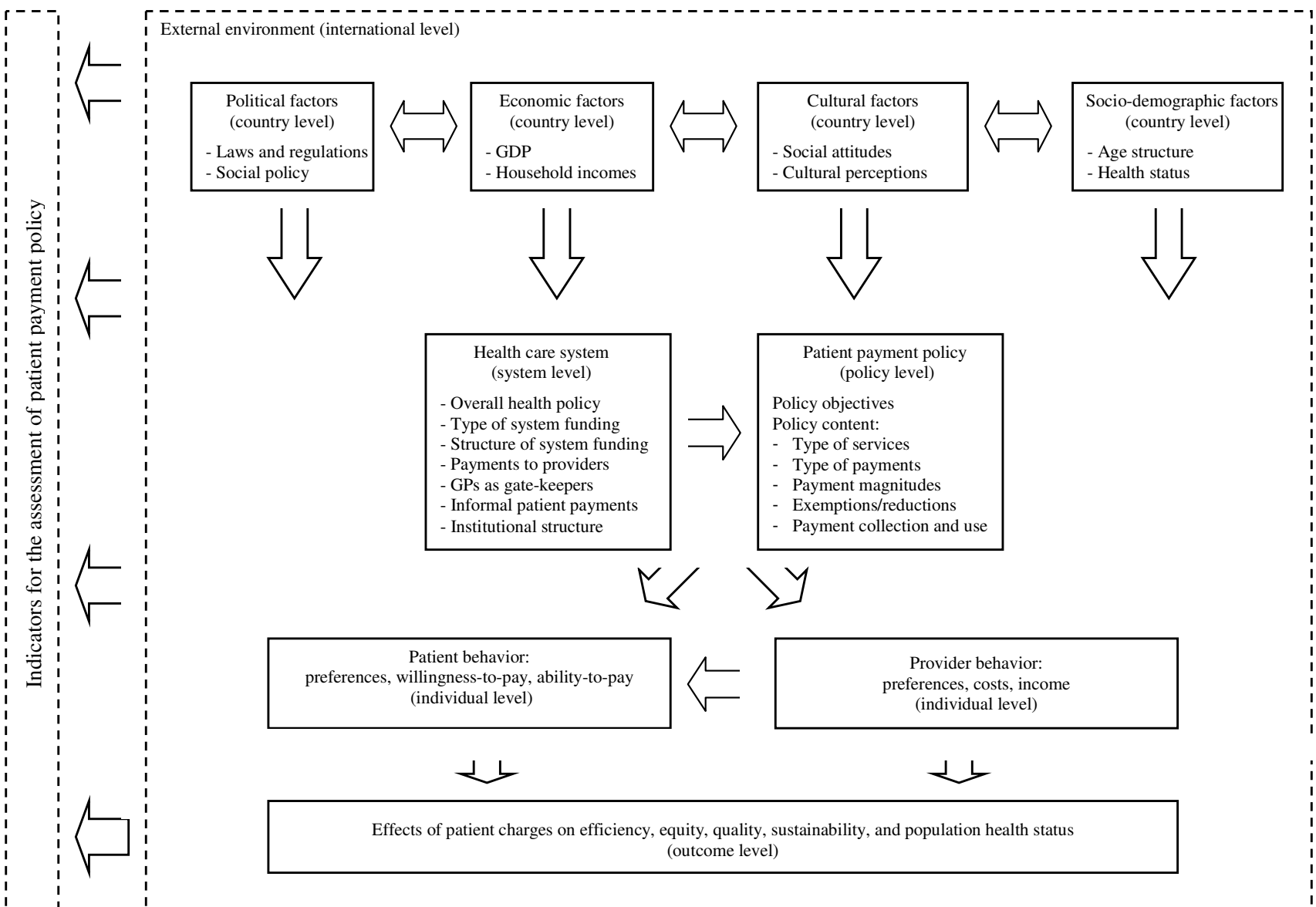
The micro-level effects of patient charges on the demand and supply, inevitably affect the macro-level characteristics of the health care sector, i.e. efficiency, equity and quality of health care provision. Although the efficiency effects of patient charges are still subject of scientific debates, the potentially adverse impact of these payments on equity is commonly recognized. In particular, research results suggest that patient charges are highly regressive. Whenever patient charges exist, the poor spend a larger part of their income on health care than the wealthy individuals irrespective of whether there are differences in price-sensitivity among these population groups. In addition, when patient charges are implemented in a context of persistent informal payments for health care services, the adverse equity effects are likely to be further aggravated. Policy-makers often accompany the introduction of patient charges with equity protection measures such as providing various limits, exemptions and fee reductions. As a result, the revenues generated by patient charges are actually very small and cannot contribute significantly to the sustainability of health care provision.

#### *Framework for analysis/assessment of patient payment policies*

Based on the theoretical and empirical evidence related to patient charges reported in the literature, we develop a framework for the assessment of patient payment policies. The framework is presented in Figure 1. We distinguish three broad groups of assessment criteria: policy context, policy content and policy effects. Within each group, we define several sub-groups of criteria.

The group of criteria related to policy context is divided into three sub-groups:

- Specificity of the health care system. This sub-group includes indicators related to the overall health policy, as well as the overall financial and non-financial characteristics of the health care sector in a country. The financial characteristics of the health care sector refer to the funding of the health care system (e.g. tax-based and/or insurance-based, amount of health care resources, share of the public expenditure on health), the allocation of health care resources to health care providers (e.g. type of provider payment mechanisms), and patient charges for health care services other than official patient charges (i.e. informal payments). The non-financial characteristics of the health care sector refer to the organization of health care provision (e.g. the existence of GPs gate-keeping function) and to the specificity of the health care institutions (e.g. administrative capacity of the health care system, effectiveness of health care management and governance). Overall, health policy and health care arrangements have a direct impact on the objectives and design of patient payment policy.



**Figure 1.** Framework for the analysis and assessment of patient payment policies

- Country-specific context. This sub-group of criteria includes economic, political and socio-demographic conditions that exist in a country. We refer to both structural (permanent) and situational (temporal) conditions, the latter divided into past and current situational conditions. Example of such indicators include laws, regulations and overall social policy in a country (political conditions), changes in GDP and median household income (economic conditions), age structure of the population and population health status (socio-demographic conditions). We also include cultural factors (such as social values and cultural perceptions). Economic, political, socio-demographic and cultural factors influence the patient payment policy in a country thorough their influence on health policy and health care provision as well as through their influence on the behavior of consumers and providers.
- External (international) environment. By including this sub-group of criteria, we recognize that any policy in a country is affected by factors which are external for the country and its political system. The membership in international organizations like EU and policy regulations related to it can be an example of an environmental influence on policy (incl. patient payment policy).

The group of criteria related to policy content consists of: policy objectives and policy design. We classify the policy objectives assigned to patient charges into the following broad categories:

- Discouraging unnecessary use of health care services.
- Controlling overall health care expenditure.
- Generating additional resources for the health care system.
- Allowing hospitals/clinics to generate additional resources.
- Increasing the income of individual health care providers.
- Dealing with informal patient payments.

We recognize that policy-makers can assign one major objective to patient charges but a combination of the above policy objective is more likely in practice. With regard to policy design, we refer to the basic elements of a patient payment mechanism. This includes:

- Type of patient charges (e.g. co-payments, co-insurance and/or deductibles).
- Scope of services that require patient charges (e.g. GPs', specialists' and/or hospital services including essential services such as maternity, preventive and emergency care).
- Magnitude of patient charges (e.g. determined by the size of the fees and various limits).
- Exemptions and fee reductions for specific groups of population (e.g. children, elderly, low-income and chronically sick individuals).
- Collection and use of revenue from patient charges (e.g. national versus local level, health care providers versus state/health insurer).

The last group of criteria, criteria related to policy effects, is divided into micro (behavioral) and macro (system level) effects. The micro-level effects include criteria related to the behavior of health care consumers and providers and the direct effect of patient charges on this behavior. With regard to consumer behavior possible indicators for the analysis and assessment of patient payment policy include the preferences of consumers for various attributes of health care services (e.g. quicker access, better quality), as well as the willingness and ability of the consumers to pay for this attributes either formally or informally. On the side of the health care providers, major indicators are the preferences of health care provider, the service costs that they incur and the adequacy of their income. The behavior of health care providers is likely to influence the behavior of health care consumer due to the potential existence of supplier-induce demand. The micro-level effects of patient charges on the demand and supply, inevitably affect the macro-level characteristics of the health care system. In particular, the implementation of patient charges have a major impact on the overall efficiency, equity and quality of health care provision, and more generally on the overall health status of the population.

### *Application to six CEE countries*

Our application of the policy assessment framework (Figure 1) focuses on the evaluation of patient payment policy in six CEE countries: Hungary and Poland (developed Central European countries), Bulgaria and Romania (less advanced Eastern European countries), Lithuania and Ukraine (former Soviet republics). Despite the common economic and political arrangements during the communist period, the six countries have proceeded on their own road of transition. Across countries, there are notable differences in macro-economic factors related to governance, laws, economic and socio-political situation, including levels of corruption, the cultures of moral and financial incentives in obtaining services at state facilities. Nevertheless, the sharp economic decline after the collapse of the communism affected their health care systems in a similar manner. Most important, it limited the health care resources and provoked major health care system reforms aiming at the establishment of social health insurance, except for Ukraine. A part of health care funding was shifted to patients by applying charges for pharmaceuticals and dental care, but also for other services in the basic service package. Thus, out-of-pocket payments have become a common feature of health care delivery, which is a major contrast to the free-of-charge service provision during the Soviet times. Patients are now paying formally, but also informally, in order to have access to and/or adequate quality of care.

In Bulgaria, obligatory visits fees for all levels of medical care (with the exception of emergency care) were introduced in 2000 along with the implementation of a social health insurance system. The fee size is equal to 1% of the minimum wage for the country for each visit to GP and out-patient medical specialist after a referral from a GP, and 2% of the minimum wage for the first 10 days of the first hospitalization in a year (at present about 1 and 2 Euro respectively). The collected payments are used by the service provider. There is a wide range of exemptions and fee reductions for certain population groups.

In other countries, the implementation of obligatory patient charges met various obstacles. In Hungary, co-payments for basic health care services (approximately 1 Euro for each visit to GP and medical specialist after a referral as well as for each day of hospitalization) were introduced in 2007 with the objective to decrease unnecessary use of health care services and to eliminate informal patient payments. These fees were collected and retained by the health care institutions. The payments system was also accompanied by various exemptions and fee reductions. Nevertheless, in April 2008, fees were abolished as the result of a public opposition expressed in the referendum. Similarly, in Ukraine, the attempt to introduce either official charges for health care services or social health insurance was unsuccessful due to legal barriers i.e. constitutional provisions proclaiming free of charge medical care in state and community health facilities. In Poland, Lithuania and Romania, uniform obligatory charges for services included in basic package have been under policy discussion but are not yet implemented.

