# ASSESSMENT OF CORRUPTION IN THE HEALTH CARE SECTOR

**Background Document, March 2015**

*This document has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of the SELDI initiative and can in no way be taken to reflect the views of the European Union*

## 1. Introduction

Many people are ready to more strongly condemn corruption in health care from the moral standpoint than corruption in some other parts of the public administration. A corrupt customs officer or tax inspector can often be met with more understanding by the general public than a corrupt general practitioner or surgeon. Two reasons can be cited as explanations for such moral attitude toward corruption in health care. First, corruption in health care is, completely erroneously, associated exclusively with the doctor-patient relationship, and then this relationship is, also erroneously, reduced to extortion by doctors, which gives rise to non-collusive corruption – a patient pays a bribe to a doctor to prompt him to fulfil his duty, i.e., his professional obligation.[1] Second, it is implicitly assumed that a patient is in a vulnerable position, since the price elasticity of demand for health services is low, and doctors can use this, even in non-collusive corruption, to extort large amounts of bribes. The list of the reasons for such harsh moral condemnation by the general public could perhaps be enlarged by another one, which touches upon personal interests of almost all individuals. It is related to the fact that everybody, regardless of their profession, job, social and/or material status, can imagine themselves on the side of demand for medical services, i.e., health services and, consequently, as potential victims of corruption in the health sector as well.[2]

Corruption in health care is, however, a far more complex, that is stratified phenomenon. First and foremost, corruption in the case of health services delivery, i.e., corruption which occurs within the doctor-patient relationship constitutes just one form of corruption in the health sector. Other forms of corruption in the health sector are related to large-scale public procurement transactions that are inevitable in this sector, at least to the extent to which the public, i.e., government sector provides health services. Corruption in public procurement in health care can take place in investment, be it the constructing and equipping new health care facilities, or just procurement of new capital equipment. Furthermore, this form of corruption can occur in procurement of medical supplies, starting with those very valuable and specific, such as medicines, all the way to other kinds of medical or diverse non-medical supplies, such as meals for hospitals. Finally, corruption can also occur in outsourcing of certain services, such as laboratory tests, to commercial organizations.

[1] Throughout this report, only the professional duty of doctors, i.e., medical staff, will be looked at, the one that arises from the contractual relationship they have entered into. Their moral obligation to provide a relevant service is not the subject of this discussion.

[2] Bearing this in mind, that is, bearing in mind the low price elasticity of demand for health services, it is clear that the personal interest of citizens can occupy a crucial position in the creation of a widespread moral condemnation of corruption in health care.

Pursuant to all the above, it is obvious that the case of corruption in which corrupt exchange takes place between a doctor and a patient constitutes just one, specific case of corruption in health care. In this specific case of corruption, too, its different types are present. As a result of the specific features of health care and its financing, which will be discussed in greater detail a bit later, in the case of the relationship between a patient and a doctor, i.e., other medical staff, despite the fact that the basic general definition of corruption (Chapter III) is fulfilled, the word corruption is not used; instead euphemisms are used in the literature, such as: informal payment, unofficial payment or „payments received without any basis in official rules". Irrespective of the specific features to be discussed, avoiding the use of the term "corruption" can be an indicator that professionals in the field of health care have not yet accepted the fact that the problem of corruption exists, i.e., that they do not want to discuss it openly.

Irrespective of the plausibility of the previous position, several authors have offered definitions of corruption in health care which are focused exclusively on the relationship between a patient and a doctor, i.e., medical staff, and they are related to the character of payments, i.e., of the cash flow from a patient to a doctor. Therefore, it is argued that corruption in health care exists if there are informal and/or unofficial payments, that is, payments which are not made official by health policy. A bit more comprehensive is definition that corruption in health care constitutes payments to individuals or institutions in cash or in kind, which are outside the official payment system, referring to the services whose costs should be covered (without direct payments) by the general health insurance system.

The above definition of corruption in health care, which is limited to corruption in the relationship between a patient and a doctor, i.e., other medical staff, points to a very important element, i.e., factor of corruption of that type – the system of state (compulsory) health insurance. Specifically, in many countries there is a monopoly of this system, i.e., only this system provides funding for the functioning of the health care system, which boils down to state health institutions, which are forbidden to operate on the market for health services; instead they are supposed to cover all their costs from the cash flow which comes from the state health insurance fund. Within such a financing framework for the health care system, many countries are faced with the essential problem of limited, i.e., relatively low revenues of the state health insurance fund (determined by the contribution rate and the total size of the base, in most of the cases the gross wage to which they are applied), while all insurees, irrespective of the level of the „premium" they are paying, are offered complete, best possible health care.[3] In other words, while supply of health services is limited, demand for these services is practically unlimited. This is all the more so because in

[3] Sometimes complete, best possible (that includes all the services) health care is offered to all citizens of a country, irrespective of whether they are insurees, i.e., irrespective of whether they are paying contributions for compulsory health insurance.

the case of such, compulsory, universal and across-the-board insurance moral hazard of an increase in demand for services provided by the system of insurance is strong. Simply, an insuree does not bear any additional (marginal, i.e., incremental) costs, and therefore he has an incentive to request an additional medical service, i.e., an additional service of the health care system.

