Health Care Finance,
User Orientation and Quality

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Health Care Finance, User Orientation and Quality

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This is the summary of the Council's report entitled "Finance, User Orientation and Quality". In addition to dealing with the topic of financial reform, the report focuses on participation as a constitutive element of the health care system, the management of medical errors and the improvement of quality in the existing health care system as well as in the future health care infrastructure. With this publication, the Council fulfils its task as formulated in the German Social Code, namely to identify areas in the health care system with overuse, underuse and misuse of resources.

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Volume I: Health Care Finance and User Orientation

1. The Reform of Social Health Insurance

1. The German health care system and in particular the Social Health Insurance (SHI) system have become the focus not only of health and social policy discussions, but also of general economic policy discussions as rarely before. Many observers in the political, economic and scientific fields consider health care and labor market reforms to be main indicators of the capacity for reform in politics and society in general. The views with regard to

- the necessity,
- the scope and
- starting points

for the reform of the health care system and especially of the SHI system are, however, still divergent.

2. With respect to the necessity and scope of health care reform, opinions range from an inflexible belief in current regulations to demands for a transition to a completely new health care system. These extreme positions influence each other since some proponents of a new system see justification for their beliefs when others insist on maintaining the status quo. Some opponents of reform, on their part, distance themselves even more adamantly from any type of change when they are confronted with the prospect of transition to an entirely different health care system. In this report, the Council does not recommend a basic change to another type of health care system but proposes numerous evolutionary reform steps. The reasons against a change to a completely new system include high costs in the form of uncertainty and misgivings in the population that would arise even if a reform were to be implemented efficiently. Furthermore, from an international perspective, frequent reform efforts in many countries show that there is no such thing as an "ideal" health care system.

3. The reform measures proposed by the Council are aimed at maintaining the basic principles of the SHI system by adapting them to external trends and thus ensuring the system's capacity to meet future requirements. Adaptive reforms serve to ensure the system's stability while clinging dogmatically to the status quo would threaten stability. The Council's recommendations target the expenditures of the SHI system as well as its revenues, for empirical evidence of weak revenue generation does not mean that there is no room for improving the efficiency of health care, and vice versa. The proposed adaptive reforms with respect to revenue generation are not aimed at distracting from the existing lack of efficiency and effectiveness in the present system. All analyses of SHI revenue generation assume neutrality, i.e. that all additional financial resources serve primarily to reduce contribution rates. Furthermore, improving the efficiency of health care can not solve financial problems in the short term but only, in the course of a structural reform process, reduce their extent in the medium term.

4. Against the background of increasing contribution rates in the SHI system, there is an almost inflationary trend in the number of proposals for the system's reform. Most of these proposals are primarily based on narrow approaches and lack recognizable focus, theoretical and empirical underpinnings and, in some cases, an adequate political perspective. To avoid pitfalls in the analysis of a system as complex as the SHI system and reform steps which consist solely in cost-containment measures, as has often been the case in the past, the Council comments on the objectives of health policy and in particular on the principle of solidarity at the beginning of its analysis (Chapter 2). In addition to presenting the Council's own proposals, the discussion of the pros and cons of various reform alternatives is intended to provide a broad basis of information for future health policy decisions.

5. Despite its faults with respect to efficiency and effectiveness, the German health care system provides comprehensive health insurance to all citizens and a virtually universal infrastructure of health care services at relatively high standards. Compared to other health insurance systems, the German SHI system offers a broad range of benefits and easily accessible services with hardly any rationing, such as waiting lists. Nonetheless, with respect to the finance of the system and to quality considerations, the issue is to utilize the existing potential for improving efficiency. With respect to expenditures and the provision of health care services, the Council considers primarily

- user orientation and participation (Chapter 3),
- prevention and management of medical errors (Chapter 4),
- quality assurance in prevention and rehabilitation (Chapter 5) and
- the development of the health care infrastructure (Chapter 6).

The report is an in-depth continuation of the Council's legal task of identifying overuse, underuse and misuse in the health care system as well as possibilities for improving its efficiency. Thus, the report reflects the fact that this scientific and political challenge is permanent.

2. The System and Its Finance

2.1 The principle of solidarity in the context of health policy objectives

6. Increasing health insurance contribution rates and looming budget deficits have placed concepts for the reform of the SHI system and the provision of health care in the center of social and economic policy discussions. In order to avoid a situation in which reform measures consist solely in cost-containment programs, as has often been the case in the past, the Council comments on the objectives of health policy and in particular on the role of the solidarity principle at the beginning of its analysis. The Council would like to recall that health care services

- not only improve health outcomes and thus increase life expectancy and quality of life but also
- create jobs,
- increase the growth rate of real social product and
- have effects on productivity and capacity and thus expand human capital both quantitatively and qualitatively.

7. In the search for appropriate reform measures, the solidarity principle and, in a broader sense, ethical criteria, play a role in the context of a goal-oriented perspective in so far as budget consolidation measures in the SHI system necessarily involve discretionary cutbacks and/or revenue increases except when benefits are financed by other third-party payers. Therefore, the reform options must be analyzed and compared with respect to fiscal, allocative and distributive aspects. One element of solidarity in the German SHI system is that, with the exception of sick pay, benefits are provided independent of the SHI contributions made by the insured. This implies that the effects of the solidarity principle decrease as the definition of the benefits catalogue narrows, for such measures are a greater burden on insured persons with low incomes; i.e. from the perspective of distribution policy, it has a regressive effect. Due to the pay-as-you-go finance of the SHI system, the situation is different if there is considerable change in the age structure of society, for the reduction of benefits or increase of patient co-payment can contribute to more equity between the generations.

8. The main effect of the solidarity principle in the SHI system is on the revenue side and consists in the redistribution *ex ante* from

- low to high health risks (risk compensation),

- earners of high incomes to those with low wages and salaries (income redistribution),
- from single persons to families with children (family compensation) and
- from the young to the old ("inter-generational" compensation).

With respect to distribution policy, these elements as well as open enrolment regulations and equal treatment of all insured persons distinguish the SHI system from the private health insurance system.

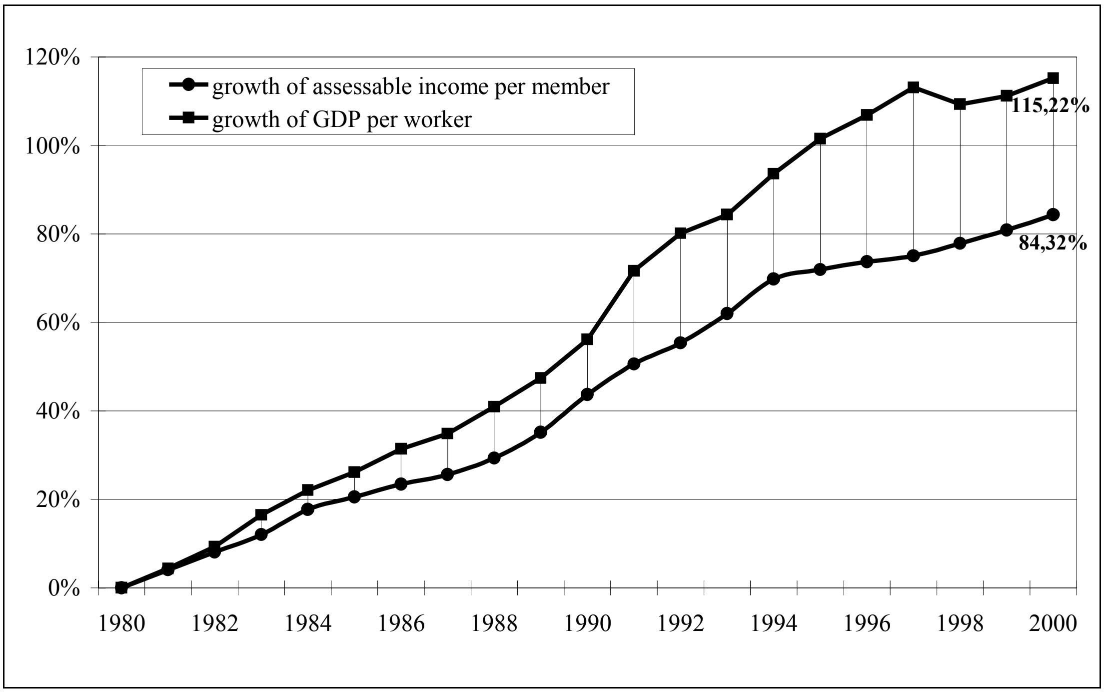
As recent surveys have revealed, these distributive effects of the solidarity principle are accepted and appreciated by the public. Rates of acceptance for risk compensation, income distribution and intergenerational compensation lie at approximately 80 per cent. The rate of acceptance for family compensation is, at 60 per cent, considerably lower. A high rate of acceptance is also to be found in most groups of the insured who, with respect to the various types of distribution, are net payers. Beyond the acceptance of the solidarity principle, survey results indicate that a majority of the insured would rather pay higher contribution rates than accept restrictions in the range of benefits or a decrease in the quality of care.

2.2 Revenue and expenditure trends

2.2.1 The weak growth of the revenue base

9. The revenue base of the SHI system, which consists mainly of earnings from wages, salaries and pension payments, has grown slowly since the early 1980s. As shown in *Figure 1:*, the growth of assessable income per member in the western states was 31 percentage points lower than the growth of GDP per worker between 1980 and 2000. The quantitative significance of this disparity in growth rates can be demonstrated with a simulation model that assumes that the assessable income per member grew at the same rate as GDP per worker over this period. Under this assumption, the assessable income per member in the year 2000 would have been 16.7 percent higher, generating DM 35.6 billion more in SHI revenues. The additional revenue could have helped cover expenditures at an average contribution rate of about 11.6 percent. This contribution rate differs only slightly from contribution rates in the years 1980 to 1984. Applying the calculation to all of Germany, the additional revenues would reach close to DM 43 billion.

Figure 1: **Growth of assessable income per member and of GDP per employed person since 1980 (western states)**



Source: Advisory Council for Concerted Action in Health Care (1994), Federal Ministry for Labor and Social Order (1998-2000), Federal Printing Office (1999), Federal Ministry for Health (2001), Federal Statistical Office (2000, 2002), "VGR" Working Group (2002), Advisory Council

10. Labor's share in national income is often used as an indicator for labor's share in the success of an economy. However, labor's share in national income does not fully reflect the development of assessable income, which, in contrast to labor's share in national income, also contains pension payments and is subject to a ceiling per SHI member. Labor's share in national income, on the other hand, includes incomes of civil servants and military personnel as well as compulsory and voluntary social costs of employers. Due to these differences it is possible that the relatively weak growth of assessable income per member – in comparison with the growth of GDP – could persist even if labor's share in national income remains constant or increases slightly.

11. In addition to the lower than average increase in the earnings of SHI members, weak revenue growth in the SHI system may also stem from changes in the structure of membership. This applies particularly to trends in the number of dependents, pensioners, the unemployed and voluntary members. Even a cursory empirical analysis reveals that the weak revenue growth in the SHI system is due to an increase in the number of the unemployed as well as to a sluggish growth in earnings. Furthermore, a slight increase in the number of pensioners as well as the transfer of deficits between the various branches of the social security system contributed to a situation in which the assessable income per SHI member grew at a clearly slower rate than GDP per worker. Trends in the number of co-insured dependents, i.e. the number of insured persons per paying member, on the other hand, did not result in a weakening of the revenue base, and the increasing share of voluntary SHI members partially offset the slower growth rate and had a stabilizing financial effect.

12. A look at the main determinants of the revenue base of the SHI system gives rise to the fear that the relatively modest growth in assessable income per member – i.e. at growth rates that are lower than the increase in GDP – will remain a problem for some time, given current contribution regulations. The weak growth of the revenue base is due not only to the business cycle, which results in lower increases in wages and salaries, high unemployment and early retirement, but also to structural factors. These include:

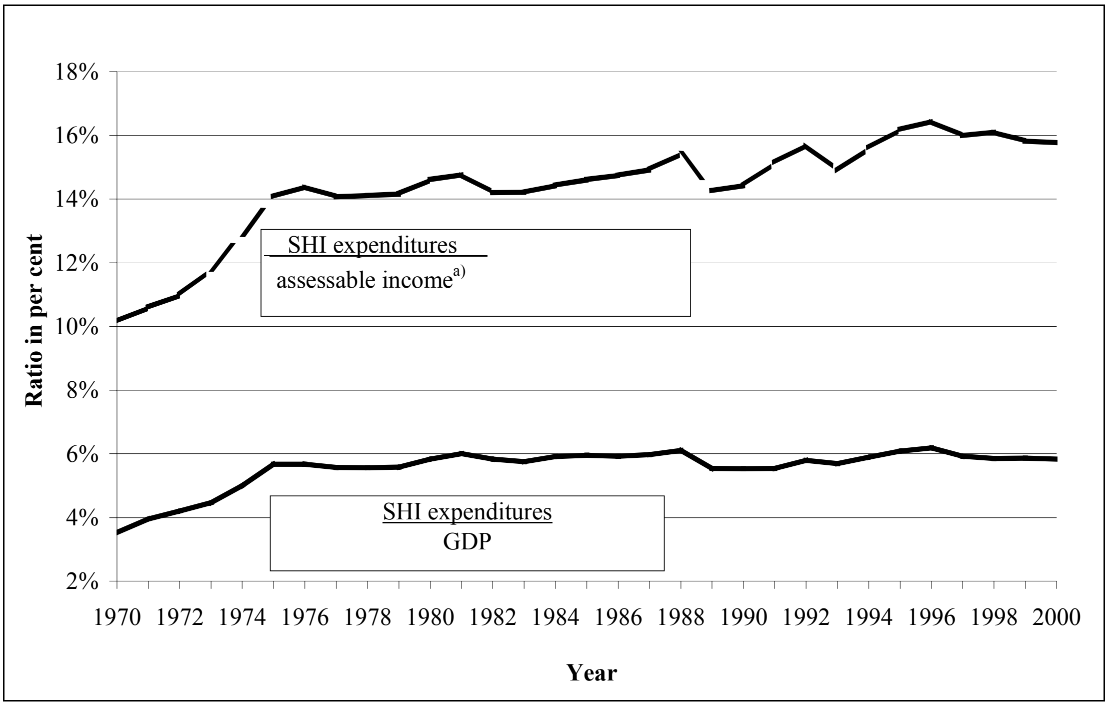
- pressure on wages, especially in lower wage groups, due to globalization,
- changing working conditions and professional careers (e.g. irregular employment, work contracts that are not subject to social security contributions),
- an increase in the share of earnings which are not subject to social security taxation, especially through conversion of income as part of company pension plans,
- increased activity in the illegal shadow economy and intensification of (legal) do-it-yourself and home production,
- increased life expectancy and longer pension periods.

13. Despite considerable economic slack in the health care system, it is unlikely, given the expected development of the revenue base, that revenues of the SHI system will be sufficient to secure stable contribution rates without reforms. The fact that there is weak cyclical and structural growth in the SHI revenue base does not contradict the Council's often emphasized reference to possibilities for improving efficiency and effectiveness. Concern with reform options for revenue generation is by no means intended to divert attention from efficiency problems in the present system. At the same time, measures against overuse, underuse and misuse do not help solve immediate financial problems and can only lessen their extent in the medium term.

2.2.2 Expenditure trends and their determinants

14. Expenditure trends in the SHI system since the mid-1970s do not provide empirical evidence of a "cost explosion" in the health care system. As shown in Figure 2, the ratio between SHI expenditures and GDP in the western states remained almost constant between 1975 and 2000, while SHI expenditures in relation to assessable income increased by 2 percentage points over the same period. This constancy was not the result of an endogenous development but of numerous cost containment measures. Without discretionary government intervention, the share of SHI expenditures in GDP would undoubtedly have increased. The SHI system thus finds itself caught between weak growth of the revenue base and a spending potential that, without government regulation and reform, would tend to increase at a rate greater than GDP.

Figure 2: **Ratio of SHI expenditures to GDP and assessable income [a] from 1970 to 2000 [b] (western states [c])**



a) Assessable income of members, excluding pensioners.
b) New calculation method since 1978 restricts comparability of later data with pre-1978 data.
c) East Berlin has been classified as part of the western states since 1995.

Source: Advisory Council for the Concerted Action in Health Care (1994), Federal Ministry for Health (2000, 2001), Federal Statistical Office (1999), VGR Working Group of the States (2002), Advisory Council

15. Almost all indicators presently point towards a continuation of this trend, i.e. to weak growth in the revenue base and expenditure growth that exceeds the growth rate of GDP. The SHI system is confronted by the following dilemma: either expenditures are linked to GDP, which leads inevitably to increases in contribution rates, or stable contribution rates require that SHI expenditures grow at a slower rate than GDP. The first option results in an increase of ancillary wage costs for employers and in a reduction in disposable income for employees. The second option places restrictions on the finances of the SHI system, especially in less prosperous times that are associated with modest growth of GDP.

16. The empirical finding that health expenditures have increased at a faster rate than GDP in almost all countries points not only to deficiencies in the allocation of resources but also to basic determinants of health expenditures in all countries. These can be classified as supply-side determinants and demand-side determinants. The supply-side determinants of health expenditures include supply-induced demand, medical and technological progress, the so-called negative price structure effect and an increasing trend towards so-called defensive medicine. Important demand-side determinants are changes in the age structure of the population, changes in the spectrum of diseases, increasing expectations and incentives to overutilize health care services or "moral hazard". In political and scientific circles, most attention presently centers on medical and technological progress and the demographic determinants of expenditure trends. While the future effects of trends in the population structure can be estimated with at least some degree of certainty, forecasts of the effects of medical and technological progress, which may increase or decrease health care expenditures, are less certain.

2.2.3 The stability of contribution rates and the burden of social security taxes

17. The requirement of stable contribution rates in the SHI system gains meaning in the context of economic policy in so far as the social pension scheme and social long-term care insurance also face considerable financial challenges. By increasing ancillary wage costs, rising social security contributions hinder structural change, including a transition to the labor intensive service sector. They also provide incentives to shift work to the shadow economy and have negative effects on international competitiveness. However, there is no sound empirical evidence of effects of increasing social security contribution rates on growth and employment trends. It must also be remembered in this context that the health sector, with its above average service and labor intensity, is an important growth sector with considerable effects on the labor market. The fact that there are only limited possibilities for substituting capital for labor in the provision of health care opens employment opportunities in the health care sector. Attempts of health policy to limit expenditures in order to stabilize contribution rates are therefore a balancing act between the effects of increasing contribution rates outside the health care sector on consumers and investors and the positive effects of expenditures on health care services. This should by no means be taken as an excuse for inefficient production and/or ineffective procedures in the health care system nor divert attention from the existing potential for improvement.

