Managed Competition in Health Care in The Netherlands and Germany - Theoretical Foundation, Empirical Findings and Policy Conclusions

Von

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1 Introduction

In social health insurance systems all over the world, the concept of managed competition may be ill-defined, but surely does attract a lot of attention.[4] Countries as culturally and institutionally diverse as Colombia and Israel reorganize their health care systems aiming for more market incentives and more responsibilities for market actors. In this article however, we focus on two neighboring countries in the heart of Europe. Both the Netherlands and Germany have a long tradition of comprehensive social health insurance systems and many similar institutional characteristics (Lieverdink/van der Made 1996). Both countries highly value broad access to health care and critically assess the effects of changes in the financing schemes with regard to income distribution. Both systems are mainly financed by premiums not dependent on individual risk but on individual income. In both countries, the health care system is characterized by a mix of predominantly public funding and private provision of health care services. At the same time, both health care systems are to a large extent regulated by central and regional governments. This regulation extends from the budgeting of sickness funds and providers to the regulation of prices and capacities. Both governments try to curb costs for health care while at the same time technological progress and demographic changes increase the pressure on health care costs.

In the 1990s the concept of Managed competition - defined as a system allowing competing health insurance agencies to selectively contract providers on behalf of their insured, under narrowly defined rules set by government - seemed to be an innovative approach for both countries in order to curb costs, increase efficiency and effectiveness of the system and maintain high standards of equity. Based on the recommendations of the 1987 Dekker-Committee, the Dutch government has implemented several instruments and incentives of the managed competition model since the late 1980s and the early 1990s (Robinson 1998; Okma 1999). This approach has been dubbed as "…not only a theoretically elegant blueprint of an equitable and efficient health care system but also an ingenious political compromise (Schut 1995b: 638)." Only a few years later the German government reorganized the health care system by introducing competitive elements (Wysong/Abel 1996; Freeman 1998). In both countries reforms aiming for more consistent incentives and instruments in the health care system are still ranking high on the political agenda (Henke 1999; Schut/van Doorslaer 1999).

The central questions this paper seeks to address are: first, what are the main underlying claims and assumptions of Enthoven´s model of managed competition (the MC model), and second, under what conditions can the model work in the context of the social insurance systems of Western Europe? The paper approaches these questions both theoretically and empirically. First, it analyzes the theoretical qualities of the model by applying economic theories as well as models of public policy. Second, it looks at empirical evidence by studying the results of the application of a variant of the

[4] As Ted Marmor observes (Marmor/Maynard 1994) the very term managed competition is somewhat oxymoronic. Competition requires the freedom of actors to negotiate about prices and volumes of their goods and services, whereas regulation seeks to restrain that freedom.

model in the Dutch health care system (the adjusted MC model). The first stage of the analysis concludes that at first sight, the model of managed competition provides an elegant solution for the problem of the trade off between solidarity and universal access to health services on the one hand, and the need for increased efficiency on the other hand. But a closer look reveals both important internal inconsistencies and theoretical deficiencies of Enthoven´s MC model. Further, the paper argues that the conditions and policy context of the Dutch and German health care systems substantially differ from the context of the private health insurance in the U.S. in which Enthoven framed his original proposals for managed competition. Those theoretical findings lead to a reframing of the model itself.

In spite of the seeming popularity of the managed competition model, its economic foundation and the foundation of economic competition it is based on is underdeveloped in literature as well in public discussion. In the first part of this article, we analyze the functions of competition in economic theory, of the proposed functions of the managed competition model and the behavioral assumptions implicit in that model. Next, the paper presents empirical evidence of the Dutch experience with the adjusted form of managed competition based on the recommendations of the 1987 Dekker advisory committee. The paper concludes that in its first years of implementation, this adjusted MC model has not been very successful.

However, before calling a final verdict two specific questions arise: first, did managed competition fail because it is altogether unsuitable for application in health care; and (or) second, did the model fail to produce results because of its incomplete application? To the first question we conclude that there are too many barriers to expect the model to work. As Arrow already observed in 1963, the very characteristics of demand and supply in health care preclude the markets in health care from providing an efficient and fair exchange based on full competition (asymmetric information, external effects, risk selection, self selection, moral hazard). In order to compensate for such deficiencies, there is need for government regulation to such extend that in fact, the rules of the market have shifted to the rules of social insurance. This difference is crucial when discussing the roles and expected behavior of the participating actors. For example, risk rating and risk selection are perfectly normal activities of private health insurance, but highly undesirable in social insurance where one of the main goals is to provide universal access to health care and hence, to safeguard access to health insurance for all. Acknowledging such problems, the Dekker advisory committee had framed its proposals in the framework of social insurance, imposing mandatory participation for all, prohibiting risk selection and risk rated premiums. Once such basic requirements were in place, the committee concluded that competitive incentives might help in improving the quality and efficiency of the Dutch health care system, but that the impact of competition need to be mitigated by strict government control and monitoring.

The second question is whether the disappointing results were due to incomplete implementation of the adjusted MC model. Our conclusion, based on findings of major behavioral changes in other parts of the Dutch health care systems, is confirmative. But the adjusted model also has to adjust its

expectations to a more realistic level. The measure of its success is not only whether there is an increase in efficiency but also, whether it can gain enough support by the major stakeholders in health care to keep it working in the longer term. This requires careful analysis of the position of, and the relations between, those stakeholders.

2 Economic Foundation of the Managed Competition Model

Our approach towards describing the economic foundation of the managed competition model starts by analyzing the mechanisms and functions economic theory throughout history has ascribed to competition. After that, we outline functions, behavioral assumptions, incentives and instruments of the managed competition model.

2.1 Competition in Economic Theory

> "There is probably no concept in all of economics that is at once more fundamental and pervasive, yet less satisfactorily developed, than the concept of competition ... a principle so basic to economic reasoning that not even such powerful yet diverse critics of orthodox theory as Marx and Keynes could avoid relying upon it - without ever clearly specifying what, exactly, competition is (McNulty 1968: 639)."

The citation above points to a severe problem with regard to competition in economic theory. Until the early 20th century, there was no such thing as a theory of competition. Functions and mechanisms of competition were embedded within prevalent economic theory. However, it is possible to identify several central mechanisms and functions of competition. It is important to note that stated aims of competition vary quite substantially over time.

Competition itself is probably as old as human history,[5] but the first economist who integrated competition and economic theory was Adam Smith in the 18th century. Within classical economic theory, competition becomes a *conditio sine qua non* for the organization of society. According to this theory, the force of competition regulates demand and supply. Thus, not only prices within one market gravitate around the natural price. This is also true for the allocation of resources between different markets. Competition is described as a process of action and reaction toward some kind of equilibrium and provides economic order and stability (Smith 1976/1776). Metaphorically speaking, competition is as central to classical economic theory as the force of gravity to physics.