Precisely the mentioned disproportion, which exists in many countries, generates the difference between demand and supply of health services, i.e., a gap between demand and supply that would be based on legal revenues (from compulsory health insurance) of providers of health services. In other words, if supply of health services was increased to match demand , i.e., in order to strike a balance, part of the costs of provision of health services would remain uncovered, for which reason no medical service provider has an incentive to increase the supply of these services. This has clarified the framework in which corruption in the health sector, i.e., corruption in the patient-doctor relationship, actually takes place.

This clarification helps to better understand the difference among three specific types of corruption in the health sector in which a patient appears on the demand side. It could be said that the first type of that corruption is the one which ensures the coverage of costs of the provision of health services. This type of corruption occurs in the situation which has just been described, in which, due to limited funds for covering the costs, generated by the state system of compulsory health insurance, doctors, i.e., all providers of health services, have an incentive to cut back supply, i.e., to set the level of supply so as to balance the marginal revenue (from the state health insurance fund) and marginal costs, that is, costs of providing an additional service.[4] Precisely such rational behaviour of doctors and other medical staff opens up a gap between demand and supply of health services, i.e., a situation in which certain part of demand is not met. That creates incentives to patients to generate incentives, through informal payments, i.e., bribes, to doctors and other medical staff to increase the volume of supply and to establish, in this manner, equilibrium on the market for health services.[5] More specifically, payments are not necessarily in cash, they can also be in kind – medical supplies which the provider of medical services lacks. Such supplies are used for a specified purpose, exclusively for the provision of medical services to the one who has secured them.

It is very important to note that this form of corruption aimed at covering costs includes all the costs of providing health care, including the opportunity costs of labour of the medical staff, primarily doctors. Specifically, the salaries of doctors in the state sector of health

[4] The cut in the level of supply applies to both the level in the narrow sense of the word, and to the composition of health services, since such services are not homogeneous.

[5] Pursuant to the mentioned result, this type of corruption in health care is sometime called "sensible corruption". Irrespective of whether this term is suitable, it is certain that this type of corruption can result in a Pareto improvement, i.e., in a simultaneous increase in the welfare of both the doctor and the patient.

services which are below their opportunity costs also constitute, although that is very often overlooked, uncovered costs of resources.[6] Therefore, all those payments which end up with doctors and serve to cover the opportunity costs of their labour, belong to this type of corruption.

The next category of corruption in health care is a kind of extortion by doctors, namely those who are in a monopolistic position. The mechanism is similar to the price setting process in a monopoly. Considering the heterogeneity of health services, as well as the heterogeneity of supply of those services, specialists in certain tasks appear on the market, who provide a very high quality of that specialist service. In other words, there is no competition in the case of, for example, top cardio surgeon in a clinic, i.e., hospital. The key question is whether, and in which manner, that cardio surgeon will charge for his services. If there is a system that will enable him to balance his marginal income and marginal costs within permitted, i.e., legal cash flows, corruption will not occur – there will be no need for it. However, if the health care financing system does not make such balancing possible, there is an incentive for corruption, both on the supply side (the doctor-specialist who is asking for a bribe), and on the demand side, since the marginal benefit of the patient is higher than, or equal in the marginal case, the amount of the bribe that should be paid. Of course, it is rather difficult to assess in operational terms where one type of corruption in health care stops and another one begins. What are the real opportunity costs of the labour of a top cardio surgeon? Is it possible that the rent which he is possibly appropriating is not rent in the true sense of the word, but returns on the investment in his own specific human capital, i.e., professional advancement? Unambiguous answers should be given to these questions before a certain type of corruption in health care (in the doctor-patient relationship) is declared to be extortion.

The third type of corruption in health care is the one which implies unofficial payments for those services, medical or supporting (non-medical), which are not, at least not explicitly, covered by compulsory state health insurance, but their delivery is not regulated by separate regulations, i.e., it cannot be financed by legal payments. The problem is in the fact that official regulation of payments is too rigid to cover such possibilities. The patient then becomes a corruptor in order to ensure these services for himself. In the case of additional medical services there is considerable asymmetry of information, i.e., the patient does not know whether these services (for example, additional tests) are really necessary from the standpoint of treatment, or they constitute a form of extortion. In the case of non-medical services (better hospital accommodation, such as a single room or a room with air-conditioning, better meals, etc.) there is no asymmetry of information, patients know what they are paying for, they

[6] Opportunity costs of doctors include the possibility of their earnings outside the state sector of health care provision (private medical practice), or outside the health sector in the narrow sense, such as commercial transactions of selling medicines and/or medical equipment, for example.

would be willing to pay for that in any event, and they resort to corruption because a rigid system of legal, i.e., official payments does not allow them to do so.

Although this taxonomy of corruption in health care, which occurs in the relationships between patients and doctors, i.e., medical staff, is very clear and consistent in analytical terms, in operational terms it is very difficult to precisely categorize individual cases of corruption under all these criteria. For example, it is very difficult to establish whether a particular case involves extortion in terms of rent seeking or coverage of opportunity costs of doctors' labour.

Of course, as in all other cases, corruption in health care can be categorized into corruption through which regulations are implemented (extortion, i.e., non-collusive corruption) and rule-breaking corruption (collusive corruption). In the case of the patient, non-collusive corruption means that he bribes the doctor or other medical staff in order to receive his entitlement, i.e., the services envisaged by compulsory or some other health insurance whose beneficiary he is. The problem arises because in a large number of cases medical and other services to which an insuree is entitled are not precisely specified. For example, although an insuree is entitled to a specialist examination, the time limit in which that specialist examination is to be performed has not been specified. Therefore, it is sometimes difficult to determine whether there is extortion or not, or collusive corruption, which means that the patient, i.e., insuree will receive a medical or some other service to which he is not entitled.

