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All rights reserved, or can we just copy? Cost sharing arrangements and characteristics of health care systems

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ABSTRACT

In most European countries cost sharing has been introduced in order to reduce the demand for care. Different forms of cost sharing are available, but because of historically grown system characteristics and prevailing values countries differ in the application of specific forms. This review focuses on eighteen European countries, and on the combinations of health system characteristics and present forms of cost sharing. We found that some combinations are more present: different payment systems for primary care physicians go together with different forms of cost sharing, different services have different forms of cost sharing. In countries with a GP as gatekeeper no charges are in use for the GP. No distinct relationship could be found between the financing system (tax-based or insurance-based) and the form of cost sharing or the exclusion of vulnerable populations. It is concluded that there are two ways of filtering 'unnecessary' demand. One is by introducing cost sharing for directly accessible services such as GPs. The second way is by having GPs act as gatekeepers to more specialized, and more costly care.

1. INTRODUCTION

In general, governments try to pursue three broad goals in the health care area: equity in access for all citizens, microeconomic efficiency and macroeconomic cost control [1]. The achievement of these goals is strongly influenced by the underlying norms and values of the wider society. For instance, some societies view health care as a social or collective good, others perceive health care as a commodity that can be bought and sold freely [2]. In the former, solidarity and equity will be more important, in the latter efficiency and individual autonomy are core values. Saltman and Figueras [3] argue that ''the stability of a social system such as health care is a result of coherence that exists between society's values and the social and physical structure of health care institutions''.

Policy in European countries is often focused on macroeconomic restrictions of the supply-side like implementing budget caps. In recent years, attention has shifted to microeconomic instruments to influence demand. One of these instruments at the demand-side is the introduction of cost sharing.

In general, cost sharing refers to any financing arrangement where the cost of the services used is supported in part by the user [4]. The main objective is to reduce the demand for and the utilization of health services. Other reasons are shifting health care expenditures from public to private resources and raising additional revenues to sustain the functioning of health services [3].

Many different cost sharing arrangements are available for health care, but not all cost sharing models fit well in every health care system. Some can be hard to implement because of technical–administrative problems, others can clash with major values in society. For policymakers it is usually not feasible to experiment with cost sharing arrangements in order to be able to choose the one with the best results in terms of decreased expenditures. In this situation, the most important, remaining source of empirical evidence for implementing cost sharing arrangements is to study other systems' experiences [4]. These should be interpreted carefully and cannot just be copied, because of specific characteristics of the system or values and beliefs in society. Like any other innovation cost sharing must, to some extent be re-invented in order to fit into national health care systems.

In this article we explore the use of cost sharing in health care in eighteen European countries. We limit ourselves to cost sharing arrangements in the publicly financed part of the health care system, because in most European countries the privately financed part is small or absent. Our research question is: How do health systems differ with respect to: (1) the services for which patients are charged; (2) the type of cost sharing that is applied; and (3) the conditions under which patients are exempted from cost sharing? Furthermore, we shall analyze whether these differences are related to other characteristics of health care systems, such as the payment systems for providers, or the position of GPs in health care. Health care systems consist of sets of characteristics that usually go together. Capitation payment for GPs, for example, is always combined with GPs having fixed patient lists and mostly also with GPs acting as gatekeepers to higher specialized care [5]. In this article, we shall explore this type of frequently used combinations of characteristics in the field of cost sharing.

2. HYPOTHESES

In this section the expected combinations of cost sharing arrangements and characteristics of the health care system will be described. Important aspects of cost sharing arrangements are: the services for which patients are charged, the type of cost sharing that is applied, and the conditions under which patients are exempted from cost sharing. We expect that these aspects of cost sharing go together with the characteristics of a system, such as the type of financing (tax-based or by social insurance) or the payment system for doctors (fee-for-service, salary or capitation). In general two strategies can be used for cost containment: focusing on the patient (costsharing), or focusing on the providers (e.g. through budget caps, or gatekeeping). In systems that rely on cost containment via providers, the introduction of costsharing is less self-evident compared to systems that use demand oriented policies. In practice, these two approaches seem to be looked upon as alternatives [6].

