Towards Neo-Bismarckian Health Care States? Comparing Health Insurance Reforms in Bismarckian Welfare Systems

Patrick Hassenteufel and Bruno Palier

Abstract

Germany, France and the Netherlands all have specific ‘Bismarckian’ health insurance systems, which encounter different and specific problems (and solutions) from those of national health systems. Following a relatively similar trajectory, the three systems have gone through important changes: they now combine universalization through the state and marketization based on regulated competition; they associate more state control (directly or through agencies) and more competition and market mechanisms. Competition between insurers has gained importance in Germany and the Netherlands and the state is reinforcing its controlling capacities in France and Germany. Up to now, continental health insurance systems have remained, however, Bismarckian (they are still mainly financed by social contribution, managed by health insurance funds, they deliver public and private health care, and freedom is still higher than in national health systems), but a new ‘regulatory health care state’ is emerging. Those changes are embedded in the existing institutions since the aim of the reforms is more to change the logic of institutions than to change the institutions themselves. Hence, structural changes occur without revolution in the system.

Keywords

Welfare state; Reforms; Health care system; Health insurance

Introduction

The specificities of health policies – as against welfare policies in general – have often been remarked on, because of the role of health professionals (especially doctors) on the one side and of the medical industry on the other. The collective protection of risks and the promotion of solidarity are not the only policy issues in the health care sector; professional and economic issues also play a great role. This is why ‘health care politics are more than a subset of welfare politics and the health care state is more than a subsystem of the welfare state’ (Moran 1999: 4).

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Despite these specificities, our purpose here is to show that it is highly relevant to analyse health policies as an important component of Bismarckian welfare systems for three main reasons. First, health insurance is historically at the core of these systems. In Germany, mandatory health insurance – created in 1883 – was the first social insurance to be established. In France the social security system is still identified with the health insurance system: for most French people sécurité sociale signifies public coverage for their health expenses. Second, the various systems of health insurance share some very important Bismarckian traits: access to health protection based on work, financing based on social contributions paid by employee and employer, administration by para-public structures governed by social partners: the sickness funds. Hence health insurance systems can clearly be distinguished from the national health services characterizing social democratic and liberal welfare states. Third, it is these institutional similarities which help explain the common problems and trajectories of reform since the end of the 1970s.

We will be dealing with the following questions in this article. What explains the common trajectories of health care reform in Bismarckian countries? How far are the reforms really changing the health insurance systems? Is there a growing realignment with national health systems? Are the changes blurring national differences between Bismarckian health insurance systems?

In order to address these issues, we will analyse three cases: Germany, France and the Netherlands. The first two countries represent the two main examples of health insurance systems in Europe but they also have some important differences: the French system is far more centralized and controlled by the state than is the German one, which represents the most typical Bismarckian case because of its historical origins and the greater autonomy of the sickness funds (Bandelow and Hassenteufel 2006). The Dutch health protection system is not strictly Bismarckian because of the existence of a first universal component (AWBZ), created in 1967, which is partly financed by taxes and covers mainly long-term care and mental health care. However, the second component clearly has Bismarckian characteristics: this compulsory (for 65 per cent of the population) health insurance system (ZFW), created in 1941 and financed by contributions, represents the biggest part of health risk coverage in the Netherlands.

The article is organized in three sections. The first section provides a general overview of the characteristics of health insurance systems compared to national health services. The second reviews the different aspects of cost containment policies, corresponding to the retrenchment sequence of reforms and highlighting the role of policy-learning processes. The third examines the structural changes occurring in the post-retrenchment sequence of reforms, which have been dominated by issues of governance.

**Common Features and Problems: Health Insurances Are Social Insurances**

In this section, we contrast the two ways in which health care can be organized, in order to highlight the social insurance traits of health insurance systems.
Main historical characteristics of health insurance systems

The history of health care systems in the developed countries indicates that at various periods all countries shared similar health care objectives (first to aid the sick on low incomes, then to guarantee a substitute income for salaried workers suffering from illness and, for Europeans after the Second World War, to ensure access to health care for all), but that they chose different solutions. These differences originate especially from the types of institutions assuming the cost of health care (the role of the state, of the mutual insurance societies and private insurance companies), from the way in which the health care supply was organized (the importance of public or private hospitals, the role played by general practitioners, etc.) and the way the development of the medical professions had been organized in the past (the importance of the liberal practice of medicine). These differences also reflect the different priorities held by each system: for some, universal health cover; for others the maintenance of liberal medicine, and for yet others the resilience of private insurances.

In Europe, one can find two types of health care systems.

1. The national health systems (Sweden, Norway, Denmark, Finland, Great Britain, Italy, Spain, and in part Portugal and Greece) ensure almost free access to health care for all citizens in order to guarantee universal cover for illness. The supply of health care is organized mainly by the state and funded by taxes. Some of these systems depend on a highly centralized organization (as is the case in Great Britain) while others have decentralized their organization and management (as is the case especially in the Nordic countries).

2. The health insurance systems (Germany, France, Austria, Belgium, Luxembourg, and to a lesser extent the Netherlands, Switzerland, and most of the countries in central and eastern Europe). The supply of health care is partially private (primary or ambulatory health care, certain hospitals or clinics), and partially public (in particular a proportion of hospital services) and most often guarantees the patient’s free choice of doctor, as well as the status of the liberal practice of medicine. Expenses are mainly assumed by the different health insurance funds and financed by social contributions. The French system is centralized while the German and the Dutch systems are more decentralized.

The national health systems generally ensure a large degree of equality of access to health care and relatively low levels of health spending; but they may provide a questionable quality of treatment and are known especially for extremely long waiting lists before access to specialist care might be possible. By contrast, health insurance systems – in which the supply of health care is often plentiful – allow for patient choice, comfort and often quality of care to be guaranteed, but most often at the cost of high health spending, and occasionally inequality of access to health care.

How do health insurance systems traditionally operate? In order to stress the importance of welfare arrangements and institutions for understanding the politics of welfare
reform, we will refer to the four main institutional dimensions – rules of access, types of benefits, financing and management arrangements – in order to analyse how particular health insurance systems operate. We will show (1) how access to the health system is organized; (2) what types of services the latter guarantees; (3) how expenditure on health is financed; and (4) how the entire system is organized and regulated. We will then be able to show how these traits partly imply the kinds of problems and kinds of reforms these systems have been subjected to.

