

**Coordination and Integration – Health Care
in an Ageing Society**

ADVISORY COUNCIL
on the Assessment of Developments
in the Health Care System

**Coordination and Integration –
Health Care in an Ageing Society**

Special Report 2009
Abridged version

Structure

Foreword	9
1. Introduction: Generation-specific Healthcare as a Coordination Problem.....	13
2. Generation-specific Healthcare against a Background of Demographic Change	29
3. Special Care Requirements for Children and Adolescents	41
3.1 Introduction and Overview	41
3.2 Health Conditions, Health Behaviours, Health Risks and Use of Health Services	46
3.3 Programmes for Prevention and Health Promotion provided by Non-Physician Healthcare Professionals	47
3.4 Growing Up Without Violence.....	48
3.5 Antenatal Care, Screening and Childhood Vaccinations.....	52
3.6 Drug Therapy for Children and Adolescents.....	60
3.7 Care for Mentally Ill Children and Adolescents.....	61
3.8 Growing Up in Mental Health – Aspects of Care for Children and Adolescents with ADHD	62
4. Special Care Requirements in the Transition from Adolescence to Adulthood.....	67
5. Special Care Requirements for Elderly and Old People.....	73
5.1 Multimorbidity and Guideline Requirements.....	73
5.2 Multimorbidity and the Requirements of Drug Provision in Old Age	75
5.3 The Need for Long-Term Care in Old Age	79

6.	Status Quo and the Need for Action in Healthcare	87
6.1	GP Care.....	87
6.2	Specialist Care	101
6.3	Drug Provision.....	102
6.4	Health Services for People in Need of Long-Term Care in Old Age.....	105
6.5	Integrated Care	118
7.	Selected Concepts for Generation- and Community-based Healthcare	121
7.1	EU Concept on Primary Care	121
7.2	Patient-Centred Medical Home	122
7.3	The Bellagio Model	124
7.4	Roadmap of the Royal College of General Practitioners	125
7.5	The Chronic Care Model for the Comprehensive Care of the Chronically Sick	126
7.6	Cooperation with Other Professional Groups.....	128
7.7	Managed Care.....	128
8.	Future Concept for Coordinated Care with a Regional Dimension	139
8.1	Central Starting Points for Improved Care	139
8.2	Developed Organisations: Future Concepts using the Example of Primary Care.....	140
8.3	Change in the Division of Labour	152
8.4	Financing: Concepts based on Insured Parties rather than Indications, including Elements of Managed Care	154
8.5	Medical and Economic Potential.....	155
8.6	Recommendations on Implementation	158
	Appendix	167

List of Tables

Table 1:	Assumptions and Variants of the 11 th Coordinated Population Forecast	30
Table 2:	Old-Age Ratio “65”	31
Table 3:	Old-Age Ratio “85”	31
Table 4:	Youth Ratio “20”	32
Table 5:	Youth Ratio “5”	33
Table 6:	Old-Age Ratio “65” in the <i>Länder</i>	34
Table 7:	Old-Age Ratio “85” in the <i>Länder</i>	35
Table 8:	Demographic Change: Comparison between Rural Regions in East and West	36
Table 9:	The Old-Age Ratio “65” in an International Comparison	37
Table 10:	Beers List of the Preparations Available in Germany	78
Table 11:	Overview of Forecasts on the Development of Long-Term Care Needs (in Millions)	85
Table 12:	Definitions of Terms	89
Table 13:	Development of Type of Care (in percent), taken from Social Code, Book XI	108
Table 14:	Provision of Long-Term Care (taken from Social Code, Book XI, 1999 and 2005)	112
Table 15:	Overall Result of the Review: Number of Studies and Effect on Quality	131
Table 16:	International (Further Development) Proposals for the Primary Care of the Future	143

List of Figures

Figure 1:	Age- and Sex-Specific Expenditure Profiles at SHIs	38
Figure 2:	Age Distribution among Professional Groups in the Healthcare System, 1997 and 2007	40
Figure 3:	Dimensions of the Capability Approach	43
Figure 4:	Drug Consumption in Defined Daily Doses (DDD) per Insured Person in SHI 2007	76
Figure 5:	Long-Term Care Needs according to Age and Gender in 2005	80
Figure 6:	Proportions of People in Need of Long-Term Care according to Level of Care and Gender	83
Figure 7:	Primary Care as a Central Element in a Network Close to the Home	91
Figure 8:	Comparison of the Development of Long-Term Care Needs	106
Figure 9:	Age of Family Members Providing Long-Term Care	111
Figure 10:	Spread of Results according to Result Parameters	133
Figure 11:	From Sectoral to Community-Oriented Care	153

Foreword

By producing the extended version of this Report, the Advisory Council is complying with the commission from the Federal Minister of Health of November 2007 to draw up a special report on the subject of “Generation-specific Healthcare in an Ageing Society”.

In the course of preparing the report, the Council conducted numerous discussions and received many valuable suggestions. It could always rely on the expert counsel of the Federal Ministry of Health. Many Federal and *Land* ministries, associations and institutions also took part in written surveys conducted by the Council. We would like to thank all of them most warmly.

The Council thanks Prof. Harald Abholz and Dr Christian Lerch from Düsseldorf University Hospital; Prof. Dr Reinhard Busse, MPH, Mr Sebastian Haller, Mr Marcial Velasco-Garrido and Dr Annette Zentner, MPH, from the Dept. of Health Care Management at Berlin Technical University; Dr Bärbel-Maria Kurth, Dr Kerstin Horch and the entire Health Reporting and Epidemiology Department of the Robert Koch Institute; Prof. Dr Doris Schaeffer, Dr Andreas Büscher and Dr Klaus Wingenfeld from the Institute of Nursing at Bielefeld University; Prof Jürgen Windeler, Medical Service of the head association of the SHI for providing expert opinions commissioned by the Council and that have been used in this Report.