2.1. Services

Patient-initiated services like visiting a GP or using over-the-counter medicines react stronger to the introduction of cost sharing than services that are usually consumed on prescription, like specialist care or hospitalization [7]. Therefore, we expect that cost sharing is more frequently applied to directly accessible services, such as primary medical care. However, in some countries the GP acts as a gatekeeper. He or she is the doctor of first-contact, who advices patients, prescribes medicines and refers patients to a specialist. Patients are in a way forced to first visit their GP before they can proceed further into the health care system. In those systems, introducing cost sharing for GPs' services may clash with the value that is attached to free access to primary medical care [8].

2.2. Type of cost sharing

Three main forms of cost sharing exist: coinsurance (patient pays a percentage of the costs), copayment (patient pays a fixed charge per service) and deductible (patient pays full costs up to a ceiling). We expect that the form of cost sharing is related to the payment system for physicians. If physicians are paid by capitation or are salaried employees, the price of a single service is unknown. This makes it technically impossible to introduce coinsurance or a deductible. In general, a price per item or service is a neccessary condition for implementing user charges in the form of coinsurance or a deductible.

In a capitation system, cost sharing in the form of copayments is technically possible, but somehow contradictory because capitation is a prospective payment system. This implies that costs of care are already covered and that patients cannot be charged a second time for using health care. Apart from

that, in Europe capitation payment for physicians is used partly for ideological reasons: to ensure that patients have access to primary medical care, free of charges. This ideology is inconsistent with the introduction of cost sharing.

Furthermore, we expect a relation between the financing system (tax-based or insurance-based) and the form of cost sharing. In a tax-based system patients usually receive services in kind. In an insurance-based system patients receive services either in kind, or in cash. In the latter case, the patient pays the provider first, and is later reimbursed by his or her insurance company. Technically, deductibles are most easy to apply in reimbursement systems.

In short, we expect the following combinations:

1. If the precise cost of a service can be determined (e.g. in the case of pharmaceuticals, or under a fee-for-service payment system) all types of cost sharing are possible.
2. If the exact price of a service item is not clear (e.g. in the case of hospital care under global budgets, or in the case of salaried or capitated physicians), only copayments can be used.
3. Deductibles are only used in reimbursement systems.

2.3. Exemption from cost sharing

Previous research suggests that some populations are affected disproportionately by cost sharing. In the RAND experiment Ware et al. [9] found that patients with a lower income perceive more restrictions because of cost sharing than those with a higher income. Lohr et al. [10] and Brook et al. [11] concluded that the imposition of cost sharing appeared to have negative effects on lower-income persons. Cost sharing also disproportionately affects the chronically ill [12]. Wedig [7] found evidence that patients with a relatively bad health limited their use of care more after price increases than patients who were in good condition.

In order to protect vulnerable groups such as the chronically ill or low-income groups, ceilings may for example be introduced above which patients are no longer charged. Another way to protect heavy users or low-income patients is to exempt them from cost sharing. The degree to which vulnerable groups are excluded from cost sharing measures, depends on the value that is attached in a specific health care system to equity and accessiblility of care. We do not have information on differences between European countries with regard to these aspects. However, funding via state taxes causes more direct state control than does public funding via compulsory health insurance programs [13]. In these tax-based systems, health care is viewed as a necessary product that should be equally accessible for everyone, independent of one's ability to pay. The degree to which health care is financed according to ability to pay differs between tax-based and insurance-based systems [20]. In general, tax financing already is more regressive than public insurance. This can be further ameliorated by exemptions from cost sharing. As a tentative hypothesis, we therefore expect more exemption from cost sharing in tax-based systems than in insurance based systems.

3. METHOD

In our study, we focused on the fifteen member States of the European Union and Iceland, Norway and Switzerland. The information about the role of cost sharing in these countries has been collected by studying available literature concerning the financing of health care systems and if possible recent literature about health policy. We also used information from comparative studies conducted by the OECD [1], by BASYS [14] and by Rovira et al. [4]. We analyzed cost sharing arrangements for five different services (GP, ambulatory specialist care, prescription- only pharmaceuticals, and inpatient hospital care) and describe if, how and to what extent patients are charged for these services. Our reference year is 1997, unless otherwise specified.

