Effects of Contribution Co- Payments on Health Care and Health Financing in the German Health Care System

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Abstract: As part of the German Health Modernization Act (GMG), additional payments have been made for outpatient and inpatient medical services since 01.01.2004. In this study here, the effect of additional payments on the quality of care and efficiency is examined by considering various literature sources. The study is only limited to the additional forms of practice fees and prescription drug fees. The effects on the health system of contributions and the effects on patient behavior are investigated. The effects of increasing or decreasing additional payments on patient behavior are examined. These changes are examined with the moral hazard problem approach. Since the medical services burden the health system financially, the main goal of relieving the health system has not been achieved. The current co-payment reforms even lead to increased moral hazard behavior, since the insured person who pays the co-payment per quarter tends to benefit more often from medical services in the same quarter.

Introduction

As part of the German Health Modernization Act (GMG), additional payments have been made for outpatient and inpatient medical services since 01.01.2004. As an example, the best-known form of co-payment of the practice fee of 10 euros for outpatient visits to the doctor and dentist should be mentioned, which has to be paid quarterly for patient visits to the doctor.

The aim of this law is to reduce rising costs and expenditures in the health care system and to prevent the use of unnecessary medical services associated with the "moral hazard" problem, which is identified as the

main responsible for this undesirable rising cost trend. Whether the GMG has reached this goal will be examined in the following paper.

Problem Statement

The German health care system is burdened with a steadily growing trend of costs and expenses. For example, total health expenditure in 2009 was approximately EUR 278.3 billion, while in 1995 this expenditure amounted to EUR 186.3 billion. The comparison between 1995 and 2009 shows that the total cost of gross domestic product (GDP) increased by 1.3%. (www.bmg.de)

In addition to the demographic development, the more frequent visits to the practice, which is associated with the problem of "moral hazard", are held responsible for the increase in expenditure in the healthcare system. Since the costs of a medical service are usually covered by the statutory health insurance companies, the insured are tempted to take advantage of unnecessary medical services.

In this work the impact of co-payments on medical services is studied on the basis of empirical studies. Moreover, various sources of literature about the practice fee and the additional payments for prescription medicines are studied and their results are compared. Particular emphasis will be placed on how the co-payments would prevent the insured from making an unnecessary visit to the doctor or affect the amount of medicines consumed.

The concept of "co-payment" is about the share of the treatment costs that must be paid by the patient in treatment. These monetary benefits are demanded by the statutory health insurance in addition to the regular insurance contributions.

The co-payments fulfill two tasks in the health service:

Finance function: With the introduction of co-payments, the legislature has declared aim to attract additional funding for the public health-non- controlling or health insurance system, which is burdened by increased costs (Kern et al. 2004).

Control function: With the introduction of co-payments it is intended to curb excessive and unnecessary use of health services, so as to control the demand.

A sharp separation of these functions is not possible according to Kern at al., (2004). This is explained by the fact that co-payment or co-payment was introduced as a means of taxation. In the meantime, the deductible has become an indispensable instrument of financing.

It also seeks to limit in particular the drug-related phenomenon of moral hazard, which will be discussed, and to alert patients to the cost of drug use (Zweifel and Menning 2000).

Many authors question whether the co-payments actually have the desired effects, since they can cause incorrect control. In a narrower sense, this means that high co-payments may make access to the required treatment more difficult. Discrimination against individual groups of insured persons, such as the chronically ill or social welfare recipients, is also a major problem. However, this problem was avoided with the exemption from co-payments or the

definition of the co-payment ceiling (Holst 2004).

Materials and Methods

In this study, literature is searched from open sources and accessible databases.

In this review, related articles are evaluated. As a result of the literature search on the keywords, the full texts reached are included in the analysis. The findings of the literature are discussed in the study.

Reasons for the introduction of co-payments

Health expenditure as a share of GDP shows a rising trend in the OECD countries. In the Federal Republic of Germany , the growth rate of healthcare costs between 1995 and 2004 was 26%, while the growth rate of GDP was much lower and 19%. There are many reasons for this increase. There are many reasons for the increase. In particular, the increasing aging of the population in Germany brings health care expenditure to a high rate: According to the information, this is 51% (Augurzky et al. 2007). With the introduction of the additional payments, the aim is to make the insured aware of health costs.