Corruption in the case of public procurement in health care is mostly collusive corruption, hence, the kind of corruption which breaks, i.e., circumvents the basic rules of public procurement, essentially in the same manner in which corruption occurs in other cases of public procurement. The core motive is avoiding competition in the broadest sense of the word, i.e., appropriation of rents generated by avoiding corruption. The key prerequisite for that is the existence of collusion between someone from among those appearing on the supply side in the case of public procurement and health officials who appear on the demand side. On top of that, other forms of abuse also occur in public procurement: it does not have to be corruption in the narrow sense of the word, but also cartel collusion of competitors through which competition is evaded in public procurement. Such collusion, in which officials on the side of demand for services that are purchase through public procurement are not involved in any way, gives rise to economic inefficiency and income redistribution in favour of those who are involved in collusion, although there is no corruption – the same effects that are generated in the case of collusive corruption.

## 2. Demand for Corruption in Health Care

When demand for corruption in health care by patients is discussed, it is necessary to note the characteristics of demand for health services. Specifically, demand for corruption in health care by patients is derived demand – it derives from demand for health services. Moreover, demand for medical services is *per se* derived demand – patients, i.e., individuals do not require health care, but health. Specificities of health as a good determine the specificities of demand for health care.

Essentially, there are two methods of paying for health services. One is health insurance, compulsory or voluntary, and the insuree acquires the right, by regularly paying the premium, to have full costs of delivery of health services paid by an insurance organization.[7] Naturally, as with any other insurance scheme, the premium is paid regardless of whether services of health insurance are delivered. The second is direct payment for health services, upon the delivery of a particular service. In the case of direct payments, low price elasticity of demand for health services can be noticed. Specifically, since there is essentially no substitute for health services, there are no substitution effects, but only the income effect. The mentioned low price elasticity of demand for health services, in principle, constitutes fertile soil for extortion by doctors or other medical staff.

It is noteworthy, from the standpoint of demand for corruption by patients, to also examine the case of gifts. Specifically, in many countries, a gift to the doctor at the end of the treatment is part of the cultural tradition. Of course, if it is a gift, no corruption is involved. In order to identify any gift (be it monetary or non-monetary, a gift in cash is still a gift) as gift, the requirement is that there is no explicit exchange. In the case of the health sector, that can boil down to an answer to the question whether the transfer was made before or after the delivery of medical services. In principle, if the transfer was made after the provision of health services, it can be said that it is a gift. This criterion for differentiating corruption in health care from a gift faces two major operational problems. First, it is possible to imagine (although it is not very likely) a corruption transaction in which a corrupt service is delivered first (e.g. the provision of health services ahead of one's turn), and only then a bribe for such service is paid, all the more so because it has the form of a gift. Second, in many cases, treatment, the provision of health services is continuous, i.e., delivered in stages, so a "gift" at the end of one stage can constitute corruption related to the next stage of treatment.

In addition to the patient, a very large number of various economic agents can appear on the side of demand for corruption in health care in public procurement. On the one hand, they include economic agents specialized in production of and/or trade in medical equipment, medicines, as well as specific non-medical equipment (hospital beds, for example). On the

[7] This payment method is sometimes combined with the so-called co-payment, that is, with an outlay through which a patient "co-finances" full costs with an insurance organization.

other hand, they include all other economic agents that produce or sell everything else, not belonging to anything associated in any sort of specialization, but is the subject of public procurement. The group of such economic agents comprises everybody – from contractors in the construction industry to manufacturers of food and hygiene items. Their motive is very simple – appropriation, i.e., maximization of rents they are appropriating. That is achieved through subverting, i.e., eliminating competition in public procurement.

## 3. Supply of Corruption in Health care

In relation to the patient, supply of corruption in health care comes from the doctor and other medical staff. Already in defining corruption in health care, i.e., in discussing its different forms, it was mentioned that one of the main mechanisms is the one in which corruption, in the absence of legal possibilities for payment, serves to cover costs of health services, since these costs are not covered by the payments from the state fund of compulsory health insurance. Still, a question may be raised of why doctors accept to work in such circumstances where their official salary is lower than their opportunity costs, which practically forces them to, maybe, through corruption cover the difference between the official salary and opportunity costs. Moreover, in such circumstances, all those doctors who do not want to be involved in corruption are receiving salaries that are lower than their opportunity costs. This certainly has to do with the specific features of medical profession that reduce the mobility of this kind of labour force. If the mobility of medical doctors within the ambit of their profession, the possibilities for such mobility are often relatively limited, since the dominant state health care sector in many countries sets the terms on the labor market for doctors. In such circumstances, the private sector is relatively small and limited to some specific segments of health care, so it is no real professional alternative for a vast majority of doctors.[8]

As already mentioned, although a distinction can be drawn in analytical terms between corruption which is aimed at covering opportunity costs and corruption which constitutes extortion in the sense of abuse of the monopolistic position, in reality it is very difficult to differentiate between these two kinds in operational terms. The information derived from this differentiation is that on the motive of the corrupted: is the motive to cover opportunity costs or to appropriate rents. However, even if it has been definitely determined that the motive was rent appropriation, there is a question whether these rents are returns on investment in one's own human capital as a result of which some top medical doctors-specialists are in a monopolistic position. In operational terms, this differentiation would make sense if the mechanisms for combating one or the other type of corruption in health care were different. It will turn out, however (the last section of this chapter), that the

[8] The domination of the state health care system means that all the elite health institutions are state-owned, that is, that moving to the private sector for a doctor means losing prestige in the medical profession.

mechanisms are almost identical, for which reason making this distinction is not particularly useful even in operational terms.