4. RESULTS

In the Appendix, a detailed overview is presented of the services for which patients are charged, the type of charge that is applied, and the patient groups that are exempted from cost sharing in the 18 countries that we studied. In this section, we limit ourselves to presenting global information.

We studied four types of services for which patients can be charged: pharmaceuticals, hospital care, care provided by medical specialists and care provided by GPs. From Table 1 it becomes clear that in

all the 18 countries under study, in 1997 some form of cost sharing was in effect for pharmaceuticals. Thirteen countries have cost sharing for hospital care, and thirteen countries have cost sharing for specialist care. Finally, 11 countries have cost sharing for GPs.

[TABLE 1]

In most countries it is not possible or allowed to cover cost sharing by insurance, because this would undermine the effects on consumption (cf. [15]). The level of charges varies between countries: a day in hospital, for instance, in Portugal is $30, in the Netherlands it is only $4. In Sweden a patient pays $15 to visit a physician, in Ireland the high-income groups only pay $8 (see Appendix).

With regard to the four service types shown in Table 1, there are two types of cost sharing in use:

1. Coinsurance, where the patient pays a certain percentage of the charges, and
2. Copayments, where the patient pays a fixed amount of money every time he or she uses health care.

Deductibles are seldomly used.

Some countries have more than one insurance scheme within the public sector, for example Ireland (where it depends on one's income) or Denmark (where it depends on one's choice for Group I or Group II insurance) (see Appendix). If in those cases, the specific arrangements vary within a country, the country's score has been divided over two categories. In Fig. 1, therefore, there is 0.5 country without cost sharing for pharmaceuticals: namely Ireland, as far as low-income groups are concerned.

[FIGURE 1]

From Fig. 1 it becomes clear that in general, for pharmaceuticals the most frequently used type of cost sharing is coinsurance, where patients pay a percentage of the price. In hospital care, copayments are popular. There is no dominant type of cost sharing as far as doctors' services are concerned: both coinsurance as well as copayments are used.

Fig. 2 shows that in Europe, there are three conditions under which patients do not have to pay user charges: low income, age (children and pensioners), and a bad medical condition. Four countries use all three criteria to exempt patients from cost sharing. Four countries use patients' medical status, two countries use age and one country uses income to exclude people from cost sharing. One country does not have any exceptions for vulnerable groups. The remaining countries use one or two of the criteria. There is no clear relation between the exceptions made for vulnerable groups and the financing system (tax-based or insurance-based) (not shown in Fig. 2).

[FIGURE 2]

Reduced charges are applied for vulnerable groups, or they are excluded from cost sharing (see Appendix). Apart form that, in most countries a certain ceiling has been established for the maximum costs that a patient should share. For some this is limited to specific services in a specific period, for others the cost sharing is totalled and maximised. The ceiling levels vary between countries. In Sweden the level is $160 (more than 2% of income of person on a minimum income) and in the Netherlands the maximum is $100 (0.9% of income of person on minimum income). Often, not all services are ceiling-eligible. In Norway, for instance, the most important user fees under the ceiling are consultations with physicians and psychologists, certain pharmaceuticals for chronic diseases, and travel to and from health care providers, but dental treatment, homemaker services, physiotherapy, chiropracty and speech therapy are not under the ceiling [16]. In Sweden most medicines do not fall under the ceiling. In Germany at the end of the year only co-payments for pharmaceuticals, dentistry and hospital care can be added up and the amount above a maximum is reimbursed, dependent of the income group.

Fig. 3 shows the relation between the type of cost sharing used for GPs' services and the payment system for GPs. Coinsurance is used only in combination with fee-for-service payment. Copayments

are used both in combination with fee-for-service and salary. Where GPs are paid on a capitation basis, no cost sharing is in effect for GPs' services. This combination does not occur.

[FIGURE 3]

A similar, though less strong relation can be seen in Fig. 4 between GP gatekeeping and cost sharing for GPs' services. In countries where GPs act as gatekeepers to secondary care, usually patients do not have to pay user charges for consulting the GP. The two exceptions are Norway and Portugal, that combine gatekeeping with copayments for consulting the GP.