Notwithstanding the lack of national system of formal patient charges, quasi-formal charges (officially regulated by providers but not entirely legal) take place due to the underfunding of services under the public health care system. This refers to health care services with higher standards e.g. better room in the hospital, services with quicker access, free choice of a physician. Patients are also often asked to purchase pharmaceuticals and/or surgical materials for their hospitalizations (especially in Lithuania, Romania, Ukraine, Bulgaria).

In all countries included in the study, informal (under-the-table) patient payments common during the communist regime and transition period, continued to exist to a greater or lesser extent. Project results suggest that these payments are widespread in Ukraine and Romania but also in Lithuania and Hungary while they are comparatively rarer in Bulgaria and Poland. Patients often pay informally to

receive better service quality, more attention from medical staff or quicker access. There are also informal payments which are considered as gratitude payment.

Although some governments in the region continue to overlook the existence of unofficial practices in the health care sector, others have employed varying strategies (although not always effectively) to eliminate informal payments. As mentioned above, Hungary and Bulgaria introduced official charges for health care services, aimed (among other things) at the elimination of informal payments. Nevertheless, the practice of informal payments continues to exist in both countries. Another strategy for dealing with informal patient payments relates to anti-corruption campaigns. All new members of the EU were requested to decrease the level of corruption in all sectors before they can join the union. Such changes have been widely discussed by politicians, media, and the public at large. In Poland and Bulgaria, there have been strong government campaigns against corruption in general and informal patient payments in particular. Although for Bulgaria, evidence is lacking, it is suggested that in the case of Poland, this campaign (in combination with other policy measures) has contributed to a reduction of informal patient payments in the recent years.

It should be pointed however, that out-of-pocket payments for health care services represent a considerable burden in most CEE countries. In particular, the accumulated patient payments affect the demand for these services forcing some patients to forgo health care. Other patients employ a different coping strategy by borrowing money to pay for hospitalizations but also for visits to physicians. The inability to pay is especially evident in Romania and Ukraine (reported by about 45% and 65% of those in need respectively). In Bulgaria, Hungary, Lithuania and Poland, inability to pay is less often reported although the share of those unable to pay is still considerably large (about 15-40%). Moreover, there is evidence that out-of-pocket payments for health care have considerable impoverishing effects on households, even on wealthy households but with chronically sick household members. This is specifically the case of catastrophic health problems.

Nevertheless, majority of health care consumers in the six countries do not object formal fees for physician visits and hospitalizations when these services are provided with an adequate quality and access. This is especially apparent for Bulgaria and Romania. The fee objection is relatively stronger in Hungary and Poland especially in case of hospitalizations. Ukraine and Lithuania rank between these two groups of countries. However, a relative large group of health care consumers in Bulgaria (about 20-25%) state that they are unable to pay such fees even though they do not object the fees. In the rest of the countries, this group is smaller but nevertheless, it represents 8-16% of health care consumers in each country.

Concluding from the above, formal patient charges could be a rational policy choice in all six countries for improving efficiency in health care provision and the effectiveness of resource allocation, as well as for generating additional health care resources. However, there are major health care system problems that should be resolved before such reforms can be successful.

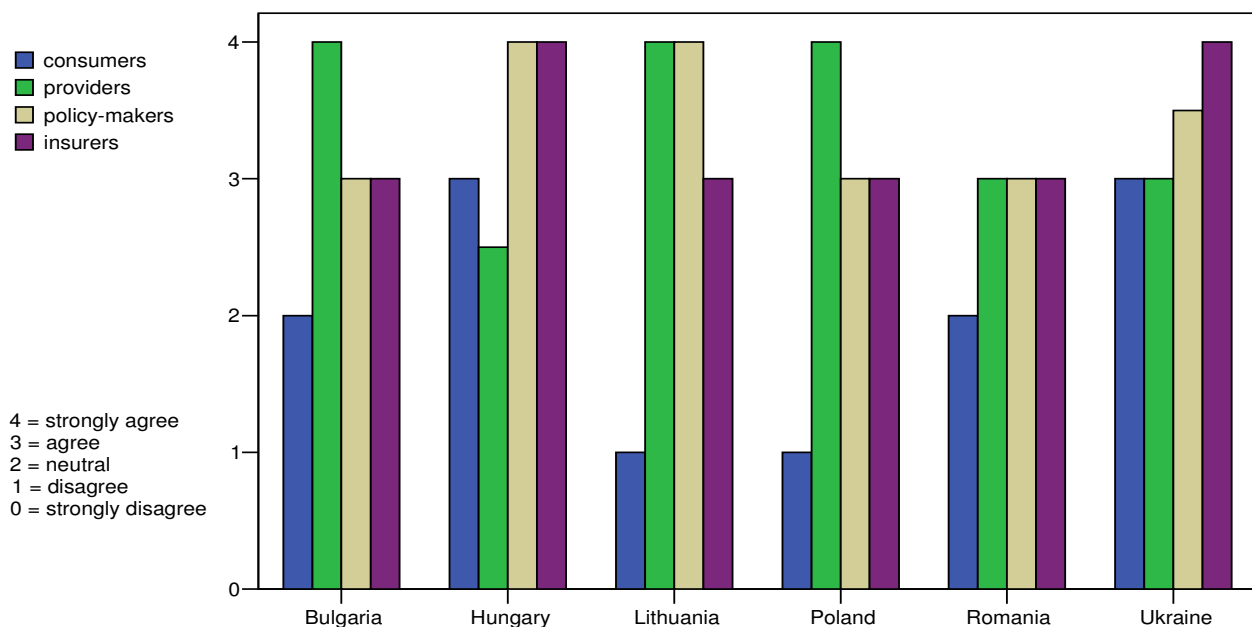
#### *Views of health systems stakeholders on patient payments*

As part of Project ASSPRO CEE 2007, focus group discussions and in-depth interviews were carried out in 2009 in six partners' countries in CEE - Bulgaria, Lithuania, Romania, Ukraine, Hungary and Poland. The objective was to study the opinion of health care consumers, providers, insurers and policy-makers toward official patient fees.

Data among policy-makers and health insurance representatives were collected via face-to-face semi-structured in-depth interviews. This choice of data-collection method was based on the fact that these target groups are relatively small and moreover, they might feel more comfortable to express their opinion if contacted individually. Data among health care consumers and providers were collected via focus group discussions. Since these target groups are rather large and diverse, focus groups discussions allowed including more individuals. Nevertheless, the objective was to assure the homogeneity of each focus group in order to reach easily a consensus during the discussion. For the purpose of the focus group discussions and in-depth interviews, a list with key questions was developed based on a preliminary literature review. The same key questions were used for all target groups with slight modifications to reflect the specificity of a given target group.

We find that consumers in all targeted countries are generally less in favor of formal patient fees than health care providers, insurers or policy-makers (see Figure 2), mainly due to skepticism and disappointment with the status of health care services and the health care reforms. In Lithuania and Poland (both economically advanced CEE countries) consumers in general disagree with paying official fees for health care services. Consumers might more easily accept voluntary payments for using luxury services, services with better quality and quicker access, as well as services without a referral. In Bulgaria and Romania (both less advanced CEE countries), the overall opinion of consumers is neutral, while in Hungary and Ukraine consumers in general agree with official patient fees. For Ukraine, the positive consumers' opinion could be explained by the prevalence of informal patient payments and the transparency that formal fees could introduce. However, the positive consumers' opinion in Hungary is somewhat surprising given that formal fees were introduced in this country in 2007 and then abolished in 2008 after a public referendum.

**Figure 2.** Agreement with the existence of formal patient fees in the country (median values)



In all countries, health care providers are in favor of formal patient fees. In general, health care providers either agree (Hungary, Romania and Ukraine) or strongly agree (Bulgaria, Lithuania and Poland) with the existence of such fees. The positive providers' opinion is to be expected given that providers could be the direct beneficiary of these fees. Similar to health care providers, health

insurers and policymakers also express a positive opinion toward official patient fees. Opinion is slightly more positive toward official payment fees in Hungary and Ukraine, and to a certain extent in Lithuania, but still positive in the rest of the countries. Given the plurality of opinion among key actors - and persistent concerns about possible double-burdening - policymakers in CEE are advised to thoroughly evaluate any official patient fees that are currently in place or planned.

Formal patient fees are often seen by all groups as an additional source of health care financing, but also as an instrument for increasing the efficiency of health care utilization and for encouraging a healthy life-style. However, all groups express the concern that the introduction of formal fees cannot be a panacea for the under-funding of the health care sector and various quality problems. There is a doubt whether the introduction of official fees can reduce or eliminate informal patient payments. What is more, consumers and policy-makers (in some instances) express concerns that patients might need to pay twice after the introduction of official fees, i.e. formally and informally.

### *Key policy recommendations*

- Although the decisions about the health care financing and provision are a responsibility of each country, it is necessary to encourage European countries to clarify their conceptual and legal framework for patient payment policy. This will be essential for the establishment of an adequate patient payment mechanism in the EU Member States.
- It is necessary to appeal for more transparency in health care decision-making (e.g. on defining the basic health care package and setting fees for services within and outside this package). A close communication with the public is needed to clarify the objectives and content of a future patient payment mechanism or its amendment. There is also a need of more transparency in the use of revenues collected via patient fees.
- Moreover, health care consumers and providers should be involved in the decision-making process concerning official patient fees, namely with regard to their scale and collection mechanism. Social consensus on this issue is necessary before the introduction or amendment of a patient payment mechanism.
- The sustainability of an adequate health care provision should remain the responsibility and priority of the governments also after the introduction of official patient fees. It is also important to work out a strategy for dealing with informal patient payments, and to implement this strategy prior to the introduction official fees.

