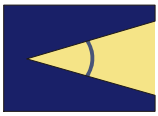
European Observatory on Health Care Systems



Health Care Systems in Transition

Germany




The European Observatory on Health Care Systems is a partnership between the World Health Organization Regional Office for Europe, the Government of Norway, the Government of Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine, in association with the Open Society Institute.

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By the year 2005, all Member States should have health research, information and communication systems that better support the acquisition, effective utilization, and dissemination of knowledge to support health for all.
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Contents

Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of each health care system and of reform initiatives in progress or under development. The HiTs are a key element that underpins the work of the European Observatory on Health Care Systems.

The Observatory is a unique undertaking that brings together WHO Regional Office for Europe, the Governments of Norway and Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine, in association with the Open Society Institute. This partnership supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe.

The aim of the HiT initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health care systems and reforms in the countries of Europe and beyond. The HiT profiles are building blocks that can be used to:

- learn in detail about different approaches to the financing, organization and delivery of health care services;
- describe accurately the process and content of health care reform programmes and their implementation;
- highlight common challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in the different countries of the European Region.

The HiT profiles are produced by country experts in collaboration with the research directors and staff of the European Observatory on Health Care Systems. In order to maximize comparability between countries, a standard template and questionnaire have been used. These provide detailed guidelines

and specific questions, definitions and examples to assist in the process of developing a HiT. Quantitative data on health services are based on a number of different sources in particular the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) health data and the World Bank.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Most of the information in the HiTs is based on material submitted by individual experts in the respective countries, which is externally reviewed by experts in the field. Nonetheless, some statements and judgements may be coloured by personal interpretation. In addition, the absence of a single agreed terminology to cover the wide diversity of systems in the European Region means that variations in understanding and interpretation may occur. A set of common definitions has been developed in an attempt to overcome this, but some discrepancies may persist. These problems are inherent in any attempt to study health care systems on a comparative basis.

The HiT profiles provide a source of descriptive, up-to-date and comparative information on health care systems, which it is hoped will enable policy-makers to learn from key experiences relevant to their own national situation. They also constitute a comprehensive information source on which to base more in-depth comparative analysis of reforms. This series is an ongoing initiative. It is being extended to cover all the countries of Europe and material will be updated at regular intervals, allowing reforms to be monitored in the longer term. HiTs are also available on the Observatory's website at http://www.observatory.dk.

The name of the country used in this document is "Germany" (while the official full name is "Federal Republic of Germany"). However, from 1949 to 1990 it was split into two parts which are referred to as the Federal Republic of Germany (FRG) and the German Democratic Republic (GDR). After 1990, the distinction is made in this report between the "eastern part" which refers to the Länder of the former GDR and the "western part" which refers to the remaining Länder.

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The Health Care Systems in Transition profile on Germany was written by Reinhard Busse (formerly Department of Epidemiology, Social Medicine and Health System Research at Medizinische Hochschule Hanover and currently head of the Madrid hub of the European Observatory on Health Care Systems) in collaboration with Annette Riesberg (now at the German Federal Ministry of Health). It was edited by Anna Dixon (European Observatory on Health Care Systems). The Research Director for the German HiT was Elias Mossialos.

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The current series of Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Care Systems.

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The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat and the research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is by Suszy Lessof. The series editors are Reinhard Busse, Anna Dixon, Judith Healy, Elizabeth Kerr, Suszy Lessof and Ana Rico.

Administrative support, design and production of the HiTs has been undertaken by a team led by Phyllis Dahl and comprising Myriam Andersen, Anna Maresso, Caroline White and Wendy Wisbaum.

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The HiT template and questionnaire have been developed by Josep Figueras and Ellie Tragakes.

Introduction and historical background

Introductory overview

Political and economic background

The Federal Republic of Germany covers an area of about 356 978 km^2. The longest distance from north to south is 876 km, from west to east 640 km. The total population is 82 million (40 million males and 42 million females). The density of the population is 230 inhabitants per km^2 (1998 figures). This includes over 7 million foreigners, of whom just over 2 million are Turkish. The population is unevenly distributed with far more people living in the western part of Germany. Of the 19 cities with more than 300 000 inhabitants only three (including Berlin) are in the eastern part of Germany. The largest city is Berlin with 3.5 million inhabitants. Other densely populated areas are the Rhine-Ruhr region with about 11 million people and the Rhine-Main area surrounding Frankfurt.

Germany is a federal republic consisting of 16 states (known in Germany as *Länder*). Each of the states has a constitution which must be consistent with the republican, democratic and social principles embodied in the constitution (known as the Basic Law or *Grundgesetz*). The constitutionally defined bodies which have primarily legislative functions are the lower and upper chambers of parliament, namely the Federal Assembly (*Bundestag*) and the Federal Council (*Bundesrat)*.

The Federal Assembly is made up of 672 members who are elected every four years. Since 1998, the Social Democrats (SPD) and the Greens have held the parliamentary majority and have formed the government. The main functions of the Federal Assembly are to pass laws, to elect the Chancellor and to control the government.

Fig. 1. Map of Germany[1]

The Federal Council which represents the sixteen federal states does not consist of directly elected representatives but of three to six members – depending on population size – from each of the sixteen state governments or their representatives. The main function of the Federal Council is to approve laws which have been passed by the Federal Assembly. About half of all bills

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Care Systems or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

require the formal approval of the Federal Council, i.e. both the upper and lower chambers have to pass them, while in other cases the Assembly may overrule a negative vote by the Council. The requirement for being passed by both chambers applies especially to bills that are of vital interest to the states, such as those regarding financial affairs or their administrative powers. Passing laws that need the approval of both chambers is often difficult and requires a compromise since the political majority in each chamber is typically held by opposing parties or coalitions. The compromise is often found and formulated by the 32-member arbitration committee (sixteen from the Federal Assembly and one from each *Land*) before being passed by both chambers.

The President (currently Johannes Rau) is elected for five years by an assembly consisting of the members of the parliament and an equal number of representatives from the states according to their population size. The president's major tasks are to approve new laws, formally appoint the chancellor and the federal ministers and to fulfil a representative function.

Fig. 2. Political map at the level of the Länder[1]

Legislative authority lies principally with the *Länder*, except in areas for which this authority is explicitly given to the federal level. The Federation's legislative authority falls into three different categories:

- exclusive
- concurrent
- framework.

Areas of legislation which pertain exclusively to the Federation are foreign affairs, defence, monetary matters, air transport and some elements of taxation. In the case of concurrent legislation, the states may only pass laws on matters not covered by federal law. The Federation may only legislate in such cases where it is necessary to have a uniform law for the whole country. Where the states grant the federal level the right to enact framework legislation, they retain a considerable amount of legislative latitude. This applies, for instance, in the fields of higher education, nature conservation, landscape management, regional planning and water management. The states can fill in any gaps left by federal legislation or in areas not specified by the constitution. Thus they are responsible for education and culture almost in their entirety as a manifestation of their "cultural sovereignty". They are also responsible for legislation defining the powers of local government and the police.

The real strength of the states lies in their participation in the legislative process at the federal level through the Federal Council. All internal administration lies in their hands, and their bureaucracy implements most federal laws and regulations. Difficulties can arise due to the fact that the Federal Council is often dominated by states that are led by parties which are a minority in the lower chamber or Federal Assembly.

The Federal Government's Cabinet consists of the Chancellor (since 1998 Gerhard Schröder) who is head of the government, and the federal ministers. The Chancellor chooses the ministers and proposes them to the President for appointment or dismissal. He also determines the number of ministers and their responsibilities. The Chancellor is in a strong position primarily due to the fact that he establishes the guidelines for government policy. The federal ministers run their departments independently but within the framework of these guidelines.

Besides the legislature and the executive, the various separate court systems (e.g. administrative, constitutional and civil courts) represent a strong third pillar of decision-making.

Germany is a member of the G7 group of leading industrial countries. In 1998 the gross domestic product amounted to a total of DM 3784 billion or DM 46 100 per capita. German industry is mainly export-oriented. The major

economic problem is the high rate of unemployment. In the five states of the former German Democratic Republic employment declined by about 3.5 million to 6.3 million between 1989 and 1994 as a result of the crisis precipitated by the transition to the social market economy. Around 4.1 million people, on average, were without employment in 1999, a rate of 10.5%, with a rate of 17.6% in the eastern part which is twice as high as that in the western part of the country. Rates by districts vary much more: between 13.9% and 22.9% in the east and between 3.3% and 15.4% in the west.

Health status

Valid morbidity data about the German population are not easy to obtain. The most important source for health data is the biennial report of the German Ministry of Health on the health system and the Basic Health Report which was published for the first time in 1998. This latter report will be updated regularly and will be supplemented by reports on specific aspects. Another source is the Hospital Diagnosis Statistics of the Federal Bureau of Statistics which provides data from 1993. Other morbidity data come from analyses of sickness fund statistics for hospitalized patients and medical certificates, pension fund data on rehabilitative measures, cancer registries, claims data for preventive measures and specific surveys. A national periodical survey, the micro-census, gathers subjective data on perceived health status of a small representative sample of the population. According to the 1995 micro-census, around 8.4 million people in Germany consider themselves to be ill and a further 0.7 million are injured by accidents. In total, 9.1 million (12.3%) of the total population are therefore classified as "not healthy". In 1995, the Cancer Registry Act came into effect. According to this law, every federal state must establish a cancer registry by 1999. Until these registries are functioning, cancer incidence and prevalence can only be estimated (with the exception of children and registries in a few states).

Mortality data are more reliable. These data are derived from the Cause of Death Statistics compiled by the statistical bureaux of the states and the Federal Bureau of Statistics. In 1998, 852 400 people died (while 785 000 children were born alive). The main causes of death were cardiovascular diseases (about 50% of all deaths) and malignant tumours (around 25%).

For the purposes of international comparison, the health status of the German population can be illustrated using certain health indicators. Cardiovascular and non-malignant lung disease mortality rates in Germany are well above the European average. In 1991 unified Germany had a life expectancy, both at birth and at age 65, that was slightly below the EU-12[2] average at that time

[2] The term EU-12 refers to the 12 members of the European Union that were members in 1991.

(prior to this the Federal Republic of Germany had consistently been narrowing the gap towards the EU average). Infant and maternal mortality rates are lower than the European average. Death rates (standardized to the European population) were above the EU average for diseases of the circulatory system (74.1 versus 62.4 per 100 000 for persons under 65 years of age) and for suicide and self-inflicted injury (15.4 versus 11.7 for all ages). They were at or around the EU average for malignant neoplasms and all external causes of injury and poisoning. Standardized death rates for motor vehicle traffic accidents are below the EU average (12.9 versus 14.1 for all ages) but remain a problem in eastern parts of the country, especially among young males. The incidence of AIDS has been stable since the early 1990s and amongst the lowest in the EU (around 2.5 new cases per 100 000 per year in 1996); this may be due to a concerted strategy towards prevention. Dental diseases, on the other hand, remain a problem with Germany having one of the highest DMFT (decayed, missing and filled teeth) index for 12-year olds of all EU countries. Germans consume more cigarettes and alcohol than the average European.

This situation of the population's health in Germany may also be analysed against the background of a 40-year political and geographical separation which provides a very interesting case-study for changes in health due to political, social and economic influences on an otherwise homogenous population. The most obvious indicator of a different pattern of the population's health in the Federal Republic of Germany compared to the German Democratic Republic is life expectancy at birth. This initially increased faster in the east (from a slightly higher level) but by the late 1960s life expectancy at birth had stagnated. However, since the late 1960s this indicator shows continued improvement in the western part of the country. Between 1980 and 1990 the gap in life expectancy widened, especially for men (see Table 1). According to McKee et al. (1996), explanations for the widening gap pre-1990 include differences in diet, better living conditions, differences in access to high technology care,

Table 1. Life expectancy at birth, 1950–1996 (years)

	Male			Female		
	West	East	Difference	West	East	Difference
1949/53	64.6	65.1	+0.5	68.5	69.1	+0.6
1980	69.9	68.7	-1.2	76.8	74.6	-2.2
1990	72.7	69.2	-3.5	79.2	76.3	-2.9
1992/94	73.4	70.3	-3.1	79.7	77.7	-2.0
1995/97	74.1	71.8	-2.3	80.2	79.0	-1.2

Source: Based on Statistisches Bundesamt 1999 and earlier.

Note: West refers to the western part of the country covered by the FRG between 1949 and 1990. East refers to the eastern part of the country covered by the GDR between 1949 and 1990.

better health care at all levels and the selective migration of pensioners from the eastern to the western parts of the country.

Since unification, the gap in life expectancy has rapidly narrowed, especially for women. It is not likely that any pre-1990 factors are responsible for this. Instead, the following post-1990 changes are likely factors that are (partly) responsible for this trend:

- the adoption of the Federal Republic of Germany social welfare system
- the adoption of the FRG health care system (see the following section on *Historical background*)
- greater personal freedom (but also higher unemployment)
- a cleaner environment.

Current health concerns are mainly related to diseases associated with the age structure and demographic trends of the German population. Important demographic and health-related trends that are currently observed include an increase in the number of one-person households, an increase in long-term chronic-degenerative diseases, increasing public expectations with respect to medical and paramedical care as well as incentives for the excessive use of health care services. In addition, the share of elderly people in the population is increasing while the relative number of people of working-age decreases, leading to shrinking social security revenues.

Future changes in the structure of the population will lead to a moderate increase in the elderly population's need for therapy, rehabilitative care, and nursing care whereas the morbidity transition will result in less need for curative medical intervention. It is also expected that there will be an additional need for health services responding to obstructive lung diseases, diseases of the cardiovascular system, urogenital diseases and cancer diagnosis and therapy. A large preventive potential for coronary and circulatory diseases, respiratory diseases and accidents is also foreseen.

Historical background

The history of the modern German health care system can be best be described according to the major periods in German history: Industrialization and the introduction of mandatory health insurance (on a national level) in 1883, social conflicts and doctors' victories during the Empire and Weimar Republic 1883–1933, the national-socialist period 1933–1945, the post-war period 1945–1949 which resulted in two separate German states and a reunified Germany since 1990.

The rise, continuity and prominence of statutory health insurance (SHI)

The rise of Germany's modern health care system dates back to 1883 when the parliament made nationwide health insurance compulsory. Germany is recognized as the first country to have introduced a national social security system. In the following decades the principle of statutory social insurance, called the Bismarck system, was also applied to alleviate the risks of work-related accidents and invalidity (1884), old age and disability (1889), unemployment (1927) and the need for long-term nursing care (1994). The prominence and structural continuity of social insurance is one of the key features of the historical development of Germany's health care system to the present day.

The origins of social insurance lie in the mutual-aid societies of guilds which emerged after the middle ages. During the nineteenth century, the rising class of industrial blue-collar workers adopted this principle by setting up occupational self-help and regulation (voluntarism). Contributory funds were also set up by companies and local communities, thus relieving (and complementing) statutory support for the poor and charity. In 1849 Prussia – the largest of the German states – made health insurance compulsory for miners and allowed local communities to oblige employees and their employers to pay financial contributions.

Multiple economic crises during rapid industrialization worsened already miserable living conditions, especially of the urban working class. The government responded to increasing workers' protests by prohibiting socialist and communist organizations in 1878 including trade unions, but increasingly it perceived political repression as an insufficient measure of maintaining the existing social order. In 1876, five years after the unification of the German states, the parliament enacted national standards for minimum contributions and benefits but opposed regulations for mandatory payments. The Emperor's charter of 1881 declared social welfare for the poor to be essential for national survival in a hostile world. Motivated by paternalism and by concerns about military and economic efficiency, Chancellor Bismarck suggested a national health service type of system in 1881. However, provincial governments as well as liberal members of parliament from business, agriculture and the church opposed tax-based financial provisions and the expansion of national government.

The resulting legislation of 1883 reflected a compromise of these rival interests but was opposed by leftist-liberals and social democrats. They dismissed the "carrot and stick" strategy of the bill and instead called for political

rights and workers' protection within the industrial process – demands which were only met gradually from the 1890s onwards.

The law built upon existing local funds and occupation-based funds (miners, guilds and companies). Health insurance was made compulsory for workers of certain industries with hourly wages or up to a legally fixed income ceiling. They were to pay two thirds of the contributions while their employers were obliged to pay one third. Furthermore, the two opponents in the class conflict were entitled and forced to cooperate in elected assemblies and boards proportionate to their 2:1 contributions. Members were eligible to receive monetary benefits, i.e. sick pay equivalent to 50% of the customary local wage for 13 weeks, maternity pay and death compensation. In addition, a minimum set of primary health care services including medication was to be provided while hospital care was left to the decision of the funds on a case-by-case basis. The funds functioned on a non-profit basis. They were initially free to choose private suppliers of health care (physicians or any other health care professionals) and to determine the nature of contractual relationships with them. The role of the national parliament and government was limited to prescribing social policy and setting legal standards for the self-administrated funds which were to be supervised by provincial governments.

For compulsory social insurance covering work-related accidents and invalidity, employers accepted the 100% contributions to self-administered accident funds as an alternative to third-party insurance schemes. Thus, they increasingly introduced and controlled preventive safety measures and rehabilitative care which were to precede financial compensation. The statutory insurance for old age, to which employers and workers paid equal contributions, also offered health care services according to the principle of "rehabilitation before compensation". Rehabilitative care, e.g. for tuberculosis patients, was delivered directly by most financing agencies, including sickness funds and local communities, in the form of inpatient treatment in the countryside. This led to the heterogeneous development of rehabilitative care and to the popularization of spa treatments which became an institutional niche, e.g. for natural treatments and remedies (often categorized as alternative medicine today).

During the 1880s many workers boycotted the self-administered statutory funds and chose self-supporting funds as a legal alternative to statutory funds (known as *substitute funds*). These funds were self-governing and were run entirely by the workers. However when this choice became restricted in the early 1890s, statutory funds became the stronghold of the social democratic party. The national government interfered to separate the rising white-collar movements from the blue-collar by introducing a separate string of statutory health insurance for salaried employees in 1901. Since white-collar workers

received greater rights to choose, the existing substitute funds catered almost exclusively for white-collar employees from that time onwards (until 1995). The substitute funds, although contributions were now shared with employers, maintained the historical pattern of representation; that is, 100% employees, which is still the case today. The 1911 Imperial Insurance Regulation introduced a common legal framework for social insurance; the regulations covering health insurance remained in force – with changes – until 1988. The regulations governing maternity benefits still remain in force today.

The number of citizens with health insurance in 1883 had doubled when compared to 1880. Over the ensuing decades statutory health insurance was gradually extended from covering 10% of the population in 1883 to 88% (mandatory and voluntary) of the population of the Federal Republic of Germany in 1987 and to 100% of the population in the German Democratic Republic in 1949. The universal national health insurance system of the socialist German Democratic Republic (GDR) was abandoned after reunification in 1990 in favour of the liberal Federal Republic of Germany (FRG) insurance system. The extension of membership was achieved either by increasing the income ceiling of mandatory membership or by adding new occupational groups to the statutory fund system, i.e. white-collar workers from the transport and commercial sector (1901), domestic servants, agricultural and forestry workers (1914) or farmers (1972). Germany also managed to integrate certain social groups, which in many other European countries were financed and/or cared for by public agencies, e.g. the unemployed, family dependants, pensioners, students and disabled persons, into the statutory health insurance scheme.

Contributions and expenditure increased substantially during the 116 years of statutory health insurance. This was the result of the extension of benefits – often following decisions by the civil courts – through state intervention but mainly by the self-administered funds themselves or by joint committees between funds and physicians. While initially the statutory health insurance scheme aimed primarily at preventing impoverishment by compensating income in cases of illness, sickness funds increasingly funded services and the prescriptions of specialized professionals. This is reflected in the falling ratio between monetary and service/product benefits. The trend was accelerated even further from 1969 when FRG employers became obliged to continue remunerating their employees during the first six weeks of sickness.

When looking at rising expenditures it should not be overlooked that the pay-as-you-go principle of contributions and expenditure ensured a sound financial basis for health care financing even during the two World Wars, mega-inflation in 1923, the economic crisis of 1929 and the introduction of a totally new currency in 1948.

Collective victories of the medical profession over funds and other professions

The shift from monetary to service benefits corresponded with a growing number of health professionals. This trend reflects a broader transformation in nineteenth century industrial society to what has been called a "professional society". Health care services were one of the solutions which the rising class of professionals offered as a means of addressing social and physical problems, and they basically received legitimization for doing so from most sections of society. However the "socialization" of professional health care developed alongside deep conflicts over income and power.

The conflicts between the sickness funds and physicians working in the ambulatory sector on a for-profit basis were one of the major factors which shaped Germany's current health care system. Office-based physicians played, and still play a dominant role not only within the ambulatory sector but also affect the health care sector as a whole. Until 1933 they gained major victories over the quasi-public funds, over other health professions and over physicians working in the public or non-profit private sector.

The 1883 legislation did not address what relationship funds should have with doctors nor what the qualification of health care professionals should be, leaving both these matters up to the funds. Doctors initially hardly took any notice of this regulation, but from the 1890s they fought for autonomy and income through strikes and lobbying. The underlying developments were the extension of the number of patients with insurance coverage, the restricted access of insured patients to doctors, the dependence and low status of employed panel doctors from the worker-dominated funds and the doubling of the physician/population ratio from 1887 to 1927. From 1900 onwards the medical profession managed to nationalize their campaign and to convince the rival panel and private doctors to express uniform demands. The most successful interest group was the *Leipzig Union*, later called the *Hartmann Union* which was founded in 1900 and whose membership grew from 21 doctors to nearly 75% of all German physicians by 1910.

In a way their demands were paradoxical: on the one hand, they demanded free (or increasing) access to statutory insured patients under the slogan "free choice of doctors for patients but not for funds". But on the other hand, they tried to restrict the size of the public sector in order to keep private patients or – from the perspective of panel doctors – in order to share the income from statutory funds with as few physicians as possible. Except for a period of real fee-for-service remuneration in the 1960s and 1970s, this conflict has remained a feature of German health care politics until today.

Since the 1911 Imperial Insurance Regulation did not address any of these demands, physicians threatened to go on strike shortly before it took effect in 1914. In December 1913, the government intervened for the first time in the conflict between funds and physicians. The Berlin Convention made joint commissions between physicians and funds obligatory in order to channel the conflict into a constructive negotiation process. The ratio of doctors to fund members was now legally fixed at a minimum of 1:1350 which joint registering committees had to put into practice. Contracts with physicians had to be agreed with all funds collectively.

After the Berlin Convention had expired at the height of inflation in 1923, office-based physicians went on strike repeatedly. Some funds responded by setting up their own health care centres which – although few in number – were perceived by the medical profession as a menacing throwback to nineteenth century conditions and to the socialization of medical services. Private practitioners also felt threatened by the establishment of a broad diversity of services for prevention, health education and social care which were delivered by local communities and welfare organizations. The government also responded to the strikes and created the Imperial Committee of Physicians and Sickness Funds (which still exists today as the Federal Committee) as the joint body responsible for decisions regarding benefits and the delivery of ambulatory care.

Emergency regulations during the economic and political crises of the early 1930s introduced co-payments for patients, the supervision of doctors through a medical service of the sickness funds and a doctor/fund-member ratio of 1:600. In return, ambulatory physicians were granted a legal monopoly for ambulatory health care (1931) for which they had been lobbying (with gradual success) over the preceding decades. These regional physicians' associations obtained the right to negotiate complex contracts with statutory health insurance funds and to distribute their payments amongst their medical members. The regulations reflected a major collective victory by ambulatory physicians over sickness funds, hospital doctors, medical officers in community health and other health care professionals.

State regulations had already subordinated non-medical professionals (such as midwives and nurses) under the medical profession since 1854 and they now restricted their autonomy further by completely prohibiting them to contract directly with statutory health insurers. Although practitioners of natural therapies and remedies were promoted ideologically during the first years of the Nazi regime, their status as free traders was restricted from 1939 when their certification and practice were submitted to the control of regional medical/public health officers. The ambulatory monopoly for physicians in private

practice meant that it was now legally prohibited for medical officers to provide curative services, for sickness funds to buy and supply pharmaceuticals or medical services, and for hospitals to treat outpatients.

Thus, the legalization of the physicians' ambulatory monopoly contributed substantially to their division from the hospital sector and to the marginalization of community health services. The separation of inpatient and outpatient care was also enhanced by the rapid expansion and specialization of acute hospital care with the majority of personnel working full-time since the 1920s. The number of inpatient beds tripled from 1885 to 107 per 100 000 inhabitants in 1938. The separation between inpatient and outpatient care was further promoted by the division of financing and planning responsibilities between the corporatist associations of funds and physicians and the public agencies at the state and community level each with their particular traditions of health administration and legal frameworks.

Another factor contributing to the division of inpatient and outpatient sectors was the early specialization and professionalization of the medical profession. The pioneering role of German physicians in natural scientific research in medicine had been strongly supported by regional and national authorities since the 1880s. By the turn of the century, most medical faculties provided chairs for all major clinical and basic science sub-specialties which again were made obligatory subjects for medical students by 1920. Medical and specialist training continued to be science-oriented and based in hospitals only, as is still the case today. The exceptional specialization process was a result of these trends and of the competition amongst the medical profession for income and operational fields. Conversely, the specialization and subsequent professionalization (including full-time occupation and separate professional organizations) increased intra-professional rivalries further – both between medical professionals in the private and the public sector and between generalists and specialists (a conflict which is currently as important as ever, see the section on *Corporatist level* below).

Continuity and change during the national-socialism period

During the national-socialist (Nazi) regime, the fundamental structures of health care financing and delivery were maintained. The regional and the newly-founded national physicians' association were established as public bodies (1934). They were also granted the right to make decisions on the registration of office-based physicians by themselves without negotiation with sickness funds. In return they were forbidden to strike and were made responsible for emergency care in the ambulatory sector as well as for the administration and

control of all ambulatory physicians. During the war, social insurance coverage was extended to pensioners (1941).

In contrast to the continuity in structure, the management of health care and the balance of power amongst the main actors was changed during the Nazi regime. In 1933, socialist and Jewish employees and the majority of workers' representatives in sickness funds were expelled by law. Sickness funds (1934), community health services (1935), nongovernmental organizations dealing with welfare or health education and the health care professions' organizations (1933–1935) were each centralized and submitted to a leader who was nominated by the National-Socialist Party (following the so-called *Führer-prinzip*). Self-administration became penetrated by nominated members of the National-Socialist Party. The participation of workers and employers was reduced to functions in an advisory council. In addition physicians and local communities were allowed to send representatives to the council.

Access to adequate health care was increasingly restricted or denied to the Jewish population and other stigmatized minorities due to the national-socialist state's and party's politics of expulsion, exclusion from social life, murder and detention in concentration camps. (During the Second World War the general civilian population and soldiers also experienced restrictions on their right to adequate health care services which they had acquired by social or private health insurance.) From 1933 onwards, public funds for social care, welfare and health education were diverted towards satisfying the political targets of racial hygiene, eugenics and social control.

Aryanization of the health care system entailed that one fourth of employees in sickness funds and about one third of the doctors working for local community welfare services were forcibly released from service in 1933. Subsequent laws prohibited Jewish doctors to treat patients with statutory insurance (1933), non-Jewish patients (1937) and to practice medicine at all (1938). Thus 12% of physicians in the country (and 60% of doctors practising in Berlin) were restricted from delivering health care. The majority of the medical profession – the profession with the highest membership in the national-socialist party – welcomed the exclusion of Jewish doctors as an advantage for increasing their own income within the context of competition for patients. In addition, the balance of power was shifted further from the funds to the physicians.

Post-Second World War

After the Third Reich fell on 8 May 1945, health care and virtually all other sectors of German society began to bifurcate into systems that became virtually diametrical. The three zones occupied by western allies were to become the

Federal Republic of Germany (FRG) whilst the Soviet zone was to become the German Democratic Republic (GDR). Both states operated separately from 1949 until they became unified in 1990 after peaceful protests by GDR citizens for social and political reform. Health care in the first years of post-war Germany was characterized by ad hoc public health interventions aimed at handling and preventing epidemics and distributing scarce resources for health care. The western allied forces basically supported and relied upon existing personnel and structures in health care and administration. The British administered health affairs in a more centralized fashion whilst the French tried to restrict centralized powers within their zone and the whole of the western part of the country. The Americans concentrated mainly on ad hoc policies, tried unsuccessfully to establish a public health school and blocked the re-establishment of the physicians' monopoly until the 1950s.

The national health service system in the German Democratic Republic (GDR)

In contrast, the Soviets took a strong interventionist role from the beginning. They took an authoritarian approach in order to control infectious diseases and, despite the protests of physicians, gradually introduced a centralized state-operated health care system. They called 60 health experts to advise them on designing a new model. This model came to be influenced by the traditions of social hygiene in the community health care services of the Weimar period, and by emigrants who had returned from Britain, Sweden and the Soviet Union where the design of those health care systems had been influenced strongly by German doctors who had left the country during the 1920s.

The resulting GDR health care system differed from its Soviet counterpart through a structural division between ambulatory and hospital services which in practice, however, often operated closely together on the same premises. In addition, the principle of social insurance was de jure maintained with workers and employers sharing premium costs but with administration concentrated in only two large sickness funds, one for workers (89%) and one for professionals, members of agricultural cooperatives, artists and the self-employed (11%). De facto, however, the role of the social insurance system was extremely limited. As in most socialist countries, health care personnel were employed by the state and delivered ambulatory care to a small degree in solo practices but mainly through community-based or company-based health care centres which usually were staffed by multiple medical disciplines and other health care professionals. Local communities provided preventive services for health education, child and maternity health and specialist care for chronic diseases such as diabetes or psychiatric disorders. These health care services were

complemented by comprehensive state support for social measures, e.g. housing, child day-care and crèches which also supported the policy for increasing the population and workforce.

Thus, they realized a type of health care system which the political left aspired to also in the Federal Republic of Germany and many other western countries until at least the 1960s. However, due to under-financing and under-investment, a shortage of personnel and modern technologies or due to qualification deficits the quality and modernization of the GDR health care system gradually began to fall behind the standards of western industrialized countries from the 1970s onwards. Shortly after the National Health Conference had decided to introduce profound health care reforms and to increase investments and personal resources in 1989, the opening of the Berlin wall ended the political sovereignty of the German Democratic Republic.

The continuation of the social insurance system in the Federal Republic of Germany (FRG)

The local sickness funds, labour unions and the Social Democratic Party campaigned for a single insurance fund for health, old age and unemployment in order to increase the bargaining leverage over the monopoly that ambulatory physicians already enjoyed in different regions. However, the conservative Christian Democratic Party won the first elections in 1949 and by 1955 had basically restored the health care system which had existed at the end of the Weimar period on a national level (in coalition with the employers). Sickness fund contributions were now shared equally between employees and employers as well as representation (except in the substitute funds). The insurance for work-related accidents and invalidity continued to be entirely financed by employers, yet trade unions were granted a 50% representation. (Due to the power of the allies, the health insurance and health care system in the western part of Berlin were governed by slightly different arrangements: e.g. a unified health insurance was maintained until the early 1960s.)

Self-administration became predominantly a field for corporatist representatives with relatively little transparency and democratic rights for insured members. Private ambulatory physicians were again granted a monopoly with the corresponding rights, power and duties. In addition the legal ratio of physicians to fund members was increased to 1:500 and then abolished completely in 1960 in favour of professional self-regulation after the Constitutional Court had declared the freedom to choose one's work a constitutional right.

The period from 1955 to 1965 has been characterized as a period of struggle concerning structural reforms aiming to reduce costs which a coalition of physicians, sickness funds, media and health product companies was able to

avert. From 1965 to 1975, costs for health care increased substantially based on growth in the national economy and was partly due to rising prices and wage costs (including the secularization of hospital personnel), demographic trends, the complementary use of more expensive technology and the modernization and expansion of health care services. Ambulatory physicians developed an increasingly sophisticated system of fee-for-service remuneration. New services for secondary prevention and partly for occupational medicine were put under the auspices of office-based physicians which saved costs for local community health but also decreased its role within the health care system.