18. The effects of high and increasing social security taxes on the international competitiveness of a country depend on factors such as parallel developments in the national systems of economic rivals. The tax ratio in Germany, that is, the ratio of tax revenues to GDP, dropped from its high level in the 1960s and 1970s to below the EU average in 1981/82 and approached the OECD average by 1990. Following an increase between 1991 and 1995, due largely to re-unification, the tax ratio in Germany dropped back to the OECD average by 1998. The relatively strong increase in the burden of social security contributions compared to taxes is also not unique to Germany, but affects all EU and OECD countries. Although this empirical finding doesn't reflect the tax structure, it does indicate that, at aggregate level, Germany does not suffer from competitive disadvantages that stem from the overall tax burden.

19. Finally, an international comparison of the social security burden according to payer reveals that the employer's share in Germany in the year 2000 was well below the EU and OECD average. Furthermore, compared to the 1970s and 1980s, it has been declining. With respect to the share in gross domestic product, the employer's burden is only slightly higher while the employee's burden is clearly above the EU average. The employer's share in the EU, however, is considerably higher than the OECD average. Overall, the international comparison of the total tax and social security rate does not support the argument that Germany has a competitive disadvantage relative to other European countries.

2.3 Action alternatives

2.3.1 A survey of alternative health care systems and adaptive reform measures

20. Health policy alternatives for securing stable contributions rates in the face of imminent budget deficits can be classified according to whether they represent a transition to an alternative health care system or adaptive reforms that remain within the framework of the existing system. The alternative health care systems include:

- a tax-funded health care system,
- the transition to a capital-funded insurance system,
- finance using fixed per-capita payments.

21. Adaptive reform options or measures include:

- improving efficiency through structural reforms,

- the reorganization of finance across the different branches of the social security system (“switching stations”),
- shifting responsibility for extraneous benefits to other payers,
- restricting the benefits catalogue,
- creating an additional capital-funded health insurance within the SHI system as a compulsory or government-supported private (top-up) insurance,
- partial tax funding, e.g. on the basis of consumer taxes on products such as tobacco and alcohol,
- increasing patient co-payment and
- modifying the computation of SHI contributions.

22. The transition to a purely tax-funded health care system is not discussed as an option in Germany. Tax-funded systems do have advantages over systems that are funded through contributions with respect to ancillary wage costs and the cost of labor, but they reduce individual choice and sovereignty. Patients would no longer obtain health services as beneficiaries of the health insurance system but only as recipients of government transfers. Furthermore, representative surveys show that there is no popular support for a national health service – which would be the practical result of a tax-funded system – while the majority prefers to be able to choose their health insurer.

2.3.2 Improving efficiency as a permanent task

23. Of the adaptive reform options, the improvement of efficiency is without doubt the most preferred option from a normative viewpoint. As the Council demonstrated in its earlier reports, overuse, underuse and misuse in the German health care system leave considerable potential for increasing effectiveness and efficiency. Merely knowing that such a potential exists, however, does not help finance short-term budget deficits. Efficiency increases first require structural reforms, and the resulting savings usually occur with a delay. Furthermore, successful measures for improving the effectiveness and efficiency of health care – such as prevention or quality assurance measures – result not only in expenditure reductions but also in improved health outcomes. The latter are not less important than cost savings but do not contribute to the finance of budget deficits in the form of reduced spending.

24. Despite the potential for improving efficiency, in light of the expected revenue and expenditure trends, the Council believes that there is a need for action in the sense of fiscally relevant reform options. If political decision makers do not react to the budget deficits that will arise if nothing is changed, contribution rates are likely to increase and/or implicit rationing could occur. The latter shifts responsibility to doctors and represents the worst of all options. It withholds services to which patients are entitled under the given benefits catalogue; services that would improve health outcomes when properly utilized. Implicit rationing thus violates ethical criteria in that it is more or less arbitrary and has the greatest effect on patients who are poorly informed and/or less able to assert themselves.

2.3.3 The transition to a self-funded insurance system

25. Proposals to move to self-funded insurance such as in the private insurance system are aimed primarily at countering the future expenditure effects that will result from the expected changes in the structure of the population. Compared to its use in old-age security, self-funding plays a minor role in the insurance of health risks. This can be demonstrated with a simple comparison of the social pension scheme and the SHI system using the example of an individual entering retirement. The social pension scheme starts disbursing retirement payments at this point and receives no contributions. Thus, retirement has a considerable effect on both the revenues and the expenditures of the social pension scheme. In the SHI system, however, expenditures do not necessarily increase upon retirement, and contributions, half of which are paid by the pension scheme, continue to flow into the SHI system, although at a lower level that does not reflect actual risk. Retirement is therefore a much more drastic fiscal turning point for the social pension scheme than for the SHI system.

26. Compared to the pay-as-you-go financial basis of the SHI system, self-funded private health insurance has advantages with respect to intergenerational equity under conditions of negative population growth. However, these are by no means as significant as the differences between self-funded retirement plans and the social retirement scheme. In addition, the transition to a self-funded system entails both the finance of the distributional effects that do not depend on health but have been carried by the SHI system, and the ex post finance of the reserves for retirement, which together total approximately € 40 billion per year. Finally, with respect to competition and efficiency, the self-funded finance of health insurance can not provide an attractive option as long as the private health insurance system is incapable of providing portable reserves for old age in the case that an individual changes the type of health insurance coverage.

27. Due to the lack of individual equivalence, the SHI system lacks the necessary incentives for the creation of an additional self-funded health insurance to complement the pay-as-you-go approach. The temporary creation of a capital stock in the SHI system is, on the contrary, aimed at checking the demographically induced increase in contribution rates during the most critical stages. However, this calls for contribution rates that exceed the levels necessary to cover costs over the next few years; an option that, due to labor market and economic policy considerations, only seems feasible in conjunction with reforms to reduce contribution rates. Furthermore, the creation of such a temporary capital reserve can only fulfil its objective if the increase in contribution rates is temporary, which assumes that birth rates will increase.

2.3.4 Finance using fixed per capita contributions

28. The finance of health risks using fixed per capita contributions, which represents a pay-as-you-go approach, is more akin to the current German system than tax-financed or self-funded approaches. In contrast to the SHI system, however, it limits the function of solidarity to transfers between the healthy and the sick and between young and old; i.e. it does not include the free co-insurance of dependents and – with the exception of financial assistance to reduce the burden of contribution payments for low-income groups – the level of contributions does not depend on the level of an individual's income or pension. A financial framework based on capitation serves to separate the social security system's obligation to guarantee adequate health care from the other objectives of income and distribution policy, which become the responsibilities of tax and welfare policy. From a theoretical perspective, the SHI system and a health care finance system that is based on fixed per capita contributions and includes flanking measures for redistribution can have the same distributional effects. However, the latter system would require annual transfer payments between € 26 billion and € 28 billion.

29. Compared to the SHI system, finance based on per capita contributions has the advantage that it breaks the link between health care expenditures and the cost of labor. It reduces the cost burden represented by labor as a factor of production and eliminates the weak growth potential of the financial basis of the current system. The clear separation of allocative health tasks from re-distributional functions makes a finance system based on fixed per capita contributions a convincing approach from the perspective of economic policy. The considerable volume of required transfer payments and the question of how they are to be financed remain problems. Due to the budget situation of local authorities, it is questionable whether the distributive functions of the past would survive the transition to such a system.

2.3.5 The SHI benefits catalogue and public task sharing

30. The SHI benefits catalogue has grown over time and can be expanded as well as defined more narrowly. It contains not only benefits that are directly related to sickness, but also includes benefits that serve social or family policy objectives. A re-definition of the benefits catalogue must therefore determine whether a benefit is removed completely from the benefits catalogue or if responsibility for its payment is shifted to another payer. In the former case we are dealing with the re-definition of objective need in a financial framework based on the principles of social insurance. The latter is a case of clearly delineating the tasks and financial responsibilities of the SHI system, the other branches of the social security system and local government authorities. In this case, extraneous benefits may be found not only on the expenditure side, but also (in a broader sense) on the revenue side of the SHI system.

Extraneous health insurance benefits and "switching stations"

31. Expenditures on extraneous health insurance benefits include:

- a funeral allowance,
- pregnancy and maternity support in accordance with §§ 195 ff. Reich Insurance Code,
- contraception,
- sterilization,
- abortion,
- household help in accordance with social health insurance law,
- sick pay for one parent when a child is sick and

- financial support for training in general medicine in accordance with § 8 of the Law for Strengthening Solidarity in the SHI System.

The Council believes that these benefits should either be removed from the benefits catalogue or financed by other means. They amount to approximately € 2.5 billion each year, which represents about 0.25 percentage points of the SHI contribution rate.

32. In addition, the majority of the Council's members support the transfer of financial responsibility for expenditures related to private accidents to an obligatory private accident insurance that complements the worker's compensation system for work-related accidents. Most of these issues do not result in irresolvable or extraordinary definition problems for an insurance plan. The obligatory private accident insurance should be financed on a pay-as-you-go basis using per capita premiums. Such a measure would save the SHI system an estimated € 8 to 10 billion and reduce the contribution rate by 1 percentage point. A minority of the Council's members do not support this proposal, because they consider the definition problems more serious and believe they would have negative effects on income distribution and diverge from the basic finality principle of the SHI system.

33. On the revenue side, extraneous health insurance benefits arise because certain groups of the insured pay reduced contributions or no contributions at all for reasons of social or family policy. These include partial or complete exemption for

- individuals during educational leave,
- students and interns,
- individuals in youth welfare service facilities and detention centers,
- participants of employment promoting programs,
- recipients of benefits in accordance with the employment promotion law,
- hardship cases and
- family dependents who are co-insured at no cost to SHI members.

34. The reduced contributions of the beneficiaries under the employment promotion law belong to the revenue losses with which the SHI system – as one of the "switching stations" in the German social security system – has contributed to the reduction of problems in other branches of the social security system. Depending on how responsibilities are defined, the annual loss in revenue to the SHI system ranges between four and six billion Euro, or 0.4 - 0.6 contribution rate percentage points. In this context, the Council argues that all future economic and social policy initiatives which impose a financial burden on the SHI system disclose the revenue losses or spending increases in the draft versions of the laws. The Council calls for a revision of the policy of "switching stations" and for a reform of the finance of extraneous health insurance benefits on the revenue side – i.e. with respect to measures to reduce the burden on families. However, this requires that families with children are not worse off as a result of such a reform. The annual loss in revenues that results from the free co-insurance of children and youths under 19 years of age amounts to almost € 11 billion or 1.1 percentage points of the contribution rate.

35. Since

- extraneous benefits on the expenditure side,
- the reduction of the burden on the SHI system through private accident insurance,
- the revision of the policy of "switching stations",
- the reduced revenues from individuals on educational leave and
- the free co-insurance of children and youths

amount to more than € 30 billion, the transition to a finance system based on the proposals of the majority (minority) of the Council would lead to a reduction in the SHI contribution rate of more than 3 (2) percentage points. Given that the reform of the "switching station" policy implies a shift in finance within the social security system, total social security contributions would decrease by only 2.5 (1.5) percentage points.

36. Most of the extraneous health insurance benefits would not be struck from the benefits catalogue altogether but could be financed through local government authorities. In this context, the SHI funds could continue to provide these benefits and pay for them as the proxy for government authorities. Such an approach utilizes the existing administrative and organizational infrastructure of the SHI funds and makes it unnecessary to create such an infrastructure at local government level. Employment policy considerations also speak for shifting the finance of extraneous health insurance benefits from contribution-based to tax-based funding. Although the reduction in contributions is offset by an equivalent increase in taxes or the public debt for a given level of benefits, there may be a considerable difference in the effects on employment. The decrease in contributions reduces ancillary wage costs and thereby promotes the utilization of labor as a factor of production, while tax increases can target consumption.

The benefits catalogue under the magnifying glass

37. The SHI system does not have a clearly defined benefits catalogue based on the objective needs of the insured. On the contrary, social security law grants the insured a very broad claim to benefits that is limited only by general, abstract criteria. The necessity for subjecting the benefits catalogue to continuous testing based on the results of the evaluation of procedures and services results from the need to leave room for new and more effective treatment procedures. Attempts to limit the catalogue to core benefits must deal with the problem that the possibilities for improving the efficiency of the German health care system reside less in the comprehensive benefits package than in its intensive application – i.e. the use of procedures for indications or in situations when they are not medically necessary. Medical, ethical and economic criteria may be of some help when defining the benefits catalogue of a social health insurance system, but they cannot be used to make unequivocal decisions in concrete cases that are based on deduction. In this respect, there is always room for personal values.

38. In consideration of these limitations, the Council calls for the removal of the following benefits from the benefits catalogue:

- transportation costs (not including emergency services), depending on the availability of public transportation and the intensity of treatment,
- outpatient preventive care in rehabilitation centers and spas,
- orthodontic treatment of adults and youths if the need for treatment does not meet defined valid criteria,
- outpatient psychotherapy of adults, depending on the evidence basis and indication,
- ineffective procedures of so-called alternative medicine and related pharmaceuticals of "special therapeutic approaches",
- physical therapy and medical aids such as massage and seeing aids, depending on the indication.

39. There is currently no empirical data with which to estimate the effects of these measures on the level of the SHI contribution rate. In addition to the benefits listed above, a majority of the Council proposes the removal of dental prostheses from the benefits catalogue, the costs of which are approximately €3.7 billion at present. These benefits should be removed successively or according to age group, depending on preventive programs for children and youth. An analysis of experience in other countries could provide information as a basis for decision making.

2.3.6 Finance and the design of contributions in the SHI system

Health related consumer taxes as a revenue source

40. In contrast to the proposal for the tax-based finance of extraneous benefits, which the Council supports in principle, consumer taxes, e.g. taxes on tobacco or alcohol, represent the tax finance of genuine health care benefits. Like a "machine tax", which expands the assessment basis of employers to capital as a factor of production, or to a firm's real net output, this type of finance further reduces group-related equivalence in the SHI system and the system's insurance character. Despite the causal relationship between the consumption of tobacco and alcohol and health care expenditures, this form of finance contradicts the budget principle of the non-affectation of public expenditures. From a fiscal perspective, health care finance with the aid of special consumer taxes also has the disadvantage that it perpetuates the weak growth of the financial base, since the growth in revenues from these taxes is clearly lower than the growth of GDP. These critical comments do not argue against an increase in tobacco and alcohol taxes as part of a well-conceived prevention program, i.e. as an instrument for reducing tobacco consumption, but only questions their appropriateness for the finance of the SHI system.

Modification of patient co-payment

41. The term co-payment often gives rise to semantic confusion in so far as the direct payment of a portion of the costs of an SHI benefit is not the only cost sharing of patients in the health care expenditures of the SHI system. Patients also pay contributions to their SHI fund, they pay for self-medication, and – as a consumer – ultimately pay for the employers' share in SHI contributions, which is passed on largely through prices. In a broad sense, health-conscious behavior can also be considered a form of co-payment.

42. Co-payment in the strict sense, i.e. direct payment, is often opposed on a priori ideological grounds. An adequate appraisal of its effects should at least take the following issues into consideration:

- the objectives of co-payment measures,
- available fiscal alternatives,
- the type and extent of co-payment,
- the indications and procedures to which it is applied and
- the affected individuals or social strata and the planned exemption rules.

43. Co-payment fulfils a financial function as well as an allocative function. However, the effect of the latter is subject to dispute. Co-payment can only fulfil an allocative function when patients are not able to avoid payment through the substitution of benefits that are free of charge. In addition, demand must have at least some price elasticity. Distributive considerations are not among the primary objectives of co-payment regulations, although they do set certain requirements. In this context, the current co-payment regulations in the SHI system, e.g. for dental prostheses and pharmaceuticals, need some correction, independent of their fiscal scope, for they fulfil neither the allocative function nor do they satisfy distributive requirements. Exemption rules, for example, should not be related to medical indication but solely to a patient's relevant income.

44. In light of the low level of patient co-payment in relation to the broad range of benefits in Germany, the Council considers a moderate increase in the scope of co-payment as reasonable if it occurs in combination with hardship clauses. If hardship clauses are included, the Council also supports the introduction of a "practice fee" for the use of office-based doctors' services (except for primary prevention services and early detection exams). These regulations must ensure that patients with actual medical need do not go without medically indicated care because of direct payment requirements. Such a measure should also be considered secondary to other reform options and only be implemented when an intensification of implicit or explicit rationing is imminent.

The reform of contribution regulations

45. In regard to the current contribution regulations, the Council puts the following issues to discussion:

- the compulsory insurance income threshold and the extent of compulsory insurance,
- the assessable income limit,
- the assessable income base and
- the free coinsurance of spouses.

Since there are a number of reform proposals for each issue in the design of contribution rates, the pros and cons of each option must first be summarized to provide a basis for a comparative analysis.

46. Based on the pros and cons of each reform option, the Council proposes both a broader definition of assessable income and the reform of the free co-insurance of spouses. Each option has advantages with respect to allocation and distribution and fulfils both the benefits principle as well as the ability-to-pay principle. A broader definition of assessable income that includes income from interest and rent as well as earnings from temporary working contracts and agreements, in addition to wage and salary income, better reflects the changes in the income sources and assets of the insured since the post-war period. The reform option for free co-insurance is based on a splitting of joint earnings and application of half of the contribution rates for both spouses. The splitting method is compatible with the current principle for the design of contributions since it does not increase the burden on families in which the total earnings of the employed spouse are lower than the assessable income limit.

47. Assuming revenue neutrality, the potential reduction in the contribution rate that would result from these measures ranges between 0.7 and 1.3 percentage points. The fiscal effect of a broader definition of assessable income, which is at most 0.4 percentage points, depends primarily on whether the other forms of income are subject to a full contribution rate or to half of the contribution rate and whether there is a tax-free allowance for the interest earnings of individuals with small accounts. The splitting method, which would allow a reduction of the contribution rate by 0.9 percentage points, could initially include an exemption for the non-working spouse who is or was responsible for childcare or home care. The potential savings that result from this option decrease if families can choose between the splitting method and the payment of a minimum contribution for the non-working spouse.