A specific supply of corruption in health care, i.e., abuse of office by doctors, is reflected in the use of the posts held in a public institution providing health services for pursuing patients to come to their own private offices. In other words, if a service is rendered in the public sector, since the costs of its provision are covered, at least nominally by revenues from the compulsory health insurance fund, it is provided in the private sector and paid by direct payments of the patient.

On the supply side of corruption in health care in public procurement all those health officials can appear who are taking operational decisions on the drafting of public procurement notices, the conduct of procedures and on the best bidder, that is, the one who will be awarded a contract on a particular deal. Those officials, no matter how high up they are, are just agents, who are much better informed than the principal, and therefore they can abuse their position with a view to gaining material benefits. They can do that at any stage of public procurement and all that in collusion with the corruptor, that is, the economic agent who is willing, for the purpose of acquiring rents, to enter into collusion i.e., a corrupt deal with officials in health institutions. The main motive of those officials, of course, is a bribe which is appropriated as part of the kickback operation. In that respect, supply of corruption from health officials in the case of public procurement is not much different from public procurement in any other field.

## 4. Mechanisms of Corruption in Health care

In principle, corrupt deals in health care are identical to corrupt deals in other sectors. In health care, too, corruption is a contract which two parties should enter into and they should make sure that the other party will meet his contractual obligations, aware of the fact that, due to the invalidity of such contract, they cannot turn to the judiciary if the obligations are not fulfilled. In other words, corrupt partners in health care are, in principle, faced with considerable transaction costs.

Yet, a question is raised of the level of these transaction costs relative to some other sectors, i.e., which kind of transaction costs is the most significant in the case of corruption in health care. It is necessary to differentiate here between corruption in which the patient appears as the corruptor and corruption in the case of public procurement in health care. In the case of corruption which occurs in the patient-doctor relationship, transaction costs are relatively low. First, there is no major problem in finding an appropriate corrupt partner. The patient and the doctor get in touch through regular channels, i.e., a relationship between them is established in a completely regular manner, and this relationship is the relationship of

mutual trust, which is, for understandable and absolutely legitimate reasons, closed to the public. In other words, if a corrupt deal is to be struck, a regular doctor-patient relationship makes a perfect screen. The patient enters the doctor's office alone and stays alone with the doctor – a completely normal situation in health care and there is absolutely no reason why something like that would arouse suspicion. Within such a safe framework, it is relatively easy to find an appropriate partner and start negotiating a corrupt contract. Both interested parties have an incentive to truthfully present their demands. The only danger to the doctor who is negotiating a corrupt deal is that the „patient" is a stoolpigeon, i.e., that he deliberately initiates a conversation about corruption so that the doctor can express his intentions, perhaps receive money and thus provide evidence for prosecution, i.e., a possible conviction. Still, doctors who are prone to corruption are relatively good in observing the general climate in society, i.e., in estimating the probability of a provocation of this kind.

The next stage of corruption is the one at which contractual obligations should be met. The patient - corruptor is supposed to pay the agreed amount of the bribe, while the corrupt doctor is supposed to deliver the agreed service. It is customary to pay in advance for the services of this kind in full, before their delivery. Such arrangement prevents any opportunistic behaviour on the part of the patient. In principle, such an arrangement opens up the possibilities for opportunistic behaviour by the corrupt doctor, but there are no strong incentives for that. Specifically, the corrupt doctor who has already received a bribe has an incentive to deliver the agreed service for at least two reasons. First, the probability is very high, if it is a case of extortion, that he has to provide that service in any event, regardless of whether he has received an additional payment or not. A failure to provide services can arouse suspicion that there is corruption, maybe not immediately, but it would signal that something irregular is going on. Second, it is not in the interest of the corrupt doctor to gain a reputation of a doctor who is taking bribes, and then fail to provide agreed services. Such reputation will discourage patients, potential corruptors, thus reducing the amount of expected future cash flows. It is a question whether the patient has strong incentives to report extortion by the doctor. In all likelihood, those incentives are weak. In such a case, the patient is not very likely to improve his chances to receive an adequate medical service, while gaining practically nothing in return. Consequently, incentives to the patient to report the corrupt practice of the doctor are fairly weak. After the provision of the agreed medical services, such incentives practically disappear completely.

Pursuant to all the above, transaction costs of corruption in the case of corrupt deals between patients, on the one hand, and doctors, i.e., other medical staff, on the other, are not high, i.e., they are lower than transaction costs of corruption in some other fields. It should be added here that the transaction costs of organizing corrupt teams are also low. Most of the corrupt transactions that include patients are, from the standpoint of organization, simple transactions which include only one person or very few people on the supply side of a corrupt service.