Access: who has the right to benefit from the health system? National health systems are open to all those residing legally within a country, without any particular conditions, whereas health insurance systems were first intended for employees and their dependants. In Europe, they have been extended to cover everyone, via free personal insurance for the most deprived. In Germany and the Netherlands over a long period, the richest had not been obliged to sign on within the compulsory system of health insurance and had been privately insured (30 per cent of the population in the Netherlands, 10 per cent in Germany). However, the 2005 reform (in the Netherlands) and the 2007 reform (in Germany) made health insurance compulsory for all.

Access to health care providers: If countries with a strong Bismarckian tradition have chosen not to go in for public national health systems, it is partly because it appeared important to keep choice and freedom as a central feature of the health care system. Health insurance systems most often ensure quite a large liberty of choice of doctor for the patient, who may go directly to a specialist (accessible via the ambulatory care sector), consult several doctors on the same pathology, or even be admitted directly to hospital (as is the case in France). By contrast, the majority of national health systems try to control the circulation of patients inside the system. The patient’s freedom to choose his or her doctor, appreciated by French or German patients, creates competition between doctors, which encourages them to write numerous prescriptions in order to satisfy the client and prevent him or her from consulting other doctors (French patients consume twice the quantity of drugs as their European counterparts).

The nature of the benefits: Sick pay is covered by health insurance systems: originally, it was the main purpose of health insurance to replace income lost because of illness. Today, however, most of the health expenditure goes on covering the cost of treatments (70 per cent of health expenditure is for the remuneration of professionals). No health system covers the full expenditure on health care. National health systems are those in which the difference between public expenditure and total health care expenditure is the smallest. By imposing only a very limited co-payment, they offer the most generous assumption of the costs of treatment and thus guarantee the best access to health care for all (cf. table 1). In the case of Germany and the Netherlands, the relatively low figures for proportionate public expenditure can be attributed in part to the fact that not all the population was covered by the obligatory system.

In all the health care systems of western Europe, the costs of the most expensive treatments, required for treatment of the most serious illnesses (cancer, cardiovascular diseases, AIDS, diabetes, etc.) and for long-term illnesses
(degenerative disease), are extremely well covered. Indeed, the costs that these treatments represent are very high and account for the majority of health expenditures. It is in the health insurance systems that you find the highest share of public spending devoted to inpatient care. However, less expensive but more frequent treatments, connected to less serious conditions and usually treated by practitioners in the ambulatory care sector, are met to a greater or lesser degree depending on the system in question. In Great Britain, as well as in Germany up until 2003, ambulatory medicine consultations are almost free, but dental care and glasses are not well covered. France is the exception for her poor coverage of ambulatory health care (only 60 per cent of ambulatory treatment is covered by obligatory health insurance). This is why complementary insurance is so well developed in France (about 85 per cent of French people having mutual society or complementary health insurance to cover part of the expenses for which they are left to pay). In the Netherlands 90 per cent of the population has taken out supplementary insurance, though this represents only a small fraction of overall health expenditure (Cohu et al. 2006: 208). By comparison, only 1 per cent of Swedes have supplementary health insurance, 11 per cent of Britons and 25 per cent of Germans (those hitherto above the threshold of obligatory health insurance, along with those who wish to supplement their health cover).

Financing: the financing of the systems: The national health systems favour taxation while the health insurance systems have for a long time favoured social contributions charged on salaries (payroll taxes). When health care systems first started up, it seemed logical to fund health insurance expenditure through contributions charged on salaries, since the main objective was to guarantee sick pay for those who were too ill to work.

Remuneration of the producers of health care: In order to ascertain how to distribute the money collected to the different health care agents, national health systems favour an a priori financing of the system. Each year they define the total amounts that will be spent on health, and allocate them to the different agents, who must thus manage a budget set in advance. By contrast, in health insurance systems ambulatory health care is financed a posteriori: it is the demand for treatment which comes first, the total amounts spent being

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Table 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Proportion of public expenditure, out of total health-care expenditure, 2004 (%)</th>
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<tbody>
<tr>
<td>United Kingdom</td>
<td>86.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>84.9</td>
</tr>
<tr>
<td>Norway</td>
<td>83.5</td>
</tr>
<tr>
<td>Denmark</td>
<td>83.0</td>
</tr>
<tr>
<td>Japan</td>
<td>81.5 (in 2003)</td>
</tr>
<tr>
<td>France</td>
<td>78.4</td>
</tr>
<tr>
<td>Germany</td>
<td>76.9</td>
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</tbody>
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dependent on doctors’ activity and on the prescriptions they write: a system which works like an open ticket office. This type of financing does not lend itself to control of the level of health expenditure.

In France and Germany (until recently), countries in which the liberal practice of medicine predominates, most physicians are paid on the basis of fee for service in the ambulatory sector. In the Netherlands this is only the case for privately insured patients, the mandatory-insured being paid for on a capitation basis. In Sweden, all doctors draw the main part of their income (at least 60 per cent) from salaries. In Great Britain hospital doctors are salaried, whereas general practitioners working in the ambulatory sector, under contract with the NHS, are paid mainly on a capitation basis.

_The organization and regulation of the system_: National health systems are much better at organizing the supply of health care, but the extent of the supply is more limited than in insurance systems.

In national health systems (in the UK and Nordic countries at least), ambulatory care is primarily general medicine, most often carried out in groups, in practices in Great Britain, in health centres in Sweden. In these cases primary health centres are often the key expression, since other health professionals such as nurses or kinesiologists work alongside the doctors. In France, the Netherlands and Germany, on the other hand, ambulatory care includes both general practitioners and specialists. It is in France and in Germany, countries where numerous specialists are found in the ambulatory sector (60 per cent of ambulatory doctors are specialists in Germany, and 49 per cent in France), that the compartmentalization between ambulatory and hospital medicine is the most marked, with the risks of a lack of coordination, of redundancy or even of contradictions in treatment. These risks are all the greater since it is these two countries which still offer the highest proportional amounts of hospital care. For all that this decreased sharply during the 1990s, the number of hospital beds remains extremely high in Germany (6.4 beds for acute cases per 1,000 inhabitants) and in France (4.3 beds).1

_Who makes the decisions and regulations?_ Each type of health system seems to have its own particular model of regulation. National health systems are strictly regulated by the public authorities alone, national in the British case, predominantly local in the case of the Nordic countries or those of southern Europe.