The 1970s also saw an extension of reform-oriented social, psychiatric and nursing services which were mainly delivered by private non-profit organizations at the community level. In addition, new membership groups were brought under the roof of statutory health insurance (e.g. farmers, disabled persons and students). In 1972 the responsibilities of states and funds in financing hospital reform were clarified and manifested towards the "dual financing" method which made funds pay for services and personnel while states were to finance investments and running costs. Therefore, it is important to note that the growth of the health care sector and health care expenditure was the result of an explicit political strategy. It aimed at overcoming the infrastructural deficits and shortcomings caused by the destruction suffered during the Second World War as well as the insufficient mode of financing hospital investment that existed at the time.

After the oil crisis (i.e. from 1975 onwards), the continued increases in costs became perceived increasingly as a cost-explosion and attracted subsequent criticism of health care providers' financial and status interests. The era of cost-containment in the statutory health insurance began in 1977 with the introduction of the *Health Insurance Cost-Containment Act*. It ended the period of rapid growth in health care expenditure, especially in the hospital sector. Since 1977, the sickness funds and providers of health care have been required to pursue a goal of stability in contributions which has remained the main cost-containment target in health care ever since. This requirement is defined as pegging increases in contribution levels with the rate of increases in contributory income. Ensuring compliance with the intentions of this legislation is one of the main tasks of the Concerted Action in Health Care, a round-table for the rival corporatist organizations to decide on how to contain costs jointly. The committee has been extended over the years to about 130 representatives but due to continued conflicts basically has not met its political expectations.

The basic principle behind "German-style" cost-containment was an income-oriented expenditure policy to guarantee stable contribution rates. This was an important objective in a time of economic restructuring and growing international competition, since the contributions are jointly paid by employers and

employees. Therefore, increases in contribution rates were (and still are) perceived to be a question of international competitiveness.

The drive for cost-containment, which intensified after reunification, was realized through a long series of legislation (see the section on *Health care reforms*) that employed various measures primarily:

- budgets for sectors or individual providers
- reference-price setting for pharmaceuticals
- restrictions on high cost technology equipment and number of ambulatory care physicians per geographic planning region
- increased co-payments (both in terms of size and number of services)
- the exclusion of young people from certain dental benefits between 1997 and 1998.

The transfer of the FRG health care system to GDR

The public protests of GDR citizens for political and economic reforms led to the fall of the Berlin wall in November 1989 and ended the sovereignty of the German Democratic Republic. In 1990, the transitional GDR government and the FRG government signed the Treaty of German Reunification which reflected the political decision to integrate the 17 million citizens in GDR quickly and comprehensively into the Federal Republic of Germany system. The transformation to standards in the FRG did not only affect the (widely-criticized) political and economic system but also the systems of social security and health care which the public regarded more positively. Yet ideas for a third way, for example, one uniform health insurance system for the former GDR or the whole of Germany, were dismissed on practical, political, legal and lobbyist grounds.

Only minor compromises were made concerning the financing and delivery of health care. For example, the Treaty of Reunification granted the community health care centres (polyclinics) only five-years' grace after which they were to negotiate jointly with regional physicians' associations. But the time limit and the restrictions on remuneration that could be achieved by these centres – they received per capita payments instead of the fee-for-service that office-based physicians collected – did not offer great prospects for the future. By May 1992, 91% of physicians who previously had worked in different ambulatory public settings were running their own practices. There are only a few polyclinics (in Berlin and the federal state of Brandenburg) which have still managed to continue operating either as a network of distinct solo-practices or as a cooperative.

In addition, the FRG health insurance types expanded quickly into the the eastern parts of the country. However, this has resulted in a lower percentage of privately insured citizens (2% versus 10%) and a higher proportion of local fund members (61% versus 42%). The federal government supported the upgrading of the infrastructure through an immediate aid programme of several billion Deutsche Marks. Investments were directed mainly towards hospitals and nursing homes.

Health care reforms in Germany of the 1990s

These extraordinary tasks increased the pressure on the system and contributed to the increasing speed of health care reform legislation in the 1990s: the Health Care Structure Act (1992), the Health Insurance Contribution Rate Exoneration Act (1996), the First and Second Statutory Health Insurance Restructuring Acts (1997), the Act to Strengthen Solidarity in Statutory Health Insurance (1998) and the Reform Act of Statutory Health Insurance 2000 (1999).

Key elements of the Health Care Structure Act were:

- the introduction of legally fixed budgets or spending caps for the major sectors of health care;
- a partial introduction of a prospective payment system in the hospital sector (case-fees and procedure-fees for selected treatments beginning in 1996) instead of the previous system of covering full hospital costs;
- a loosening of the strict separation of the ambulatory and hospital sector (e. g. ambulatory surgery in hospitals became possible);
- the introduction of a positive list of pharmaceuticals (which was later abolished), increased co-payments, and restrictions for opening new practices in ambulatory care;
- the introduction of a risk compensation scheme to redistribute contributions among sickness funds;
- the freedom to choose a sickness fund for almost all the insured population.

The Health Insurance Contribution Rate Exoneration Act and, more explicitly, the First and Second Health Insurance Restructuring Acts represented a shift from cost-containment to a possible expansion of private payments. Co-payments were now viewed as a means to put new money into the system. These laws included: the cancellation of the budgets in ambulatory care and the spending caps for pharmaceuticals; increased co-payments for inpatient care, rehabilitative care, pharmaceuticals, medical aids, and transportation (to the hospital); an exclusion of young persons from certain dental

benefits (mainly crowns and dentures) but also the privatization of the relationship between dentists and all other patients for these treatments; and an annual flat premium of DM 20 for the restoration and repair of hospitals which had to be paid entirely by the insured.

The Act to Strengthen Solidarity in Statutory Health Insurance reversed almost all of these changes since they were perceived by the new government to violate the basic principles of the statutory health insurance system, namely uniform availability of benefits, equally shared contributions between employers and employees, financing depending only on income and not on risk or service utilization, and the provision of services as benefits-in-kind.

The Reform Act of Statutory Health Insurance 2000 does not have one central theme but rather tries to address a range of (perceived) weaknesses of the system by strengthening primary care, opening opportunities for overcoming the strict separation between the ambulatory and inpatient care sectors, introducing new requirements for health technology assessment and quality assurance, as well as supporting patients' rights. In addition, the payment system for hospital care will be changed.

Organizational structure and management

Organizational structure of the health care system

A fundamental facet of the German political system – and the health care system specifically – is the sharing of decision-making powers between the *Länder* and the federal government, with further powers governing statutory insurance schemes being delegated to nongovernmental corporatist bodies. Corporatism has several important aspects. Firstly, it hands over certain rights of the state as defined by law to corporatist self-governed institutions. Secondly, the corporatist institutions have mandatory membership and the right to raise their own financial resources under the auspices of, and regulation by the state. Thirdly, the corporatist institutions have the right and obligation to negotiate and sign contracts with other corporatist institutions and to finance or deliver services to their members. A separate group of actors are the courts which will be dealt with separately after the federal, *Länder* and corporatist levels. All major actors as well as their main interrelationships are shown in Fig. 3.

The German constitution (known as the Basic Law) requires that living conditions shall be of an equal standard in all *Länder*. However, health promotion or protection is not specifically mentioned as a goal. (This was different in the German Democratic Republic where Article 35 of the constitution named health protection as a state objective.) As mentioned, the constitution defines areas of exclusive federal legislation and concurrent legislation. Health is not an area exclusive to federal legislation and specific topics relevant to health are included in the concurrent legislation. For example, social benefits, measures against diseases which are dangerous to public safety, protection against ionizing radiation, certification of physicians and other health professions, pharmaceuticals and drugs, and the economic situation of the hospitals. However, federal law – where it exists in these areas – takes precedence over *Länder* legislation. In addition, parts of environmental policies fall into this category. Implicitly, all other aspects of (public) health are therefore the responsibility of the *Länder*.

Federal level

At the national (i.e. federal) level, the Federal Ministry for Health and the parliament are the key actors. The Ministry of Health is divided into five divisions with two subdivisions each:

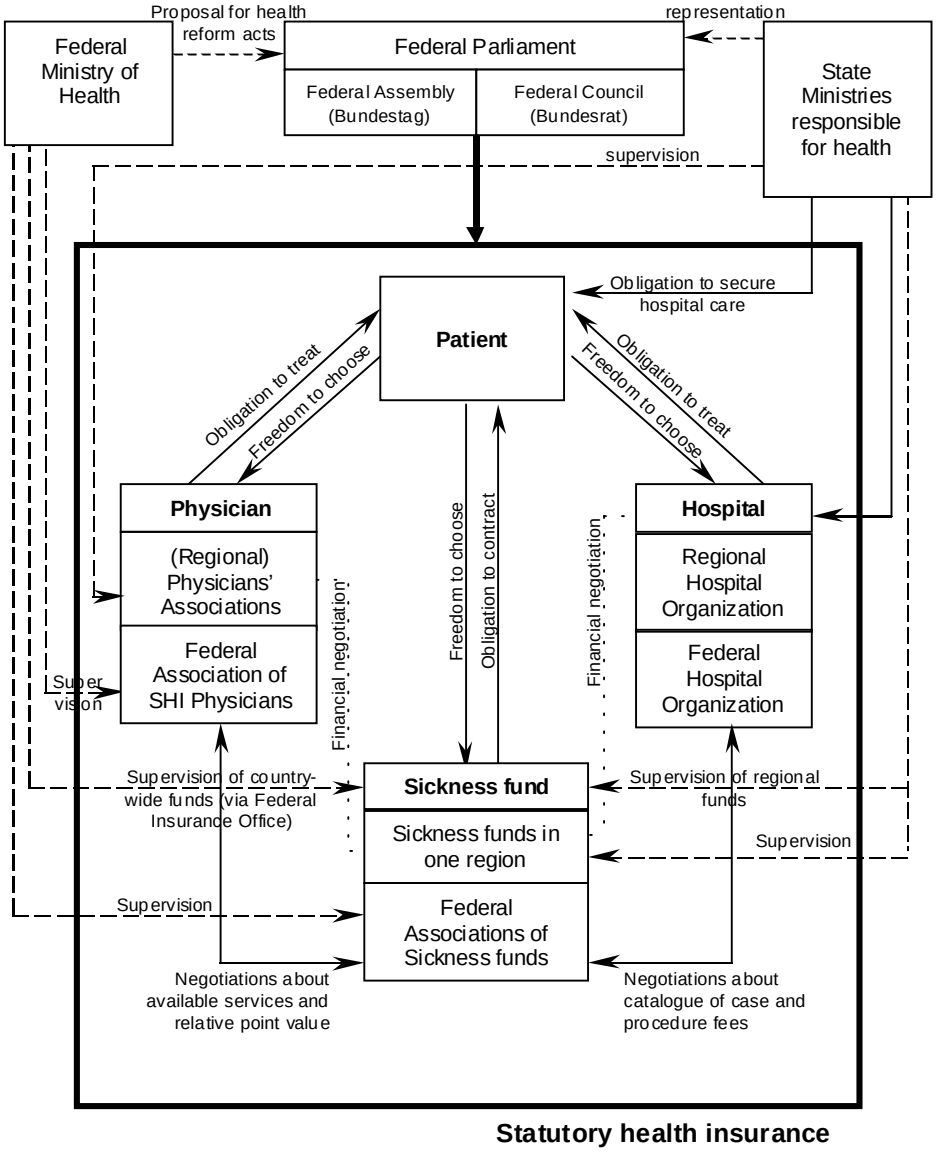
- administration and international relations
- pharmaceuticals/medical products and long-term care
- health care and statutory health insurance
- protecting health and fighting disease
- consumer protection (mainly food-related) and veterinary medicine.

Before 1991, the (sub)divisions dealing with statutory health were part of the Ministry for Labour and Social Services while most of the other (sub) divisions were part of the Ministry for Youth, Family, Women and Health. The subdivision responsible for long-term care, including social long-term care insurance was transferred from the Ministry of Labour and Social Services to the Ministry of Health only in 1998.

The Federal Ministry of Health is assisted by subordinate authorities (not included in Fig. 2) with respect to scientific consultancy work and the performance of certain tasks:

- The Federal Institute for Pharmaceuticals and Medical Devices (BfArM), is the major licensing body for pharmaceuticals and supervises the safety of both pharmaceuticals and medical devices;
- The German Institute for Medical Documentation and Information (DIMDI) has the task of providing public and professionals information in all fields of the life sciences. After initially concentrating on health care and medicine, DIMDI now offers a broad collection of databases covering the entire spectrum of life sciences and social sciences;
- The Federal Institute for Communicable and Noncommunicable Diseases (Robert-Koch-Institute) which has the tasks of surveillance, detection, prevention and control of diseases;
- The Federal Institute for Sera and Vaccines (Paul-Ehrlich-Institute) for the licensing of sera and vaccines;
- The Federal Centre for Health Education (BZgA) has the objective of maintaining and promoting human health
- The Federal Institute for Health Protection of Consumers and Veterinary Medicine (BgVV) which is charged with improving consumer protection in the areas of food, chemicals, cosmetics, veterinary pharmaceuticals and diseases, crop protection and pest control. Another task is the licensing of veterinary pharmaceuticals.

Fig. 3. The organizational relationships of the key actors in the health care system



The first three institutions are the successors of the former Federal Health Institute which was more independent of the ministry but was dissolved after being accused of mishandling the requirement to carry out HIV testing of pharmaceuticals produced from human blood plasma.

Other federal institutions relevant to the health care system are the Federal Insurance Office and the Federal Supervisory Office for the Insurance Sector (not included in Fig. 3).

In 1977, the Concerted Action in Health Care (not included in Fig. 3) was created as an advisory body to the government. Its main tasks are collecting and presenting data on the medical and economic situation of the health care system with the aim of advising both the government and the corporatist institutions on improving the effectiveness and efficiency of health care. Further, the Concerted Action makes recommendations on improvements in remuneration systems, health care delivery and the structure of the health system. This committee consists of about 65 members from all relevant organizations in the German health care system plus experts in the Ministry of Health.

Since 1985, the Concerted Action has been backed by an advisory council, which produces an annual report or a so-called special report if specific questions have been posed by the Minister of Health, something which became the rule in the 1990s. The advisory council consists of seven medical, economics and nursing experts in the field of health care. The members are appointed by the Minister of Health. The annual reports are highly valued as a source of data and useful recommendations but their impact on the improvement of the health care system is not really clear.

Since 1999, the Ministry of Health also has an Ethics Council composed of thirteen persons covering the disciplines of biology, law, medicine, nursing, philosophy, psychology, social sciences and theology.

Another advisory body used to be the Federal Health Council which dealt with matters related to the promotion of public health and the prevention of illnesses and diseases. Other federal ministries relevant to health include the Ministries for the Environment and Nuclear Energy and for Education and Research (not included in Fig. 3).

Länder level

The federal structure is represented mainly by the 16 state governments and, to a very small extent, by the state parliaments. In 1998, 13 out of the 16 *Länder* governments had a ministry which mentioned “health” in its name. However, none has an exclusive health department. In most of these *Länder* it is most commonly combined with Labour and Social Services (which is also the case in the three *Länder* which do not mention health in the name of a ministry), less commonly with family or youth affairs, and only in one *Land* is it combined with environmental affairs. This combination used to be more common in the 1970s and 1980s.

Within a *Land's* Labour Ministry, health is typically one of four or five divisions. In Lower Saxony for example, the health division is further subdivided into units concerned with:

- public health services and environmental hygiene
- health promotion, prevention and AIDS care
- state-owned hospitals
- hospital planning
- supervision of health professions and their professional institutions
- psychiatry and illegal drugs
- pharmaceuticals and supervision of pharmacists and their professional institutions.

Most other areas affecting health such as traffic, city planning or education are controlled by other ministries.

Corporatist level

For the statutory health insurance scheme, corporatism is represented by the (statutory health insurance-contracted) physicians' and dentists' legal associations on the provider side and the sickness funds and their associations on the purchasers' side.

Physicians' associations exist in every *Land* following the principles of federalism; since there are several physicians' associations in three *Länder* (North Rhine-Westphalia which has two; Rhineland-Palatinate four; and Baden-Württemberg four), the total number of associations is 23. In addition, there is the Federal Association of Statutory Health Insurance Physicians based in Cologne. Every physician treating sickness fund members on an ambulatory basis has to be a member of their respective physicians' association. The associations distinguish between their "ordinary" members, i.e. physicians in private practice, and other members, mainly hospital physicians who are extraordinarily accredited to treat patients on an ambulatory basis (see the section on *Primary and secondary ambulatory health care*). All associations have an elected "parliament" as well as a board elected by those representatives. Recently, following the Psychotherapy Act, psychologists with a subspecialization in psychotherapy were admitted to the physicians' associations. This was done in order to equalize the terms of the provision and reimbursement of psychotherapy between physicians and psychologists.

Dentists accredited by the statutory health insurance are organized in the same way as physicians, i.e. through dentists' associations in the *Länder* as a Federal Association of SHI Dentists.

The hospitals are not represented by any legal corporatist institution but by organizations based on private law; they are, however, increasingly charged with legal responsibilities as well. The hospital organizations have *Länder* organizations as well as a federal organization based in Düsseldorf.

The payers' side is made up of autonomous sickness funds which are organized on a regional and/or federal basis. In mid-1999 there were 453 statutory sickness funds with about 72 million insured persons (50.7 million members plus their dependants) and 52 private health insurance companies covering around 7.1 million fully insured people.

Sickness funds can be differentiated into seven different groups:

- 17 general regional funds known as *Allgemeine Ortskrankenkassen* (AOK) – their federal association is based in Bonn;
- 13 substitute funds known as *Ersatzkassen* – Siegburg;
- 359 company-based funds known as *Betriebskrankenkassen* (BKK) – Essen;
- 42 guild funds or *Innungskrankenkassen* (IKK) – Bergisch-Gladbach;
- 20 farmers' funds or *Landwirtschaftliche Krankenkassen* (LKK) – Kassel;
- 1 miners' fund known as *Bundesknappschaft* – Bochum;
- 1 sailors' fund or *See-Krankenkasse* – Hamburg.

All funds have non-profit status and are based on the principle of self-government, elected by the membership.

In most funds, the management is made up of an executive board – responsible for the day-to-day management of the fund – and an assembly of delegates deciding on bylaws and other regulations of the fund, passing the budget, setting the contribution rate and electing the executive board. Usually, the assembly is composed of representatives of the insured and employers whilst only in the substitute funds do representatives of the insured population comprise the whole of the assembly. Both the representatives of the employees/insured and of the employers are democratically elected every six years. Many representatives are linked to trade unions or employers' associations.

The total number of sickness funds has decreased steadily since the AOKs and the substitute funds were legally opened to all those seeking insurance through the Health Care Structure Act (see the section on *Historical Background*). The first wave of mergers in 1994/1995 affected the AOKs. As some of them were very small, they merged into single AOKs per *Land*. In 1995, the IKKs followed – partly before they opened themselves to outside members. The latest wave of mergers has been that of the BKKs, also often as a prelude to competition. By the beginning of 1999, the "open" BKKs had more members

than those which remained "closed", i.e. with an exclusive in-company membership (for further details see the section on *Health care finance and expenditure*).

Table 2. Number of sickness funds, 1993–1999

	1.1.1993	1.1.1994	1.1.1995	1.1.1996	1.1.1997	1.1.1998	1.6.1999
AOKs	269	235	92	20	18	18	17
BKKs	744	719	690	532	457	386	359
IKKs	169	160	140	53	43	43	42
All other funds	39	39	38	37	36	35	35
Total	1 221	1 152	960	642	554	482	453

Source: Federal Ministry of Health, 1999.

By law, sickness funds have the right and the obligation to raise contributions from their members which includes the right to determine what contribution rate is necessary to cover expenditure. The Health Insurance Contribution Exoneration Act of 1996 interfered with this right by legally lowering the contribution rates of all sickness funds on 1 January 1997 by 0.4%.

Corporatist institutions similar to the sickness funds exist in other health-related statutory insurance schemes as well:

- accident funds for statutory accident insurance covering curative and rehabilitative care services for work-related accidents and diseases;
- retirement funds for statutory retirement insurance which is responsible for most rehabilitative measures;
- since 1995, long-term care funds which were formed by the existing sickness funds (see the section on Social care).

Outside the scope of the statutory health insurance, legally established professional chambers exist for physicians, dentists, pharmacists and veterinarians. By law, all these health care professionals must be a member of their respective chamber at *Land* level. The chambers are regulated by laws of the *Länder.* They are responsible for secondary training and accreditation (i.e. of specialist training after university) and continuing education, setting professional and ethical standards as well as for community relations. To coordinate these affairs at federal level, the *Länder* associations have formed federal chambers which are, however, based on private law and therefore can only pass recommendations. Professionals organized in chambers enjoy certain exclusive rights, e.g. the right to maintain their own pension schemes.

Nurses, midwives, physiotherapists and other groups are not considered to be professionals in the legal sense and are therefore not organized in chambers.

Other actors

Voluntary organizations outside the above-mentioned legal actors are too numerous to be listed. They may be differentiated by their main focus of interest (i.e. scientific, professional, political lobbying or economic) and by the group they represent.

There are more than 100 medical scientific organizations; they are united in the *Association of the Scientific Medical Societies* (AWMF). Physicians' organizations outside the corporatist field are of two types: the more professional type and the more political lobbying/economic type. The former includes the general practitioners' organization as well as similar organizations for other (sub)specialties. These organizations work both on professional standards as well on defending their interests among the wider group of all physicians. Another type of professional organization is the local physicians' unions which have, as their main functions, continuing education and providing a forum for physicians from all sectors working in a particular regional area. The organizations, which are clearly designed for lobbying, comprise the *Organization of German Doctors – Hartmann Union* – as the successor of the *Leipzig Union* which was formed in 1900 to defend the economic interests of physicians (see the section on *Historical background*) – and has its main membership base in the ambulatory sector, and the *Marburg Union*, which was formed in 1948 to defend the rights of hospital physicians. Another organization is the *Organization of Democratic Physicians* which often finds itself in opposition to the traditional physicians' organizations since it views itself as a lobby for better health and health care rather than better working conditions for physicians.

The main voluntary organization of nurses with a professional focus are the independent *German Nursing Association* and the *Federation of German Nurses' Associations* as the representation of Catholic, Protestant and Red Cross nurses' associations. Similar but less known organizations exist for other groups such as physiotherapists or midwives. Psychologists are represented by the professional *Organization of German Psychologists*.

The most important organization for pharmacists outside the corporatist sector is the *German Pharmacists' Organization* which is the lobby group for pharmacists with private pharmacies (who have a monopoly in the distribution of pharmaceuticals; see the section on *Pharmaceuticals*). Together with the pharmacists' chambers it forms the *Federation of Pharmacists' Organizations.*

The organization of the German pharmaceutical industry has recently seen a change since the large, research and international companies have formed their own organization, the *Association of Research-based Pharmaceutical Companies* (37 manufacturers representing more than two thirds of the market),

so that the remaining *Federal Association of the Pharmaceutical Industry* (approximately 300 members) has become the organization of smaller companies only. Part of the underlying reasons for the split were disagreements over whether to support negative or positive lists, i.e. prescription exclusions. Two further associations represent pharmaceutical manufacturers with special interests: *The Federal Association of Pharmaceutical Manufacturers* (with approximately 300 members) for OTC producers and the smaller German *Generics Association* (until 1999, *Association of Active Pharmaceutical Companies*) for generics producers.

The last important group on the providers' side is the *Federation of Voluntary Welfare Associations* as the head organization of the six leading non-profit associations which own and manage hospitals, nursing homes, home care agencies and ambulance transportation. In the latter area, the non-profit organizations actually provide the majority of services. The six associations are the *Workers' Welfare Association* (having its roots in the social-democratic workers' movement), the German Red Cross, the Catholic *German Caritas Association*, the *Association of Protestant Welfare Organizations*, the *Welfare Organization of the Jews in Germany* and the *Association of Independent Voluntary Welfare Organizations*.

Turning to the payers' side, the 52 major private health insurance companies (in 1997) are represented through the *Association of Private Health Insurance*, a rather powerful lobby group when it comes to defending the private health insurance sector. Of the 52 private insurers, 25 are traded on the stock market.

Insurees or patients are not represented by any powerful organizations. While a large spectrum of disease-specific self-help groups exist (with a total of up to 10 000 members), they do not represent all patients. A small *General Patients' Association* is not well known (or invited to parliamentary hearings as are most of the above mentioned organizations). An interesting development is that the mainly publicly funded *Foundation for the Testing of Consumer Goods (and Services)* as well as other consumer protection agencies have recently turned their attention towards the health care sector. They have started to investigate hospitals and other providers and to advise the public accordingly.

All of the above named organizations are politically independent, i.e. not associated with particular political parties.

Planning, regulation and management

Federal level

Issues of equity, comprehensiveness and the rules for providing and financing social services are regulated at the federal level. All statutory social insurance schemes are regulated through the Social Code Book (SGB) – the cornerstone of social insurance legislation – but fall within the authority of different ministries. All parts of the Social Code Book have regulated the statutory insurance schemes in the eastern part of Germany since 1 January 1991, in the same way as in the western part, except for certain special, mainly transitional regulations.

Health-related social services are regulated through several statutory insurance schemes with statutory health insurance being the most important one. Others include accident insurance, retirement insurance (which includes responsibility for most rehabilitative measures) and, since 1995, long-term care insurance. Statutory health insurance (under the authority of the Federal Ministry of Health since 1991) is dealt with in Social Code Book V (SGB V) which is amended and supplemented by various reform laws. Book I defines the general rights and responsibilities of the insured, and Books IV and X define responsibilities and administrative procedures common to all social insurance agencies. Chapter 1 of SGB V defines the basic principles of the statutory health insurance. The remaining chapters regulate the following issues:

- mandatory and voluntary membership in sickness funds (chapter 2);
- contents of the sickness funds' benefit package (chapter 3);
- goals and scope of negotiations between the sickness funds and providers of health care, most notably the physicians' associations (chapter 4);
- organizational structure of sickness funds and their associations (chapters 6 and 7);
- financing mechanisms including the risk compensation scheme between funds (chapter 8);
- tasks and organization of the medical review boards (chapter 9);
- collection, storage, usage and protection of data (chapter 10);
- special regulations for the eastern part of Germany (added through the Reunification Treaty as chapter 12).

Chapter 4 is the core chapter regulating the corporatist – or self-regulated – structure of the statutory health insurance system. It defines what has to be and

what may be self-regulated through joint committees of funds and providers (e.g. the details of the benefit package or the relative point values for services) or through direct negotiations (e.g. the total remuneration for ambulatory or dental care); the level at which these negotiations have to take place; how the composition of the joint committees is decided; what happens if they cannot agree etc. (details will be discussed in the appropriate sections).

While the rules are defined by parliament through the SGB V at federal level, the Federal Ministry of Health is responsible for supervising whether the federal associations of physicians and sickness funds as well as the joint committees comply (see also under *Corporatist level*). The supervision of sickness funds operating countrywide is the responsibility of the Federal Insurance Office which is also charged with calculating the risk-structure compensation mechanism between all sickness funds.

Long-term care is also regulated under the authority of the Federal Ministry of Health through Social Code Book XI (SGB XI) which is similar to SGB V in its main content (although it is only about one third as long). Other health-related duties at the central level include legislation in the areas of pollution and ionising radiation, which is the responsibility of the Federal Ministry for the Environment and Nuclear Energy, and the supervision of private health insurance companies by the Federal Supervisory Office for the Insurance Sector (under the authority of the Federal Finance Ministry).

Länder level

The *Länder* governments are responsible for maintaining hospital infrastructure. They attempt to fulfil this duty through hospital plans and funding the hospital investments outlined in those plans. The investments are paid for independently of actual ownership of the hospitals and according to the priorities of the *Länder* government. While the responsibility for major investments (i.e. buildings and large-scale medical technology) is undisputed, it is unclear whether the *Länder* are responsible for building maintenance and repairs. With the exception of Bavaria, all *Länder* have refused to pay for these since 1993. As a measure of compensation for hospital maintenance and repair, the Second Statutory Health Insurance Restructuring Act (Second SHI Restructuring Act) introduced an annual fee of DM 20 to be paid by all insured people for three consecutive years. However, this annual fee was cancelled in 1998.

A second major responsibility of the *Länder* is public health services (subject to certain federal laws concerning diseases which are dangerous to public safety). About half of the *Länder* operate them themselves while the other half delegate responsibility to local governments. The public health tasks comprise

supervision of employees in health care institutions, prevention and monitoring of transmissible diseases, supervision of commercial activities involving food, pharmaceuticals and drugs, environmental hygiene, counselling, provision of community-based psychiatric services, health education and promotion and clinical examination of school children. Since the 1970s, most of the preventive measures, such as screening programmes and health checkups for both children and adults, were included in the sickness funds' benefits package and thus are carried out by office-based physicians (details of this can be found in the section on *Public health services*).

Additionally, the *Länder* are responsible for undergraduate medical, dental and pharmaceutical education and the supervision of the regional physicians' chamber as well as the regional physicians' association(s) and the sickness funds operating in the *Land* (see also under Corporatist level).

The *Länder* coordinate their (public) health activities through the Working Group of Senior Health Officials and the Conference of Health Ministers. However, both are unable to pass binding decisions. In addition, the *Länder* have established various joint institutions to enable them to perform certain tasks. For example the *Länder* of Berlin, Bremen, Hamburg, Hesse, Lower Saxony, North Rhine-Westphalia, and Schleswig-Holstein maintain the Academy of Public Health Services in Düsseldorf to train their public health physicians. A similar academy is run by Bavaria with the support of Baden-Württemberg, Rhineland-Palatinate, the Saarland, Saxony, and Thuringia (so that only Mecklenburg-Western Pomerania and Saxony-Anhalt run their training for public health physicians independently). A joint institution of all *Länder* is the Institute for Medical and Pharmaceutical Examination Questions which is responsible for preparing and evaluating written examinations in the undergraduate education of physicians, dentists and pharmacists.

Corporatist level

The corporatist institutions on the payer side, i.e. the sickness funds, have a central position within the statutory health insurance system. The Social Code Book defines their rights and responsibilities (see above). The sickness funds have the right and the obligation to raise contributions from their members and the right (and obligation) to determine what contribution rate is necessary to cover expenditure. Their responsibilities include negotiating prices, quantities and quality assurance measures with providers on behalf of all sickness funds' members. Services covered by such contracts are usually accessible to all fund members without any prior permission from the fund. Permission is, however, necessary for preventive spa treatments, rehabilitative services and short-term nursing care at home. In cases where there is doubt, the sickness funds must

obtain an expert opinion on the medical necessity of treatment from their Medical Review Board, a joint institution of the sickness funds.

A reform to make these benefits (together with non-emergency ambulance transportation and physiotherapy) optional, i.e. to leave it to the individual sickness fund to decide upon inclusion of these services in its benefits catalogue, failed late in 1996 as the sickness funds threatened to remove these benefits altogether. Their main argument was that sickness funds without these benefits could offer lower contribution rates which would attract a healthier clientele. This would widen the gap in contribution rates and possibly force generous funds out of the market since expenditure for voluntary benefits would have been outside the risk compensation mechanism between the funds.

The corporatist institutions on the provider side have to provide all personal acute health care services. The most prominent examples are the physicians' and dental physicians' associations which have both a corporatist monopoly and the mission to secure ambulatory care. The monopoly means that hospitals, communities, sickness funds and others do not have the right to offer ambulatory medical care. The mission includes the obligation to meet the health needs of the population, to guarantee provision of state-wide services in all medical specialities and to obtain a total, prospectively negotiated budget from the sickness funds which the physicians' associations distribute among their members (see the section on *Financial resource allocation*).

The legal obligation to deliver ambulatory care includes the provision of sufficient emergency services within reasonable distances. The physicians' associations must provide health services as defined both by the legislator and through contracts with the sickness funds. The physicians' associations must provide a guarantee to the sickness funds that this provision meets the legal and contracted requirements. Due to the necessity of intervening and controlling delivery in this way, the physicians' associations were established as self-governing bodies. This facilitates their work which is constantly influenced by doctors' freedom of diagnosis and therapy and supports the principle of a democratically legitimized cooperative.