While in most cases the patients do not know the cost of their medical services because they do not receive a bill after the treatment, health insurance covers the largest share of the expenses.

Another reason for the introduction of co-payments is the aforementioned moral hazard problem: The excessive demand for health services confirms the interests of the service providers in order to achieve higher sales and to expand the offer. In return, the patients are not interested in taking preventive action against a disease on their own responsibility. As a result, the main interest of the legislators was to minimize possible excess demand or unnecessary use of health services by the patient.

Based on the assumption that a service will be excluded if the consumer reacts to a price increase with a decreasing demand, it can be assumed that services and goods may be considered unnecessary due to consumer perceptions of subjective preference.These services, which are classified as dispensable, are therefore excluded from the list of services by the SHI based on the declining demand (Kern et al. 2003).

This assumption involves the risk is consequently that may benefits are excluded, although they do not match individual preferences, so subjectively be regarded as expendable, but medically necessary and would be useful. As a result, the exclusion of healthcare services that are based on high price elasticity and a consequent decrease in demand is in line with the preferences of the insured, but not necessarily with the medical success.

Health goods and services that are considered to be unnecessary due to the high price-elastic demand patterns have also legitimizes the introduction of co-payments in addition to their exclusion from the catalog. The insured mostly pursue the goal of consuming the amount of saturation of a service as soon as there are no direct costs for it, if they take advantage of a health service. This case occurs, for example, in a copayment-free health insurance system (Kern et al. 2003).

The control function of an additional payment can be affected if the consumers

react more strongly to a price increase of health goods and services. For the economy as a whole, the result is that instead of saving costs, there is only a shift from SHI to the insured in the case of completely inelastic demand. In order to enable an actual cost reduction, a purely falling demand for resources released for other economic uses is assumed (Kern et al. 2003).

"Moral Hazard" Problem

The term "moral hazard" is generally described as "acting against social norms and standards of value", whereby in economic literature this behavior is interpreted as "economically rational" (Schreyögg 2002). According to the definition of Arrow (1970) "the existence of an insurance policy that changes behavioral incentives for the individual and thus also the probabilities with which the insurance company has to reckon" is understood as moral hazard. The term originally comes from the USA and is used in connection with the local fire insurance; in the case of negligent behavior or intentional arson of the insured (Hoh and Honekamp 2010).

The moral hazard problem occurs in cases where the insured person or the-sen provider can directly affect the probability of damage, the occurrence and the amount of damage (Schreyögg 2002).

The moral hazard problem facing Schreyögg (2002) in health economics three forms:

- The insured person increases the probability of damage by preferring a lifestyle that is dangerous to health, e.g. Drinking lots of alcohol or satisfying high-fat foods. The insured is largely aware of the consequences, but is not liable for the costs incurred after the damage occurs.
- The insured person deliberately causes or simulates an illness. This case is associated with "a certain cost relevance in the event of illness and continued payment of wages". It is also possible that so-called "minor illnesses" cause the insured person to suffer damage: Using medical services is disproportionate in the case of illnesses such as runny nose or cough and is not expedient from a medical point of view.
- The most important form of moral hazard in health economics is when the amount of damage to the insurance company after the onset of damage is not clearly known. The insured person is given a certain amount of leeway when it comes to choosing the treatment strategy, since the price for the claim is not fixed. When choosing a treatment that is unfavorable in terms of price, the costs are raised, which is then borne by the insurance company.

In summary, one can say that the moral hazard problem arises from the fact that insured persons do not have to fully pay for the costs of using the services, which is why the insured persons overuse medical services.

Even after the GMG comes into force, moral hazard can arise: If the insured person has already paid the practice fee in the quarter, he will take as many other medical services as possible in the same quarter without having to pay any fees again, The desired effect, namely self-control and awareness of costs, is therefore not

achieved; on the contrary, this confirms moral hazard behavior (Holst 2004).