48. In addition to these measures, a minority of the Council supports an increase of the assessable income limit and compulsory insurance threshold to the level of the assessable income limit in the social pension scheme; i.e. to € 5,100 per month (2003 level). In their view, this proposal would not only have the positive fiscal effect of lowering the contribution rate by 0.7 to – over time – 0.9 percentage points, but also expand the extent of compulsory membership and thus the application of social insurance principles. The majority of the Council opposes this proposal, because such an increase in the assessable income limit would increase the burden on those of the insured who are already subject to a very high marginal burden. Furthermore, the additional burden has the effects of a tax, since, with the exception of sick pay, it is not associated with any additional benefit. An increase in the compulsory insurance income threshold to the level of the assessable income limit in the social pension scheme alone hardly benefits the SHI system while it would wreak havoc on the private health insurance system.

2.3.7 The interdependence of adaptive reform options

49. The adaptive reform options discussed above can function both as complementary measures or as competing alternatives. The combination of reform options so that they complement each other is recommended when large budget deficits are likely or a significant reduction in contribution rates is necessary. A marked decrease in contribution rates also offers the advantage that the increase in revenues and/or reduction in expenditures, which inevitably place a burden on patients, the insured and taxpayers, are offset by a noticeable decrease in contributions rates. Finally, the combination of different reform options also has the advantage that it opens more possibilities for the equal distribution of the burden it creates.

50. Limiting the benefits catalogue and increasing patient co-payment are closely related reform options. The extreme case of 100 per cent co-payment corresponds to an exclusion from the benefits catalogue. This combination is given in the SHI system in cases in which the price of a pharmaceutical is not greater than the co-payment of € 4, 4.5 or 5, depending on package size. Such pharmaceuticals are part of the standard SHI benefits catalogue, at least formally, but patients must pay their full cost, as if they were de-listed products. Such a situation can also be given when the co-payment rate is high, as is the case, for example, in France, where the social health insurance system covers only 35 per cent of the price of certain pharmaceuticals. If a patient goes without the medication because of a prohibitive co-payment, then the co-payment regulations have the effect of a de-listing.

51. Patient co-payment not only has effects on the existence and extent of the benefits catalogue and the utilization of these benefits; similar effects work in the other direction. For all those who do not wish to go without these benefits, their exclusion is the same as a 100 per cent co-payment. Positive lists, no matter how they are used to restrict the range of benefits, result in an increase in patient co-payment by increasing the extent of self-medication. From this perspective, it is not fully consistent to reject patient co-payment for reasons of social policy and at the same time support the application of positive lists. This contradiction disappears only if the excluded benefit is proven to apply to ineffective therapies or benefits for which there are less costly alternatives that are at least as effective.

52. With respect to fiscal considerations, it makes no difference in the SHI system whether a particular benefit is struck from the benefits catalogue or the coverage of its costs are shifted to another payer. The situation is perceived differently from the perspective of the insured, who apparently prefer a shift in fiscal responsibility to other public payers over de-listing, i.e. over a more narrow definition of the SHI benefits catalogue. Compared to a more restrictive benefits catalogue and an increase in co-payment, the reform of contribution regulations offers the advantage that it does not primarily affect patients but the insured community as a whole. This information could be taken to imply that alternatives for the reform of contribution rates should first be undertaken and other alternatives only then be taken into consideration when sizeable SHI deficits are imminent. Apart from the fact that each reform alternative has disadvantages, the combination of various reform options create opportunities for greater fiscal yield as well as for a more balanced distribution of the financial burden.

2.4 Summary

53. The Council proposes a broad range of reform options which include

- a revision of the "switching station" approach to health and social security policy,
- the transfer of responsibility for extraneous SHI benefits to other payers,
- restrictions of the benefits catalogue,
- a moderate increase in patient co-payment (if necessary) and
- changes in contribution regulations.

The implementation of all of the Council's proposals could decrease contribution rates in the SHI (social security) system by more than 4 (3.5) percentage points. This applies to both the proposals made by the majority of the Council as well as to those made by the minority of its members. The resulting decrease in ancillary wage costs could have significant effects on the labor market and on employment policy.

54. The Council's proposals all remain within the basic framework of the existing system. In this respect, the Council's recommendations are steps in an evolutionary reform that are aimed at maintaining the basic principles of the present system while modifying it in preparation for the future. However, there are some complementary effects between the proposals of the Council and alternative health care systems. The advantage of funded health insurance, for example, is that it doesn't result in implicit government deficits and does not give rise to inter-generational distribution problems. By reducing the implicit government deficit, the Council's adaptive reform proposals result in an at least slight reduction of distribution problems between the generations. The Council's recommendations do not lead to a reduction in contribution rates with the same consistency as fixed per-capita payments, but nonetheless target the same objective of attenuating the strict link between health expenditures and ancillary wage costs. A broader definition of assessable income leads to the inclusion of all income sources whereas the splitting method results in a transition from the individual to the household principle. Both reform options thus target two elements that are also the intended outcomes of self-funded health insurance and per capita payments. Finally, like the transition to a self-funded insurance system or to a system based on capitation, the Council's proposals would require funding from other public sources. With approximately € 15 billion from the budgets of local government authorities and some € 5 from the reform of the policy of "switching stations" within the social security system, the recommendations of the Council still amount to less than the volume needed to finance alternative health care systems (approximately € 40 billion or € 26 - 28 billion per year).

55. The German discussion of health care reform often suffers from an overly narrow perspective that judges certain options without comparing them to actual alternatives. The isolated analysis of the pros and cons of a reform option almost always results in it being discarded, because none of the measures as such, e.g. the limitation of the benefits catalogue, the increase in patient co-payment or placing restrictions on free co-insurance, are attractive social policy measures. Since an imminent budget deficit requires additional fiscal measures, the comparison of reform options with their real alternatives is better suited to the problem and the intended goals. The issue is not one of the pros and cons of each option but of a discriminating comparison with actual alternatives, such as increasing contribution rates or an increase in rationing. The comments and recommendations of the Council are aimed primarily at providing a broad basis of target-oriented information for necessary health policy decisions.

3. The Route to User Orientation and Participation

3.1 Patient orientation in health care – a concept between conflicting structures and goals

56. In its 2000/2001 report, the Council spoke clearly in favor of more patient orientation. Policy makers are increasingly calling for placing the "patient at the center" of health care. However, this demand conflicts with a number of basic values, patterns of behavior and organizational procedures in the institutions and professions of the health care system. There are also conflicts between the objective of patient orientation and other important policy goals such as the strict "system orientation" (in the sense of the priority of an institutional orientation) and the strict "cost orientation" of all participants, and with legal requirements such as the division of the health care system in separate sectors with different fee regulations.

57. Of the 90-odd laws that were implemented as reforms of the Social Health Insurance system between the mid 1970s and 1999, not one was focused on improving the role of the patient. The Health Care Reform 2000 was the first serious attempt to increase the self-responsibility and competency of patients and the insured (see, for example, §§ 20, 65b and 66 of the German Social Code, Book V). It is, however, evident that health care institutions often do not fully embrace the concept of patient orientation despite lawmakers' attempts to implement this concept in the health care system.

58. A consistent orientation towards patients has also not been realized to an adequate extent in the doctor-patient relationship, as evidenced by patient surveys and studies on compliance, on the extent and causes of inappropriate prescription of pharmaceuticals (the annual "pharmaceutical waste" in Germany is estimated to be a nine-digit € figure) and on the content and length of medical consultations. Lack of time is one factor, but the lack of communication skills suited to the varied needs of different patients on the part of many doctors also plays a role. A more patient-oriented communication style could contribute to an improvement in compliance and in health outcomes.

59. The fact that patient-oriented communication is often lacking or performed under too much time pressure is also due to the organization and finance of health care in Germany. Doctors find themselves increasingly caught between legal requirements, medical possibilities and economic restraints. Efforts for the support of "verbal medicine” through the introduction of special fees have not had lasting success under the conditions in the office-based sector in Germany.

It is necessary to create a framework that allows decision makers in hospitals and practices more time to develop patient-oriented care. Consideration must be made of this need in the design of case-related payments in the hospital sector as well as in the fee schedules of doctors' services in the office-based setting and in the payment of rehabilitation services (see Chapter 5.2.1). Health policy debates over "admission fees" for visits to a doctor as a means for preventing excessive utilization can and should also be seen from the perspective that less crowded waiting rooms leave more room for a "verbal medicine”.

60. Increased patient orientation in a theoretically sound and practical manner also requires more knowledge about individual patients and their subjective models for coping with sickness as well as concepts for integrating this knowledge in preventive, therapeutic or rehabilitative care. Although an individual's subjective theory of disease can be seen as an important factor for his/her attempts to cope with being sick, it is hardly recognized in the treatment process.

The subjective concepts of healthiness, sickness, age and aging that are hidden behind the professional roles of health care professionals must be better illuminated and reflected on by doctors and other therapists in their own objectives and treatment concepts.

61. The call for "objectivity in health care" in the sense of the norms of the German Social Code, Book V and the demand for "more consideration of patient subjectivity", in particular in the sense of the new norms in the German Social Code, Book IX, are at present largely unrelated, both legally and with respect to their contents. The German Social Code, Book IX views the individual need of patients as the equivalent of objective need. Although the concept of individual need in German Social Code, Book IX contains an objective component, responsibility for determining objective need and for the definition of needs criteria does not, in contrast to social health insurance law, reside with healthcare providers but is the joint responsibility of third-party payers and patients. However, this also means that the concept of need in the SHI system, which is derived from the German Social Code, Book V, is not fully compatible with the need concept of the German Social Code, Book IX. This incompatibility has not yet been dealt with at a judiciary level and has only been touched upon at an analytical level.

The social, legal, organizational and economic framework for medicine and the provision of health care must leave room for a basic duality of applied medicine – objectivity, science and systems orientation on the one hand and subjectivity of patients and their caregivers on the other – and allow for sufficient organizational and legal flexibility.

The goal for a health care system in the 21st century is a "co-operative medicine" that includes more rights to participation for patients and the insured (see Chapter 3.2). In order to enable participation, quality-assured information must be made available (see Chapter 3.3).

3.2 Participation at the level of system design

3.2.1 Introduction

62. The participation of citizens, the insured and patients is an important component in the development of all levels of the health care system. Participation at the level of system design can be justified on the basis of the health care system's effects on a large portion of the population as well as on the fact that it is financed primarily by the citizens and the insured. The general population has an interest in participating in health policy decisions. A survey conducted in 2002 revealed that 35 per cent desire a participation "in any case". Forty-five per cent of those surveyed voted for "yes, probably" and only 21 per cent rejected direct participation (Janssen-Cilag 2002).

63. There is an increasing focus of the health policy agenda on the conflict between what is medically possible and what can be financed by the SHI system. The question as to what the limited resources should be utilized for and the principles on which their utilization should be based is inevitably a normative issue. Medical and scientific criteria alone do not suffice for this purpose. In spite of standardized criteria, e.g. the legal regulations in §12 of the German Social Code, Book V and evidence-based guidelines, there remains room for discretion with respect to the determination of the individual need for treatment. Since the wide array of the individual and collective effects of medicine are general values of existence such as the extension of life, easing pain and suffering, and the maintenance and restoration of the ability to live and partake in society all of which transcend the boundaries of medicine, decisions on these issues can be made only at the level of society.

3.2.2 Basic chances and hurdles for citizen participation

64. The direct involvement of citizens in constitutive social processes can be seen as the extension of the democratic process and thus as a value in itself. It promotes a better understanding of health policy issues and the readiness of citizens to assume responsibility and contributes to increasing confidence in health policies. Furthermore, opening medicine to social discussion can result in a considerable increase in transparency. However, the chances for citizen participation require a fundamentally new form for the communication of medical issues (see Chapter 3.3).

65. Although citizen participation in the design of health care systems has been established in many European countries and in the USA, a discussion of the objectives of participation has been lacking. It is therefore questionable whether citizen participation creates any added value. In particular, it is doubted that participation actually leads to a changed or even "better" or "more egalitarian" distribution of health benefits. Moreover, the experience of the Oregon Health Plan, described as "political paradox of rationing", shows that increasing public participation in the debate over cost savings in health care is associated with an increasing likelihood that attempts to reduce costs will fail and may even result in an increase in health care costs.

The issue of the legitimization of so-called "patient representatives" is usually viewed as a central problem in the discussion of participation. It is unclear who represents whom, the decision-making level at which representation should occur and the extent of representation (hearings, advice, involvement in decision making). With respect to its actual implementation, it is feared that participation will make routine procedures and practices much more complicated, elaborate and drawn out. Furthermore, the influence of sub-groups of the population or of patients with particular interests and the influence of interest groups on patient organizations and patient representatives, e.g. through financial support, are seen as threats to rational decision making.

3.2.3 Implementing participation at the macro-level

66. While public participation is being called for in the German health care system, decision-making remains in fact the responsibility of the government bureaucracy and corporatist system. Overall, Germany lags behind other countries with respect to public participation in decisions at the level of the health care system. However, a start has been made, for example, in the alliance of national institutions for the self-help of handicapped persons, in democratically elected advisory bodies at the state level and in a “planning cell” initiative in which citizens work on solutions to unsolved problems in various areas of municipal and state policy.

67. The Council considers the cooperation of the following two institutions, both of which must first be created, to be promising:

1. Responsibility at national level should reside with a "Federal Commissioner for Patient Issues". Through cooperation with the Federal Commissioner for the Concerns of Handicapped Persons, activities in both areas can be optimized.

2. Representatives of the insured could be elected through expanded social elections that correspond to the organizational structure of the social health insurance system and private health insurers (see Report 2000/2001, Volume I, Chapter 3). A "Council of the Insured" could then be established at national level. This council would not only be responsible for representing the interests of the insured vis-à-vis health insurance funds, but could also function as an independent body with responsibility for participative tasks in the health care system.

68. The Council's demand for participation at the level of system design also implies the participation of the above mentioned institutions at the national level (e.g. Federal Committee of Physicians and Health Insurance Funds or the Coordinating Committee) and at the regional level (e.g. hospital planning).

3.3 Increasing competence by informing users

69. The Council concerned itself extensively with the changing role of the user in modern health care systems in 2001 (Report 2000/2001, Volume I, Chapter 3) and stressed the need for an improvement in user behavior through strategies for building competency and increasing participation. Valid and comprehensible information on all aspects of good health, coping with sickness and living with "restricted health" are necessary (if not sufficient) elements of prevention and health care as well as the prerequisites for the implementation of concepts such as "self-responsibility", "patient as co-producer of health" and “empowerment”.

70. The Council believes that user competence should be promoted through group-specific, quality assured and informal information, counsel and education by different actors and by different means. The design of this part of the health care system occurs presently as a search process organized by different actors with diverse interests.

The Council welcomes the variety of these approaches. For health policy it is important that, overall, quality-assured information on health, sickness, prevention, health promotion and treatment reaches those who need it (healthy persons, risk groups and the sick). Individual need (e.g. of persons with little formal education, immigrants, middle-aged males) must be taken into consideration when designing the information on health topics and the means for their dissemination. In this report, the Council devotes its attention to the description of a model for a contact office for elderly and co-morbid patients. In addition, the Council portrays four dynamic approaches to the counseling of the general public, patients and the insured: independent patient counseling centers in accordance with § 65 of the German Social Code, Book V, call centers sponsored by SHI funds, health information on the Internet and performance reports.

3.3.1 Concept for information centers for persons with complex health problems

71. The Council recommends the creation of information centers as pilot projects for the "integrated counseling" of individuals with complex health problems and associated social problems. The centers should assume the function of guides through the complex health care and social security systems and work according to principles that can solve the complex problems of an aging population. These principles include counseling concepts that are aimed at maintaining individual competency, promoting adjustment to the loss of functionality or managing the support for problematic cases.

72. The existence of numerous different types of counseling hinders the search for appropriate support. "Integrated counseling" can better reflect the differences in need for support or at least help patients find the right specialists. The Council therefore recommends that the information centers focus on different areas of expertise, e.g. information on prevention, the referral to the appropriate health care providers or health care facilities, life-style counseling and crisis intervention. The qualified counseling of family members who are involved in the provision of health care or nursing care to family members can serve to reinforce private and family support.

73. The information centers should use personal communication (consulting hours), telephone and postal contacts as well as modern digital communication (email) to provide prompt and competent answers to questions. In addition, the experts employed by the information centers should be able to make house calls as a means for preventing critical situations. The information centers should be affiliated with a medical and a social competence center. The latter should be in close contact with the existing social welfare services. Investments in approaches to integrated counseling can lead to an increase in the self-determined behavior of patients and their family members, to more self-responsibility, to the more effective utilization of health care resources and to greater satisfaction with the health care services provided. The long-term finance of such institutions should depend on evidence of their positive effects; evidence that should be supplied through complementary research projects.

3.3.2 Independent consumer and patient information offices (§ 65b of the German Social Code, Book V)

74. The Council greets the swift implementation of § 65b of the German Social Code, Book V by the national SHI associations as well as their willingness, expressed in the decision to support the projects, by giving the broadest possible range of institutions and approaches the chance to develop and prove themselves.

75. In the broad array of existing and emerging information there is clearly room for neutral and autonomous counseling offices with genuine responsibilities. The need for such counseling services is due in part to the demand for "neutral" and "autonomous" sources of information that appeal – like self-help groups – to persons who might be wary of other institutions. Especially in regard to population groups who are difficult to reach with information of specific institutions or to sources that are available only through electronic media (individuals with a low level of education, immigrants etc.), autonomous and easily accessible counseling offices can play an indispensable role as the first point of contact. The effectiveness of these information sources will depend in part on the social quality of the counseling office and the extent to which they succeed in providing emotional and psychosocial support in addition to the straightforward task of informing patients (Report 2000/2001, Volume I, Chapter 3, paragraph 322). Furthermore, projects supported in accordance with § 65b of the German Social Code, Book V can serve as important guides that direct users to other sources of information (e.g. through training in the use of the internet or referral to other institutions).

In view of the potential of these facilities and projects, it seems too early for the Council to make recommendations for the definition of responsibilities and the distribution of tasks from a purely theoretical perspective. It is appropriate to make the existing search processes as transparent as possible so that, in due time, the strengths and weaknesses of the various actors and points of access can be compared on an empirical basis. Then, this basis can be used to support decisions on the design of the appropriate and efficient provision of information and education to the insured and patients.