Ambulatory medical care is therefore the classic sector in which the corporatist institutions have the greatest power. The Social Code Book V concentrates mainly on regulating the framework, i.e. generic categories of benefits, goals and scope of the negotiations between the sickness funds and the physicians' and dental physicians' associations. These negotiations determine both the financing mechanisms and the details of the ambulatory benefit package. As a general rule, both the scope of services which can be reimbursed through the sickness funds and the financing mechanisms are tightly regulated, sometimes legally but usually through negotiations between providers and sickness funds.

The most important body for the joint negotiations between sickness funds and physicians concerning the scope of benefits is the national-level Federal Committee of Physicians and Sickness Funds. Established in 1923, it is the oldest joint institution in the German statutory health insurance system. It consists of nine representatives from both sides (usually chairpersons of the respective associations), two neutral members with one proposed by each side, and a neutral chairperson who must be accepted by both sides and who has the decisive vote if no agreement can be reached.

During the last few decades, the committee has issued 16 guidelines to regulate the prescription of pharmaceuticals, medical aids and care by non-physicians such as physiotherapists, the needs-based planning of the distribution of physicians in private practice, and the inclusion of new technologies and procedures into the catalogue of ambulatory benefits. The guidelines have different audiences. The first group of guidelines tries to steer the behaviour of all office-based physicians individually. The needs-based planning guidelines provide the framework for actual planning at *Länder* level through *Länder* Committees of Physicians and Sickness Funds (see the section on *Human resources and training*). Finally the guidelines on evaluating technologies set the criteria for the actual decisions on individual technologies by the Federal Committee itself.

The Second SHI Restructuring Act gave the Federal Committee new competencies in July 1997. It is now responsible for technology assessment of the existing catalogue of ambulatory benefits, for defining a positive list for care by non-physicians and for guidelines defining rehabilitative entitlements. The Federal Committee has several sub-committees, one of which had made proposals for decisions concerning the effectiveness of new diagnostic and therapeutic methods according to a set of criteria that were outlined in guidelines first passed in 1990. After the extension of the committee's mandate, this subcommittee was renamed the Medical Treatment Subcommittee and passed new evaluation guidelines (see the sections on *Health care benefits and rationing* and *Health care technology assessment*).

Another separate joint committee of physicians and sickness fund representatives makes decisions on the relative value of all services in the ambulatory part of the benefits catalogue, i.e. the Uniform Value Scale (see the section on *Payment of physicians in ambulatory care*).

Due to the absence of corporatist institutions in the hospital sector, hospitals contract individually with the sickness funds. Usually, all sickness funds with more than a 5% market share in a particular hospital negotiate the contract with that hospital. However, the conditions regarding both the range and number of services offered and the remuneration rates are valid for all sickness funds. After the Federal Ministry for Health had unsuccessfully proposed to make the

hospital organizations corporatist bodies, a weaker regulation was included in the Second SHI Restructuring Act to widen the hospital organizations' legal powers, e.g. to negotiate the catalogue of prospective case and procedure fees with the sickness funds. The Reform Act of SHI 2000 has further strengthened this "quasi-corporatist" status by introducing a Committee for Hospital Care which is made up of 19 persons: nine from sickness funds, five from the hospitals, four from the Federal Physicians' Chamber and the chairperson of the Federal Committee of Physicians and Sickness Funds.

In addition, a Coordinating Committee between the two committees will be charged with identifying areas of over- or under-utilization as well as with passing treatment guidelines. The Coordinating Committee has 20 members: nine from the sickness funds, three each from the Federal Association of SHI Physicians and the German Hospital Organization, two from the Federal Association of SHI Dentists, one from the Federal Physicians' Chamber and the chairpersons of the two committees.

Supervision of corporatist decisions – be they made by an individual corporatist institution, in the form of a contract or a decision by a joint committee – is a multi-layered endeavour involving self-regulatory institutions themselves, the government and the social courts. "The government" is the Federal Ministry of Health in cases concerning countrywide sickness funds, federal associations of sickness funds and providers, joint institutions between them as well as their decisions and contracts. For actors, decisions and contracts on the *Länder* level, the government is the statutory health insurance unit within the *Länder* ministry responsible for health.

Supervision and enforcement can be divided into several levels:

- the formal governmental approval of decisions taken by self-regulatory bodies;
- the governmental right to override self-regulatory decisions if these are not taken according to the law (or to substitute for these decisions if they are not taken at all);
- legal threats to institutions that intentionally or unintentionally do not fulfil their prescribed tasks.

While the threats of closing sickness funds are related mainly to financial instability or incompetence, the ultimate threats to physicians' and dentists' associations are more related to their behaviour as corporatist institutions. As a first step, a state commissioner may be installed if no board is elected or if the elected board refuses to act according to its legal responsibilities (§ 79a SGB V). In the case that 50% or more members of an association refuse to treat patients who have insurance with a sickness fund, the association loses its

legal monopoly to provide ambulatory care which is then passed to the sickness funds (§ 72a SGB V). Both of these threats were only introduced in 1992 (in force 1993) as a result of the announcements by self-governing associations to disobey certain legal requirements. The instalment of a state commissioner has been used only once. In 1995, the government of Lower Saxony removed the board of the dentists' associations due to its refusal to sign required remuneration contracts with the sickness funds. It installed a senior government official as state commissioner who then signed contracts on behalf of the dentists' association. Only afterwards were the board members allowed to return to office.

Social courts

Many corporatist decisions as well as governmental regulations may be challenged before the social courts which exist at the local, regional, and federal level constituting a separate court system devoted entirely to issues of social insurance. They rule in cases of dispute between individuals and social insurance institutions or between social insurance institutions. Within health care, examples include: patients suing their sickness fund for not granting a benefit; physicians disputing the calculations of the Claims Review Arbitration Committee; or medical device companies objecting to the non-inclusion of their product into the benefits' catalogue by the Federal Committee of Physicians and Sickness Funds.

Decentralization of the health care system

As may be seen from the above, the German health care system is highly decentralized with the most striking component of it being delegation of state power to corporatist actors. While most of the legal rights and obligations of the corporatist associations of sickness funds and providers are the result of a long process, the transfer of the Federal Republic of Germany system to the former German Democratic Republic constituted a real delegation of responsibilities by the government to corporatist actors (see the section on *Historical background*).

Privatization is another important feature of the German health care system. Some health care sectors are in fact based entirely on private providers, e.g. the office-based ambulatory and dental care sectors or the distribution of pharmaceuticals through private pharmacies. In other sectors, both private non-

profit and for-profit providers co-exist with public providers, e.g. in the hospital sector (with a trend towards more privatization: see Table 3) and the social care sectors. Private insurance companies also co-exist alongside the statutory sickness funds.

Table 3. Development of the public-private mix in ownership of general hospitals, 1990–1998

	Public		Non-for-profit		Private		Total
	beds	% share	beds	% share	beds	% share	beds
1990	387 207	62.8	206 936	33.5	22 779	3.7	616 922
1998	295 382	55.3	202 270	37.9	36 118	6.8	533 770
Change	-24%		-2%		+59%		-12%

Source: Calculations based on Federal Statistical Office.

The usual term "decentralization" does not capture the entire realm of German-style federalism however. At first sight the considerable power of the *Länder* might look like a case of devolution but this is not a true description as powers were never passed down from the federal level to the *Länder;* the latter had existed before the Federal Republic (which, in fact, was founded by the *Länder*). Instead, the opposite of devolution took place in Germany: the *Länder* passed certain rights and responsibilities, as defined in the constitution, to the federal level and retained others.

Deconcentration is only of minor importance in the German health care system, e.g. in the area of public health services. This is due to the fact that most levels of administration (with the exception of some *Länder* administrations) do not have any sub-level administrative offices as all political units from the local level upwards have their own autonomous, elected representatives and governments.

Health care finance and expenditure

Main system of finance and coverage

Contributions towards statutory health insurance with its current 453 sickness funds constitute the major system of financing health care in Germany. Sickness fund membership is compulsory for employees whose gross income does not exceed a certain level (a little less than EURO 40 000/year in the western parts of the country [in 2000: DM 77 400] and around EURO 32 000/year in the parts in the former GDR [DM 63 900]) and is voluntary for those above that level. Currently, 88% of the population are covered by the SHI; 74% are mandatory members and their dependants while 14% are voluntary members and their dependants. Nine per cent of the population are covered by private health insurance, 2% by free governmental health care (i.e. police officers, soldiers and those doing the civil alternative to military service) while only 0.1% are not insured.

Contributions are dependent on income and not risk, and include non-earning spouses and children without any surcharges. Contributions are based on income only (i.e. not on savings or possessions); income is liable to contributions up to an upper level (which is the same as that for the right to opt out or become a voluntary member). The total sum of the income of all the insured up to that level (the so-called contributory income) is among the most important figures in health policy since its growth rate from year to year determines the level of cost-containment. Growth in average contributory income is not necessarily the same as wage increases. Higher than average wage increases for workers earning less increase the contributory income disproportionately, while rising unemployment – especially hidden unemployment through people leaving the workforce and becoming "dependants" – has a moderating effect.

Contributions are shared equally between the insured and their employers. Taking the current average contribution rate of 13.5% as an example, the insured persons pay 6.75% out of their pre-tax income below the threshold and the

employer pays the same amount in addition to wages. For people with earnings below a threshold of DM 630, only employers have to pay for contributions (at a rate of 10% for all funds). Until 1998, income up to that level was not liable for sickness fund contributions. In the case of retired and unemployed people, the retirement and unemployment funds respectively take over the financing role of the employer.

Traditionally, the majority of insured people had no choice over their sickness fund and were assigned to the appropriate fund based on geographical and/or job characteristics. This mandatory distribution of fund members led to greatly varying contribution rates due to different income and risk profiles. Only voluntary white collar members – and since 1989 voluntary blue collar members – had the right to choose among several funds and to cancel their membership with two months' notice. Other white collar workers (and certain blue collar workers) were able to choose when becoming a member or changing jobs. Since this group grew substantially over the decades, around 50% of the population had at least a partial choice in the early 1990s.

The Health Care Structure Act gave almost every insured person the right to choose a sickness fund freely (from 1996) and to change between funds on a yearly basis with three months' notice (from 30 September 1996 to 1 January 1997). All general regional funds and all substitute funds were legally opened up to everyone and have to contract with all applicants. The company-based funds and the guild funds may choose to remain closed but if they open up, they too have the obligation to contract with all applicants. Only the farmers' funds, the miners' fund and the sailors' fund still retain the system of assigned membership.

To provide all sickness funds with an equal starting position or a level playing field for competition, a risk structure compensation scheme to equalize difference in contribution rates (due to varying income levels) and expenditure (due to age and sex) was introduced in two steps (1994 and 1995 – the latter included retired insurees and thereby replaced the former sharing of actual expenses for retired persons between funds). The compensatory mechanism requires all sickness funds to provide or receive compensation for the differences in their contributory incomes as well as in averaged expenditures. For both sexes, average expenditure for benefits included in the uniform, comprehensive package is calculated for one-year age brackets using actual expenditure data (i.e. the actual calculation is always retrospective and only estimated for the current year).

The sum of these average expenditures for all members of a sickness fund determine that fund's contribution need. The sum of all funds' contribution needs divided by the sum of all contributory incomes determines the

compensation scheme's rate which is used for comparing actual contributions and contribution need to calculate the compensated sum paid to those funds receiving compensation from the scheme, or the sum required from those funds making payments into the scheme. In doing so, the risk compensation mechanism also equalizes for different income levels between the members of the funds as well as differences in the number of dependants (since they are included on the expenditure side whilst they enter the calculations of actual contributions as zero).

The impact of both the free choice and the risk structure compensation scheme on the structure of the sickness funds, the actual movement of members between funds, the development of the contribution rates and transfer sums between funds can be summarized as follows:

- Even before the period of actual free choice for the insurees began, sickness funds began to merge (see the section on *Organizational structure and management*).
- Increasingly, members leave one fund and join another. While no data on actual moves are available, net losses/gains in membership numbers may be taken as an indicator. For example, the AOKs have lost 479 000 members in 1997, 400 000 in 1998 and 292 000 in 1999 while the BKKs have gained 335 000, 516 000 and 971 000 members respectively. These net losses/gains are correlated to the contribution rates of the funds, i.e. funds with higher than average contribution rates lose members while those with lower than average rates gain members.
- The importance of the contribution rate is further highlighted by a survey study. For people who have moved from one fund to another, lower contributions were cited as the prime motive (58%) while for people considering a move, both the contribution rate and better benefits are equally important. People not considering a move regard better benefits to be more important. People joining a sickness fund for the first time mostly cited other reasons for choosing a particular fund – presumably advice from their family, friends or their employer.
- The risk compensation scheme has narrowed contribution rates between funds. This trend is especially observable in the west but recently also in the east. While in 1994, 27% of all members paid a contribution rate differing by more than one percentage point from the average, this number has dropped to 7% in 1999.
- The movement of members between funds has not equalized the different risk structures (which would result in diminishing transfer sums) but the first opportunity to change between funds desegregated membership further, i.e. the healthier, younger, better-earning people moved more often and

towards cheaper funds, which in turn has increased the transfer sums (see Table 4). This development implies that a risk compensation mechanism will be needed permanently, and not only temporarily until the risk structure has become equal.

Table 4. Transfer sums in risk structure compensation (RSC) scheme – absolute figures and relative to total expenditure, 1995–1998

	Western part		Eastern part		Germany	
	RSC[1]/exp.[2] (billion DM)	RSC as % of expenditure	RSC/exp. (billion DM)	RSC as % of expenditure	RSC/exp. (billion DM)	RSC as % of expenditure
1995	13.49/190.29	7.1%	4.61/38.53	12.0%	18.05/228.82	7.9%
1996	14.22/196.39	7.2%	4.90/40.03	12.2%	19.12/236.42	8.1%
	– 1 January 1997: First opportunity to change between funds –					
1997	15.07/192.13	7.8%	5.15/39.22	13.1%	20.22/231.35	8.7%
	– 1 January 1998: Second opportunity to change between funds –					
1998	16.07/195.07	8.2%	5.47/39.06	14.0%	21.54/234.13	9.2%

Source: Calculations based on data provided by the Federal Ministry of Health in December 1999.
Notes: [1] RSC = risk structure compensation; [2] expenditure = total expenditure of sickness funds without administration.

Health care benefits and rationing

Health care benefits

Through chapter 3 of the Social Code Book V, the following types of benefits are currently legally included in the benefit package, usually in generic terms:

- prevention of disease
- screening for disease
- treatment of disease (ambulatory medical care, dental care, drugs, non-physician care, medical devices, inpatient/hospital care, nursing care at home, and certain areas of rehabilitative care)
- transportation.

In addition to these benefits in kind, sickness funds have to give cash benefits to sick insurees after the first six weeks during which employers are responsible for sick pay. While employers have to pay 100% of income, sickness funds pay

80% for up to 78 weeks per period of illness. From 1989 to 1996, a third type of benefits was health promotion measures offered by sickness funds directly to their members. While the Second SHI Restructuring Act had abandoned this benefit, it has been partly reintroduced through the SHI Reform Act 2000.

While the Social Code Book regulates preventive services and screening in considerable detail (e.g. concerning diseases to be screened for and intervals between screening) but leaves further regulations to the Federal Committee of Physicians and Sickness Funds, the latter committee has considerable latitude in defining the benefits catalogue for curative, diagnostic and therapeutic procedures. The decision-making process concerning coverage is described in more detail in the section on *Health technology assessment*. All covered procedures are listed in the Uniform Value Scale together with their relative weights for reimbursement (see the section on *Payment of physicians in ambulatory care*). The range of covered procedures is wide, ranging from basic physical examinations in the office via home visits, antenatal care, care for terminally ill patients, surgical procedures and laboratory tests to imaging procedures including MRI. Until 1997, exclusions were not explicitly possible but the mandate to (re)evaluate technologies made this possible. Currently, osteodensitometry is the first benefit under consideration for exclusion.

While benefits for ambulatory care are legally defined in generic terms only, one can observe more details in the description of dental, especially prosthetic benefits in SGB V. One reason is the de facto dysfunction of the Federal Committee of Dentists and Sickness Funds. The SHI Contribution Rate Exoneration Act's regulation to remove crown/denture treatment from the benefits catalogue for persons born after 1978 (even though they still had to pay the full sickness fund contribution rate) was politically contentious. The Act to Strengthen Solidarity in SHI reintroduced these benefits.

The non-physician care sector comprises the personal medical services of professionals other than physicians, such as physiotherapists, speech therapists, and occupational therapists. Insured patients are entitled to such services unless they are explicitly excluded by the Federal Ministry of Health which is currently not the case (§§ 32 and 34 SGB V). According to §138 SGB V, non-physician services may be delivered to the insured only if their therapeutic use in connection with recommendations regarding the assurance of quality is recognized by the Federal Committee of Physicians and Sickness Funds. In the Federal Committee's guidelines for Non-physician Care and Medical Aids, the conditions for the prescription of these services are regulated. Therefore, non-physician care may be ordered only if a disorder can be recognized, healed, mitigated or aggravation can be prevented; health damage can be prevented; health endangerment of children can be avoided; and risk of long-term care

can be avoided or decreased. As mentioned previously (see the section on *Organizational structure of the health care system*), psychologists sub-specialized as psychotherapists are the exception to the rule as they have become members of the physicians' associations and therefore no longer have the status of "non-physicians".

The range of services provided in the hospital sector is determined through two factors: the hospital plan of the state government, and the negotiations between the sickness funds and each individual hospital (a result of the fact that the hospitals do not have a collective corporatist body). While the decision of the state government determines the flow of capital for investments, the negotiations determine whether the costs for running these services are reimbursed by the sickness funds. This dual financing is the result of the 1972 Hospital Financing Act (see the section on *Payment of hospitals*).

Home nursing care is regulated separately. Due to the split in responsibilities between sickness funds and long-term care funds, there is a lack of regulation. The Second SHI Restructuring Act mandates, however, that the Federal Committee will also pass guidelines for this sector.

Priority-setting and rationing: the public's and the experts' view

According to a representative population survey in 1998, the majority of the public – in the west as well as in the east – favours unlimited funding for health services more than the setting of limits. Almost 50% of the respondents wanted the extra money to be gained through lower spending on other things, while higher general taxation or higher social insurance contributions are supported by only a few. Visible differences between east and west appear in the options "more private health insurance" and "higher charges for patients". In the east, support is only half of that in the west (where it is also weak). If priorities do have to be set, they should be set by doctors – with stronger backing for this option in the east – with the public and health service managers as joint second choice. Limiting the benefits' catalogue to a core of essential services is rejected as are priorities based on age. In summary, the notion of rejecting rationing in favour of equal treatment opportunities independent of age, income or status is stronger in the east, possibly due to a longer history of advocating equity.

In a similar survey in 1993, 55% of respondents were of the opinion that sickness funds should pay for everything while 41% thought that they should not cover certain diseases: smoking-related diseases 32%, alcohol-related diseases 28%, injuries through risky sports 26%, drug abuse 23%, abortion 11%, stress-induced diseases 3% and pregnancy 1%. In another 1995 survey, 41% of respondents favoured the inclusion of health risks in the calculation of

sickness fund benefits, mainly through bonuses for healthy lifestyle (29%) and less frequently through extra contributions for people with risky behaviours (7%).

In a further survey in 1998, a three-quarter majority favours restrictions in the area of pharmaceuticals. Seventy-four per cent are of the opinion that drugs lacking explicit proof of effectiveness should not be paid for by the sickness funds. Seventy-three per cent are in favour of restricting physicians' choice to cheaper drugs in cases where pharmaceuticals differ in price but not effectiveness. Another survey in the summer of 1998 showed that the majority of the population (59%) backed the decision of the Federal Committee of Physicians and Sickness Funds to exclude drugs such as Viagra on the basis of lifestyle (see the section on *Pharmaceuticals*).

In 1997, physicians agreed with the public that large or significant efficiency reserves exist in the German health care system (89%). Contrary to the public's view, 70% of them believe, however, that rationing is inevitable. Fifty-nine per cent say that rationing already exists.

Health care experts in a 1995 Delphi survey expected further restrictions in health care and limitations on therapeutic freedom, mostly within five years, i.e. by the year 2000. Most of them welcomed changes in the coverage procedure for new drugs, supplementary insurance policies being offered by sickness funds (which currently is illegal), the introduction of a gatekeeper system and – to a lesser extent – bonuses and penalties in conjunction with yearly checkups. The obligation to use the cheapest diagnostic or therapeutic measure was rejected by a small majority while large majorities rejected the idea of lessening the quality of care due to economic restrictions, the right to choose a doctor freely or rationing by age, income or status.

Complementary sources of finance

Even though statutory health insurance dominates the German discussion on health care expenditure and health care reform(s), its actual contribution to overall expenditure is only a little more than 60%. Other statutory insurance systems for retirement, accidents and more recently for long-term care contribute 1–3% each so that statutory insurance as a whole has been the source of finance for 66–68% of total health expenditure for the last 25 years.

In the German statutory insurance-based system, three other main sources of finance can be identified: taxes, out-of-pocket payments (see below) and private health insurance (see below). According to OECD data (see Table 5),

taxes have been overtaken as the major complementary source by out-of-pocket financing in the early 1990s – a trend which is expected to be seen more clearly in the figures for 1998. However, a recent re-calculation of health expenditure for 1992 and 1994 by the Federal Statistical Office puts out-of-pocket spending 1.4% lower (while taxes are roughly placed equal and private health insurance almost 1% higher; see Fig. 11 in the section on *Financial resource allocation*).

Taxes as a source of finance are used for various purposes in the health care system. Among them are reimbursement of parts of the private health care bills for permanent public employees (see below), health insurance contributions or reimbursement of health care bills for persons on welfare, free governmental health care, capital investment costs for hospitals, public health services, and subsidies for the farmers' funds (while other funds do not receive any tax income).

Table 5. Main sources of finance (percentage of total expenditure on health care), 1970–1995

Source of finance	1970	1975	1980	1985	1990	1993	1994	1995
Public								
Statutory insurance	58.3	66.7	67.0	66.3	65.4	66.0	67.0	68.2
Taxes	14.5	12.4	11.7	11.2	10.8	11.5	10.6	10.0
Private								
Out-of-pocket	13.9	9.6	10.3	11.2	11.1	11.3	11.3	10.8
Private insurance	7.5	5.8	5.9	6.5	7.2	6.7	6.8	6.6
Other	5.8	5.6	5.1	4.9	5.4	4.4	4.3	4.4

Source: OECD Health Data 1999.

Note: Data in all tables and figures up to and including 1990 is for the Federal Republic of Germany only, from 1991 onwards data is for the unified Germany including the *Länder* of the former GDR unless otherwise stated.

Out-of-pocket payments

Cost-sharing has a long tradition within the German health care system, the most traditional sector being the pharmaceutical sector. In this area, nominal cost-sharing had increased over the years, but cost-sharing as a percentage of total costs had remained stable at less than 5% of pharmaceutical expenditure until 1992 (when it was 3.5%). Through the Health Care Structure Act, cost-sharing was regulated anew in two steps, the first being the introduction of new co-payments according to the price of the pack (1993) and later according to pack size (1994). These measures doubled patient cost-sharing to 8% in 1993 and to 9% in 1994. The Health Insurance Contribution Exoneration Act

increased this to DM 4/6/8, accounting for more than 10% of total expenditure and only six months later the Second SHI Restructuring Act increased this further to DM 9/11/13 and 14% of expenditure for prescribed drugs. The new co-payment levels also meant that more than 20% of prescribed drugs had to be paid entirely by the patients which increased the volume of directly bought OTC-drugs. The new coalition government lowered the co-payments through the Act to Strengthen Solidarity in Statutory Health Insurance to DM 8/9/10, effective from 1 January 1999, which lowered co-payments to around 11% of expenditure.

In other areas, cost-sharing was reduced in the 1970s by enlarging the benefits catalogue (i.e. denture treatment) but later cost-sharing was increased again. New areas for cost-sharing since the 1980s are charges for inpatient days in hospitals, rehabilitative care facilities and ambulance transportation. Most of these measures were cost-containment measures to shift spending from the sickness funds to patients – they were not intended to reduce overall spending, for example, patients were told that the co-payment for hospital treatment had to be paid to cover food.

In the 1989 Health Care Reform Act, cost-sharing was advocated for two purposes; firstly, to raise revenue (to reduce expenditure for dental care, physiotherapy and transportation and making the patient liable for pharmaceutical costs above reference prices) and secondly to reward "responsible behaviour" (again dental treatment) and rewarding good preventive practice with lower co-payments. These cost-sharing regulations were part of a complete re-structuring of co-payments resulting in generally higher cost-sharing than previously.

Cost-sharing was increased markedly in 1997. Crown and denture treatment were removed from the benefits catalogue for everyone born after 1978. Pharmaceutical co-payments were increased markedly as well as co-payments for spa treatment and rehabilitative care (see Table 6 for details).

For people born before 1979, dental care also became the major sector to test market-oriented instruments. Prosthetic treatment was no longer an area of direct reimbursement through the sickness funds but patients were required to obtain treatment on a private billing basis and received a fixed sum from the sickness fund retrospectively. Through this regulation, prosthetic treatment became the first area within German statutory health insurance to work on the basis of "contracts" between patients and providers. While the law had established limits for private billing until 1999, the ministry estimated that at least one third of dentists overcharged. Accordingly, the regulation was abolished late in 1998 in favour of the former co-insurance regulation (see Table 6).

Table 6. Co-payment/co-insurance levels (western part of the country), 1989–2000

	1989–1990	1991–1992	1993	1994–1996	First half 1997	Second half 1997	1998	1999	2000
Ambulatory medical treatment	0	0	0	0	0	0	0	0	0
Pharmaceuticals (DM)									
- without reference price[a]	3	3							
- with reference price[b]	0	0							
- up to DM 30 in price[a,b]			3						
- >30 up to DM 50 in price[b]			5						
- over DM 50 in price[b]			7						
- small pack[a,b]				3	4	9	9	8	8
- medium pack[a,b]				5	6	11	11	9	9
- large pack[a,b]				7	8	13	13	10	10
Conservative dental treatment	0	0	0	0	0	0	0	0	0
Crown and denture treatment	50% 40%[c] 35%[d]	50% 40%[c] 35%[d]	50%[e] 40%[c,e] 35%[d,e]	50%[e] 40%[c,e] 35%[d,e]				50%[e] 40%[c,e] 35%[d,e]	50%[e] 40%[c,e] 35%[d,e]
- for persons born before 1979					50%[e] 40%[c,e] 35%[d,e]	55%[e] 45%[c,e] 40%[d,e]	100% above fixed sum		
- for persons born after 1978					100%	100%	100%		
Orthodontic treatment[f]	20%	20%	20%	20%	20%	20%	20%	20%	20%
Transportation to and from									
- inpatient treatment or in emergencies (DM per trip)	20	20	20	20	20	25	25	25	25
- ambulatory treatment	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-physician care (e.g. physiotherapy)	10%	10%	10%	10%	10%	15%	15%	15%	15%
Hospital stay and stationary rehabilitative treatment after a hospital stay (DM per day)[g]	5	10	11	12	12	17	17	17	17
Stationary preventive spa or rehabilitative treatment unrelated to hospital stay (DM per day)	10	10	11	12	25	25	25	25	17

Source: Own compilation.

Notes: [a] with price of drug as maximum; [b] plus 100% of price above reference price; [c] if insured had regular yearly check-ups for the last five years; [d] if the insured had regular yearly check-ups for the last ten years; [e] 100% for major dental work (more than four replacement teeth per jaw or more than three per side of mouth, excepting multiple single bridges, which may exceed three); [f] if eating, speaking or breathing is severely limited, otherwise 100%; [g] limited to a total of 14 days per calendar year. Several rates shown in this table are lower in the eastern part of Germany.

Patient cost-sharing is limited by a range of measures:

- People with very low incomes[3] and those on unemployment benefits or on social welfare are exempted from most cost-sharing requirements – with the notable exception of co-payments for hospital treatment (§ 61 SGB V).

[3] i.e. up to DM 21 504/17 472 (west/east) for one person, DM 29 568/24 024 for two persons, and DM 5376/4368 for each additional person (in 2000).

- Persons up to the age of 18 years are exempted from cost-sharing except for co-insurance payments for crowns/dentures and co-payments for transportation.
- For all other sickness funds' members, yearly cost-sharing for pharmaceuticals, non-physician care and transportation (but not for hospitals and rehabilitation) is limited to a maximum of 2% of their gross income for single people (§ 62 SGB V). If two or more people are dependant on this income the threshold is lower.[4] Co-insurance payments for crowns/dentures are lowered for these persons.
- Chronically ill patients who have paid at least 1% of their gross income for pharmaceuticals, non-physician care and transportation are exempted from these payments for the further duration of that chronic illness. In contrast to the previously-mentioned limit, this exemption applies only to the respective person individually.

Private health insurance

In the German system private insurance has two facets: to fully cover a certain portion of the population and to offer supplementary insurance for insurees of the sickness funds. Both types are offered by 52 private health insurers which are united in the Association of Private Health Insurance Companies. In addition, there are around 45 other very small and usually regional private health insurers. In terms of premiums, the full-cover segment is more than four times as large as the supplementary insurance segment.

The 7.1 million (9% of the population) with full-cover private health insurance consist of three main groups:

- formerly SHI-insured persons who have opted out once their income reached the level above the threshold (see above);
- self-employed people who are excluded from SHI unless they have been a member previously (except those who fall under mandatory SHI cover like farmers);
- active and retired permanent public employees such as teachers, university professors, employees in ministries etc. who are excluded de facto as they are reimbursed by the government for most of their private health care bills (they receive private insurance to cover only the remainder).

Fully privately insured patients usually enjoy benefits equal to or better than those covered by statutory health insurance. This depends, however, on the insurance package chosen; e.g. it is possible not to cover dental care. In the

[4] i.e. by DM 8064/6552 (west/east) for the second and DM 5376/4368 for each additional person (in 2000).

private health insurance market, premiums vary with age, sex and medical history at the time of underwriting. Unlike in statutory health insurance schemes, separate premiums have to be paid for spouses and children – making private health insurance especially attractive for single people or double-income couples. Since premiums rise – often steeply – with age, and (re)entry of privately insured people into statutory sickness funds is not permitted in ordinary circumstances, private insurers are obliged to offer an insurance policy with the same benefits as in the SHI at a premium that is not higher than the average maximum contribution in the sickness funds. Up until now, however, this option is hardly ever chosen.

Unlike SHI, privately insured people generally have to pay providers directly and are reimbursed by their insurer. While a price list for privately delivered medical services exists as an ordinance issued by the Federal Ministry for Health, physicians usually charge more – by a factor of 1.7 or 2.3 (which are the maximum levels for reimbursement by the government and by most private health insurers for technical and personal services respectively) or even more. The real fee-for-service reimbursement for privately insured people has led to cost increases which are on average almost two thirds higher than in the SHI – and in ambulatory care, where SHI cost-containment was most successful, even twice as high (see Table 7).

Table 7. Changes in per capita expenditure between 1988 and 1998 for statutory health insurance versus private health insurance; western part of Germany only

	Statutory health insurance	Private health insurance
Ambulatory care	+ 51%	+ 96%
Dental care	- 4%	+ 84%
Pharmaceuticals	+ 24%	+ 61%
Hospital care	+ 62%	+ 50%
Total	+ 44%	+ 72%

Source: Verband der privaten Krankenversicherung 1999.

The second market for private health insurers is supplementary insurance, e.g. to cover extra amenities like hospital rooms with two beds or treatment by the head-of-service. Since sickness funds are legally not allowed to offer these extra policies, people must obtain insurance from private health insurers. It is estimated that in 1997 around 7 million people had some kind of supplementary insurance. This figure had risen considerably from 1996 due to the introduction of the new insurance segment to cover crowns and dentures which were excluded from the benefits package for people born after 1978 (but which subsequently were reintroduced).

Health care expenditure

Germany's health care system is expensive by international comparison, both in absolute figures (see Fig. 4) and – even more visibly – as a percentage of GDP (see Fig. 5). While health care expenditure had remained stable at around 8.7% of GDP in the Federal Republic of Germany between 1975 and 1990, it has risen considerably since reunification (see Table 8) and bypassed that of other countries (see Fig. 6). The main reason for the high expenditure level compared to GDP is due to the fact that health expenditure in the east is almost as high as in the west while the GDP is still much lower.