Comparisons of Study Results

This part of the study compares the different studies on co-payments in relation to practice and pharmaceutical fees and their effects on the number of visitors to the patient. After briefly mentioning the study topics, the study methods are described and concluded with a summary of the study results. Although there are many forms of additional payment, only the practice fee and the fee for medicines ("prescription fee") are referred to here.

consultation fee

The expectation was when introducing additional payments in the health care system for legally insured persons in 2004 to minimize unnecessary visits to the practice based on moral hazard behavior and to relieve the health care system of financial burden.This case is examined in most studies with different methods.

In most studies it is striking that the focus is on the effects of the practice fee that was introduced in 2004 under the GMG. The fee is charged every quarter in which at least one doctor's visit takes place. The number of doctor visits before and after the introduction of the practice fees is used for comparison. In addition to the total number of visitors, these studies also deal with the different visitor groups.

Most studies have also looked at whether and to what extent people with low social status were disadvantaged in the form of practice fees after the introduction of the additional payments.

The topics listed above also represent the study object of Grabka and Schreyögg (2005). The data from the Socio-Economic Panel (SOEP)[1] were used for this. A total of 22,000 legally insured persons from the age of 18 were surveyed, since the age groups under 18 are completely exempt from the practice fee.

It can be seen from the results of this study that the proportion of visits to the doctor per quarter has been around 70% since the mid-1990s. This share changed from 2003 to 2004 with a smaller decrease of 1.2%. The development of the average number of doctor visits over the same period of time is also associated with a decrease. The number of patients visited was significantly higher in 1995 with a number of 3.2 than in 2004 with 2.5 visits to the doctor per quarter. A falling trend can be observed between 2003 and 2004: the number of patients visiting the doctor decreased by 0.24, which corresponds to a relative decline of 8.8%. This decline goes hand in hand with the fact that the SOEP surveys take place at the beginning of the year and the use of medical services is lower due to the pull-forward effect after the reform (Grabka and Schreyögg 2005).

The authors Grabka and Schreyögg (2005) evaluate these results in such a way that the introduction of the practice fee would not have a direct effect on the proportion of people with at least one doctor contact, but the frequencies of the doctor contacts would be affected. An effect that can be viewed as

[1] Grabka and Schreyögg describes the SOEP as a "representative repeat survey of private households in Germany" (Grabka and Schreyögg 2005: 4), which has regularly interviewed the same people and families once a year since 1984.

positive is that the necessary referrals prevent so-called “doctor hopping”, an unsystematic multiple use of medical services, in the same quarter.

The study does not provide any information about whether, for example, low-income groups avoid contacting the doctor due to the practice fees. If the people with a doctor's contact are categorized according to their income level every quarter, a slightly variable development is observed. The second income quintile in particular has a high share of 71.5% in doctor visits in 2003. According to this study, there was no decrease for 2004 in low-income groups, both in terms of doctor visits and the frequency of doctor visits (Grabka and Schreyögg 2005).

Furthermore, it can be seen from the study results that the state of health of the patients in the previous year of the GMG had a significant influence on taking a doctor's visit in 2004. According to SOEP statistics, patients who are in a poor health condition are not afraid to contact a doctor. From this it is concluded that "medically necessary treatments by a doctor cannot be avoided by introducing the practice fee". With regard to the type of insurance, i.e. statutory or private, there is no difference. According to the study, however, it can be observed that in 2004, compared to the previous year, unemployed people and people without a professional qualification were more likely to avoid visiting a doctor than, for example, employed people and people with a professional qualification (Grabka and Schreyögg 2005).

In conclusion, the authors state that although the number of visits to the doctor in 2004 fell significantly compared to 2003, the proportion of people with an annual visit to the doctor remained relatively constant in both years. In contrast, the necessary visits to the doctor do not subside in groups with poor or poor health or in the severely disabled. According to the authors, there is no evidence of discrimination against people with low social status. In conclusion, it should be stated that the introduction of the practice fee is an effective means of preventing the number of unnecessary doctor visits or multiple examinations.