### **PROJECT BACKGROUND PAPERS:**

*Marzena Tambor, Milena Pavlova, Stanislaw Golinowska, Christoph Sowada, Wim Groot. **Towards a stakeholders' consensus on patient payment policy: the views of health-care consumers, providers, insurers and policy makers in six Central and Eastern European countries.** Health Expectations 2013, forthcoming.*

*Milena Pavlova, Marzena Tambor, Tetiana Stepurko, GG van Merode, Wim Groot. **Assessment of patient payment policy in CEE countries: from a conceptual framework to policy indicators.** Society and Economy in Central and Eastern Europe 2012, 34(2): 193-220.*

*Marzena Tambor, Milena Pavlova, Piotr Woch, Wim Groot. **Diversity and dynamics of patient cost-sharing for physicians' and hospital services in the 27 European Union countries.** European Journal of Public Health 2011, 21(5): 585-590.*

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## INFORMAL PATIENT PAYMENTS IN CEE COUNTRIES <sup>2</sup>

### *Patterns of informal patient payments*

The topic of informal patient payments is rather new in research and policy discussions although the phenomenon has existed for decades. Studies on informal patient payments published hitherto refer mainly to the period after 1990 and mainly to former-socialist countries. Therefore, it is often argued that informal patient payments are one of the phenomena, which the transition economies inherited from the communist period. Nevertheless, unofficial payments for health care services are reported in other countries as well. This includes low- and middle-income countries, for example Uganda, Peru and Turkey, and high-income countries like Greece, which are not former-socialist countries. Certain unofficial payments for health care services (even though not widely spread) are reported in some other high-income countries in Europe, such as Italy and Austria. Apparently, the presence of informal patient payments is an important feature of many health care systems around the world.

Empirical studies on informal patient payments attribute different characteristics to informal patient payments. As a result, informal patient payments do not have a universal definition although the definitions used by researchers partly overlap. Based on the definitions of informal patient payments discussed in the literature, we define several key characteristics of informal patient payments in the public health care sector (see Figure 3), which form the operational definition of informal patient payments used in Project ASSPRO CEE 2007. Using the key characteristics presented in Figure 3, we reviewed the pattern of informal patient payments reported in the literature.

Overall, empirical studies indicate that informal payments are made to both medical staff in hospitals and general practitioners in polyclinics. Both patients and providers are initiating informal payments. Informal patient payments are most often reported for services included in the basic health care package, but services outside the basic package are also affected. These payments are primarily cash payments and in-kind gifts. However, informal patient payments in the form of service, e.g. car repairs, plumbing, sponsorship, are also reported. Informal cash patient payments are mainly paid before or during the treatment and gifts are mainly presented after the service is provided. Informal payments for surgery and maternity care services are frequently reported as the highest.

Informal patient payments are observed in all patient groups irrespective of the socio-economic status of the patients. However, empirical studies in some countries report certain variations among the patient groups. For example, elderly and those with low-level of education are found to pay less informally than the younger and those with high-level of education. Expression of gratitude is often identified as a motivation for informal patient payments in addition to improved service provision (better quality and quicker access), which is also reported as the main reason for such payments

Although the measurement of informal patient payments is a challenging task since these payments are a multi-face phenomenon with different features even within a single country, empirical evidence indicates that informal patient payments can represent a significant part of the income of the health care providers. In some instances, physicians may earn as much as a full additional salary from informal payments. In more extreme cases (i.e. specialized doctors), physicians may increase their incomes up to five times through such informal payments. These payments can also represent a significant part of the total health care expenditure.

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<sup>2</sup> Related to project objective 2



**Figure 3.** Types of informal patient payments reported in empirical research

Who initiates the informal payment?	Patients (expression of gratitude) Provider (demanded by a provider)
What is the nature of informal payment?	Payments in cash Payments in kind (gifts) Payments in a form of services
When is informal payment made?	Before/during treatment (mostly in cash) After treatment (mostly gifts)
Who receives the informal payment?	General practitioners Medical specialists: - Surgeons - Dentists - Obstetrics-gynaecologists Other medical staff: - Nurses - Emergency staff Health care institutions <sup>1</sup>
What is the purpose of the informal payment?	Expression of gratitude Fee for service Fee for commodity Fee for access Fee for quick access Fee for better quality Fee for psychological comfort
What is the amount of informal payment?	It varies but most commonly: - up to 30% of monthly income - higher than 80% of monthly income
How is the informal payment perceived?	Tradition/gratitude Complementary to low official physicians' salaries Illegal behaviour Corruption

<sup>1</sup> quasi-official payments when the patient receives a kind of receipt.

### *Why do informal patient payments matter?*

Informal patient payments affect the health care provision in a very complex and interrelated manner. On the one hand, these payments usually exist in a context of limited resources for health care provision and therefore, informal compensations to providers appear to be a feasible solution for receiving treatment. On the other hand, these payments are a threat to public health since those who cannot afford to pay informally might forgo or delay seeking treatment. Thus, informal patient payments can jeopardize efficiency, equity, and quality of health care provision.

In case of informal patient payments, the providers of health care services are compensated individually, irrespective of the value of health care provision to the society. Thus, the role of health policy and priorities set by policy-makers are undermined by the existence of these payments. The informal cash-flow goes directly from the patients to medical staff in publicly funded health care facilities and remains unregistered. In view of this, informal patient payments can become a major impediment to ongoing reforms because they hinder the estimation of future funding requirements of the health care sector.

The existence of informal patient payments can also obstruct the attempts to improve the technical efficiency of health care provision. In fact, these payments might introduce incentives for providing less cost-effective services if patients are willing or accept to pay informally. It is likely that the practice of informal patient payments can lead to resource allocation that is different from the social optimum. Specifically, in case of informal patient payments, resources are not allocated based on the benefits to the society and services are not consumed by those who would benefit most, but rather by those who are able to pay or are easily forced into paying. Thus, social efficiency is adversely affected as well.

Significant quality improvements as a result of informal patient payments exist seldom. Overall, health care providers are not interested in reinvesting these payments in the public health care system (e.g. for purchasing new medical equipment) but are more likely to invest them in their own private practices (if dual-practice is allowed and if informal payments are invested at all). On long-run, this leads to better quality of services provided in the private sector, even when provided by the same physician. Thus, the public health care provision remains under-funded even when informal patient payments are widely spread. This does not mean however, that the health care providers remain under-paid. Yet, there are no incentives for health care providers to improve current conditions and working patterns when they provide public health care services and receive informal payments.

The most adverse effect of informal patient payments concerns equity. When informal patient payments are established as a practice, patients who cannot afford to pay informally either avoid or delay seeking treatment, or more likely, use personal savings, loans and sell assets to cover these payments. The ultimate effect is the same as referring patients to the private health care sector. Thus, the burden of informal patient payment is not distributed equally within different socio-economic groups. In some instances, patients with very low earnings are found to pay informally about six times more in relation to their income than those in high-income groups. Therefore, informal patient payments are highly regressive even when compared to formal patient fees.

Since informal patient payments are provider-determined (excluding expressions of gratitude where patients are intrinsically motivated to make informal payments), there is a hypothesis that health care providers can cross-subsidy unofficially when charging wealthier patients with higher informal payments than the poor patients. However, the validity of this hypothesis depends to a large extent on the social structure and level of solidarity within the society. The rationale behind the theory of

cross-subsidizing is quite weak since willingness-to-pay is a more important determinant of informal patient payments than the ability-to-pay, especially when immediate care is needed and where the choice of providers is limited. There is no reason to expect that wealthier patients will pay more informally than the poor. In fact, the empirical evidence shows rather the opposite.

The issue of informal patient payments is also relevant to policy-making when formal patient payments are introduced or considered for introduction. There is an overall concern that official charges do not have the ability to eliminate the informal ones, and their introduction results in a mixture of formal and informal payments by the patients. If no effective measures for dealing with informal patient payments are introduced, the effectiveness of the exemption mechanism for vulnerable population groups that accompanies official charges, could be undermined.

### *Why do informal patient payments exist?*

Informal patient payments are sometimes made due to the patients' gratitude for services provided, but such payments also result from the misuse of market power by the health care providers due to monopoly or due to the principle-agent relation between providers and patients. As reported in empirical studies, the main reasons why patients make informal payments and why physicians or medical staff accept/request such payments, can be summarized as follows:

Patients make informal payments in order to:

- thank the physician and medical staff;
- reduce waiting time from referral to hospitalization;
- obtain services with higher quality or obtain more services;
- obtain treatment at a specific health care facilities or from a specific physicians;
- obtain services that are not available formally in the medical institution;
- substitute for a high formal patient payment;
- respond to the request of physician or medical staff to pay informally;
- establish a good relationship with the physician (in order to get good service next time or to get the service at any time).

Physicians or medical staff accept/request such payments due to:

- low level of income and salaries;
- possibility to receive unregistered cash that is several times higher than formal fees;
- incoherence between official fees and physicians' perception of their true costs;
- perceived higher expertise than colleagues, who receive the same reimbursement;
- lack of resource for purchasing necessary equipment, instruments, and materials;
- lack of resource for professional development and improvement;
- lack of regulation and unresponsive government.

Thus, informal patient payments can be seen either as "donation" or as "fee-for-service". The donation hypothesis affirms that gratitude payments do not adversely affect efficiency in health care provision in case when the gratitude payments are sustainable. Gratitude payments can improve the responsiveness of health care staff, ensure sustainable supply of human resources, and provide incentives for physicians to stay in the profession, especially in countries where medical staff is under-paid. The fee-for-service hypothesis states that informal patient payments can exhibit the adverse effects of formal co-payments but with additional complication of lack of transparency, which makes it difficult to control them. Still, these are only hypotheses and they need to be tested to explain the existence of informal payments in some parts of the world and their absence in others.

Overall, the reasons for the existence of informal patient payments discussed above, suggests three areas for possible solutions to the problem of informal patient payments: cultural perceptions, insufficient funding of the health care sector and lack of control and accountability in the system.

- **Cultural perceptions:** People use gifts to express their gratitude. Thus, gratitude payments for health care services could be seen as a part of the social culture. However, informal patient payments are gratitude payments as long as they are gifts in kind with negligible monetary value and are given after the service provision by the thankful patient without any request or hint by the staff. Truly gratitude payments would be sustainable for the patient and patient's family, and would not adversely affect efficiency in health care provision. The elimination of such informal payments would require a change of culture, which means inter-sector efforts and generally more time to be achieved. Nevertheless, informal payments that are not truly gratitude payments (e.g. expensive gifts in kind or informal cash payments often requested by the staff or given by the patient as a bribe for service provision) may also look or may be even presented like gratitude payments. To be able to deal with such "gratitude" payments, strategies for dealing with corruption should be followed.
- **Insufficient funding:** In countries where the public health care sector is under-funded, the existence of informal patient payments is often excused by insufficient health care resources. As a result, informal patient fees are charged by providers to fill in the gaps in funding of medical supplies, diagnostics, pharmaceuticals and hospital hotel services. Informal compensations are also requested (directly or indirectly) to supplement the low salaries of health care providers. Under these circumstances, informal payments become a means for the patient to receive more attention by the health care staff, as well as to ensure better quality and quicker access to health care. Informal compensations also provide incentives for low-paid physicians to stay in the profession. However, the implementation of formal patient fees with an adequate exception mechanism in addition to a suitable health care funding mechanism, would be a more appropriate solution to insufficient health care resources. Nevertheless, this is not sufficient to eliminate informal payments. The formal fees should be accompanied by a suitable rewarding mechanism for the physicians.
- **Lack of control and accountability:** Governance and accountability in the health care sector emerge as important determinants of the performance of the health care systems. Nevertheless, they are still under-estimated and even neglected in some countries. Poor governance and poor accountability contribute to the existence of corruption and create a favorable environment for informal patient payments. The incapability to maintain the rule of law leads to non-ethical behavior of medical staff, who can use their bargaining power to increase their earnings. Thus, the development of a transparent system for monitoring and control of health care provision and patient payments can be essential steps in dealing with informal payments.