The Council would also like to thank Prof Dr oec. Volker Amelung, Institute for Epidemiology, Social Medicine and Health System Research of Hanover Medical University; Prof. Dr Ullrich Bauer, School of Public Health at Bielefeld University; Prof. Dr Erika Baum, Department of General Practice, Preventive and Rehabilitative Medicine at Marburg University; Prof. Dr Wolf-Dieter Brettschneider; Prof. Dr Hans Josef Böhles, Centre of Paediatrics and Adolescent Medicine at Frankfurt University Hospital; Prof. Dr Norbert Donner-Banzhoff, Department of General Practice, Preventive and Rehabilitative Medicine at Marburg University; Prof. Dr Raimund Geene, Magdeburg-Stendal University; Prof. Dr Jochen Gensichen, MPH, Institute of General Practice at Jena University Hospital; Dr Katja Götz, Department of General Practice and Health Services Research at Heidelberg University Hospital; Dr med. Wolfram Hartmann, Professional Association of Paediatricians and Adolescent Medicine Specialists; Dr Christopher Hermann, AOK Baden-Württemberg; Prof. Dr Heiner Keupp, Ludwig-Maximilians University Munich; Prof. Dr Thomas Klingebiel, Centre for Paediatrics and Adolescent Medicine at Frankfurt University Hospital; Dr Antje Köster-Schmidt, Hesse *Land* Dental Association, Frankfurt; Ms Melanie Lisac, Bertelsmann Foundation, Gütersloh; Ms Melanie Mark, West-Saxon University

Zwickau (FH); Prof. Dr med. Gisela Offner, Department of Paediatric Kidney Diseases at Hanover University; Ms Martina Oldhafer, MBA, Programme Management, KfH Committee for Dialysis and Kidney Transplants, Hanover; Dr Dorothea Osenberg, Department of General Practice at University of the Ruhr Bochum; Ms Eva Reinert, Final Year Student at Cologne University; Mr Christoph J. Rupprecht, AOK Rhineland/Hamburg; Ms Sophia Schlette, MPH, Bertelsmann Foundation, Gütersloh; Dipl.-Geogr. Claus Schlömer, Federal Office for Building and Regional Planning (BBR); Prof. Dr Martin Schrappe, Clinic for General Paediatrics at Kiel University Hospital; Dipl.-Geogr. Martin Spangenberg, Federal Office for Building and Regional Planning (BBR); Prof. Dr Joachim Szecsenyi, Department of General Practice and Health Services Research, Heidelberg University; Prof. Dr Maik Winter, Faculty for Social Work, Health and Nursing at Ravensburg-Weingarten University for important suggestions and information.

The Council also extends its thanks to the staff of the faculties and institutions of the Council members, in particular: Dipl.-Soz. Martin Beyer, Institute for General Practice at Frankfurt University; Dr Susanne Dettmer, Institute for Medical Sociology at Charité University Medicine Berlin; Dr med. Anja Dieterich, MPH, Research Group Public Health at the Berlin Science Centre for Social Research (WZB); Dr Dagmar Dräger, Institute of Medical Sociology at Charité University Medicine Berlin; Dr med. Antje Erler, MPH, Institute for General Practice, Frankfurt am Main; Dr P.H. Falk Hoffmann, MPH, Centre for Social Policy (ZeS) at Bremen University; Gisela Kassner, Institute for General Practice, Frankfurt am Main; Dr rer. pol. Michael Noweski, Research Group Public Health at the Berlin Science Centre for Social Research (WZB); Ms Katrin Pieper, Centre for Social Policy (ZeS) at Bremen University; Diplom-Volkswirt Michael Popp, Mannheim University, Faculty of Economics; Dr med. Hans-Michael Schäfer, Institute for General Practice, Frankfurt am Main; Dr Liane Schenk, Institute of Medical Sociology at Charité University Medicine Berlin; Diplom-Volkswirtin Gloria Schmidt, Mannheim University, Faculty of Economics; Mr Roland Windt, Centre of Social Policy (ZeS) at Bremen University; Ms Edda Würdemann, MPH, Centre of Social Policy (ZeS) at Bremen University.

As in the past, the Council was able to rely on the support of the scientific staff at its office for the preparation and review of important sections of the report and for the final editorial work. The members of staff include Mr Kai-Uwe Beger, MA; Ms Sarah Dauven, MSc; Dr. med. Nejla Gültekin, MPH; Ms Karin Höppner MSc; Dr rer. pol. Ronny Wölbing and the director of the office, Dr. oec. Dipl.-Volksw. Lothar Seyfarth (until December 2008) and Dr Birgit Cobbers (since February 2009). These individuals

deserve special thanks for their extraordinary dedication and their tireless, professional support.

The Council also thanks Ms Anette Bender, who handled the technical preparation of the report with the utmost care and patience. Finally, the Council would like to thank Ms Sabine VanDenBerghe and Ms Annette Wessel for their support of the Council's work at its office.

Where the Report uses the masculine form to refer to groups of people, healthcare professions and other collectives, both men and women are meant. The shorter male form is used only to make for easier reading.

All trademarks and trade names used are the property of the respective holder. The Council has dispensed with further identification of trademarks and trade names for better clarity and to make for easier reading.

The Council bears the responsibility for any errors in the report.

Bonn, May 2009

Ferdinand M. Gerlach
Adelheid Kuhlmei

Gerd Glaeske
Rolf Rosenbrock
Eberhard Wille

Marion Haubitz
Matthias Schrappe

1. Introduction: Generation-specific Healthcare as a Coordination Problem

Coordination Shortcomings at the Heart of the Report

1. Although the German healthcare system is by no means poor in an international comparison, the provision of services suffers from various coordination shortcomings. In line with the content and methodology of the two previous reports, this Special Report once again deals with specific coordination problems in the German healthcare system, i.e. corresponding demands for the efficient and effective provision of care, any shortcomings that still exist and possible solutions. The previous reports were concerned with the integration of the service sectors of outpatient and inpatient care, which had been largely separate until then, and with rehabilitation and long-term care. Targeted preventive measures and the generation and implementation of guidelines both played an important role within these integration processes. Guidelines had attained a considerable standing in healthcare provision and sectoral coordination was also progressing somewhat, irrespective of some weaknesses and potentials for improvement. The 2007 Report supplemented this sectoral integration with proposals for reform for the more efficient coordination of occupational groups and thus set in motion a hotly disputed discussion that has since intensified in breadth and intensity.

Concentration on integrated, trans-sectoral healthcare and the guidelines, as well as on cooperation between the occupational groups from the point of view of efficiency and effectiveness, has already clearly shown that the shifts in the morbidity spectrum that will accompany foreseeable demographic change will demand targeted changes to the current structures in the German healthcare system. In addition to acute care for the general population, the most important task in future will probably be to ensure adequate care for the chronically sick or those with several illnesses in an ageing population. Guideline-based healthcare will require a corresponding adjustment to take account of patients' multimorbidity. This raises the question of generation-specific healthcare that satisfies the criteria of efficiency and effectiveness as well as quality and sustainability. Provision of this kind, which starts with preventive measures in childhood, provides optimum support to patients undergoing age-related changes and looks after them and cares for them with close regard to their problems in very old age, is at the centre of this special report. From an integrative point of view, healthcare has thus given itself the demanding task of linking in a targeted and appropriate fashion family doctor and specialist, outpatient and inpatient, as well as long-term care. This should occur within the context of interdisciplinary cooperation including preventive measures, rehabilitation, drug therapy and the services of social institutions and patients' organisations.