It is interesting to consider the question of transaction costs in the case of corruption in public procurement in health care. As regards the finding of corrupt partners on the supply side of corruption, transaction costs can be substantial. Specifically, officials charged with the implementation of public procurement are usually carefully watched by the general public, i.e., their principal. An attempt to establish contact, i.e., negotiate a corrupt deal, can result not only in a negative reply, but also in the elimination of the corruptor from any subsequent public procurement tenders in which he tries to take part. For that reason, the first step is made with great caution, maybe through a middleman who would only gather the basic information, in order to take a decision on a general strategy on how to go about the public procurement.

Furthermore, the problem of fulfilment of contractual obligations, provided that a corrupt contract has been concluded, generates substantial transaction costs. Both parties are in a position to behave opportunistically. This is all the more so because the payment for and the provision of a corrupt service are separated in terms of time. This problem cannot be solved even by breaking the total amount of the bribe into several instalments. If the amount (share) of the advance payment is high, the corruptor is vulnerable, and the corrupted has an incentive for opportunistic behaviour. If the amount (share) of the advance payment is low, the situation is reversed: the corrupted is vulnerable, while the corruptor has an incentive for opportunistic behaviour.

Furthermore, the corrupted can be under corrupt pressure from several interested corruptors. Such competition among corruptors causes a rise in the amount of the bribe, but the possibility is clearly left to the corrupted to take bribes from several corruptors, and provide a corrupt service to only one of them. The probability of such opportunistic behaviour depends on the ability of the corruptor to punish the corrupted who received the bribe, and failed to provide the contracted corrupt service. Obviously, transaction costs of corruption in health care in public procurement are higher than in the case of the provision of medical services, i.e., health services. Luckily enough for the participants in corrupt deals in public procurement, the reputation gained in that relatively closed circle of businessmen and officials is a prerequisite for the performance of corrupt exchange in which both sides gain, so both of them have incentives to build such a reputation by refraining from opportunistic behaviour.[9]

Although the levels of transaction costs in two basic types of corruption in health care are different, a general assessment can be made that the level of these costs is somewhat lower than in the case of corruption in other sectors. Still, it is necessary to point to the main

[9] This applies in particular to producers of specialized equipment, which essentially have no other option. Those who have no incentive to build a reputation, i.e., those who can relatively easy move to another market, can afford to behave opportunistically, such as producers of and traders in non-medical products, that is, non-specialized equipment.

mechanisms through which it occurs, i.e., its typical cases, in order to understand the character of transaction costs that have been discussed. One of the basic cases of corruption in the provision of health services is corruption associated with admission to hospital (for hospital treatment) in the circumstances where waiting periods for such admission are very long. The assumption is that there is a medical necessity (medical grounds) for hospitalization, i.e., that there are no irregularities in that respect. The scarcity of supply, i.e., the lack of hospital capacities creates a "bottleneck", so the rationing of spending is carried out in two ways. Officially, a system based on the first come – first served principle is applied, and unofficially this queue is jumped by means of corruption.

Furthermore, the next objective which can be accomplished through corruption is the securing of a longer stay of a patient in hospital relative to the period required on the basis of medical reasons. The main motive of the corruptor in this case can be of relevance if the status of the hospitalized is different from that of non-hospitalized with respect to drug purchase. In those cases in which drugs are free only for hospitalized patients (costs are covered by health insurance), there is a motive to stay in hospital longer than necessary on medical grounds, in order to reduce expenses for drugs.

Corruption in health care is very often associated with surgeries, in particular surgeries carried out by the best specialized surgeons. The first case of that type of corruption is payment to be listed for surgery by that particular surgeon in the first place. If the patient fails to pay a bribe, he will be operated on by another surgeon with lower qualifications, i.e., less capable, so the probability of restoration to health will thus be lower, or the required surgery will not take place at all. The second case is to pay for jumping the queue formed for surgeries by a top surgeon. Without corruption one's turn comes after a long waiting period, while with corruption they can be jumped. A special problem with this type of corruption lies in the fact that a corrupt contract is concluded by a lead surgeon, who also appropriates the entire amount of the bribe. The problem arises because of the fact that this medical service is not provided only by the lead surgeon. In spite of the fact that he is the leading "star" of the surgery, he would not have been able to provide that medical service without other members of the team: other assistant surgeons, an anaesthesiologist, nurses and medical technicians, etc. None of them will receive as much as a fraction of the corrupt income, although they provide, i.e., take part in providing of the corrupt service. Very often, that creates bad interpersonal relations and causes a breakup of teams that could have functioned very well in different circumstances.

A special type of abuse of office in public health institutions is the abuse of the public health care system for attracting patients to private clinics where a doctor employed in the public health care sector is working. This is performed in the following manner: a specialist in a public hospital suggests to a patient to move all the treatment to the private sector, i.e., to the private medical office of that specialist, although there are no medical grounds for that.

Instead of providing to a patient a health service to which he is entitled as a contributor to the state fund for compulsory health insurance, a doctor denies that service to him and entices him to move to the private sector, in order to be able to charge for his services without restrictions in force in the public sector. Through this mechanism, instead of direct corrupt payment within the public sector, the provision of the service is transferred to the private sector with formal, i.e., permitted payments.