Attitudes of the health care consumers, providers and policy-makers play a crucial role for the existence of informal payments for health care services. While consumers are generally interested in solving the problem of informal patient payments, they often accept these payments as a means of gaining more attention, better quality and quicker access to health care. Information campaigns among health care consumers are needed to change their attitude towards informal payments. In addition to this, patients need to be well informed about the size of the official fees that they are obliged to pay for health care service prior to the use of these services. Patients are often unable to make a distinction between formal and informal payments, especially if they do not know the exact size of the formal charge. Also, there is a need of a formalized channel for filing complains by

patients who are asked to pay informally for health care services. The procedure for filing such complains should be easy and simple.

Health professionals are often reluctant to comply with strategies for dealing with informal patient payments and attempt to maintain the “status quo”. They might even try to sabotage measures aimed at eliminating informal payments (e.g. by creating unnecessary delays for patients). Therefore, the power of the medical lobby will play a key role in eliminating informal payments. Mechanisms to improve integrity and ethics in health care provision will be essential. It is necessary to develop professional code of conduct for physicians and other health professionals related to medical and non-medical activities. The main objective of such codes should be to ban the request or acceptance of any informal payment (either in cash or in kind), including gratitude payments and gifts.

Also, informal patient payments are not always seen as a negative phenomenon by policymakers, especially in countries with very low fiscal capacities and insufficient financing of the public health care sector. In these countries, informal patient payments could be the only factor that maintains the survival of the public health care system and keeps physicians working in public health care institutions (e.g. hospitals). Thus, policy-makers might address informal patient payments since they are of an unethical nature, but they might decide to neglect these payments in their decisions since they do not have an alternative for filling in the gaps in the public health care budgets. Due to the non-transparent nature of the informal patient payments, health authorities might even deny the existence of bribes in the health care system. Under such circumstances, solutions to the problem of informal patient payments would not be a priority. Changes in the attitude of policymakers toward informal patient payments will be essential.

#### *Developing a strategy for dealing with informal patient payments*

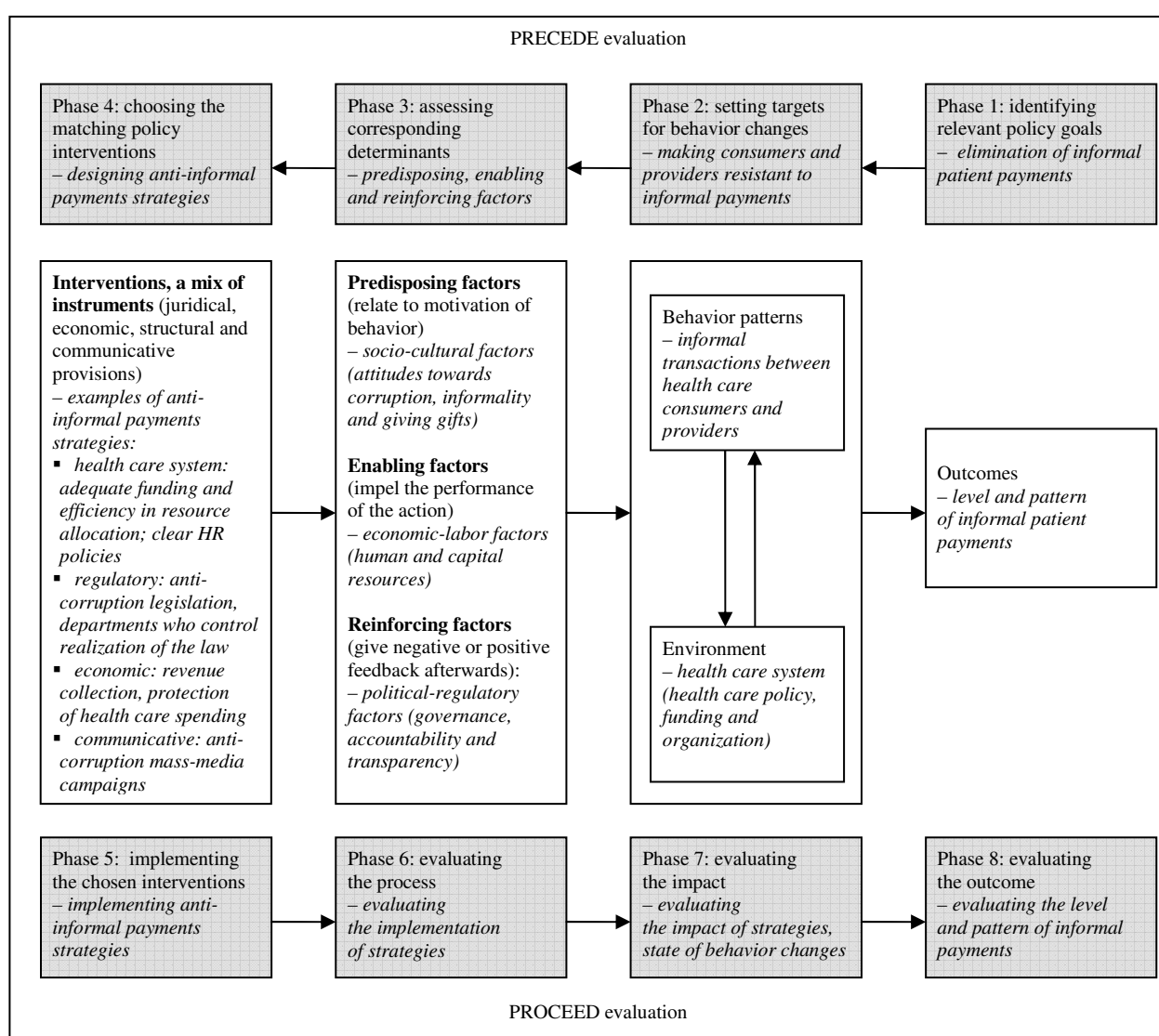
There is no single solution to the problem of informal patient payments since the phenomenon is not isolated but rather connected to the overall performance of public health care sector as well as to the general socio-political environment in a country. We define a social-level PRECEDE – PROCEED model (see Figure 5) for developing a comprehensive policy agenda for the elimination of informal patient payments. The informal transactions between health care consumers and providers are in the center of this model, and the outcomes of these transactions are the level and pattern of informal patient payments in a country.

The model groups the factors of the existence of informal patient payments discussed above, into four dimensions:

- The health care system dimension represents the environment where the informal transactions between health care consumers and providers take place. It contains factors related to the policy, funding and organization aspects of health care. Weak health policy, inadequate funding of the public health care sector and low moral of health care providers create a need and favorable environment for informal transactions in the patient-physician relations. Health care reforms that aim to deal with such pitfalls should be the primary concern of policy-makers.
- The socio-cultural dimension (e.g. attitudes towards corruption, informality and giving gifts) includes predisposing factors. By definition, predisposing factors are cognitive-level factors such as attitude and beliefs that motivate behavior. When corruption, informality and giving gifts are generally accepted by society, informal transactions between consumers and providers appear in the health care sector as well. The creation of an overall negative social disposition towards corruption and bribery, will be essential for the elimination of informal patient payments.

- The economic-labor dimension is linked in our model to the enabling factors. These factors are seen as conditions that impel the behavior adoption. Poor economic development in a country that results in a low-paid workforce and lack of resources for the adequate provision of public services, pushes patients and physicians to resort to informal transactions (for patients to obtain better services and for physicians to obtain a better salary). Economic and labor advancements will enable the elimination of informal payments by reducing the need of such payments.
- The political-regulatory dimension refers to the reinforcing factors. Reinforcing factors shape the behavior adoption by giving negative or positive feedback. Poor governance incapable to deal with corruption in general, facilitates informality in the patient-physician relation as well. Improved regulations, accountability and transparency will reinforce the elimination of informal payments in the health care sector as well as in other sectors.

**Figure 4.** PRECEDE – PROCEED model for the elimination of informal patient payments



Predisposing, enabling and reinforcing factors influence not only the informal transactions between health care consumers and providers but also the environment (the health care system) where the behavior takes place. Thus, a mixture of strategies for changing the predisposing, enabling and reinforcing factors, as well as the health care environment is necessary to diminish the informality in

the patient-physician relation and eliminating the informal patient payments in a country. The successful implementation of these strategies and the possibility to circumvent their weaknesses will depend on the particular setting and the overall conditions in the country. The prevalence of corruption in the society is crucial. Dealing with corruption at all social levels will be a precondition for dealing with informal patient payments.

### *Key policy recommendations*

- Countries should be encouraged to improve governance and accountability in their health care sectors. There is a need to develop professional code of conduct related to medical and non-medical activities of physicians and other health professionals at European level, where the request or acceptance of any informal payment (either in cash or in kind) is banned. This ban should extend to gratitude payments.
- The income of physicians and medical staff could be increased in view of the average wage in the country. It is necessary to implement a provider payment mechanism that allows for a more fair compensation for service provision (e.g. based on quality and professional skills) rather than a uniform central payment scale for physicians and medical staff.
- Introduction of formal patient charges should be considered. Yet, there is an overall concern that official charges do not have the ability to eliminate the informal ones, and that their introduction would result in a mixture of formal and informal payments by the patients. Moreover, vulnerable population groups who are exempted from formal charges might continue to pay informally.
- Patients should be offered the option to use health care services included in the basic health care package but provided by private health care providers. This could result in a direct competition for patients. Lower or no official charges in the public sector compared to the private sector might stimulate the use of public services.
- Penalties can be imposed on those who receive/request informal payments. One of the basic characteristics of the environment where informal payments are prevalent is a weak regulatory system. Strengthening the control and accountability in the health care sector will be essential for dealing with corruption. However, if the financing of the health care system is insufficient, it is hard to expect that imposing sanctions to providers would be an effective measure for dealing with informal patient payments. Among other things, imposing sanctions could be one of the driving forces for shifting providers from public to private sector.