In future, demographic developments will not only result in shifts between age groups, but also in other changes of relevance to health policy, both between the Federal *Länder* and within urban and rural settlements. Ensuring full provision of high-quality care in rural areas, especially in the poorly developed regions of the eastern German *Länder* will be a central challenge for health policy in the future. It therefore seems necessary to look at desirable community-based care both from generation-specific and regional points of view, which expands the coordination task by another dimension and makes it more demanding in terms of content. The concept for the future proposed in this special report comprises coordinated, generation-specific healthcare, differentiated according to regional circumstances and needs. Continuous monitoring, which is based, among other things, on regional quality indicators in conjunction with appropriate benchmarking, can be used for the early recognition of care bottlenecks and quality deficits.

This report thus adds a regional aspect to the generation-specific perspective in the search for efficient, effective and sustainable healthcare. At the same time, the sectoral coordination and coordination between occupational groups demanded in previous reports must be given adequate consideration, i.e. the two coordination tasks previously dealt with are joined by two more in this report. Thus, from the Council's point of view, multidimensional coordination is the guiding principle of target-oriented healthcare in the future. The multidimensional nature of the envisaged coordination requires many complex and sometimes complicated adjustment processes in existing structures. However, in the interests of efficient and effective healthcare, all involved should face up to these challenges.

The Demographic Challenges of Future Healthcare

2. Foreseeable demographic developments will result in a noticeable ageing of society and, correspondingly, in a rapidly growing proportion of very old people. Due to a shift in age groups, an increasing demand for health services in the future will be accompanied by a shrinking potential labour force to provide the services required. Since patients will largely need healthcare locally and outpatient and inpatient services are provided on a regional basis, a realistic analysis must also consider the development of demographic structures in the individual Federal *Länder* and must draw specific conclusions from this. But demographic developments will not only trigger changes relevant to health policy between Federal *Länder*, but also within Federal *Länder*, as well as between various settlement structures, in particular between urban and rural areas. The task of ensuring full provision of high-quality healthcare will thus have to be faced in rural areas generally, but especially in the poorly developed regions of the

eastern German Federal *Länder*. At the same time, the development in the age structure of people working in the healthcare system is aggravating the challenge for health policy to provide generation-specific care that satisfies the criteria of sustainability, efficiency and effectiveness.

In principle, the extra years of life gained through increasing life expectancy enhance people's health outcomes and thus their well-being. However, this is more likely to be the case if these extra years are healthy. Compared to the hypothesis of morbidity expansion, that of morbidity compression does make financing healthcare easier, all other things being equal, but without knowledge of the future costs of illness and death, no well-founded statements can be made about the effects of increasing life expectancy on expenditure. If the costs of dying increase greatly over time, morbidity compression could go hand in hand with growth in health expenditure and, if there is a reduction in costs as a consequence of effective tertiary preventive measures, morbidity expansion would not necessarily lead to a rise in expenditure.

Special Care Requirements for Children and Adolescents

3. The good health of the vast majority of children growing up in Germany should not obscure the fact that one fifth of the birth cohort in any year – that is 140,000 children per year – grows up suffering from serious, mainly psycho-social stress and severe shortages of material and social resources. The social gradient in the distribution of health-related chances in life is not quite as marked during childhood and adolescence as during adulthood, but it does start to manifest itself in these early phases of life. One of the main challenges of health policy lies in improving the health opportunities for the future lives of these children. It goes far beyond healthcare and statutory health insurance (SHI) and relates to health-policy responsibility in other areas, in particular education, family, social and labour market policies. The most important factors behind this risk – as can be seen from the evaluation of the German Health Interview and Examination Survey for Children and Adolescents conducted by the Robert Koch Institute for the Council – can be found in the unfavourable personal circumstances of the parents, which make their children particularly vulnerable. Based on the guiding principle of “Capabilities” also used in the Federal Government's reporting on poverty and wealth, the Council has formulated four health policy objectives: (1) Ensure the provision of material wealth suffices to secure a minimum subsistence level and to enable participation in normal life. (2) Encouragement to deal as well as possible with health/illness, disability, and take advantage of educational services, etc. (3) Establish or ensure access to the health and education system, the labour market and career

development, access to welfare benefits to protect against poverty, protection against violence and crime, access to an ecologically sustainable, working environment and the chance for political participation. (4) Establish and ensure transparency with regard to opportunities to make use of grants and benefits.

In recent years, the Federal and *Land* governments as well as SHIs and non-governmental organisations have increasingly been trying to counter the problem of growing inequality by means of (compensatory) primary prevention and health promotion. In spite of the impressive variety and dynamism of the programmes, however, they still manifest serious shortcomings in target group orientation, in weighting and resources for setting-based projects and in quality assurance. Since both the optimisation of the interventions and the development of appropriate methods of quality assurance are open learning processes that influence each other, they need to have organisational support from a centre of experts for quality assurance. Moreover, better coordination between Federal departments and between the Federal Government and the *Länder* could provide synergies.

There is no reliable evidence for an increase in neglect or physical and mental violence towards children. Nevertheless, it is still an extremely serious health problem. An analysis of the institutional and legal instruments of child protection shows that the effectiveness of this system, which is well structured in principle, could be further enhanced by improvements in material resources and the qualification structure, and in cooperation. As it is designed at the moment, medical screening is not a targeted instrument with respect to the detection or prevention of child abuse or neglect.

Preventive medicine for pregnant women and children (screening and vaccinations) is largely well developed in Germany. However, there are shortcomings with respect to the evidence of effectiveness and benefits as well as quality assurance. In this respect, there are high expectations of the current revision of corresponding guidelines by the Federal Joint Committee. The discussions on what screening services are covered by the catalogue of benefits pursuant to Article 25 Social Code, Book V lack a clear legal framework, and there is not a sufficiently transparent process for the licensing of new vaccines. The lower take-up of preventive services by socially disadvantaged children can counteract tests of internationally tried and tested interventions.