Health insurance systems are based more on negotiation between the managers of health insurance funds and representatives of the medical professions, as the German case shows. The principle of self-administration (Selbstverwaltung) by management and labour has enabled the German system to function on a basis of permanent negotiation. Within this framework, the doctors – who assert their identity as liberal practitioners – have agreed to assume some of the responsibility for the management of public money. All self-employed doctors are compulsory members of the doctors’ unions (Kassenärztliche Vereinigungen), and since the 1980s these doctors’ representatives have taken part in the negotiation of the budget given over to health expenditure, the amount of the fees being adjusted in accordance with the total activity of physicians within this limited budget. The doctors have also accepted that there should be regulation and control of their practices,
provided that this is carried out by a body made up of doctors and which represents them (the regional doctors’ union). Doctors’ unions thus carry the double task of controlling their members and representing their interests. In France the negotiation between sickness funds and numerous and divided doctors’ trade unions also concerns the amount of fees, but it is more controlled by the state (no agreement – convention médicale – can be signed without the approval of the state, which participates in the negotiation through the director of the health insurance, a senior civil servant nominated by the government).

**Specific problems of health insurance systems**

In health as in other sectors (such as pension or unemployment insurance), institutional differences explain most of the divergent developments. The health care systems of France, the Netherlands or Germany on the one hand, and the British or the Swedish ones on the other, have been challenged by distinct, if not opposite, problems in recent decades. In the UK and Sweden, health care is altogether a state service, and thus it was relatively easy for the government to control the development of expenditure for health, basically by freezing the budget of the National Health Service. The main problem remains: how do you achieve an efficient and adequate health care system with the limited resources the government makes available? By contrast, in France, the Netherlands and Germany, the government does not directly control health care expenditures. There are no budgetary limits or freezes; rather there is a system of reimbursing the health care expenditures first incurred by an insured person. The problem here is an uncontrolled upward trend in health expenditure. The problems confronted by these health care systems are at polar opposites: while in the UK waiting lists are the key issue, in France, the Netherlands or Germany health insurance deficits and cost containment are on the top of the agenda.

Although they fail to record the best results for the health of their population, the health insurance systems give rise to higher total health expenditure (cf. table 2). Table 2 underlines that Sweden is the country where the evolution in health spending between 1980 and 2004 was the best controlled.

Having shown how important the institutional settings of the health care systems are for understanding its functioning and problems, we will now turn to the processes of reform in France, Germany and the Netherlands, in order to see how they have coped with their specific problems.

The reforms decided and implemented since the mid-1970s can be summarized into three main issues that form the policy agenda for health insurance systems. The financial and the cost containment issues are specific for health insurance systems, as we have just mentioned. The third issue (governance) has much more in common with national health services, but was differently implemented in Bismarckian systems. However common the agenda is, responses have been specific, as table 3 summarizes and as we will show in the next two sections.

The three issues correspond to three main sequences (which partly overlap in time) in the reform of Bismarckian health insurance systems: a ‘before
Table 2
Evolution in health expenditure

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Canada</td>
<td>7.1</td>
<td>9.0</td>
<td>8.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>9.1</td>
<td>8.5</td>
<td>8.3</td>
<td>8.9</td>
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<tr>
<td>France</td>
<td>7.6</td>
<td>8.6</td>
<td>9.2</td>
<td>10.5</td>
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<tr>
<td>Germany</td>
<td>8.7</td>
<td>8.5</td>
<td>10.3</td>
<td>10.6</td>
</tr>
<tr>
<td>Italy</td>
<td>–</td>
<td>8.0</td>
<td>8.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Japan</td>
<td>6.4</td>
<td>5.9</td>
<td>7.6</td>
<td>8.0  (2003)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7.5</td>
<td>8.0</td>
<td>7.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Norway</td>
<td>6.9</td>
<td>7.7</td>
<td>8.5</td>
<td>9.7</td>
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<tr>
<td>Spain</td>
<td>5.4</td>
<td>6.7</td>
<td>7.2</td>
<td>8.1</td>
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<tr>
<td>Sweden</td>
<td>8.8</td>
<td>8.2</td>
<td>8.4</td>
<td>9.1</td>
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<tr>
<td>United Kingdom</td>
<td>5.6</td>
<td>6.0</td>
<td>7.3</td>
<td>8.1</td>
</tr>
<tr>
<td>United States</td>
<td>8.7</td>
<td>11.9</td>
<td>13.3</td>
<td>15.3</td>
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Table 3
The reform agenda in health care and its implementation in Bismarckian health insurance systems

<table>
<thead>
<tr>
<th>Policy issues</th>
<th>Policy measures in health insurance systems</th>
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<tbody>
<tr>
<td>Financial issues</td>
<td>• Raising social contributions</td>
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<tr>
<td></td>
<td>• Financing by taxes</td>
</tr>
<tr>
<td>Cost containment</td>
<td>• Reduction of reimbursement rates and co-payment for patients (silent privatization)</td>
</tr>
<tr>
<td>(retrenchment in health care)</td>
<td>• Global volume envelopes (negotiated cost containment)</td>
</tr>
<tr>
<td></td>
<td>• Capped budgets for health expenditures</td>
</tr>
<tr>
<td>Governance</td>
<td>• Competition</td>
</tr>
<tr>
<td>(managed competition)</td>
<td>(between health suppliers/between health insurers)</td>
</tr>
<tr>
<td></td>
<td>• Managerialism</td>
</tr>
<tr>
<td></td>
<td>• Creation of state agencies</td>
</tr>
<tr>
<td></td>
<td>• Reorganization of medical care (GPs as keepers, health networks, integrated care, etc.)</td>
</tr>
<tr>
<td></td>
<td>• Institutional reforms of sickness funds (hollowing out the role of social partners)</td>
</tr>
</tbody>
</table>
retrenchment’ sequence (starting in the mid-1970s), which mainly dealt with financial issues by rising social contributions; a ‘retrenchment’ sequence (starting in the early 1980s) characterized by the predominance of cost containment policies and, eventually, a ‘restructuring’ sequence (starting in the mid-1990s) focused on governance issues in order to increase the efficiency of health insurance systems.