Classical economic theory and its implicit analysis of competition has been challenged by neoclassical economic theory in the late 19th century. This theory frames central assumptions for

[5] Although it is probably more adequate to talk of rivalry in order to define competition as a purely economic concept.

demand and supply reaching equilibrium with an optimal amount of social welfare.[6] These assumptions include optimal rationality of market actors, full mobility of resources and independent actions of market actors. It is important to note that neoclassical economic theory does not explicitly explain functions and mechanisms of competition. It more or less assumes that allocative efficiency and a stationary equilibrium will be realized under the above assumptions and conditions of perfect competition. Thus, perfect competition is one of the prerequisites for highest social welfare (Marshall 1890). It should be obvious that this approach is a powerful analytical tool in order to analyze different states of utility, but that it is not very helpful to analyze competition as a dynamic force.

This is the reason for the establishment of competition theory as a more or less autonomous branch within economic theory. In order to explain the development of innovation, *elements of monopoly* have been re-integrated, since empirical evidence has shown imperfect competition to be the rule rather than an exception (Robinson 1954). According to this approach, innovative entrepreneurs should be able to reap monopolistic profits for a limited period of time in order to reward them for the risk to introduce new products and new production techniques. Competition does ensure that after an adequate amount of time has passed, other entrepreneurs imitate the innovations or introduce even more innovative new products and reduce the profits of their predecessors. Consequently, proponents of this dynamic theory of competition do not postulate perfect but imperfect competition as a prerequisite for economic progress.

The theory of imperfect competition further developed into the concept of *workable competition*. In the beginning, workable competition was seen as a second-best approach, looking for a situation as close to perfect competition as possible. However, later on the concept of workable competition became a viable concept to increase and optimize not only allocative efficiency but also technical efficiency, dynamic efficiency, consumer sovereignty and economic liberty.[7] Workable competition considers elements of monopoly necessary for economic progress. Perfect competition and economic progress exclude one another. However, the concept fails to define exactly how perfect or rather how imperfect a market should be in order to reach these targets.

The so-called Austrian school, criticizing especially the neoclassical economic theory, developed the most radical approach towards competition. According to the Austrian school, states of equilibrium do not tell us anything about competition as a dynamic process, because in equilibrium enterprises do not have any incentives to compete against other market actors by optimizing price and quality of their products. Proponents of the Austrian school define competition as a *process of searching and discovering* (von Hayek 1976). Thus, competition is open with regard to its results. Competition even is valued in itself as a vehicle of economic liberty. Individual liberty is considered essential for inventions, innovations and imitation. If liberty is constricted, the process of trial and error on the way

[6] We do not include a formal mathematical definition of this so-called Pareto- or allocative efficiency. An optimal state according to this definition is reached if nobody can be better off without somebody else being worse off.

[7] Technical efficiency is defined by producing an optimal amount of goods for a fixed amount of money or a fixed amount of good for an optimal amount of money, quality is to remain constant.

to most efficient solutions is also constricted. Distributive measures by the state are believed to be a constraint to individual liberty and economic progress.

The short tour of economic theory with regard to the meaning of competition reveals that there are several functions competition is supposed to fulfill. First, there is *static efficiency*. Static efficiency is further divided into optimal factor allocation or allocative efficiency, and optimal value for money or technical efficiency. Secondly, there is *dynamic efficiency*, which stands for a high rate of technical innovation and the elimination of non-efficient enterprises. Finally, *consumer sovereignty* and *economic liberty* are functions of competition. With regard to these functions there are two important aspects to note. One is the fact that in most theories only some of the functions are included in the ideal outcome or target system. The other is that those theories do not mention distributive functions such as fair income distribution or equal access to certain goods and services. Some theories are even consider them as inimical for reaching the other functions.

2.2 Managed Competition Model

The market for health services is different from other markets for products and services (Arrow 1963). There are several market imperfections such as moral hazard, supplier-induced demand and X-inefficiencies (Bartelsmann/ten Cate 1997). *Moral hazard* exists when the existence of insurance increases the possibility of incurring a covered loss and/or the size of the covered loss. The existence of moral hazard implies that insured people use more health services than people with no or limited insurance (Rice 1998). This is not a result of “moral perfidy” but of rational economic behavior (Pauly 1968). Health economists conclude that this rational behavior leads to welfare losses, since people demand services although the individual utility derived from these services is much lower than the social cost. *Supplier-induced demand* on the other hand points to inefficiency produced not on the demand side but on the supply side. It is assumed that especially providers of highly specialized services do not act as perfect agents for their patients, but induce demand among patients for their services which have to paid by the third-party insurer. *X-inefficiencies* occur due to imperfect information individual patients have about individual providers. Consequently, inefficient providers are not forced out of the market (Bartelsmann/ten Cate 1997).

At least in theory, the managed competition model as framed by Alan Enthoven provides a way out of these constraints to static and dynamic efficiency in health care markets. With the managed competition model in place, Enthoven argues, market actors have incentives to behave as if they were in a perfectly competitive environment (Enthoven 1978; 1988; 1993). Price signals and competitive pressures are designed to let cost-conscious consumers and profit-seeking providers as well as insurers interact. Moral hazard, supplier-induced demand and X-inefficiencies are avoided by creating specific incentives and instruments as well as particular institutions (Bartelsmann/ten Cate 1997).

In this concept new market actors, so-called sponsors, act as a purchasing agents for a pool of consumers and define the basic rules for competition among insurers and providers, supply consumers with information and monitors the behavior of insurers in order to prevent risk selection. Insurers offer potential consumers contracts at or above a standardized range of health services at a community-rated premium. Consumers are free to switch between plans periodically. Ideally, the sponsor collects premiums and distributes these premiums on a risk-adjusted basis to the individual insurers. Additionally, the sponsor provides consumers with information on price, quality, level of coverage and co-insurance schemes of the insurers. Insurers are free to contract selectively with providers or even integrate with them. Additionally, they have to bear the financial risk of acting on the market. Thus, insurers are induced to monitor health care delivery as they compete for insured, and providers are forced to increase technical efficiency as they compete for contracts with insurance agencies. Insurers compete for consumers with the level of their premium, the range of the services covered and the quality of the services which they have contracted. Effective competition policy makes sure that there is high degree of competition on both the insurer and the provider market. Competition is enhanced by free market access for providers and insurers.

In this model the three pitfalls on health care markets are avoided. Moral hazard is reduced by the introduction of deductibles or co-insurance. X-inefficiency is reduced, because providers will lose market shares if their unit costs are too high. Over-consumption due to supplier-induced demand is unlikely, since insurers closely monitor the delivery of services. Table 1 summarizes incentives and instruments of the managed competition model.[8]

Table 1: Market Actors, Incentives and Instruments of the Managed Competition Model

Market Actors	Incentives	Instruments
Competing insurers	Financial risk; risk-adjusted capitation; free market access for new entrants	Selective contracting of providers; setting premiums, coinsurance and deductibles; vertical integration of insurers and providers
Competing providers	Financial risk (loss of contracts, loss of patients); free market access for new entrants	Price competition; quality of services; horizontal and vertical integration
Well-informed consumers	Standardized benefits package for consumers	Free choice (and exit) of insurance agency; choice of provider; direct access to consumer information
Sponsor	Political incentives	Effective competition policy; encouraging selective contracting; providing consumer information on health insurance and provision; issuing rules of access and acceptance to (social) insurance

Source: based on Enthoven/Kronick 1989; Enthoven 1993; Schut/van Doorslaer 1999

[8] Market actors cannot influence incentives while they are free to use any one or all of the instruments.