A similar study using the same method was carried out by Schreyögg and Grabka (2009). Similar to the previous study, the data provided by SOEP from around 22,000 subjects was analyzed using the Difference-in-Difference (DiD) method. This study by Schreyögg and Grabka (2005) only differs with regard to the time periods examined. In addition to the period 2000-2003 before the health care reform, the period between 2005-2006 after the reform is also examined. Therefore, the reform year was not taken into account in the analysis.

After comparing the study results, the authors find that the frequency of visits to the practice among the statutory insured fell after the introduction of additional payments in 2004, but reached the level of 2003 one year after the reform. These results can be observed even among the privately insured, although members of this form of insurance are completely exempt from the additional payments. This state of affairs is justified by the insecurity of the privately insured with regard to their impact from the introduction of the additional payment.

The results of this study are viewed by Schreyögg and Grabka (2009) as a

"temporary effect" and have even failed in terms of reducing health care expenditure compared to other OECD countries. The thesis of these authors is based on the reasoning that additional payments are cheap and have to be made once for the first visit per quarter. This does not show the cost-reducing effect for the patients, whereas the Washington State model, which provides for an additional payment of $ 5 per doctor's visit, would bring the desired effect as a counter-proposal. It is not clear from the results whether the low earners or the chronically ill avoid visiting a doctor. Benefiting from the diverse disease management programs after the reform, people with chronic illnesses even go to the doctor more often. Winkelmann (2006) even found a dominant superiority of women in terms of visitor numbers than men.

The study by Augurzky et al. (2006) deals with the assessment of the effectiveness of additional payments in Germany. For this purpose, empirical comparative studies on the effects of the additional payments introduced in the late 1960s and early 1970s from the USA and in the Canadian province of Saskachevan in 1968 are used.

The results of these studies prove according to Augurzky et al. (2006) that co-payments are an effective means of reducing doctor visits. However, the results of the US or Canadian studies at the time of the analysis were not transferable to the German healthcare system, since the additional payments were introduced in Germany relatively later than in these North American countries. To date, only the co-payments for prescription drugs had been the only form of co-payment in Germany.

Contrary to the expectation that the total number of visits to the doctor per quarter for those insured by law would decrease, the authors assume that the number of doctor contacts per person within a quarter will not be influenced by this development. On the other hand, according to the authors, Augurzky et al. (2006) cannot make a statement about the extent to which the low-income insured persons will feel something from the regulation. The results of the study show that the German regulation of the practice fee of 10 euros per quarter prevents the low-wage earners from making more frequent doctor contact per quarter. The regulation of the exemption from copayment for low earners, whose health expenditure corresponds to about 2% of the total annual income, remains unaffected by this desired effect (Augurzky et al. 2006).

The evaluation of the study showed that those insured by law have a higher frequency of doctor visits than members of a private insurance company. Furthermore, the study by Augurzky et al. (2006) observed that adults visit the doctor more frequently each quarter than adolescents. After evaluating the available results, it is found that the practice fee of 10 euros has no significant effect on the probability of a doctor visit. In addition, the data show no significant effect for the different subgroups such as gender, region, education and income.

From the results of the study by Augurzky et al. (2006), it can be concluded that the GMG did not live up to the expectations of the public: there was no significant decrease in doctor visits for both general practitioners and specialists after the introduction of the practice fees. In the

author's opinion, this is due to the fact that patients avoid visits to the doctor by prescribing all the necessary medicines in larger packs, if possible in a single appointment.

It is also found that the number of visits to the doctor does not vary significantly within a quarter. Overall, the effects hoped for by the health care reform cannot be realized with the current regulation. Just as Schreyögg and Grabka (2009) previously proposed, As in the opinion of Augurzky et al (2006) instead of a practice fee per quarterly visit, a flat-rate co-payment per doctor visit is levied, as is practiced in the USA or Canada and successfully leads to a decimated doctor visit there. This is the only way to reduce costs in the health system according to the authors.