Retrenchment in Bismarckian Health Insurance Systems

Containing costs in health insurance systems

Since the beginning of the 1970s, in France, Germany and the Netherlands, health care expenditures increased much faster than the economy grew. As for pension or unemployment insurance, the first main response to this trend has not been retrenchment, but to increase social contributions paid to health insurance funds (meanwhile, in national health systems, budgets have been controlled through rationing services, giving rise to waiting lists and waiting times). By the mid-1980s, increasing the social contribution appeared an economic dead end for the Bismarckian countries, and attempts were made to limit the growth of health insurance expenditure and to reduce the deficits of the health insurance funds.

Cost containment policies in Bismarckian health insurance systems have two main aspects: the introduction of a capped budget for health expenditures and a decrease in health risk coverage.

Limiting the health budget. Budgeting logic was introduced to the Netherlands in the early 1980s. In 1983 an open-ended hospital reimbursement system was replaced by a global budgeting system for hospital operating expenses. In 1984 the scope of the general budgeting system was extended to all other inpatient-care institutions. Acquisition of expensive technologies was also restricted, fees and salaries were limited and a complex system for planning the development of hospital facilities and the geographical distribution of specialists was launched (Harrison 2004: 135). At the end of the 1980s the government also tried to introduce global expenditure caps for medical specialists – with the threat of fee reduction for cases of excessive prescription. In the 1990s medical specialists’ payments were progressively integrated into hospital budgets. In 2000 a legal basis was provided for integrating hospital specialists’ fees also into the hospital budget. Since then medical specialists have had to negotiate their fees with hospital management rather than with the health insurers (Schut and Van de Ven 2005: 63). Meanwhile, from 1996, the Drug Prices Act enabled the state to impose price limits on the prescription drugs covered by the health insurance system.

In Germany, cost containment policies followed the historical pattern of self-administration, being negotiated between sickness funds and the doctors’ unions (Hassenteufel 1996). Yet as early as 1975–6 unions signed agreements with the sickness funds which included a limitation on price rises for medical acts. In 1985 the unions accepted the implementation of ‘global volume
envelopes’, according to which physicians continued to be remunerated on a fee-for-service basis, but each service rendered carried not a fixed monetary value, but a fixed point value. Each trimester the sickness funds were to distribute a fixed-sum global envelope to the unions, who were then to divide the amount of money by the number of treatment points submitted by doctors. Increasing services should then no longer increase expenditure, since the ‘value’ of each service was set to diminish to the extent that the volume of its provision increased.

But neither these negotiated envelopes nor the health reform act of 1988 (the Blüm reform), which introduced therapeutic classes for pharmaceuticals in order to restrain their prices, had the hoped-for effects on the financial situation of the health insurance system. In 1990–1 the average growth of health costs was 5 per cent and in 1991 the health insurance system again showed a deficit of 5.5 billion Deutschmarks. A new reform seemed called for in the context of German unification and a structural law on the health system was voted at the end of 1992. Many changes were here decided on, in the effort to curb overall health care expenditure.

1. The hospital financing system was completely reformed from a per-bed, per-diem basis to global budgets based upon standard illness categories. These budgets would not be permitted to increase more than the average rate of German wage increases from 1993 through to 1995.

2. The activity and number of physicians became restricted: the overall body of doctors was given a strict aggregated prescription budget of 24 billion DM (being the total cost of prescriptions in 1991); the global volume envelope for physician reimbursement was maintained (since 1989 the unions had been trying to negotiate its abolition); the number and type of physicians who could practise within each regional division was limited.

3. The state would exert a stronger control on negotiations between sickness funds and unions, on the functioning of these institutions, and obtained the right to intervene directly if the actors of the self-administration system did not implement the law.

Meanwhile, in France, in the 1980 conventional negotiation, the minister of social affairs tried to impose a ‘global volume envelope’, as in Germany, in order to try to link the growth of expenditure in ambulatory care to economic growth. This goal was accepted by the sickness fund (CNAM), which then negotiated with the medical unions in exchange for the creation of the so-called ‘sector 2’ (secteur 2). Doctors in this sector are able to charge higher fees than those reimbursed by the sickness funds, the difference being paid directly by the patient. But only one medical union, the FMF – representing mostly specialists from large cities (being those most favoured by this sector 2) – accepted this system. The CSMF, the biggest union, was clearly against it. Because of this opposition, the global volume envelope was never implemented. In 1983 a global budget for hospitals was introduced in an attempt to control costs in this sector.

After the 1988 presidential election the new government, headed by Michel Rocard, wanted to negotiate regulation, as in Germany. This strategy
also corresponded to a reorientation of regulation away from a financial to a medicalized logic, based on the medical evaluation of therapeutic activities. It was only introduced in the new convention signed in October 1993. An objective of cost growth was fixed (3.4 per cent), as were ‘medical references’. If a doctor did not conform to these therapeutic norms he could be penalized. But these changes were limited. The main point is that doctors could not be penalized automatically if the target fixed rate was overshot.

The limited effects of such negotiated cost containment policies in France explain the introduction of a capped budget for all health insurance expenditures in the 1996 reform (the Plan Juppé) which imposed an annual vote on national health spending objectives (ONDAM) on every sector of the health insurance system (ambulatory and hospital care).

Reducing mandatory health insurance coverage. The other aspect of retrenchment, also typical of Bismarckian health insurance systems, has been the reduction of the health risk coverage. In France, the public coverage of health expenditures clearly decreased between 1980 and 2002, from 79.4 to 75.5 per cent, because of the reduction of reimbursement rates for patients and of the creation of direct patient co-payments for health care services (creation of the hospital flat-rate co-payment in 1982, patients’ co-payment for medical consultation, drugs and medical analysis). The 2004 reform again raised the co-payment for patients: €1 annual growth of the hospital flat rate, a new €1 co-payment for medical consultation, de-reimbursement of drugs. Unless you are under acute care (and then almost fully covered), the level of patient co-payment was raised to 30 per cent for medical consultation, to 40 per cent for drugs and to 20 per cent for hospitalization.