Implicitly, the managed competition model relies on three central assumptions with regard to the behavior of market actors. All of these assumptions are interlinked, each one is necessary but not sufficient:

1. Insurers compete with each other via price, quality and range of services without having permanent monopoly power.

2. Consumers have free choice between insurers and exercise their right to choose.

3. Non-effective and/or non-efficient providers are induced by insurers to work more effectively and efficiently and provide good quality. Otherwise, they are not contracted.

If and only if the postulated behavior of market actors is realized, the aims of the managed competition model can be realized. Expected outcomes do not only include an increase of static efficiency but also an increase of dynamic efficiency, since it is assumed that insurers and providers increasingly consider the cost-effectiveness of new technologies.

Theoretically, the managed competition model is extremely attractive to systems with social health insurance like Germany and the Netherlands for two reasons. First, it promises not only to increase efficiency, but also to maintain a high standard of equity by implementing regulation in order to avoid risk selection by the insurers and by safeguarding reasonably equal access to health insurance and health care services. Second, the model shifts the responsibility for cost control to a large degree from government to market actors:

> „ … The competitive market would generate cost controls, but they would be private market controls based on individual and group judgements about cost versus value and not public controls based on arbitrary numerical standards, insensitive to the quality or the value of the services (Enthoven 1978: 715)."

Thus, the ideal outcome of the managed competition model is quite far reaching and can be summarized as follows:[9]

- Increase of allocative efficiency by considering consumer preferences;
- Increase of technical efficiency by increase of competitive pressure on insurers and providers;
- Increase of dynamic efficiency by taking into account costs when deciding about investments;
- Maintenance of broad access to health care and avoidance of risk selection by implementing regulation;
- Shift of responsibility for cost control from government to market actors.

[9] Due to this ambitious target system the model has been described as the 'sheep with five legs' (Schut 1995a).

2.3 Theoretical deficiencies and institutional eclecticism of the MC Model

Even without putting the managed competition model into practice it is to be criticized on several levels. We focus on theoretical deficiencies and what may be called institutional eclecticism. The managed competition model explicitly and implicitly refers to neoclassical economic theory. Explicitly, Enthoven defines the managed competition model as an "integrated framework that combines rational principles of microeconomics with careful observation what works (Enthoven 1993: 45)." Implicitly, the concept is a bit more ambiguous. On the one hand, it refers to neoclassical functions of competition such as increasing the allocative and technical efficiency; it seeks to create a second best solution by simulating a perfectly competitive market. On the other hand, the neoclassical framework does not explain dynamic efficiency, the maintenance of equity and especially cost control by market actors. The ambitious ideal outcome seems to refer to the concept of workable competition, but even within this framework equity and cost control cannot be explained. Equity defined as equal access to health insurance and to health services is nowhere to be found in competition theory. Enthoven himself concedes that the managed competition model probably cannot guarantee equal access, but still finds a way out by defending a multi-tier system of health services:

> „In the long run, a multi-tier system is probably better for the poor than a rigid single-tier system. The more expensive tier may generate innovations in quality and service that are eventually adopted by lower-tier plans. Imagine the quality of cars we would have if everybody had to drive the same government-manufactured car (Enthoven 1994: 1420)!"[10]

Furthermore, it is an illusion to expect managed competition to reduce total health care costs:

> "It should be realized that market-oriented reforms are primarily targeted at reducing unit costs, not at reducing total health care costs. Thus, if more units, or units of higher quality will be traded in health care markets, total health care expenditure may still go up. Nevertheless, a successful implementation of some form of regulated or managed competition may result in slowing down the growth of health care expenditure because it can reduce the amount of inappropriate care, encourage productivity improvement and stimulate the development of cost-reducing technologies (Schut 1995a: 38)."

As to the matter of institutional eclecticism, it is important to note that Enthoven's managed competition model since its first introduction went through some significant changes. In the beginning he used the term *regulated competition*, although the extent of regulation in the early version (Enthoven 1978) was much smaller than the later ones (Enthoven/Kronick 1989). The author changed the name of the model to *managed competition* in order to refer to a more dynamic expression instead of to the dusty concept of regulation, although ironically new institutions with regulative tasks were introduced in the age of management and not in the age of regulation. Kuttner aptly criticizes the extent of regulation:

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[10] This point sounds similar to the so-called trickle-down effect which was a central argument to defend supply-oriented Reaganomics.

„At the core of pro-market reform is one more unreal premise – and a highly ironic one. The whole scheme depends on a heroic degree of regulation, to prevent an opportunistic race to the bottom. One could fill an entire chapter discussing the kind and extent of regulations necessary to make such a system work. Enthoven himself, in the course of proposing a plan contrasting virtuous market incentives with dubious government regulation, calls for literally dozens of regulations… Clearly, pro-market reforms turn out to require massive government regulation. And … it further presumes regulators with the wisdom, public-mindedness, and incorruptibility of philosopher-kings (Kuttner 1997: 138-139)."

Another consequence of this step-by-step process of adjusting institutional arrangements is an implicit shift from a private-market model towards a social-insurance model.[11] Looking at the aggregate of the behavioral assumptions and the degree of regulation necessary for the managed competition model to work, it appears that Enthoven has left the private-market model and shifted to the social-insurance model developed by European countries in the 19th and 20th century.

Social health insurance implies that government determines the entitlements and mandates participation for all or a part of the population. Moreover, it requires substantial regulation for access rules and cross-subsidization between population sub-groups in order to safeguard universal access to health care. In those systems, governments play the role of ´sponsors´ on behalf of the common good. Based on their legislative power, they set the rules of social insurance and of competition; they mandate insurance for certain population groups, and impose payment schemes with cross-subsidies between high income and low income groups in order to protect incomes and ensure fair sharing of the financial burden. The private market cannot fulfill those regulatory and redistributive functions. Once such rules are in place, it does not matter very much whether a system like that is called public or private (Okma 2000).

However, we do not argue that the model of managed competition does not provide an interesting approach to the problem of increasing effectiveness and efficiency of publicly funded goods and services. Most if not all OECD countries face the problem of reconciling the social goals of universal access and fair distributions of the financial burden with the need to improve the efficiency and rein in the growth of public spending.

3 Managed Competition in the Netherlands

Although the is no clear direct link between Enthoven's proposals and the reforms of the Dutch health care system since 1989, there are several elements suggesting at least a strong similarity of the target system as well as of incentives and instruments of the reform. The Dutch reform efforts have been extensively discussed (van de Ven 1993; Schut 1995b; Okma 1997; Robinson 1998). We compare the elements of the reforms with the managed competition model as outlined above, especially with regard to the differences between the original model and the adjusted model in the Netherlands. After

[11] Enthoven framed his Consumer Choice Health Plan in an ideological climate of anti-governmentalism in the USA of the late 1970s (Okma 2000).

that, we evaluate the effects of the adjusted model of managed competition in the Netherlands, focusing on effects on markets of health insurance and provision of care as well as on distributive effects.[12] Finally, we discuss the reasons for non-intended, and sometimes undesired effects.