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## OUT-OF POCKET PAYMENTS FOR HEALTH CARE SERVICES IN CEE COUNTRIES<sup>3</sup>

### *The complexity of patient payments in CEE countries*

Equity in health care financing and equity in access to health care have been long established as guiding principles in Europe. Although European patients are accustomed to pay for health care commodities, such as pharmaceuticals and devices, extensive patient charges for public health care services are uncommon. Free-of-charge access to essential health care services is even seen as a patient's right in some countries. Nevertheless, the scarcity of public resources, combined with the global economic crises, puts pressure on European governments to set new priorities. As a result, charges for public health care services are being extended in Europe as a means to shift health care costs to consumers and to reduce the need of government funding. Such reforms are expected to limit the deficits in the state budget but also to provide incentives to consumers for efficient health care use and a healthier life-style. In view of this, European policy-makers face a major challenge in designing efficient and equitable patient payments mechanisms that maintain a high quality of care for all citizens.

The issue of patient payments is especially relevant to CEE countries. Despite the common economic and political arrangements during the communist period, the CEE countries have proceeded on their own road of transition. However, the sharp economic decline after the collapse of the communism affected their health care systems in a similar manner. Most important, it limited the health care resources and provoked major health care system reforms. Health care funding was partly shifted to patients by applying or increasing charges for pharmaceuticals and dental care, but also for other services in the basic package, and due to the development of the private health care sector. Thus, out-of-pocket payments have become a common feature of health care delivery, which is a major contrast to the free-of-charge service provision during the Soviet times.

There is a concern however that official patient charges in CEE countries, impose a double financial burden to consumers since they are implemented in a context of persistent quasi-formal and informal payments. Patients in CEE countries are now paying formally, but also informally, in order to have access to and/or adequate quality of care. Would they be able to cope with new or increased formal charges? Taking this question as a perspective, Project ASSPRO CEE 2007 provides evidence on the affordability of public health care services in the CEE region, and the future challenges related to the introduction or increase of patient charges.

The findings presented here are based on representative national surveys among health care consumers carried out in the targeted countries. Data for Bulgaria, Hungary, Lithuania, Poland, Romania and Ukraine were collected in July-August 2010 and 2011 as a part of Project ASSPRO CEE 2007, and data for Albania, Serbia and Russia were obtained from existing datasets collected in previous years by the World Bank (Living Standards Measurement Surveys for Albania and Serbia) and the Carolina Population Center (Russia Longitudinal Monitoring Survey).

### *Payments for physician visits and hospitalization in CEE countries*

Health care consumers in CEE countries can be divided in three main groups: (1) those who use health care services but do not have to pay out of pocket; (2) those who use health care services and

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<sup>3</sup> Related to project objectives 3 and 4

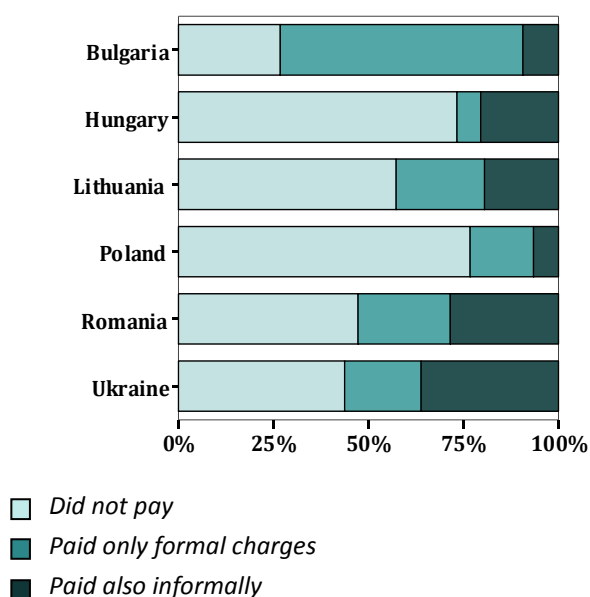


pay formal charges only; and (3) those who also pay informally. All three groups are present in the countries included in the project survey: Bulgaria, Hungary, Lithuania, Poland, Romania and Ukraine (see Figure 5A).

With regard to physician visits, the group of health care users who pay for such services (either formally and/or informally) is the largest in Bulgaria, followed by Ukraine, Romania and Lithuania. For Bulgaria, this is mostly due to formal charges, while in the other three countries, informal payments also play a considerable role. In Poland and Hungary, the group of patients paying for physician visits is comparatively small. However, in Hungary, this mostly includes informal payments in addition to formal fees. Overall, Bulgarian and Polish patients are less frequently confronted with informal payments when visiting a physician, compared to the rest of the countries. The group of patients who pay informally for physician visits is the largest in Ukraine and Romania, followed by Hungary and Lithuania. In all six countries however, a considerable part of health care consumers (about 10% to 40%) reports informal payments for physician visits, which means that this type of payments should not be neglected in policy decisions about formal charges.

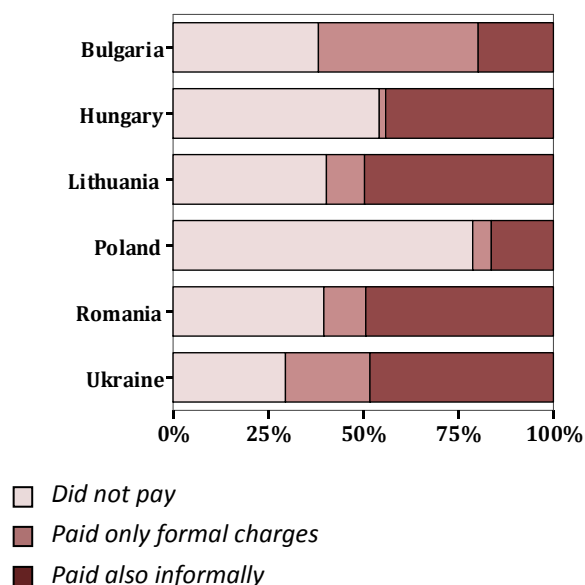
**Figure 5A. Payments for physician visits**

*Bars show % of users during the last 12 months*



**Figure 5B. Payments for hospitalizations**

*Bars show % of users during the last 12 months*



All three groups of health care consumers are also observed with regard to payments for hospitalizations (see Figure 5B). Similar to physician visits, Bulgarian health care users most often report only formal charges when hospitalized as compared to the other countries. However, in Ukraine, the group of patients who pay either formally or informally for hospitalizations is the largest. Ukrainian patients as well as patients in Romania, Lithuania and Hungary are also often confronted by informal payments for hospital services. In Bulgaria and Poland, the group of patients who pay informally when hospitalized is relatively small compared to the other countries.

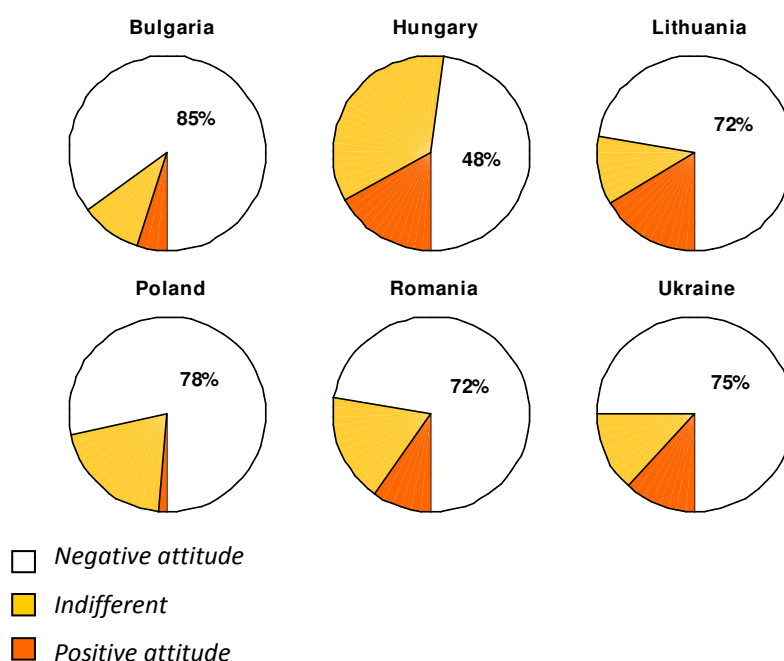
Out-of-pocket payments, and in particular informal payments, for hospital services are especially problematic because the costs of these services are rather high while the use of these services is often vital. Project results for Albania focused on the level and dynamics of informal payments indicate that “gifts” to medical staff represent a significant share of the out-of-pocket payments for hospital

services in this country. In Serbia, hospitalized patients pay formally and informally but also indirectly. By indirect payments, it is meant payments for medical goods that should be provided by the hospital to any hospitalized patient but the patient is required to bring these goods to the hospital. Such goods include hospital drugs, disposal material and devices. This indicates that formal fees for hospital services should take into account not only the existence of informal payments but also the indirect ones, which mostly result from the lack in hospital funding.

The general public in CEE is interested in the solution to the problem of informal patient payments, but often accepts these payments as a means to receive more attention, better quality and quicker access when using health care services. Nevertheless, there are some significant differences between the countries. Health care consumers in Bulgaria and Poland mostly oppose informal cash payments for health care services, followed closely by those in Lithuania, Romania and Ukraine. A notable exception is Hungary where the majority of the health care consumers (52%) are either positive or indifferent towards this type of payments (see Figure 6).

**Figure 6.** Attitudes towards informal cash payments for health care

*Pies show % of actual and potential health care users*



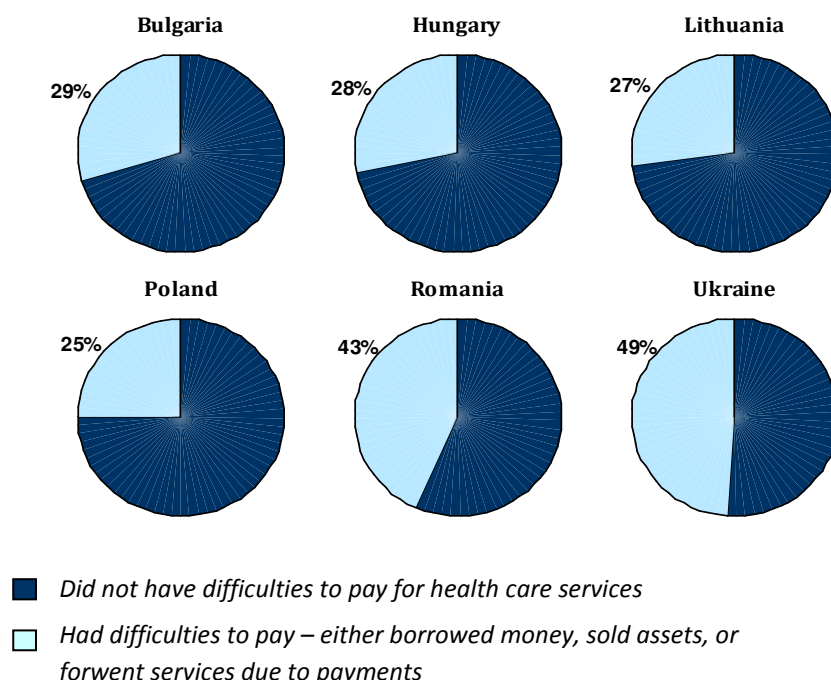
Extensive information campaigns among health care consumers will be required to change the public attitude towards informal payments and to create a social opposition against informal patient payments. Public attitudes will be a crucial factor for the successful implementation of official patient charges and the elimination of the informal ones.