76. In this context, the Council greets the decision of the national associations of SHI funds in January 2001 to initiate a thorough, participatory and formative scientific research of the 31 projects supported under § 65b of the German Social Code, Book V. In addition to the evaluation of the extent to which the objectives have been attained and quality assurance maintained in each project (see Report 2000/2001, Volume I, Chapter 3), the accompanying research should also deal with the answers to questions that promise important indications for the overall design of information and counseling for patients and the insured:

- With respect to the utilization of counseling facilities it is not only the actual users that are of interest but the target groups according to sickness, region and social strata. The analysis of the reasons why certain target groups do not use the services can provide important information on groups that are hard to reach and thus provide information for improving access to target groups. This is particularly important for reaching underprivileged groups (e.g. low level of formal education, the elderly, immigrants, the unemployed).

- With respect to the existing counseling alternatives offered by the SHI funds, medical associations and private companies, it is important to know the specific reasons that lead to the utilization or non-utilization of one or more types of counseling services. Such analyses can provide important information on the desired division of labor among the information and counseling institutions and on access to them.

- In so far as possible, the effect of the utilization of counseling offices on personal health status should be recorded and evaluated. Indicators of successful utilization could be a competent search behavior, targeted utilization, improved participation or the modification of health behavior.

The results of the accompanying research should also be used for the development of general criteria and methods for the quality assurance of autonomous counseling offices, for example in the form of check lists and procedural recommendations.

77. The Council recommends that thorough accompanying research and quality assurance be applied not only to the projects funded in accordance with § 65b of the German Social Code, Book V, but also to the information and counseling services of other providers. The results of these analyses should be collected and published. Such information can be used to evaluate the specific strengths and weaknesses of different providers, approaches and media with respect to the needs of particular sub-groups of the population or patient groups. The promising search processes for the provision of the best possible information for patients and the insured can only be used for the provision of health care and, in the long term, serve as a precondition for funding, if it is supported by high-quality scientific research and evaluated as part of health services research.

3.3.3 SHI call centers for counseling patients and the insured

78. The Council considers quality assured call centers to be useful, in principle, and views them as an increasingly important component of a modern health care system. It greets their creation and recommends that SHI funds make their existence better known to the public while ensuring that they are designed to meet actual needs and subject to expanded quality assurance. Accessible and interactive forms of communication can provide impulses for prevention, help avoid unnecessary visits to doctors and support the rational provision of health care. Call centers that provide high quality services that are accepted by the insured can make an important contribution to the Council's call for the better qualification of users. The call centers that are currently being formed for disease management programs and case management are no substitute for call centers that provide clear and qualified information on all health issues. Quality assurance programs should enable the different types of call centers to learn from each other's experience.

79. In addition to easy and reliable accessibility – in terms of time and costs – as well as to the quality of services, quality assurance is the most important condition for meeting counseling tasks. The selection of call centers on the basis of criteria and the design of appropriate contracts should ensure that all users of the call centers are provided quick access to comprehensible information concerning their problems. To fulfil these requirements, call centers should be required in their contracts to employ properly qualified personnel, to ensure for their continuing education and to maintain and update data. As patrons, the SHI funds should work to ensure that call centers are not only institutions for the production of health-related services, but that they offer employment under healthy working conditions.

User friendly counseling routines should be supported by the necessary measures for external quality assurance. The standards for the quality of information on health and medicine should be based on scientific criteria and correspond as much as possible with the approach of evidence based medicine.

80. The quality of those call centers that are working for the SHI system – which, despite some negative results, is generally high – may be used to illustrate the fact that quality-oriented competition between the SHI funds can be stimulated when the proper incentives are used. In the past, quality assurance has measured and analyzed the quality of counseling. In the context of health services research it would also be necessary to explain the effects of the utilization of call centers on health behavior and the utilization of the health care system. The Council hopes that this will provide important information for the further improvement of these services.

In regard to the stabilization of the desired objective and to increasing transparency for the users, the Council recommends that the criteria, methods and results of quality assurance for call centers are made public.

The services of call centers are also subject to the efficiency principle of § 12 of the German Social code, Book V. The Council recommends that the SHI funds conclude contracts with those call centers that have established quality assurance measures (e.g. in accordance with the EFQM). The Council also recommends to conduct economic analyses as a component of accompanying research.

81. In this context it would be necessary to ensure that neither the SHI funds nor other interested parties (other health insurers, health care providers, etc.) have access to the data of the persons who utilize the services. Furthermore, contracts and quality assurance measures should ensure that the information provided by call centers that are sponsored by SHI funds is based on scientific criteria and free of commercial interests (e.g. those of health care providers).

82. Quality assurance measures record few of the socio-demographic characteristics of the users of call centers other than age and sex. The Council believes that surveys for the compilation of user profiles (e.g. including formal education and other indicators of socio-economic status) should be more comprehensive in order to clarify the extent to which the supply of call centers reaches target groups. This is especially important if call centers are created to compensate for the closure of the offices of SHI funds, which are used primarily by less privileged persons as a source of information.

3.3.4 Health information on the internet

83. On the basis of a provisional evaluation of the extraordinarily dynamic trends in internet-based information, the Council tends toward a quality assurance strategy for the internet that would "separate the wheat from the chaff" through an independent review board that makes its opinion clearly visible.

There are a number of approaches to this end:

1. The European pilot project MedCERTAIN combines elements of consumer education with the commitment of the authors of internet information and external control. These measures are aimed at the certification of internet information.

2. The MedCIRCLE project (Collaboration for Internet Certification, Rating, Labeling and Evaluation), which builds on the MedCERTAIN project, is aimed at enabling semantic questions on health information via the internet. Quality assurance is based on self-assessment, the assessment of project planners and the assessment of certified experts.

3. In addition, medical software and tele-medical services are supposed to be certified as part of the TEAC-Health project (Towards European Accreditation and Certification of Telematics Services in Health). The intention is to establish a EuroSeal similar to the CE mark.

4. The Health on the Net Foundation (HON) in Geneva has its own search engine (MedHunt, HONselect) for websites that it has certified (from more than 300 subscribers). It advertises the HON logo as self-certification based on quality criteria that are documented in a questionnaire. The criteria include factors such as the proof of evidence, literature sources and clear information about sponsors. Based on the

analysis of the questionnaire, which must be filled out by the authors of websites, the foundation awards the HON logo and checks at least a sample of the certified websites. If the criteria of the foundation are met, the website is awarded the logo and users can learn about the logo and the quality criteria by clicking on the logo. If the logo is abused (which must be reported by users) or if it is rescinded due to quality problems, the foundation has no means with which it can remove the logo. However, it can "cut" the link from the logo so that users who find a "dead" HON logo have some warning that the site is no longer quality assured.

5. The American Accreditation HealthCare Commission has developed the URAC certification program that resembles the HON but is more comprehensive and includes accreditation on the basis of formal review.

6. The Action Forum on Health Information Systems (AFGIS) which is supported by the Federal Ministry of Health, provides a logo for the websites of members who pledge to maintain specific quality criteria.

84. The Council recommends to the creators of websites, the owners of portals and search engines and the actors in health policy who are concerned with these topics that they increase public awareness for the unresolved problems in the quality assurance of internet-based information.

Over the long term, the Council recommends that the voluntary certification of websites on health be based on standard and transparent criteria that apply at least nationally, but ideally Europe-wide or even worldwide. The organization and control of this quality assurance should be the responsibility of neutral, independent and recognized institutions. Whether this role is assumed in Germany by the AFGIS, the *Stiftung Warentest*, the Federal Center for Health Education (BZgA) or academic institutions, and whether the role of recognized institutions for quality assurance and consumer information such as the Agency for Quality in Medicine or consumer associations would be subject to negotiations that the Council recommends be started soon. As a first step, quality assurance measures could point to those websites or portals that are already quality assured. The procedure of the HON Foundation to the issuance and retraction of certification appears to be a sensible approach.

85. The Council recommends that the German Ministry for Health and Social Security and the Ministry for Consumer Protection, Food and Agriculture work to ensure the quick initiation of discussions among the responsible actors. In this context it would also be necessary to assess the extent to which authors of websites can be made legally responsible for misleading and insufficient information.

In addition to the quality assurance of internet information, increased efforts must be made to promote the qualification of users. The dissemination of quality criteria represents a feasible means to this end. The effectiveness of quality criteria and instruments for their implementation hinges on their broad public communication by recognized authorities, e.g. government institutions. However, other actors in the health care system, in particular doctors, as well as the proprietors of search engines and the sponsors of computer and internet training can also make important contributions.

3.3.5 Performance reports as an instrument of user information programs

86. In regard to performance reports there is a basic difference between optional and obligatory reports. Optional reports serve primarily either internal quality assurance or marketing purposes. There is no requirement to publish such reports. Obligatory reports are compiled on the basis of legal requirements with specific contents. They are part of external quality assurance, and data is classified on a state or national basis and published.

Hospitals that fall under § 108 of the German Social Code, Book V will be required to compile performance reports as part of the DRG system. The published statistics will provide users information on the number of cases, the length of stay, complication rates, hospital mortality, referral rates and the age structure. Most of the data on which the statistics are based will be contained in the data that hospitals submit to the DRG office and which must be re-classified on the basis of ICD diagnoses.

87. The Council believes that health services research must search for appropriate ways for measuring the patient orientation of health care facilities. A health care facility can only be considered to be patient oriented when the autonomy and self-determination of patients are respected, common definitions of the aims of diagnosis and therapy are developed, patients are involved in the diagnostic and therapeutic processes and past experiences are taken into consideration.

88. The data collected and published by the DRG office should serve not only the purposes of external and internal quality assurance. This information should also be collected and compiled in a user-friendly "Patient Guide" that is easily accessible, e.g.

via special internet pages, call centers or counseling centers, etc. The user-friendly comparison of health care providers must enable patients without medical knowledge to make decisions on the basis of the parameters that are important to them.

89. The Council acknowledges the limited provision of anonymous data records to research facilities as a means for the support of health services research. This process could be modeled on the practice in the USA and the experiences there with respect to anonymity, data utilization and data privacy. Such data can be used as the basis for performance reports as well as for a significant share of quality assurance.

90. The Council considers hospitals to have a pilot function in that they have been the only healthcare providers that have been required in the past to compile performance reports. In the future, performance reports should also be compiled by other institutions and health care networks. The Council advises that work on the necessary scientific technical and legal conditions for the compilation of performance reports begin immediately. It is the Council's view that successful measures in this area can make important contributions to the focus on quality in the provision of health care.

91. The Council believes that an important condition for the development of user competence is that every individual with a question on health or a health problem has access to reliable and comprehensible information without considerable expenditure of time and money. The various information channels and media as a whole should ensure such easy access. The Council calls on all those responsible to observe this overarching objective in the design of each information channel and component in the informational infrastructure. Health services research should be used to analyze the extent to which this important health policy objective is met and to explore new possibilities for improving its attainment.

4. Medical Errors – Causes, Prevention Strategies and Patient-oriented Adjustment of Damages

4.1 Frequency and causes of medical errors

92. Medical errors and the resulting damages must be seen as a general risk in the day-to-day provision of health care. Nonetheless, there is only insufficient data on the frequency, causes, extent and consequences of medical errors. The Council considers the analysis of conditions under which medical errors arise and the development and implementation of more effective and efficient prevention strategies to be a pillar of quality assurance in the health care system. The aim is to prevent unnecessary suffering and material and immaterial damages for patients. This requires a new culture of dealing with medical errors openly, increased efforts for the avoidance of errors and damages, the establishment of research on medical errors and improvements in the procedures for the adjustment of damages sustained by patients as a result of medical errors.

93. Since there is no unambiguous, generally accepted definition of the concept of "error" in medicine, it is first necessary to find a consensus with respect to the term and, on this basis, to work toward a uniform use of the concept. In accordance with the usual legal definition, "medical error" in the strict sense must be distinguished from the concept of "misuse", as discussed by the Council (Report 2000/2001, Volume III.1, Chapter 3.6), as well as from "avoidable, undesired events". The latter term may be used to describe those events that possibly but not necessarily lead to a resulting damage for patients. Undesired events are to be classified as "preventable" if they could have been avoided by adhering to the principle of due care on the part of the healthcare provider.

94. When assessing medical errors (in the sense of procedures that were not performed correctly or inappropriate under the given circumstances), the frequency of occurrence, the likelihood of consecutive damages, the severity of potential damages ("fatality"), the avoidance potential and the resources needed for avoidance must be taken into consideration. This must also include the damages that patients experience as uncertainty, fear, disappointment and the feeling of being neglected.

95. Data on the number of suspected or actual medical errors and damages are only partially available at present. Furthermore, it may be assumed that the known numbers are only the "tip of the iceberg". The number of suspected and documented medical errors in Germany is currently estimated at 40,000 per year and the number of acknowledged damage claims at approximately 12,000 (Robert Koch Institute 2001).

The majority of registered damage claims focus on those medical professions that are involved in surgical procedures, including gynecology and obstetrics, presumably because medical errors appear easier to recognize for laypersons than is the case for conservative medical treatment. Hospitals and hospital doctors are confronted with damage claims more often than their office-based colleagues. The intimacy and familiarity of the doctor-patient relationship in the hospital setting is usually less pronounced, thus accentuating the service character of medical treatment as well as the concomitant expectations with respect to its quality and the claim to legal recourse.

96. Furthermore, both characteristics of a disease (e.g. severity and frequency) as well as certain patient characteristics determine the probability that a medical error will occur. The latter include factors such as the patient's age, which is correlated with co-morbidity and the complexity of care, as well as socio-economic factors. In particular the undesired side effects of drugs, falls and complications of diagnostic and therapeutic interventions occur more frequently among the elderly, although these do not necessarily imply a medical error under German law on medical liability. Undesired events in the course of treatment and substandard medical care also occur more often among members of lower social classes, especially if there is a language barrier.

97. Due to the fact that hospitals have a more complex structure than doctors' practices, they are more susceptible to the effects of organizational and communication deficits, which are particularly apparent at the interfaces with other providers. However, there is an inverse relationship between the rate of detected medical errors and the size or degree of specialization of a hospital. The smaller a facility, the more often damage claims are recognized as justified. This is an indicator for the empirically proven relationship between special skills or the frequency with which procedures are performed and the results of treatment (volume-outcome relationship).

98. According to the results of a population survey, 19 per cent of the population believe that they have been the victim of at least one medical error during their lifetime, half of them at the hands of a doctor in a private practice. Only a minority of the victims took action because of the suspected medical error. A number of empirical studies indicate that there is a high rate of undisclosed cases of medical errors or undesired effects that could have been avoided. For example, false medication and drug (side) effects are responsible for two to five per cent of all hospital admissions. Furthermore, one out of every 17 patients will suffer a potentially avoidable infection during the course of hospital stay and autopsy studies reveal consistently high rates of erroneous or incomplete diagnoses.

99. Studies in the USA indicate that adverse events occur in 2.9 to 3.7 per cent of all patients treated in hospitals. These have fatal results in 6.6 to 13.6 per cent of the cases. Comparable studies in other countries indicate that the rate of undesired effects may be even greater. The resulting costs are considerable. Extended length-of-stay is repeatedly mentioned as the main cost factor (see Table 1). Under the assumption that the results of the US studies are applicable to Germany, the 16.5 million hospital cases of the year 2001 resulted in 31,600 - 83,000 fatalities due to the undesired effects of medical interventions in hospitals. This means that more people die as a result of medical diagnosis and treatment or of medical errors than from colon cancer, breast cancer or traffic accidents.

Table 1: **An international comparison of adverse events in hospitals**

Study or study site	**Number of cases**	**Adverse events**	**Share of potentially avoidable adverse events in all undesired results**	**Estimated costs of adverse events**
New York[a)]	31,000	3.7 %	-	3.8 billion US$
Colorado and Utah[b)]	14,321	2.9 %	58 %	661 million US$ total; 348 million US$ for medical costs
Australia[c)]	14,179	16.6 %	51 %	900 million Australian dollars
London[d)]	1,014	10.8 %	46 %	2,400 £ per case; for all inpatient cases in GB this would imply costs of £1 billion per year (solely due to an increase in the length of hospital stay)
New Zealand[e)]	6,579	12.9 %	63 %	10,264 NZ$ per case; 1.6 billion NZ$ for the whole population

Source: Advisory Council (original sources: a) Johnson, W. et al. 1992, b) Thomas, E. et al. 1999, c) Wilson, R. et al. 1995, d) Vincent, C. et al. 2001, e) Brown, P. et al. 2002)

100. Factors that affect health care processes and contribute to the occurrence of medical errors include the institutional context, overarching organizational and management characteristics, the immediate work environment, interactions within the team, personal characteristics of staff members, characteristics of the task at hand and features of individual patients. Different models are available to describe constellations of complex systems that lead to the occurrence of medical errors. Common to these models is the assumption that manifold interactions at a variety of levels result in damages only through their concurrence.

The different determinants affect both the frequency with which errors occur as well as the probability that errors will be recognized and the resulting damages to patients avoided. The occurrence of errors can be seen as the failure of prevention strategies, which allows for a chain of unfortunate events and circumstances that lead to medical errors and the resulting damages. Thus, the causes of medical errors can be identified at the level of the individual healthcare provider, the team of healthcare professionals or the health care facility and of the whole health care system.

101. The most common cause of errors are deficiencies in communication and coordination which frequently result from insufficient process organization. In particular, there is often a lack of standardized processes and internal guidelines (Table 2 and Table 3). In addition, certain structural characteristics of the health care system may promote medical errors by creating unfavorable conditions for the activities of individual healthcare providers and institutions. This applies, for example, to the impediment of adequate cooperation and information exchange across the sectors of the health care system and the unsatisfactory management of "interfaces" in the system.

Table 2: **Organizational deficiencies as cause of medical errors – analysis of expert reports on the causes of recognized medical errors**[a)]

Cause	**share in %**
Insufficient communication/coordination	23
Of which: – between ambulatory and hospital providers	42
– among office-based doctors	58
Documentation errors	20
Errors in the referral process	13
Inadequate recognition and treatment of complications	10
Lacking health information of patients	7
Hygiene problems	1
Emergency situation	0.07

a) The data reflects cases before expert commissions and arbitration boards of the medical associations.