Table 8. Trends in health care expenditure, 1970–1997

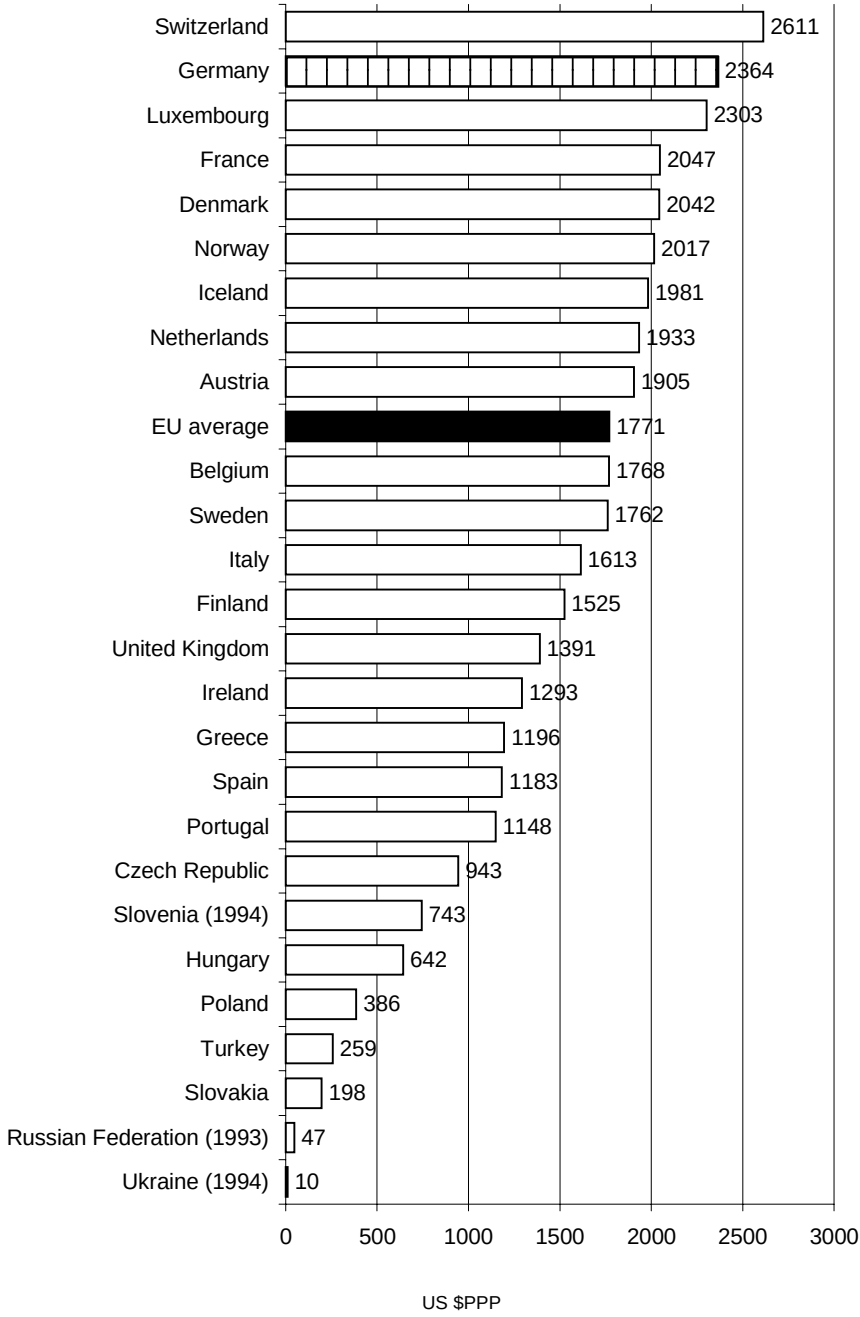
Total expenditure on health care	1970	1975	1980	1985	1990	1995	1996	1997
Value in current prices (million DM)	42 356	90 380	130 128	169 637	212 106	359 723	373 089	380 500
Value in constant prices 1990 (million DM)	103 967	156 584	181 718	189 814	212 106	301 528	306 313	–
Value in current prices, per capita (US $PPP)	175	375	649	979	1 279	2 128	2 278	2 339
Share of GDP (%)	6.3	8.8	8.8	9.3	8.7	10.4	10.5	10.4
Public as share of total expenditure on health care (%)	72.8	79.1	78.7	77.5	76.2	78.2	78.3	77.4

Source: OECD Health Data 1999.

Public expenditure's percentage share of total health expenditure has remained constant since 1975 and is comparable to most other countries with statutory health insurance and also to Scandinavian countries (see Fig. 7).

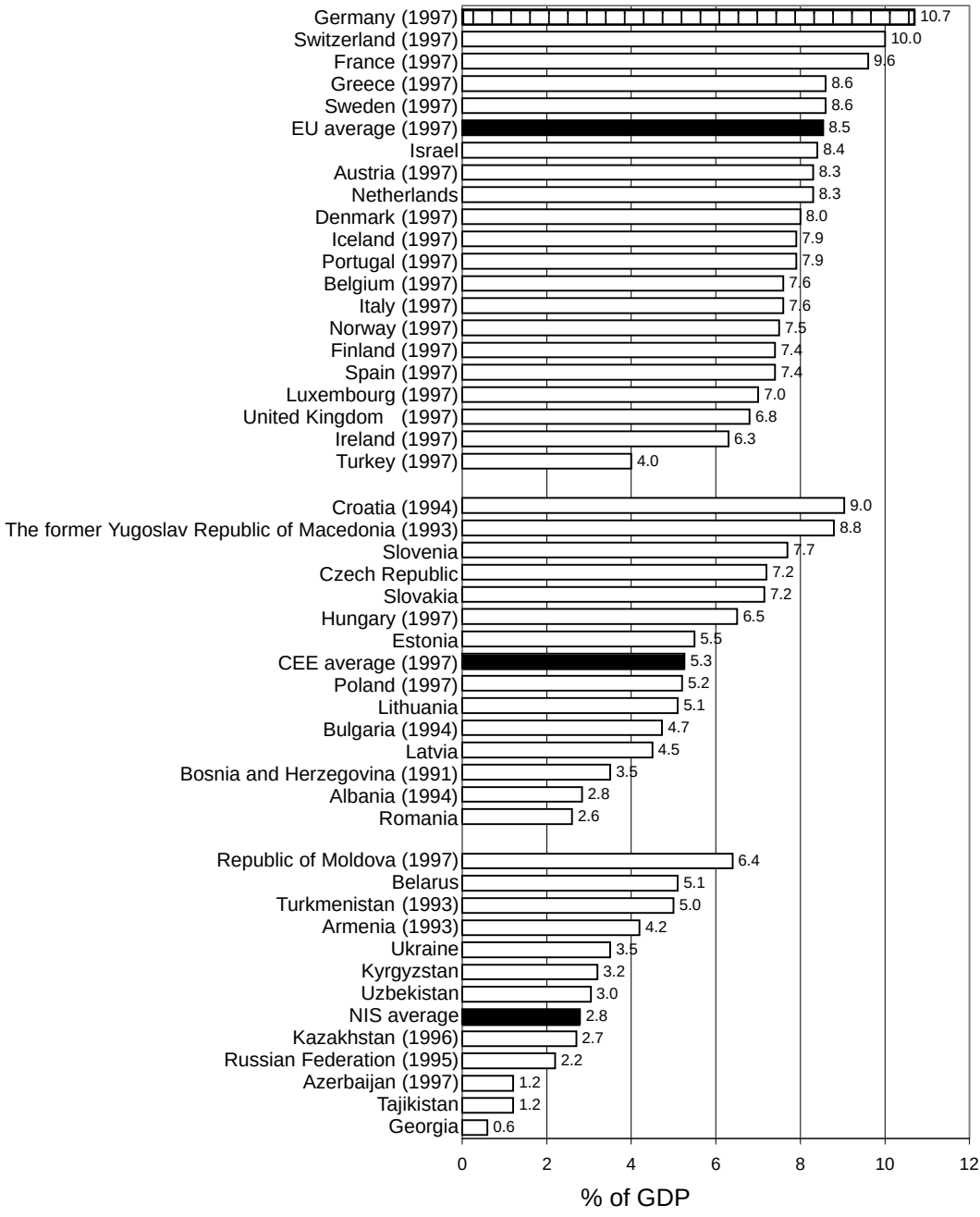
Due to the strong ambulatory care sector offering (almost) all specialties, expenditure on hospital care is low by international comparison. It has, however, risen considerably over the last thirty years with increases above those for contributory incomes in most years. The high increases in hospital expenditure in the early 1970s may be explained both by the introduction of hospital planning to address a perceived shortage of hospital beds and the full cost cover principle. However, even since 1975 hospital expenditure has been the area of German health care that has been least constrained in its growth, with an increase from 1.9% of GDP per capita in 1975 to 2.4% in 1995. This accounts for almost two thirds of the increases in sickness fund expenditure since 1975 and the total increase since 1988, i.e. the phase of major cost-containment legislation. Only recently has hospital expenditure been controlled better (see the section on *Payment of hospitals*). On the other hand, capital investments decreased steadily until 1990 after which they went up again temporarily due to investments in the east after unification (see Table 9).

Fig. 4. Total expenditure on health care in the WHO European Region (US $PPP per capita), 1997 or latest available year



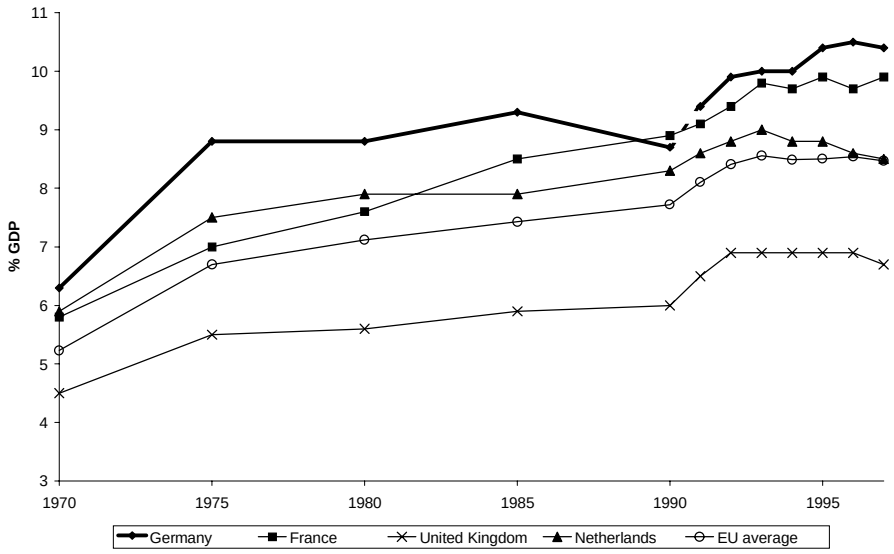
Source: WHO Regional Office for Europe health for all database.

Fig. 5. Total expenditure on health as a % of GDP in the WHO European Region, 1998 (or latest year)



Source: WHO Regional Office for Europe health for all database.

Fig. 6 Trends in total expenditure on health care in Germany and selected countries, (percentage of GDP), 1970–1997



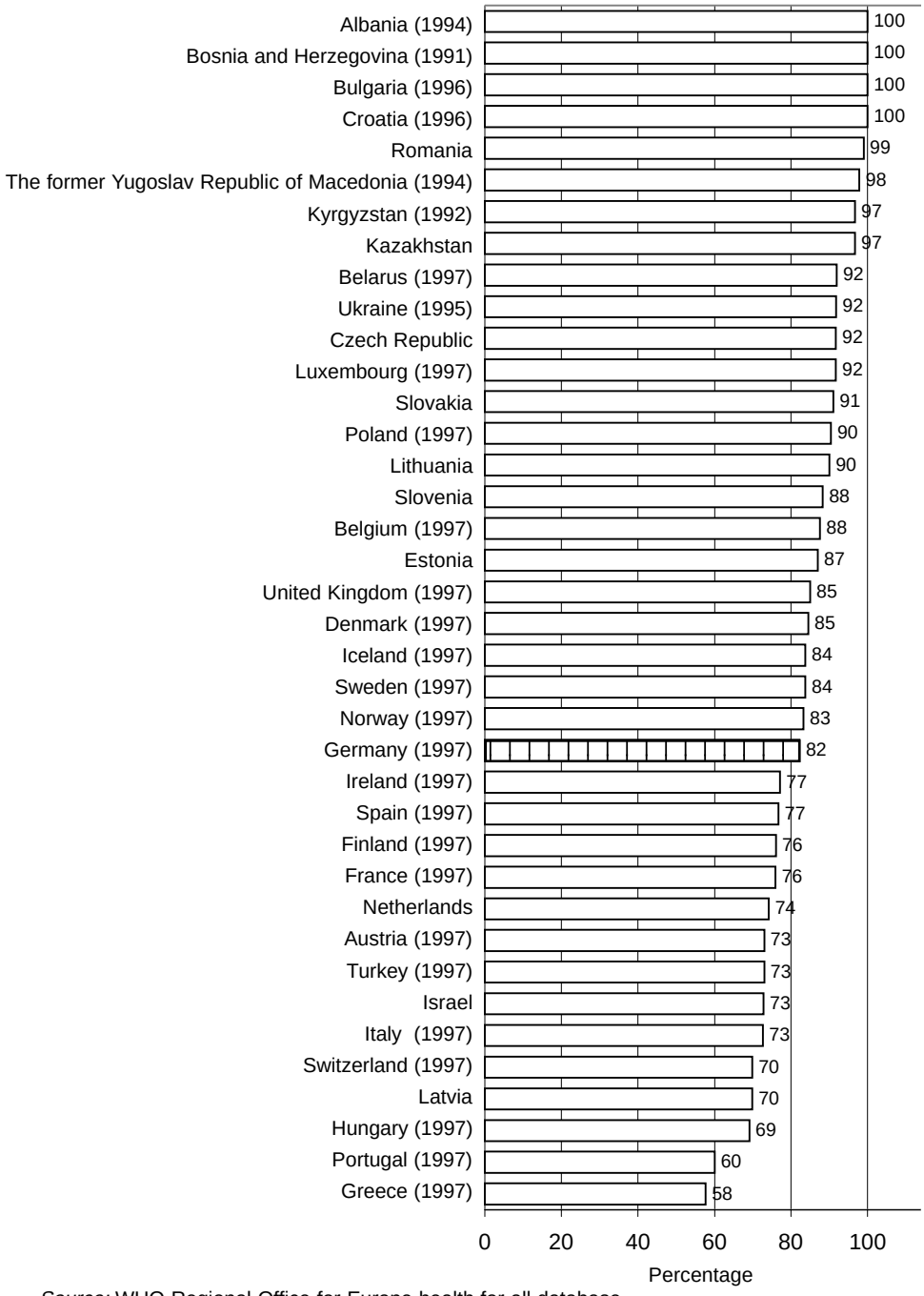
Source: WHO Regional Office for Europe health for all database.

Table 9. Health care expenditure by categories (percentage of total expenditure on health care), 1980–1996

Total expenditure on	1980	1985	1990	1991	1992	1993	1994	1995	1996
Inpatient care (%)	33.2	34.0	34.7	34.4	33.9	35.5	35.8	34.6	35.0
Pharmaceuticals (%)	13.3	13.8	14.2	14.3	14.2	12.4	12.3	12.3	12.7
Public investment (%)	3.9	3.4	3.1	3.5	3.4	3.3	3.2	3.2	3.0

Source: OECD Health Data 1999.

Fig. 7. Health expenditure from public sources as % of total health expenditure in the WHO European Region, 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Health care delivery system

A key feature of the health care delivery system in Germany is the clear institutional separation between the publicly provided public health services, primary and secondary ambulatory care through office-based physicians and hospital care which has traditionally been confined to inpatient care. The separation between the latter two is stricter than in all other countries and only the Health Care Structure Act eroded this separation somewhat by allowing day-surgery in hospitals and a limited amount of ambulatory pre- and post-inpatient care.

The following sections are therefore grouped according to the above-mentioned three categories.

Public health services

While the specific tasks of the public health services – and the level at which they are carried out – differ from *Land* to *Land*, they generally include activities both linked to sovereign rights and care for selected groups, such as:

- supervision of employees in health care institutions
- prevention and monitoring of communicable diseases
- supervision of commercial activities involving food, pharmaceuticals and drugs
- certain areas of environmental hygiene
- counselling in health and social matters
- providing community-oriented (social) psychiatric services
- health education and promotion
- physical examinations of school children and certain other groups.

The services are delivered by roughly 360 public health offices across Germany which vary widely in size, structure and tasks.

In the first decades of the Federal Republic's history, the *Länder* defended their responsibility for public health services against several attempts by the federal government to extend its influence to this sector. However, in the 1980s they lessened their resistance which led to the inclusion of several public health activities in the Social Code Book, thereby transferring provision from the public health services to office-based physicians.

Originally, immunizations, mass screening for tuberculosis and other diseases, and health education and counselling used to be in the hands of the public health services. Since the 1970s, however, the rules of the Social Code Book have been extended to include many of these services. Before 1970, only antenatal care was included in the sickness funds' benefit package. Since 1971, screening for cancer has become a benefit for women over 20 years and men over 45 years. At the same time, regular checkups for children under the age of four were introduced (and extended to children under the age of six in 1989 and to adolescents in 1997). Also in 1989, dental group preventive care for children under 12 years (e.g. in kindergartens and primary schools) and individual dental preventive care for 12–20 year olds became sickness funds' benefits (individual preventive care was extended to 6–20 year olds in 1993). Regular health checkups such as screening for cardiovascular and renal diseases and diabetes for sickness funds' members above 35 years were also introduced in 1989. A last amendment in 1989 was the introduction of health promotion as a mandatory task for sickness funds (abolished in 1996). Legally, immunizations and the support of self-help groups have also been considered a health promotion activity (until 1996; since 1997 the respective article is headed "disease prevention").

After health promotion and prevention was lost by the public health service, it became even less visible to the public and much smaller in size. The number of physicians working in the public health service decreased from 4900 (1970) to 3300 (1996), whilst the number of dentists employed in the public health service decreased even more, from 2500 to 800 and that of social workers from 4000 to 2500 (all figures for the west only).

After inclusion of health promoting and disease prevention measures in the benefits' catalogue, the ambulatory care physicians control a large share of preventive services. For some services, they actually have a legal mandate (screening and checkups), which includes the obligation to deliver these services, while for others the physicians were able to negotiate fees with the sickness funds (e.g. immunizations). Thus, preventive services are now delivered under the same regulations as curative services which means that their exact

definition is subject to negotiations between the sickness funds and the physicians' associations. The shift in responsibilities for immunizations however has had the result that immunization rates are rather low by international comparison (see Fig. 8).

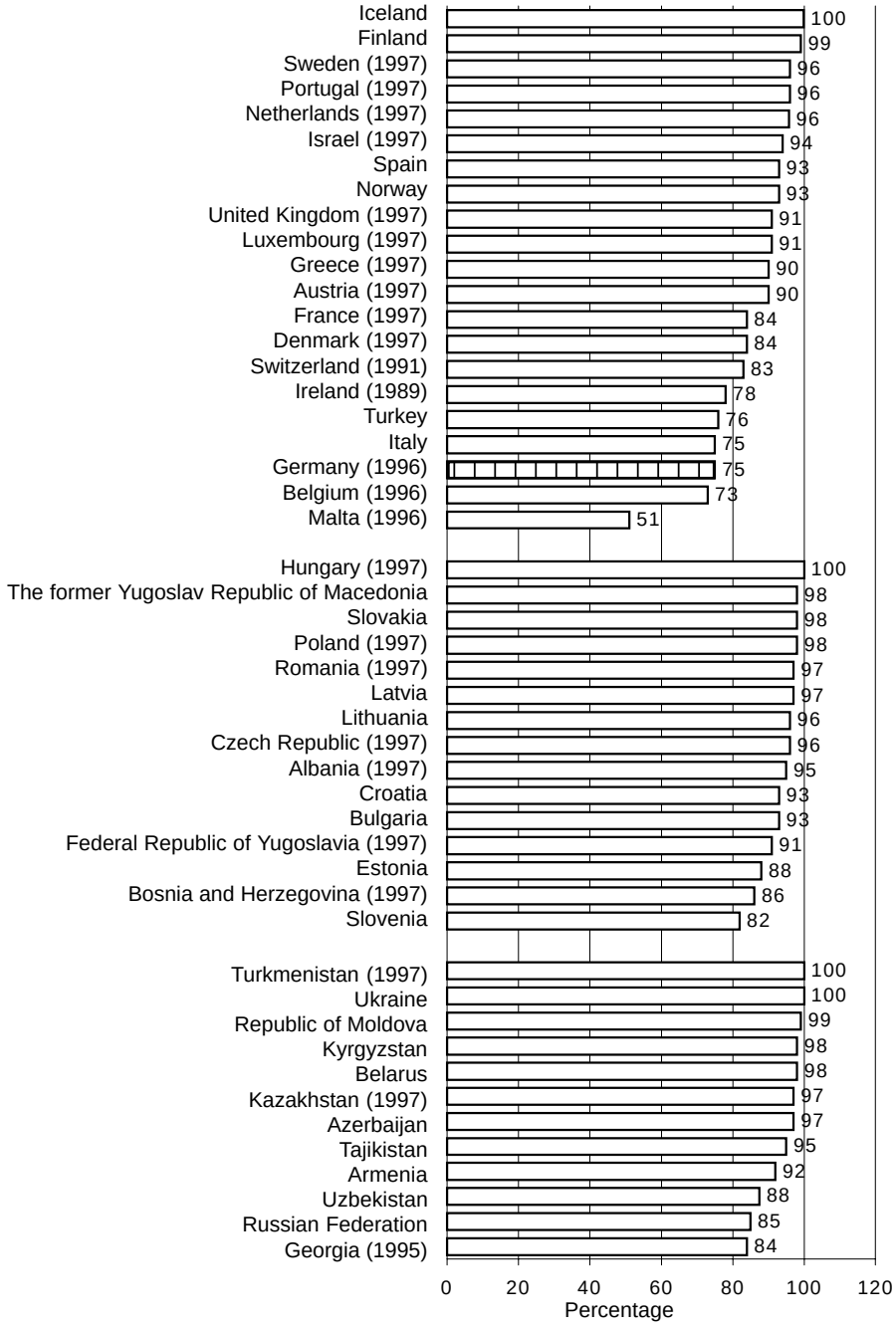
Primary and secondary ambulatory health care

All ambulatory care, including both primary care and outpatient secondary care, has been organized almost exclusively on the basis of office-based physicians. The majority of physicians have a solo practice – only around 25% share a practice. Their premises, equipment and personnel are financed by the physicians.

Ambulatory physicians offer almost all specialties; the most frequent ones are listed in Table 10 together with their development in the 1990s. The table also provides information on two aspects which link the ambulatory and the hospital sector. Firstly around 5% of all office-based physicians have the right to treat patients inside the hospital. This is mainly the case for small surgical specialties in areas where the hospital has so few cases that a physician operating once or twice a week is sufficient. All other physicians transfer their patients to hospital physicians for inpatient treatment and receive them back after discharge, i.e. post-surgical care is usually done by office-based physicians and not by the hospital surgeons. Secondly, in addition to the office-based physicians, around 11 000 other physicians are accredited to treat ambulatory patients. These are mainly the heads of hospital departments who are allowed to offer certain services or to treat patients during particular times (i.e. when practices are closed). Taking reimbursement as a proxy for activity, the latter group provides around 2% of all ambulatory services (and the outpatient departments of the university hospitals around 5%). Not included in Table 10 are the 7 800 physicians who work as salaried physicians in ambulatory practices.

Germany has no gatekeeping system, instead patients are free to select a sickness-fund-affiliated doctor of their choice. According to the Social Code Book (§ 76 SGB V), sickness fund members select a family practitioner which cannot be changed during the quarter relevant for reimbursement of services for that patient. Since there is no mechanism to control or reinforce this self-selected gatekeeping, patients frequently choose direct office-based specialists. Family practitioners are GPs and physicians without specialization. General internists and paediatricians may choose whether they want to work as family practitioners or as specialists (§ 73 SGB V). This is important, since specialists and family practitioners have different reimbursable service profiles. Despite

Fig. 8. Levels of immunization for measles in the WHO European Region, 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

efforts by the federal government to improve the status of family practice in the ambulatory care sector, the number of office-based specialists has increased more rapidly than those of general practitioners over the past few decades so that GPs, as a share of all office-based physicians, dropped to less than 40% in 1998 (see Table 10).

Table 10. Specialties of SHI-affiliated office-based physicians, 1990–1998

	Physicians in private practice 1990	Increase 1990–1998 in %	Physicians in private practice 1998	Private practice physicians with right to treat inpatients in 1998	Hospital physicians with right to treat ambulatory patients in 1998
Anaesthetists	508	+264%	1 848	142	1 117
Dermatologists	2 535	+30%	3 299	25	99
ENT physicians	2 967	+31%	3 900	1 592	151
Gynaecologists	7 306	+31%	9 580	1 574	862
Internists (general and subspecialists)	12 720	+25%	15 951	330	2 584
Laboratory specialists	419	+38%	577	–	90
Neurologists	3 228	+50%	4 847	23	636
Ophthalmologists	4 092	+27%	5 191	605	98
Orthopaedists	3 460	+39%	4 815	487	279
Paediatricians	5 128	+14%	5 824	39	701
Psychotherapists	842	+215%	2 653	–	363
Radiologists	1 439	+59%	2 282	–	751
Surgeons	2 539	+35%	3 435	512	1 781
Urologists	1 744	+43%	2 490	475	216
All specialists (including other)	50 567	+37%	69 024	5 939	10 360
General practitioners	38 244	+14%	43 659	142	503
Total	**88 811**	**+27%**	**112 683**	**6081**	**10 863**

Source: Federal Association of SHI Physicians 1999;
Note: Column 4 is included in column 3; column 5 is additional; – = not available but negligible.

Secondary and tertiary hospital care

As mentioned, German hospitals concentrate on inpatient care. Only university hospitals have formal outpatient facilities, originally for research and teaching purposes. Recently, their role in providing highly specialized care on an ambulatory basis (e.g. for outpatient chemotherapy) has been recognized through special contracts with the sickness funds. Day surgery is another new area for German hospitals (see below).

There are around 2260 hospitals with approximately 572 000 beds (6.97 beds per 1000) and an average occupancy rate of a little over 80%. Of the 2030 general hospitals, around 790 hospitals are in public ownership, 820 have private non-profit status and 420 are private for-profit hospitals, with bed shares of 55%, 38% and 7% respectively (see also the section on *Decentralization of the health care system*). Hospital beds per capita vary between *Länder* (see the section on *Payment of hospitals*). In 1994, beds in university hospitals accounted for 8.3% of all general and psychiatric hospital beds, beds in hospitals enlisted in state hospital plans for 87.5%, beds in hospitals additionally contracted by sickness funds for 1.5% and beds in hospitals without such contracts, i.e. purely for privately insured patients, for 2.7%. That is, over 95% of all beds are publicly financed as far as investment costs are concerned. As mentioned earlier, this is independent of ownership.

In addition, approximately 1400 institutions with 190 000 beds (2.32 beds per 1000) are dedicated to preventive and rehabilitative care. Compared with general hospitals, ownership is very different for preventive and rehabilitative institutions with 15%, 16% and 69% of beds being public, non-profit and for-profit respectively.

In 1998, the general and psychiatric hospitals' workforce amounts to 1.038 million persons or 850 400 full-time equivalents (of which 12% physicians), which is around 4% less than the employment peak reached in 1995. The preventive and rehabilitative institutions' workforce amounted to 91 500 full-time equivalents (of which 8% physicians), around 10% less than the peak in 1996.

Until 1992, the number of hospital beds, inpatient cases, and length of stay had changed continuously but gradually and had been foreseen by all parties involved. The decreasing number of acute hospital beds was largely compensated by beds in newly opened preventive and rehabilitative institutions. The shorter length of stay was almost equalled by the increasing number of inpatient cases so that both the occupancy rate and the number of bed days per capita had remained stable. The first hospitals faced with restructuring initiatives were those in the east after reunification in 1990 since they had to adapt to the western standards in infrastructure, planning, and financing. Since 1993, hospitals in the west and in the east have been faced with a rapidly changing environment with challenges through fixed budgets, the possibility of deficits and profits, ambulatory surgery, and the introduction of prospective payments from 1996. This has changed utilization data much more rapidly than was previously the case.

Between 1991 and 1998, the average length of stay in general and psychiatric hospitals fell by 24% in the western part and even by 35% in the eastern part of

the country (see Table 11). In preventive and rehabilitative institutions, it fell only by 15% and 18% respectively (see Table 12). During the same period, the number of general and psychiatric hospital cases per 1000 population has risen by 6% in the western parts and 24% in the eastern parts of the country. The resulting number of bed days per person has therefore fallen in the whole country. Occupancy rates in the western parts have decreased while they have increased in the eastern parts of the country. In preventive and rehabilitative institutions, occupancy rates had reached the (high) level of 1995 before occupancy rates in the whole country dropped sharply as a result of the Health Insurance Contribution Rate Exoneration Act. In summary, after a remarkably short time, almost all structure, utilization, and expenditure data look very much alike for the whole country (see ratios in Table 11 and Table 12).

Table 11. Inpatient structure and utilization data I: general and psychiatric hospitals in western and eastern parts of the country, 1991–1998

	beds/ 1000			cases/ 1000			length of stay (days)			occupancy rate (%)		
	west	east	Ratio	west	east	Ratio	west	east	Ratio	west	east	Ratio
1991	8.19	8.89	1.09	179.3	151.1	0.84	14.3	16.1	1.09	86.0	74.9	0.87
1992	8.02	8.08	1.01	180.4	159.4	0.88	13.9	14.2	1.02	85.3	76.0	0.89
1993	7.80	7.50	0.96	180.3	162.9	0.90	13.2	13.0	0.98	83.9	77.4	0.92
1994	7.68	7.16	0.93	181.9	169.0	0.93	12.7	12.2	0.96	82.7	79.0	0.95
1995	7.55	7.03	0.93	185.4	175.9	0.95	12.2	11.7	0.96	82.0	80.1	0.98
1996	7.30	6.98	0.96	186.8	181.9	0.97	11.5	11.2	0.97	80.3	79.6	0.99
1997	7.12	6.87	0.96	189.4	187.5	0.99	11.1	10.8	0.97	80.7	80.5	1.00
1998	7.01	6.78	0.97	194.4	194.9	1.00	10.8	10.5	0.97	81.8	82.3	1.01

Source: Based on data from Federal Statistical Office 1999 and preliminary data for 1998.

Table 12. Inpatient structure and utilization data II: preventive and rehabilitative institutions and hospitals in western and eastern parts of the country, 1991–1998

	beds/ 1000			cases/ 1000			length of stay (days)			occupancy rate (%)		
	west	east	Ratio	west	east	Ratio	west	east	Ratio	west	east	Ratio
1991	2.06	0.66	0.32	21.4	5.0	0.23	31.0	31.7	1.02	88.4	65.9	0.75
1992	2.09	0.82	0.39	22.0	8.1	0.37	31.1	29.6	0.95	89.8	79.4	0.88
1993	2.13	0.92	0.43	22.4	9.3	0.42	31.1	29.5	0.95	89.5	81.4	0.91
1994	2.28	1.39	0.61	23.3	13.9	0.60	31.3	30.2	0.96	88.0	82.5	0.94
1995	2.34	1.66	0.71	24.3	17.6	0.72	31.1	30.5	0.98	88.7	88.6	1.00
1996	2.39	1.96	0.82	24.1	19.9	0.83	30.2	29.9	0.99	83.2	83.1	1.00
1997	2.33	2.15	0.92	19.4	18.4	0.95	27.5	26.0	0.95	62.6	60.9	0.97
1998	2.30	2.44	1.06	21.1	22.2	1.05	26.5	25.9	0.98	66.4	65.0	0.98

Source: Based on data from Federal Statistical Office 1999 and preliminary data for 1998.