[FIGURE 4]

5. DISCUSSION

The use of cost sharing as an instrument to control the demand of patients, is a fairly common tool in most countries. Charging patients for medical services is seen as a measure to control cost of health care, because it raises additional revenues, shifts costs from public to private and can control the demand by limiting 'unneccesary' medical consumption. Every country has its own cost sharing arrangements, depending on technical possibilities of the system and the values and beliefs in society.

We found a relation between the type of cost sharing and the payment system for GPs and GPs' position in health care. If GPs are paid on a capitation basis and if they act as gatekeepers to specialized care, patients usually do not have to pay user charges for consulting the GP. Apparentely, there are two ways of filtering 'unnecessary' demand. One is by introducing cost sharing for directly accessible services such as GPs. In this case the barrier is built in the health care system before patients actually enter the system. The second way is by having GPs act as gatekeepers to more specialized, and more costly care. In this case, patients have free entrance into the health care system, but they need a referral or prescription to proceed further into the system.

For other health care services too, there is a relation between the type of cost sharing and the unit of payment. Coinsurance is used only if a price per item of service can be calculated (e.g. in the case of pharmaceuticals). In hospital care, however, copayments are popular. This is probably, because in most European countries hospitals receive global budgets nowadays, which makes it difficult to calculate a percentage of the price for one particular admission or inpatient day. Furthermore, coinsurance for hospital care can rapidly increase the total amount to be paid and so become very regressive.

There was no relation between exemptions of copayments for vulnerable groups and the type of financing of the health care system. It might be fruitful in the future also to look at the progressiveness regressiveness of financing systems (although this has a strong relation with the type of financing system). Especially, from the point of view of the regressivenss of financing systems, the relation between the amount to be paid and exemptions is interesting.

In this article we focused on describing the current situation in eighteen western European countries. We have relied mostly on secundary sources. This is, of course, time efficient, but the information could be less accurate, depending on the sources used. It was also hard to find information for the different countries that related to the same year.

In the literature, hardly any information is available with respect to the effect of cost sharing in those countries on the development of health care expenditures. However, it seems that some arrangements have better results than others. Rice [17] summarized available evidence on effects of different cost sharing arrangements, but concluded that is is not possible to project accurately how overall health care expenditure would change if cost sharing requirements would change. Evidence for consumption reduction by coinsurance comes from the RAND experiment, carried out 20 years ago in the USA. The probability of using medical care appeared to be lower for those with a higher coinsurance rate. On the effects of varying levels of copayments and deductibles no evidence is available, although the RAND experiment suggested that deductibles had better effects than other forms of cost sharing [18]. Starmans [19] on the other hand, argues that a mandatory coinsurance for outpatient care with a level

of about 50% and an income dependent maximum (between 5 and 15% of family income per year) without the possibility or reinsurance, is most effective in reducing consumption.

It would be interesting to study the effect of cost sharing on health care expenditures in an internationally comparative study. However, our overview has shown that health care systems consist of historically determined sets of characteristics that occur on more or less fixed combinations. This means that independent variables such as gatekeeping, payment systems or cost sharing are not randomly distributed over all cases. Therefore it is very difficult, if not impossible to distinguish between the separate effects of each feature on health care expenditures.

TABLES AND FIGURES

Table 1
Cost sharing in Europe: absence or presence of cost sharing arrangements for four service types

Country	GP services	Pharmaceuticals	Outpatient specialist care	Inpatient hospital care
Austria	Yes	Yes	Yes	Yes
Belgium	Yes	Yes	Yes	Yes
Denmark	No	Yes	No	No
Finland	Yes	Yes	Yes	Yes
France	Yes	Yes	Yes	Yes
Germany	No	Yes	No	Yes
Greece	No	Yes	No	Yes
Iceland	Yes	Yes	Yes	No
Ireland	Yes	Yes	Yes	Yes
Italy	No	Yes	Yes	Yes
Luxembourg	Yes	Yes	Yes	Yes
Netherlands	No	Yes	Yes	Yes
Norway	Yes	Yes	Yes	No
Portugal	Yes	Yes	Yes	Yes
Spain	No	Yes	No	No
Sweden	Yes	Yes	Yes	Yes
Switzerland	Yes	Yes	Yes	Yes
UK	No	Yes	No	No