In Germany, this trend began with the 1988 health care reform act, which introduced patients’ co-payments for pharmaceuticals, hospital inpatient stays, physical therapy and spa cures. It was pursued in 1997 (but the main measures were withdrawn shortly after the change of government in 1998). The reduction of health risk coverage has again been more visible since 2003. The law for the modernization of the health insurance system increased the level of co-payment and created an ‘office fee’ for patients in the ambulatory sector. Hospital fees went up to €10, patients have to pay 10 per cent of the price of each drug (with a minimum charge of €5 and a maximum of €10) and an ‘office fee’ of €10 per trimester and per pathology for certain visits to a specialist (if not following a family doctor’s consultation). Moreover, voluntary private health insurance is now supposed to cover for teeth prostheses, and some benefits are not covered any more – such as thermal cure, drugs without prescriptions, sterilizations, medical transports, dental prostheses and glasses. Meanwhile, individual health expenses have been limited to 2 per cent of annual revenue (1 per cent in the case of chronic sickness).

In the Netherlands the latest reforms have also excluded several benefits from the sickness fund scheme, so these have to be covered by out-of-pocket payments by patients.
Explaining cost containment policies: policy failures and policy learning

In our three countries, the main aim of cost containment policies is the stability of the social contributions rate in order to stabilize labour costs and maintain economic competitiveness. The deficits of health insurance, added to the financial constraints linked to the Maastricht Treaty, explain the common retrenchment policies in Bismarckian health care systems. But the evolution of cost containment policies from negotiated policies to more constrained policies imposed by the state can be explained by a policy learning process based on policy failures, as the German health care structural reform act of 1992 (the ‘Seehofer Reform’) and the French Plan Juppé in 1996 clearly show.

In 1990/1 the German government faced a growing fiscal crisis because of the costs of German unification and the recession. The high level of German wage costs made it necessary to curb the evolution of health insurance contributions paid by employees and employers. The political strategy followed by the new health minister Horst Seehofer is a good example of a policy learning process: he was state secretary under Blüm (minister of social affairs) and experienced the failure of the health insurance reform of 1988. Seehofer negotiated with the main opposition party, the SPD (social democrats). He took their claims into account (especially the centralization and strengthening of the sickness funds). As a result the SPD backed the reform. This allowed the approval of the law by the second Chamber, the Bundesrat, which has a veto power on this topic (because hospitals are a Länder prerogative) and where the SPD had the majority. It also allowed Seehofer to outmanoeuvre the Liberal Party (FDP), which traditionally defended the interests of physicians and those of the pharmaceutical industry.

The 1996 French reform is also a consequence of a policy learning process. Three main failures of previous cost containment policies had been identified in several public reports on the health insurance system since the beginning of the 1990s:

- The lack of constraints on doctors that the reform addressed by introducing global budgets for the reimbursement of doctors with financial penalties if the fixed rate for budget increases was overstepped.
- The limits of imposing fixed budgets on hospitals. The need to restructure the supply of hospital beds (reduction of the number of beds, changing from short-stay to long-stay beds, and so on) had often been mooted. The reform addressed this by creating regional hospital agencies in order to implement this restructuring.
- The lack of control by the state, leading to extending state power in the health insurance system with the vote in Parliament on national health spending objectives (ONDAM) and greater intervention in the negotiation of collective contracts between doctors’ organizations and the health insurance funds.

Yet none of these reforms was successful in the long term. As table 2 shows, in France health expenses continued to grow very fast and the deficit
still grew. The target of the national health spending objective (ONDAM) was temporarily reached in 1997, but never again in the years after. These budgets were ineffective because of the failure of the sanction mechanism (Hassenteufel 2003). Doctors led a successful juridical battle against penalties, which were finally abandoned. Since 1996 health expenditure has always exceeded budgets, without any sanction against doctors. Moreover, in 2002, France’s GPs actually went on strike for higher fees (€20). The raising of the fees was accepted by the new minister of health, at a time when the deficit of the health insurance system was already growing!

In 2004 a new law on health insurance was voted by the French parliament in the context of a huge deficit in the health insurance system (€10.6 billion in 2003, €11.6 billion in 2004; €8.3 billion expected for 2005). This last reform was accepted by the main physician trade union (the CSMF) – which was not very surprising, since this law embodies no new constraint on doctors (for their activity, for prescriptions or for installation) and gives specialists the right to get higher fees when patients go directly to them, without being referred by a GP. The main effort is being asked from patients, in the form of raising co-payments and taxes. This evolution is also clear in the German case, where the modernization law of 2003 (Hassenteufel and Palier 2005) introduced patient co-payments for medical consultation in ambulatory care (as we have already mentioned) and at the same time planned the end of regional budgets for doctors.

In the Netherlands cost containment policies were more successful (see table 2) but led to new problems during the 1990s, especially the increase in waiting lists. This policy failure created a new window of opportunity for market-oriented reforms (Helderman et al. 2005: 203).

The Dutch case illustrates how the reform agenda slowly moved from cost containment issues to more structural ones, aimed at changing the governance of the system. The reforms adopted since the mid-1990s have led to structural changes which are partly blurring the difference between health insurance and national health systems.

The Transformation of Bismarckian Health Insurance Systems

At first glance structural changes introduced by the reforms adopted in the last decade seem to follow similar patterns to national health services. But a closer look underlines their links with the specific problems we have analysed previously. These changes also led to specific health insurance system trajectories: the silent privatization of health care coverage, the limits imposed on financing by social contributions, the lack of regulation of the health care supply.

The hybridization of Bismarckian health insurance systems

It is possible to characterize as path-breaking some of the changes that occurred from the 1990s, since they introduced new principles and new instruments to the health insurance systems, some of them being close to the
national health service systems (especially to the British one – Hassenteufel 2001), namely, more universal coverage, more taxes to finance health expenditure, the development of New Public Management devices and more control over the patient’s circulation within the system.