These developments in the hospital sector as well as in the preventive/ rehabilitative sector are much less visible if data are combined. Taken together, the German hospital sector appears to be more stable than it is in reality. In international comparison, the total number of hospital beds, admissions and length of stay are well above average (see Table 13, Fig. 9 and Fig. 10). While the number of beds in German acute hospitals has been reduced since 1991, it has not fallen by more than in France or the Netherlands, i.e. Germany's bed capacities have remained about 150% of the EU average (see Fig. 10).

Day surgery: While hospitals have been allowed to offer surgery on an ambulatory or day-case basis only since 1993, day-case surgery is not new in Germany. Due to the separation of the hospital and the ambulatory care sector, surgeons, ophthalmologists, orthopaedic surgeons and other specialists in private practice have performed minor surgery for a long time. Since the 1980s, this has been supported through the introduction of new items in the Uniform Value Scale, both to cover additional costs of the operating physician (equipment, supporting staff, etc.) and to cover necessary anaesthesia. In 1991, day surgery accounted for almost 2% of sickness funds' expenditure in the ambulatory care sector. In 1993, additional items for post-operative care were introduced. The frequency of these items may be used to estimate the extent to which ambulatory surgery is taking place in Germany, although they do not allow a distinction between hospital-based and office-based day surgery since remuneration is done under the same norms (i.e. those of the ambulatory care sector). Day surgery increased rapidly in the first half of the 1990s with growth rates higher than anticipated when budgets were fixed. Growth rates are even higher if the volumes of points for the services is taken into account since procedures with the smallest surcharge increased only by 27% while those with the highest surcharges increased by more than 300% between 1990 and 1994.

According to Asmuth et al. (1999), approximately 45% of hospitals offered ambulatory surgery and 55% of hospitals ambulatory pre- and/ or post-inpatient care in 1997.

Social care

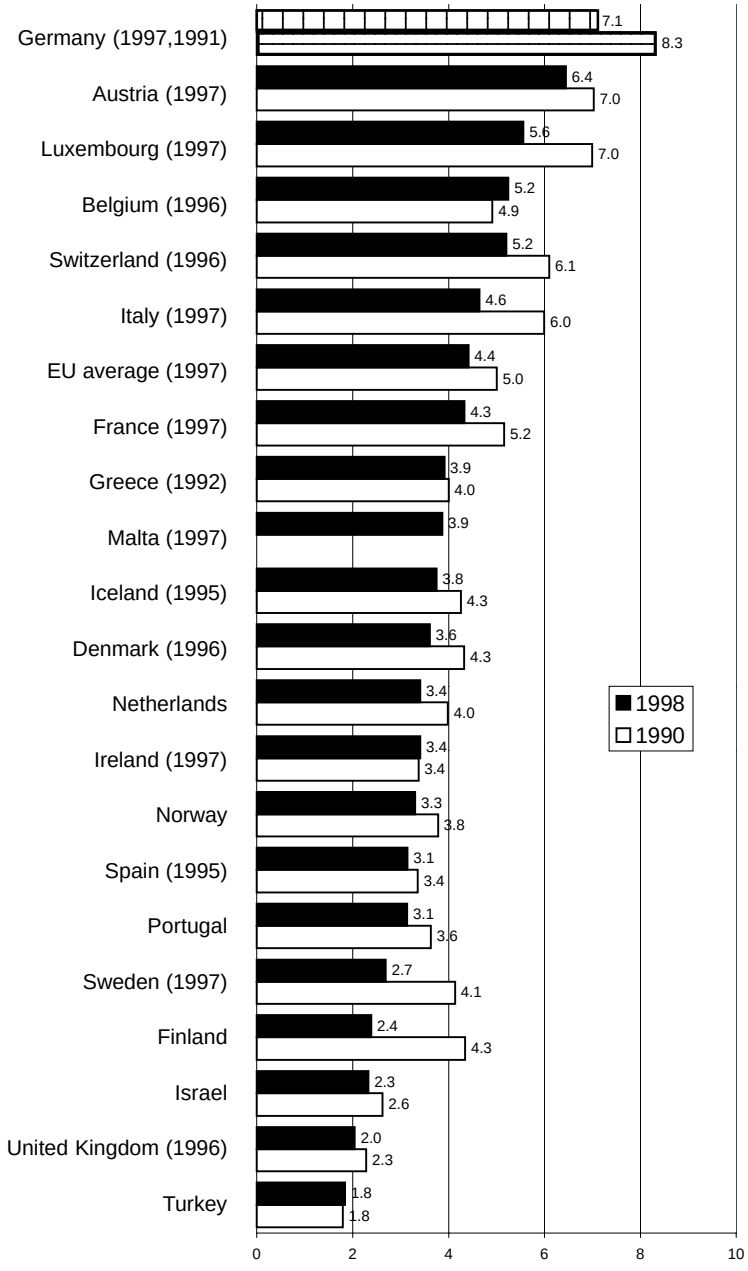
Social care is delivered by a broad variety of mainly private organizations who complement family and lay support for the elderly, the mentally ill and for physically and/or mentally handicapped. Funding is generally based on the principle of subsidiarity with a priority of private (out-of-pocket or insurance) over public subsistence. Compared to health care, however, public resources

Table 13. Inpatient utilization and performance in acute hospitals in the WHO European Region, 1998 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Austria	6.4[a]	24.7[a]	7.1[a]	74.0[a]
Belgium	5.2[b]	18.0[b]	7.5[b]	80.6[c]
Denmark	3.6[b]	18.8[b]	5.6[b]	81.0[b]
Finland	2.4	20.5	4.7	74.0[c]
France	4.3[a]	20.3[c]	6.0[b]	75.7[a]
Germany	7.1[a]	19.6[a]	11.0[a]	76.6[a]
Greece	3.9[f]	–	–	–
Iceland	3.8[c]	18.1[c]	6.8[c]	–
Ireland	3.4[a]	14.9[b]	6.7[b]	82.3[b]
Israel	2.3	18.4	4.2	94.0
Italy	4.6[a]	16.5[a]	7.0[a]	76.0[a]
Luxembourg	5.6[a]	18.4[d]	9.8[b]	74.3[d]
Malta	3.9[a]	–	4.5	72.2[a]
Netherlands	3.4	9.2	8.3	61.3
Norway	3.3	14.7[b]	6.5[b]	81.1[b]
Portugal	3.1	11.9	7.3	75.5
Spain	3.1[c]	10.7[c]	8.5[b]	76.4[c]
Sweden	2.7[a]	16.0[b]	5.1[b]	77.5[b]
Switzerland	5.2[b]	14.2[e]	11.0[a]	84.0[a]
Turkey	1.8	7.1	5.5	57.3
United Kingdom	2.0[b]	21.4[b]	4.8[b]	–
CCEE				
Albania	2.8[a]	–	–	–
Bosnia and Herzegovina	3.4[g]	7.4[g]	9.7[g]	70.9[g]
Bulgaria	7.6[b]	14.8[b]	10.7[b]	64.1[b]
Croatia	4.0	13.4	9.6	88.2
Czech Republic	6.5	18.4	8.8	70.8
Estonia	6.0	17.9	8.8	74.6
Hungary	5.8	21.7	8.5	75.8
Latvia	–	–	–	–
Lithuania	–	–	–	–
Poland	–	–	–	–
Romania	–	–	–	–
Slovakia	7.1	19.3	10.3	77.9
Slovenia	4.6	15.9	7.9	75.4
The former Yugoslav Republic of Macedonia	3.5[a]	8.1	8.9	66.5
NIS				
Armenia	6.0	6.0	10.7	30.2
Azerbaijan	8.0	5.6	–	–
Belarus	–	–	–	88.7[d]
Georgia	4.6[b]	4.8[b]	8.3[b]	26.8[d]
Kazakhstan	6.6	14.9	13.0	91.2
Kyrgyzstan	6.7	15.8	12.9	81.7
Republic of Moldova	9.1	16.9	15.4	77.6
Russian Federation	9.0	19.9	14.0	82.5
Tajikistan	6.2	9.7	13.0	59.9[b]
Turkmenistan	6.0[a]	12.4[a]	11.1[a]	72.1[a]
Ukraine	7.4	17.9	13.4	88.1
Uzbekistan	–	–	–	–

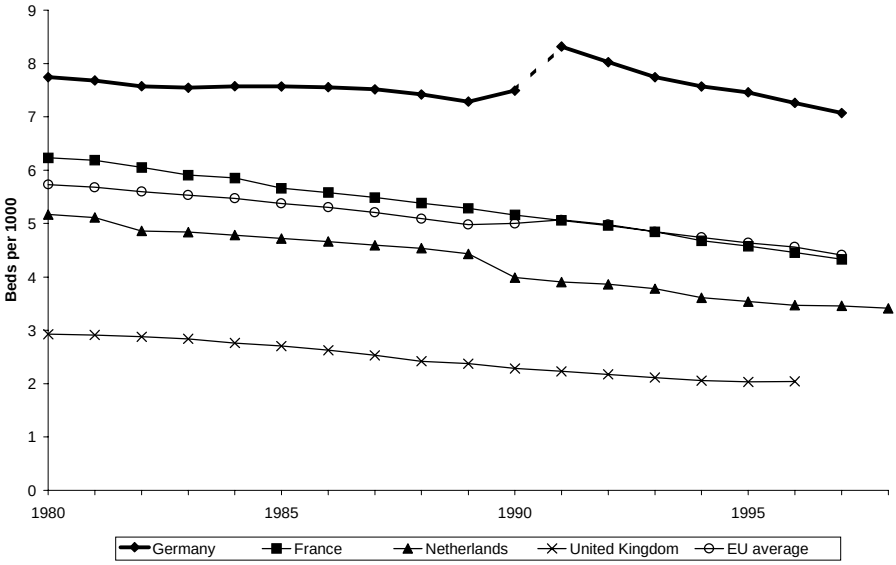
Source: WHO Regional Office for Europe health for all database.
Note: [a] 1997, [b] 1996, [c] 1995, [d] 1994, [e] 1993, [f] 1992, [g] 1991, [h] 1990.

Fig. 9. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Fig. 10. Number of acute hospital beds in Germany and selected countries (per 1000 population), 1980–1998



Source: WHO Regional Office for Europe health for all database.

from federal states and local communities contribute a greater share of the monetary and – to a smaller degree – service benefits in social care because recipients are often not entitled to employment based insurance benefits or because insurance benefits do not cover the needs. The *Länder* are responsible for the planning (and guaranteeing the provision) of institutionalized care and schools for children with special needs. Most providers of institutional care belong to the six welfare organizations united in the *Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege* (see section on *Organizational structure and management*). Welfare organizations have established 60 000 autonomous institutions with nearly 1.2 million employees. In social care, they run 50% of old age homes, 80% of homes for handicapped and nearly 70% of institutions for youth.

Other typical features of social care in Germany are:

- the traditional legal priority (§ 93 BSHG) for welfare organizations to deliver social care;
- the statutory insurance for long-term care (see below);
- the provision of comprehensive care for severely physically or mentally handicapped people in institutions separate from the community;
- regional differences in community integrated services;

- a legal quota for the employment of disabled employees;
- special schools which offer education for children who do not match with secondary or handicapped schools (e.g. children with learning deficits and behavioural disorders).

In 1995, 8.3% of the population living in Germany (6.6 million) were officially recognized as severely disabled (which is not the same as "needing care" – see below). Four per cent were younger than 25 years old and 51% of them were 65 years or older – accounting for one fourth in this age group – giving Germany the highest registered rate of severe disability amongst the elderly in western countries. Of the working-age, severely disabled 17.9% were unemployed, i.e. 1.7 times more than in the general population.

The majority of the elderly (91%) live in their homes in the community. In 1996, 5% of people aged 65–79 years and 8.2% of those aged 80–84 lived in old age institutions. The proportion of the elderly living in homes rose with increasing age to 17.6% amongst those aged 85–89 years and to one third of people aged 90 years or older. There were 8300 old age homes with an average of 80 inhabitants. Fifty-one per cent of old age home residents received nursing care funded by statutory long-term care insurance.

Statutory long-term care insurance

Statutory long-term care insurance was introduced in 1994 – as book XI of the Social Code Book – following increasing concerns amongst the public about the situation of the elderly and a public debate about inadequate access and support for nursing care especially in the ambulatory sector. All members of statutory sickness funds (including pensioners and unemployed) as well as all people with full-cover private health insurance were declared mandatory members – making it the first social insurance with practically population-wide membership. The long-term care insurance scheme is administered by the sickness funds (as an entity that is separate from the health insurance part but without any separate associations) and by the private health insurers.

The requirement to pay contributions began in January 1995 with ambulatory benefits available from April of that year. Benefits for care in institutions were available from July 1996. According to the principles of the statutory health insurance scheme, members and their employers contribute jointly 1.7% (until June 1996, only 1%) of monthly gross income, i.e. 0.85% each. In order to compensate the employers for the additional costs on wages, a public holiday was turned into a working day. As an exception, the *Land* of Saxony retained the holiday and the contribution is split between employee and employer 1.35% to 0.35%.

Applicants are examined and categorized by the regional medical review boards which are jointly run by all statutory sickness funds (while the private health insurers mainly contract for this examination). Entitlement to insurance benefits is given when care is expected to be necessary for at least six months (hence, long-term care). Short-term nursing care continues to be funded by the sickness funds (and the private insurers if included in the package). The benefits of long-term care insurance are graded according to types, frequency and duration of need for nursing care:

- Grade I: support is necessary for at least two activities in the areas of body care, eating and mobility (at least once daily) as well as housekeeping (at least several times a week) with an overall average duration of at least 90 minutes daily.
- Grade II: support is necessary at least three times daily with an overall average duration of at least 3 hours daily.
- Grade III: support is necessary around the clock including nights with an overall average duration of at least 5 hours daily.

Everybody with an entitlement to ambulatory nursing services is given the choice between monetary support for home care delivered by family members (Grade I DM 400 monthly, Grade II DM 800, Grade III DM 1300, plus a professional substitute for up to DM 2800 a year to cover holidays) or professional ambulatory services as in-kind benefits (up to DM 750/1800/2800 monthly). In addition, caregivers who care for their family member at home can attend training courses free-of-charge and are insured against accidents, invalidity and old age. For persons needing institutionalized nursing care, benefits are available for day or night clinics, as well as institutional care in old age or special nursing care homes (benefits up to DM 2000/2500/2800 monthly).

The income of the long-term care funds exceeded their expenditure during the first year three years by more than DM 9 billion – which was mainly due to the fact that funding began earlier than benefit provision – but reached almost a steady state in 1998. By the end of 1998, 1.71 million people (2.4% of all insurees) received benefits or services funded from statutory long-term care insurance (not counting entitled people who were privately insured), 1.2 million (1.7% of all insurees) received ambulatory benefits and 510 000 (0.7%) received institutionalized care (of those around one tenth in homes for the handicapped). The percentages of entitled persons are age-dependent and reach from fewer than 0.6% below the age of 50, via 1.7% between 60 and 65 years, and 4.7% between 70 and 75 years to 29.6% in the group of 80 years and older; age-dependency is steeper for institutionalized than for ambulatory benefits: less

than 0.1% are entitled below the age of 30 but 11% of the insurees of 80 years and older are entitled.

One half of the persons entitled to ambulatory benefits are classified into group category I, almost 40% into category II and a little over 10% into category III. Seventy-seven per cent of these persons choose monetary benefits. Less than 10% choose only benefits in-kind (i.e. professional care at home) and 12% choose a combination of professional and lay support. Short-term care, day or night clinics are utilized to a very small degree only – partly because of insufficient provision especially in rural areas. The beneficiaries entitled to institutionalized care are grouped into higher categories on average: around 40% each into categories I and II and more than 20% into category III.

Professional care in the ambulatory sector is paid on a fee-for-service basis while institutionalized care is financed by per diem charges. The prices are negotiated between care funds and provider associations at *Länder* level. The duty to guarantee access to professional ambulatory care has been legally handed over to statutory care funds while the *Länder* remain obliged to guarantee access to institutionalized care. In the case of nursing care the principle of dual financing means that the *Länder* have to cover investment costs fully for institutions and partly for ambulatory suppliers. The *Länder* are also responsible for planning but they are legally not allowed to limit the number of providers in the ambulatory sector so that competition is enhanced.

The Social Code Book XI ended the legal priority of welfare organizations over private for-profit providers explicitly in order to introduce competition for prices and quality. Thus, for-profit providers take part in the annual negotiations with care funds. In practice, however, private providers and welfare organizations usually agree on asking prices before the annual negotiations with the payers.

The introduction of statutory insurance benefits for long-term care strengthened the self-supporting capacities of people in need of care. The work of caregivers – most of them women – was officially recognized by financial compensation and by integration into the social security system. However statutory care insurance provides basic rather than comprehensive support for entitled people and their families, many of whom still have to rely on additional benefits from public assistance funds belonging to local communities. In 1997, public assistance contributed around 10% less to supporting nursing care than in 1995. Since insurance benefits do not cover accommodation costs for old age homes, the elderly who are institutionalized are particularly affected. Welfare organizations and self-support groups have also presented the criticism that the care needs of demented patients and severe cases are not met adequately due to the narrow criteria determining long-term care. The somatic orientation

of services and their payment, as well as the grading of benefits according to severity are said not to support the legally prescribed principle of "rehabilitation before nursing care".

The introduction of long-term care insurance also led to an increase in the number of active nurses and professional old age caregivers, especially in the ambulatory sector. The number of full-time staff in inpatient and outpatient nursing care increased by one third within three years to 289 000 professionals in 1996 and is expected to increase further because of demographic factors.

Mental health care

Since a parliamentary committee report in 1975 which criticized the institutionalization and low quality of care for people with long-term mental illness, mental health care in the Federal Republic of Germany shifted gradually to offering community-integrated services. During the process of de-hospitalization the number of beds for the mentally ill was reduced from 150 000 in the FRG in 1976 to 69 000 in Germany in 1995. During the same period the duration of stay in psychiatric hospitals was decreased from an average of 152 to 44 days.

The situation of mental health care in the eastern part of Germany in 1990 was similar to conditions in FRG before the psychiatric reforms in the 1970s. The lack of specialized community-integrated services was further aggravated by staff shortages. Thus, big institutions with 300 to 1800 beds provided a relatively low quality level of care. Sixty per cent of inpatients were judged as not needing hospital care in 1990. Consequently local, state and national funds promoted the provision of long-term care homes and ambulatory services within communities in the eastern part of the country particularly. However social integration and access to services in the community are still judged to be inadequate although currently Germany enjoys a favourable position by international comparison. In 1995, between 24% and 40% of the institutionalized mentally ill were still estimated as not needing any sort of institutionalized care. 10 000 hospital patients could still be transferred into homes for long-term care.

The dehospitalization process led to an increase of homes for long-term mental care within the community which are funded by subregional funds. There were as many as 250 ambulatory psychosocial services in 1992 which offered advice and therapy to 8000 mentally ill patients. The decentralization of care did not necessarily entail the decentralization of finance and planning capacities. Thus, ambulatory services are characterized by substantial regional differences depending largely on budgets and the policy of local communities to contract with private deliverers.

Public health offices deliver social-psychiatric services themselves for the most disadvantaged people amongst the mentally ill by offering home visits and counselling. There is a general lack of comprehensive services based in the community. Day-clinics, which are mostly attached to the psychiatric departments of hospitals, are funded by sickness funds or by retirement funds as social rehabilitation if patients are entitled to these benefits. Hospitals also offer flexible services for crisis intervention which are usually paid by health insurance or public assistance.

Ambulatory care for the mentally ill is also supported by the increasing number of psychiatrists, neurologists and psychotherapists working in the ambulatory care sector (see the section on *Primary and secondary ambulatory health care*). In addition the process of dehospitalization for psychiatric patients was accompanied by an increasing number of private hospitals which offer short-term care/rehabilitative care for patients with addiction problems and psychosomatic disturbances (which lie outside the *Länder* hospital plans).

Social care for physically and mentally handicapped

Social care for physically and/or mentally handicapped people in Germany is characterized by well-equipped and highly-specialized institutions and schools. Although these comprehensive services are increasingly offered within communities on an outpatient basis, institutionalized care still plays a major role especially for severely disabled people with multiple handicaps.

Similar to the situation of the mentally ill, there is a broad variety of private organizations and local community initiatives which offer support for the handicapped and their families. Yet because of unclear financial responsibilities, those affected do not have a concrete right to specific community-integrated services, including integrated kindergartens and schools. This again leads to great regional differences and under-provision in rural areas.

Human resources and training

Human resources

Physicians

The number of active physicians in Germany has been rising constantly over the last 25 years. The average increase, however, has stabilized at around 2%

in the 1990s – as compared to average rates of 3% growth in the 1980s. Of a total of 357 700 physicians in 1998, 287 000 are active – a rate of 3.5 per 1000 population. Of these, 135 800 work in hospitals, 124 600 in ambulatory care (112 700 as SHI-accredited physicians, 7800 as salaried physicians and 4100 purely for private patients), 10 500 in public health services, administration or corporatist bodies and 16 100 in other areas (e.g. pharmaceutical industry).

According to §§ 99–105 of the Social Code Book V, needs-based plans have to be developed to regulate the number of SHI-affiliated office-based physicians. Originally, the intention was to guarantee that less numerous specialties would also be available in rural areas. Since the 1980s, however, the focus has been on avoiding over-supply. Since 1993, the Social Code Book regulates matters so that new practices may not be opened in areas where supply exceeds 110% of the average number for the particular specialty in question. Accordingly, the Federal Committee of Physicians and Sickness Funds has developed guidelines which define these limits. The guidelines classify all planning areas into one of 10 groups – ranging from large metropolitan cities to rural counties – and define the need per group as the actual number of physicians working in counties of that group in 1990 (divided by the population). Accordingly, "over-supply" is defined as 110% of that figure. Factors such as age, gender, morbidity or socioeconomic status of the population or the supply of hospital beds are not taken into account. Due to this definition, the need for certain specialties varies widely (up to a factor of 7.5) since differences are frozen (see Table 14 for details).

Table 14. "Needs-based" population ratios defined as covering 100% of need per specialty – highest and lowest ratios (defined as 1 physician per X population)

	Highest district ratio	Lowest district ratio	Relative difference highest/ lowest
Anaesthetists	1/18 383	1/137 442	7.48
Dermatologists	1/16 996	1/60 026	3.53
ENT physicians	1/16 419	1/42 129	2.57
GPs/ physicians without specialization	1/1 674	1/2 968	1.77
Gynaecologists	1/6 711	1/14 701	2.19
Internists	1/3 679	1/9 992	2.72
Neurologists	1/11 909	1/47 439	3.98
Ophthalmologists	1/11 017	1/25 778	2.34
Orthopaedists	1/13 009	1/34 214	2.63
Paediatricians	1/12 860	1/27 809	2.17
Radiologists	1/24 333	1/156 813	6.44
Surgeons	1/21 008	1/62 036	2.95
Urologists	1/26 017	1/69 695	2.68

Source: Federal Association of SHI Physicians 1999.

In early 1999, out of a total of 417 planning areas 380 were closed for setting up new surgical practices, 370 for paediatricians and 363 for dermatologists. For general practice, however, only 212 areas were closed meaning that almost 50% had not reached the defined maximum.

Nurses and other health professions

Since nurses are legally not considered to be a profession, they do not need to register and hence no good data on nurses are available. Estimates put numbers in an about average position within the WHO European Region (see Fig. 11).

An interesting instrument was included in the Health Care Structure Act namely the introduction of nursing time standards. Through this instrument, a daily documentation of nursing activities put every patient in one of nine categories with a standardized amount of necessary nursing time between 52 and 215 minutes per day. The total amount of minutes per ward and per hospital could be calculated into the necessary nursing staff for the unit. Nursing time standards were introduced to end the period of (perceived) nursing shortages. It was expected that new jobs would be created. However, the Second SHI Restructuring Act abolished the regulation for the official reason that the standard had led to almost 21 000 new nursing positions between 1993 and 1995 when the lawmakers had anticipated only 13 000.

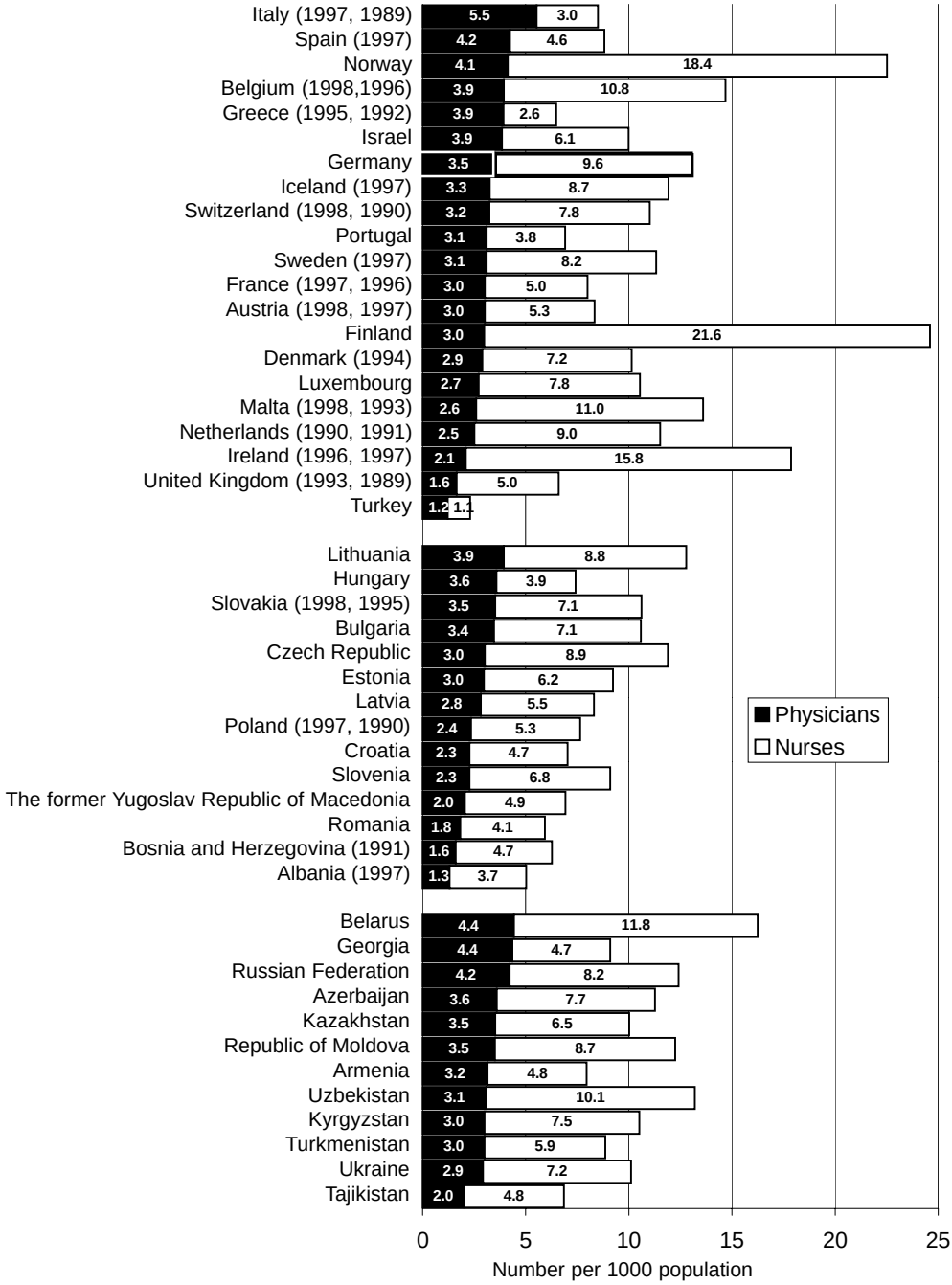
The conditions for independent health care professionals other than physicians – such as physiotherapists or speech therapists – are regulated in the Social Code Book (§§ 124 and 138 SGB V). § 124 regulates the licensing of providers who must fulfil certain prerequisites (training, practical experience, practice equipment, contractual agreements) if they want to participate in the care of the insured.

Training

The training of health care professionals is a shared responsibility between the fields of education, health care, professional self-regulation and government. Most current debates arise out of the tension between the various stakeholders.

According to the federal structure, the 16 *Länder* are generally responsible for regulating and financing education as well as for registering and supervising professions including health professions. However, health professions differ traditionally from other professions in terms of the national regulations concerning their primary education and by the virtual autonomy of their chambers for regulating specializations (secondary professional education) and continuous education. National standards for curricula and examinations were introduced in 1871 for medical studies, in 1875 for faculties of pharmacy and in 1907 for the training of nurses. Today uniform curricular frameworks exist

Fig. 11. Number of physicians and nurses per 1000 population in the WHO European Region, 1998 or (latest available year)



Source: WHO Regional Office for Europe health for all database.

for 16 out of 22 non-academic health care professions (e.g. therapists, technical assistants, doctors' assistants, paediatric nurses, nursing assistants, emergency and transport staff, etc.). National legislation is currently also under way for carers of the elderly.

Primary professional education and registration

Primary training of non-academic as well as academic professionals is basically free-of-charge in Germany. However private schools with course-based training for therapeutic professions demand fees of DM 600–1000 per month. Participants of practice-based training in health care institutions such as nurses in training receive a basic income. University education is financed by the states while practice-based training at hospitals is basically funded by statutory insurance funds as part of their financial contracts with individual hospitals.

Most German universities offer a degree in medicine (36), dentistry (31) and/or pharmacy (23); veterinary medicine is a discipline at 5 faculties. There are also many facilities for the primary training of nurses (42 000 beginners at 1050 centres in 1995), therapeutic professions, e.g. physiotherapists or dieticians (12 000 beginners, 340 centres), technical assistants (5800 beginners, 110 centres), ambulance workers (1900 beginners, 30 centres) or professional carers of the elderly (16 000 beginners, 125 centres).

Primary training of most non-academic health professionals requires an advanced degree after secondary school and usually takes three years. Access to German universities is (usually) limited to people with an A-level equivalent (13 years of school). Academic health education is among the subjects for which places are distributed centrally according to school marks, waiting times and special quotas (e.g. foreigners or disabled persons). Fifteen per cent of medical students are accepted by way of interviews at individual universities. University studies last between 4 years (pharmacy) and 6 years (medicine).

The curriculum for academic health care professions is highly standardized and organized around 3–4 central examinations. However, in 1999, a long sought-after clause was integrated into the national regulation for medical studies which allows individual medical faculties to offer curricula reform while preserving basic national standards (e.g. two centralized final examinations). The political target was to facilitate profound innovations towards more bedside-teaching, primary care orientation, problem-solving skills and the integration of basic science with clinical subjects. The first reformed medical curriculum was set to begin as a second track for 63 students at Berlin Humboldt University in autumn 1999.

Since the beginning of the 1980s cost considerations have motivated health policy-makers to try to reduce university places for health care studies (while those responsible for education have not generally agreed). Since 1990, the

number of graduates has dropped by about 15% to 9500 medical graduates and 1800 dentists. Thus in 1998, the number of academic health care graduates (16 500 including veterinary medicine) equalled the number of economic graduates and superseded law graduates by about 4000. In addition, 5700 psychologists graduated from university.

After graduation, health care professionals are eligible for registration at the *Länder* ministries responsible for health, except medical doctors who receive full state recognition only after having worked in clinical practice for 18 months.

Secondary professional training (specialization) and continued education

Medical and veterinary graduates are obliged to specialize (e.g. general practice, internal medicine) while specialization is optional for the other health care professions. The different federal states recognize a maximum of 8 specialities in pharmacy, 3 in dentistry, 48 in veterinary medicine, 7 in psychology and 12 in nursing. The number of medical specialities has increased from 14 in 1924 to 36 in 1998, supplemented by another 50 subspecialties (e.g. pneumology) or additional qualifications (e.g. allergology).

Practice-based specialization usually takes two or three years in non-academic and four to six years in academic health care professions. The duration of specialization in general medicine has been increased from three to five years in 1998 in order to strengthen the quality and professional status of future family practitioners. Yet, general practitioners amounted to only about 20% of the physicians receiving their specialty diplomas from medical chambers during the 1990s. The low generalist/specialist ratio has been interpreted as a result of deficient training facilities in ambulatory care, lower income prospects and a lower prestige due to the socialization of medical doctors in secondary and tertiary hospital care. Therefore, since 1999 the sickness funds and the private health insurers have been obliged to finance incentives to GP trainees and to senior family practitioners during the office-based training period (minimum two out of five years). Physicians' associations agreed with the programme despite scepticism about undue interventions in professional autonomy.