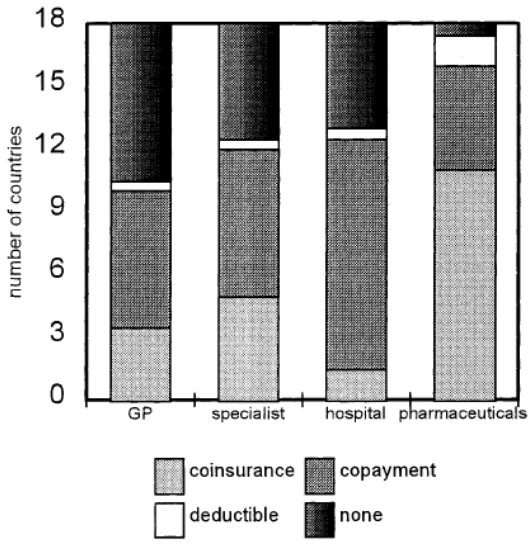


Fig. 1. Type of cost sharing per service.

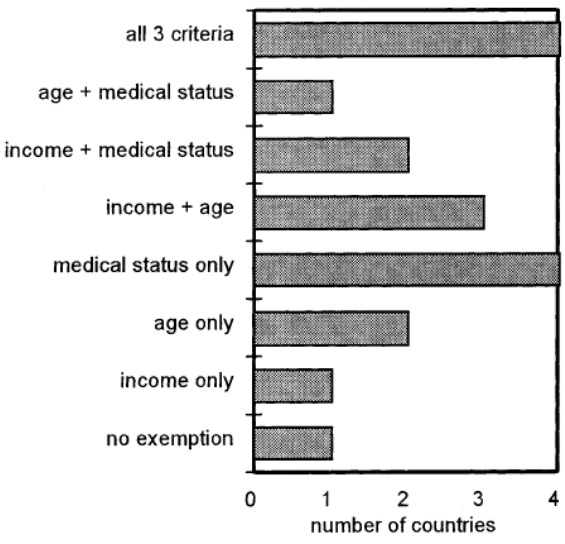
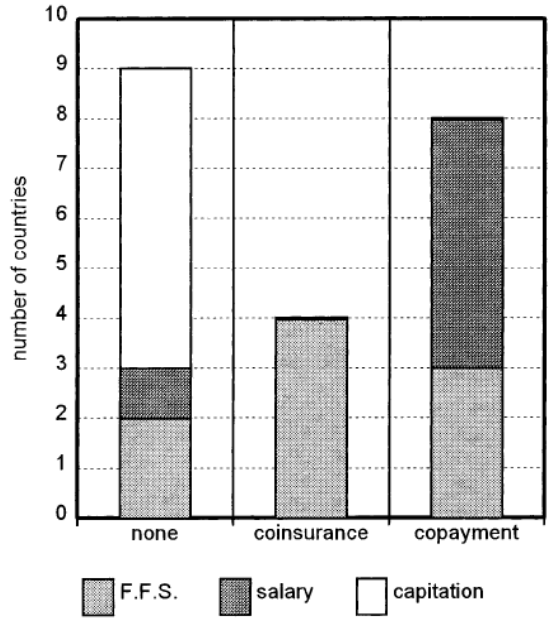


Fig. 2. Basis for exemption from cost sharing.



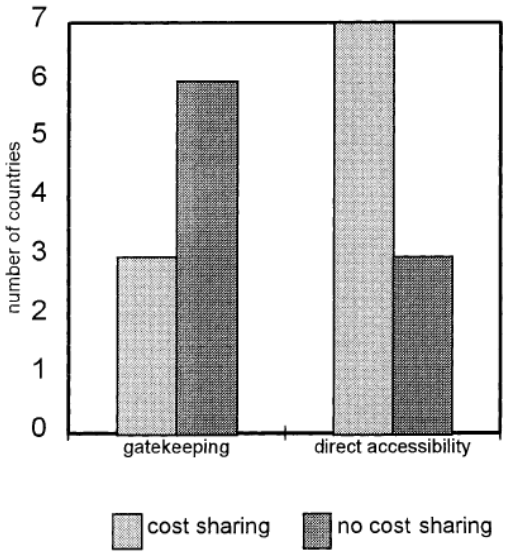


Fig. 3. Type of cost sharing and GP payment. Fig. 4. Cost sharing for GP and GP gatekeeping.

