Regulatory Fees - Suitable Way for Czech Health Care Management?

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Abstract: - The paper deals with possible types of health care financing and the impact of regulatory fees on health care. It responds to questions like “Why does health care cost so much? What benefit do I get from spending my money on books or art or cars or clothes if I am death?” Sick and pain, confronted with the possibility of death, people would be willing to spend almost any amount of money to get their health back. Health care costs so much because people are willing to pay so much for it. The conclusion includes an example of the situation before and after the introduction of regulatory fees in the Czech health system and an analysis of their impact.

Key-Words: - health care systems, health, regulatory fees, insurance, health management

1 Introduction
At the turn of the millennium, the Czech Republic began to show a lack of financial resources for health care, which mainly consisted of citizens’ income payments to health insurance. Expenses on health care have been growing each year especially due to higher quality of health care, extending the age of the people demanding health care and more expensive drugs [10].

These circumstances forced the politicians and experts in charge to prepare and gradually implement a health system reform in the CR. A part of the reform consists of the introduction of regulatory fees.

It is the issue of regulatory fees that is the topic of the paper. More specifically, we will focus on analyzing the impact of regulatory fees in the Czech health care system as well as impact on changes in health care utilization. It is obvious that the feedback can evaluate the impact of regulatory fees in health care as a complex and the impact on patients as a subject of the Czech health care system, and verify the correctness of implementation.

Analyzed from an economic perspective, the human health is perceived as a superior good that plays a double part – as a consumer good and as a capital good.

As a consumer good, the human health produces satisfaction to the individuals and enables them to consume other goods and services. It is a known fact that best consumers are the healthy persons, because they have no restricted products, like ill people do. As a capital good, human health can be seen as an investment of each individual in producing income.

Every person invests part of his/her health in order to generate further income – partly used to
maintain or improve the state of health and partly used for other type of actions and activities.

Therefore, the health economy is an important element of the health policy, both from a strategic perspective (the macroeconomics) and a tactical one (the microeconomics) [1, 2].

2 Literature Review

The development of medicine as a caring profession is sort of primitive financial intermediation—those who can afford to, pay more, so that those who can't pay still get professional care. With transplants and therapies costing hundreds of thousands of dollars, professional goodwill and charity alone are hardly sufficient, so there are public and private insurance plans pooling funds and sharing risks across millions of people that provide most of the financing for health care. Looking into the funding of research provides additional insight. The people who benefit from medical research are not usually the people who pay for it. A study of brain function or cell structure will do nothing for a patient in the hospital today, and not much for the foundation that donated money or the taxpayers funding a research grant. Tomorrow's miracle drugs are paid for by adding overhead into the price of today's pharmaceuticals, and advances in surgical technique by adding overhead into the price of an operation. The basic discoveries that provide most of the financing for health care. The development of medicine as a caring profession is sort of primitive financial intermediation—those who can afford to, pay more, so that those who can't pay still get professional care. With transplants and therapies costing hundreds of thousands of dollars, professional goodwill and charity alone are hardly sufficient, so there are public and private insurance plans pooling funds and sharing risks across millions of people that provide most of the financing for health care. Looking into the funding of research provides additional insight. The people who benefit from medical research are not usually the people who pay for it. A study of brain function or cell structure will do nothing for a patient in the hospital today, and not much for the foundation that donated money or the taxpayers funding a research grant. Tomorrow's miracle drugs are paid for by adding overhead into the price of today's pharmaceuticals, and advances in surgical technique by adding overhead into the price of an operation. The basic discoveries that provide most of the financing for health care.

2.2 Charity

The obligation to help extends beyond friends and family to people we have never, and may never, meet and who can do nothing for us in return. We still care about people even if we don't know them. Mutual caring makes people a society rather than just a random collection of individuals. The first hospitals were caring institutions, substitute homes for people who did not have a home and for people who were ill or had a disability but whose families were too poor to take care of them [3]. Charity as a means of social exchange predates formal insurance contracts by thousands of years and has been far more important as a way to pay medical bills for most of that time. Yet charity is limited in scope and the extent to which most people feel responsible for someone else's misfortune has declined as formal market institutions have arisen to provide coverage for risks [7, 8, 9].