At the levels of development, licensing and application, there are shortcomings in the structural and process quality of the overall well developed supply of medicines to children in Germany. There has been too little treatment and pharmaceutical research into rare (childhood) diseases (orphan diseases), and there appear to be inadequate material incentives for the pharmaceutical industry in this respect. Since many of the

medicines used for children and adolescents have not been tested and approved for this age group, the relevant EU directive of 2007 must be implemented quickly. The unfounded use of psycho-stimulants as well as antibiotics for viral infections still exists.

There are no reliable indications of a general rise in psychological disorders and diseases among children and adolescents in Germany. Parallel to the fall in the birth rate, the capacities for psychotherapy and psychiatric care for these age groups are rising. Nevertheless, there are often complaints of inadequate provision, as well as indications of oversupply in some regions. There remains a need for research into the aetiology and determinants of psychological disorders, on primary and secondary prevention, diagnostics and diagnostic evaluation, as well as into the quality of the various treatments and concepts. The healthcare planning model foresees a large range of medical services for psychologically disturbed children and adolescents that makes use of the potential for self-help and participation. The diversity corresponds to the heterogeneity of the target groups and their different needs and coordination and cooperation with other bodies involved in child protection and the educational system is carried out in a targeted manner.

Among the psychological disorders of childhood and adolescence, the Attention Deficit Hyperactivity Disorder (ADHD) occupies a prominent position due to its relative frequency, its (measured) increase and the questionability of one-sided drug treatment. As well as supporting parents and raising awareness of those affected, easier access to multi-modal, including behavioural, therapies is necessary. Within this context, drugs are indispensable, possibly with the support of a second opinion pursuant to Article 73d Social Code, Book V. Further research into ADHD's aetiology, the possibilities for primary and secondary prevention and the benefit and quality of treatments used today promises helpful and necessary findings.

Care in the Transition from Adolescence to Adulthood

4. Transition in healthcare services entails the planned and targeted transfer of adolescents and young adults with chronic illnesses from paediatricians to physicians for adults. The life expectancy of young people with a particular need for care has risen in recent decades due to medical progress, with the result that an increasing number of them need further treatment by such physicians.

In adult medicine, knowledge about how to treat these patients is sometimes insufficient, and, once they have reached the age of 18, they are faced with the problem

of finding specialist care. They are therefore often cared for by paediatricians for a long time and only consult a physician for adults at a late stage. Indications that the quality of care is deteriorating because of inadequate transition processes are mounting. Delayed or no treatment can result in avoidable complications. The low prevalence of the rare illnesses in adolescence may be accompanied by high treatment costs.

This report discusses transitional care from adolescence to adulthood using the example of five illnesses (endocrinology, cystic fibrosis, children with congenital heart defects, terminal kidney failure/kidney transplant and rheumatoid arthritis). In addition to their illness-specific problems, these diseases also have far-reaching implications and can be used to assess transitional care for other chronic illnesses of childhood and adolescence. A successful transition is characterised by a coordinated, multi-disciplinary process that not only considers the medical needs of the young person during the transition from paediatrics to adult medicine, but also psycho-social, school and work aspects.

To obtain as comprehensive an overview as possible of transitional care in Germany, the discussion also includes statements from patients' representatives, selected medical specialist bodies, professional associations and public sector organisations and, on this basis, derive recommendations for the care of chronically sick young people during the transition into adulthood. The aim of transitional programmes is to ensure the good treatment and lasting adherence of patients in the transition to adulthood. The results of research show the need for an individualised approach during transition, where the patient can decide on the timing of the transition into adult medicine himself, or at least contribute towards the decision. Health services research should first of all identify the need for transitional surgery and transitional wards (dedicated ward for adolescents) for certain illnesses on the basis of pilot projects. Furthermore the transition process needs guidelines on how to conduct transition programmes, as well as an evaluation after the transition process. To improve the quality of care, the interlinking of the outpatient and inpatient sectors appears necessary, as well as better coordination of the institutions involved. Publishing information on transition programmes in quality reports will not only serve the purposes of quality assurance, but also increase competition. It remains to be tested whether a supplement to the catalogue in Article 116b Social Code, Book V could improve multidisciplinary care for children and young people in the transition from adolescence into adulthood.

Special Care Requirements for Elderly and Old People

5. As people become elderly and old they develop illnesses that result in age-specific care requirements. These include the phenomena of multimorbidity and polypharmacy among old people with many illnesses, as well as the need for long-term care. The number of elderly and old patients with many illnesses is increasing in all areas of care. Multimorbidity is more than the total of individual illnesses and, at very advanced ages, is often associated with incontinence, cognitive deficits, immobility, risk of falling and pain. Care for people with many illnesses must focus on functional incapacities.

In spite of the increasing importance of multimorbidity – approx. two thirds of people over the age of 65 have at least two chronic illnesses – there are very few guidelines that refer to elderly patients with several chronic illnesses. The main reason for this deficit is a lack of evidence. Guidelines for patients with multiple illnesses should help to set treatment priorities, be adapted to the overall condition of the patient and his resources and abilities and take account of his life expectancy and individual situation. Furthermore, they must focus on the treatment structure and care process and on specific agreements at the interfaces between the two.

In spite of a broad acceptance of guidelines for individual illnesses, their implementation in this area still remains a major challenge. It presupposes studies that provide evidence for common illness combinations and for the prioritisation of the main risks and health problems. These studies should also describe cross-sectoral care patterns, interfaces and interdisciplinary cooperation in the health professions. The implementation of the guidelines requires their incorporation in basic, further and continuing training and in quality assurance, as well as financial incentives. An evaluation of the implementation of guidelines also seems called for.

Multimorbidity results in increased contact with doctors, more frequent and longer stays in hospital, as well as a rising number of prescriptions (polypharmacy). Thus, around 35 % of men and 40 % of women over 65 receive nine or more drugs on a repeat prescription. In this context, the undesirable side effects of medication are a key problem in the care of old people. According to a study by the national pharmacovigilance centres, 10.2 % of inpatient stays were due to the undesirable adverse effects of digitalis glycoside-associated reactions. Elderly women were affected in particular. Unwanted effects and drug interactions are especially important among elderly people with dementia. In this context, the prescription of neuroleptics to patients with dementia should be viewed extremely critically because use is associated with higher mortality.

To increase drug safety among elderly people, an adaptation of the list of inappropriate medication use drawn up by a group of American scientists around Mark Beers can be used. But randomised controlled trials (RCTs) to prove a benefit to the patient are essential to improve the safety of treatment for older people. Drugs should be tested on the patient populations that will need them after they have been licensed.