APPENDIX A. COST SHARING ARRANGEMENTS[A] IN 18 WESTERN COUNTRIES (REFERENCE YEAR IS 1997 UNLESS OTHERWISE SPECIFIED)

Country	General Practitioner	Prescribed pharmaceuticals	Outpatient specialist care	Inpatient hospital care
Austria [1,10]	COPAYMENT (ticket for quarter $2,50[A]) *Children, people receiving income from social benefits schemes, visits for prevention, mother and child care* [B]	DEDUCTIBLE + COPAYMENT of $2 *people with low-income and people with low-income and above average costs*	see GP	COPAYMENT/ COINSURANCE $4-5 per day or 10-20% for first 28 days (=$6) *people with low-income and people with low-income and above average costs*
Belgium [2,10] max $380-$1267	COINSURANCE/COPAYMENT 30% maximum $440-$1065 *pensioners, widows and orphans, disabled: 10%* *maximum $440*	COINSURANCE depending on price and size: 0%,25% (max $10) or 50% (max$16) or 60%, 80% or 100% (no max) *pensioners, widows and orphans, handicapt: 10% 0%,-15% (max $6) or 50% (max $10) or 60%, 80% or 100% (no max)*	COINSURANCE:40% *pensioners, widows and orphans, handicapt: 15%*	COPAYMENT/COINSURANCE admission fee + $12 per day + $1 for medicine + 100% for non reimbursable drugs *pensioners, widows and orphans, handicapt:and additional exemptions (children, unemployed) no admission fee, $5 per day, $1 nedicine and 100% for non reimbursable drugs*
Denmark(1994) [4]	none	COINSURANCE 25-50% coinsurance	none	none

Finland(1996) [9]	COPAYMENT varies per municipality: maximum of $18 per year, or $9 per visit to health centre doctor, or only for first three visits	COPAYMENT/ COINSURANCE $9 per prescription and 50% of price *medicines for individuals suffering from certain specific conditions*	see GP	COPAYMENT $23 per day
France [5,10]	COINSURANCE 30% *disabled children, pregnant women, people receiving incomes from benefit schemes like war victim or disabled, people suffering from illnesses on special list and illnesses that cause heavy costs*	COINSURANCE 0%,35%,65% for non-serious ailments 100% for relief ease drugs *disabled children, pregnant women, people receiving incomes from benefit schemes like war victim or disabled, people suffering from illnesses on special list and illnesses that cause heavy costs*	COINSURANCE: 30% for ambulant treatment in hospital 25%	COINSURANCE/ COPAYMENT 20% in general 0% after 31st day of treatment or after certain treatments $9 per day
Germany [5] (yearly maximum)	none	COPAYMENT depending on size $2,$3,$4 *Children <18, drugs in relation with pregnancy*	none	COPAYMENT $7 per day (max 14 days)
Greece(1993) [1]	none	COINSURANCE 20-25% coinsurance	none	COPAYMENT outpatient department hospital without referral ($3)