Also, patients need to be well-informed about the size of the official fees that they are obliged to pay for health care service. Patients are often unable to make a distinction between formal and informal payments, especially when they do not know the size of the formal fees prior to the service use. Some patients are unaware of possibilities to file a complaint when requested to pay informally. There is a need of an easy and simple procedure for filing such complaints.

Out-of-pocket payments for health care services represent a considerable burden in most CEE countries. As the project results indicate, the accumulated patient payments affect the demand for these services forcing some patients to forgo health care (see Figure 7). Other patients employ a different coping strategy by borrowing money to pay for hospitalizations but also for visits to physicians. The inability to pay is especially evident in Romania and Ukraine (reported by 43% and 49% of those in need respectively). In Bulgaria, Hungary, Lithuania and Poland, inability to pay is less often reported although the share of those unable to pay is still considerably large (see Figure 7). This issue requires an immediate policy attention in CEE countries.

**Figure 7.** Inability to pay for physician visits and hospitalizations

*Pies show % of those in need of health care during the last 12 months (i.e. those who visited a physician, were hospitalized and/or forewent services)*



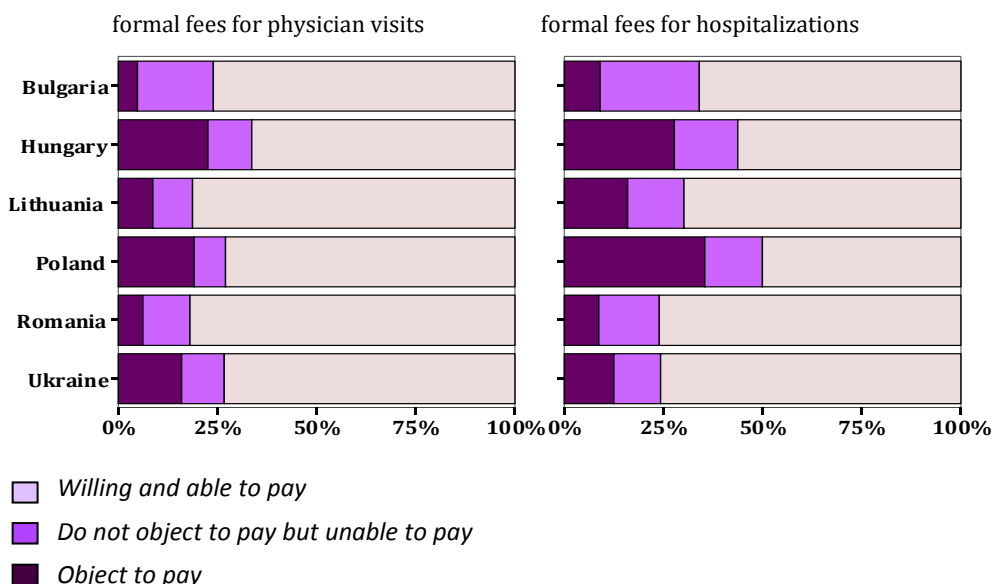
It is well-known that small medical costs can produce a considerable burden for poor households but when patient payments are the main source of health expenditure, they can push even the wealthy households into poverty. For example, the project results for Serbia indicate that 5% of health care users are shifted to the lowest poverty group as a result of patient payments. Most households find it difficult to recover from such a burden, especially if they are exposed to health costs during many subsequent years like it is in the case of chronic diseases. An adequate exemption of poor and frequent health care users should be in place. Such mechanisms often fail, as it is the case in Serbia. In Russia, some groups eligible for free medication cannot benefit from this privilege due to unavailability of the medication.

Nevertheless, majority of health care consumers in CEE do not object formal fees for physician visits and hospitalizations when these services are provided with an adequate quality and access (see Figure 8). This is especially apparent for Bulgaria and Romania. The fee objection is relatively stronger in Hungary and Poland especially in case of hospitalizations. Ukraine and Lithuania rank

between these two groups of countries. It should be noted however, that a relative large group of health care consumers in Bulgaria (about 20-25%) state that they are unable to pay such fees even though they do not object the fees. In the rest of the countries, this group is smaller but nevertheless, it represents about 8-16% of health care consumers in each country (see Figure 8).

**Figure 8.** Willingness to pay formal fees for improved services

*Bars show % of actual and potential health care users*



The relatively high willingness to pay for improved health care services is also reflected in the importance that health care consumers assign to various quality-, access-, and price-related attributes. When asked directly to rank such attributes, health care consumers assign a relatively low importance to the amount that they are required to pay compared to quality- and some access-related attributes. The median rank of the price-attribute is 5 out of six attributes, for all countries included in the survey except for Ukraine, where the median rank of this attribute is 4 out of six attributes. Only travel time is ranked lower in all six countries. Also, the results of the pilot study carried out in Ukraine prior to the survey, suggest that Ukrainian patients are somewhat indifferent towards the type of payment (formal or informal) as long as they receive an adequate service provision. Given the absence of a well-developed private health care sector in Ukraine, these results might well explain the high rate of informal patient payments reported in this country.

#### *The scale of formal and informal out-of-pocket payments*

In addition to the micro-level estimates presented above, Project ASSPRO CEE 2007 also provides macro-level projections of the scale of formal and informal patient payments in the six CEE countries included in the project survey - Bulgaria, Hungary, Lithuania, Poland, Romania and Ukraine. The estimates are based on a simplified estimation module developed within the project. The accuracy of the module is tested using macro- and micro-level indicators for different countries. The module description is published in *Society and Economy in CEE* 2012, 34(2): 359-378.<sup>4</sup> The main results are presented in Figure 9.

<sup>4</sup> <http://www.akademai.com/content/1588-9726>

**Figure 9.** Macro-estimates of consumption of and payments for health care service

Projections (per year)	Bulgaria	Hungary	Lithuania	Poland	Romania	Ukraine
Users of out-patient physician service [% adults]	74.2	79.9	73.1	73.6	65.2	56.4
Users of in-patient hospital service [% adults]	16.2	21.1	16.3	15.9	19.2	18.0
Average physician visits per adult user per year	5.7	6.6	5.0	5.1	5.0	3.39
Average hospital admissions per adult user per year	2.3	1.9	1.6	1.6	1.9	1.48

Projections (per year)	Bulgaria	Hungary	Lithuania	Poland	Romania	Ukraine
Formal payments for physician visits [% adult users]	69.1	12.7	31.5	19.3	42.2	42.1
Formal payments for hospital admissions [% adult users]	56.8	10.5	30.3	8.2	42.2	54.5
Informal payments for physician visits [% adult users]	9.6	20.8	19.8	6.7	28.7	36.1
Informal payments for hospital admissions [% adult users]	19.8	44.2	49.7	16.4	49.5	48.2

Projections (per year)	Bulgaria	Hungary	Lithuania	Poland	Romania	Ukraine
Average formal payment per physician visit [Euro]	4.21	10.06	13.03	14.37	22.90	15.24
Average formal payment per hospital admission [Euro]	31.59	34.39	50.68	56.05	56.16	115.98
Average informal payment per physician visit [Euro]	8.23	8.75	16.16	13.51	14.73	9.30
Average informal payment per hospital admission [Euro]	44.11	67.31	79.64	37.88	63.42	54.62

Projections (per year)	Bulgaria	Hungary	Lithuania	Poland	Romania	Ukraine
Total formal payments for services by adults [% GDP]	0.30	0.10	0.20	0.10	0.50	1.00
Total informal payments for services by adults [% GDP]	0.10	0.20	0.20	0.04	0.30	0.50
Total formal payments for services by adults [% THE]*	4.30	0.80	2.30	1.40	10.10	14.50
Total informal payments for services by adults [% THE]*	1.50	2.10	2.70	0.60	6.30	6.70

\*THE - total health expenditure

As shown in Figure 9, health care consumption shows similarities across the countries except for the relatively high number of physician visits in Hungary and considerably fewer visits in Ukraine, as well as the relatively high number of hospital admissions per patient in Bulgaria. These trends are discussed in previous studies as well.

Formal payments are more frequent for physician services while informal payments are more frequent for hospital admissions. Both average formal payments and average informal payments for a physician visit are lower compared to those for a hospital admission. All data refer to the adult population (18+ years) in the countries

Total formal patient payments for services are relatively low in Hungary, Poland and Lithuania (about 0.1-0.2% of GDP or 1-2% of total health expenditure) and a bit higher in Bulgaria (about 0.3% and 4.3% respectively). The higher total formal patient payments in Bulgaria can be attributed, to a certain extent, to the co-payments for services in the basic service package. In Poland and Hungary, for example, these services are free-of-charge at the point of consumption. The relative size of formal patient payments is high in Romania and Ukraine reaching 0.5% and 1.0% of GDP (10.1% and 14.5% of total health expenditure) respectively. In Ukraine, these are predominantly quasi-formal payments (charitable contributions, which are voluntary but usually expected by providers).

Total informal patient payments for services show a similar trend. They are the lowest in Poland (only 0.04% of GDP or about 0.6% of total health expenditure) and a bit higher in Bulgaria, Hungary and Lithuania (about 0.1-0.2% of GDP or about 1.50-2.70% of total health expenditure). In Romania and Ukraine, these shares are higher (about 0.3-0.5% and 6.3-6.7% respectively).