The need for long-term care has also become another characteristic health risk in ageing societies. The condition of a person in need of long-term care is characterised by an extreme level of physical, mental and social vulnerability which means that everyday life can be maintained only with outside help. The vast majority – 82 % – of all people in need of long-term care in Germany is aged 65 or older; one in three is over 85. Half of the population aged over 90 needs long-term care. Women end up in this situation more often than men.

The intended extension of the definition of long-term care previously narrowly defined in Social Code, Book XI complies with a demand going back many years. The Advisory Council set up by the Federal Ministry for Health (BMG) has now submitted proposals for a new definition and a new assessment instrument – based on an analysis of different definitions of the need for long-term care. Unlike today's assessment process, a person's self-reliance will become the yardstick for the need for long-term care and not the amount of time long-term care will require.

The prognoses for the development of the need for long-term care in Germany illustrate that the long-term care sector will continue to grow with considerable dynamism in the future. The Council's status-quo prognosis has the highest number of people in need of long-term care at 4.35 million in 2050, but other, more recent calculations also reach orders of magnitude of around or over 4 million. Even assuming morbidity compression, the number of people in need of long-term care will rise to 3.5 million.

Status Quo and the Need for Action in Healthcare

6. In the German health system, family doctors perform key functions in primary healthcare. This form of healthcare must therefore be capable of working for the foreseeable future to ensure the health needs of the population are met. Dealing in depth with care provided by family doctors appears to be particularly necessary because, on the one hand, its sustainability does not appear to be certain (partially because of an imminent lack of newly qualified GPs) and, on the other, primary medical care for the most common health problems will be faced with special challenges due to

demographic change and the shift in the population's illness spectrum. In this context, primary care by a general practitioner is an important element of comprehensive insurance- and community-based care and shares the objectives of meeting the individual needs of a growing number of people with chronic illnesses and exploiting the scope for preventive medicine.

A description of the sickness burden, in particular due to chronic illnesses, in the family doctor's practice and the standing and performance criteria of family doctor healthcare services are the starting point of the analysis. An evidence report commissioned by the Council in the form of a meta-review examines the extent to which GP-oriented care can contribute to improving the health condition of a community, i.e. what evidence is there with respect to health indicators or costs. Further deliberations concentrate on the utilisation of general practitioners' surgeries in Germany, the acceptance and level of satisfaction with family doctor care among the population, the current working conditions of general practitioners using the example of contact figures and general practitioners' documentation, and on safeguarding the next generation of family doctors. Following on from basic considerations as to the need for the coordinated organisation of healthcare, various measures, in particular for basic, further and continuing training and for cooperation with other professional groups and thus for the further development and safeguarding of high-quality primary care by family doctors, are recommended.

Specialists in private practice are an important link between primary care provided by general practitioners and highly specialised inpatient treatment. Foreseeable demographic developments and the increasing scope offered by medical and technical progress are moving the interface between the outpatient and inpatient sectors to the heart of reform efforts from both a quantitative and qualitative point of view. To realise functioning and fair competition between the (specialist) doctors and hospitals, a change to the regulatory framework is needed, i.e. in particular a harmonisation of quality standards, including investment financing and the approval of new treatment methods.

If used appropriately, drugs are among the most effective and efficient instruments of medical assistance. The expected expansion of primary care and treatment by specialist doctors will further increase the medical importance of outpatient drug therapies in the future. This strengthens the need to integrate drug therapies and include pharmacists in interdisciplinary cooperation in the various areas of care. Examples from abroad show many options for cooperation, in which the ownership structure of the pharmacy plays only a marginal role. If incorporated in a cross-sectoral care network, pharmacies can take on even more responsibility than now for the quality and efficiency of drug treatments. As part of a care network, pharmacists, as well as doctors and other service

providers involved, can be paid within the context of a prospective payment system (PPS) or capitation fee. However, target-oriented cooperation in a care network would require special qualifications among pharmacists.

The marked increase expected in the proportion of elderly and very old people requires adjustments in the health system as well as in other areas of life in order to achieve and ensure long-term care meets demands and needs. Providing long-term care for those who need it is a long-term task with the aim of maintaining independence and a satisfactory quality of life. Against the background of these challenges, high priority is given to prevention and delaying the need for long-term care by expanding age-specific preventive medicine and health promotion. The current low standing of age-specific preventive medicine and health promotion is in urgent need of correction, especially in view of the potentials that have not yet been exploited.

In spite of a marked expansion in long-term care services in recent years, there are justified doubts as to whether these capacities can meet anticipated demand. A shift in what is needed towards more professional long-term care providers is also emerging. Moreover, most people prefer to remain in their home environment when they need long-term care. The relatively narrow service profile of long-term care services for outpatients will probably not meet the needs of many of those involved. Further development in the quality and versatility of long-term care for outpatients is necessary to cover the whole spectrum of long-term care strategies from health promotion to palliative care. The incorporation of long-term care into integrated care in accordance with Article 92b Social Code, Book XI enables an improvement in care at the interface between the outpatient and inpatient sectors; but there is no valid information available on the effects of programmes of this kind. Systematic evaluations of the introduction of long-term care support centres and case management are recommended in order to learn further. Since family members providing long-term care still provide the majority of care at home, maintaining their incomes and encouraging their skills deserve particular attention. To make lasting improvements to inpatient care, nursing homes, which mainly take care of people in the end stages of chronic illness or at the end of their lives, need to be adequately staffed with qualified personnel and need to be made more professional. The realities of care in some nursing homes reveal an innovation deficit in this respect.

To realise integrated care with a cross-sectoral reference and intensify competition, several regulations have recently been introduced that enable health insurance funds and service providers to conclude selective contracts as an alternative to collective-contract organisation. However, of these special forms of care (Article 53 Social Code, Book V),

only the model project according to Articles 63 – 65 Social Code, Book V, the integrated care providers according to Article 140 a-d and the structured treatment programmes according to Article 137 f-g have a cross-sectoral reference and thus fulfil the conceptual standards of integrated care in their approach. Among providers of integrated care, however, there was no cross-sectoral coordination in over 50 % of programmes. According to a representative survey conducted by the Council, only 55 of a total of 6,183 registered contracts at the end of 2008 contained a community reference, and contracts for family doctor-based care manifested a similarly modest proportion.