Towards universal coverage for health care. As we have already noticed, a first universal component was created in 1967 in the Netherlands and since then extended, and the 2005 reform made the second component compulsory for the whole population. In France the ‘silent privatization’ processing of health risks (due to co-payments) increased the role of optional supplementary health mutuelles, that not all the population could afford. Therefore, introducing a new form of coverage for the poorest appeared necessary. The Plan Juppé included the idea of the creation of universal medical coverage. This measure was not implemented immediately, but was taken up again by the Jospin government: the universal health coverage (Couverture Médicale Universelle – CMU) was created at the end of 1999. Every person residing lawfully in France, irrespective of his or her employment status or contribution record is insured for health risks. In 2003 complete CMU coverage was made available to about 7 per cent of the population, who benefited from a basic package of health services. Meanwhile in Germany concerns have recently been raised over there being an increasing number of uninsured people (with estimates ranging from 80,000 to 300,000), who are mostly jobless and not eligible for unemployment insurance and/or the owners of small businesses (Greß et al. 2006). The 2007 reform tackles this issue by guaranteeing insurance for people who may have lost their private insurance (which may concern 200,000 people) and by establishing the principle of universal obligation for health insurance. Therefore, the total population is now covered in Germany (whether by private or public health insurance schemes).

More taxes to finance public health expenditure. The deepening of economic competition within the Single European Market put pressures on those welfare systems mainly financed by social contribution. Inasmuch as health care systems no longer restrict their cover to those with jobs (who therefore pay contributions), and since health spending today is mainly to fund health treatment (with no connection to income from employment), it seems more appropriate to finance this expenditure through income or consumption taxation rather than through payroll taxes. For these reasons, one structural reform of health insurance systems has been to change their mode of financing, from social contribution to taxation. This has gone relatively far in France especially, since most of the social contribution paid by employees was replaced by a general tax on revenue in 1998. The French pay a specific tax of 5.25 per cent for health insurance on all their income from salaries and capital. This tax, called CSG (contribution sociale généralisée), funds approximately 30 per cent of expenditure on health care. The pharmaceutical industries pay a tax on their sales and advertising expenditure. The taxes on tobacco and alcohol (representing most of the cost of these products) are partly allocated to the general social security system and account for 3.4 per cent of its revenues.
Health expenditures are financed only to the extent of 8.4 per cent by income taxes in Germany, though this was increased in the reform of 2003 by adding specific taxes: cigarette prices were raised by €1 per packet to enhance the tax financing and it was also decided that wage compensation in the case of sickness was no longer to be financed by employers but by the contributions of employees. In consequence, the contribution rate is no longer shared equally between employers and employees, since the latter pay 0.9 percentage points more. Taxes (especially on tobacco) are supposed to cover expenditures deemed not to conform to the actuarial foundations of the health insurance system (the so-called versicherungsfremde Leistungen). Moreover, the sickness funds are cross-subsidized from social security schemes covering old-age and unemployment risks (Altenstetter and Busse 2005: 124).

Even more important, the central debate on the future of health insurance in Germany is over its financing. Both the two main political parties (SPD and CDU) are trying to move away from a system of insurance financed by payroll taxes. The concept of the SPD, the so-called Bürgerversicherung (citizen’s insurance), would place all citizens under the same health system, thereby ending the distinction between public and private health insurance and broadening the financing base by including all incomes. This system would in fact be close to that of a tax-based one, since all citizens would be covered per se – and there would in turn be a levy on all sorts of incomes. On the other hand, in the model envisaged by the CDU (called Kopfpauschale and copied from Switzerland), every person would have to pay a flat-rate contribution to the health system of about €160 to €200 per month. In this conception, the idea of progressively taxing incomes would be limited to the actual tax system, whose progressiveness should be strengthened accordingly (Grabow 2005). Both proposals thus differ from an insurance system based on work-related contributions; nevertheless, the new governmental coalition between the CDU–CSU and the SPD had great difficulty in trying to reach a compromise agreement between the two conceptions. This is why a bipartite commission was created in the spring of 2006. After almost one year of negotiation a new law was passed in February 2007, but this did not radically transform the financing of the system, which still relies on employer and employee contributions. Nevertheless three significant changes were introduced: the planned creation of a health fund (Gesundheitsfonds) in 2009 to fix a unified payroll contribution rate for every sickness fund; the possibility for sickness funds to charge enrollees with a uniform lump-sum premium; the coverage of children to be financed out of general tax revenue (a change to be progressively introduced).

Comparable developments have been even more obvious in the Netherlands because of the introduction, in 2005, of a flat-rate contribution for every insured person, to cover about 50 per cent of health insurance expenditures. The state here offers financial help for low-income contributors – and cover for children.

**Managerialization of the hospital sector and the creation of new state agencies.** In France this managerialization process began with the 1991 law. The purpose of the law was to make hospital regulation take into account the real activity of
hospitals (importing into France the ‘diagnosis-related group’ method from the USA). With this reform each hospital’s budget was to depend upon an evaluation of its activity and its prospective development, both to be negotiated with the state. Since the beginning of the 1990s, two new tools for evaluation have been introduced: the ‘programme of medicalized information systems’ (geared to evaluating the activity of each hospital and to introducing payment systems based on diagnosis-related groups) and ‘medical references’ for ambulatory care (containing therapeutic norms and norms for prescription). The 1996 reform further promotes and generalizes the evaluation of therapies in the health insurance system with the creation of a National Agency for Accreditation and Evaluation in Health (ANAES), recently incorporated within the new top authority on health (Haute Autorité en Santé) created in 2004. They have been introduced to increase economic and medical efficiency (Robelet 1999) and to make competition work between hospitals. Regional hospital agencies (Agences Régionales d’Hospitalisation) have also been created to achieve this goal by distributing budgets between hospitals, based on an evaluation of the performance of every hospital. These agencies also have the right to close inefficient hospitals after an accreditation enquiry. Such changes have led to the rise of ‘managerialism’ among hospital directors (Pierru 1999).

The same pattern of evolution has occurred in Germany and the Netherlands since 2000. The financing system changed with the introduction of flat-rate reimbursement for hospitals. Diagnosis-related groups (DRG) systems in which fees are reimbursed after the evaluation of diagnosis and treatment – rather than length of stay – were set up. In Germany an Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen was also established for the diffusion of therapeutic norms and tools for evaluation, especially in respect of drugs (checking which medicine is most efficient and has the best price/effect ratio).