A high drop-out rate of non-academic health professionals from professional training and practice has been interpreted as a result not only of the employment situation for women but also of relatively low job satisfaction in hierarchical structures and limited prospects for intra-professional development and social mobility. The shortage of nurses was another factor which motivated the introduction of course-based specialization facilities at polytechnic colleges during the 1980s. In 1995, 634 nurses graduated in nursing sciences at 11 universities for applied sciences and one private university. Part-time or full-time courses are increasingly offered for other non-medical professions as well, for example, physiotherapists, speech therapists or carers of the elderly.

Polytechnics and private institutions also offer a variety of courses in areas such as health promotion and hospital management.

Public health used to be a medical specialty exclusively until 1989 when postgraduate courses were gradually introduced at nine universities, predominantly in medical faculties. The two-year part-time courses are free-of-charge and offer about 300 places to university and partly to polytechnic graduates from medical and non-medical disciplines. Quality management is another part-time qualification which has been introduced in recent years at five state medical chambers, private institutions and some polytechnics.

Continuous education is voluntary and self regulated by health care professionals.

Some general issues

Current debates on the education of health care professions in Germany reflect the tensions between and within the fields of education, health care and professional self-regulation. Some issues have been raised at least since the turn of the century. For example, interpersonal skills and the ability to synthesize knowledge are perceived to be underrepresented in nearly all types of health care education compared to curricular requirements for factual knowledge which have been increased in response to the developments and specialization in medicine. While the practice-based training of health professionals (e.g. in care of the elderly) is criticized as lacking broader educational and pedagogic support for trainees, course-based education at universities is criticized as preparing students insufficiently for their future work either in research or in general health care practice.

Some quantitative and qualitative issues have gained particular political importance during recent debates and reforms designed to meet future challenges in health care. Traditionally, strong political and professional values concerning free choice have made restrictions to accessing university education or professional practice (especially for self-employed professions such as ambulatory doctors) a highly contentious issue.

There is now broad agreement in German society that future and existing health care professionals should be better qualified in primary care, health promotion, rehabilitative care or interdisciplinary cooperation. However, it has turned out that it is not sufficient to add these topics to the content of course syllabuses while the majority of German health trainees are still nearly exclusively based, trained and specialized in secondary and tertiary hospitals for acute care. One of the major challenges in health care training will therefore be to introduce or increase the role, funding and infrastructure of education based in the community.

Table 15. Number of health care personnel (per 1000 population), 1980–1997

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Active physicians	2.2	2.6	3.0	3.0	3.1	3.2	3.3	3.4	3.4	3.5
Active dentists	0.6	0.6	0.7*	0.7	0.7	0.7	0.7	0.7	0.8	0.8
Active pharmacists	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6

Source: Federal Statistical Office 1998 (* no exact figure available, extrapolated from 1989 and 1991)

Note: National data on nurses are not available, as they do not count as professionals, data on them are not routinely collected.

Pharmaceuticals

Regulations concerning the pharmaceutical market present a dichotomy. On the one hand, the distribution of drugs through wholesalers and pharmacies and their respective surcharges on ex-factory prices are regulated in great detail. On the other hand, regulations concerning the pharmaceutical industry's pricing and the need to prove efficacy are remarkably liberal. The growing realization that a significant proportion of drugs possessed a level of effectiveness which was unproved and questionable led to the introduction of the mandate for drug licensing in the 1976 Pharmaceutical Act (effective from 1978). Before that, products only had to be registered with the Federal Health Office as drugs. Registration regulations called for only minor examinations concerning possible toxic effects. Also, the new regulation affects only newly developed pharmaceuticals because the 1994 Pharmaceutical Act Amendment Law extended the deadline for licensing pharmaceuticals already on the market to the year 2005 (see the section on *Health care technology assessment*).

The pharmaceutical industry in Germany is amongst the most powerful in developed countries and contributes significantly to the export market (pharmaceutical export surplus in 1998: DM 10.8 billion). Around 1100 pharmaceutical companies with 115 500 workers are operating in Germany (1997). The market covers "public" pharmacies (providing prescription drugs, prescription drugs which could also be sold over-the-counter, and self-prescribed over-the-counter [OTC] drugs) and hospital pharmacies.

In 1998, public pharmacies – which are actually all privately-owned and which have a monopoly over drug dispensing except to hospitals – sold drugs for DM 52.0 billion while hospitals purchased drugs with an ex-factory volume worth DM 4.8 billion. The DM 52.0 billion were the sum of ex-factory prices (27.1 billion), surcharges by wholesalers (3.5 billion, ca. 13% of ex-factory prices) and pharmacies (13.5 billion, ca. 50% of ex-factory prices) as well as

value-added tax (6.4 billion). The pharmacy surcharge and the tax are among the highest in west European countries.

Of the DM 52.0 billion, 44.4 billion were for prescribed drugs and 7.6 billion for OTC drugs. The DM 44.4 billion included about 7.2 billion for potential OTC drugs (i.e. almost half of all potential OTC drugs are prescribed by physicians). Of the DM 44.4 billion, the statutory health insurance paid DM 33.4 billion (and received a rebate of 2 billion) while 3.6 billion was sold to privately insured people and 5.4 billion were co-payments by sickness fund members (which was 20% more than in 1997 and even 60% more than in 1996). Assuming full reimbursement by the private health insurers, patients paid a total amount of DM 13.0 billion or 25% of total ambulatory drug expenditure themselves.

In 1997, the average number of prescription forms per sickness fund member was 12.1 (with an average of 18.6 prescribed packs). More than 55% of all prescriptions were written by general practitioners, 18% by internists and 7% by paediatricians.

An analysis of prescriptions is undertaken annually by a sickness fund affiliated institute. Although this report does not provide patient data which could be used to evaluate appropriateness it is nevertheless of value for the assessment of trends in physicians' prescribing behaviour. The report is based on a comprehensive sample of prescriptions (*GKV-Arzneimittelindex*) in the ambulatory care sector, jointly maintained by several corporatist associations.

The structure of the pharmaceutical market has been defended by both the pharmaceutical industry and the physicians' associations as beneficial for the "therapeutic freedom" of physicians. Due to this structure, it is not surprising that drugs without any or clear evidence of therapeutic effectiveness are among the most widely sold pharmaceuticals. Federal legislation has mainly concentrated on cost-containment issues.

Pharmaceutical cost containment

Pharmaceutical expenditure has been an effectively controlled area of German health care expenditure, at least if one takes the perspective of the statutory sickness funds. Rather steep increases were always followed by decreases. The major elements of this ability to control drug expenditure are cost-sharing measures (see *Out-of-pocket payments* under the section *Complementary sources of finance*), prescription limitations (see the section on *Health care technology assessment*), reference prices introduced in 1989 and lastly the pharmaceutical spending cap from 1993 to 1997 and again since 1999.

Reference prices

The idea behind reference prices was to establish an upper limit for the costs reimbursable through the sickness funds. Their legal basis is § 35 SGB V. This stipulates that reference prices are defined:

- for drugs containing the same substance
- for drugs with similar substances
- for drugs with comparable efficacy.

While the Federal Committee of Physicians and Sickness Funds is responsible for the identification and classification of drugs, the federal associations of sickness funds do the actual price-setting.

Due to lowered prices for drugs formerly above the reference price, these regulations led to decreasing prices for reference priced drugs but the pharmaceutical industry partly compensated these through above-average increases for non-reference priced drugs. For the sickness funds, the savings are currently estimated to be in the range of DM 3 billion per year, i.e. roughly 9% of their pharmaceutical expenditure.

For patients, reference prices had two effects. Generally, pharmaceuticals priced at or below the reference price for that substance were co-payment free (until 1992). More specifically, if a patient with insurance sickness fund wished to use a more expensive alternative, he or she had to pay the difference out of their own pocket. For all prescribed drugs without a reference price, the patient had to pay a co-payment of DM 3 per package – instead of DM 2 previously (§ 31 SGB V). These new regulations led to an increase of co-payments by about one third but subsequently – due to the increasing number of reference-priced drugs – by 1992 it fell to the 1988 level. While in 1989 reference-priced drugs accounted for only 15% of the drug market, this share increased to about 30% in 1992 and has been above 60% since 1997.

The Act to Strengthen Solidarity in SHI introduced tighter regulations for the setting of reference prices, i.e. they now may not be higher than the highest price in the lowest third of the market. For 202 out of a total of 446 drug groups with reference prices, prices were supposed to be lowered from 1 April 1999 for a saving of approximately DM 550 million. However, this reduction was stopped legally and reference prices altogether came under legal threat when a pharmaceutical company successfully sued. Early in 1999, a court argued that price setting by the sickness funds violated European Union cartel regulations. Therefore, the health minister plans to put reference prices on a new legal basis, i.e. fixing them through an ordinance issued by the Ministry of Health.

Spending cap

The spending cap for pharmaceuticals imposed a real reduction in pharmaceutical expenditure which accounted for DM 26.7 billion in 1992 (west). Based on the 1991 expenditure of DM 24.4 billion, it reduced future spending to a maximum of DM 23.9 billion per year. In the case of overspending in 1993, any excess spending up to DM 280 million each would have been clawed back from the physicians' associations (from physician remuneration) and the pharmaceutical industry. From 1994 to 1997, the physicians' associations (in the west as well as in the east) were liable for any overspending with no upper limit; this liability was in force for every single association in the case of overspending, even if total pharmaceutical spending remains below the cap. At the same time as introducing the spending cap, the reform act imposed a price cut of 5% for existing drugs not covered by reference pricing and a price freeze for new drugs, both measures applying for 1993 and 1994.

The result of all three cost-containment measures in the Health Care Structure Act – i.e. a price moratorium, new cost-sharing regulations and the expenditure cap – in their first year of operation was a reduction of 18.8% in sickness funds' costs for pharmaceuticals in the ambulatory sector. This figure represents a reduction for the sickness funds of DM 5.1 billion from the 1992 expenditure or DM 2.2 billion more than had been required. Of these savings, around DM 1 billion was attributable to price reductions. Almost another DM 1 billion was the result of the new cost-sharing regulations. Only about 60% of the total reduction was attributable to changes in physicians' prescribing behaviour. Physicians reduced the number of prescriptions by 11.2% and increased their prescriptions for generics instead of the original products.

Due to subsequent increases, regional caps were exceeded in some of the 23 regions in 1994 even though national figures remained within the total (hypothetical) spending cap. While this remained the case for the western part of the countryin 1995 as well, overspending occurred in the eastern part (which were not affected by the 1993 cap) where the increase in pharmaceutical expenditure was so high that per capita expenditure in 1995 was almost 13% higher than in the west. Since the legislation allowed overspending in one year to be rectified in the next, no sanctions were imposed in 1995. However, some of the regions also exceeded the 1995 budget and therefore, in September 1996, the sickness funds instigated proceedings to claim back money from nine regions which have overspent their budget by up to 11.3%. The physicians' associations resisted payment, arguing that they could not effectively manage overall or physician-specific drug expenditure, due to untimely and unspecified data. Despite the rises in pharmaceutical expenditure in 1996 – when nationwide spending exceeded the cap, leading to agreements in several states to even out the overspend in coming years – the spending cap proved to be an effective

method of short-term reduction and long-term modification of pharmaceutical expenditure. A review of published studies showed that the initial reduction was mainly attributable to physicians who had on average prescribed drugs of a higher quality, while the others reduced their prescriptions mainly on the basis of price.

With the Second SHI Restructuring Act the regional spending caps for pharmaceuticals were abolished from 1998 and were replaced by practice-specific soft targets to exclude both certain types of drugs (list under development) and drugs for patients with certain indications (i.e. opiate addicts, patients post transplantation, etc.). It was more than doubtful that there would have been any effective mechanisms of sanctioning over-prescribing. In addition, the legal limit for over-prescribing and paying-back had been set at 125% of the target (§ 106(5a) SGB V). While retaining these targets for individual practices, the Act to Strengthen Solidarity in Statutory Health Insurance reintroduced spending caps for pharmaceuticals at the regional level. Physicians' associations are now liable for any over-spending up to 105% of the cap. As a kind of compensation, debts resulting from the former spending cap (see above) were waived.

Health care technology assessment (HTA)

Regulation and control of health technologies in Germany was not a major issue in the past. Although German regulations, especially licensing for pharmaceuticals and medical devices, meet international standards, other types of technologies have not received the attention they deserved. Since the peculiarities of regulation of health technologies in Germany depend on the structure and organization of the health care system, when analysing the status-quo the sector of health care (ambulatory, hospital, rehabilitative care, non-physician care), type of technology (drugs, devices, procedures (medical, surgical, non-physician)) and the level of regulation (licensing, coverage decisions within the statutory health insurance schemes and diffusion and use of technology) have to be taken into account. While certain aspects are dealt with in other sections as well, a summary of the main issues follows.

Licensing of pharmaceuticals

Drug licensing for new drugs became mandatory only in 1976. The licensing of pharmaceuticals is currently the most regulated area of medical technologies in Germany. The admission of pharmaceuticals for humans into the market falls under the responsibility of the Paul-Ehrlich-Institute (blood, blood products, sera and vaccines) and the Federal Institute for Pharmaceuticals and Medical

Devices (BfArM) (all other drugs). This is done through mandated processes specified by the Pharmaceutical Act which took effect in 1978 and a set of guidelines issued by the Ministry of Health. The criteria for licensing pharmaceuticals are: scientifically proven efficacy and safety. This includes the results of phase I to phase III (controlled clinical) studies. However, only a marginal beneficial effect of the new drug needs to be demonstrated with a small sample in order for it to be sufficient to fulfil the efficacy criteria. Cost-effectiveness is of no importance. This has led to the increasing admission of active substances with merely minor modifications rather than the introduction of real product innovations. Licensing is, in any case, limited to five years, after which one needs to apply for an extension.

Besides regular admission, an accelerated admission process is also possible. This is intended for drugs which, on the basis of their potential therapeutic value, show considerable public interest, but still no sufficient data with which to judge therapeutic efficacy. In this case, it can be decreed that within a certain period data should be systematically collected on the drug's efficacy in order to reappraise its therapeutic value. This procedure is relevant for orphan drugs (i.e. those used to treat very rare diseases) and in instances when companies try to expedite the licensing procedure. However, this procedure is very rarely adopted.

Although currently not widespread, an increasingly used strategy for approval is the mutual recognition procedure, in accordance with the EC-directive 75/319, which came into effect in Germany on 1 January 1995. Based on this directive, a manufacturer whose drug has been admitted in another country may also apply for the drug's admission in Germany. Market admission may only be refused by the BfArM if a public danger exists. In this case, a procedure of arbitration enforced by the European Agency for the Evaluation of Medicinal Products (EMEA) would be initiated, and eventually adjudicated through a determination by the European commission.

Homeopathic and anthroposophic drugs are exempted from the licensing procedure according to the AMG since they are subject to registration only. Requirements for registration refer mainly to the quality of the basic products and the manufacturing process as well as to the durability of the final products. Registered homeopathic drugs do not need to prove their therapeutic efficacy unless they are to be licensed for a specific purpose. In this case, a manufacturer has to apply through the regular admission procedure. The characteristics of the admission of homeopathic and anthroposophic drugs and fixed combinations of phytotherapeutics are regulated explicitly in guidelines issued by the Ministry of Health. An exception to this are prescription drugs that are produced and sold in pharmacies in quantities of up to 100 units per day. A similar exception

exists for homeopathic drugs produced in quantities of less than 1000 units per year. A third exception are drugs currently being tested in phase III clinical trials.

Since 1978, when the AMG came into effect, approximately 16 000 drugs have been licensed and about 1 750 homeopaths registered. A substantial number of pre-AMG drugs are still on the market. These had to apply for licensing within an appointed time or be removed from the market. The deadline was 30 April 1990 and 70 000 drugs were removed by January 1993 accordingly. Since a substantial number of drugs did not have a chance to prove their efficacy, another deadline (31 December 1999) for submitting licensing applications was established. If a manufacturer renounces its application for licensing a certain drug, the drug may be marketed until the end of 2004 without any proof of therapeutic benefit. Currently, only about one third of the drugs on the market are of proven efficacy according to the AMG.

Market admission is not linked to an obligatory comprehensive and systematic post-marketing surveillance system. However, physicians and other professionals are requested to report problems they or their patients have encountered with drugs and medical devices to the BfArM. The BfArM is required to maintain a database of all side effects, contraindications and other problems emerging from the use of drugs. Records are assessed by medical, pharmacological and toxicological experts. A specific course of action on different levels according to a predetermined plan is dependent upon the severity of the problem. In the most extreme cases, the market license may be withdrawn.

Coverage of pharmaceuticals

For most drugs, market admission also means that they may be prescribed on the accounts of and are covered by the statutory health insurance schemes. However, there are a few but important exceptions which are gaining increasing attention:

- Since 1983 drugs for certain conditions (common colds, drugs for the oral cavity with the exception of antifungals, laxatives and drugs for motion sickness) are legally excluded from the benefits' package for insured people over 18 years old (§ 34(1) SGB V).
- The Social Code Book allows the Minister of Health to exclude "inefficient" drugs (i.e. they are not effective (for the desired purpose) or combine more than three drugs the effect of which cannot be evaluated with certainty (§§ 2, 12, 34(3) and 70 SGB V). The evaluation of these drugs takes into account the peculiarities of homeopathic, anthroposophic and phytotherapeutic drugs. A negative list according to these principles came into effect on 1 October 1991. It was revised in 1993 and contains about 2200 drugs.

- Additionally, drugs for "trivial" diseases (such as common colds) which can usually be treated by treatments other than drugs may be excluded (§ 34(2) SGB V). A list of this type has not yet been worked out.

The coverage of drugs is also regulated in the pharmaceutical guidelines of the Federal Committee of Physicians and Sickness Funds and forms part of the contract between the two sides at the federal level. These guidelines, which are legally binding, attempt to steer the appropriate use of different groups of pharmaceuticals. They limit the prescription of certain drugs to certain indications (e.g. anabolics to cancer patients), specify that they may only be used after non-pharmaceutical treatments were unsuccessful (e.g. so-called chondroprotective drugs) or in a few cases, disallow any prescription by the sickness funds (e.g. drugs to quit smoking). However, the overall effect of these guidelines is doubtful, especially since very few drugs with mainstream indications were affected.

In mid-1998, the Federal Committee amended its pharmaceutical guidelines to exclude drugs for the treatment of erectile dysfunction and drugs to improve sexual potency such as Viagra. The committee argues that individually very different behaviour does not allow the determination of a standard of disease upon which to base economic considerations. In its opinion, the responsibility of the sickness funds ends where personal lifestyle is the primary motive for using a drug. This case demonstrates that the criteria for exclusions are less explicit than for medical technologies, so that decisions depend de facto on the common will of both sides. Accordingly, the Federal Social Court disapproved of the general exclusion of drugs for the treatment of erectile dysfunction and instead demanded measures against their misuse.

In early 1999, the Federal Committee passed pharmaceutical guidelines that were completely new. These state explicitly that the licensing of pharmaceuticals is a necessary but not sufficient precondition for coverage by the social health insurance system. Apart from the above-mentioned legal exclusions, the guidelines list five reasons for not including drugs in the benefits' catalogue:

1. they are not necessary for treating diseases – this is the Viagra argument
2. other pharmaceuticals are more effective and/or cost-effective
3. non-pharmaceutical strategies are more effective and/or cost-effective
4. combination therapy if monotherapy is more effective and/or cost-effective
5. if they have not been proven to be effective.

The number of drug groups for which prescriptions are limited or prohibited has been greatly enlarged. Examples are anti-rheumatic drugs for external use (for reasons 2 and 3 above) and lipid-lowering drugs (for reasons 3 and 4).

Additionally, an annex lists all groups with legal and other prescription exclusions and limitations; in case of limitations, reasons for exceptions and the necessary documentation are provided.

Originally, the 1993 Health Care Structure Act had called for a "positive list" of reimbursable pharmaceuticals to be developed by the Federal Ministry of Health. This regulation, however, was dropped only weeks before it was supposed to be put into effect on 1 January 1996. The Federal Minister of Health decided not to pursue the idea of a positive list and justified this by citing the successful cost-containment measures in the pharmaceuticals sector, the otherwise rising costs for chronic patients due to OTC purchases and, most importantly, the threat to smaller pharmaceutical companies. While this decision was welcomed by the pharmaceutical industry, it was faced with criticism by both the sickness funds and the Social Democratic Party. However, the Reform Act of SHI 2000 has again introduced the mandate for a positive list which has to be passed by the Federal Council upon proposal of the Federal Ministry of Health. The Ministry will be supported by an expert commission when preparing the proposal.

Licensing of medical devices

Since 1 January 1995, the Medical Devices Act (MPG) which translates the corresponding European Union (EU) directives into German law has been in effect. According to the EU directives 90-385 (active devices that can be implanted such as pacemakers) and 93-42 (medical products other than those active devices that can be implanted and in vitro diagnostic substances), devices marketed in Germany must conform to the essential requirements contained in the Medical Devices Act. In contrast to drugs, medical products and devices are defined as instruments, appliances, materials and other products, which do not produce their main effect in a pharmacological, immunological or metabolic way. The licensing of medical devices is the responsibility of authorized institutions (notified bodies) which require accreditation through the Federal Ministry of Health. The question of safety and of technical suitability for the planned operational purpose of a device is the primary criterion for the market admission of medical products and devices. As opposed to drugs, medical devices do not need to prove that they are beneficial in terms of potential health gain in order to be marketed. Devices marketed in Germany are reviewed for safety, and for whether they technically perform as the manufacturer claims.

The EU Medical Devices Directive 93-42, which covers most devices, established a four-part classification system for medical devices. The rules for classification take into account the risk associated with the device, the device's degree of invasiveness, and the length of time the device is in contact with the

body. The classification of a medical device governs the type of assessment procedure the manufacturer must undertake to demonstrate that the device conforms to the relevant directive's requirements.

Coverage decisions about medical devices and mechanisms to steer their diffusion and usage differ depending on their use (i.e., whether they are used directly by patients or whether they are used as part of medical or surgical procedures in the ambulatory medical or the hospital sector).

Coverage of medical aids (devices directly used by patients)

Medical aids comprise devices such as prostheses, glasses, hearing aids, wheelchairs or respirators. Similar to non-physician care, insured people are entitled to medical aids, unless they are explicitly excluded from the benefit catalogue through a negative list issued by the relevant ministry (§§ 33 and 34 SGB V). The Federal Ministry of Labour and Social Affairs (responsible for SHI at that time) has explicitly excluded aids with small or disputed therapeutic benefit or low selling price (e.g., wrist belts, ear flaps, etc.). The regulations for the coverage of non-excluded medical aids are complex and therefore are only briefly described.

The federal associations of the sickness funds publish a medical aids catalogue, which contains among others:

- a legal account of who may be entitled to medical aids debited to statutory health insurance
- an alphabetical catalogue of all medical aids
- the medical aids listing which can be provided on the accounts of statutory health insurance.

The medical aids listing represents a positive list of services which can be provided through the debiting of the statutory health insurance scheme. The decision to include medical aids in this list lies exclusively with the federal sickness funds' associations.

Steering of diffusion and usage: The Federal Committee of Physicians and Sickness Funds guidelines limit the prescription of medical aids to the following cases: assuring the success of medical treatment, prevention of threatened health damage, preventing the health endangerment of a child, and avoidance or reduction of the risk of long-term care.

Ambulatory medical treatment

The regulation of medical technologies in the ambulatory care sector is combined with its reimbursement, since coverage procedures are linked to the

value assigned to them. The responsible coverage body is the Federal Committee of Physicians and Sickness Funds. This committee has several subcommittees, one of which is responsible for approving reimbursable medical technologies. Until 1997, the subcommittee on New Diagnostic and Therapeutic Procedures had to decide on the effectiveness of technologies which were proposed by either a (regional) physicians' association, the Federal Association of SHI Physicians or a federal sickness funds' association (§ 135 SGB V). Since 1 July 1997, the committee has also been responsible for the evaluation and re-evaluation of existing technologies; its name has been changed accordingly to the Working Committee on Medical Treatment.

Until 1997, the subcommittee worked according to a set of criteria, outlined in guidelines by the Federal Committee of Physicians and Sickness Funds. New technologies could only be proposed when they were perceived to be 'necessary' from a physician's point of view and when enough data were available for their evaluation. Approval required that one of the following criteria be fulfilled:

- at least one randomized controlled trial, or
- at least one case-control or cohort study, or
- at least two of the following studies – time series comparison, non-controlled clinical trials, studies that show a change in relevant physiological parameters, expert statements based on scientific evidence.

This system could be influenced by a number of factors, leading to decisions that were not necessarily based on sound scientific evidence, but rather on interest and opinion. After critiques concerning the existing procedure and the extension of the committee's mandate to (re)evaluate existing technologies, new guidelines were passed in October 1997.

The evaluation is now based on the three criteria of benefit, medical necessity and efficiency. In addition, the procedure has been changed. The Working Committee on Medical Treatment will prioritize technologies for evaluation. This result is announced publicly and medical associations and possibly individual experts are invited to submit evidence concerning the three criteria mentioned.

The Working Committee will then examine the quality of the evidence presented by the applicant, the medical association(s) and individual experts as well as the results of its own (literature) searches. Therapeutic procedures will be classified according to five categories:

I randomized controlled trials

IIa other prospective studies

IIb well-designed cohort or case-control studies

IIc temporal or regional comparisons

III other studies and opinions.

Diagnostic procedures are ranked into four:

Ia studies demonstrating a benefit in patient outcome

Ib controlled study under routine conditions which allows the calculation of sensitivity, specificity and predictive value

II other studies allowing at least the calculation of sensitivity and specificity

III other studies and opinions.

For both types of procedures, at least one study with level I evidence is necessary. Somewhat illogically, however, lower evidence is accepted for existing technologies if no level I evidence is available.

In its decision-making, the Federal Committee uses three categories:

1. to be included/retained in the benefit catalogue
2. may not be provided in the statutory health insurance system
3. does not fulfil the criteria completely, i.e. not included in benefit catalogue but may be provided by individual sickness funds if they decide to do so.

Early in 1998, the committee published its first announcement listing two existing technologies for re-evaluation – i.e. bone densitometry and methadone substitution – and six new technologies for evaluation. A second announcement in June 1998 listed an additional seven new technologies for evaluation.

Managing usage: Another committee consisting of physicians and sickness fund representatives – the Valuation Committee – is charged with setting the relative value in the Uniform Value Scale (§ 87 SGB V). This process applies to new procedures as well as to established services. Another important task is a description of the reimbursable technology and its indications for use. However, currently only a part of all procedures listed in the Uniform Value Scale are indication-specific. A revaluation may be initiated when frequency statistics provide evidence for over- (and under-) utilization of services. In this case, the service in question may be devalued in order to rebalance utilization rates by incentive.

In the Valuation Committee, financial interest and intraprofessional distribution conflicts can play a dominant role. The fee distribution system of the physicians' associations may lead to decisions resulting in outcomes unintended by the Federal Committee of Physicians and Sickness Funds.

Clinical practice guidelines and managed care elements are increasingly used to guide medical decision-making. Hundreds of guidelines have been developed over the last two years by scientific medical societies, about 80% of

which are related to therapy, including treatment with drugs. However, most of them are of questionable methodological rigour and no data are available as to the extent of their adoption and use in everyday clinical practice.

Hospital sector

For the hospital sector, an authoritative committee, similar to the Federal Committee of Physicians and Sickness Funds, has been lacking. Until now, the introduction of new procedures and technologies has usually been managed by individual hospitals in the context of budget negotiations. Such considerations have not been a priority in comparison to general financing considerations, as given in the Hospital Financing Act (see the section on *Payment of hospitals*).

However, two recent reform laws have changed the situation.

- After the Second Statutory Health Insurance Restructuring Act had transferred the responsibility for maintaining and further developing the catalogue to joint negotiations between the sickness funds and the hospital associations from 1999, the federal hospital organization on one side and the federal associations of sickness funds (together with the private health insurers' organization) on the other founded a so-called coordinating committee which is assisted by working groups for specific purposes.
- More importantly, the new Committee for Hospital Care (see the section on *Planning, regulation and management*) will be charged with health technology assessments for technologies used in the hospital sector. It is also expected that the treatment guidelines to be developed by the Coordination Committee, as well as the process of defining groups for case-fees under the new payment system (from 2003) will stimulate this work.

Expensive medical devices

Agreements upon the diffusion of expensive medical devices ("big ticket technologies") and their distribution between the ambulatory and hospital sector has been called a never-ending story. This judgement is the result of various attempts of corporate and legislative bodies to improve planning of expensive medical devices in the light of increasing costs and new types of devices such as extra corporeal shock-wave lithotripsy.

Until 1982, when the Hospital Cost-containment Act came into effect, no regulations concerning expensive medical devices existed. With this law, it became mandatory for expensive devices to be subject to hospital planning. Devices that were not part of an agreement could not be considered in the per diem charges and thus could not be re-financed. In contrast, expensive devices

in the ambulatory care sector had only to be notified to the physician associations. This unequal situation remained essentially unchanged until the Health Care Reform Act of 1989.

Between 1989 and 1997, diffusion and regional distribution of expensive medical equipment for supply to the population covered by the mandatory health insurance was controlled intersectorally, through joint committees involving both the hospital and ambulatory sector. The Second SHI Restructuring Act abolished these committees with effect from July 1997. Site planning was carried out by committees formed at the state level. These committees consisted of representatives of the hospitals, physicians' associations, sickness funds and a state representative. This planning committee negotiated aspects of the joint use of devices by third parties, service requirements, population density and structure, as well as the operators' qualifications. Since the Health Care Structure Act came into effect in 1993, the Minister of Health could determine which devices fell under the Committees' auspices (§ 122 SGB V). However, the Minister did not execute this right and the Committees defined what is expensive medical equipment. On 30 June 1997, the following devices fell within this definition in almost all states:

- left heart catheterization units
- computer-tomographs
- magnetic resonance imaging devices
- positron-emission tomographs
- linear accelerators
- tele-cobalt-devices
- high-voltage therapy devices
- lithotripters.

It seems, however, that this arrangement has not proved to be as effective as intended. From 1993 to 1997, the total number of these devices increased from 2118 to 2845. However, in some states, agreements between the committee partners yielded closer cooperation between the hospital and ambulatory care sector. In Lower Saxony for example, in 1997 57% of magnetic resonance imaging devices, 46% of computer-tomographs, 24% of left heart catheterization units and 20% of tele-cobalt-devices, high-voltage therapy devices and lithotripters were operated jointly by hospitals and ambulatory practices.

As a result of the abolition of the joint committees, it is now the task of the self-governing corporate bodies to guarantee the efficient use of expensive equipment via remuneration regulations. This could also lead to an even steeper increase in the number of expensive medical devices, since previous procedures of site planning have been annulled.

Discussion

There are considerable inconsistencies in the different health care sectors with regard to coverage decisions and the steering/managing of diffusion and usage of health technologies in Germany. In general, the ambulatory sector appears to be much more regulated than the hospital sector. Explicit coverage decisions regarding medical and surgical procedures are currently non-existent for the hospital sector. This is due to the fact that coverage of medical devices and expensive medical equipment falls under budget negotiations at hospital level and hospital plans at state level. Services provided by non-physician professionals, such as physiotherapy, are explicitly excluded by the government or are covered through collective contracts. Clearly, this unequal situation is due to the strict separation of the hospital and the ambulatory care sector which constitutes a barrier to regulation approaches and to making HTA an effective instrument in Germany. There is scope for improving this situation.

One initiative, funded by the Federal Ministry of Health, has stimulated HTA activities in Germany from the viewpoint of decision-making at the federal and corporate level. As a result of this initiative, the German Scientific Working Group Technology Assessment for Health Care has been set up. The Reform Act of SHI 2000 charged the German Institute for Medical Documentation and Information (DIMDI) with the task of establishing a database containing relevant HTA results as well as with supporting decision-making processes by the Federal Committee and other actors. As mentioned, the act also introduced a Committee for Hospital Care which will commence its work in 2000. The coordination of its decisions with those of the Federal Committee is one of the tasks of the equally new Coordinating Committee.