To trigger target-oriented competition, in particular at the interfaces between the service sectors, alongside the harmonisation of prevailing conditions for outpatient treatment there is also a need for further action regarding relations between the outpatient and inpatient sectors:

- Insured parties need more transparency about alternative treatments and the quality of services, e.g. by means of valid indicators on patient safety and quality.
- Within the context of team-oriented cooperation in the health professions, a heavier weighting of services provided by non-physician healthcare professionals must be legally guaranteed.
- Structured treatment programmes should be considered as integrated care services.
- There is no need for the obligatory provision of a certain type of care, such as isolated, family doctor-based care.
- Competition with open results should decide on the future relationship between collective and selective contracts.
- Discount contracts according to Article 130a para. 3 Social Code, Book V reside in an over-regulated, opaque SHI drug market.

Selected Concepts for Generation- and Community-based Healthcare

7. When portraying selected concepts, which primarily deal with the development of primary care (EU Concept on Primary Care, Patient Centered Medical Home, Bellagio Model, Roadmap of the Royal College of General Practitioners, Chronic Care Model) the main interest is whether and to what extent these approaches are suitable for establishing a community-based care model and ensuring high-quality generation-specific care. A systematic review on the effects of gatekeeping by family doctors

commissioned by the Council served the same objective. The results, which are subject to the reservation of a weak evidential basis, indicate that upstream gatekeeping can reduce health expenditure, but do not allow any conclusions to be drawn about a change in health outcomes. In this disputed issue, the Council does not advocate strict gatekeeping in a form that is obligatory for insured parties, but it does advocate coordinated care across all care levels.

The managed care concept that originated in the USA also contains many elements that make it necessary to examine its suitability for an efficient integrated care concept. To avoid misunderstandings, this is not a question of whether to adapt the American health service, but of whether and the extent to which individual instruments and structures of managed care might improve the efficiency and effectiveness of healthcare in Germany. In literature, there is no formal definition of managed care in terms of binding, constitutive elements. But most definitions contain declared goals, forms of internal financing, structures and instruments that make prioritisation appear sensible. Accordingly, a central element is the integration of insurance and service provider functions, followed by a prospective payment system or capitation fee. In implementation, selective contracting and the establishment of management structures play an important role.

To assess the effects of managed care on the quality of care, the report contains a related systematic review. The main interest here was whether the concept was likely to increase efficiency and effectiveness, or went hand in hand with unwanted effects such as risk selection and service refusals. In this connection, no clear trend towards an improvement or deterioration in care quality could be identified. However, more recent studies show more positive effects. The results of the review neither speak in favour of adapting managed care as an integrated system, nor for distancing oneself from all of its structures and elements. Rather, it makes sense to use elements of managed care in conjunction with a structural adaptation or limitation of the concept with the aim of stemming negative effects on the quality of care. In parallel, managed care can be incorporated in further reaching concepts that are separate from its direct implementation.

The requirements and development options for a healthcare system that makes use of managed care elements in Germany, can be summarised in hypotheses. In this context, managed care and its elements are initially in competition with other care concepts and no limitations appear to make sense with respect to its providers. Different forms of managed care have different effects on the quality of care and there is the danger of risk selection. Quality indicators need to be community-based with a focus on older, insured

persons and the chronically sick. Managed care tends to promote medical prevention, but is dependent on the financial planning horizon. Particular consideration should be given to care in rural areas, the gatekeeping concept, the relationship between primary and secondary care and outpatient care at the interface between the outpatient and inpatient sectors.

Future Concept of Coordinated Care with a Regional Dimension

8. The exhaustion of the structural efficiency and effectiveness reserves at the transitions between primary, specialist secondary and inpatient care, as well as rehabilitation and long-term care in conjunction with the future effects of demographic developments, require a coordination of care which takes particular account of the specific needs of different generations, regional circumstances and other special features. In this connection, the development towards coordinated care with a regional dimension can be supported by the following changes in particular:

- Developed organisations increasingly take on outpatient care.
- Individual service sectors change their function and coordinate care on the basis of a changed division of labour.
- Internal financing is increasingly oriented to prospective payment systems or capitation models.
- Reorganisation of secondary care by specialist doctors releases the decisive medical and economic potential that is the key engine behind the changes.

Primary care practices close to people's homes play a key role in coordinated care with a regional dimension. The intended future concept of generation-specific and regionally differentiated care is based on the responsibilities of family doctor-based healthcare, taking account of the development recommendations of international models. The proposals in this regard comprise payment systems that are more heavily geared towards the continuity of care and achieving medium- to long-term goals with respect to insured individuals and the community as a whole. Since full family doctor coverage appears to be at risk in poorly developed rural areas (currently mainly in the eastern German *Länder*, but increasingly also in the west of Germany), the care models in these regions need a special design. Concepts for both decentralised and centralised family doctor-based care are suitable here.

As already indicated, the future concept of coordinated care oriented to generation-specific needs and demands requires a changed, target-oriented division of labour in the service sectors. This ranges from primary care, including preventive measures, right up to long-term care. In this connection, sectoral delimitations become less significant and regional circumstances decide on the location and structure of service provision. Secondary care is at the centre of a new division of labour and its area of responsibility, mainly determined by medical and technical progress, will increase heavily in future. Currently outpatient (specialist) doctors and hospitals compete under inadequate general conditions. In this context, gatekeeping can also contribute to improved coordination of care.

With respect to internal financing, in order to ensure comprehensive care in the long term, prospective payment systems with some targeted incentives (pay for performance) should be tried out, for example in the implementation of preventive measures. A mixture of payment elements of this kind could partially neutralise the potential disadvantages of a flat-rate payment, such as insufficient economic incentives for the complete and conscientious care of patients. Furthermore, payment should also take account of the coordination work of non-physician members of a care team, the risk structure of those insured and the case-mix differences between the various communities to be cared for.

The medical and economic potential to improve the efficiency and effectiveness of care thus lies primarily at the interfaces between the service sectors, especially in the area of secondary care. As far as the incentive system is concerned, the conditions for the success of efficient, cross-sectoral care appear to be best placed when the service providers involved do not work in isolation on their own account, but for a joint budget and receive a (cross-sectoral) flat rate. The integration of care processes increases even further if a care unit prefers to offer a comprehensive range of preventive and therapeutic services in a specific region. From today's point of view, a comprehensive care unit of this kind is a target-oriented concept. But from the point of view of regulatory policy, it is not about striving to achieve such a care concept by means of statutory regulations, but only about opening up the opportunity for development in this direction. A decision on the desired organisational form should be taken by the insured parties and patients within the context of competitive processes, a choice that may vary regionally and over time.