2.3 Private Market Insurance Contracts

From the individual perspective, insurance is a trade between two possible states of the universe: one in which the person has a heart attack and one in which he or she does not [12]. Money is shifted from the state in which individuals have more (when they are healthy) to the state in which they have less (when they are sick), similar to the way saving shifts money from good periods to pay for the bad periods. From a societal point of view, insurance is a collection of trades between people. Money is shifted from people who have plenty of money (those who are healthy) to people who suffer losses (those who are sick).

Insurance pools losses; it does not get rid of the losses or even reduce them. The group members must pay for all losses (plus some administrative fees or "load") with the premiums they pay. Insurance companies do not like to take risks. They like to sell insurance to large groups of people with predictable (average) losses. This way the insurer's revenues and expenses, and therefore its profits, are very stable and predictable from year to year. Insurance companies specialize in pricing risks, not in taking risks. They try to predict exactly how large premiums need to be to cover all the predicted losses. This specialty, known as actuarial science, uses information on previous losses to make accurate predictions of the amount of money
required to pay for future benefits. For this example, the probability (one in one hundred) and size ($50,000) of the loss is well known, so it is simple to determine the actuarially fair premium, $1/100 \times 50,000 = $500. An actuarially fair premium is the same as the expected value of a loss with regard to cost-benefit analysis [7, 8].

Insurance must be priced above the actuarially fair premium to cover the expenses of administering the insurance plan, to provide a cushion for contingencies, and to provide profit to the owners who put up their expertise and capital. The difference between the actual premium and the actuarially fair premium is known as the loading factor. It may be as small as 5 percent or 10 percent for group policies covering large businesses and may exceed 100 percent for individual policies.

Traditional insurance plans simply paid for all (or a defined part) of the medical bills a person incurred. Such indemnity plans have become rare. People want insurance companies to bargain for lower prices with hospitals and physicians, to evaluate whether new variations on an old drug are really worth twice as much, and to process all paperwork. Managed care plans provide a package of services at a cost lower than people could obtain if they do it all on their own.

2.4 Social Insurance

Market contracts are mutually beneficial to people who purchase insurance and to the companies that act as financial intermediaries. However, they do nothing for people who cannot afford to buy insurance or for people excluded from purchasing insurance (e.g., people with disabilities). Market contracts do not pay for medical research or education programs to promote healthy lifestyles, nor do they provide outreach to teenage mothers or people with mental illness. In short, they do nothing to strengthen the social contract that binds the people of a nation together in support of each other.

The informal obligations of citizens to society expressed in charitable giving are extended and formalized in social insurance programs such as Medicare and Social Security in the United States, the National Health Service in the United Kingdom, universal Medicare in Canada, and the health care systems of most countries [4]. Contributions to social insurance are not voluntary but mandatory through the tax system. Who will pay and who will receive are determined by concerns common to all and the political process rather than through individual choices made in the market place.

The U.S. health care system is a blend of private and public financing. Medicare, a social insurance program that covers medical bills for most elderly people in the United States, is larger than the many private for-profit companies combined. Even when insurance is privately paid and managed by profit-making firms, government regulations mandate who is covered, what services are offered, and how prices are set. Therefore, even private insurance is forced into some conformity with social principles [7, 9].

2 Regulatory Fees in Czech Health Care

Experiences from other countries confirm that the fees are beneficial to the functioning of the health care system. They reduce waste of drugs and visits to doctors, but their amount is different, as visible in Figure 1 [4].

Fig. 1 Regulatory fees - the situation in Central Europe [4]

The only state in Central Europe where regulatory fees in health care have not been established is Poland. Here, however, a high participation of patients is introduced - up to 28.1 percent of health expenditures. In the Czech Republic it is about 11 percent. Before the introduction of fees, surveys showed that an average Czech visits a doctor thirteen times per year, which is the most frequent of all European Union countries. A Czech pensioner takes the most medicaments across the EU - during one month, on average, nine different preparations.

The Czech Republic used to have the lowest participation of patients in the health care system in the European Union. The introduction of participation meant the flow of several billions into the health care system. It could also strengthen the role of a patient, whose fee should provide him/her with an adequate attitude of doctors, or even better food in hospitals. [5].