Source: Advisory Council, based on the Robert Koch Institute 2001 (see also: Hansis, M.L. 2001 and Scheppokat, K.D. and Held, K. 2002)

Table 3: **Immediate causes of errors in medication[a] and other determining factors[b]**

Suspected cause (more than one cause is possible)	**Share of registered cases**
Errors in the performance of tasks	42 % (55 % in combination with other causes)
Divergence from the usual routine (protocol)	20 % (75 % in combination with other causes)
Recording (of prescribed medication) incorrect or forgotten	14 %
Documentation errors	13 %
Erroneous input into computer	10 %
Communication errors	10 %
Knowledge deficits	9 %
Errors in the distribution of medication (storage, transport etc.)	4 %
Written orders (incomplete, confusing etc.)	4 %
Penmanship (illegible etc.)	4 %
Determinants (more than one determinant possible)	**Share of registered cases**
Diversion	53 %
High work load	21 %
Inexperienced staff	18 %
Insufficient number/qualification of personnel	11 %
Change of shift	7 %
Staff member performed tasks outside usual are of responsibility	5 %
Staff member substituted for other staff member (‚*cross coverage*‘)	4 %
Temporary personnel	4 %
Emergency situation	3 %
No pharmacy with 24-hour availability	3 %
No access to patient information	2 %
Extended working time	1 %

a) The data is based on 38,077 cases submitted on a voluntary basis; multiple responses were possible to identify the type of error (40,936)

b) The evaluation is based on 10,063 cases for which additional causal factors were identified (13,450 responses)

Sources: Advisory Council on the basis of U.S. Pharmacopeia Convention (2002)

4.2 Strategies for preventing adverse events and errors

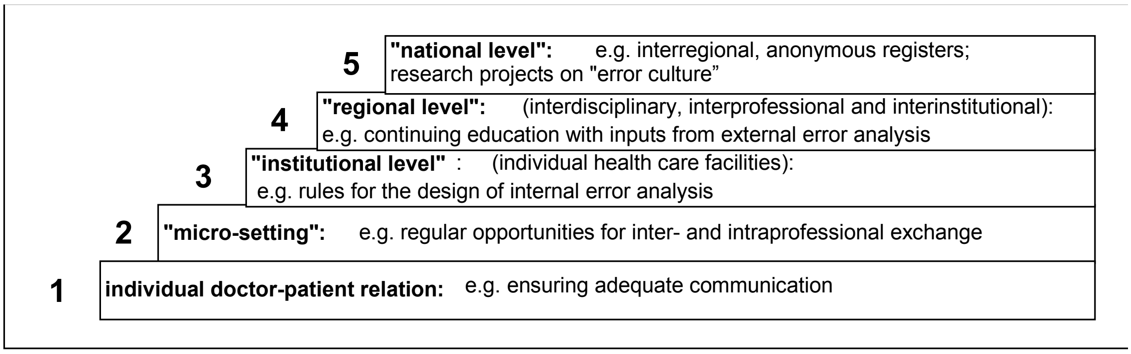
102. Industry has long concerned itself with the exploration of the causes of errors and the development of prevention strategies. The most important principle is the recognition of the fact that effective prevention must start at the roots of the causes during the planning and implementation phases. In the airline industry, which in some respects can serve as a model for medicine, the potential for error is included as part of the system planning process. This includes planning for buffers, redundancies, the broad automatization of tasks, procedures based on check lists, the regular certification of pilots and crew resource management. In addition, pilots and air traffic controllers are required to report disturbances as well as dangerous events and situations promptly, and are guaranteed freedom from sanction. Reporting systems that include so-called near accidents that did not result in damages but, with respect to their occurrence and the reactions of the persons involved, are tantamount to actual errors, make an important contribution to the analysis of the causes of errors.

A considerable amount of effort for the prevention of treatment errors and damages has been made in the areas of anesthesia and intensive care. This includes technical solutions (e.g. improved monitoring, different types of connections for anesthetic gas), the introduction of simulation programs, the establishment of standards and guidelines as well as the systematic investigation of undesired events.

103. Wide-ranging activities aimed at the reduction of errors and damages in medicine as well as at the improvement of patient safety have been initiated in different countries over the past years. Examples include the recommendations of the American Institute of Medicine and the Australian National Advisory Group on Safety and Quality or the British initiative "Building a safer NHS for patients". Comparable nation-wide programs are lacking in Germany, although some measures can be seen as a step in the right direction (e.g. certification and accreditation procedures, measures for external and internal quality assurance, the creation of cancer registries and competence networks).

104. In order to establish a new awareness for medical errors and a preventive management, action will have to be taken on several levels (Figure 3). Only a comprehensive approach will be adequate to deal with the often complex genesis of errors and the aim of improving patient safety, given the complexity of the health care system. The objective is to make the features of patient safety integral components of health care processes. All actors in the health care system must be encouraged to assume a new outlook on medical errors. Among other things, this implies refraining from the punishment of individual healthcare providers.

Figure 3: **Levels of an open "error culture"**



Source: Advisory Council

105. If a new form for the communication of information on errors is to be successful, it's necessary to rethink the design of the daily routine of doctors and other healthcare professions in hospitals and private practices. Medical practice is characterized by isolated actions on patients that are often disturbed by time constraints or diversions. The communication of errors, however, requires a working style that allows a doctor to reflect on patients and his/her own actions, including contacts with the sick and, in some cases, their families, and to engage in an open exchange with colleagues on such issues. The same applies to the exchange of information and referral processes to other professionals in the health care system (e.g. nursing referral, nursing or case conferences).

106. Communication deficits at internal and external interfaces in the health care system are among the most common causes of medical errors. Deficits in interdisciplinary cooperation among doctors as well as the interprofessional cooperation of nurses and doctors are particularly prominent in inpatient settings. Barriers between the professions that leave no room for productive exchange promote errors and must be avoided in the interest of patients. Mutual recognition and the creation of communication opportunities and responsibilities are necessary conditions for the establishment of the new "error culture" in health care.

107. In order to enable the candid handling of errors, senior professionals must be conscious of their role as models for others. The style of contact of senior professionals with patients, the errors that occur and the persons who are involved in such errors have a decisive influence on the attitudes and behavior of employees. At present, there is no legitimate place or a protected forum for the candid discussion of medical errors, free of sanctions. Such an exchange could take place, for example, within the framework of structured and, when necessary, interdisciplinary and interprofessional case discussions when there are unexpected fatalities or treatment processes that result in complications.

108. The identification of the sources of errors and typical constellations of determinants requires the disclosure of all available information. The Council holds as necessary the systematic analysis of errors "registered" both by courts of law as well as by professional expertise. This would require the disclosure of the respective data of liability insurers. The objective of this compilation of data is to inform those who were directly involved as well as to disseminate the perceptions for educational purposes on a broad basis ("learning from the mistakes of others"). At present, some reviewers and arbitration boards occasionally publish pertinent casuistics. However, a systematic interregional assessment of the cases occurs only in isolated instances. Medical expertises from court proceedings are not evaluated. The Council therefore believes that the centralized collection and analysis of the medical expertises (for courts and arbitration boards) and the decisions that are based on them to be a prudent measure. A data base that provides access to expertises that have been made anonymous can contribute to quality assurance, standardization and the transparency of expertises and decisions.

109. There is at the same time a need for the establishment of reporting systems for (near) errors (see Table 4). The design of internal and external registries, parts of which would be publicly accessible, parts of which would remain confidential, is an important step toward improving data on medical errors and the analysis of errors at different levels of the health care system. It also increases transparency. The recording of errors and their processing must be an integral component of health services research.

Table 4: **Characteristics of effective reporting systems for (near) medical errors**

1. *Autonomy:* Data collection and analysis are independent of control and supervisory functions that take disciplinary action.
2. *Basic attitude:* React with gratitude and not censure to those who report errors.
3. *Near errors:* Collection of reports on errors as well as near errors.
4. *Feedback:* Rapid, useful, easily understandable and easily accessible feedback to persons or facilities that report errors.
5. *Accessibility:* Reporting procedures must be uncomplicated.
6. *Confidentiality:* Opportunities for confidential or anonymous reporting.
7. *Internal reporting:* Standardized reporting system within health care facilities and organizations.
8. *Commitment:* Obligatory reporting systems.
9. *Consensus:* Unanimity with respect to important determinants of errors and their prevention.

Source: Advisory Council, based on the Department of Health (2000)

110. The overburdening of healthcare providers through the continuous increase of administrative and documentation tasks must be avoided through the time-saving "intelligent" design of quality and error management. Quality management measures should not be perceived as a bothersome, time-consuming duty that has no consequences, but as a permanent issue with the aim of identifying and preventing errors. Doctors, nurses and other professionals involved in the provision of health care must be allowed sufficient time and energy for their real task: the care of patients.

111. The damages that patients suffer due to medical errors also shed light on continuing education. The latter is all the more effective, the less it is removed from the daily provision of care and the closer it is linked to practical casuistics and, ideally, cases described by the participating doctors. The knowledge gained from the systematic analysis of errors must be integrated in the curricula of schooling, training and continuing education.

112. The Council therefore believes that it is appropriate to initiate a national process for consensus and cooperation involving all relevant actors in the German health care system as a means for creating the conditions for the improved management of medical errors. Proceeding from the issues discussed above, a consensus should be striven for with respect to the following points:

1. The definition of adverse events and errors.
2. The derivation of suitable parameters for recognizing errors ("errors as a self-evident outcome variable with teaching character").
3. Standard reporting and analysis procedures.
4. Creation and expansion of registry networks (including the data of liability insurers and of court proceeding and other legal proceedings).
5. Freedom from sanction for (self) reports submitted to liability insurers; questions of other freedom from other financial, civil and criminal liability for (self) reports.
6. Legal specifications on the regulation of access to registries (confidentiality versus openness).
7. Feedback of the results of the systematic analysis of the causes of errors to those involved (including the regular use of the analyses in schooling, training and continuing education) and the creation of reliable sources of information for professionals and lay people (transparency).
8. Evaluation of existing quality management measures in regard to their suitability for prospective error management.
9. Coordination and integration of quality assurance and error management measures and the establishment of the institutions needed for this purpose or the expansion of the responsibilities of existing facilities.
10. Promotion of coordinated research into medical errors (as an element of practice-oriented health services research).
11. Error-avoidance as an element in the design of working conditions and structures in the health care system.
12. Other measures that appear appropriate for the creation of a professional and public culture that is aimed at the prevention of errors in the German health care system

(including internal and inter-institutional opportunities for the exchange of information).

4.3 Improving complaints management and the adjustment of claims

113. The avoidance of risks and errors in medicine has priority over the compensation of the victims after the fact. However, since it is impossible to avoid all errors and medical practice is generally not immediately explicable to laypersons, it is the task of medicine to provide patients and their families with adequate opportunities for the collection of information, the filing of complaints, the request of reports and the compensation of damages. This calls for the appropriate information and communication channels in order to avoid misunderstandings and conflict. Adequate information and open communication on potential risks serve to build trust.

114. Information, transparency and participation are the pre-conditions for the patient-oriented, effective and efficient design of the health care system. Patients can provide important insights into weaknesses of the health care system through their complaints. Complaints should therefore not be viewed as bothersome attacks that must be fended off but as positive inputs with the potential for improving the health care system. Qualified information, counseling services and complaint management systems should be made available to users. The appropriate facilities or a functional complaint management system should be created on a nationwide basis and their long-term finance ensured. The beginnings for such approaches are being made with the promotion of patient counseling offices in accordance with § 65b of the German Social Code, Book V (see Chapter 3.3.1 and 3.3.2). Models such as the Independent Patient Counseling Office in Bremen and the counseling services of consumer associations should be developed further into counseling offices that have the joint support of all actors or are based on the close cooperation of all participants.

115. The behavior of doctors and other healthcare professionals should demonstrate to patients and their families that they take their concerns seriously. An appropriate handling of the questions and anxieties of patients can often prevent the loss of trust and legal proceedings even in the presence of medical errors and damages. However, this requires personal integrity, a capability for self-criticism, empathy and communication skills. The development of these skills should be promoted through education, training and continuing education.

116. The establishment of a standard complaints management system should guarantee that the procedures are sufficiently well-known, transparent and easily accessible. The timely processing, referral and reaction to complaints must be ensured. Patients seeking advice and support must be able to rely on the autonomy and impartiality of advisors, arbitrators and experts. In a multi-stage system of complaint management that is aimed at reconciliation and de-escalation, joint discussions involving all concerned and guided by a neutral mediator should be the primary form for dealing with complaints. Only when this process does not lead to a resolution should a settlement be sought through a consistent and binding out-of-court procedure before the expert commissions and arbitration boards of the medical associations.

117. Based on the out-of-court decisions of the experts, liability insurers should provide compensation quickly and without bureaucracy. The general conditions for liability insurance must be modified so that the liability insurers can provide more constructive input into the improvement of patient safety and the regulation of damages than has been the case in the past. They should provide their active support to the creation of effective complaint management in the health care system and cooperate with patient counseling facilities.

118. According to § 66 of the German Social Code, Book V, the SHI funds can support the insured in their claims for compensation. They are supposed to proceed according to consistent transparent criteria that provide qualified information on all possibilities open to those seeking counsel and, in the case that a medical review board of the SHI funds is called on to compile an expertise, on the limits of this approach. The quality of the expertise must be ensured. Furthermore, the review process must be evaluated and the results published. SHI funds should provide constructive support to the development of complaint management, the arbitration processes and the research of errors in the provision of health care.

119. In order to enhance the position of users, participatory elements should be implemented on as many levels of the procedures for the identification of errors and the adjustment of damages as possible. This should above all include the participation of patient representatives in the governing boards of the expert commissions and arbitration boards of the medical profession.

120. The work of expert commissions and arbitration boards is viewed positively by the Council. However, the procedures should be standardized in order to increase transparency for patients, allow them more opportunities for active participation and to avoid regional inequities. It is also necessary to ensure the neutrality of the board, the quality of the expertise and the "equal footing" of the parties involved. The responsible state medical associations are called on to quickly standardize the procedures of the arbitration boards and to implement the recommendations of the German Medical Association. This also applies to the participation of patients and optional oral proceedings. Furthermore, the merger of smaller arbitration boards with the expert commissions of neighboring regions appears sensible.

121. The recent reform of liability law, which lessened the burden of proof for suspected damages due to pharmaceuticals and expanded patients' rights to information, is viewed positively by the Advisory Council. Despite the lawmakers' doubts with respect to no-fault liability, the Council believes it is worth investigating whether such regulations can be introduced into medical liability law (see Report 2000/2001, Volume I, Paragraph 413). The adjustment of damages could be facilitated if there were no need to identify a single culprit of proven damages from treatment and thus offset the disadvantage of a possible reduction in the compensation of patients. The largely formal objections to such an approach must be weighed against the basic principle of focusing on the interests of patients.

Volume II: Quality and the Health Care Infrastructure

5. Securing Quality in Prevention and Rehabilitation

5.1 Quality in Prevention

5.1.1 Health promotion in schools

122. Health promotion aims at healthy lifestyles and living conditions, at augmenting individual health resources such as self-esteem and self-awareness, at building personal competence and at social support. An acquisition of proficiencies and knowledge that go beyond health concerns in the strict sense as well as improved earning and living opportunities can contribute to the promotion of health. Health promotion and educational opportunities are thus closely related.

123. Children and youth are a main target group for health promotion strategies and primary prevention. The course of many diseases is affected by aspects of individual behavior and lifestyle that are rooted in childhood and adolescence.

124. Institutions that are used by a part or all of a target group on a long-term and continuous basis – in the case of children primarily pre-schools and grade schools – offer ideal starting points for health promotion and primary prevention programs. According to the setting approach, institutions serve not only as an access path for information, counsel and support but also undergo organizational development.

125. Health promotion in the sense of organizational development calls for the participation of the members of the organization; in the school setting this would be pupils, parents and teaching staff. As individual schools tend to have different problems, priorities in organizational development should be determined by these groups.

126. Experience with the concepts and instruments of health promotion in other settings can also be used for health promotion in schools. Sickness funds or the institutions they commission can exploit their experience in the implementation and evaluation of workplace health promotion activities.

127. The implementation of health promotion in accordance with § 20 of the German Social Code, Book V has proceeded slowly. The Council recommends that SHI funds intensify their activities in the school setting. Health promotion projects should be provided on a broad basis through the integration of other actors, so that interventions are possible without the permanent support of sickness funds.

128. Certain risk factors and health threats are more prevalent in less privileged social strata and groups. Since the chances for increasing competence and personal development are particularly significant in this target group, health promoting schools can contribute to equity in health.

129. From a health policy perspective, the debate on education policy stimulated by the results of the PISA study should not be reduced to pupils' cognitive abilities, the value of which remains undisputed. The professional discussion of health promotion in schools as well as the educational policy discussion on the future development of schools indicate that the objectives and measures of health promotion can be joined harmoniously with educational policy issues. However, from the health policy perspective there is the risk that health promotion in the school setting will not be advanced with the needed energy if these topics are not integrated in current educational programs. The Council recommends the close coordination of political activities at the interface of health policy and educational policy. The Council recommends further that health promotion criteria and strategies be considered in the framework of the planned program for promoting full-day schooling and that financial support be linked to evidence of such activities.

5.1.2 Prevention and the role of nursing

130. Nurses make up the largest professional group of health care providers. Together with doctors, they have the potentially broadest contact with patients and their families. This potential must be better utilized in the future for prevention and health promotion. Such a position corresponds to the modern professional image of nursing. Today, nursing is defined as a holistic, patient-oriented service with the overarching aim of maintaining the clients' autonomy, restoring it to the greatest extent possible or enabling patients and those in need of long-term care to participate in the disease management process. However, it should not be forgotten that the conflict between the traditional categorization of nursing and the actual need for preventive nursing services has not yet been resolved.

131. The increased integration of nursing in the provision of preventive care and health promotion offers chances for improving the quality of life of the sick and those in need of support. Empirical studies show that targeted prevention measures can avert, postpone or alleviate the need for long-term care. To make better use of the preventive resources that are present in the nursing profession, basic health policy decisions are necessary. The Council sees these in the development of the legal and structural conditions and the professionalization of nursing itself.

132. A number of different laws require preventive measures by the nursing profession without integrating the corresponding modules in the fee schedules that healthcare providers use as a basis for accounting in the provision of preventive services. The Council recommends the initiation of a more comprehensive law on nursing that combines preventive services with stronger incentives.

133. Health care in Germany is characterized by a considerable degree of fragmentation. Medical, social and nursing facilities are not well integrated. There is a lack of coordination to ensure the consistency of services. Local approaches to health care are an appropriate instrument for overcoming these deficits and increasing the focus of services on prevention. The Council recommends that the nursing profession be granted a role that corresponds to its qualifications. This implies that prevention must also be given more consideration in the design of new educational concepts for the nursing profession.