3.1 Dutch health care reforms: Model of Managed Competition Put into Practice?

Comparing the expected outcome of the managed competition model to the aims of the health care reforms proposed by the so-called Dekker-commission of 1987, there are significant similarities. The reforms sought to increase the efficiency of the system while maintaining a high standard of equity and universal access (Ministry of Welfare Health and Cultural Affairs 1988). Costs were to be controlled partly by market forces and partly through market regulation. Although the reform process proved to be more difficult than expected, a fair amount of the original proposals were actually implemented (Okma 1997). The instruments and incentives reveal important similarities to Enthoven's managed competition model. This is true although neither the authors of the Dekker-report nor the Dutch government labeled their reform plans managed competition. This label was added in a later stage by Dutch health economists who discovered the surprising similarities to the managed competition model (van de Ven 1990; Schut 1992; Schut/Hermanns 1997).[13] At second thought, however, such similarity is less surprising. There are, after all, only that many models for funding and organizing health care. Any given health care system may be described in terms of its particular mix of funding (out of general taxation, social and private health insurance and out of pocket payment), and contracting arrangements (integrated systems; public and private contracting, and reimbursement) (OECD 1992; OECD 1994). Most OECD countries have public funding as its main source. In many cases, there is a shift towards a public or private contracting system. Within the boundaries of such parameters, there are few options for improving efficiency while safeguarding universal access, ranging from strict centralized government control to the introduction of competitive elements in the system.

Table 2: Actors, Incentives and Instruments in the adjusted Model of Managed Competition in the Netherlands

[12] In order to set apart the original managed competition model from the content of the Dutch health care reforms we refer to the latter with the term *adjusted model of managed competition*.

[13] Similar to Enthoven himself the reforms first were labeled Regulated Competition, later on Workable Competition and finally managed competition.

Actors	Incentives	Instruments
Insurers	Financial risks caused by prospective budgets; need to gain strategic market positions; need to set nominal premiums	Risk selection; improving administrative efficiency; selective contracting self-employed health professionals and institutions; own and manage health facilities; negotiating prices, tariffs and volume of health services
Providers	Selective contracting of insurers, free choice of patients	Create market power, regional monopolies; attract media attention; negotiate contracts with insurers on prices, volume, and organization of services; improve quality
Consumers	Differences in flat rate premiums, quality of services, supplemental insurance, collective contracts	Consumer information, direct internet access; attract media attention; exit: change provider and insurer (or threaten to change)
Sponsors (government and other regulatory bodies)		Competition law; basic rules of social insurance (coverage, cross-subsidy schemes, eligibility and access rules)

Analyzing the incentives of the current health care system, the financial risk for sickness funds in the Netherlands still is quite low. It gradually increased form 3 percent in 1993 to 35 percent in 1999 (but is expected to further increase in the near future). The sickness funds receive a budget according to a prospective risk-adjustment formula including age, sex, region, disability and employment status. There is a standardized benefits package for consumers. The high level of entitlements has been reduced by de-listing dental services for adults, homeopathic drugs and a few other services. Patients pay such excluded services out of their own pocket, or may seek coverage by voluntary supplementary insurance. Insurers have free market access. This is true not only for new market actors, but also for traditional sickness funds who used to be restricted to one region. Market access for providers is more restricted. There still are supply controls by government, and providers have only limited power over the capacity of professional education. The national competition authority (*Nederlandse Mededingingsauthoriteit*, NMa) established in 1998 is also responsible for the health care sector[14]. Consumers are free to change sickness fund once per year, but they have little incentive to do so as the level of nominal premiums they pay directly to their funds still is very modest. In general, cost sharing is still very limited. A more extensive cost-sharing scheme was abolished after two years, because of its high administrative costs. There is no sponsor in the Netherlands, but government fulfills the main sponsor functions on behalf of the insured (framing competition law; providing consumer information; determining the eligibility criteria and coverage of social insurance).

[14] In April 2001, the NMa announced steps to prohibit the general tariff agreements betwen health insurers and general practitioners.

Another important difference with the managed competition model lies in the extent of competition. Only a part of the Dutch health care system is subject to this kind of regulation. A large segment of the population, about 40%, carries private health insurance, and the supplementary insurance covers less than 5% of all health expenditure. The 1994 coalition government abolished the plan of its predecessors to integrate social and private health insurance. The funding system continues to have a fragmented character, since catastrophic risks are covered by a separate long term care insurance for the entire population. For this care, providers have largely grouped into regional monopolies. Altogether, it can be argued that only around 40 percent of all health care spending is subject to managed competition.

The competition instruments and incentives are only partially developed. Health insurers only face very limited price competition (Schut/Hassink 1999). Around 90 percent of health insurance contributions is income-related. This premium is regulated by the health authorities. It is the same for all insurers and is distributed according to the risk-adjustment formula mentioned above. The revenue generated from risk-adjusted budgets does not cover all expenses of the sickness funds. The funds have to finance around ten percent of their budget by nominal premiums the funds set themselves. Those nominal premiums may differ between sickness funds. Theoretically, this nominal premium is supposed to signal relative efficiency of the sickness funds to the consumers, but in practice this price signal is weak because the amounts are modest. Price competition between providers is even more limited. The (maximum) tariffs for ambulatory care services are fixed by the Central Tariff Authority (*College Tarieven Gezondheidszorg, CTG*) within the boundaries of global budgets determined by the Health Ministry. Insurers and providers may contract at prices below those maximum tariffs, but not above them. Also, hospital budgets are fixed by the Tariff Authority. Insurers are able to contract selectively with providers of ambulatory care, e.g. general physicians, specialists and physiotherapists. They still are obliged to offer contracts to all hospitals and other health care facilities. Vertical integration of insurers and providers is very limited. Since 1998, insurers are allowed to manage and own pharmacies but only a few have actually done so. Health insurers are only free to compete with each other about the range of additional services not included in the basic coverage set by law.

3.2 Effects on the Insurer Market

After the introduction of competition between sickness funds in 1990, the health insurance landscape changed significantly. A process of formal mergers between sickness funds and informal cooperation between sickness funds and private insurers sharply reduced the number of insurers (de Roo 1995; Schut 1996). Especially sickness funds were very intent on defending their regional market shares by merging with their competitors.[15] Furthermore, cooperation with private insurers was necessary,

[15] It is important to note that before 1990 sickness funds were granted regional monopolies. Thus, there was no competition at all.

because sickness funds are not allowed to offer supplementary insurance. At the same time they are legally prohibited to merge with private insurers.[16] The number of both sickness funds and private insurers dropped by more than a third, even including new market entrants (Schut/Hassink 1999). This first wave of concentration led to large market shares for the biggest funds. The seven biggest conglomerates of sickness funds and their private partners control around 80 percent of social health insurance and around 70 percent of private health insurance (van den Hauten 1999). This development is even more significant on the regional level. According to a spokesperson of the National Competition Authority the regional market share of the respective market leader ranges at 70 percent and above. Thus, formally regional monopolies are abolished but in fact they are still in place. Individuals can choose, but the impact is quite low (Greß 2000; Groenewegen/Greß 2000).

The 1990s not only witnessed a major restructuring of the market, but also a significant increase of competition on the market for collective contracts. After the privatization of social insurance schemes for sickness pay and disability insurance private insurance companies offer a whole range of new products. Consequently, this increased the cooperation of public and private insurers and even with financial conglomerates. These conglomerates are able to offer employers and their employees integrated insurance including social and private health insurance and labor management services.