Financial resource allocation

Third-party budget setting and resource allocation

Germany does not have one budget for health care. Instead, there are 17 tax-based budgets (one at federal level and 16 at *Länder* level) and currently 453 sickness fund budgets (not counting other social insurance budgets, reimbursement through private health insurance companies etc.).

All tax-based budgets are determined by individual parliaments acting on a proposal from their respective government. On the federal level, health care-related financing is part of the budgets of the ministries of health, defence (in terms of free health care for soldiers), interior (in terms of free health care for police officers and partial reimbursement of private health care bills for permanent public employees), education and research. On the *Länder* level, health-care related financing mainly flows from the budgets of the ministries of health, and also the ministries of science. The health ministries cover, for example, capital investments for hospitals – which vary greatly from *Land* to *Land* (see below) – as well as public health services. The science ministries are responsible for medical and dental education including the university hospitals.

Sickness funds do not have fixed pre-determined budgets, but have to cover all the expenses of their insured members. This means that the contribution rate has to be adjusted if income does not match expenditure. As mentioned in the section on *Historical background* earlier, the main political goal in health policy has been to restrict the sickness funds' expenditure to a level where it matches income (or – more precisely – to limit expenditure growth to the rate of growth of contributory income in order to keep contribution rates stable). To that end, sectoral budgets or spending caps were introduced (see the section on *Health care reforms*).

In terms of resource allocation, two issues should be kept in mind:

- All these budgets within the statutory health insurance system are budgets on the providers' side and not on the payers' side. While some budgets, in

effect, also limit the expenditure of individual funds (e.g. capitation payments to the regional physicians' associations for ambulatory care), others do not have (nor intend to have) that effect, since for example expenditure under a hospital budget or a pharmaceutical spending cap is divided between funds according to actual utilization of their particular members. (In addition, if private patients are also taken into account, then the providers' budgets are not budgets in the strict sense.)

- All these budgets are based on historical expenditure patterns and not on a needs-based formula (such as the resource allocation working party (RAWP) approach in the United Kingdom). As mentioned above, legislation has aimed mainly to contain increases in expenditure. To that end: a) budgets/ spending caps were introduced which were based on actual expenditure in a previous year (often the year before the legislative act, so as to avoid any changes after proposing or passing the act; for example the pharmaceutical cap for 1993 was based on 1991 expenditure) and/or b) growth rates were legally limited. In both situations, regional differences in expenditure levels remained untouched. The issue has only recently been discussed publicly with reference to caps on pharmaceutical expenditure.

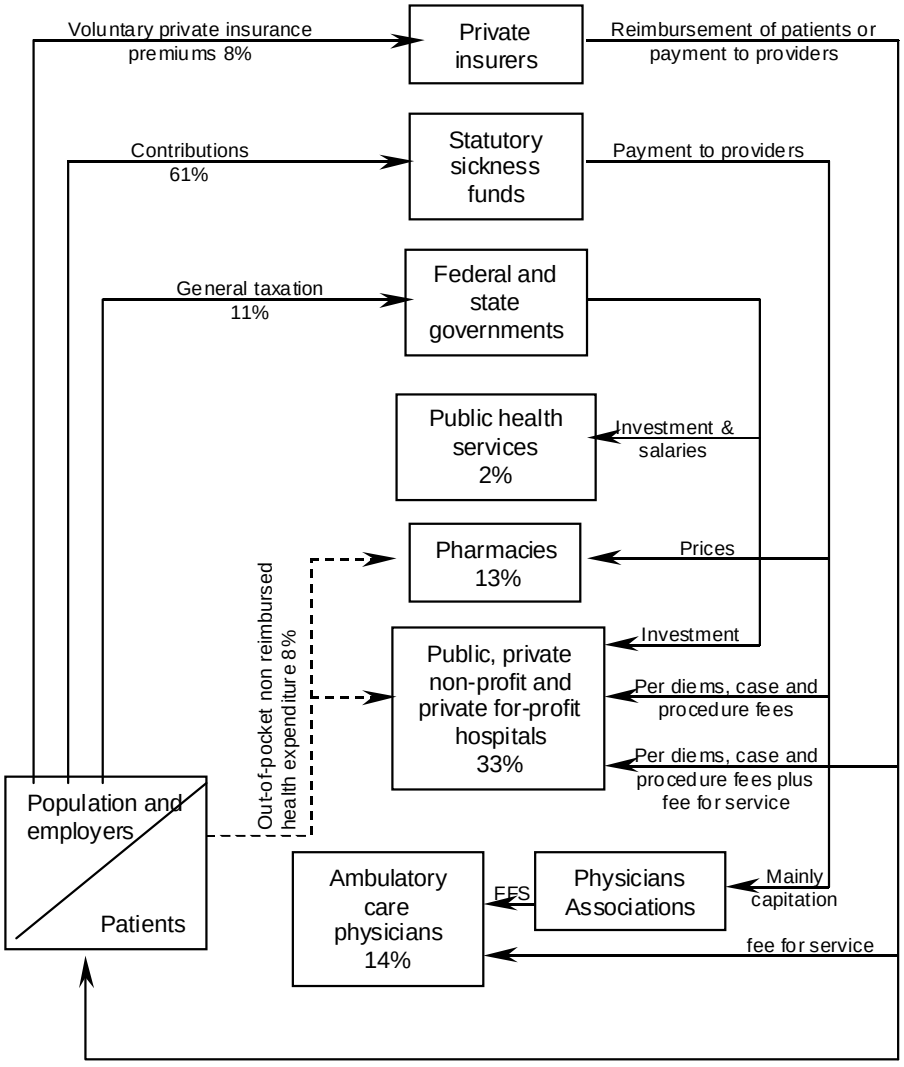
The overall flow of finances in the German system is outlined in Fig. 12. Since the financing side has been described in the section on *Health care finance and expenditure*, and payment for pharmaceuticals has been dealt with in the section on *Pharmaceuticals*, the following sections focus on the payment of hospitals and physicians.

Payment of hospitals

Since 1993 and more dramatically since 1996, the German hospital sector has experienced considerable changes due to fixed budgets, the possibility of deficits and profits, ambulatory surgery, and the introduction of prospective payments. Previously, since the 1972 Hospital Financing Act which had introduced dual financing and the full cost cover principle, circumstances had been more favourable for hospitals in Germany.

Dual financing means financing of investment costs through the *Länder* and of running costs through the sickness funds (plus private patients). The running costs include all personnel costs, as hospital physicians are salaried employees of the hospitals. The heads of medical departments usually have the right to charge private patients for medical services on top of the hospital charges.

Fig. 12. Financing flow chart of Germany[5]



Data source: Federal Statistical Office, 1998.
All data for 1994.

[5] The figures on the left side are percentages of financial sources (missing: other social insurance 4%, employers 4%, private organizations 2%). The figures in the boxes are percentages of health care spending (missing: dental practices 8%, practices of non-physicians 3%, health sector trade handicraft 5%, institutions for ambulatory nursing care 2%, preventive and rehabilitative care institutions 4%, nursing homes 7%, transportation providers 1% administration 6%, other 3%).

In order to be eligible for *investment costs*, hospitals have to be listed in the hospital plans which are set by the *Länder*. These plans often also list the specialties which are necessary, and even the number of beds per specialty, for every hospital. Since 1989, a hospital has been legally defined as an institution to treat sick patients or to deliver obstetric services which is continuously staffed by physicians and "in which patients can be lodged and fed" (§107 SGB V); in the following these hospitals will be referred to as general and psychiatric hospitals. The development of hospital bed capacities, and the money invested in hospitals, varies widely between *Länder* (see Table 16). Between 1991 and 1998, Berlin reduced its bed numbers from the highest number per capita by more than a third. Brandenburg and Saxony have reduced their capacities from well above to well below average. On the other hand, due to only modest reductions, Bavaria and Rhineland-Palatinate have moved from well below average to average numbers per capita.

Table 16. Hospital bed numbers in the German *Länder*, 1991–1998 and capital investment 1997

Land	General and psychiatric per 1000 population (relative to German average=100)		Change	Capital beds investment: DM/ bed
	1991	1998	1991–98	1997
Baden-Württemberg	6.97 (84)	6.28 (90)	-9.9%	11 196
Bavaria	7.63 (92)	6.97 (100)	-8.7%	16 004
Berlin	11.57 (139)	7.36 (106)	-36.4%	17 363
Brandenburg	8.95 (108)	6.42 (92)	-28.3%	18 164
Bremen	10.66 (128)	9.63 (138)	-9.7%	10 449
Hamburg	9.16 (110)	8.07 (116)	-11.9%	16 126
Hesse	7.53 (91)	6.77 (97)	-10.1%	11 425
Mecklenburg-Western Pomerania	8.39 (101)	6.49 (93)	-22.6%	28 696
Lower Saxony	7.51 (90)	6.27 (90)	-16.5%	9 336
North Rhine-Westphalia	9.19 (110)	7.71 (111)	-16.1%	7 648
Rhineland-Palatinate	7.65 (92)	7.01 (101)	-8.4%	10 652
Saarland	8.80 (106)	7.52 (108)	-14.5%	10 958
Saxony	9.06 (109)	6.62 (95)	-26.9%	20 669
Saxony-Anhalt	8.98 (108)	6.98 (100)	-22.3%	25 755
Schleswig-Holstein	6.90 (83)	5.95 (85)	-13.8%	10 414
Thuringia	8.79 (106)	7.45 (107)	-15.2%	22 871
GERMANY	**8.32 (100)**	**6.97 (100)**	**-16.2%**	**13 028**

Source: Calculations based on data from Federal Statistical Office; last column from Bruckenberger 1998.

In international data, preventive and rehabilitative institutions are often included in hospital data. These institutions, however, are not listed in hospital

plans and receive no reimbursement of investment costs by the state governments, but instead have to rely solely on reimbursement through negotiated contracts.

As regards *running costs*, the full cost cover principle meant that whatever the hospitals spent had to be reimbursed. The actual remuneration was done through per diem charges which were retrospectively calculated by the states for each hospital. However within each hospital, all per diems were equal.

The original Hospital Financing Act remained the main legal basis for the German hospital sector until 1992, since the federal cost-containment acts dealt with issues outside the hospital sector. This was partly due to the power of the federal states which had to agree to all decisions affecting hospitals. Thus only minor legislation on hospital services was included in the 1981 Health Insurance Cost-containment Amendment Act, restricting postnatal hospital stay to six days except in the case of medical need for a longer stay, and requiring hospitals to agree purchases of "large (high cost) medical technology" with ambulatory physicians (see the section on *Health care technology assessment*). The 1984 Hospital Restructuring Act introduced prospectively negotiated per diem charges which were based on expected costs. Coverage of excess costs was de jure limited. De facto, however, hospitals received full compensation through adjustments of charges. In addition, the act opened up the possibility of including capital costs in per diem charges if investments would lower running costs in the medium or long term. From that time onwards, dual financing also meant dual planning, with the number of hospitals and hospital beds being planned at state level, while staff numbers and hospital day numbers were subject to negotiations between hospitals and sickness funds within the framework of negotiating per diem charges.

Since the Health Care Reform Act, hospital and sickness fund associations have been obliged to negotiate contracts concerning quality assurance (which took several years to be put into practice). In addition, the sickness funds gained the right to contract with additional hospitals and to de-contract hospitals. The latter process is, however, complicated – and therefore happens rarely – since firstly the funds have to agree to do it jointly and, secondly, it needs the approval of the respective *Land* government.

The Health Care Structure Act was the first major law in the cost-containment area to affect the hospital sector. This reform was possible since the Social Democratic Party, which was the opposition in the lower chamber or Federal Assembly but the ruling party in most states at that time, had agreed to it. The hospital sector was affected by several new regulations, as follows.

Increases in sickness fund expenditure for inpatient treatment were tied to the increase in contributory incomes for 1993 to 1995. To facilitate this, the

full-cost cover principle was abolished, i.e. the hospitals were allowed to make both profits and deficits, and *fixed budgets* were calculated for each hospital (for budgets see below). The growth rates of the budgets were to be based on estimates published in advance by the Federal Ministry of Health (and retrospectively adjusted for the actual growth rate). In addition, however, the law allowed several exceptions for higher growth rates which led to expenditure increases well above intended growth rates.

Secondly, *nursing time standards* were introduced (see the section on *Human resources and training*). Since it was calculated that new nurses would have to be employed as a result of this innovation, a budget exception was allowed in this case.

Hospitals were allowed to offer *ambulatory surgery* and ambulatory care of inpatients for a few days before and after their inpatient treatment (see the section on *Health care delivery system*). The incentives for these services were initially weak, however, since remuneration was included in the fixed budgets.

Prospective case-fees and procedure-fees were introduced from 1996 for a limited segment of inpatient care. Politically, fixed budgets in the hospital sector were presented as an interim measure until this new prospective payment system took effect.

Case-fees are supposed to cover all costs during a hospital stay while *procedure-fees* are reimbursed on top of the (slightly reduced) per diem charges. Case-fees are based on a combination of a certain diagnosis (4-digit ICD-9, partly separated into elective and emergency) and a specific intervention (i.e. open appendectomy attracts a case-fee different from that for laparoscopic appendectomy). Procedure-fees are only based on an intervention and more than one procedure-fee may be remunerated per case. The number of points for both the (currently more than 70) case-fees and the (currently almost 150) procedure-fees were originally set through an ordinance by the Federal Ministry of Health, while the monetary conversion factor was negotiated at *Land* level. However, when the number of points was fixed by the ministry, it assumed a point value of DM 1 (approximately US $0.55). The number of points were calculated by taking the real costs of a relatively small sample of patients with the diagnoses/interventions in question and assuming a 15% reduction in average length of stay, which was still calculated to be two to five times higher than those for comparable DRGs in the USA. In spite of this longer (calculated) length of stay, case fees are only about 40–50% as high as comparable DRG reimbursements in the USA (see Table 17). In addition, German case-fee definitions include a specified maximum length of stay which will be covered; if the actual length of stay exceeds this maximum (which happens in around 3% of all cases), extra days are reimbursed separately.

Table 17. Prospective forms of payment – German case-fees versus US DRGs

	Germany: case-fee no.	USA: comparable DRG no.	Germany: calculated remuner-ation in US $	USA: actual remuner-ation (1992) in US $	Germany: calculated length of stay	USA: actual length of stay
Appendectomy, open	12.05		2 064		7.2	
Appendectomy, laparoscopic	12.06		2 295		6.0	
Appendectomy (unspecified)		167		5 663		2.7
Cholecystectomy, elective & open	12.03		3 442		11.4	
Cholecystectomy, elective & laparoscopic	12.04		2 994		7.3	
Cholecystectomy (unspecified)		198		7 587		2.6
Inguinal hernia repair, unilateral	12.07	162	2 262	4 524	7.9	1.8
Tonsillectomy	7.01	59	1 635	3 097	6.5	1.3
Cataract, photoemulsification	3.02	39	1 904	6 024	3.1	1.9
Varicosis, stripping	10.01	119	2 244	6 936	6.2	3.3
Vaginal delivery	16.01/16.041	373	1 660	2 763	5.2	1.9
Cardiac valve replacement	9.09	105	18 135	56 414	21.5	13.1

Source: Busse & Schwartz 1997, based on Bundespflegesatzverordnung 1996 and HCUP-3 Nationwide Inpatient Sample for 1992 Hospital Inpatient Stays.

Notes: USA data are for cases without secondary diagnoses; German remuneration based on US $1 = DM 1.56 (in 1992).

The proportion of cases reimbursed through prospective case fees in Germany is less than a quarter, with wide variations both between hospitals and specialties. According to Asmuth et al. (1999), 12% of hospitals receive no prospective payments while in the remaining hospitals they account for 25% of both cases and reimbursement volume (for case-fees alone: 18% of cases with 15% of bed-days). While no case-fees exist for medical, paediatric or psychiatric patients, more than 50% of cases in gynaecology and obstetrics and about two thirds of ophthalmologic cases are reimbursed in this way. Both the number of different case-fees and procedure-fees offered and the volume provided are subject to budget negotiations at hospital level. On average, the service spectrum of a hospital includes 32 different case-fees and 42 procedure-fees (Asmuth et al. 1999).

The Second Statutory Health Insurance Restructuring Act transferred the responsibility for maintaining and further extending the benefits catalogue to joint negotiations between the sickness funds and the hospital associations from 1999. Accordingly, early in 1998 the federal hospital organization founded a so-called coordinating committee to work with the federal associations of sickness funds and the private health insurers' organization.

All other cases are currently reimbursed by a two-tier system of per diem charges: a flat hospital-wide rate covering non-medical costs and a department-specific charge covering medical costs including nursing, pharmaceuticals, procedures, etc.

Case-fees, procedure-fees and per diem charges are all part of the budget for each particular hospital. These German-style budgets are not budgets in the sense that the hospital will get an amount of money independent of actual activity. Instead, the budgets are targets established during the negotiations between the sickness funds and the hospital. The target budget establishes service numbers (for cases to be reimbursed by case and procedure fees as well as for cases reimbursed by per diems) as well as the per diems.

If the hospital reaches exactly 100% of its target activity, then no financial adjustment has to be made since the sum of all case and procedure fees plus the per diems exactly equals the target budget. If actual activity is higher than the target, i.e. if the hospital has been reimbursed above the target budget, then it has to pay back a certain part of the extra income – 50% of case fees for transplantations, 75% of other case- and procedure-fees and 85–90% of per diems. In other words, activity above the target is only reimbursed at 50%, 25% and 10–15% respectively. If actual activity is lower than the target, i.e. if the hospital's total reimbursement has not reached the target budget, then it receives 40% of the difference (since 1 January 2000; it was 50% in 1999). This sum is divided according to utilization between the funds, i.e. actual case-fees, procedure-fees and per diems are then higher than originally negotiated.

Due to above average increases in hospital expenditure, this area has been the concern of health policy for a long time. While expenditure per bed and day has continued to rise in the last few years, expenditure per case has actually declined since 1996, meaning that efficiency has risen (see Table 18). The development of the ratios in Table 18 is another indicator that the former GDR health care system has been rapidly assimilated.

The Reform Act of SHI 2000 mandates the introduction of a new payment system for hospitals based on case-fees for all patients (except psychiatry). It has to be developed until the end of 2001 and will be introduced in 2003.

Payment of physicians in ambulatory care

The payment of physicians is not straightforward, but is subject to a process involving two major steps. Firstly, the sickness funds make total payments to the physicians' associations for the remuneration of all SHI-affiliated doctors. This releases them from the duty of paying the doctors directly (§83 SGB V).

Table 18. Expenditure data for general and psychiatric hospitals in western and eastern parts of the country, 1991–1998

	Expenditure/bed			Expenditure/day			Expenditure/case		
	west (DM)	east (DM)	Ratio	west (DM)	east (DM)	Ratio	west (DM)	east (DM)	Ratio
1991	121 866	60 944	0.50	388	223	0.60	5 571	3 585	0.64
1992	133 451	85 218	0.64	427	306	0.72	5 931	4 322	0.73
	+9.5%	+39.8%		+10.0%	+37.3%		+6.5%	+20.5%	
1993	141 129	103 087	0.73	461	365	0.79	6 102	4 750	0.78
	+5.8%	+21.0%		+7.8%	+19.2%		+2.9%	+9.9%	
1994	147 620	120 621	0.82	489	418	0.85	6 235	5 112	0.82
	+4.6%	+17.0%		+6.1%	+14.6%		+2.2%	+7 6%	
1995	157 580	133 483	0.85	526	457	0.87	6 418	5 337	0.83
	+6.7%	+10.7%		+7.6%	+9.2%		+2.9%	+4.4%	
1996	163 054	140 494	0.86	555	482	0.87	6 375	5 394	0.85
	+3.5%	+5.3%		+5.4%	+5.6%		–0.7%	+1.1%	
1997	167 465	147 028	0.88	568	500	0.88	6 293	5 389	0.86
	+2.7%	+4.7%		+2.5%	+3.8%		–1.3%	–0.1%	
1998	172 855	154 423	0.89	579	514	0.89	6 233	5 372	0.86
	+3.2%	+5.0%		+1.8%	+2.7%		–1.0%	–0.3%	

Source: Calculation based on Federal Statistical Office 1999.

Total payment is usually negotiated as a capitation per member or per insured person. The capitation – which varies between substitute and other funds within a *Land* and between *Länder* – covers all services by all SHI-affiliated physicians of all specialties.

Secondly, the physicians' associations have to distribute these total payments among their members according to a Uniform Value Scale and additional regulations. Prior to payment, the physicians' associations have to check, record and sum up the data that comprise the basis of these calculations.

All approved medical procedures are listed in the Uniform Value Scale (EBM). While the coverage decision is made by the Federal Committee of Physicians and Sickness Funds (see the section on *Health care technology assessment*), a separate joint committee at the federal level, the Valuation Committee, is responsible for the Uniform Value Scale. This scale lists all services which can be provided by physicians for remuneration within the statutory health insurance system. Besides 147 basic services (consultations, visits, screening etc.), the services are ordered by specialty. The chapter on surgery and orthopaedic surgery lists 355 services, the chapter on ear, nose and throat 97, the chapter on internal medicine 87, etc. Each service is allocated a point value (hence the name "value scale") and lists certain preconditions for claiming reimbursement, e.g. particular indications for use or exclusions of other services during the same visit (see Table 19).

Table 19. Examples of services and the associated points attributed in the Uniform Value Scale (based on the 1996 version)

Service	Number of points
Basic fee per patient per 3 months	60–575 depending on specialty of physician and status of patient (working/retired)
Surcharge for regular care (per 3 months) by Nephrologists for patients needing dialysis, Oncologists for patients with cancer or Rheumatologists for patients with rheumatoid arthritis	900
Consultation fee (practice)	50
Diagnosis and/or therapy of psychiatric disorder through physician-patient conversation, duration at least 15 min.	450
Consultation fee (home visit)	400 (non urgent)/600 (urgent)
Antenatal care per 3 months	1850
Cancer screening	260 (men)/310 (women)
Health checkup	780
ECG	250
Osteodensitometry	450

At the end of each quarter, every office-based physician invoices his/her physicians' association for the total number of service points delivered. While physicians receive monthly payments based on previous figures, their actual reimbursement will depend on a number of factors:

- Since 1997, the number of reimbursable points per patient is limited – with the limit varying between specialties and between *Länder*.
- The total budget negotiated with the sickness funds is divided by the total number of delivered and reimbursable points for all services within a regional physicians' association, i.e. the monetary value of each point cannot be predicted as it depends on the total number of points. The monetary value is then used to calculate the physicians' quarterly remuneration.
- The actual reimbursement may be further modified through the Remuneration Distribution Scale which is different for every physicians' association. Through this measure, minimum and/or maximum point values for the different specialities and/or different service categories are regulated to adjust for large variations between specialties.

The reimbursement is further subject to control mechanisms to prevent over-utilization or false claims. Physicians may be subject to utilization reviews at random or if their levels of service provision or hospital referrals per capita are higher than those of colleagues in the same specialty and under comparable

circumstances. To escape financial penalties, the physician has to justify the higher rates of utilization and referral which may be due to a higher number of severely ill patients. Utilization review committees and utilization review arbitration committees with an equal number of physicians and sickness fund representatives are responsible for these controls.

The physicians' associations were successful in their efforts to include a regulation in the Second SHI Restructuring Act to end the use of fixed budgets and to return to real fee-for-service. On the one hand, this resulted from an increase in allegations by physicians that some of their colleagues had submitted false claims and, on the other hand, that the size of the predetermined budgets was too small to cover all necessary services. Before this legal stipulation could be turned into reality, the new government reintroduced fixed budgets for 1999 through the Act to Strengthen Solidarity in Statutory Health Insurance. An analysis of the development of physician reimbursement between 1988 and 1995 shows that – due to both higher numbers of physicians and higher levels of service provision per physician – reimbursement between 1992 and 1995 remained almost constant per physician and actually decreased per service delivered (see Table 20). The above-mentioned limit of points per patient was a partial solution to these problems.

Table 20. Changes in the number of physicians, services provided, and remuneration in the ambulatory care sector, western part of Germany only, 1988–1995

	1988–1992	1992–1995	1988–1995
SHI-affiliated physicians in private practice	+ 12%	+ 15%	+ 29%
Services (incl. new services)	+ 32%	+ 26%	+ 67%
Services (incl. new services)/ physician	+ 18%	+ 10%	+ 30%
Total remuneration (in current prices)	+ 34%	+ 13%	+ 51%
Remuneration/ physician (in current prices)	+ 19%	- 1%	+ 18%
Remuneration/ service (in current prices)	+ 1%	- 10%	- 9%

Source: Busse & Howorth 1999.

However, in spite of the moderate growth rates in remuneration per physician, the income of office-based physicians has remained rather high, which is partly due to the high increases in reimbursement from private patients (see the section on *Private health insurance*). The average income varies between a little more than DM 150 000 for general practitioners and DM 250 000 for ENT physicians (see Table 21), i.e. between three and five times as much as blue-collar workers and between two and three times as much as white-collar workers.

Table 21. Remuneration/income of SHI-affiliated physicians in private practice in 1996, western parts of the country only – all figures in DM

	SHI remuneration	Total remuneration (incl. private patients, etc.)	Costs for personnel and equipment	Surplus = income before tax
Dermatologists	362 200	500 600	303 800	196 800
ENT physicians	422 200	576 900	326 100	250 800
Gynaecologists	378 800	488 500	284 900	203 500
Internists (general and subspecialists)	430 500	527 100	320 500	206 600
Neurologists	333 800	398 800	220 400	178 400
Ophthalmologists	372 600	523 700	300 700	223 100
Orthopaedists	496 500	686 500	457 400	229 100
Paediatricians	368 300	405 700	231 300	174 300
Radiologists	813 100	1 103 200	870 600	232 600
Surgeons	391 000	560 200	387 600	172 600
Urologists	407 000	543 900	343 500	200 300
All specialists (incl. other)	415 100	531 100	330 500	200 600
General practitioners	320 700	369 900	214 100	155 800
Total	**378 300**	**472 500**	**287 600**	**184 900**

Source: Federal Association of SHI Physicians 1998.

Health care reforms

The major objective: cost-containment

Since 1977, the sickness funds and providers of health care have been required to pursue a goal of cost-containment in health care through a policy of maintaining contribution stability. This requirement is defined as holding increases in contributions level with the rate of increase in contributory income. Ensuring compliance with the intentions of this legislation is one of the main tasks of the Concerted Action in Health Care.

The era of cost-containment in the German statutory health insurance sector started in 1977 with the introduction of the Health Insurance Cost-Containment Act. It ended a period of rapid growth in health care expenditure, especially in the hospital sector. This growth was intentional on the part of politicians in order to overcome infrastructural deficits and shortcomings, caused by the destruction during the Second World War and an inadequate method of financing hospital investment.

The basic principle behind German-style cost-containment was an income-oriented expenditure policy to guarantee stable contribution rates. This was an important objective in a time of economic restructuring and growing international competition, since the contributions which cover all ambulatory care, pharmaceuticals and all hospital care (with the exclusion of hospital investment and some dental treatment) are jointly paid by employers and employees. Rises in contribution rates therefore became a question of international competitiveness.

A series of cost-containment acts employing various tools were used, including:

- budgets for sectors or individual providers
- reference-price setting for pharmaceuticals
- restrictions on high cost technology equipment and number of ambulatory care physicians per geographic planning region

- increased co-payments (both in terms of level and number of services)
- the exclusion of young people from certain dental benefits during 1997 and 1998.

These acts led to a moderation of health care expenditure growth and stabilized sickness funds' expenditures as a proportion of GDP per capita (in western Germany between 6% and 7% since 1975). However, this stability has not been acknowledged in discussions about health care expenditure, since the factor being used by both politicians and employers (and to a much lesser extent, the employees/ insured) has been the contribution rate alone. This is increasing slowly but regularly (from 10.4% in 1975 to 13.5% in 1999), with cost-containment measures having only minor and transient effects. These effects were often even more moderated by exceptional increases after the publication of new cost-containment proposals, i.e. in the time-span before coming into effect. The equivalent expenditure curve in late 1988 became known as "Blüm belly" after the then responsible Minister.

A fact often overlooked is that rising health care expenditure (which rises in line with GDP) is not responsible for an increase in contributions, but for the shrinking proportion of GDP used for wages from which all social insurance contributions are financed. Thus, larger profits by employers, a higher level of unemployment and wage increases below productivity have led to this situation. The mid-90s' debate about social expenditure has been dominated by employers and economists who believe that using an even smaller percentage of GDP for wages will be the solution to the current economic crisis with high numbers of unemployed – a questionable belief which is hardly supported by hard data.

The budgets have been of varying forms and efficacy but have been generally more successful in containing costs than any of the other supply or demand-side measures which largely failed. Table 22 provides an overview of the rise, fall and resurrection of budgets and spending caps. A full account of all cost-containment measures and their (relative) success is provided by Busse and Howorth (1999).

Other health (care) objectives – health for all

As mentioned, public health in Germany is mainly a responsibility of the *Länder.* Public health services are organized under their supervision and are outside the scope of the SHI system. However, priority-setting in this area does not seem to be high on the agenda. Only one *Land* (North Rhine-Westphalia) has set targets for public health. It passed a set of ten health targets in 1994, which

Table 22. Cost-containment through budgets and spending caps, 1989–1999

	Ambulatory care	Hospitals	Pharmaceuticals
1989 to 1992	negotiated regional fixed budgets	negotiated target budgets at hospital level	no budget or spending cap
1993	**legally set regional fixed budgets**	**legally set fixed budgets at hospital level**	**legally set national spending cap**
1994			negotiated regional spending caps
1995			
1996	negotiated regional fixed budgets		
1997		negotiated target budgets at hospital level	
1998	(target volumes for individual practice)		negotiated target volumes for individual practices
1999	**negotiated regional fixed budgets with legally set limit**	**negotiated target budgets at hospital level with legally set limit**	**legally set regional spending caps**
2000			negotiated regional spending caps

Note: The larger the size of text, the more strictly regulated the sector.

follow some of the WHO health for all targets but are more detailed in naming specific responsibilities of specific institutions and groups. Other *Länder* have initiated their own targets since 1997/1998.

The German discussion about WHO's health for all by the year 2000 programme was initially rather short. An extensive book on urgent health needs of the population in Germany (FRG) and subsequent objectives and targets did not lead to a change in health policies, possibly since they were published at a time when both the public and the politicians were preoccupied with other (i.e. unification-related) problems. The only visible outcome of the debate was the mandate contained in the 1989 Health Care Reform Act that sickness funds should undertake health promotion activities.

Health objectives and targets gained (renewed) attention early in 1997 when the sickness funds were looking for new ways of competing. Health promotion having been legally abolished at the end of 1996, health care targets was the only remaining area in which the benefits' catalogues differed between funds. A senior manager of the federal association of company-based sickness funds proposed that sickness funds set their own individual health care targets which they should try to pursue through managed care and disease management tools.

Health system analysts supported the use of health care targets by the sickness funds but argued for common targets on which sickness funds' performance could be judged.

Reforms and legislation

The codification of Social Code Book V (SGB V) through the Health Care Reform Act provides a useful starting point for listing the major health care reform acts (see Table 23).

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Table 23. Major health care reform acts since 1988

Reform act	Year passed
Health Care Reform Act 1989 ("First step")	1988
Health Care Structure Act 1993 ("Second step")	1992
Health Insurance Contribution Rate Exoneration Act	1996
1st & 2nd Statutory Health Insurance Restructuring Act ("Third step")	1997
Act to Strengthen Solidarity in Statutory Health Insurance	1998
Reform Act of Statutory Health Insurance 2000	1999

Health Care Reform Act

Besides codifying the social insurance legislation (or rather renewing the 1911 version), the Health Care Reform Act (which came into force on 1 January 1989) changed the following aspects of German health care:

- option to choose sickness fund or to opt out was extended to blue-collar workers above the income limit (i.e. putting them on par with white-collar workers)
- new benefits for long-term care
- introduction of "no claim" bonus models
- introduction of health promotion and increase in preventive services
- differentiation of co-payments for dentures depending upon regular dental examinations
- introduction of reference prices for pharmaceuticals and medical aids
- introduction of negative list for pharmaceuticals based on inefficiency
- introduction of quality assurance measures
- introduction of public committees to regulate expensive medical technologies jointly in the ambulatory and the hospital sectors

- introduction of a right for sickness funds to selectively contract with hospitals
- increased scope for the medical review boards of the sickness funds to include hospitals.