The macro estimates presented here should not be seen as exact numbers but rather as an indication of the level of health care consumption and the scale of formal and informal patient payments for health care services in CEE countries. To establish the validity of our estimations, we compare them to results from previous studies:

- A survey carried out in Bulgaria in 2006 indicated that total informal patient payments in the country amounted to about 37.8 million Euro, which was equal to about 3.6% of total public expenditure on health (or about 2.0% of total health expenditure). Thus, in absolute terms, the size of total informal patient payments is comparable to that estimated by our module (see Figure 9). However, we find that in 2010-2011, informal payments represented a lower share of total health expenditure (1.5%). It should be noted that the total health expenditure in the country has been increasing, which can explain the difference between the two estimates.
- The empirical evidence for Hungary also confirms our estimations for informal patient payments. Informal patient payments in Hungary are found to be in the range 64.8-203.6 million Euro, which is equal to about 1.5-4.6% of total health expenditure. Our estimations of 170.0 million Euro and 2.1% of total health expenditure respectively fall in these ranges.
- Also for Poland, our estimations are similar to those reported in recent studies. In particular, in 2006, the informal payments in Poland were estimated to be about 51-81 million Euro or about 0.3-0.5% of total health expenditure. Although in absolute terms, our estimations of total informal payments are higher (149.8 million Euro), we still find that in 2010-2011, they represented not much more than 0.5% of total health expenditure in Poland.
- In Romania, analyses conducted for the Ministry of Health suggest that annual informal payments for health care amount to about 274-500 million Euro. Although the reliability of some of these analyses could be questioned, they indicate that our estimations of informal patient payments in Romania are plausible.
- Regarding formal patient payments for physician and hospital services, Eurostat reports data for 2005, which indicate that these payments represented about 3% of total health expenditure in Bulgaria, Hungary and Poland, about 2% in Romania and a bit more than 1% in Lithuania. Our estimations suggest different shares for 2010-2011. The changes in patient payment mechanisms in these countries as well as the development of their private health care sectors may well explain the discrepancies.

The comparability of our results to the results from previous studies is evidence for the convergent validity of our estimates, and for the persistence of the informal patient payments in this region. It should be considered however, that patient payments for services are only one part of total out-of-

pocket patient payments in a country. The total out-of-pocket payments also include payments for pharmaceuticals and medical devices, which are extensively measured in other studies.

### *Key policy recommendations*

Project results indicate two main policy concerns related to patient charges in CEE countries:

- There is an urgent need to eradicate informal patient payments in the CEE region given their negative efficiency and equity effects. Project results show that informal patient payments continue to exist in CEE countries. These payments present a considerable problem in the health care sector because they negatively affect the overall functioning of the health care system. In case of informal patient payments, the providers of health care services are compensated individually, irrespective of the value of health care provision to the society. The role of health policy and priorities set by policy-makers are undermined by the existence of these payments. A mixture of strategies on the demand and supply side of the health care market is proposed as a plausible solution to informal patient payments (as discussed earlier in this report).
- Also, there is an urgent need to (re)design the exemption mechanisms that accompany formal patient charges given their catastrophic and impoverishing effects. From a macro-level perspective, formal and informal patient payments for health care services seem negligible, which can explain the limited policy attention devoted to them. However, these payments have a considerable impact on the individual patients by creating financial barriers to access health care services. Project evidence suggests that the accumulated patient payments affect the demand for these services forcing some patients to forgo health care. Other patients employ a different coping strategy by borrowing money not only to pay for hospitalizations, but also for visits to physicians. This accessibility problem requires the immediate attention of policy-makers in CEE countries.

New or increased formal charges should be implemented with precautions (e.g. exemptions or compensations for vulnerable population groups at risk of poverty or with chronic diseases). The implementation should also take into account the country specific contextual factors since the function and impact of formal patient charges will vary between the countries. Even though CEE countries had similar health care systems at the beginning of the transition process, the diversity in their health policy and overall development resulted in very different health care systems at presents.

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#### **4.1.4 The potential impact (including the socio-economic impact and the wider societal implications of the project so far) and the main dissemination activities and exploitation of results**

Project ASSPRO CEE 2007 focuses on the development of evidence-based indicators for policy-making based on both, qualitative and quantitative data, combined with analytical methods such as econometric modeling and trend analysis. The policy of interest in this project is the policy of patient payment, namely the evaluation of policy content, its changes and impacts. The project targets research on both, the identification of relevant evidence-based criteria for the assessment patient payment policies and the analysis of their efficiency, equity, and quality impacts.

The research activities have a direct application to CEE countries. In particular, the project generates new knowledge through research, improves competitiveness, and addresses major societal needs in these countries. However, the implications of the project results to other countries that are not explicitly covered by the project are also explored. The impacts of the project are subsequently described.

##### *Contributions to standards*

The project offers an integrated framework for the analysis of patient payment policy in a new and comprehensive fashion. The framework is based on macro- and micro-level indicators related to a broad range of factors (incl. economic, social, institutional, historical geographical, ethical, cultural, demographic and sector-specific criteria). It includes evidence on potential effects and actual impact of policy that are continuously disseminated among policy-makers to be able to take informed policy decisions. The policy framework is based on both qualitative and quantitative indicators important to policy-makers but also related to consumer preferences and willingness to pay. This is of particular importance since the neglect of the public views can result in payment mechanisms that lack an overall public acceptance. The introduction of a patient payment mechanism that contradicts public views, can be impeded even in case of political will and providers' conformity. The implementation of official fees higher than the prices that consumers are willing and able to pay for, can discourage the use of public health care services.

Thus, the policy framework developed in this project enables a rational policy choice with respect to the type, magnitude and limits of the official patient fees, as well as with regard to the system of exemption. It also analyses the impact of different patient payment mechanism as well as the impact of the broad socio-economic environment. The main advantages of this approach to policy analysis include comparable results, transparent computational techniques and clarity of information used to address the issues of feasibility and adequacy. Thus, the integrated framework for the analysis of patient payment policy developed in the project, provides the means to set unified and comprehensive standards for the evaluation of economic and social impact of patient payment mechanisms worldwide.

The framework can also be used for the projection of the revenue-generating potential of patient payment policy, and subsequently, for the efficient reallocation of fee revenues in the health care sector. The empirical evidence suggests that although small at a national level, when retained locally, patient payments can represent an important additional financial resource for health care provision. In many countries where public health budgets are decreased due to economic crisis, patient payments are retained at the level of collection and are successfully reinvested in local health care

facilities to revitalize service provision. The utilization of the fee revenues to cover small expenditures for maintenance, emergency purchases of drugs or spare parts, increases the quality of public health care provision. The decisions about the reinvestment of the fee revenues can however, be effective if they take into account not only political and professional priorities for service development, but also the importance that the consumers attach to the quality- and access-related characteristics of the health care services. The analyses of consumer preferences and willingness to pay for public health care in this project aid the projection of the fee revenues that can be retained at a public health care facility given the socio-demographic characteristics of its patients. The project results also indicate how the fee revenues can be then reinvested in the health care facilities based on the preferences of consumers in order to enhance social efficiency. The inclusion of the public perspective in the reinvestment of fee revenue for the improvement of those service attributes, that consumer value most, will not only raise patient satisfaction, but can justify the collection of fees at public health care facilities. It is expected that these results can also give an opportunity for informed policy discussions regarding the design of patient payment mechanisms and their subsequent amendments.

### *Contribution to policy developments*

The project also offers methodology regarding policy evaluation. Modeling techniques are applied in this project to investigate the potential efficiency, equity and quality impacts of patient payment policies. In the area of research on patient payments, modeling is often applied but mainly in distinctive studies focused on a single country. Integrated models for the comprehensive evaluation of patient payment policies and their cross-country comparison are still lacking. Therefore, the project makes a contribution towards the development of methodology for policy analysis, specifically the analysis of patient payment policies. The model of patient payment policy and its impacts generated by this project, rely on integration between research areas achieving cooperation within and between disciplines. It takes into account a broad range of factors from the area of socio-economic sciences and humanities, and is based on theoretical and empirical evidence. The model is validated by its application in CEE countries. As a result, a methodological framework for the systematic evaluation of patient payment policies is offered. This methodological framework can be used for purpose of research and decision-making in other countries (inside or outside Europe) where patient payments are implemented or being considered for implementation. The application of the methodology developed in this project strengthens the capability of socio-economic sciences and humanities to contribute to the development of the health care sector.

In addition to modeling for policy analysis, the project also promotes the development and use of policy indicators based on stated preference techniques. In particular, the project seeks to establish the predictive validity of these techniques by comparing the results with the outcomes of the real market data based on revealed preference methods. Stated preference techniques allow experimentation with policy changes (e.g. expansion and reduction of the fee magnitudes) without actually being necessary to implement these changes. The lack of sufficient empirical evidence with regard to the predictive validity of these techniques however, diminishes their application in health policy-making. Therefore, the project results provide evidence on the ability of stated preference techniques (discrete choice experiment and contingent valuation) to generate data that are comparable with the actual consumer behavior. The project also establishes the theoretical validity of the two methods by comparing the results with predefined hypothesis. The analysis focused on the validity of stated preference techniques can also be important to decision-makers in other economic sector (e.g. education, environment protection and food industry) where actual experimentation is

unethical or impossible. Evidence on the validity of these techniques can reinforce their application for rational decision-making within the framework of cost-benefit analysis.

### *Contribution to the development of evidence-based policy indicators*

The focus of this project is on policy assessment. The set of assessment criteria and the projection module that are developed in this project, are validated by their application in CEE countries. The outcomes of this application provide health policy-making in these countries with relevant economic, social and sector-related indicators that they can use for the analysis of the official patient payment mechanisms already implemented or changes expected in these mechanisms. The research outcomes also help to identify which factors, opportunities and problems in this European region influence the effects of patient payments policies and what is the strength of their impact on policy outcomes. Specifically, the impact of the transition process and the widely spread informal patient payments in CEE, on the assessment of official patient payment mechanisms is in the center of the research activities. The project results can also be used by policy-makers in these countries as a support in the assessment of future policy transformations and the potential impact of new patient payment policies that are considered for implementation.

However, the implications of this project are not limited to CEE countries only. The research activities within the project address the more general need of new, improved and more appropriate indicators for the evaluation of patient payment policy at a European level and worldwide. This is necessary because the implementation of patient payment policies is rarely based on scientific evidence and is hardly ever preceded by an analysis of their potential impacts. The lack of relevant and tangible policy indicators are seen as one of the reasons why evidence is not considered in policy-making. However, the implementation of patient payment policy is found to have numerous adverse effects on efficiency, equity and quality of health care provision. If these effects are neglected when policy is being developed, the negative impacts of patient payments can be further aggravated. Therefore, this project makes a contribution to the improvement of patient payment policies by offering a comprehensive and feasible set of tangible evidence-based assessment criteria, and by outlining the process of their application in policy evaluation.