Reorganization of ambulatory care. We know that health insurance systems guarantee great freedom of choice for the patients. It is, however, contemplated more and more that the movement of patients within these systems should be controlled, as in the national health services; this is both to limit ineffective expenditure and to improve the monitoring of the patient and the coordination of treatment. Thus it is sought to make the general practitioner or ‘family doctor’ play the role of ‘referring doctor’ (who must be seen before any specialist consultation), to have a medical file circulated between all those involved in the treatment of a patient, and to institute health care channels or networks (e.g. teams of practitioners brought together by the same insurer). The implementation of such new practices represents a restriction on the freedom of choice and, often, a more important role for the general practitioners.

In France the 1996 reform made it possible for GPs to act as gatekeepers for patients who agree to contract with them (médecins référents). However, this system was replaced by another (médecin traitant) in 2004, geared to making GPs the ‘drivers’ of patients in the health system. All French insured persons now have to choose their médecin traitant (it is usually a GP, but it can be a specialist). It will cost them more if they consult a specialist directly without
being referred by their main GP. In Germany the 2003 reform developed the system of the ‘family practitioner’, to take the role of piloting the patient towards specialists. It also made possible the creation of medical centres in place of a single doctor’s consulting practice, in order to promote cooperation between doctors and other health professionals. In the Netherlands the sickness funds have the right to create health networks and day-surgery hospitals.

Even so, despite the similarities in the instruments utilized, these evolutions have not ended the gap between health insurance and national health service systems. Some institutional specificities still remain, especially with regard to the role of the sickness funds – the main issue for governance reform.

Sickness funds between competition and state control

The role of sickness funds in relation to the governance structure of the health insurance systems has followed two different paths: growing competition between health insurance funds in Germany and the Netherlands, growing state control in France.

Competition for German and Dutch health insurance funds. In the Netherlands, competition between insurers was developed in two main stages: the Simon Plan in 1991 and the reform of 2005. Regulated competition was progressively introduced for the second and the third compartment of health insurance because of the lack of incentives for efficiency and innovation in the prevailing health insurance system (Schut and Van de Ven 2005: 65–7). The starting point of the structural transformation process was the market-oriented model of managed competition developed by the Dekker Commission (appointed by the government) in 1987. This model was progressively introduced from the beginning of the 1990s by the successive centre-right and centre-left governments. In 1991 enrollees in the compulsory health insurance systems got the right to choose their fund. The 2005 reform abolished the difference between public and private insurances: competition was extended to the whole of the second compartment (former ZFW, see the Introduction, above) and – in consequence – private companies are now offering most of the care coverage. On 1 January 2006, the Dutch population gained the power to choose and change their own health insurers (25 per cent of the population did so forthwith). Meanwhile sickness funds and private insurers received the power to negotiate the price, quality and volume of hospital treatments and to selectively contract with health care providers. In order to make competition work, a thorough system of risk adjustment was developed, based on age, gender, region, disability, employment status, pharmacy cost groups and – since 2004 – on diagnostic cost groups. The reform has tried to combine the social nature of health insurance with the achievement of efficiency via a competitive market environment (Hemerijck and Marx 2006). The state has a clearly regulatory role: defining the framework of the health market and supervising the balance between competition and solidarity.

In Germany, the 1992 ‘Seehofer Reform’ planned to progressively introduce competition between public health insurance funds by giving
insurers a free choice between them. As services were not allowed to differ beyond legislatively fixed limits, price competition was supposed to incite funds to compete by merging and slimming down their administrative staff (the number of health insurance funds has indeed dramatically diminished, from more than 1,000 to 250). The sickness funds have increasingly been influenced by orientations derived from private business (Bode 2004). They conceive their organizations as market players racing for new members and as enterprises facing business partners and customers. Sickness funds offer more and more special advantages to their members (especially after the 2003 reform): counselling, health checks, packages with complementary insurance, reductions on contributions for enrollees’ participation in health-improving activities, refunding of contributions in case of the non-consumption of reimbursed services. In 2003, the reform even made a first step towards the transformation of sickness funds into health care purchasers. They can differentiate the range of services available to their enrollees by selective contracting with networks of local providers and by developing prevention or disease management programmes. The latest reform, adopted in February 2007, offers the further possibility of contracting with single providers. The 2006 law on drug provision allows sickness funds to negotiate special prices with producers of pharmaceuticals and to provide their members with cheaper drugs (Bode 2006).

All such changes in Germany since the mid-1990s can be subsumed under an attempt to render the insurance system more efficient, while guarding its essential features. The health reform of 2003 did not differ much from this logic; it inscribed itself in the ‘Agenda 2010’ (the many reforms in social protection planned by Gerhard Schröder in the early 2000s) and its overall aim was to reduce contributions without abolishing the assurance system or its corporatist functioning. At the same time the competition logic is still growing, as the name of the latest reform shows: Wettbewerbs Stärkungs Gesetz (law for the improvement of competition). Inter-fund competition is broadening, but at the same time the planned implementation in 2009 of a Gesundheitsfonds, directly linked to the federal state – in order to fix a centralized contribution rate for health insurance and to combine solidarity and competition – can be interpreted as a further step in the direction of a regulatory health state, challenging the autonomy of leading actors in the traditional health care system: especially doctors and social partners in the German case (Moran 1999). The frequency of state intervention in this self-regulatory health care system increased from the early 1990s with the implementation of sectoral budgets and the stronger control of contribution rates. The ‘shadow of state hierarchy’ (Wendt et al. 2005: 22), based on the threat of state intervention, has broadened.

However, the trend towards a regulatory health care state has been even more obvious in France.

‘Etatisation’ in France. In France, even if competition was favoured in the hospital sector and has been characterizing the ambulatory sector ever since the late 1920s (the médecine libérale), a different trend is now in evidence: the strengthening of the state. This étatisation of French health insurance (Hassenteufel
and Palier 2005) really started with the 1996 reform, which gave new institutional tools to the state in order to increase its control over the whole health insurance system. In the hospital sector the new regional state agencies have taken over the previous powers of the sickness funds. In the ambulatory sector the scope of collective bargaining between sickness funds and doctors’ organizations has been reduced and the state has been allowed to replace the social partners when the latter are not able to reach an agreement. The 1996 reform also obliged parliament to vote a national health spending objective (ONDAM) every year, which sets targets for financial limits for health insurance expenditure. Given this reform, the government can more easily go in for cost containment every year, since it is now a constitutional obligation (the parliament being in France strongly controlled by the government).