The course content of Chandra et al. (2011A) looks at the effects of staggered changes in co-payments on medical care for the elderly. These changes were brought about by the California Public Employees Retirement System (CalPERS) Board. This healthcare policy decision will see practice fees increase from $ 0 to $ 10. For evaluation purposes, the data from CalPERS are examined for medical purposes from 2000 to September 2003. The DiD method is also used to determine the results of this study.

After the additional payments were introduced, the number of visits to the doctor dropped considerably: according to the DiD estimate, the rate is 0.312 per month per person. With an average visitor rate of 0.753 before the specified period, this corresponds to a decrease of approx. 17.5%. Two quarters before the changes occurred, there was a large increase in doctor contacts, while after the change, the situation reversed. The contrasting changes with regard to doctor visits suggest a temporary postponement of visits to the practice, but this cannot be explained by a fundamental change in patient behavior in relation to the higher costs.

In addition, the following points are presented as results of this study:

1. Visits to the doctor and prescribing a medicine are more moderate among the elderly because they react sensitively to the costs incurred out of their own pocket.

2. Due to the lack of an offset effect[2], the use of medical services in hospitals is higher than for visits to the practice and the prescription of medicines.

In a study by Chandra et al. (2011B) the impact of deductibles and co-payments on low-income policyholders ages 19 to 64 imposed on them in the Massachusetts Commonwealth is examined. The focus is on the reaction of the insured to the cost sharing. The low-wage earners are considerably restricted by the introduction of medical services, while the health system is relieved of the burden on the insured. This means that due to the higher costs imposed on them, which the low-wage earners have to pay for themselves, they will avoid or postpone a visit to the doctor's offices. Since treatment is not possible in this way, it is more likely that an illness will progress and

[2] "Offset effect" describes the state when psychotherapy can possibly lead to savings in the use of medical services. (Vogel 2004: 110)

can only be treated after a stay in the hospital. This has the opposite side effect that the hospital stays involve additional costs to a greater extent.

The results of Chandra et al. 2011 is similar to the results of the "Health Insurance Experiment" (HIE) study with regard to the elasticity of demand for visits to the doctor and prescription of medication for low-income earners. It is striking that in the analysis of HIE the patient with chronic disease show an increased "compensation through hospitalization" (hospitalization offset), whereas in the study by Chandra et al. a decline in this effect can be observed.

In order to enable a qualitative cross-comparison between the effects of the health care reform of 1997 and the reform of 2004, it is appropriate here to go into a study about this reform. The results of the study by Winkelmann (2004) are briefly summarized here.When analyzing the study results, Winkelmann found a decline of 2.66 to 2.35 between 1996 and 1998 in terms of visits to the practice per quarter, which corresponds to a decrease of approx. 11% . There was a 1% decrease between 1995 and 1996 and a 2% increase between 1998 and 1999 after the 1997 health care reform. According to the author, this decrease in the numbers shows a correspondence with the time before the reform.

Based on the analysis, the author finds that the 1997 health care reform has contributed to a significant drop in doctor visits, although there are no signs of a changing patient health, such as a pre-reform illness epidemic that would have suddenly disappeared in 1998. Another reason for the declining visitor numbers would, according to the author, be the economic situation: If unemployment is higher, the author believes that people in employment avoid a demand for medical services in order not to be seen as a "quitter" by their employers.

In summary, Winkelmann (2004) suggests that other obstacles would have to be created to influence the demand for doctor visits through such reforms.

The Farbmacher study (2009) deals with the question of the demand for doctor visits, which are categorized according to groups A and B. Group A consists of those who took a full quarter into account when visiting the doctor, while the subjects in Group B were interviewed at the end of a quarter. A SOEP data set for a period of four years around 2004 was also selected for the analysis. The study uses the years 2002 and 2003 before the introduction of the additional payments and the years 2005 and 2006 after the introduction of the additional payments. As subjects, the demand includes men and women aged 20 to 60 who have either statutory or private health insurance.

The following results from the study: The proportion of patients with at least one doctor's visit after the year of reform was significantly lower among the subjects who were interviewed at the end of a quarter. Before the health care reform, both groups visited a doctor at least once a quarter at a rate of 64%. After the health care reform, this rate drops to 61.6% for the group B subjects, while the rate of the group A subjects remains unchanged at 64%.