134. Policy makers wish to make prevention a separate pillar in the German health care system, next to therapy and rehabilitation. The idea of expanding the German Social Code by adding a twelfth book is one possible way for increasing prevention. In this context the Council recommends the increased focus on the preventive potential in the nursing profession.

135. In the future, prevention and health promotion must be more clearly communicated as central components of nursing. For example, studies must provide more evidence of the preventive potential of nursing. Furthermore, it will be necessary to review the effectiveness of models and approaches in other countries and the conditions for transposing international experiences into the German health care system. Nursing research will play a central role in this context. The Council recommends that research policy provide more support to these areas of nursing research.

5.2 Quality in rehabilitation

136. In its 2000/2001 report, the Council identified a large degree of underuse in the various outpatient and inpatient forms of rehabilitation. Especially in the care of persons with chronic diseases and disabilities, rehabilitation opens opportunities for comprehensive, multi-dimensional care. The Council therefore believes that efforts must be taken to use this potential. With the summary and update of all of rehabilitation law in Book IX of the German Social Code, lawmakers have already taken an important step in this direction. However, the Council sees deficits in the implementation of the law, so that the necessity remains to ensure

- the participation of those involved,
- the improved and individualized access to services,
- the coordination of providers,
- a comprehensive (and outcomes-oriented) quality assurance and
- appropriate contractual relations with health care providers.

5.2.1 Quality assurance in medical rehabilitation on the basis of appropriate remuneration systems

Quality considerations in medical rehabilitation

137. Current health policy trends such as the introduction of Diagnosis Related Groups (DRG) in the hospital sector and the planned Disease Management Programs (DMP) pose new challenges for the rehabilitation sector. The chances that the integration of rehabilitation in DMPs for the chronically ill offers was not adequately exploited in the past (see Chapter 6.2). DMPs are usually only seen as an element of outpatient care processes. An involvement of pension insurance schemes is so far not intended. This approach will perpetuate segmentation in the treatment of the chronically ill instead of putting the patient at the center of health care processes, an aim that has often been proclaimed by health policy makers. The Council therefore calls for the integration of rehabilitation and rehabilitation concepts in the development of DMPs.

138. In addition to its direct effects on acute care hospitals, the introduction of case-related fees (DRG) in the hospital sector beginning in 2003 will have repercussions in downstream areas of health care. Experience in other countries has shown that hospital expenditures may be reduced, but that overall health care expenditures do not decrease. Based on the introduction of DRGs and demographic trends, forecasts indicate a clear increase in the need for rehabilitation services. However, these must have sufficient funding in order to avoid shortfalls in the provision of rehabilitation services, especially for the chronically ill and the disabled. In view of the rather pessimistic economic forecasts for the coming years, it is likely that renewed efforts for cost-containment will supersede the issues of quality in the area of rehabilitation.

139. The DRG-induced reduction in hospital length of stay offers patients with the opportunity to benefit from the timely provision of medical rehabilitation. On the other hand, case-related payment of hospitals creates an incentive to release patients prematurely. This must be countered by uniform and binding rules that target the quality of outcomes and by the transparent documentation of quality (see Chapter 3.3).

140. In this context, the Council would like to point to the special needs of persons with serious physical, psychological or mental handicaps who are also acutely or chronically ill. The treatment needs of these patients can not usually be reflected in the calculation of DRGs. In the view of the Council, special regulations should be introduced for the remuneration of hospital services provided to these patients.

141. Since DRGs provide acute care hospitals with incentives to release patients before they are in a condition suitable for rehabilitative care, the average severity of cases in the rehabilitation sector is likely to increase. To a growing extent, rehabilitation facilities will therefore have to provide acute inpatient services. If the current regulations on the duration of rehabilitation remain unchanged, this would have negative effects on the actual rehabilitation of patients. Furthermore, it would be necessary to ensure the qualification of doctors and nurses in rehabilitation facilities with respect to the provision of acute care, to maintain the appropriate ratio of patients to hospital staff and to ensure the availability of medical equipment.

142. The assumption of certain acute care tasks by rehabilitation facilities should not be prohibited in principle, but it must be congruent with the objectives defined in Book IX of the German Social Code (Law on Rehabilitation and the Integration of the Disabled). According to the law, the first hospital providing care is responsible for all acute care, including early rehabilitation (§ 39, para. 1, German Social Code, Book V). Due to the fact that the existing capacity to provide early rehabilitation is rather insufficient, it is questionable whether adequate consideration has been given to early rehabilitation in the calculation of German DRGs. Early rehabilitation is not covered by DRGs in other countries that use this form of hospital finance. Since the determination and introduction of special prospective payments for early rehabilitation can not be realized over the short term, special payments should be introduced for at least an interim period, similar to the regulations that apply in Australia. These could include, for example, "surcharges" in the form of per diem payments. To avoid the tendency for an extension of the length of stay, the payment of such "surcharges" should be linked to certain requirements with respect to the structural and process quality and to the review of services.

143. The introduction of case-related payments in the hospital sector also provides an incentive to assign acute-care beds that have been made superfluous to the provision of rehabilitation services. This would lead to the creation of additional capacities for inpatient medical rehabilitation and thus tend to bring about an excess supply in this area. Such trends must be followed closely. The rehabilitation insurers are therefore called upon to ensure the strict observance of quality characteristics in the conclusion of contracts with rehabilitation facilities that are associated with acute care hospitals (in accordance with § 111 of the German Social Code, Book V, § 15, paragraph 2 of the German Social Code, Book VI and § 21 of the German Social Code, Book IX). If the quality of these facilities has been assured, it will be necessary to terminate contracts with those facilities that do not provide adequate rehabilitation services (§ 21, para. 3 German Social Code, Book IX) in order to avoid excess supply. To ensure that competition is oriented towards quality and that rehabilitation insurers do not "dictate" prices on the basis of their stronger position, it would be necessary to implement general reimbursement regulations for all facilities (see below).

144. The expected effects of the DRG system on discharge policies of hospitals will also exacerbate the existing lack of sufficient capacity in the area of ambulatory rehabilitation. Rehabilitation law does give priority to ambulatory rehabilitation over inpatient rehabilitation under certain conditions. However, there are no appropriate and unambiguous benefit regulations for implementing such measures, especially in the SHI system. Diverging views within SHI self-governing bodies, which, according to § 73 of the German Social Code, Book V are supposed to specify the extent to which preventive medicine and rehabilitation are to be the responsibility of office-based doctors, show the necessity of such regulations. They should include the conceptual clarification and legal delineation between curative ambulatory care (especially with respect to the prescription of physical therapy and medical aids) and ambulatory rehabilitation (see Report 2000/2001, Volume III, Chapter 7).

The remuneration of medical rehabilitation

145. In addition to "exogenous" factors that affect the quality of rehabilitation, there are also incentives for quality within the rehabilitation sector, especially those based on fee regulations. Reforms of the reimbursement system in medical rehabilitation, which are also called for in the course of the introduction of DRGs, must therefore be designed to absorb the effects of exogenous factors – such as the DRG system in the hospital sector – and to avoid other incentives within the rehabilitation sector that could lead to a reduction in quality.

The standards and experience from the acute care sector cannot simply be transposed to the rehabilitation sector, because there are different objectives, requirements and treatment processes in each sector. Instead, consideration of the objectives, target groups, legal requirements and the desired effects of rehabilitation must be used as the basis for the appropriate reimbursement of rehabilitation services.

146. The payment of inpatient rehabilitation has been based on provider-specific per diem fees that cover the full costs of rehabilitation facilities. The management of referrals and the legally defined limits on the maximum length of rehabilitation counteract the inherent incentives to increase the number of cases and the length of stay. Incentives to provide less care than necessary is offset by means of quality assurance and quality management measures. However, a general system of quality assurance has not yet been established, especially in the SHI system. The joint agreements on quality in accordance with § 20 of the German Social Code, Book IX must be implemented as soon as possible.

147. The demand for the remuneration of medical rehabilitation on the basis of case-related fees that do not depend on the length of stay, which was put forth by some parties in the discussion surrounding the introduction of DRGs in the hospital sector, is not supported by the Council. An increase in the efficiency of rehabilitation services can not be attained through the general reduction in the length of stay that is usually associated with flat-rate payments. Due to the lack of widespread quality assurance systems, such measures could lead to a (further) deterioration of quality. These could be even more serious in the rehabilitation sector than in acute-care hospitals, since resource utilization in rehabilitation does not necessarily decrease during the course of treatment but is often spread more evenly over the length of stay than in acute care. The premature discharge of a patient from inpatient medical rehabilitation also poses problems due to the lack of sufficient ambulatory rehabilitation facilities. As a result, either the treatment objective will be unattainable or unsustainable or, in extreme cases, long-term care will become necessary.

The argument that flat rate payments in rehabilitation would make it possible to use "complex fees" (*Komplexpauschalen*) to pay for the services of acute care hospitals and the following rehabilitation services, disregards the potential negative effects on rehabilitation. Since acute-care hospitals have the power to define when rehabilitation begins, fee complexes would result primarily in the strengthening of the financial position of acute care and to a weakening of the position and quality of rehabilitation.

Even if the (maximum and minimum) limits on length of stay counteract such tendencies, acute-care hospitals that have transformed their "excess" acute-care beds into "rehabilitation beds" (see above) still have an incentive to select patients. "Simple" rehabilitation cases may remain in their facility while the "serious" cases, some of which may still require acute care, are transferred to rehabilitation facilities that in some cases do not have the adequate equipment and staffing for the provision of acute care at their disposal. Case-related payments and "complex fees" could thus result in a further deterioration of quality in the rehabilitation sector.

148. The Council therefore views generally applicable (not provider-specific) per diem rates for homogenous case groups (in respect to the need for rehabilitation) as a better alternative than a case-based remuneration system that is invariable with respect to the duration of treatment. The Council is aware that an adequate system for the classification of patients must first be developed and adjusted, since the applicability and practicality of nationally and internationally proven classifications have not yet been tried in Germany's medical rehabilitation system.

The inherent incentive for prolonging the length of stay must be countered with appropriate measures. Undifferentiated, legally mandated limits on the duration of rehabilitation benefits are inappropriate. The Council views the flexible management of individual length of stay within certain limits as more appropriate.

149. The Council also recommends pilot projects on outcome-oriented forms of remuneration in the rehabilitation sector, in which the medical added value of rehabilitation services are reflected in bonus-malus payments based on empirical indices.

5.2.2 Rehabilitation in the context of long-term care

150. More attention must be paid to rehabilitation in the context of long-term care as defined in the German Social Code, Book XI. The simplistic view of the need for long-term care as a state of irreversible helplessness has resulted in the relative downgrading of and disregard for rehabilitative measures as part of long-term care both within the health care professions as well as at system level. The reasons include the unsatisfactory treatment of the topics of "activating" and "rehabilitative" long-term care in the curricula of nurses and geriatric nurses as well as the qualifications of family doctors, who are not always adequately experienced in geriatrics and rehabilitation.

At the same time, a lack of clear regulations in social law and the incentives inherent to the system lead to the unsatisfactory implementation of rehabilitation as part of nursing care. Regulatory deficits include in particular the non-recognition of the long-term care insurance funds as third-party payers in the rehabilitation sector, even though these organizations are above all interested in reducing the extent of need of their beneficiaries and avoiding that insured members and beneficiaries become more dependent on care and thus require more support. Other social insurers don't have such an interest or it is less pronounced. In particular SHI funds, which are the most important payers for the rehabilitation of persons in need of long-term care, have been relatively inactive in this area. Due to weak financial incentives, including the virtually complete non-inclusion of rehabilitation expenditures in the risk structure compensation scheme (*Risikostrukturausgleich*), this is not surprising.

Furthermore, some providers and recipients of long-term care have little interest in rehabilitation. Such measures may indeed improve the capacity for self-help and the independence of patients and, by increasing the self-sufficiency of patients, reduce their dependence on the help of family members and healthcare professionals. However, the added quality of life may be associated with financial losses – including those on the part of healthcare providers – that result from the reclassification in lower care levels.

151. This broad spectrum of causes for the deficient implementation of rehabilitation in long-term care can not be tackled using a single measure. Strategies must be developed in the context of education and training, in the context of nursing and health services research and in particular with respect to social law and the benefit catalogues of social insurers.

152. The new rules on the education and training for the nursing profession represent a first step toward the promotion of rehabilitation in the provision of long-term care. The new national law on the care of the elderly is unsatisfactory in comparison. There is still a need for improvement with respect to the role of rehabilitation in the care of the elderly. The training curriculum of general practitioners should put more emphasis on diagnosis and therapy in geriatrics and in particular on geriatric rehabilitation. Nursing research should also be intensified with the aim of providing (more) evidence on the preventive and rehabilitative potential of "nursing" and thus ensuring that rehabilitation is seen not only as a "medical" benefit for patients who do not need long-term care. Adequate cooperation among nurses and physical therapists, ergonomic therapists, speech therapists and other healthcare professionals involved in rehabilitation as well as family members should be a topic in education, training and research.

153. To give healthcare providers stronger incentives to include rehabilitation in long-term care, the Council believes that two short-term measures should be introduced:

- the general inclusion of SHI expenditures on rehabilitation in the risk structure compensation scheme and/or
- the creation of an "introductory" budget in the long-term care insurance scheme for the medical rehabilitation of long-term care patients. To avoid misleading incentives at the cost of the SHI system, this budget should be financed on a fifty-fifty basis by the SHI funds and by the long-term care insurance system. This would be a first step toward the integration of long-term care insurance in the group of the third-party payers of rehabilitation benefits.

Furthermore, in the long run, consideration should be given to the complete integration of long-term care insurance in the group of the third-party payers of rehabilitation according to the German Social Code, Book IX. Another alternative would be to integrate long-term care insurance with the health insurance system. However, since such reform steps do not automatically lead to an improvement of rehabilitation as an element of long-term care, further measures would be necessary. In particular, these include – independent of the alternative chosen – a change of benefit regulations that would make the provision of rehabilitation benefits subject not solely to the judgement of the third-party payer, but would redefine them as "standard benefits" that could be subject to evaluation by the Medical Review Board of social health insurers.

154. In order to increase the motivation of healthcare providers for rehabilitation in long-term care, special fees for the provision of rehabilitation services could be introduced as an interim measure until an incentive compatible system for the remuneration of health care providers, and in particular for inpatient facilities, is in place. This could be financed on the basis of the budget described above and funded jointly by SHI funds and long-term care insurance funds.

The interest of beneficiaries in rehabilitation services could be increased by allowing the long-term care benefits to be granted on a provisional basis if the first assessment conducted by the Medical Review Board reveals a rehabilitation potential. This would make it possible to grant benefits for a period that is less than six months and for the duration of ambulatory rehabilitation measures that are usually provided close to home. This would ensure that adequate nursing care is also provided during this period. Furthermore, for persons who already receive benefits of the long-term care insurance system, successful rehabilitation measures should not necessarily lead to the short-term review of the care level and re-classification of the patient in a lower care category. It is at least necessary to evaluate the stability of a patient's increased independence over an extended period of time and not re-classify the patient until this period is finished.

155. The most important reform alternatives for promoting rehabilitation in long-term care include the creation of uniform rules for ambulatory rehabilitation – i.e. a legal framework that applies to all third-party payers of rehabilitation – as a means for supporting the formation and expansion of ambulatory rehabilitation facilities (see also Report 2000/2001, Volume III.1, paragraphs 352 ff.). In addition, efficient forms of cooperation between nursing and rehabilitation facilities should be developed and provided with financial support. This could help offset the deficiencies in the care of long-term care patients in nursing homes that are due to shortages with respect to the number and qualification of personnel.

6. Development of the Health Care Infrastructure

6.1 Opportunities, hurdles and limits of integrated care

6.1.1 Aims and approaches of integrated care

156. Integrated care is instrumental in enhancing the efficiency and effectiveness of the German health care system. As already discussed by the Council in the earlier reports on the appropriateness and efficiency of health care, the German health care system has a considerable potential for increased efficiency, in particular with respect to the improved cooperation and coordination among the different sectors of the health care system. These include quality deficits as well as underutilized opportunities for reducing costs. The Council has repeatedly called for new forms of health care that are more flexible and which integrate the services of different sectors and has pointed to the appropriate alternatives; e.g. for the outpatient and inpatient sectors and for the provision of oncological treatment and care (Special report 1994, paragraph 568, Special Report 1995, paragraphs 235 ff., 265 ff., 290).

6.1.2 Existing barriers to utilization and successful implementation

157. The framework agreement on integrated care allows SHI funds or their associations to join integrated care networks "at the beginning of the third year of an agreement". The chance that competitors may join a new integrated care model two years after an agreement is concluded and without the consent of the innovators, is tantamount to the introduction of a short "patent term" and will hinder innovation. The new parties to an agreement must carry their share of the costs for establishing the network but, in relation to the innovators, bear considerably less risk. If, for example, an SHI fund tests five new concepts for integrated care of which two are successful, it pays for the unsuccessful projects in full yet must share the fruit of the promising projects with other SHI funds and/or their associations. Under such conditions it is apparent that SHI funds will shy away from innovative involvement and instead try to assume the role of the "free rider". Finally, the right of third parties to partake in the integrated care agreements gives rise to considerable legal problems. The German Ministry for Health has stated that it holds the right of SHI funds to join agreements at a later date as illegal.

The complicated and convoluted legal construct of integrated care and corresponding framework agreements do not make the creation of integrated care networks appear inviting. It can therefore be expected that DMPs will more likely be based on current regulations for pilot projects, even though these are not part of "standard care".

158. One paragraph (§ 13, paragraph 3) of the framework agreement on integrated care in accordance with § 140 d of the German Social Code, Book V has also led to some dissent. Under this clause, the Association of Office-Based Doctors "can become party to an agreement only after the contract has been in effect for three years, unless the parties to the contract ... specify an earlier date". Like the right of SHI funds to become party to an agreement after it has been concluded, the German Ministry for Health also holds the enrolment of an association of office-based doctors in a closed contract on integrated care as illegal. According to the view of the Ministry, which is shared by the Council, the membership options represent a grave infringement on the contractual relations and thus contradicts the contractual freedom of the contracting parties.