		drugs for chronic diseases, mental illness and AIDS		
Iceland(1993) [4] (yearly maximum $140)	COPAYMENT $8 during working hours otherwise $14 *children, disabled and pensioners with low incomes: reduced fee*	COPAYMENT medicines are categorized and subsidized. *pensioners and disabled have lower ceiling*	COPAYMENT $17 + COINSURANCE 40% *children, disabled and pensioners with low incomes: reduced fee*	none
Ireland(1994) [9]	COPAYMENT 1. none (38%) 2. payment for physician (62%): $8 first visit (limit $56) *maximum $56*	DEDUCTIBLE 1. 0% 2. deductible $38	COPAYMENT 1. none 2. variable	COPAYMENT 1. none 2. $27 per day up to *maximum of $270 per year*
Italy(1992) [6]	none	COPAYMENT/COINSURANCE flat rate of $3 for first two items or for first two plus 50% coinsurance *citizens below certain income, pensionners including family*	COPAYMENT $7-$8	COPAYMENT $6 per day up to 10 days
Luxembourg(1994) [1]	COINSURANCE 5% coinsurance	COINSURANCE 20% *drugs for special diseases free*	see GP	COPAYMENT flat rate
Netherlands[C] [7] (yearly maximum: $100)	none	COINSURANCE 20% co-insurance positive list with max. payment (fixed prices)	COINSURANCE 20%	COPAYMENT $4 per day

		people receiving income from social benefits schemes, 65 year or older have maximum of $50 *chronically ill regain $45*	*people receiving income from social benefits schemes, 65 year or older have maximum of $50* *chronically ill regain $45*	*people receiving income from social benefits schemes, 65 year or older have maximum of $50* *chronically ill regain $45*
Norway (1995) [4] *(yearly maximum $138)*	COPAYMENT $17 (consultation) $24 (night, weekend)	COINSURANCE age-depending 7-16 and 67+ and disabled: 10% (max $15 per 3 months) others 30% (max $60 per 3 months) if used during consultation:100% *children, disabled and pensioners with low income: reduced payment*	COPAYMENT $16	none
Portugal (1992) [1,6]	COPAYMENT *children, pregnant women and mothers*	COINSURANCE 0-30-60% of positive list	COPAYMENT $91-$213	COPAYMENT $30 per stay
Spain (1995) [5]	none	COINSURANCE 40% of price maximum $3 *low incomes and chronically ill: 10%*	none	none
Sweden [3,10] *(yearly maximum of $113)*	COPAYMENT [10] private physician: $8 public physician:$18 *chronically ill*	COINSURANCE 100% for below $50, 50% for $50-150, 25% for $150-400, 10% for $400-480	COPAYMENT $13-20	COPAYMENT $7 per day
Switzerland [1,10] *(yearly deductible $100)*	DEDUCTIBLE +COINSURANCE $112 + 10% *children: 10% (maximum $224) and pregnant women: 0%*	DEDUCTIBLE + COPAYMENT 10% $7' *Children: 10% (maximum $224)* *and drugs in relation with pregnancy: 0%*	see GP	DEDUCTIBLE + COPAYMENT $7 per day (up to $332)
United Kingdom [3,10]	none	COPAYMENT $7 per prescription or annual season ticket $100 *Children <16, men >65 and women >60, drugs in relation with pregnancy, people with low income or serious illnesses*	none	none

[A] Prices are presented in US$, as they were given by the sources used. Otherwise we used the exchanged rates for October 1998.
[B] Exemptions are printed in italics
[C] The cost sharing arrangements in the public insurance system, described in the appendix,

1 OECD, The reform of health care systems: a review of seventeen OECD countries. Paris: OECD, 1994.
[2] Landsbond der Christelijke Mutualiteiten (1993)
[3] Rubin, R.J., Mendelson, D., A framework for cost sharing policy analysis. In: Matisson, N. (ed.), Sharing the costs of health: a multicountry perspective. Basel: The pharmaceutical Partners for Better Healthcare, 1995.
[4] Alban, A., Christiansen, T., Overview of the structures of the Nordic health care systems. In: Alban, A., Christiansen, T. (eds.), The Nordic Lights, new initiatives in health care systems. Odense: Odense University, 1995.
[5] Schneider, M., Rovira, J., Köse, A., Rhodes, G., Cost sharing and health funding in selected European Union member states. In: Leidl, R., ed., Health care and its financing in the single European market. Amsterdam: IOS Press, 1998: 212-229.
[6] Adams, M., Bertels, J., Cocquyt, W., Jorens, Y., Pieters, D., De eigen bijdrage in de gezondheidszorg in de Europese Gemeenschap. Antwerpen: Maklu, 1992.
[7] Starmans, B., Patient charges in the Dutch sickness fund insurance scheme: an overview and discussion. In: The effects of patient charges on medical utilization, expenditure, and health: Dutch investigations and international evidence. Maastricht: thesis, 1998.
[8] Ministry of Social Affairs and Health. (1996) Health care in Finland.
[9] Abel-Smith,B. and E.Mossialos (1994) Cost Containment and health care reform: a study of the European Union. Health Policy 28 89-132
[10] Schneider, M., Beckmann, M., Biene-Dietrich, P., Gabanyi, M., Hofmann, U., Köse, A., Mill, D., Späth, B., Gesundheitssysteme im internationalen Vergleich, Übersichten 1997. Augsburg: BASYS, 1998.