The 2004 reform furthered this trend by creating a national union of sickness funds (UNCAM) to be directed by a senior civil servant, him/herself to be nominated by the government. This ‘director’ has the power to nominate the directors of local sickness funds and now heads negotiations with the different medical professions – hitherto the role of the Chair of the now disappeared administrative board of the fund, as representative of the social partners. Indeed, the law has replaced this administrative board of the social partners by advisory boards on which both users and parliament have representatives. The institutional model behind this change is clearly the state agency model.

New policy elites: different forms of regulatory health care state. The differences in health insurance trajectories can be explained by differences between the emergent new policy elites in health policy. Non-medical (especially economic) expertise is playing a growing role in the reforms. It is one important aspect of the decline of the health care state (Moran 1999). In the French case, since the beginning of the 1980s, we have been able to observe the constitution of a group of senior civil servants, specialists in health insurance policies and occupying strong positions (especially in the cabinets of the ministry of social affairs and of the prime minister) (Hassenteufel et al. 1999). They played a growing role in the decision-making process, not merely in the case of the Juppé reform (Hassenteufel 1997) but in respect of other decisions also: the global budget for hospitals, hospital performance evaluation, global volume envelopes, therapeutic norms for ambulatory care, hospital management, and so on. This new ‘welfare elite’ wants to raise the efficiency of the health insurance system through the strengthening of the state. They have been trained in French elitist (and statist) grandes écoles rather than in universities and have therefore fewer links with academic expertise or to international debate.

The situation is rather different in Germany (Döhler and Manow 1997) and the Netherlands, where academic expertise (especially with regard to questions of economics and public health) plays a growing role. The expertise is more internationalized than in France, which partly explains why there has been more policy transfer of competition mechanisms, inspired by foreign examples – and, in short, which explains that the international diffusion of market tools in health care has more impact in Germany and the Netherlands than in France. Academic experts, especially health
economists, are now embedded in the health policy networks of Germany especially, as the example of Karl Lauterbach shows. Indeed, expertise in health insurance policy was institutionalized in Germany through the creation, in the mid-1980s, of the Advisory Council for Concerted Action in the Health Care System (renamed the Advisory Council on the Assessments of Developments the Health Care System – Sachverständigenrat zur Begutachtung der Entwicklung des Gesundheitswesen), which has a role in setting the agenda and framing the policy debate for health care, and sometimes even prepares policy decisions (Brede 2006: 441).

In the Netherlands the first proposals for regulated competition were made in 1986 by a government-appointed committee headed by W. Dekker, chairman of the board of the Philips Corporation; and the 1991 and 2005 reforms6 were inspired by these proposals.

One might also mention that in Germany elected politician members of the social and health commissions have won autonomy from interest groups (Trampusch 2005). Political actors (the minister of health, the state secretaries for health, the health policy speakers of the leading political parties, the health ministers of some Länder, deputies, members of the health commission) are playing a greater role in the health policy decision-making process, as the creation (in April 2006) of a bipartite commission (charged to elaborate a new reform project) composed of 16 political actors, coming from the parliaments and the Länder and belonging to both parties of the governmental coalition, bore out. The new policy elite in German health policy is composed of experts, political actors and the so-called political civil servant (politische Beamte), at the top of the federal health administration and discretionarily nominated by the health minister. Politicians also played an important role in the last Dutch reform, whose ideological dimensions were geared to promoting competition and privatization. In the Netherlands the locus of power has shifted since the mid-1990s, with the revision of the corporatist decision-making structure7 coupled with the growing autonomy of individual health providers and insurers (Helderman et al. 2005: 200).

The role of such new policy elites underlines the ‘non-incidental’ nature of the structural reforms so far remarked on. Rather, they follow a reform design elaborated by programmatic actors who have the capacity partially to redefine the policy frameworks for health care (Hassenteufel 2007). Nevertheless, the implementation of these reforms will be incremental, as befits a middle-term learning process.

Conclusion

Up until now and despite the institutional reforms, continental health insurance systems have remained Bismarckian (they are still mainly financed by social contributions, managed by health insurance funds, delivering public and private health care, and freedom is still higher than in national health systems). This is due to the incremental strategy chosen for the introduction of structural change. Those changes are embedded in the existing institutions. The aim of the reforms is more to change the logic of institutions than to change the institutions themselves; they follow a ‘conversion’ type of change
(Streeck and Thelen 2005). Hence, structural changes occur without revolution in the system. The new ‘regulatory health care state’ (Hassenteufel 2007) that we have seen emerging in Germany, France and the Netherlands can be said to be ‘neo-Bismarckian’. Health insurance systems are combining universalization through the state and marketization based on regulated competition; they associate more state control (directly or through agencies) with more competition and market mechanisms.

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Notes

1. It is more limited in the United Kingdom (3.9 beds), the Netherlands (3.5), and relatively low in the United States (2.9) and in Sweden (2.4) (source: OECD 2003).
2. Only the employer’s share is now calculated in relation to the employee’s income.
3. And of a federal union for all sickness funds headed by a former SPD deputy. The German governance reforms are partly inspired by the Dutch reforms, which explains the new similarities between the two systems, especially the competition between sickness funds and the compensation of risks through a centralized fund.
4. Up until now each fund has had the power to fix its contribution rate.
5. Professor for health economics after a PhD at Harvard University, he was the main adviser to the Health Minister Ulla Schmidt from 2000 until 2005.
7. In the annual survey of the most powerful people in the Dutch health care system, the minister of health and the national director of the health insurance are at the top of the list (Top 100 Medische Macht, Mednet Magazine, 12 January 2006: 18).

References


Grabow, K. (2005), Fighting with Goliath: the reform of the public health care insurance scheme in Germany, its potential to increase employment and alternative models of reform, German Politics, 14, 1: 51–73.


Hassenteufel, P. (2001), Liberalisation through the state: why is the French health insurance system becoming so British? Public Policy and Administration, 16, 4: 84–95.


OECD (2003), Data on Health, Paris: OECD.


Palier, B. (2004), La réforme des systèmes de santé, Paris: PUF.


Trampusch, C. (2005), From interest groups to parties: the change in the career patterns of the legislative elite in German social policy, German Politics, 14, 1: 14–32.