In the case of corruption in health care in public procurement, the most direct mechanism of corruption is the choosing of the corruptor as the winner of a tender, although he has not offered the best terms. Despite the fact that someone else, for example, offered a more favourable, lower price of hygienic items for a hospital, the bid of the corruptor is chosen, which is less favourable and a higher price is paid for the purchase of hygienic items for the hospital. That enables the corruptor to appropriate rents, which he shares, in the form of a kickback, with the corrupted health official. This mechanism is simple and allows the generation and distribution of the highest rents. The problem with this mechanism lies in the fact that it is apparent, and therefore easily detectable. Competitors who have lost in public tenders have strong incentives to reveal corruption in public tenders, hence the corruptor and the corrupted have an incentive to modify the above mechanism, to make the corrupt transaction as such less apparent.

The main method to achieve this is biased drafting of a public procurement notice, i.e., invitation to bid. That implies corrupt cooperation at the first stage of public procurement. Biased notice drafting can be carried out in a number ways. The first one is to list a number of criteria in the notice itself specifying the criteria used to evaluate bids, without specifying the method for combining these several criteria to arrive at an aggregate evaluation. In addition, the list of criteria in most of the cases is drawn up so as to include criteria known to be the most favourable to the corruptor. The second method is to eliminate at the very onset, through inferior formulation of a notice, those producers that are assumed to be the toughest competitors to the corruptor. For example, if the corruptor, unlike others, can deliver the requested supplies relatively quickly, and the delivery period is not of relevance to that procurement transaction, a procurement notice will set out a requirement for a very short time limit for the delivery of supplies, which only the corruptor can meet. In such a manner, the tendering process as such is not influenced, since competition is excluded beforehand – all competitors to the corruptor are eliminated at the very beginning, since they cannot submit a tender. Similar mechanisms are also used for making specifications of the product itself, its properties, quality, etc. All these methods are used to bring a procurement notice closer to the specific and unique tender of the corruptor, thus eliminating other competitors from a public procurement tender in health care.

Free competition in the public procurement process in health care can be called into question in different ways. Some of them do not constitute corruption in health care, but

other types of corruption, i.e., they do not have to be corruption at all. It has already been mentioned that cartel collusion among competitors in public procurement – a tender which is received is less favourable than the one received through free competition, but no government official is involved in all these practices, either from the health sector, or any other sector, so there is no corruption involved. The second option is for the state to favour domestic producers of, for example, drugs. This is manifested in effective bans on participation in public procurement tenders by foreign producers through, for example, a failure to register their drugs. In such a manner, competition in a public tender is weakened, so domestic producers can appropriate rents. If such an arrangement is a consequence of corruption, that could not be classified as corruption in health care, since those bribed were not officials from the health sector, but people from the executive and legislative authorities.

## 5. Factors of Corruption in Health Care

One of the main factors of corruption in health care in many countries is the existence of a gap between revenues and total expenditures of the public health sector. Total revenues are raised through the public system of compulsory health insurance, while total expenditures are a consequence of the universal right to „free“ health care, that is, the rights of insurees, even all the citizens quite often. The gap is, on the one hand, a consequence of a shortfall in collected revenue from compulsory health insurance contributions. On the other hand, it is a consequence of a considerable moral hazard, i.e., demand for health services. In such circumstances, the only rational strategy for doctors and other medical staff is to reduce the volume of supply, in order to balance official (marginal) revenue and marginal costs, thus creating a gap between supply and demand for health services. Such state of affairs generates incentives to narrow, i.e., close the gap between supply of and demand for health services through corruption.

By way of illustration of the above, cases were registered where family doctors, i.e., general practitioners who have entered in contracts on their jobs, i.e., on health services they provide with the national health care fund cannot cover from that revenue even the incurred costs, let alone their own opportunity costs. Direct payments by patients are obviously the only way to close the gap between total costs and total revenues of general practitioners. If there is no possibility to make such payments in a legal manner, within the official system, it is clear that corruption constitutes the only possibility to close the mentioned gap.

The mentioned gap between demand for and supply of health services is a consequence of populist public policies and proclamations of universal and to the patients „free“ health care, i.e., supreme quality health care services for all those requiring them. Such policy is in part

based on left-wing ideologies and the proclamation of „free“ health care, and in part on political populism, absence of incentives to put the system of financing health care, i.e., system of health insurance on a sound and sustainable basis. Precisely that kind of policy is, due to the existence of the already explained mechanism, the most important factor of corruption in health care, the kind related to the provision of medical services to a patient.

Such system of „free“ health care usually has features that contribute to the strengthening of corruption. The first such feature is that the system does not allow practically any direct payments by patients to doctors, i.e., health institutions. The second is that health services to which an insuree is entitled are not precisely defined, nor diversified, be it by volume or by quality. There is only one type of compulsory insurance, and the premium whose payment is mandatory is commensurate with the current earnings of insurees.[10] Hence, the usual formulation that everyone is entitled to the best possible health care does not say anything about whether a patient in a hospital is going to be accommodated in a single room or not. These two features of the public health care system boost corruption. If there is demand for something, and that something cannot be paid for legally, it will almost unfailingly be paid illegally. Likewise, if something has not been precisely defined as an obligation for whose fulfilment no direct payment is required (as it has already been covered from insurance), there is a high probability that the payment for it will be collected, formally (if possible) or informally.

It has already been mentioned that the demand for health services is price inelastic. That completely understandable inelasticity also constitutes a factor of corruption in health care, i.e., a factor which increases the amount of the bribe. In such circumstances, the probability for successful extortion is going up.