In sparsely populated, poorly developed areas, there can no longer be competition between comprehensive care units due to low capacities, and there can hardly be any competition between outpatient and inpatient service providers. Here, continuous

monitoring on the basis of quality indicators and benchmarking can help to reveal care bottlenecks and quality deficits. In recent years, the Federal Government has decided several measures to avoid under-provision in these areas and more recommendations can be found in the report. Irrespective of the need to set financial and non-monetary incentives for service providers here, health policy needs support from town and country planning to solve this problem. However, ensuring high-quality care in poorly developed regions is a general problem and not one specific to healthcare organised by means of selective contracts.

This report contains many proposals for what are sometimes far-reaching changes in our healthcare system. To generate learning processes and to recognise any wrong developments that may emerge, the relevant reform processes need the support of an assessment by independent academics. Only an information basis of this kind enables sound decisions to be made on whether and the extent to which new care concepts should be pursued further and implemented more widely, or stopped. In view of the importance of these evaluation results for the further development of healthcare, health insurance funds should have the option of financing such studies with a fixed percentage of their expenditure.

2. Generation-specific Healthcare against a Background of Demographic Change

9. Demographics, i.e. the size and structure of the population of a country, are not only relevant to medical treatment requirements and corresponding health spending, but also to the personnel resources available to satisfy this demand. Changes in demographics therefore have an influence both on the supply and demand for healthcare services. Since demographic projections provide information about developments that are central to health policy, they are important for decision-making in order to be able to counteract future emerging problems or shortages at an early stage.

10. Demographic forecasts attempt to show how the size and structure of the population, starting from today's situation, may develop in the future under certain assumptions about the three demographic components of births, deaths and migration. Within the context of the health system and taking account of financing and supply aspects, the changes in the share of the population in certain age groups are of interest, i.e. the cohort age and the cohort size act as demographic indicators. The forecast for the age cohorts is based on the 11th coordinate population forecast by the Federal Statistics Office, whose assumptions for certain demographic components are summarised in Table 1. To take account of uncertainties with respect to the development of the influencing factors, this forecast is based on three alternatives for the birth rate and two each for life expectancy and the (positive) migration balance. Combinations of these assumptions result in a total of twelve scenarios. In this context, Version 1 – W1 (“mean” population, lower limit) forms the basis and the starting point of the cohort estimates and the two extreme scenarios, i.e. Version 3 – W2 (“relatively young” population) and Version 6 – W1 (“relatively old” population) are used to demonstrate the spectrum of possible demographic developments.

Table 1: Assumptions and Variants of the 11th Coordinated Population Forecast

Annual net migration until 2050	Fertility rate (average number of children per woman)		
100,000 people (W1)	More or less constant 1.4	Rising slightly from 1.4 to 1.6 (2006- 2025), then constant	Falling slightly by 2050 to 1.2
200,000 people (W2)			
Assumptions about life expectancy at birth (at the age of 60) in 2050			
Basic assumption			
Male: 83.5 (25.3) Female: 88.0 (29.1)	Variant 1 – W1 ("mean" population, lower limit)	Variant 3 - W1	Variant 5 - W1
	Variant 1 – W2 ("mean" population, upper limit)	Variant 3 – W2 ("relatively young" population)	Variant 5 – W2
High rise			
Male: 85.4 (27.2) Female 89.9 (30.9)	Variant 2 - W1	Variant 4 - W1	Variant 6 – W1 ("relatively old" population)
	Variant 2 – W2	Variant 4 – W2	Variant 6 – W2

Source: Federal Statistics Office 2006a, own presentation

11. The key figures to portray the demographic ageing process are the old-age ratios "65" and "85". They show the number of people over 65 and over 85 per 100 people in the population between 20 and 65. Table 2 shows that the old-age ratio "65" almost doubles from the basic variant of 2006 (32.63) to 2050 (64.35). The old-age ratio "65" also illustrates that the values are heavily dependent on the assumptions made about demographic factors, with the spectrum in 2050 ranging from 57.97 to 70.92. In this connection, it must also be borne in mind that the alternatives, which this forecast uses as a starting point for life expectancy, are based on a period observation. This extrapolates current mortality conditions and the life expectancy derived from this into the future and thus excludes all effects on the population's life expectancy stemming from medical and technical progress, lifestyle variables and other factors. The underestimation of life expectancy associated with this means that the old-age ratios "65" and "85" may be even higher than according to Variant 6 – W1 ("relatively old" population").

Table 2: Old-Age Ratio “65”

Year	“relatively young” population	“mean” population		“relatively old” population
	Variant 3 – W2	Lower limit Variant 1 - W1	Upper limit Variant 1 - W2	Variant 6 - W1
2006	32.63	32.63	32.63	32.63
2010	33.55	33.62	33.55	33.70
2020	37.98	38.68	37.98	39.48
2030	50.21	52.21	50.27	54.20
2040	57.19	61.35	57.98	65.25
2050	57.97	64.35	60.10	70.92

People aged 65 and older per 100 persons aged between 20 and 65

Source: Federal Statistics Office 2006b, own presentation

12. The old-age ratio “85”, which refers to the very elderly, is thus of special relevance with regard to the need for long-term care and long-term care insurance since the prevalence of long-term care rises greatly over the age of around 80. Compared with the old-age ratio “65”, the old-age ratio “85” will rise even more in the period of the forecast, as Table 3 shows. Starting from 3.22 in 2006, according to the basic variant it will rise to 15.92 and, in the event of a “relatively old” population, to 19.71, i.e. to 4.9 or 6.1 times current levels. By 2020 the old-age ratio “85” will grow by 1.6 to 1.8 times.

Table 3: Old-Age Ratio “85”

Year	“relatively young” population	“mean” population		“relatively old” population
	Variant 3 – W2	Lower limit Variant 1 - W1	Upper limit Variant 1 – W2	Variant 6 - W1
2006	3.22	3.22	3.22	3.22
2010	3.86	3.87	3.86	3.89
2020	5.25	5.35	5.25	5.69
2030	7.55	7.86	7.56	8.90
2040	9.61	10.38	9.74	12.32
2050	14.07	15.92	14.58	19.71

People aged 85 and older per 100 persons aged between 20 and 65

Source: Federal Statistics Office 2006b, own presentation

13. As only very few young people die and the migration balance is currently only at a noteworthy level among young females aged 15 to 20, the future development of both youth ratios “20” and “5” largely depends on assumptions about the birth rate. As Table

4 shows, the basic variant of the youth ratio “20” will fall noticeably from 32.53 in 2006 to 30.02 in 2010 and 28.14 in 2020, but will then rise again to 29.92 by 2040. The higher ratios in the variant “relatively young” population are based almost exclusively on the assumption that the birth rate will rise from 1.4 to 1.6 by 2025 and then remain constant.