Health Care Structure Act

The Health Care Structure Act (the majority of which came into force on 1 January 1993) was introduced because it was felt that cost-containment was not as successful as it should be. The act pursued two different strategies:

- increased emphasis on clear-cut cost-containment measures such as budgets
- more competition to enhance efficiency, especially between sickness funds and in the hospital sector.

The key elements of the act and their market intentions can be classified as follows:

- freedom to choose a sickness fund for most of the insured population (from 1996)
- introduction of a risk compensation scheme to redistribute contributions among sickness funds (from 1994)
- abolition of the full cost cover principle for hospitals
- partial introduction of a prospective payment system for hospitals (case-fees and procedure-fees for selected treatments from 1996)
- lessening of the strict separation of the ambulatory and hospital sector (e.g. ambulatory surgery in hospitals became possible)
- introduction of "smart card" instead of paper documentation for the insured population
- introduction of a positive list of pharmaceuticals (from 1996; but regulation abolished in 1995)
- introduction of legally fixed budgets or spending caps for the major sectors of health care (originally limited until 1995)
- increased co-payments (for pharmaceuticals introduction of co-payments for products with reference price and differentiation according to price (1993) or pack size (from 1994))
- tighter restrictions on the number of ambulatory care physicians
- introduction of reimbursement claims auditing of ambulatory care physicians at random.

The "Third Step" of health reform

After a draft bill failed, the government proceeded with a small-scale act embedded in a more general act to support economic growth. The health care part was the so-called Health Insurance Contribution Rate Exoneration Act (the majority of which came into force on 1 January 1997) and contained the following measures:

- exclusion of operative dental treatment and dentures from the benefits catalogue for persons born after 1978 (subsequently abolished in 1998)
- reduction of all contribution rates by 0.4 percentage points on 1 January 1997
- reduction of benefits for rehabilitative care
- increased co-payments for pharmaceuticals and rehabilitative care
- reduction of health promotion benefits.

The First and Second SHI Restructuring Acts, which followed and came into force on 1 July 1997 and 1 January 1998 respectively, represented a shift away from strict cost-containment. The new policy restricted employers' contributions on the one hand and expanded market mechanisms on the other hand, as well as increasing the share of private money in the system. In this respect, co-payments were presented as a means to put new money into the system (and no longer as a means to decrease utilization). Other measures included the cancellation or modification of anti-market instruments such as budgets and collective contracts. The measures introduced in these two acts included:

- for operative dental treatment/dentures a privatization of relationship between patient and dentist, i.e. patients have to negotiate services and ultimately prices with the dentists and receive only a flat rate from their sickness fund (from 1998);*
- establishment of a link between an increase in the contribution rate of a sickness fund to an increase in the co-payments for the insured of that fund;*
- the option for sickness funds to introduce "no claim" bonus, deductibles and higher co-payments;*
- the option for all insured to choose "private" treatment with reimbursement by sickness fund at contract rate;*
- cancellation of the budgets in ambulatory care and the spending caps for pharmaceuticals (from 1998);*
- increased possibilities for non-collective contracts between sickness funds and providers;

- transfer of the responsibility for maintaining and further developing the catalogue of prospective payments from Ministry of Health to self-government (sickness funds and hospital organizations) and abolition of public committees for expensive medical devices;
- introduction of an annual amount of DM 20 per insured (not shared with employers) for restoration and repair of hospitals;*
- increased co-payments for inpatient care, pharmaceuticals, medical aids, ambulance transportation and dentures (for those still covered) (partially abolished in 1998);
- establishment of a link between an increase in the contribution rate of a sickness fund to higher co-payments for the insured of that fund;*
- introduction of new hospice care benefit;
- abolition of public committees for expensive medical devices;
- new requirements for HTA in ambulatory care.

An asterisk (*) denotes that the measures were subsequently abolished in 1998 (effective 1 January 1999).

In effect, the 1996/1997 acts broke several traditional rules of the system such as:

- uniform availability of benefits
- contributions shared equally between employers and employees
- financing depending only on income and not on risk or service utilization
- provision of services as benefits-in-kind.

The abolition of these reforms – as well as the reversal in the trend to shift costs onto patients while easing the financial pressure on providers – became the most important part of the health policy programme of the opposition parties. In anticipation of such a policy reversal after the elections, the sickness funds undermined the implementation of the de jure end of forcing providers to limit their income for the sake of cost-containment. They refused to sign contracts but agreed they would re-consider this standpoint after the election, i.e. if the government had remained in power. Regarding the instruments addressing the relationship between the insured and the funds, however, the picture was less clear: some sickness funds exercised the right to introduce “no claims” bonuses while deductibles or higher co-payments were not introduced. Due to public dissatisfaction and the expected variation in co-payment rates, the government itself postponed the enforcement of its proposal, i.e. to link an increase in the contribution rate of a sickness fund to higher co-payments for the members of that fund.

Act to Strengthen Solidarity in SHI

After the change of government in the autumn of 1998, the Act to Strengthen Solidarity in SHI reversed the above-mentioned changes that were not in line with traditional approaches (marked with an asterisk above). In addition, co-payment rates for pharmaceuticals and dentures were lowered and budgets or spending caps reintroduced for the relevant sectors of health care – and in the case of dental care defined more strictly than ever before. Dental care received particular attention in 1998: even though charges were legally limited for an initial period of three years after privatization of dental care, a large number of dentists overcharged from the beginning. This behaviour, together with the restrictions on the benefits catalogue and the offers of private insurers to sell new insurance policies, contributed to a growing level of dissatisfaction amongst the population.

Development perspectives: Reform Act of SHI 2000

After the short-term Act to Strengthen Solidarity in SHI, the current government introduced a new medium- to long-term reform into parliament in June 1999, which was passed in a modified form in December 1999. This Reform Act of SHI 2000 has been effective since January 2000. This reform tries to pick up many of the system's weaknesses (see *Conclusions* in the following section). Its key features are as follows:

- *Removal of ineffective or disputed technologies and pharmaceuticals from the sickness funds benefits catalogue*: A number of measures have been introduced in this area including strengthening health technology assessment through the establishment of a new unit within DIMDI to inform decision-makers (especially those in the corporatist institutions) about the effectiveness and cost-effectiveness of health technologies. The regulations concerning the – more or less inactive – joint committee of dentists and sickness funds will be tightened. This means that the ministry can set this committee deadlines for the evaluation of technologies for inclusion or exclusion from the benefits catalogue. In addition, decision-making under corporatist arrangements is extended to the hospital sector by establishing a Committee for Hospital Care as well as a Coordinating Committee. While these measures are on the whole undisputed (or rather go unnoticed by the public), the third measure, that is the introduction of a positive list of reimbursable drugs, has been opposed by the pharmaceutical industry, especially the smaller companies with a high percentage of disputed products. The Federal Ministry of Health is now authorized to issue a positive list upon approval by the Federal Council. A nine-person commission consisting

of experts in clinical medicine and pharmacology will be charged with its preparation. The measures addressing the benefits' catalogue are accompanied by mandatory treatment guidelines and new quality assurance regulations.

- *Improvements to the cooperation of general practitioners, ambulatory specialists and hospitals*: In this respect, the new act allows contracts between sickness funds and providers which cross the line between the ambulatory and the inpatient sectors. For example, a group of providers could contract with funds to provide both kinds of care. To promote a (voluntary) gatekeeping function amongst general practitioners, the act allows sickness funds to give their members a bonus if they access specialists via their general practitioner.
- *Budgets and reimbursement*:The proposal called for the introduction of global budgets for sickness funds through which they would have been legally obliged to spend only as much money as they receive through contributions. In addition, it called for a change in hospital financing from the dual approach (i.e. where hospital investment costs are financed by the *Länder* and recurrent costs by the sickness funds) to a monistic way (i.e. one in which the sickness funds would have to cover all costs including capital costs) – through a new case-fee system covering all patients. In ambulatory care, the budget for general practitioners will be separated from that for ambulatory specialists.

The financing and reimbursement aspects of this reform received by far the largest public attention. While most actors said that they agreed in principle with the aim of these measures, they were opposed to different elements. The physicians presented the fiercest opposition to the global budget. They openly threatened to ration benefits by putting patients on waiting lists for drugs and procedures (which had been unknown up until now except for transplants). The physicians, however, were divided about the issue of separate budgets for general practitioners. Both physicians and hospitals were afraid that they might be the losers if certain parts of their budgets were used for transsectoral contracts. The employees of physicians' practices and hospitals threatened industrial action because they were afraid that jobs might be cut as a result of the global budget. The sickness funds welcomed global budgets and, in principle, also the monistic financing of hospitals but insisted on having the power to plan hospital capacities as well. The *Länder*, while happy to leave capital financing to the sickness funds, wanted to retain their power to decide upon hospital capacities.

In the end, the act finally passed did not contain a requirement for global budgets but retained sectoral budgets which will be reduced by the expenditure necessary to finance care delivered under transsectoral contracts. The proposal

to change hospital financing to a monistic approach failed in the Federal Council. As far as the reimbursement of the running costs is concerned, from 2003, a new payment system based on uniform case-fees taking complexities and co-morbidities into account will replace the current mixed system of per diems, which vary between hospitals, uniform case fees and procedure fees. Psychiatry will remain the only specialty exempted from the new reimbursement system. As proposed, the ambulatory care budgets will be divided between primary care physicians and specialists; the actual division will be determined by the Valuation Committee.

Conclusions

The German system puts more emphasis on free access, high numbers of providers and technological equipment than on cost effectiveness or cost-containment per se (in spite of all the cost-containment acts which have been passed). The public supports these priorities and, if they are used as criteria for assessing the system the German system of health care appears to work well. Waiting lists and explicit rationing decisions are virtually unknown. These priorities are further supported by the complicated decision-making processes. While the framework for the statutory health insurance system and co-payment levels are set by law at the national level, most decisions on the actual contents of the uniform benefits catalogue and the delivery of curative health services are made through joint negotiations between the associations of the physicians and the sickness funds both at regional and national levels. Cuts would therefore require the (unlikely) support of both the sickness funds and the providers. Only those bodies outside the corporate field such as the Advisory Council have proposed a stricter and more unpopular approach. Currently, however, a shift has begun towards evidence-based medicine, health technology assessment etc. as well as support for cuts in benefits according to such evidence.

The most important topics for current and future reforms are: financing and reimbursement, health technology assessment (HTA), the fragmentation of health care between sectors and payers and collectivism versus competition.

Financing and reimbursement: A major controversy centres on the financial situation of SHI. There is now growing recognition of the fact that the perceived cost explosion in German health care never happened. This perception has led to efforts to contain costs and the policy of income-oriented expenditure in health care with the aim of stabilizing contribution rates. Although the absolute amount of health care expenditure has increased fivefold since 1970, health care expenditure as a percentage of GDP has remained relatively stable – at least until reunification. This is even more remarkable, since a number of new services had been introduced in health care, such as prevention measures. It is

now perceived that there is a financing crisis rather than an expenditure crisis or cost explosion. Two facts are especially relevant to this matter. Firstly, the high level of unemployment narrows the financial basis of the social insurance system. Secondly, labour is responsible for an ever-decreasing share of the national income while the share of capital is increasing in parallel. These factors result in a relative reduction in the financial flow to the social insurance system, since contributions are based only on labour.

However, due to reunification, health care expenditure as a percentage of GDP has risen substantially (and now remains at a higher level) since health care costs per capita are almost the same in the eastern part as in the western part of Germany while GDP is not. Cost-containment will therefore remain high on the political agenda and budgets appear to be here for the foreseeable future. Another focus will be on changes to the reimbursement mechanisms that currently favour unnecessary or excessive treatments, such as the remaining per diem charges in hospitals which will be replaced by an all-encompassing case-based system from 2003.

Health Technology Assessment: There are considerable inconsistencies in different health care sectors regarding the regulation of health technologies in Germany as well as the licensing, coverage and steering of diffusion and use of technologies. In general, the ambulatory sector is much more heavily regulated than the hospital sector in terms of coverage decisions and diffusion and use of technologies.

Licensing, as a prerequisite for providing services to be reimbursed by the SHI, applies to pharmaceuticals and medical devices (independently of the health care sector in which they are used). While almost all licensed pharmaceuticals are covered by the SHI, coverage decisions for medical and surgical procedures in the ambulatory care sector are made explicitly through a joint commission of sickness funds and physicians. Explicit coverage decisions are currently non-existent for the hospital sector regarding medical and surgical procedures. This is due to the fact that coverage of medical devices and expensive medical equipment falls under budget negotiations at hospital level and hospital plans at state level. Services provided by non-physician professionals, such as physiotherapy are explicitly excluded by law or are covered through collective contracts.

The future direction, as laid out in the Reform Act of SHI 2000, is both to extend existing health technology assessment mechanisms to other sectors, especially the hospital sector, and also to ensure that assessments and coverage decisions are coordinated between sectors. In addition, the new treatment guidelines are an attempt to steer the appropriate use of technologies.

Separation between sectors: One definite weakness is the fragmentation of the German system, especially the separation between the SHI and the Social Retirement Insurance (which covers the majority of rehabilitative care) on the one hand and between ambulatory care and inpatient care on the other hand. There is also the separation of inpatient care and rehabilitative care from long-term care, which has a long tradition and involves different actors. The exact extent of the duplication of services and the number of inappropriate referrals which are either made too early (due to sectoral budgets) or too late (due to difficulties in communication) are not exactly quantifiable. There is however a broad consensus that there are, at least potentially, negative consequences for patients. Related to the separation issue is the weak role of primary care and the absence of gatekeepers (e.g. general practitioners) to steer the patient through the system. The sickness funds are ambiguous about this issue: on the one hand, they claim to support gatekeeping by primary practitioners, on the other hand, many of their "disease management" and other models may be intended to increase their own role in gatekeeping. The Reform Act of SHI 2000 has addressed these issues firstly by allowing contracts between the sickness funds and intrasectoral groups of providers and secondly by giving the funds the option to introduce gatekeeping on a voluntary basis.

The future direction of reform is to increase the role of general practitioners which requires a strengthening of their position vis-à-vis office-based specialists; improvement of training for guiding patients through the system; and finally, increase awareness in the population about the ability of the general practitioners to guide them. Office-based specialists, on the other hand, will increasingly have to face competition with the hospital sector, which will gradually provide more and more ambulatory treatment. While this would open new opportunities for the hospitals to compensate losses from further reduced inpatient capacities, it will further aggravate the problem of large, often duplicate capacities for specialized ambulatory care. Future health care reforms will probably have to deal with this issue, which requires a consensus between all actors including the *Länder*.

Collectivism versus competition: Throughout the history of the German statutory health insurance system, regulations have become much more uniform. In the late nineteenth century, individual sickness funds contracted with individual physicians. Later, individual sickness funds contracted with physicians' associations. Then, certain sickness funds negotiated together but differences remained between the so-called primary funds and the substitute funds. The 1989 Health Care Reform Act was an attempt to strengthen the purchasers' side by standardizing and centralizing all negotiating procedures while at the same time standardizing the benefits catalogue. By introducing a

risk compensation mechanism, the 1993 Health Care Structure Act led to a narrowing of differences in contribution rates. The Act also introduced free choice of funds for members and therefore competition between funds. True market competition is not possible, however, since the sickness funds have to offer (almost) the same benefits for a very similar contribution rate; in addition, the range of providers is also the same since they are contracted collectively. In this situation it is not surprising that funds – particularly the more successful ones in terms of gaining new members – are demanding greater flexibility for selective contracting. Health policy-makers are cautiously supporting them while trying to retain a system with equal access and service quality for all the insured population. Possibilities for selective contracting are therefore increased only gradually, e.g. in the latest Reform Act of SHI 2000 by removing the requirement to get approval to contract selectively from the respective physicians' association. Recent preliminary court verdicts have supported the move towards selective contracting for the reason that joint decisions of sickness funds constitute monopoly power. The issue will remain a case for debate in future.

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Glossary

German to English

German name	German abbreviation	English name
1. GKV-Neuordnungsgesetz		First Statutory Health Insurance (SHI) Restructuring Act
2. GKV-Neuordnungsgesetz		Second Statutory Health Insurance (SHI) Restructuring Act
Ärztekammer		(regional) physicians' chamber
Allgemeine Ortskrankenkassen	AOK	general regional sickness funds (literally: general local funds)
Allgemeiner Patienten-Verband		General Patients' Association
Apothekerkammer		(regional) pharmacists' chamber
Arbeiterwohlfahrt		Workers' Welfare Association
Arbeitsgemeinschaft Deutscher Schwesternverbände	ADS	Federation of German Nurses' Associations
Arbeitsgemeinschaft Wissenschaftlich-Medizinischer Fachgesellschaften	AWMF	Association of the Scientific Medical Societies
Arzneimittelgesetz	AMG	Pharmaceutical Act
Ausschuss Krankenhaus		Committee for Hospital Care
Berufsverband der Allgemeinärzte Deutschlands – Hausärzteverband		Organization of German Primary Care Physicians – General Practitioners' Union
Berufsverband deutscher Psychologen	bdp	Organization of German Psychologists
Betriebskrankenkassen	BKK	company-based sickness funds
Bewertungsausschuss		Valuation Committee (for ambulatory care)
Bundesärztekammer	BÄK	Federal Physicians' Chamber
Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege		Federation of Voluntary Welfare Associations
Bundesaufsichtsamt für das Versicherungswesen		Federal Supervisory Office for the Insurance Sector
Bundesausschuss der Ärzte und Krankenkassen		Federal Committee of Physicians and Sickness Funds
Bundesfachverband der Arzneimittel-Hersteller	BAH	Federal Association of Pharmaceutical Manufacturers (representing the OTC manufacturers)
Bundesgesundheitsamt	BGA	(the former) Federal Health Office
Bundesgesundheitsrat		(the former) Federal Health Council
Bundesinstitut für Arzneimittel und Medizinprodukte	BfArM	Federal Institute for Pharmaceuticals and Medical Devices

Bundesinstitut für gesundheitlichen Verbraucherschutz und Veterinärmedizin	BgVV	Federal Institute for Health Protection of Consumers and Veterinary Medicine
Bundesknappschaft		miners' sickness fund
Bundesministerium für Gesundheit	BMG	Federal Ministry of Health
Bundespflegesatzverordnung		Federal Hospital Reimbursement Directive
Bundesrat		Federal Council (Upper Chamber of Parliament)
Bundestag		Federal Assembly (Lower Chamber of Parliament)
Bundesverband der Pharmazeutischen Industrie	BPI	Federal Association of the Pharmaceutical Industry
Bundesvereinigung Deutscher Apothekerverbände	ABDA	Federation of Pharmacists' Organizations
Bundesversicherungsamt		Federal Insurance Office
Bundeszentrale für gesundheitliche Aufklärung	BZgA	Federal Centre for Health Education
Deutsche Krankenhaus-Gesellschaft	DKG	German Hospital Organization
Deutscher Apothekerverband		German Pharmacists' Organization
Deutscher Berufsverband für Pflegeberufe	DBfK	German Nursing Association
Deutscher Caritasverband		German Caritas (= Catholic Welfare) Association
Deutscher Generikaverband (previously: Verband aktiver Pharmaunternehmen)		German Generics Association (previously: Association of Active Pharmaceutical Companies)
Deutscher Paritätischer Wohlfahrtsverband Organizations		Association of Independent Voluntary Welfare
Deutsches Institut für medizinische Dokumentation und Information	DIMDI	German Institute for Medical Documentation and Information
Deutsches Rotes Kreuz		German Red Cross
Diakonisches Werk		Association of Protestant Welfare Organizations
Einheitlicher Bewertungsmaßstab	EBM	Uniform Value Scale
Ersatzkassen		substitute funds
Ethik-Beirat beim Bundesministerium für Gesundheit		Ethics Council (at the Federal Ministry of Health)
Fallpauschale		case-fee
Gesetz zur Stärkung der Solidarität in der Gesetzlichen Krankenversicherung		Act to Strengthen Solidarity in Statutory Health Insurance (SHI)
Gesetzliche Krankenversicherung	GKV	statutory health insurance (SHI)
Gesundheitsreformgesetz	GRG	Health Care Reform Act 1989
Gesundheitsstrukturgesetz	GSG	Health Care Structure Act 1993
GKV-Arzneimittelindex		list of pharmaceuticals prescribed in SHI
GKV-Gesundheitsreform 2000		Reform Act of SHI 2000
Grundgesetz		Basic Law (= constitution)
Honorarverteilungsmaßstab	HVM	Remuneration Distribution Scale
Innungskrankenkassen	IKK	guild sickness funds
Kassenärztliche Bundesvereinigung	KBV	Federal Association of SHI Physicians
Kassenärztliche Vereinigung	KV	(regional) physicians' association
Kassenzahnärztliche Bundesvereinigung	KZBV	Federal Association of SHI Dentists
Kassenzahnärztliche Vereinigung	KZV	(regional) dentists' association
Konzertierte Aktion im Gesundheitswesen	KAiG	Concerted Action in Health Care
Koordinierungsausschuss		Coordinating Committee (between Committee for Hospital Care and Federal Committee of Physicians and Sickness Funds)
Krankenhaus-Kostendämpfungsgesetz		Hospital Cost-containment Act
Krankenhausfinanzierungsgesetz	KHG	Hospital Financing Act
Krankenhausneuordnungsgesetz		Hospital Restructuring Act
Krankenversicherungsbeitrags-entlastungsgesetz		Health Insurance Contribution Rate Exoneration Act
Krankenversicherungs-Kostendämpfungs-ergänzungsgesetz		Health Insurance Cost containment Amendment Act

Krankenversicherungskosten-dämpfungsgesetz	KVKG	Health Insurance Cost-containment Act
Land (plural: Länder)		State(s)
Landwirtschaftliche Krankenkassen	LKK	farmers' sickness funds
Marburger Bund – Verband der angestellten und beamteten Ärztinnen und Ärzte		Marburg Union of Employed (Hospital) Physicians
Medizinischer Dienst der Krankenversicherung	MDK	SHI Medical Review Board
Medizinproduktegesetz	MPG	Medical Devices Act
Paul-Ehrlich-Institut (Bundesamt für Sera und Impfstoffe)		Federal Institute for Sera and Vaccines (Paul-Ehrlich-Institute)
Reichsausschuss der Ärzte und Krankenkassen		Imperial Committee of Physicians and Sickness Funds (predecessor of the Federal Committee)
Reichsversicherungsordnung	RVO	Imperial Insurance Regulation (largely replaced by the Social Code Book)
Robert Koch-Institut	RKI	Federal Institute for Communicable and Non-Communicable Diseases (Robert Koch-Institute)
Sachverständigenrat (für die Konzertierte Aktion im Gesundheitswesen)	SVR	Advisory Council (of the Concerted Action in Health Care)
Seekrankenkasse		sailors' sickness fund
Sonderentgelt		procedure-fee
Sozialgesetzbuch V	SGB V	Social Code Book V (Statutory Health Insurance)
Sozialgesetzbuch XI	SGB XI	Social Code Book XI (Statutory Long-term Care Insurance)
Statistisches Bundesamt		Federal Statistical Office
Stiftung Warentest		Foundation for the Testing of Consumer Goods (and Services)
Verband der Ärzte Deutschlands – Hartmannbund (previously Leipziger Verbund)		Organization of German Doctors – Hartmann Union
Verband der privaten Krankenversicherung	PKV	Association of Private Health Insurance
Verband forschender Arzneimittelhersteller	VfA	Association of Research-based Pharmaceutical Companies
Verein Demokratischer Ärztinnen und Ärzte	VDÄÄ	Organization of Democratic Physicians
Vermittlungsausschuss		Arbitration Committee (between Federal Assembly and Federal Council)
Zahnärztekammer		(regional) dentists' chamber
Zentralwohlfahrtsstelle der Juden in Deutschland		Welfare Organization of the Jews in Germany

English to German

English name	German name	German abbreviation
First Statutory Health Insurance (SHI) Restructuring Act	1. GKV-Neuordnungsgesetz	
Second Statutory Health Insurance (SHI) Restructuring Act	2. GKV-Neuordnungsgesetz	
Act to Strengthen Solidarity in Statutory Health Insurance (SHI)	Gesetz zur Stärkung der Solidarität in der Gesetzlichen Krankenversicherung	
Advisory Council (of the Concerted Action in Health Care)	Sachverständigenrat für die Konzertierte Aktion im Gesundheitswesen)	SVR
Arbitration Committee (between Federal Assembly and Federal Council)	Vermittlungsausschuss	
Association of Independent Voluntary Welfare Organizations	Deutscher Paritätischer Wohlfahrtsverband	
Association of Private Health Insurance	Verband der privaten Krankenversicherung	PKV
Association of Protestant Welfare Organizations	Diakonisches Werk	
Association of Research-based Pharmaceutical Companies	Verband forschender Arzneimittelhersteller	VfA
Association of the Scientific Medical Societies	Arbeitsgemeinschaft Wissenschaftlich-Medizinischer Fachgesellschaften	AWMF
Basic Law (= constitution)	Grundgesetz	
case-fee	Fallpauschale	
Committee for Hospital Care	Ausschuss Krankenhaus	
company-based (sickness) funds	Betriebskrankenkassen	BKK
Concerted Action in Health Care	Konzertierte Aktion im Gesundheitswesen	KAiG
Coordinating Committee (between Committee for Hospital Care and Federal Committee of Physicians and Sickness Funds)	Koordinierungsausschuss	
(regional) dentists' association	Kassenzahnärztliche Vereinigung	KZV
(regional) dentists' chamber	Zahnärztekammer	
Ethics Council (at the Federal Ministry of Health)	Ethik-Beirat beim Bundesministerium für Gesundheit	
farmers' (sickness) funds	Landwirtschaftliche Krankenkassen	LKK
Federal Assembly (Lower Chamber of Parliament)	Bundestag	
Federal Association of Pharmaceutical Manufacturers	Bundesfachverband der Arzneimittel-Hersteller	BAH
Federal Association of SHI Dentists	Kassenzahnärztliche Bundesvereinigung	KZBV
Federal Association of SHI Physicians	Kassenärztliche Bundesvereinigung	KBV
Federal Association of the Pharmaceutical Industry	Bundesverband der Pharmazeutischen Industrie	BPI
Federal Centre for Health Education	Bundeszentrale für gesundheitliche Aufklärung	BZgA
Federal Committee of Physicians and Sickness Funds	Bundesausschuss der Ärzte und Krankenkassen	
Federal Council (Upper Chamber of Parliament)	Bundesrat	
(the former) Federal Health Council	Bundesgesundheitsrat	
(the former) Federal Health Office	Bundesgesundheitsamt	BGA
Federal Hospital Reimbursement Directive	Bundespflegesatzverordnung	
Federal Institute for Communicable and Non-Communicable Diseases (Robert Koch-Institute)	Robert Koch-Institut	RKI

Federal Institute for Health Protection Consumers and Veterinary Medicine	Bundesinstitut für gesundheitlichen Verbraucherschutz und of Veterinärmedizin	BgVV
Federal Institute for Pharmaceuticals and Medical Devices	Bundesinstitut für Arzneimittel und Medizinprodukte	BfArM
Federal Institute for Sera and Vaccines (Paul-Ehrlich-Institute)	Paul-Ehrlich-Institut (Bundesamt für Sera und Impfstoffe)	
Federal Insurance Office	Bundesversicherungsamt	
Federal Ministry of Health	Bundesministerium für Gesundheit	BMG
Federal Physicians' Chamber	Bundesärztekammer	BÄK
Federal Statistical Office	Statistisches Bundesamt	
Federal Supervisory Office for the Insurance Sector	Bundesaufsichtsamt für das Versicherungswesen	
Federation of German Nurses' Associations	Arbeitsgemeinschaft Deutscher Schwesternverbände	ADS
Federation of Pharmacists' Organizations	Bundesvereinigung Deutscher Apothekerverbände	ABDA
Federation of Voluntary Welfare Associations	Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege	
Foundation for the Testing of Consumer Goods (and Services)	Stiftung Warentest	
General Patients' Association	Allgemeiner Patienten-Verband	
general regional funds	Allgemeine Ortskrankenkassen	AOK
German Caritas (= Catholic Welfare) Association	Deutscher Caritasverband	
German Generics Association (previously: Association of Active Pharmaceutical Companies)	Deutscher Generikaverband (previously: Verband aktiver Pharmaunternehmen)	
German Hospital Organization	Deutsche Krankenhaus-Gesellschaft	DKG
German Institute for Medical Documentation and Information	Deutsches Institut für medizinische Dokumentation und Information	DIMDI
German Nursing Association	Deutscher Berufsverband für Pflegeberufe	DBfK
German Pharmacists' Organization	Deutscher Apothekerverband	
German Red Cross	Deutsches Rotes Kreuz	
guild (sickness) funds	Innungskrankenkassen	IKK
Health Care Reform Act 1989	Gesundheitsreformgesetz	GRG
Health Care Structure Act 1993	Gesundheitsstrukturgesetz	GSG
Health Insurance Contribution Rate Exoneration Act	Krankenversicherungsbeitragsentlastungsgesetz	
Health Insurance Cost-containment Act	Krankenversicherungskostendämpfungsgesetz	KVKG
Health Insurance Cost-containment Amendment Act	Krankenversicherungs-Kostendämpfungs-ergänzungsgesetz	
Hospital Cost-containment Act	Krankenhaus- Kostendämpfungsgesetz	
Hospital Financing Act	Krankenhausfinanzierungsgesetz	KHG
Hospital Restructuring Act	Krankenhausneuordnungsgesetz	
Imperial Committee of Physicians and Sickness Funds (predecessor of the Federal Committee)	Reichsausschuss der Ärzte und Krankenkassen	
Imperial Insurance Regulation	Reichsversicherungsordnung	RVO
list of pharmaceuticals prescribed in SHI	GKV-Arzneimittelindex	
Marburg Union of Employed (Hospital) Physicians	Marburger Bund – Verband der angestellten und beamteten Ärztinnen und Ärzte	
Medical Devices Act	Medizinproduktegesetz	MPG
miners' (sickness) fund	Bundesknappschaft	
Organization of Democratic Physicians	Verein Demokratischer Ärztinnen und Ärzte	VDÄÄ
Organization of German Doctors – Hartmann Union	Verband der Ärzte Deutschlands – Hartmannbund (previously Leipziger Verbund)	

Organization of German Primary Care Physicians – General Practitioners' Union	Berufsverband der Allgemeinärzte Deutschlands – Hausärzteverband	
Organization of German Psychologists	Berufsverband deutscher Psychologen	bdp
Pharmaceutical Act	Arzneimittelgesetz	AMG
(regional) pharmacists' chamber	Apothekerkammer	
(regional) physicians' association	Kassenärztliche Vereinigung	KV
(regional) physicians' chamber	Ärztekammer	
procedure-fee	Sonderentgelt	
Reform Act of SHI 2000	GKV-Gesundheitsreform 2000	
Remuneration Distribution Scale	Honorarverteilungsmaßstab	HVM
sailors' (sickness) fund	Seekrankenkasse	
SHI Medical Review Board	Medizinischer Dienst der Krankenversicherung	MDK
Social Code Book V (Statutory Health Insurance)	Sozialgesetzbuch V	SGB V
Social Code Book XI (Statutory Long-term Care Insurance)	Sozialgesetzbuch XI	SGB XI
State(s)	Land (plural: Länder)	
statutory health insurance (SHI)	Gesetzliche Krankenversicherung	GKV
substitute funds	Ersatzkassen	
Uniform Value Scale	Einheitlicher Bewertungsmaßstab	EBM
Valuation Committee	Bewertungsausschuss	
Welfare Organization of the Jews in Germany	Zentralwohlfahrtsstelle der Juden in Deutschland	
Workers' Welfare Association	Arbeiterwohlfahrt	