As the benefits of regulatory fees can be considered:
- Increasing the number of operational procedures,
- Reducing long waiting periods and increasing the number of stations of the emergency medical service,
- Shortening hospitalization periods,
- More money to treat seriously ill,
- Increasing the number of surgical procedures with long waiting periods,
- Improving access to care,
- Relieving overcrowded waiting rooms,
- Increased patient comfort,
- First aid medical service has ceased to be misused,
- The saved money also allows to invest in prevention programs to primary care as well as to fund extensive screening preventive programs such as prevention of colorectal cancer, breast cancer, cervical cancer, and screening for hereditary birth defects,
- For the first time, there are systematically collected data on the financial participation of potentially vulnerable groups, enabling them to be protected by precisely targeted and effective measures. [6]

The main disadvantage of paying regulatory fees is the payment itself. Some patients are losing hundreds of crowns each month.

The collection of regulatory fees causes problems even to doctors and hospitals. These can include for example:
- The cost of cash handling (the cost of cash transportation, the cost of depositing coins at the bank or the cost of transporting coins by security service),
- Administrative demands.

The following Figure 2 illustrates an overview of the trend of expenses on health care, both public and private sources of financing from 1990 to 2009, therefore, even after the introduction of regulatory fees.

Fig. 2 Total expenditure on health care [3].

As can be seen in Figure 2, total expenditure on health care increased from 1990 every year. Compared to 1990, expenditures on health care in 2009 are almost 10 times higher and reached almost CZK 287 billion.

Figure 2 also shows the proportion of representation of the individual sources of health care financing. It is obvious that costs barely exceeding CZK 30 billion in 1990 were almost all covered from public budgets and participation of patients as causes of private expenditures was minimal. This proportion was drastically changed in 1993 when the majority of expenditures were transferred under the administration and authority of insurance companies, especially General Health Insurance Company (GHIC). The representation of the so-called patients’ financial participation steadily increased over the years. In 2000, this participation was 9.4 percent, but more than 16 percent in 2008. On the contrary, the representation of resources from public budgets is still on the downward trend, so it fell to about 7 percent of all expenditures in 2008. [3]

Now I will focus on the analysis of total costs in the period from 2003 to 2009. That is the period when significantly increasing expenditures began to show, which was one of the reasons why the payment of regulatory fees was introduced.

<table>
<thead>
<tr>
<th>ITEMS OF EXPENDITURES</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
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<tr>
<td>I. Public expenditures</td>
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<td>184825</td>
<td>191356</td>
<td>194344</td>
<td>206565</td>
<td>218719</td>
<td>239685</td>
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<tr>
<td>Insurance companies</td>
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<td>163310</td>
<td>170063</td>
<td>171516</td>
<td>183713</td>
<td>197280</td>
<td>219630</td>
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<tr>
<td>Ministries and municipal gov.</td>
<td>23891</td>
<td>21495</td>
<td>21263</td>
<td>22828</td>
<td>22851</td>
<td>21439</td>
<td>21055</td>
</tr>
<tr>
<td>II. Private expenditures</td>
<td>19563</td>
<td>21927</td>
<td>24228</td>
<td>26534</td>
<td>35370</td>
<td>45801</td>
<td>46544</td>
</tr>
<tr>
<td>TOTAL EXPENDITURES</td>
<td>195155</td>
<td>206752</td>
<td>215584</td>
<td>220878</td>
<td>241935</td>
<td>264520</td>
<td>286234</td>
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</tbody>
</table>

Tab. 1: Expenditures on health care and the proportion of sources of financing [13].

The overall situation is described in the table. It shows that from 2003 to 2009 expenditures on health care rose by more than CZK 90 million to CZK 286,234 million. Growth in total expenditures appears to be unaffected, because between 2007 and 2008, as well as a year later, the total costs were still significantly increasing. Yet the annual growth was partially reduced between 2008 and 2009 by more than CZK 800 million.