Although at least competition for collective contracts has increased, price competition between sickness funds at the moment does not provide an sufficient incentive for consumers to switch health insurers. The income-related contribution are fixed nationally, while nominal premiums differ only around 100 NLG per year per insured.[17]. Furthermore, sickness funds did not convince consumers that they invested in the quality of health services and administrative efficiency. However, administrative services such as opening hours, accessibility and waiting list management did improve significantly since the introduction of managed competition. Several studies conclude that only one about one percent of all insured did indeed switch from one sickness fund to another annually (Hoykaas/Klaasen 1997; Kalshoven 1999; Schut/Hassink 1999). Sickness funds do not suffer from the lack of competition for consumers. They are still able to build up their financial reserves. Especially supplementary insurance proved to be quite profitable.

The Dutch health insurance market underwent significant change since the first steps of implementation of the adjusted model of managed competition. However, the model assumes insurers to compete with each other via price, quality and range of services without having permanent monopoly power. At the moment, we have to conclude that insurers do not follow this behavioral

[16] Informal cooperation is almost as far reaching as formal merging. In some cases even the same persons are responsible for the management of the sickness fund and the private insurer. However, legally the companies have to remain separate.

[17] With regard to the importance of price for the choice of consumers, Germany differs quite significantly form the Netherlands (see 4.2)

assumption of the model. The same is true for the assumption that consumers exercise their right to choose between insurers.[18]

3.3 Effects on the Provider Market

Following the analysis of the changes in the insurer market, we now turn to the behavior of providers of health care. Like other countries of Western Europe, Dutch health care has a large number of self-employed professionals, hospitals and other health facilities offering a wide range of medical care and related services to the population. Most facilities are independent, not-for-profit organizations, usually owned and managed by religious or groups or charitable foundations. Those ideological roots have become less visible today but the nonprofit, independent legal status remains dominant model. There are few state institutions. Private clinics are allowed on condition they closely collaborate with existing hospitals. In the last decade, this organization and management underwent major change. Almost all sectors of health care saw rapid processes of vertical and horizontal integration by formal mergers or the development of informal networks between professionals and institutions. Hospitals and mental care institutions increased the scale of their operations; retirement homes, nursing homes and home care organizations integrated their organizations to improve the coordination of their services. There is little evidence that those changes have increased (or decreased) the quality or efficiency of services. Some studies suggest that strategic considerations and the desire to become a dominant actor in the regional market were more important motivations that concerns about the patients.

Moreover, there has been little change in the contractual relations with the health insurers. Although empirical data on this subject is quite limited, it seems to be obvious that sickness funds have hardly used their power to contract selectively with providers. Insurers and providers are still negotiate collectively on a national and regional level. There is some exclusion of providers with severe quality problems although this is not a new development since the introduction of managed competition. Several interview partners from sickness funds, provider organizations and independent experts confirm this analysis. Furthermore, several studies conclude that there is almost no culture of bargaining on the micro-level (Ziekenfondsraad 1999). The expected increase in competition is simply not there (Raad voor de Volksgezondheid en Zorg 1998). Furthermore, the same is true for the degree of price competition between providers. The chairman of the Health Tariffs Authority COTG concludes that there are no contracts with prices below maximum tariffs (Scheerder 1999).

In order to broaden the empirical basis about the perception of competition by one group of key market actors, the Center for Social Policy Research at the University of Bremen conducted a study with Dutch general physicians (GPs). In Dutch health care, GPs act as gatekeepers for patients. They

[18] Theoretically, even the „shadow of exit" may be sufficient as incentive for sickness funds to act in the intended way. We assume that the threat has to be support by a considerable degree of actual exits of at least two to five percent of the insured.

have strong and long lasting ties with their patients as well as with their colleagues. They were asked how strong they consider the influence of competition on their own area of work and on other areas of Dutch health care. Table 3 3 shows that around 95 percent of all respondents consider the influence of competition on both areas as weak or not perceptible.

Table 3: Perception of competitive pressures by Dutch general practitioners

How strong do you consider the influence of competition…	Very Strong	Strong	Weak	Not Perceptible
…on your own area of work?	0,4	2,6	51,3	25,2
…on the Dutch health care system	-	5,1	82,7	12,2

Source: Lukas-Nülle 2000. N=497

The effects or more precisely the non-effects on the provider market confirm the assumption that the third behavioral assumption of the managed competition model so far has not been acted upon by market actors. There has been hardly any selective contracting with health providers. That means they had little or no incentives to improve the efficiency and the effectiveness of their services.

3.4 Effects on Equity

One of the most appealing features of the managed competition model for social health insurance is that it is supposed to avoid non-desired effects on equity. We evaluate this assumption by analyzing the effects of cost sharing and the exclusion of services from social insurance. Furthermore, we ask whether the sickness funds did engage in risk selection rather than improving the quality of health services. Finally, we assess the overall impact of incentives and instruments of managed competition on income distribution.

Cost-sharing is supposed to increase cost-consciousness of consumers and decrease overconsumption. The Dutch government introduced a cost-sharing scheme in 1997. It included a co-payment of 20 percent of all costs for medical services except visits to the GP. For hospital services there was a small nominal payment. However, the annual amount of co-payment was limited to 200 NLG, in for some groups of insured even to 100 NLG. At the same time the nominal premium that all insured pay directly to their sickness fund was reduced by 110 NLG for all insured. According to a government statement the target of this co-payment scheme was twofold. In addition to he reduction of moral hazard, the consumers were supposed to carry a larger share of health care expenses (Delnoij, Groenwegen et al. 2000). Only two years after its implementation, the scheme was abolished, because of its high administrative costs. In 1997, the scheme incurred a loss of more than 300 million

NLG.[19] Except for one pharmaceuticals, there were no significant effects on the utilization of services by consumers. Consumption by lower income groups dropped much more than that of higher income groups. This confirms international research suggesting that modest cost-sharing schemes do not work while schemes that are more extensive almost certainly affect lower income groups much stronger than higher income groups (Newhouse/Insurance Experiment Group 1993).

Exclusion of services from the basic benefits package increased options for insurers to compete via supplementary insurance. In 1991 the Dutch government asked the so-called Dunning-Commission to recommend a procedure to define what services should be excluded from the basic health insurance coverage. The commission suggested a system of sieves to determine which services were to be excluded from the sickness fund scheme. The Dutch government never really used this procedure (van der Grinten/Kasdorp 1999). However, some services were excluded, most importantly dental services for adults in 1995. One study analyzed the use of dental services after the exclusion. Respondents were grouped according to insurance status (public or private) and according to the existence of supplementary insurance (yes or no). While there were only minor changes in other groups, the use of dental services of people with public insurance and without private supplementary insurance for dental services dropped dramatically (Friele, Bakker et al. 1996). Since some 95 percent of sickness fund insured have opted for supplementary insurance, effects probably are limited. Unfortunately, there is no information on the coverage for dental services only, so that it is difficult to assess the overall effect of the exclusion of dental services from the basic package. However, it should be obvious that a more extensive exclusion of services would lead to a much more disparate utilization pattern.