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The results of the study are as follows: The proportion of patients with at least one doctor's visit after the year of reform was significantly lower among the subjects who were interviewed at the end of a quarter. Before the health care reform, both groups visited a doctor at least once a quarter at a rate of 64%. After the health care reform, this rate drops to 61.6% for the group B subjects, while the rate of the group A subjects remains unchanged at 64%.

Based on the results, after the analysis Farbmacher (2009) claims that there is only a slight decrease in the number of visits to the doctor by the legally insured. For privately insured persons there are no significant changes in doctor visits after the reform.

In his study, the author noted the shortcoming that the interviews and their evaluations from Group B would have weakened the effects of the GMG, which is why there is a risk that these results would be representative of the whole. Due to a minor change of -3.4% after the reform, the effectiveness of practice fees in reducing healthcare expenditure is considered ineffective.

As the last study regarding the introduction of practice fees, Gruber (2006) examined the data from RAND-Health Insurance Experiment (HIE) which is dealing with the following questions:). The results of the Kaiser Family Foundation are presented here, which refer to the data from RAND-Health Insurance Experiment (HIE). The study deals with the following questions:

1. The extent to which the use reduced from medical treatment when the charges of coinsurance be increased?

2. To what extent are these reductions dangerous to patients' personal health?

3. How do these changes affect patients with different characteristics, such as income and health status (Gruber, 2006).

The RAND-HIE study provided the author with "convincing information on a number of questions", from which he draws the following results (Gruber, 2006):

- The rate of a co-insurance influences the use of medical services and thus also the costs.
- The effects are not only limited to visits to medical examination , but also to e.g. prescription drugs or mental health measures.
- The higher co-insurance rates have no negative impact on the health of an average insured person.
- For insured persons with low incomes, higher insurance contributions represent a higher financial hurdle, which is why disadvantageous health consequences are more likely with a less used benefit.

If one summarizes the results of the HIE, it can be seen that higher insurance premiums mean that low-wage earners have to forego a significant part of their medical benefits that they cannot afford financially (Gruber, 2006).

The author contrasts some of the existing studies on the effects of co-insurance. Accordingly, Cherkin et al. (1989) found in their study that if a $ 5 co-payment was introduced, officials would experience fewer visits to the doctor. Heisler et al. (2004) study has a similar result that in a survey of prescription drugs that are associated with increased costs and therefore lead to underutilization. This low utilization consequently has negative health effects, especially for people with chronic diseases.

Pharmaceuticals

It would also be interesting to analyze the effects of co-payments for medicines. It was collected from literature analogous studies on medical examination fees, and compared with each other.

In another section of Chandra et al. (2011A) study, is examined the effects of co-payments for prescription drugs. It is found that the additional payments show an average varying development from year to year. While the average co-payments for 2001 were $ 7.25, a year later these values decreased by about $ 0.50.

According to the authors, the study suggests that the results show no decreasing tendency with regard to drug consumption. The declining consumption of pharmaceuticals is only an “impact of the political change of course”. Gemmill et al. (2008), examined the effects of user fees for prescription drugs in high-income OECD countries . They focused on efficiency and fairness through literature review.A total of 173 articles from 15 OECD countries were used for comparison, while the majority of the data comes from the United StatesSome of the outstanding issues listed in the study could be addressed as follows;

a. Influence of prescription drug costs on expenses

In the review, 63 articles found that introducing or increasing prescription fees would have a marginal impact on total spending, while consumer costs overall are on the rise. Only interrupted by a higher prescription drug allows a reduction in 0.04-58 % of total expenditure.

b. Influence of prescription drug costs on total healthcare expenditure

It is found from 23 studies that a reduction in total healthcare costs through co-payments is possible if the prescription drug expenditure is reduced. Otherwise it may weaken this explosive effect on total expenditure.

c. Will lower prescription drug expenses be achieved through price or quantity reductions?

The quantity can be determined by the following measures :

1. By by lowering prescription drugs,
2. By decreasing in volume (number) of prescription drugs

another study that analyzed the impact of co-payments for various statins (cholesterol-lowering drugs, price: $ 0- $ 52.51) says that patients tend to choose the cheaper option to keep their own financial burdens in check.