Finally, one of significant factors, not necessarily of corruption in health care, but certainly of the conflict of interest and abuse of office in that respect, is the undefined status of double employment of doctors and other medical staff. The key question is whether and on which terms doctors, as well as other medical staff employed in public health institutions, can be engaged in private medical practice. This gives rise to another question: should, and on which terms, institutional capacities of public health institutions be at the disposal of doctors for private medical practice? If there are no clear and unambiguous answers to these questions, that will open up empty space for interpretation of the conflict of interest and result in the understanding of a job in the public sector is perceived as a possibility to “tunnel” patients into private medical practice, thus creating conditions to charge the patients for the rendered medical services.

[10] This arrangement, a single contribution rate which creates proportionality between taxation and income, can be defended by arguments of the so-called vertical equity. This criterion is fairly widely accepted criterion for assessing the equity of taxation, which indirectly shows the degree to which such system of compulsory health insurance shares common characteristics with the tax system.

Regarding corruption in health care in public procurement, its key factor is the manner in which public procurement procedures are structured. The less transparent the public procurement process and the weaker the obligation to compete for public procurement contracts, the higher the probability of incidence of corruption. For example, if the threshold is high for public procurement procedures implemented without competition (tender), or if the rules applied in tendering are formulated in a way which makes them easily circumvented, all that contributes to a rise in corruption in health care in public procurement. A higher degree of market regulation for products purchased in public procurement transactions, also enhances competition in an indirect manner. If the number of competitors submitting bids in public procurement procedures has been reduced through government regulation, regardless of its motives, the probability of incidence of corruption is increased.

## 6. Consequences of Corruption in Health Care

It is clear that the activity of providing health care in many countries is organized in such manner which constrains the market for those services, i.e., highly regulates it. Many market transactions are explicitly forbidden, even punishable. In that sense, corruption in health care, particularly the part of it which occurs in the provision of medical and supporting services to the patient subverts that regulation, i.e., enables the functioning of the market. Therefore, this type of corruption can result in a Pareto improvement – the welfare of the patient, i.e., the one who has received a medical service is improved, as is the welfare of the corrupted, who would not have delivered that service had it not been for corruption. In other words, corruption opens up space for both sides to appropriate (consumer, i.e., producer) surplus, which would not be the case in the absence of the corrupt transaction, i.e., exchange.[11] In addition, corruption practically resolves the problem of moral hazard on the side of demand for health services, since no one has an incentive to request the thing he is not ready to pay for.

Such benevolent attitude toward this form of corruption in health care, i.e., its effects on social welfare, should be balanced with facts related to the costs of corruption. These are primarily transaction costs of corruption. Although it turned out that, in the case of provision of medical and supporting services to a patient, these costs are not high, at least not as high as in some other cases of corruption, but they still are loss of economic efficiency, since the resources used for their coverage have their own opportunity costs. Moreover, such

[11] Corruption aimed at jumping the queue certainly constitutes corruption of that type. The corruptor pays such amount of a bribe which is, under the worse-case scenario for him, equal to consumer surplus that he appropriates by jumping the queue, while the corrupted appropriates additional income without a rise in costs, accordingly, he appropriates economic surplus.

arrangements sometimes lead to inefficient resource allocation. Specifically, corrupt doctors receive bribes as income which they use to cover their opportunity costs and, potentially, appropriate rents. However, in delivering a medical service, other resources are also engaged, not just the highly qualified labour of a corrupt doctor. In the already mentioned case of corruption of a specialist surgeon, a bribe as a cash flow toward the lead surgeon does not secure the covering of opportunity costs of the labour of other members of the surgical team, as well as the coverage of costs of purchases, i.e., depreciation, and maintenance costs of equipment in operating rooms. This raises the question of economic sustainability of such an arrangement. By way of example, the state fund for compulsory health insurance can raise the contribution rate in order to secure additional funds for covering the mentioned (incremental) costs occurring owing to the bribing of the lead surgeon.

Moreover, direct payments by patients for medical services are made against the backdrop of strong asymmetry of information. Patients cannot make an assessment on whether additional tests proposed by a corrupt doctor are really necessary. That puts a corrupt doctor in a very good position from the standpoint of extortion. In other words, a corrupt doctor has an incentive to offer (and a patient has no grounds to refuse) completely unnecessary medical services, thus reducing economic efficiency of resource allocation in health care, i.e., in society as a whole. Finally, corruption opens up a serious question of accessibility of medical services to the population, which raises the question of fairness of such a system. At the end of the day, the main argument for introducing a system of full and compulsory health insurance was the question of fairness, i.e., a desire to also enable the poor to protect their health. All the above arguments only demonstrate that corruption can only be a second best solution with respect to introduction of market transactions into the provision of medical services and that it should by no means be a mechanism for introducing the market into health care.

Corruption in health care in the case of public procurement gives rise to numerous adverse consequences for health care and for society as a whole. An absolutely expected consequence is the inefficiency of procurement procedures in health care, regardless of whether they involve investments (the construction of new facilities or procurement of new equipment) or purchases of materials (medical supplies, such as medicines, or non-medical, such as hygiene items or food). Specifically, a health institution is paying more than it is necessary for purchases of a given product. That in itself constitutes redistribution between health care fund insurees and the producer, i.e., merchant who managed to win a public tender through corruption. However, much more significant are allocative distortions, i.e., deadweight loss which is incurred.