REFERENCES

1. OECD. New directions in health care policy, Health Care Policy Studies no. 7. Paris: OECD, 1995.
2. Saltman RB. Convergence versus social embeddedness. Debating the future direction of health care systems. European Journal of Public Health 1997;7:449–53.
3. Saltman RB, Figueras J. European Health Care Reform: Analysis of Current Strategies. Copenhagen: World Health Organization, 1997.
4. Rovira J, Mompo C, De Wildt K, Schneider M, Blasco I. Comparing cost-sharing in European Union member states: a system-oriented framework. In: Leidl R, editor. Health Care and its Financing in the Single European Market. Amsterdam: IOS Press, 1998:183–211.
5. Groenewegen PP, Delnoij DMJ. Wat zou Nederland zijn zonder de huisarts? De positie van huisartsen in relatie tot de aard en kosten van de zorg. Maarssen: Elsevier/De Tijdstroom, 1997.
6. Saltman R. A conceptual overview of recent health care reforms. European Journal of Public Health 1994;4:287–93.
7. Wedig GJ. Health status and the demand for health: results on price elasticities. Journal of Health Economics 1988;7:151–63.
8. Delnoij DMJ, Groenewegen PP, Ros CC. Een eigen bijdrage voor de huisarts en de inhoud van de zorg: een studie naar (on)bedoelde gevolgen. Utrecht: NIVEL, 1998.
9. Ware JE, Shapira MF, Sherbourne C. Effects of cost sharing on seeking care for serious and minor symptoms: results of a randomized controlled trial. Annals of Internal Medicine 1986;104:246–51.
10. Lohr KN, Brook RH, Kamberg CJ, Goldberg GA, Leibowitz A, Keesey J, et al. Use of medical care in the RAND health insurance experiment. Medical Care Supplement 1986;24:S18–30.
11. Brook RH, Ware JE, Rogers WH, Keeler EB, Davies AR, Donald CA, et al. Does free care improve adults' health. New England Journal of Medicine 1983;309:1426–34.
12. Soumerai SB, Ross-Degnan D, Avorn J, McLaughlin TJ, Choodnovskiy I. Effect of medicaid drug-payment limits on admission to hospitals and nursing homes. New England Journal of Medicine 1991;325:1072–7.
13. Westert G. State control and the delivery of health care: a preliminary study in eleven European countries. Environment and Planning C: Government and Policy 1997;15:219–28.
14. Schneider M, Beckmann M, Biene-Dietrich P, Gabanyi M, Hofmann U, Köse A. Gesundheitssysteme im internationalen Vergleich, Übersichten. Augsburg: BASYS, 1997:1998.
15. Abel-Smith B, Lewis L. Cost Containment and New Priorities in Health Care: a Study of the European Community. Aldershot: Avebury, 1992.
16. Ostbye T, Hunskaar S. User fees for health services. Canadian Family Physician 1996;42:2109–12.
17. Rice T, Morrison KR. Patient cost sharing for medical services: a review of the literature and implications for health care reform. Medical Care Review 1994;51:235–87.
18. Newhouse J and the Insurance Experiment Group. Free for All? Lessons from the RAND Health Insurance Experiment. Cambridge: Harvard University Press, 1996.
19. Starmans B. The effects of patient charges on medical utilization, expenditure, and health. Dutch investigations and international evidence. Thesis, Maastricht, 1998.
20. Van Doorslaer EKA. Gezondheidszorg tussen Marx en Markt. Inaugural address Erasmus University Rotterdam, 1998.