159. Despite an often considerable commitment of initiators of integrated care concepts, some doctors are joining networks primarily in order not to miss out on new earning opportunities. As a result, a considerable share of doctors in networks have not met their contractual requirements or done so only to an insufficient extent, as the lack of active participation in quality circles demonstrates. This trend has been proportionate to the size of integrated care networks. Furthermore, even though the insured have agreed to consult only doctors within an integrated care network, some have shown a lack of network loyalty. As a result, in some cases the utilization of doctors outside of networks outweighed that of network doctors. It is apparent that integrated care models can be neither medically nor economically successful if the majority of doctor-patient contacts occur outside of a network. In this respect, the fact that, in contrast to managed care models in the USA and Switzerland, the contracting parties refrained from the use of financial sanctions on patients who seek services outside of the network without necessity has proven to be a deficiency of the system.

6.1.3 Recommendations

160. The Council recommends

- removal of false incentives described above and of superfluous stipulations from legal requirements on integrated care. This applies in particular to framework agreements as well as to other legal areas. Hospitals should, in the framework of integrated care, be able to provide contracted services on an outpatient basis and, if they are properly qualified, also in the area of rehabilitation and long-term care.
- providing users with incentives in the choice of integrated care. To avoid risk selection, incentives for users, health insurers and healthcare providers should be introduced concurrent with a morbidity-based risk structure compensation scheme that also serves as an incentive for SHI funds to make efforts for the care of the chronically ill.
- that hurdles to market entrance for healthcare providers in integrated networks be kept as low as possible. In particular, the conclusion of contracts should not depend on healthcare providers acting as a group.
- a morbidity-based remuneration for the reduction of overuse and underuse in integrated care networks. The design of remuneration in a network can be left to the healthcare providers.
- that the choice of morbidity indices considers their effects on resource allocation – i.e. on the appropriateness of care and thus on the reduction of overuse and underuse as well as on the more efficient utilization of the given system – as well as their feasibility. In view of changing forms of remuneration and resulting changes in the structure of healthcare spending, the predictive power of morbidity indices with respect to future expenditures is indeed an important criterion, but not a single decisive factor.

6.2 Disease Management

6.2.1 Definition and assessment of the current DMP introduction process

161. Differences in care provided by different doctors – especially in the care of the chronically ill – are sometimes associated with serious consequences for patients and unnecessary resource utilization. To counter deviations from optimal care, the legal basis for the introduction of Disease Management Programs (DMPs) was introduced in § 137 f of the German Social Code, Book V.

162. A clear and unequivocal definition of disease management is to be found neither in the law nor in the international literature. In many cases, the term is used to describe a very heterogeneous array of instruments. In general, DMPs have common components such as evidence based guidelines, information systems, patient education and quality assurance measures. The objective is the management of the treatment and counseling of patients with specific ailments across professional, institutional and sectoral boundaries. Ideally, DMPs don't focus on single episodes of sickness but consider whole life phases that are characterized by health problems and include all measures of care and treatment as well as health promotion, prevention and rehabilitation. Such programs can presumably improve the quality of care and perhaps even reduce costs.

163. In addition to the overly ambitious time schedule, a problem in the implementation of DMPs has been the attempt to define treatment requirements on the basis of evidence based guidelines. Apart from the quantitative and qualitative deficits in the existing guidelines, the principal problem is that guidelines, which are based on empirical results for a whole population, must be applied to individual patients in daily practice. This requires the integration of the best currently available scientific (external) evidence with the experience of the individual doctor (internal evidence). The value of randomized, controlled clinical studies that only describe the efficacy (and, in some cases, the efficiency) of measures under artificial clinical conditions, is often overestimated. This is due in large part to the lack of health services research that analyzes the success of interventions in the actual health care context (effectiveness). A formal consensus-building procedure for the decision-making organs is especially necessary if evidence varies or if there are differences between "schools of thought".

164. In a manner that is more pronounced than in the case of the "lege artis" development of evidence-based consensual guidelines (see Report 2000/2001, Volume II, Chapter 2.4.6), divergent standpoints, interests, objectives and values are integrated in the consensus building process for DMPs. The validity of judgements of medical experts reaches limits when ethical, moral, legal, political, social and/or economic interests have to be taken into account. Procedural rules of the Coordinating Committee for the determination of requirements for DMPs should therefore be clarified.

165. The Council is critical of the fact that the current regulations implement the intersectoral concepts of disease management only on a limited basis. Neither prevention nor rehabilitation, long-term care nor inpatient care have been adequately included in the programs. The interfaces of these sectors have often been defined too vaguely or not at all. There must be increased efforts towards an intersectoral design of programs.

166. Many observers have criticized the fact that Disease Management Programs are linked to the risk structure compensation scheme of the SHI system. From a competitive standpoint virtually no SHI fund can abstain from the implementation of DMPs even though the connection of DMPs to risk structure compensation mechanisms will once again be subject to discussion as soon as the risk structure compensation scheme is based more on morbidity. However, this connection does entail some risks:

- Under the assumption that there is an undersupply of health care services for diseases that have been named for DMPs, it is possible that patients with other (chronic) diseases will be "discriminated" against until the programs are applied to all relevant indications. Other innovations can have similar effects, but they rarely affect similarly large groups of patients in such a short time span.
- Depending on the characteristics of the insured and the patients, the limited number of DMPs has asymmetrical, economic and possibly legally relevant effects on SHI funds and healthcare providers.
- As SHI funds and doctors have concurrent interests in the subscription of as many chronically ill individuals as possible in DMPs, it is necessary to take measures to counter the potential for manipulation.

The integration of DMP with risk structure compensation entails the risk that DMPs may be introduced nationwide but on a low quality level as long as no evaluation has been performed or as long as results have not been made available to patients who are interested in subscribing to DMP. Due to the effect on the contribution rate, an SHI fund that faces the alternative of conducting a limited program with a small number of highly qualified healthcare providers or a comprehensive program with all doctors, would probably choose the alternative that encompasses a large number of patients and just meets the legal requirements. The SHI fund has no interest in sanctioning doctors or patients who don't fulfil the requirements. With respect to the incentives, the combination of DMPs and risk structure compensation will probably result in less quality competition among groups of health care providers in the sense of empirically supported search processes. Quality assurance in the context of DMPs thus plays an important role. Despite justified arguments against linking DMPs with the risk structure compensation scheme, such a connection sets incentives for the introduction of new forms of care.

167. The DMPs should utilize the experience gained in regional pilot projects and the functioning structures of care that already exist. It appears reasonable and quite possible to modify existing models so that they meet the accreditation requirements for DMPs.

6.2.2 Design of a Disease Management Program

168. The provision of primary care in which the family doctor assumes the function of the disease manager, is the focus of care in disease management programs. Specialized medical professionals are used when necessary. Insured persons who fulfil the medical requirements can subscribe to a DMP voluntarily. Based on the information gained through anamnesis, physical examination and laboratory tests, a patient is classified by his doctor in one of the disease management groups.

Group 1: Target values met or outside of the risk threshold,

Group 2: At least one value lies within the defined "risk area",

Group 3: Complications / co-morbidity.

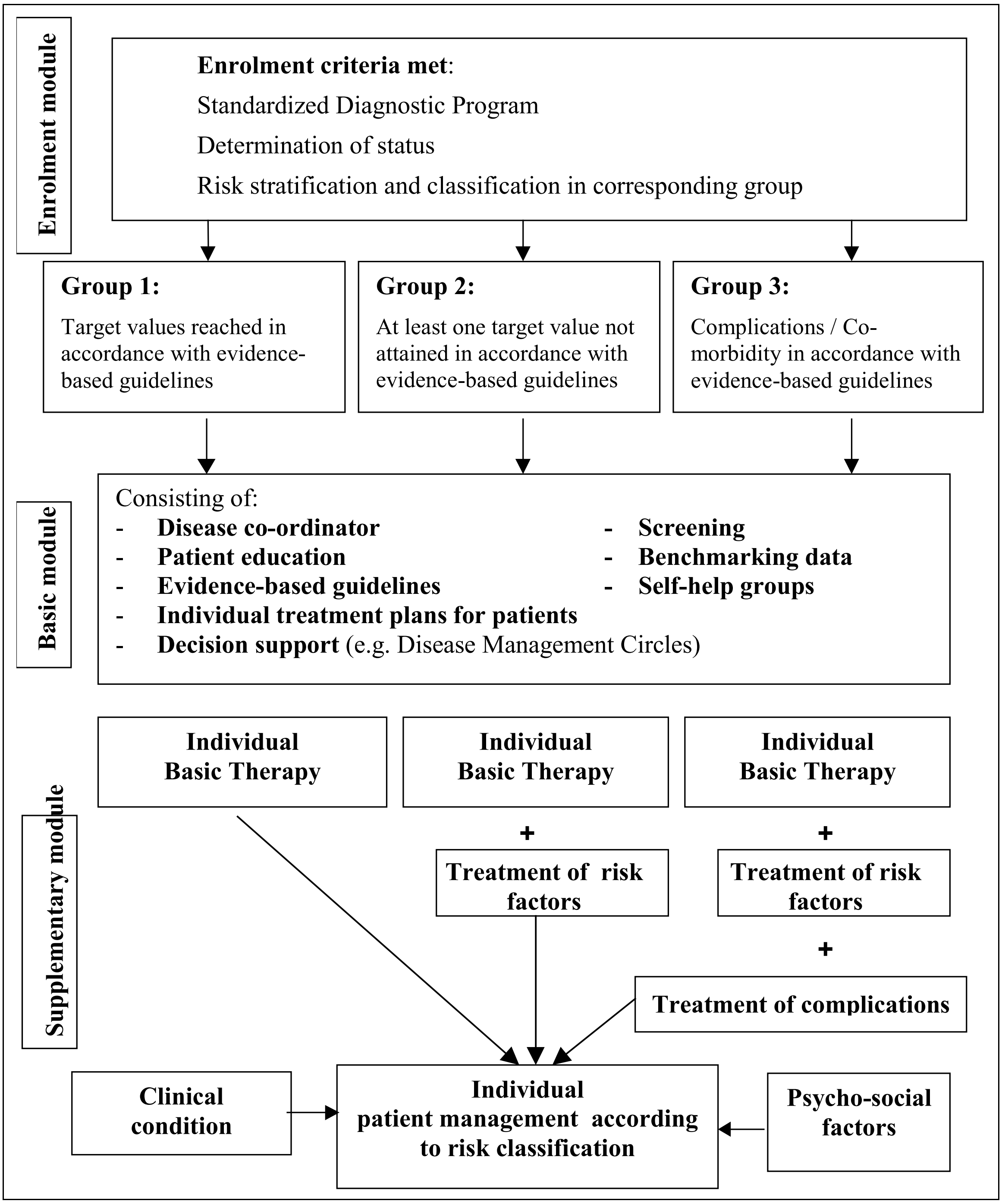
In order to accommodate the various combinations of risk factors and diseases of individual patients in one program, interchangeable modules should be used. The program includes a basic module that is characterized by a regular (e.g. quarterly) check of the risk profile and the effectiveness of the intervention.

The basic module, which is applied to all groups, includes general care components (screening according to guidelines, individual therapy plans, patient education following evidence-based schooling concepts) and supporting components (e. g. evidence-based guidelines, coordination of care and decision support when necessary, prompt quality management, self-help groups).

If a patient has risk factors that can not be modified satisfactorily with the measures of the basic module, the disease manager should initiate the interventions called for in the supplementary module for risk factors. If complications related to the underlying disease arise or are already present when the patient joins a DMP, the patient will also receive additional treatment that focuses on the complication (basic module plus "risk factor" module plus "complication therapy" module).

169. In addition to the basic module, a continuing education of doctors, information systems for patients and doctors, data bases and a precise definition of the interfaces for referrals to other health care system levels serve the implementation of evidence-based treatment protocols. Individual instruments and components of a Disease Management Program should be summarized in a convenient flow chart (see Figure 4).

Figure 4: **Flow chart of a Disease Management Program**



Source: Advisory Council

170. For clarification, the long version of this report includes a discussion of individual components of a DMP using diabetes mellitus Type 2 as an example.

6.2.3 Documentation and data processing

171. Data exchange is necessary to check whether the subscription criteria are met, for the targeted dissemination of reminders and information to patients and to ensure the adequate implementation of benchmarking and quality assurance. SHI funds do not need to receive all data in personalized form; for some tasks, pseudonymous information is sufficient. The protection of doctor-patient relationship must be given special attention. The extent of and access to documented, personalized data is subject to controversy. The documentation and management of data flows should observe the following points:

- determination of patients' risk profile, risk classification based on standardized methods,
- recording of interventions performed over time as a basis for reminders and for an analysis of quality indices,
- data collection for administrative purposes of health insurers and regional associations of office-based doctors.

Since the actors have different views on the utilization and management of data, it will be difficult to reach a general consensus. It is therefore appropriate to give this task to a neutral institution. Some of the Council members believe that the data can be transferred directly to SHI funds with the consent of doctors and patients.

172. The aggregate and pseudonymous data should be accessible to all healthcare providers involved in the care of patients, to authorized institutions with special access rights and to the patients themselves. The central administration of the data makes it possible to conduct analyses promptly. The ease of data collection and the increase of transparency can contribute to the acceptance and motivation of all participants. SHI funds have access to the registration data needed for the revenue sharing scheme as well as to pseudonymous data that is needed for the logistic support of the program. The provision of personal data to SHI funds by a neutral data center, on the other hand, requires the consent of all participants in order to prevent the creation of profiles on the insured, patients and doctors and thus reduce the threat of risk selection.

6.2.4 Quality assurance in disease management

173. In addition to quality factors, the Council believes that it is necessary to include cost-benefit considerations in the development of DMPs. Interest groups may be affected negatively if services or procedures with unproven efficacy are not included as part of DMPs for medical reasons, or when procedures with proven efficacy are not included for economic reasons. Since such conflicts can not be avoided they must be made transparent to all participants.

174. A DMP quality committee helps the participants to act in accordance with evidence-based recommendations and to apply them meaningfully. At the same time it is responsible for conducting quality assurance measures. The committee needs sufficient resources and instruments in order to take a proactive stance when quality deficits have been identified. The committee's tasks could also include the planning and implementation of training, disease management circles (quality circles) and the compilation of a manual describing the concepts behind the training, disease management circles and educational courses. Patient data as well as data from training sessions, circles and educational courses should be submitted to health services research in order to create a direct interface between practice and research and to allow research results to be quickly taken up in practice.

175. Quality assurance in the framework of DMP should be promoted through benchmarking. A benchmarking data file containing important target criteria for the defined disease must be compiled for this purpose. The targets should include variables that allow for the evaluation of structural, process and outcomes quality and especially of risk trends, the implementation of evidence-based pharmaceutical therapy and the definition of interfaces. The overall evaluation called for in § 137 f of the German Social Code, Book V is seen by the Council as an important element of quality assurance.

6.3 Competence bundling

176. In many sectors of the economy, public administration and research, the bundling of competencies, i.e. of professional know-how, specific personal, organizational and structural resources, is viewed and promoted as a promising instrument for increasing efficiency and for performing complex tasks. The aim of such activities is to improve quality and enhance efficiency through synergy effects, the reduction of interfaces in the processing of certain questions and the optimization of the market position by concentrating on areas in which the best services can be provided.

177. From the patient perspective, competence bundling in medicine is aimed primarily at the provision of high quality care. In particular in respect to complex and rare diseases, a strong interdisciplinary cooperation is necessary that focuses on the demands of adequate diagnosis and treatment including prevention, rehabilitation and long-term care as well as on the individual preferences and living conditions of patients. The positive correlation between the volume of services provided and their quality has been empirically proven for many areas of care and individual services.

178. In the area of medical research, bundling of competence is occurring as a means to promote high quality services. The interregional disease-specific competence networks funded by the German Ministry for Education and Research are not intended primarily as a means for bundling research activities. Instead they are meant to serve horizontal and vertical integration and thus expedite the transfer of knowledge from basic research to applied research, the industry and daily practice. Along with the creation of new structures, this is intended to improve care for patients.

179. In accordance with legal requirements, competence networks in medicine that are currently being established are aimed at rather common diseases (e.g. stroke, depression, dementia, inflammatory intestinal diseases) but not at the creation of a research and care infrastructure for rare diseases. The Council named a few such rare indications in which very specific medical experience and skills – bundled in competence centers – are required in its earlier reports. This includes, for example, cooperation in the field of oncology (Special Report 1995, paragraph 251ff), the interdisciplinary care of complicated progredient endocrine orbitopathy Special Report 1997, paragraph 186), growth hormone substitution (Special Report 1997, paragraphs 244ff), muscular diseases (Special Report 1997, paragraph 190) and hemophilia (Special Report 1997, paragraph 225; Addendum to the report 2000/2001, Supplement).

180. In addition to its discussion of specialized care for hemophiliacs in the Addendum to the Report 2000/2001, the Council uses the example of rare neuromuscular diseases to clarify how medical competence may be meaningfully bundled and the health care for these patients organized (model of "comprehensive care centers"). Neuromuscular disease in the strict sense are very diverse but rare. Their diagnosis and treatment requires specific experience. Self help groups demand bundling of necessary competence in neuromuscular centers in order to avoid overuse, underuse and misuse of resources. Quality assurance (structure, process and outcomes) as well as the continued existence of neuromuscular centers, however, do not appear to be secured.

181. Due to the low incidence and prevalence of these diseases, healthcare providers in "normal" office-based and hospital settings usually do not treat the minimum number of patients required for an experienced and competent treatment of such patients, for the education and training of specialists and for an efficient provision and use of special facilities, equipment and infrastructure. The treatment of rare diseases calls for close interdisciplinary interaction (e.g. in conferences) among specialists and other healthcare professionals. From both a quality and an economics perspective, a specialized and localized provision of care has advantages over a "diffuse" system of care. Efficiency can be increased by focusing the provision of care in appropriate centers as long as this leads to the reduction of unnecessary, harmful or inefficient services. In this context, the Council recommends the implementation of a structured, evidence-based, interdisciplinary consensus-building process that is aimed at the definition of diseases or phases of sickness for which the bundling of competencies has advantages for patients. The postulated competence must meet accepted quality criteria that reflect structures, processes, outcomes and the minimum number of cases. Participating facilities should be externally certified.

182. Specialized competence and special facilities are traditionally provided by university hospitals and some maximum care hospitals (e.g. in the form of specialized outpatient clinics). To the extent that such facilities provide outpatient services, they are paid – but usually not enough to cover all costs – out of budgets for office-based care. Financial shortfalls must be borne by hospitals and are covered through internal "cross-finance". Regulation is needed to ensure the long term finance of specialized facilities independently of the remuneration of office-based doctors.