This is associated not only with the shrinking of consumption, due to an increase in costs, which results in the emergence of the so-called Harberger's triangle and the corresponding

loss related to the quantity of consumption, but also with extremely high distortions in the structure of that consumption, i.e., the composition of public procurement. As already mentioned, the basic mechanism of corruption in public procurement in health care is biased specification of procurement notices, so as to make them tally with the bid of the corruptor. In such a manner, in the case of investments, equipment is received which is not the most necessary equipment, i.e., the type of equipment which is not indispensable for the provision of medical services, or equipment whose quality is lower/higher than optimal, or drugs that are not the best possible therapy for diseases treated in a hospital. In the case of construction of a new health facility, even a location can be changed in order to accommodate the needs of the corruptor, regardless of the fact that the new location is inferior from the standpoint of health care, i.e., the delivery of health services. Part of the drugs purchased in corruption-ridden public procurement transactions is not usable at all, so that can result in a situation where patients have to purchase, by directly paying, drugs that are supposed to be „free“ for them, at least nominally, on the basis of health insurance .

An additional problem arises due to the fact that a higher price which is paid for equipment purchased in corrupt public procurement transactions, i.e., equipment which is more expensive than the really needed equipment, causes a faster depletion of the public health insurance funds, so there is not enough to finance proper maintenance of that equipment. Not only that equipment has been purchased which is more expensive than the needed one, but this equipment also goes to waste faster than it is normal due to poor maintenance and gets out of order, thus creating a need for earlier purchase of new equipment and writing off of the wasted one.

It is obvious that the consequences of corruption in health care are manifold and very serious. Adverse consequences of corruption in public procurement are more evident, but that does not mean that corruption in the provision of health services to patients is less dangerous. The differences between these two forms of corruption in health care come to the fore in defining the elements of strategies to fight one and/or the other form of corruption in health care.

## 7. Elements of an Anti-Corruption Strategy in Health Care

Elements of anti-corruption strategy in health care should be considered in light of the need for reform of the system of health care provision, first and foremost of the health insurance system. As for health insurance, the key element of reform that contributes to the fight against corruption is the introduction of multiple insurance, with a differentiation of the package of that insurance. The basic package of compulsory health insurance would cover only a smaller number of very precisely defined services. Compulsory insurance would be

linked only to the basic package, while all other insurance packages would be voluntary. Everyone would be able to choose according to their income, preferences and risk attitude.

The second element of the insurance system reform is legalization of direct payments for services rendered, i.e., the introduction of substantial, non-symbolic co-payment, depending on the type and coverage of the package. In this manner, all informal payments, i.e., corruption, covering opportunity costs of all resources used for delivering a particular health service, will be formalized, i.e., legalized. Such formalization of direct payments will bring several good effects. First, the element of concealment i.e., of the need to keep secrecy, will be removed, thus eliminating all those transaction costs that attend a corrupt contract and its performance. Second, all opportunity costs of all resources will be covered, not just the opportunity costs of doctors. Third, cash flows will move to the legal domain, with all the advantages offered by that (such as taxation of that income for the purpose of provision of public goods). Finally, the existence of such legal co-payment mitigates, i.e., eliminates the problem of moral hazard.

In addition to the reform of health insurance system, i.e., the system of health care financing, it is also necessary to launch a reform of the system of health services supply, by introducing competition between the public and private sectors. In order to enhance that competition it is of key importance for all private health institutions to have access to all health insurance funds. In other words, an insuree, be it of the state or private fund, should have access to all health institutions, i.e., should be able to choose an institution. Likewise, it is necessary to allow private practice on the premises of public health institutions on strictly defined terms – it means precisely defined rights of private practice and financial and other liabilities to public health institutions, as well as defining rules for preventing conflict of interest.

The introduction of private health institutions into the provision of health services by itself contributes to the reduction of incentives for corruption in health care in public procurement. Specifically, it turned out that this corruption is a consequence of the agency problem in the case of health institutions. Private principals have, compared to the principals in the public sector, far more incentives to suppress the agency problem, i.e., to reduce, if not eliminate, asymmetry of information that causes it. Therefore it is clear that this reform on the health services supply side would have favourable effects on corruption in health care.

The classic arsenal of elements for fighting corruption in public procurement can also be applied to corruption in health care which occurs in such transactions. It should incorporate all the things that increase transparency and diminish chances for collusion between the two parties.

## 8. Some estimates of the health care sector corruption in Serbia

The only empirical research on corruption in the health care sector in Serbia has been done as a part of a survey of general population in 2010 (done by CESID). Two specific questions were about personal experience of the respondents regarding corruption in the health care sector. About 64% of the respondents have never experienced corruption in the health care sector (in the last five years), about 18% of the respondents paid a bribe (7% for themselves and 11% for the others, mainly family members), and 18% of respondents know that someone else paid a bribe for their health care treatment. Rather staggering information that 36% of the respondents experienced corruption in the health care system, one way or the other. Nonetheless, this data should be considered within the framework of the answers of the respondents to the other question in the survey. About 70% of the respondents who paid the bribe without any demand from those who provide health care services, 25% of the respondents claim that the demand of that kind was indirect, while only 5% of the respondents claim that there was a direct demand for corruption. It seems that in many of these cases in was not corruption strictly speaking.