One of the most important assumptions for the functioning for the managed competition model (adjusted or not) is that sickness funds do not focus their attention on preferred risk selection rather than on improving health services for their insured. Risk selection is defined by trying to attract good risks and by trying to deter bad risks.[20] Theoretically, insurers are able to identify subgroups of insured within the risk groups the risk-adjustment formula defines. Dutch sickness funds have tried to improve their risk structure by selective marketing in certain regions and by collective contracts with employers. Following that development the Dutch health ministry has improved the adjustment formula by including urbanization and employment status. There is a lot of research to improve the formula by integrating diagnostic information in order to close the gap between the knowledge the sickness funds have about their insured and the information included in the formula (Lamers 1998; van Barneveld, Lamers et al. 1999). Although theoretically risk selection may be profitable for sickness funds in the short run, in the long run costs due to negative publicity in the media have to be

[19] There were revenue losses due lower premiums of 871 mill. NLG and administrative costs of 50 mill. NLG on the one side and revenue through co-payments of 600 mill. NLG on the other side.

[20] Good risks are insured with health care expenses under the risk-adjusted payment the insurers receive for them. Bad risks are insured with expenses over the risk-adjusted payment.

considered. Consequently, at the moment there is no evidence of systematic risk selection of Dutch sickness funds.

There has been extensive research about the influence of reform elements on income distribution. Researchers concluded that several reform elements such as nominal premiums, cost sharing and supplementary insurance have a regressive effect.[21] However, other reform elements counteract this regressive effect. For example, the integration of social and private health insurance would extend the income-related payments over the entire population. And, while implementing cost sharing the government also lowered nominal premiums. Furthermore, the extent of supplementary insurance and of nominal premiums is quite low. In balance, the effects of managed competition on income distribution are only slightly regressive.

3.5 Reasons for Non-Intended Effects

It is clear that there is a large gap between the expected results of managed competition in the Netherlands and the changes that really took place. Actors did not behave according to the three behavioral assumptions of the managed competition model. It seems that the expectations of the outcome of the adjusted model were not very realistic. As Evans has argued for many years, aggregate health expenditures are, by definition, equal to aggregate incomes of health professionals and others (Evans 1997). There is no reason to assume that health professionals or others are willing to contribute to cost savings by giving up income voluntarily. And since there is ample room for supply-induced demand, price controls or spending limits of some sort usually result in increased volume or shifts in expenditure elsewhere particularly in markets where the affected parties control a scarce resource, e.g. the number of physicians or very specialized technology. Understanding such reactions helps to understand the non-intended effects of the adjusted MC model in Dutch health care much better.

Within the Dutch institutional and cultural context, we identify four central conflicts or trade-offs as reasons for this development. First, there is a conflict between cost control and competition. Second, there is a conflict between competition and cooperation in the health field. Third, there are conflicts between distributive targets and competition and fourth between political rationality and competition. Taken together, these conflicts render managed competition in the Netherlands, at least for the moment, to be a theoretical model rather than a viable concept.

A conflict between cost control and competition ensues from government policy which is rather ambiguous. Certainly, the government postulates competition and increased responsibility of actors such as insurers, providers and consumers. However, much policy is actually focused on cost control

[21] Regressive means that the burden for lower income groups is higher than for higher income groups. Progressive means that the burden for lower income groups is lower than for higher income groups. If the burden for all income groups were the same the effect would be proportional.

and regulation of supply rather than a shift of responsibilities from government to other market parties. This also means that as of 2001, market actors have few incentives and instruments to act according to the behavioral assumptions of the MC model. Insurers still face limited financial risk, they are not allowed to contract selectively with hospitals. Furthermore, insurers are able to compete about the nominal premium only and the share of supplementary insurance is quite low. More importantly, capacities of some categories of providers are quite tight. According to interviews with sickness funds managers they are quite happy to be able to contract with almost any GP, because supply is extremely short. Only at the end of 2000, the Health Ministry announced it would expand the capacity of medical schools.

The second conflict is caused by a contradiction between the cultural and institutional context of primary care in the Netherlands and competition. Traditionally, ties between patients and GPs are much stronger than ties between insurers and insured. Consumers rather change their insurer than their physician. Accordingly, insurers are afraid of losing their insured if they stop contracting certain GPs. Since high market shares are one of the most important strategic targets of all sickness funds they try to avoid the loss of insured. Next to the close relationship between GPs and their patients there is strong local and regional cooperation between GPs, encouraged by the Ministry of Health. Local groups of physicians organize night and emergency services, regional groups meet to discuss prescription patterns as well as quality assurance issues. For sickness funds, these local groups of GPs are the smallest unit to contract with. Existing groups of GPs may be unwilling to welcome newcomers in their area, and sickness funds are hesitant to contract individual physicians who may not have access to shared arrangement for night calls.

The conflict between distributive targets and competition so far has been well balanced in the Netherlands. Although cost-sharing and exclusion of services from the basic benefits package are an integral part of the managed competition model, they have not been widely used. Reasons range from negative income effects of cost-sharing to the impossibility to define a consensual procedure for the exclusion of health services. Furthermore, Dutch governments have been keen to avoid preferred risk selection by sickness funds. The introduction of the prospective budgets for the sickness funds based on a risk-adjustment mechanism is based on a step-by–step implementation, with careful adjustments to prevent risk selection by the funds. Almost all measures affecting incomes negatively provoked strong public reactions and forced governments to take compensatory measures or to exempt certain population groups. They realize the trade-off between the consistent application of the Managed Competition model and the need to limit distributional effects. Substantial cost-sharing schemes or de-listing of services may compromise access to health care services, especially for lower income groups. This has become clear not only from international research but even from experiences in the Netherlands. Additionally, higher levels of cost-sharing and supplementary insurance as well as a higher share of nominal premiums result in a more regressive income distribution. Dutch policy makers have shown themselves aware of such trade-offs.

Finally, there is a conflict between political rationality and competition. For different reasons, including technical complexities of designing the prospective budget model for sickness funds, the reform was implemented step by step. At the beginning of this implementation process there seemed to be strong political support by political parties and interest groups. But the gradual implementation also left a lot of room for anticipatory behavior of market actors (Commissie Willems 1993). Over time, political consensus about the reforms weakened considerably (Okma 1997). Facing mounting opposition, government slowed down the implementation process and abolished several key elements of the reform. This compromised the consistency of the adjusted MC model. The tensions described above illustrate the importance of cultural and contextual factors in the shaping and outcome of social policies.

4 Managed Competition – Policy Conclusions for Germany and The Netherlands

In this section we compare the institutional framework of Germany and the Netherlands, and analyse how the differences in this institutional setting may affect the adjustment of the managed competition model in both countries. Further, we address possible policy options as a consequence of institutional deficiencies. However, since we are aware of the pitfalls of comparing different international health care systems, we start this section with a short discussion of these pitfalls.

4.1 Pitfalls of Comparing Health Care Reforms

> „… Learning about other countries is rather like breathing: only the brain dead are likely to avoid the experience (Klein 1995: 96)."