6.4 Rescue services[1]

6.4.1 Rescue services and expenditures

183. Rescue service providers were deployed an estimated 10.3 million times per year in the years 2000/2001. Fifty-seven per cent of deployments fell into the category of (non-critical) patient transport. The number of emergency cases was approximately 4.4 million, or 43 per cent of all deployments. Almost half of the emergency deployments (47 %) involved the participation of an emergency doctor (Schmiedel, R. 2002). Table 5 provides an overview of trends in emergency deployments.

Trends in the number of deployments of emergency services during the 1990s differed according to the reason for deployment but were clearly subject to an overall increase. The increase shown in Table 5 was due in particular to emergency cases in internal medicine, which increased nationwide by 25 per cent between 1992/93 and 2000/01, and to "other emergencies", which include the consequences of crimes and attempted suicide, the care of helpless individuals and emergency blood and organ transports, which increased by 93 per cent. The number of "other accidents", which include accidents at home, sport accidents and accidents during leisure time, also increased by 58 percent. The number of traffic accidents, on the other hand, has decreased.

If no emergency measures are performed on-site or during transport of if sorties are interrupted, deployments are classified as unnecessary deployments (“*Fehlfahrten”*). The rate of unnecessary deployments was approximately 8 per cent during 2000/2001. In a retrospective analysis of emergency doctor deployments, approximately 30 per cent were judged as unnecessary or as not fully necessary. At least some of these deployments could have been avoided through the expansion of standby services in the office-based sector.

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[1] Rescue services in Germany (*Rettungswesen*) include emergency care (*Notfallversorgung*) and (non-critical) patient transport services (*Krankentransport*).

Table 5: **Emergency care deployments in Germany**[a)]

Time period	**(with or without participation of emergency doctors), in 1,000**					
	Traffic accidents	**Workplace accidents**	**Other accidents**	**Internal medicine**	**Other emergencies**	**Total**
1985	272	48	265	820	325	1,730
1986/87	280	53	278	830	339	1,780
1988/89	307	57	281	828	437	1,910
1990/91	304	50	308	1,008	490	2,160
1992/93	398	75	438	1,479	810	3,200
1994/95	398	63	473	1,483	939	3,356
1996/97	312	53	457	1,557	1,088	3,467
1998/99	318	52	537	1,778	1,337	4,022
2000/01	268	57	692	1,853	1,560	4,430

a) The eastern states are included beginning in 1992/93

Source: Schmiedel, R. (2002)

184. Expenditures of the Social Health Insurance system on rescue services are classified as transport costs ("*Fahrkosten*") (§ 60 German Social Code, Book V). The increase in the share of transport costs in total SHI expenditures from 1.7 per cent to 2.0 per cent places it – along with spending on pharmaceuticals, administrative costs, post-hospital treatment and inpatient care – among those SHI benefits for which the share in total SHI expenditures has grown over the period 1996 - 2001. In addition to rescue services on the ground (emergency care and qualified ambulance transportation), transport costs include expenditures on air rescue and ground transport that is not provided by rescue services but by taxis or public transport, and expenditures for transportation services that do not involve the transport of persons.

Total SHI expenditures on transport costs increased by approximately 70 percent from € 1.5 to € 2.6 between 1993 and 2001. Deployments of emergency ambulances, which are used not only for emergency rescue but also for the qualified transportation of patients, was at € 755 million the largest spending item in 2001. The basic transport of patients with taxis or rental care cost the SHI system € 628 million in 2001 (or 24.3 % of all transport costs). In the period 1993 to 2001, "other transport costs", which include costs for public transport and for the use of private cars, had the highest growth rate

(122.9 %), followed by emergency ambulance deployments (120.7 %) and taxis and rental cars (115.5 %).

6.4.2 Enhancing the provision of rescue services

Coordination of hospital and rescue service planning efforts

185. Concepts for the enhancement of rescue service provision must consider not only the increase in the frequency of deployments and expenditure trends, but also effects of the introduction of a DRG system in the hospital sector. The latter is expected to result in a reduction in the number of hospitals, their increasing specialization and the establishment of competence centers. It is possible that some hospitals will no longer participate in the provision of emergency services. This development may be associated with a reduction in the number of emergency care centers and beds for emergency patients as well as with longer transport distances. Such trends must be reflected in the planning of the rescue services' infrastructure.

186. The participation of hospitals in the provision of emergency care should rely more on quality criteria, in particular with respect to staffing and technical equipment as well as to the logistics in a hospital as regards the transport, diagnosis and treatment of emergency patients. District hospitals endowed with several medical specialties and sub-specialties should play an important role in the provision of emergency services even in large geographic areas with a low population density.

187. The planning of the rescue services' infrastructure should be conducted independent of administrative borders of cities, counties or even states (*Länder*). This could lead to a reduction in the number of planning districts, control centers and service points. State-wide planning should also be considered. States are already being used as relevant planning districts for air-based rescue services. Furthermore, hospital capacity is being planned on a state-wide basis. In the course of the implementation of DRGs and an expected specialization and concentration, better coordination of hospital and rescue services planning is recommended for reasons of both quality and efficiency. Health insurance associations should be granted a right to participate in the planning process.

The development of new reimbursement models

188. More transparency is needed with respect to the calculations on which existing reimbursement rules are based. The uniform rendering of accounts across state borders as well as separate cost and activity accounting for emergency services and for non-critical patient transport is recommended. Statutory rules should be replaced by negotiated agreements throughout the country. A minimum of transparency in regard to the contractual conditions must be guaranteed. In view of the continuous availability of rescue services (options good character of rescue services), contracts should cover the provision of services (including stand-by crews) for a defined geographical area and for a certain period of time and specify quality standards, but focus less on the remuneration of individual deployments (e.g. transports with a certain type of vehicle). Regional analysis of rescue services data can provide starting points for the negotiation of contracts between associations of health insurers and the organizations running rescue services.

189. To facilitate a strategic controlling of SHI expenditures, the term "transport costs" should be differentiated in the social code as well as in deployment and expenditure statistics in the SHI system. The following criteria could be used for differentiation:

- emergency rescue with / without participation of an emergency doctor including reference to the type of rescue vehicle (e.g. ground-based transport with emergency ambulance, air rescue with helicopter),
- "qualified" patient transport (i.e. non-critical transport of patients by a rescue service) with reference to the type of “rescue vehicle”,
- transport between inpatient facilities, including “intensive care transportation” with reference to the type of rescue vehicle and the participation of an emergency care doctor (can also be classified as a sub-category of "qualified" patient transport),
- "Simple" patient transport (i.e. transport of patients without the participation of rescue services) with reference to the means of transport (e.g. taxi, rental car, private automobile, mass transit),
- transport of objects according to the type of good (e.g. pharmaceutical, stored blood) with reference to the means of transport,

- other services, e.g. maritime rescue, mountain rescue and other expenditures classified as "other transport costs", about which additional information should be available as needed.

In the future, more detailed information on health problems that lead to the utilization of rescue services should be made available for the analysis of their use and the associated costs.

Coordination of rescue services with other health care providers

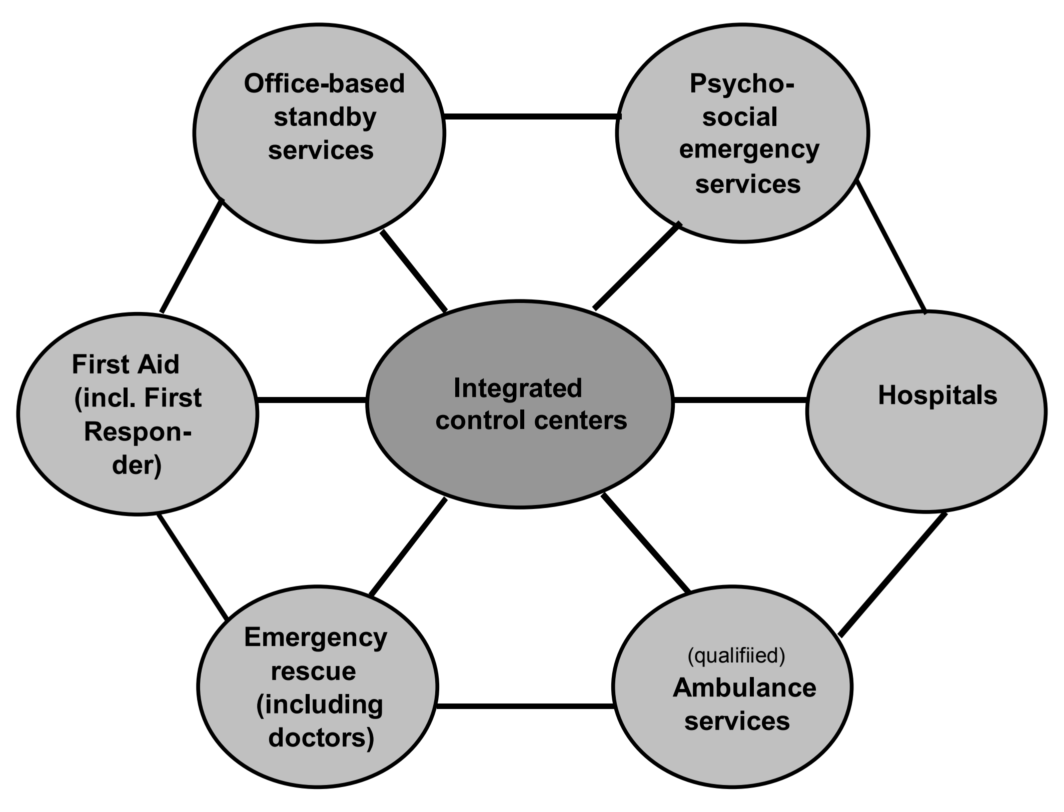
190. Standby services of office-based doctors should be subject to rules that guarantee the continuous availability of office-based emergency services, including during regular office hours. This requires adequate financial incentives for the provision of office-based services that lower utilization of rescue services and hospitals. Hospitals and regional associations of office-based doctors should promote the establishment of emergency practices in appropriately located and equipped hospitals. The tasks of these emergency practices should be coordinated with those of hospital outpatient clinics. Alternatively, they should form part of departments which integrate patient admission and ambulatory care.

191. Emergency control centers should be organized as “integrated control centers” responsible for all incoming calls for medical assistance. This requires an organizational integration of office-based emergency services. It is likely that resulting synergy effects could help avoid an unnecessary deployment of emergency doctors. The information and communication capacities of control centers as well as the qualification of their personnel should reflect these new tasks. Furthermore, control centers should only be contacted through one single emergency number "112".

Agreements on the finance of integrated control centers should reflect the involvement of different service providers. Since rescue services are utilized not only by persons with social health insurance, the finance of control centers can not be borne by the SHI system alone. If necessary, budgets of office-based doctors should be corrected by flat fees that reflect user costs. The establishment of additional control centers responsible only for office-based services is not recommended by the Council.

192. The reality of emergency care is shaped by an increase in emergencies related to cases in internal medicine and “psycho-social” emergency cases. Rescue services, as a round-the-clock, universally and easily accessible institution are increasingly confronted with a wide range of crises which result from a failure of social resources in the family or social environment. The complexity of “psychosocial” emergencies should lead to a re-thinking of emergency care as a linear "rescue chain". In the Council's view, the 24-hour availability of psychosocial emergency services could supplement existing emergency services. Furthermore, the future development of emergency care should be oriented less towards the model of a linear "rescue chain" and more towards the concept of emergency care as a network (see Figure 5).

Figure 5: **Emergency care as a network**[a)]



a) Figure 5 exhibits functional, not organizational relations.

Source: Advisory Council

Quality in emergency care

193. Methods must be developed for quality evaluation and management in emergency care. The first step required is to reach a consensus on the definition of important parameters such as the time to provision of care. It is also necessary to ensure the uniform documentation of service statistics as a basis for the comparative evaluation of organizations and processes as well as of the quality of outcomes. The continued development of external quality management in the area of rescue services could also be linked to tracer diagnoses, the implementation of guidelines and catalogues of standard indications as well as interregional benchmarking methods. Complementary facilities such as hospitals should be included in the quality management and clinical data used for the measurement of outcomes. Furthermore, emergency deployments without the participation of a doctor should also be included in the evaluation.

194. To improve the qualifications of emergency care personnel and establish an educational infrastructure that is similar to those for other health care professions, the training of emergency care assistants should be extended to three years. Emergency care assistants with these increased qualifications could be granted greater responsibility and allowed more independence in their actions (re-definition of standard responsibilities). The law on emergency care assistants and the related statutes on their training and qualification exams are to be changed accordingly.

195. Qualification requirements for emergency care doctors should be formulated for the whole country and a single term defined for this qualification (e.g. sub-specialty "Emergency Medicine"). Education, training and continuing education of (emergency) doctors should put more emphasis on knowledge and skills in the treatment of psycho-social emergency cases (e.g. moderation, crisis intervention techniques). Furthermore, the adequate professional direction and supervision of emergency doctors must be ensured.

196. Emerging trends in emergency care and steps recommended by the Council for enhancing efficiency will lead to an increase in the size of emergency care catchment areas and stricter requirements for quality management and for activity confirmation. Management structures should be professionalized and made more transparent. Some state regulations have established supervisory positions, such as the "Medical Director of Emergency Services", of which the general introduction is called for, in particular as a means to ensure effective quality management. At the same time there are various other management positions with overlapping responsibilities that have been defined separately for stand-by and on-call situations. In the Council’s view, it is necessary to evaluate whether the management structure could become more consistent, transparent and efficient through the establishment of only one emergency medical care manager and one rescue services manager in each region.

197. The significance of emergency care provision for subsequent providers in the health care system, an increasing number of deployments, increasing SHI expenditures on "transport costs", considerable intransparency with respect to costs and outcomes and the introduction of DRGs in the hospital sector should provide the impetus to improve both the quality and efficiency of rescue services.

6.5 Prospects for the development of the hospital sector

6.5.1 Hospital functions

198. A survey of hospital care can be based on the following basic functions of hospitals, which can be combined in a modular fashion:

- emergency care in cooperation with rescue services,
- elective inpatient as well as pre-, post- and semi-stationary care in accordance with the hospital's areas of medical specialization,
- rehabilitation services in cooperation with rehabilitation clinics,
- transfer of patients to nursing facilities or providers of home care,
- hospice care to compensate for the lack of facilities for the care of terminally ill patients outside the hospital setting,
- outpatient treatment by hospital doctors in cooperation with office-based doctors,
- education, training and continuing education of doctors and nursing staff and
- clinical research, the diffusion of medical knowledge and technical innovations and increasingly health services research.

6.5.2 Aspects of the development of the hospital sector

199. Functional analyses of sectors in the health care system can contribute to the design of health care processes, the solution of problems at the interfaces of the sectors and to the attainment of the objective of realizing an "integrated" provision of health care services across sectors. Since the introduction of DRGs beginning in 2003 will also affect other sectors in the health care system, there is a need for systematic analyses of health care processes and trends in the hospital sector as well as at the interfaces to other health care sectors. The Council recommends

- regionalized needs assessment with respect to hospital functions in order to support hospital capacity planning,
- agreements on the responsibilities of hospitals with respect to their functions and capacity,
- the promotion of health services research to support planning efforts.

200. The introduction of DRGs will have diverse effects on hospital functions. The primary, but not the sole effect of DRGs is on elective inpatient care. It is expected that DRGs will accelerate hospitals' focus on specialization and the creation of centers of medical competence (see Chapter 6.3). The responsibility for the provision of care should be related to the qualification and experience of hospital staff, the technical capabilities and the consistency of care. The results of external review procedures should also play a role. In this context, the minimum number of procedures will become more important as a criterion for evaluating hospital performance in diagnosis and treatment. Independent of the finance regulations and the expected increase in the number of hospital admissions, the specialization of hospitals within regions can contribute to the improvement of regional health care infrastructures.

201. Allowing hospitals to provide ambulatory care, or at least to provide highly specialized outpatient care, is presently under discussion. The "dual infrastructure" for medical specialists resulting from the division of secondary care into two sectors that have incompatible planning and finance mechanisms is subject to criticism and is seen as an explanation for efficiency losses in the health care system. The Council recommends improving the cooperation among hospitals and office-based doctors, beyond the current practice of granting office-based doctors the right to treat their patients in a hospital, through the introduction of a consultant system. Small general hospitals in particular could benefit from the knowledge of office-based specialists. The coordination between hospitals and office-based doctors could also be improved in the area of emergency care, e.g. through cooperation in emergency departments or in emergency practices located in hospitals.

202. Tertiary care is usually provided in central locations. If a high degree of interdisciplinary cooperation is required, a bundling of medical and technical competences is recommended. In addition to inpatient services, tertiary care also involves the provision of outpatient services, e.g. in hematology/oncology. The partial "opening" of hospitals is particularly important for highly specialized services and in areas characterized by a rapid progress of knowledge.

203. The funding of capital costs in the hospital sector must be reformed. At present, the amount of financing of capital costs as well as costs per case differ widely between states. To the extent that private hospitals have better access to sources of capital than public hospitals and other non-profit hospitals (e. g. church-owned), their market share can be expected to grow. The extent to which the structure of ownership affects the provision of services and the quality of hospital care is largely unknown. More health services research will be necessary to assess the effects of trends in the hospital structure on medical and nursing care, especially in the course of the introduction of DRG.

204. Strategies for the development of the hospital sector and of individual hospitals following the introduction of DRG (complete in 2007) will require a clear regulatory framework. This health policy task should be undertaken soon in order to increase certainty in the planning environment of hospitals and of social and private health insurance funds.

Appendix

Legal basis of the Advisory Council for the Concerted Action in Health Care (as of January 1, 2000)

German Social Code, Book V

Chapter 5

Concerted Action in Health Care

§ 142

Support for the Concerted Action; the Advisory Council

(1) The Minister for Health shall provide and explain the data needed for the work of the Concerted Action using the Federal Government's Annual Economic Report.

(2) The Minister for Health shall appoint an Advisory Council to support the Concerted Action in Health Care in fulfilling its tasks. The Advisory Council shall also be responsible for the compilation of reports on trends in the Social Health Insurance system. The report shall identify and analyze areas in which the provision of health care is excessive, insufficient or inappropriate and identify opportunities for increasing efficiency. The Federal Ministry for Health can identify more specific subject matter of the report. The Advisory Council shall prepare the reports in intervals of two years and submit them to the Federal Ministry for Health on April 15th of each year, beginning in the year 2001. The Federal Ministry for Health shall distribute the report immediately to the legislative bodies of the federal government and state its position on the report within an appropriate time frame.

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