The completeness, feasibility, scientific reliability and comprehensibility of these criteria for policy-makers are of primary concern in the project when developing the set of assessment criteria. Since beginning of the project health policy-makers and representatives of health insurance organizations have been involved as external experts. These external experts participated in focused group discussions, semi-structured interviews and project seminars. This helps to assure that the set of assessment criteria developed in the project is not only scientifically sound but can also be implemented in practice to facilitate an effective policy-making process.

### *Contribution to improvement of knowledge and solution of societal problems*

The project also helps to improve knowledge and resolve societal problems. In particular, the project activities are rooted in research that aims not only at providing the scientific basis for the assessment of patient payment policies, but also to gain insights into the key factors that underline the impact of these policies, specifically in CEE countries. By outlining the direction of policy impact and options for policy improvement, the project also addresses major societal needs in these countries related to the enhancement of efficiency, equity and quality of health care provision.

The project specifically contributes to the understanding of how CEE health care consumers respond to prices in the health care sector, and about the impact of informal patient payments on consumer willingness and ability to pay official health care charges. In view of this, the project also addresses the general societal need of improving health care provision in this European region. The transformation of public health care sectors in these countries and the implementation of patient payment mechanisms as part of their social health insurance reforms, have influenced the overall efficiency and equity. Although the impact of patient payments on efficiency is disputable, it is commonly believed that these payments have adverse effects on equity. Empirical evidence indicates that the introduction of patient payments certainly increases inequity in both, access to health care services and their financing.

Due to these essential drawbacks, the establishment of adequate patient payment mechanisms is a fundamental issue in the area of health care financing. A well-designed patient payment policy can prevent the underutilization of health care services due to inability to pay, especially among low-income and chronically sick individuals. To design such mechanism and to implement it effectively, the effects of patient payments on consumer behavior need to be studied.

The project also offers evidence on the informal patient payments in the CEE region, as well as on their influence on consumers' willingness and ability to pay and on the official payments for health care services. The nature of the informal payments makes it difficult to obtain representative estimates of their patterns and total volumes. Even though the existence of informal payments might indicate that individuals are inclined to pay for public health care, the relatively low standards of living in this European region suggest that they do not always have sufficient resources for such payments. However, the spending decision-making of CEE health care consumers is still largely unknown. By providing relevant policy information on formal and informal patient payments, as well as on the willingness and ability of consumers to pay for health care services, this project enables a rational policy choice regarding the design of patient payment policies given their efficiency, equity and quality effects in the health care sector.

The project also contributes to the adequate design of a patient payment policy by providing data on public attitudes towards the involvement of consumers in public health care financing and specifically, towards the features of patient payment mechanisms. The project focuses on public perceptions regarding four aspects of official patient payment mechanisms considered as highly relevant for policy analysis. These aspects include services under payment, the type and magnitude of payments, the beneficiaries of payments, and systems of exemptions. Data on public preferences can be used by policy-makers to assess the acceptability of patient payment mechanisms to the consumers and to identify possibilities for their improvement.

Another social issue in the CEE health care sectors that is tackled in this project is the continuous under-funding of the public health care system and the inefficient resource allocation, which result in poor service quality. Due to the insufficient and inefficient health care funding in these countries, there is often a major lack of elementary drugs, materials and instruments, and insufficient maintenance of health care facilities. This is particularly true for the primary health care facilities in the small rural settings. The low service quality is often stated as the main reason for the low patient satisfaction. To solve these problems, additional financing is necessary.

Therefore, given that patient payments are being legislated, the project analyzes their revenue generating potential. As suggested by the empirical evidence, it might be efficient to retain these payments at the point of their collection (preferably at the health care facility) and to reinvest them to improve the provision of public health care. The revenues of patient payment can be directly

allocated to pay, for instance, for emergency purchases of elementary supplies, small reparations, purchasing of bed linen, improved sanitation and catering. The research in this project provides evidence on these issues.

### *The added-value of research at a European level*

The official patient payment policies in this EU region are not adequately compared. Even at a national level data on patient payments are presented solely via macro indicators. The reliability of these indicators can be disputed given the widely spread informal patient payments in the CEE countries. Systematic analyses on the impact of official patient payments on the behavior of CEE health care consumers and subsequently, on the efficiency, equity and quality of health care provision is absent. This lack of data however, can impede the overall analysis of patient payment policies in Europe and can obstruct in future the attempts for their harmonization. By collecting and analyzing data on the impact of patient payments in the new EU Member States, this project opens up opportunities for informed policies discussions in this direction.

The focus of this project on CEE countries provides an adequate basis for a comparative analysis. The introduction of patient payments in these countries took place relatively simultaneously after the abolishment of the communist governing. It was a part of the general trend in this European region to replace the old tax-based public health care systems with a social health insurance mechanism. The common points in the CEE health care reforms combined with the historical, political and socio-economic similarities between the countries, offers the possibility for a comparison. Moreover, patient payment mechanisms were introduced in CEE countries relatively recently compared to the Western European countries. Therefore, by focusing on this Europe region, it becomes possible to examine and compare the initial short-term effect of a patient payment policy and subsequently, to forecast the long-term policy impact.

The project also explores the diversity between the CEE countries. These countries have a lot in common but they also show diversity in terms of economic development, demographic patterns, and health status indicators. The specificity of the country profiles influences the consumers' perceptions and their spending decisions. This in turn affects the adequacy of the patient payment mechanism implemented. Therefore, the research activities in this project specially pay attention to the similarities and the differences between the countries where data are collected.

The project includes four groups of CEE countries at different stage of social and economic development:

- Economically advanced Central European countries (Hungary and Poland).
- Economically advanced former Soviet republics in Europe (Lithuania).
- Less advanced countries from Eastern Europe (Bulgaria and Romania).
- Less advanced former Soviet republics in Europe (Ukraine).

The comparative analysis of data collected in these countries helps to outline to what extent consumer perceptions and behavior at the health care market differ, and whether these differences are due to diversity in the social and economic context. The cross-country perspective in the project also helps to establish to what extent the country context influences the evaluation of patient payment policies.

### *Contribution to international research collaboration and capacity building*

The project establishes a network of scholars from EU Member States and outside the EU, with the aim to achieve a common research challenge. Creation of networks between scholars is in line with Theme 8 Socio-economic Sciences and Humanities, which objective is to stimulate the development of international cooperation at the EU level and with the EU partners. Enhanced international cooperation is in fact a key objective of the entire Seventh Framework Program. However, for CEE countries, as those involved in the project, the establishment of such network is of particular importance. Due to socio-political circumstances, these countries, relatively recently opened up for advanced scientific knowledge, especially in the field of socio-economic science and humanities. The international cooperation between scholars in this European region is to a great extent in its infancy. Therefore, the project makes a contribution in this direction.

The project also contributes to capacity building within the EU and the EU partners. The day-to-day research activities in this project are carried out by junior researchers from CEE countries with the objective of preparing and defending a doctorate (i.e. PhD thesis). The joint supervision of these researchers by the project partners and the opportunity for their mobility within the partners' organizations enables their effective training in carrying out scientifically sound research. In addition to this, the multicultural composition of the project consortium also enables the development of the generic skills of the junior researchers (e.g. intercultural communication), which are currently of high demand among employers in Europe. The knowledge and skills that the junior researchers develop during the project can facilitate their professional career in the academic sphere and can contribute to the quality of their subsequent research activities. Capacity building and mobility of scholars that is expected from this project conform to the overall EU objectives.

### *Dissemination of project results*

The project relies on a systematic exploitation of project results and their dissemination among policy-makers and other interest parties, scientific audiences and the general public. The group of policy-makers primarily includes government organizations involved in the management of the health care sector, decision-makers in health insurance organizations, and other parties. They are involved in the project from the very beginning. For this purpose, representative of government institutions, national health insurance companies and international organizations concerned with health policy-making are attracted to participate in the project. They form the group of external experts within the project.

The group of external experts is involved in the discussion of the conceptual models related to the research activities and subsequently, in the discussion of policy implication of the research findings. They are also involved in the process of synthesizing project results for the purpose of policy-making, and for the general public. The external experts are also involved in the preparation of discussion papers and publications for policy-oriented newsletters, magazines, and local mass media. This helps to assure that the information about the project and its results are presented in a useful and comprehensible manner.

The actual dissemination of results among other policy-makers and the general public follows four main mechanisms: project seminars, discussion papers, publications in policy-oriented newsletters and magazines, and local mass media. This also includes the use of the latest available technologies by designing a project website.

Three project seminars are organized within the project. The first project seminar took place in March 2010 in Maastricht, the Netherlands. It covered results based on the focus group discussions and in-depth interviews carried out within the project. The second project seminar took place in May 2011 in Budapest, Hungary, after the first wave of data collection. At the end of the project, a final project seminar took place in December 2012 in Vilnius, Lithuania, as well as multiple project seminars at the partners' countries (national level). These seminars enforced broad discussions around the issue of patient payment policies and their impact on efficiency, equity and quality of health care provision.

After the completion of each project task within the project, the possibilities for disseminating the results via publications in policy-oriented newsletters and magazines, and via local mass media are explored. The use of local mass media and the project webpage are of particular importance for the dissemination of project results to the general public. When suitable, discussion papers are prepared with the help of the external experts involved in the project.

The dissemination of project results among scientific audiences is done in form of articles and presentations at research conferences. The articles are submitted to both national and international peer-reviewed journals to ensure optimal publicity of the results among scholars and their discussion. The articles are related to the main research objective of the project. The possibilities for participation at relevant research conferences are explored. The possibility to participate in policy oriented conference and seminars organized by others are also pursued in this project.

### *Summary of project dissemination output*

As described above, three key groups of stakeholders are targeted in the project dissemination activities: policy-makers, researchers and the public. The table below presents a short summary of project output.

Dissemination activity	Output
Research publications	36 papers published in peer-reviewed journals
PhD theses	8 PhD theses under the project, 3 of them are already approved
Policy publications	18 policy papers published in policy oriented journals
Oral presentations	43 presentations at research conferences and policy seminars
Poster presentations	14 poster presentations at research conferences
EU-policy briefs	4 EU policy briefs and an additional brief is drafted
Project policy briefs	14 project policy briefs published on the project website
Project seminars/workshops	3 project seminars and 2 project workshops, and on-line proceedings
National project seminars	5 project seminars at national level in CEE countries
Interviews in mass media	12 interviews for newspapers, popular journals, press, etc.

The dissemination of project foreground will continue also after the end to further promote project output. This will be done via the project website, as well as during direct communications with policy-makers.

#### **4.1.5 The address of the project public website, if applicable as well as relevant contact details.**

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**Project duration:** March 2008 – February 2013 (60 months).

**EU contribution:** 1 446 496 €.

**Project website:** [www.assprocee2007.com](http://www.assprocee2007.com)