When comparing health care systems and especially health care reforms, there are at least four pitfalls which should be avoided. First, it should be differentiated between *learning about* other countries from *learning from* their experience (Marmor 1995) Learning about a country is about collecting information, learning from a country is about reflecting on that information. Rather like health care itself, supply of information seems to create its own demand. Obviously policy makers are attracted to other countries as much as scientists to laboratories. New policy theories or techniques can be tested. Unfortunately, no two countries are so much alike as laboratories in scientific experiments. Therefore, we have to include the institutional and even cultural context of these countries into our analysis (Klein 1995).

Secondly, it is easy to assume that similar terms have the same meaning in different countries when they are used frequently in all of them. However, in practice their use reflects different meanings of which the foreign observer may be unaware (Ranade 1998). The term managed competition is a good example for this pitfall. Consequently, we try to differentiate between the theoretical model of

managed competition as originally developed in the context of private health insurance markets by Enthoven and the implementation of managed competition in the social insurance environment of Germany and the Netherlands. These three forms of managed competition are quite different with regard to content and institutional framework.

The third pitfall can be characterized as follows:

> „…Most policy debates in most countries are parochial affairs. They address national developments in a particular domain … and embody conflicting visions of what policies the particular country should adopt … when cross-national examples are employed in such parochial styles, their use is typically part of policy warfare more than a policy understanding (Marmor 1986: 617)."

In order to avoid becoming part of policy warfare instead of policy understanding, in this article we try to follow a difficult path. This path meanders somewhere between economic and political analysis, individual curiosity, impartial academic analysis and the necessity for practical policy consequences.

Last but not least, the fourth pitfall is relevant especially for the analysis of health care reforms and refers to the "fuzziness" of reforms. The causes of this fuzziness lie not only in ordinary mistakes and in misunderstandings, but also in the vagueness of the definition of national policies.[22] In order to minimize the danger of ordinary mistakes and the vagueness of policy measures it is important no to rely solely on secondary sources. If possible, the use of primary sources and the consultation of experts should be added (Kroneman/van der Zee 1997).[23]

4.2 Actors, Incentives and Instruments in Germany and in the Netherlands

Table 4 presents an overview of some of the main institutional characteristics of the German and Dutch health care systems. Both systems show strong similarities, especially with regard to underlying values (Kirkman-Liff 1991).

[22] The second kind of fuzziness may even be used deliberately in order to create broad support for policy measures, in other words: „governing by magic and managing by speech (Kroneman/van der Zee 1997)."

[23] An obvious sign for the awareness of this pitfall is the fact that this article is written by Dutch and German co-authors.

Table 4: Underlying values and institutional characteristics of the German and the Dutch health care system

	Germany	Netherlands
Underlying Values	Solidarity (Mechanism to provide cohesiveness)	
	Mutual obligations (Responsibility of individuals)	
	Share responsibility for shaping and outcome of social policies	
	Self-Regulation	
	Health care as one of the corner stones of social protection	
Funding of Health Care	Social Health Insurance (90%) via income-dependent contributions	Social Health Insurance (65%) via income-dependent contributions and nominal premiums
	Private Health Insurance (10%) via risk-dependent premiums	Private Health Insurance (35%) via risk-dependent premiums
	Separate peak organizations	United peak organization
Delivery of Health Care	Public, semi-public and private providers	Public, semi-public and private providers
	Strong peak organizations of providers act formally as contracting partners (national and regional level)	Strong peak organizations of providers act informally as contracting partners
Regulation of Health Insurance	Federal government, regional governments, several quasi-public agencies, extensive involvement and consultation of employers and employees (peak organizations)	Central government, competition authority, tariffs authority, other quasi-public agencies
Regulation of Health Care Delivery	See above plus professional organizations	See above plus professional organizations and consumer organizations

Source: based on Kirkman-Liff 1991; Centraal Planbureau 1997

We try to assess how the actors, incentives and instruments of the model may fit to the real world in both countries. There are several important differences between the model and the *status quo* both in Germany and the Netherlands. The market actors consist of insurers, providers and consumers. There is no sponsor, although some of the tasks of the sponsor are fulfilled by government or government agencies. Sickness funds are deemed to act on behalf on their insured. In Germany, there are several agencies that monitor sickness funds in order to prevent risk selection. In both countries, competition authorities try to prevent anti-competitive behavior and consumer organizations gather information for consumers in order compare sickness funds. However, the enrollment process is managed by the sickness funds themselves. There is no central purchasing agent similar to the sponsor in the managed competition model.

In spite of strong similarities of the basic features of the health care system in both countries (see Table 4), there are also important differences. First, sickness funds in Germany bear a higher risk for

their expenses. In theory, they are fully responsible for their losses; in practice there is quite a high volume of transfers between branches of sickness funds.[24] In the Netherlands, sickness funds have to bear only 35 percent of their financial risk. Equally important, secondly market access especially for physicians is much more difficult in the Netherlands than in Germany. In Germany, the right to choose a profession is part of the constitution. In contrast, it is very difficult to become general physician or even specialist in the Netherlands.[25] With regard to other incentives of managed competition, they are more developed in the Netherlands. Sickness funds are budgeted by a system of risk-adjusted capitation payments. The formula for risk-adjustment is more comprehensive than in Germany and has been improved significantly since its first implementation.[26] In both countries there is a standardized benefits package for consumers, but market access for insurers is much better in the Netherlands than in Germany. Both countries try to implement effective competition policy in health care, the Netherlands have established a competition agency which is very eager fight anti-competitive behavior of providers and insurers. Free choice of insurers for consumers is limited in Germany, while there are no limits in the Netherlands.[27] Cost-sharing for consumers is evident in both countries, although the degree still is very small.

[24] For example, almost every state (Land) in Germany has one Ortskrankenkasse (local sickness fund or AOK), which is legally separate from the AOK in other states. However, especially AOKs in western states do support AOKs in eastern states who have to fight high premiums and high deficits. Without this cross-subsidization some AOKs were bankrupt.

[25] Barriers range from tough ceilings on the number of students that are implemented by government to limited access to specialized education which is a domain of physician organizations. Both actors used to be interested in tight capacities. Now, the government tries to increase capacities, while the physician associations are still very reluctant to do the same.

[26] There are even plans to include diagnostic information in order to increase the predictive value of the formula even more.

[27] Especially sickness funds established by employers are not required to open enrollment for non-employees in Germany. In the Netherlands, they are.

Table 5: Actors, Incentives and Instruments of Managed Competition in the Model, in Germany and in the Netherlands

	MC Model	Germany	Netherlands
Financial risk for insurers	High	Medium	Medium to Low
Risk-adjusted capitation for insurers	Refined	Coarse	Slightly Refined
Standardized basic benefits package for consumers	Yes	Yes, but very high level	Yes, but high level
Free market access for providers	Yes	Limited	No
Free market access for insurers	Yes	No	Yes
Sponsor	Yes	No	No
Effective competition policy	Yes	No	Starting up
Free choice of sickness fund for consumers	Yes	Mostly	Yes
Cost-sharing for consumers	High	Medium	Low
Price competition insurers	High	High	Low
Price competition providers	High	Zero	Almost Zero
Competition on the range of services insurers	High	Almost Zero	Low
Selective contracting of providers	Possible	Almost impossible	Possible only for self-employed professionals
Vertical integration of insurers and providers	Possible	Impossible	Only for pharmacies

With regard to instruments of managed competition, both countries have significant deficits, although in separate areas. In Germany, there is very strong price competition between insurers, since the income-dependent premium is determined by each sickness fund individually and differs from 11.2 percent to 14.9 percent of gross income.[28] Assuming an average income of 2500 Euro a month, the difference between the lowest possible premium and the highest possible premium amounts to more than 1000 Euro annually. Since the income-dependent premium in the Netherlands is fixed, only the nominal premium is determined by individual sickness funds. Premium differences amount to around 50 Euro annually. Accordingly, in Germany around tree to five percent of all insured change their sickness fund every year. Estimations in the Netherlands range under one percent.