Regarding the trend of expenditure on health care from 1990, as mentioned above, it is possible to see the distribution of health financing sources into two trends. The first is the growing share of patients’ financial participation in expenditures, thus the proportion of private expenditures. In 2003, this...
proportion was equal to 10 percent of total expenditures. In 2005, it was already 12.5 percent. It is interesting to see the proportion between 2007 and 2008, when this proportion was increased from 14.6 percent to all-time high 17.3 percent representing private sources. We can say with certainty that this growth is the result of wider opportunities for paid medical treatments. An example may include plastic surgery. However, as an important factor, it is necessary to mention the introduction of regulatory fees that have now become an integral part of health care financing. Just the regulatory fees were the main reason for increased participation in expenditure. In 2009, however, there was a decrease of 1 percent on behalf of private sources, showing an increased demand of patients for care covered by insurance company [14, 15].

The second trend says that the proportion of financing from public budgets is still declining. The value of public expenditure from the sector and public institutions in 2003 amounted to almost CZK 24 billion, or more precisely, 12.3 percent. Between 2003, 2004 and 2005, gradually decreased to CZK 21.3 billion. In 2006, the growth reached CZK 22.8 billion which meant decline in the percentage representation of all expenditures. In 2007, the amount of money from the state budget scarcely changed. Only in 2008, the introduction of regulatory fees decreased the need of funds from these sources, and conversely, very significantly increased contributions from private sources.

The trend of outpatient treatment is one of the other examined indicators, which can analyze the impact of regulatory fees on health care. Specifically, Emergency First Aid Service (EFAS) in this case is composed of categories for adults, children and adolescents, as well as dental treatments at the EFAS. For a more detailed analysis, we used the following table.

**Number of adults treated at the EFAS**

Since 1 January 2008, the treatment at the EFAS has been charged with the highest regulatory fee of CZK 90. It had and still has a very high regulatory effect to be the main purpose. It can be noticed that between 2006 and 2007 there was already a decline in the provision of treatments by almost 10 percent. This trend was further multiplied with the introduction of regulatory fees in 2008. These facilities had to cope with less than 60 percent of treatments. In 2009, however, the number of treatments was again increased by 10 percent. The total reduction of adult visits at the EFAS as visible from the table was affected by more than 40 percent less attendance. The EFAS reported more than 360,000 visits by adults less than in 2006.

**Number of children and adolescents treated at the EFAS**

A similar situation as in providing health care to adults occurred in children and adolescents. The only difference was that the demand decline was not so high; nevertheless, it was still very significant. In 2008, in comparison with 2007, facilities providing EFAS were visited by only 75 percent of children and adolescents. A very similar trend compared with the treatment of adults was the treatment in children and adolescents with almost identical increase of 10 percent. The final comparison between 2006 and 2009 shows a reduction in visits to more than 20 percent of treatment, or more than 83,000 visits.

**Number of dental treatments at the EFAS**

A decreasing trend between 2006 and 2007 evident from the table was also significantly influenced by regulatory fees, when the dental EFAS was visited in 2008 by just over 63 percent of patients from 2007. There was a noticeable increase of approx. 23 percent of patients compared to the first year of the introduction of regulatory fees. As a result, this meant nearly one-quarter reduction of dental EFAS [16].

**The overall regulatory effect on the EFAS**

The last row of the table shows the overall regulatory effect, which became evident between
2006 and 2009. It indicates that only two thirds of patients visited the EFAS in 2009. The question remains what will be the next trend in the number of visits, whether it will become stable or whether will people once again return to emergency rooms with their health problems more frequently.

4 Conclusion

The immediate effect of the introduction of regulatory fees led to a decrease in the number of doctor visits and a reduction in the number of people in emergency rooms. Some people also started to buy cheaper drugs on their own. Insurance companies therefore saved considerable sums on medicine. Overall, the fees became an indispensable source of revenue for healthcare facilities. These revenues were then mostly used to purchase new technology and to cover expensive medicaments.

From the health care analysis after the introduction of regulatory fees is clear that the introduction of fees has brought far more positive than negative. People obviously disagreed with the introduction of fees and still disagree, but some are starting to realize the positive impact of regulatory fees.

The health care system has long been in a bad economic situation and the introduction of fees was one of the steps that can help health care, at least a little.

This paper is one of the research outputs of projects Grant Agency of the Ministry of Health with the number NT 12235-3/2011.

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