At conclusion of the study is indicated following implications for healthcare costs (Gemmill et al. , 2008):

-The prescription fees reduce the use of prescription drugs,

-The demand for prescription drugs shows a rather inelastic behavior.

In terms of equity, the authors implied that if the cost of prescription drugs is to be shifted from the public to private funding has a negative impact on health care expenses (Gemmill et al. 2008).

Goldmann et al. (2007) examined in the English literature published between 1985 and 2006, whether the increase in the co-payment with medication reduced or even discontinued, as Gibson et al. (2005) did. They have found that with an increase of 10% of the copayment amount, the expenditure of prescription medicines is reduced by 2% to 6%, depending on the type of medication and the condition of the patient. This change is reflected in the increased use of medical services for those chronically ill.

Gibson et al. (2005) examined the effects of co-payments for drugs or deductibles. For this purpose, thirty studies were reviewed and they showed that higher co-payments for medicinal products have decreased consumption. It also has a significant impact on patients' choice of medication: they are directed towards medication that was not previously preferred. However this does not eliminate an even more unpleasant effect thatis the interruption of treatments that can be attributed to the higher co-payments. It concludedthat the co-payments can reduce excessive drug consumption, but the undesirable side effects on the treatment process and the results of this policy cannot be ignored. The authors therefore have questioned the effectiveness and continuation of this health policy.

A negative price elasticity of the demand for the unfavorable medicinal products is the result of the study published by Costa-I-Font and Gemmill-Toyoma (2010), which they examine the effects of the additional payments on the reduction of inappropriate prescription. It is also found that older people with excessive co-payments or deductibles for drugs do not consume inappropriate drugs .the authors indicated that it is striking in the results that being the private and the compulsory insurance shows different demand behavior. The compulsorilyinsured are less sensitive to the consumption of medicines than privately insured when it comes to reducing the price of unsuitable medicines. The authors believe that general programs such as Medicaid are useful for raising the

awareness of doctors in order to prevent the prescription of inappropriate medication.

Conclusion

In the study , the influence of additional payments on the quality of care and efficiency was examined by considering various literature sources. The study was only limited to the additional forms of practice fees and prescription drug fees.

Overall, the comparison of studies showed that the introduction of additional payments did not have the desired effect. Even in various studies, the appropriateness of the 2004 reform, as it exists today, is questioned. As a common result, it was found that only in the year of reform did a significant decrease in medical examination fees be observed, while in the years thereafter the level of the pre-reform years was reached. It is interesting to note that, especially among the low-wage earners, the medical examination fees help to prevent visits to the practice, but on the whole, due to the delayed visits to the doctor results deterioration in general health and hospital stay cannot be prevented.

As a result, medical services provision continued to be a burden on the health financement system and the main goal of relieving the health system has not been achieved yet. The currently existing co-payment reforms even lead to increased moral hazard behavior, since the insured person who pays the co-payment per quarter tends to benefit more often from medical services in the same quarter. As a result, this cannot lead to financial relief for statutory insurance companies and thus for the healthcare system.

As an alternative to the practice fee of 10 euros per quarter, a practice fee of 5 euros per doctor visit is suggested here. This arrangement allows the claim that due to financial concerns such as those practiced in the United States in California, patients will experience fewer visits to the practice, at least that of the expendable. The exemption of the low-income earners, whose annual income reaches 2%, as well as the chronically ill at an annual exposure limit of 1%, should be left in the future reform requests so as not to disadvantage these “marginalized groups”.

In Germany, when paying a doctor or buying medication, additional payments may lead to restrictions on the medical care of persons in the institution. Some segments may be affected negatively due to their contribution.

Especially the lower income groups, people living with chronic disease will be affected more than the others. As a result, it will cause health inequality among individuals.

Due to the additional payment, the demands of the health services which are not postponed by those who do not benefit from the health service will add additional burdens on the system as increas in hospitalizationovertime and sustainability of the health system will become increasingly difficult.

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