However, managed competition in Germany is also lopsided competition. Prices and volumes of services are still determined collectively and sickness funds are not allowed to contract with individual

[28] As of June 2000. Employers and employees each pay 50 percent of this premium. Differences in premiums are not only due to differences in administrative efficiency but primarily due to incomplete risk-adjustment.

providers. Vertical integration of insurers and providers is prohibited legally and sickness funds are not allowed to offer supplementary insurance. In contrast, Dutch sickness funds formally have more possibilities to act competitively. They are allowed to contract selectively with individual providers such as physicians and physiotherapists. Price competition between providers is possible, although there are maximum tariffs. Sickness funds are able to offer supplementary insurance via private insurers they cooperate with quite closely.

4.3 Policy Consequences

After comparing the institutional status quo of managed competition in Germany with the requirements of the model and after taking into account the experiences of managed competition in the Netherlands we derive the following policy consequences. The application of these consequences assumes that after major adjustment allowing for the context of social health insurance Enthoven's managed competition model is a viable concept for the reform of European social health insurance systems.

Experience in the Netherlands has shown that managed competition not necessarily has to include a sponsor as an additional market actor. However, there have to be institutions that have to take over tasks ascribed to the sponsor. In a European context, these institutions often are already existent. It remains to be seen if the enrollment process can be conducted by the sickness funds themselves or if an intermediary institution should manage it. This probably depends on the extent of direct risk selection strategies funds apply during the enrollment process. In the Netherlands, these strategies were almost non-existent. Furthermore, experience in Germany shows that self-selection by consumers induced by marketing strategies of the insurers is an important reason for switching to another fund. This behavior cannot and probably even should not be influenced by a sponsor. It is more important to have an efficient and effective mechanism for risk adjustment.

Without effective risk adjustment incentives for competitive behavior of insurers are incomplete. Comparative advantages should be a result of efficient management of administrative resources and of the health field itself, not of a good risk structure. This problem is relevant especially in Germany. A step-by-step improvement of the risk adjustment system is a prerequisite for the successful implementation of managed competition. This conclusion is supported by extensive research in the Netherlands and plans to include diagnostic information into the formula for risk adjustment.

Following the implementation of effective risk adjustment, sickness funds have to be responsible for their financial risk. This is a very powerful incentive to increase competitive pressure. For Germany, in the long run this results in the end of cross-subsidization between sickness funds. In the Netherlands, the share of expenses sickness funds are responsible has to be increased significantly. Of course, full financial risk also means full responsibility for contracts with providers. Sickness funds in both countries have to be able to influence price, quantity and quality of health services. Accordingly, collective contracts with all providers in Germany (ambulatory and stationary care in theory and in

practice) and with most providers in the Netherlands (ambulatory care not in theory but in practice and stationary care in theory and in practice) have to be abolished. Even formal integration between insurers and providers is an option.

Other important prerequisites of managed competition consist of a standardized benefit package for consumers, of unrestricted choice between insurers for consumers, of free market access for providers and consumers and of effective competition policy. We consider it unlikely that in Germany, Holland or other countries with a long tradition in social health insurance there will be political support for a drastic reduction in entitlement by delisting. However, there is rapid growth of new health technologies and the borderlines between medical care, social support and technologies aimed to improve the quality of life are fading. Such innovations may add to the growth of supplementary insurance if insurers are willing to offer coverage to interested consumers. Further, a systematic application of scientific knowledge to medical practice such as medical technology assessment and related activities may reveal that the cost effectiveness of current practices is too low to justify collective funding. Next, increasing consumer incomes and consumer expectations may create new demand for health-related goods and services (Light 2000). If the current sickness funds are allowed to expand their activities beyond the traditional borders of social health insurance, they have an incentive to be more creative.

5 Discussion: Costs and Benefits of Managed Competition

Obviously, a consistent reform of both the Dutch and the German health care systems following the policy consequences formulated above is a quite extensive enterprise. It requires a careful analysis of the probable reactions of the political players in the health field and their possible anticipative behavior. Implementation and maintenance of managed competition is an enormous challenge for regulation and policy makers. That is why in this last section of our article we try to speculate about possible costs and benefits of implementing managed competition in Germany and the Netherlands.

Potential benefits of managed competition for the Dutch and the German health care system first consist of an increase of allocative efficiency by a stronger consideration of consumer preferences. Second, of competitive pressure on insurers and providers supposedly leads to higher administrative efficiency and to more value for money in health services. Third, decisions about new investments in the health care system are improved because market actors have to take into account real costs. This is a prerequisite for increased dynamic efficiency. Ideally, even responsibility for cost control can be shifted from government to market actors. At the same time regulation by government, government-like agencies or a sponsor makes sure that broad access to health services is maintained and that risk selection by market actors is avoided.

Possible costs of managed competition for the Dutch and the German health care system are implementation costs, costs of regulation and transaction costs. Experience in the Netherlands has

shown that the implementation of managed competition is a lengthy and technically complex process. Especially the definition and implementation of the risk-adjustment formula and of the basic standard package proved to be more difficult than expected. Political opposition to several parts of the original reform plans made it necessary to change several key reform elements. Anticipative reactions of market actors made it necessary to adjust regulation frequently.

Obviously, costs of implementation and regulation are the higher, the more anticipative reactions and political opposition occurs. Since a transformation to managed competition threatens the power and market positions of many actors, these kind of costs can be expected to be quite high. The amount of transaction costs in managed competition obviously is higher than in a system dominated by collective contracts between insurers and providers.[29] Sickness funds have to invest heavily into contract management and quality monitoring. Experience in the Netherlands shows that providers are reluctant to contract individually if they have good working relationships with fellow physicians. Transaction costs of providers probably would be lower in Germany, since most physicians work individually rather than in groups.

It is probably impossible to state a prognosis if costs or benefits of managed competition would be higher in both countries examined. There are three arguments that point toward a situation where costs would be higher than benefits. First, there are some serious theoretical deficiencies within Enthoven's model with regard to economic foundation. Second, the model never has been implemented fully and successfully. Finally, costs are quite certain to occur while benefits seem to be more remote. On the other hand, policy makers and policy advisers in both countries feel to have a lack of alternatives, since regulation by government proved to be not very successful. More importantly, experience with the implementation and regulation of managed competition grows constantly while more countries try to implement their version of the model. If policy makers can use these experiences in the Dutch and the German institutional context, the success of managed competition depends on the ability and on the willingness of market actors to increase the ratio between benefits and transaction costs. This process will take some time, even when applying a very optimistic scenario.

[29] Of course there are also transaction costs for consumers when they decide about switching to another sickness fund (gathering information, comparing premiums and services, writing letters, etc.).

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