Table 4: Youth Ratio “20”

Year	“relatively young” population	“mean” population		“relatively old” population
	Variant 3 - W2	Lower limit Variant 1 - W1	Upper limit Variant 1 - W2	Variant 6 - W1
2006	32.53	32.53	32.53	32.53
2010	30.12	30.02	30.01	29.98
2020	29.24	28.14	28.09	27.60
2030	33.07	29.88	29.99	28.32
2040	33.94	29.92	30.04	27.72
2050	33.38	29.18	29.19	26.63

People aged 20 and below per 100 persons aged between 20 and 65

Source: Federal Statistics Office 2006b, own presentation

14. The youth ratio “5” in Table 5 is subject to slight fluctuations in the two variants “mean” population and will not quite reach the starting level of 2006 in 2050. The slightly higher value in Variant 1-W2, which assumes higher (net) immigration of 100,000 immigrants per year, can be explained by the relatively high migration balance among women aged between 20 and 25. The different assumptions about the development of the birth rate are thus, as expected, reflected in the youth ratio “5” more markedly than among the young people in the respective ratios.

Table 5 Youth Ratio “5”

Year	“relatively young” population	“mean” population		“relatively old” population
	Variant 3 – W2	Lower limit Variant 1 - W1	Upper limit Variant 1 – W2	Variant 6 - W1
2006	7.02	7.02	7.02	7.02
2010	6.70	6.59	6.59	6.55
2020	7.46	6.74	6.82	6.42
2030	8.02	6.88	7.02	6.35
2040	7.86	6.71	6.80	6.11
2050	8.24	6.83	6.92	6.03

People aged 5 and below per 100 persons aged between 20 and 65

Source: Federal Statistics Office (2006b), own presentation

15. The average forecast development in German old-age ratios already illustrates that demographic developments will present the healthcare system, and long-term care in particular, with major challenges in future. Due to strong growth in the cohort of the very elderly, an increasing demand for health and nursing services will be faced with a shrinking potential labour force to provide the services required. This throws up the question of generation-specific healthcare that satisfies the criteria of sustainability, efficiency and effectiveness as well as quality.

16. Since patients will largely need healthcare locally, or at least regionally, and outpatient and the provision of inpatient services is mostly decentralised, it makes sense to also consider the development of demographic structures in the individual Federal *Länder*. As Table 6 shows, the old-age ratio “65” will rise at above average rates in the new *Länder* in particular. In 2050, Brandenburg at 90.60 and Thuringia at 80.73 will have the highest levels and Bremen at 50.92 and Hamburg at 57.50 the lowest. The old-age ratio “65” in Brandenburg will thus exceed the German average by 40.8% and that of Bremen by 77.9%. The well above-average ageing in the new *Länder* is mainly due to the influence of age on domestic migration patterns.

Table 6: Old-Age Ratio “65” in the *Länder*

	2005	2015	2025	2040	2050
Baden-Württemberg	30.09	33.41	41.33	60.15	63.38
Bavaria	30.37	33.66	41.06	58.99	62.00
Berlin	26.30	32.45	39.41	54.27	63.87
Brandenburg	31.57	38.60	55.90	82.43	90.60
Bremen	33.27	35.27	39.15	48.25	50.92
Hamburg	28.52	29.93	33.14	49.12	57.50
Hesse	30.76	34.85	42.75	62.08	65.46
Mecklenburg-Western Pomerania	31.44	38.23	55.63	70.36	74.51
Lower Saxony	32.85	36.61	44.67	63.40	63.73
North Rhine-Westphalia	32.22	34.40	41.58	58.39	59.94
Rhineland-Palatinate	33.04	34.82	44.26	62.34	62.95
Saarland	35.19	37.07	47.38	61.90	59.89
Saxony	36.41	43.73	56.57	68.95	77.25
Saxony-Anhalt	35.08	42.76	58.10	73.73	78.53
Schleswig-Holstein	33.26	38.33	44.97	65.06	66.65
Thuringia	33.19	40.70	56.94	73.83	80.73
Germany	31.69	35.47	43.91	61.35	64.35

People aged 65 and older per 100 persons aged between 20 and 65

Source: Federal Statistics Office 2006b, own presentation

17. The overview of the development of the old-age ratio “85” in Table 7 shows a similar picture. In 2005 the new *Länder* still have below-average values, but surrender this relatively good starting position by 2025 and by 2050 are at the top of the table here too. Whereas the old-age ratio “85” will rise by an average of 5.2 times in Germany as a whole, it will rise 9.4 times in Mecklenburg-Western Pomerania and 10.1 times in Brandenburg. A look at the old-age ratio in the individual Federal *Länder* illustrates the problem of ensuring high-quality healthcare in Germany in the future, as mentioned above.

Table 7: Old-Age Ratio “85” in the *Länder*

	2005	2015	2025	2040	2050
Baden-Württemberg	3.02	4.49	6.94	10.13	15.92
Bavaria	2.95	4.41	6.60	9.58	14.94
Berlin	2.91	3.52	6.34	9.24	14.53
Brandenburg	2.45	4.37	9.13	14.53	24.86
Bremen	3.82	5.05	7.09	8.89	12.19
Hamburg	3.35	4.09	5.76	7.62	12.42
Hesse	3.12	4.61	6.90	10.46	16.11
Mecklenburg-Western Pomerania	2.23	4.39	9.15	13.48	20.88
Lower Saxony	3.29	4.81	7.43	10.55	16.05
North Rhine-Westphalia	2.99	4.54	6.72	9.37	14.38
Rhineland-Palatinate	3.22	4.72	6.95	10.30	15.75
Saarland	3.01	4.80	7.35	10.43	15.28
Saxony	3.43	6.10	10.48	14.40	20.39
Saxony-Anhalt	2.87	5.33	9.87	14.38	21.20
Schleswig-Holstein	3.49	4.67	7.73	10.74	16.34
Thuringia	2.65	5.05	9.35	14.29	21.35
Germany	3.04	4.62	7.25	10.38	15.92

People aged 85 and older per 100 persons aged between 20 and 65, rounded data as a starting point

Source: Federal Statistics Office 2006d, own presentation

18. Unlike the old-age ratios, the development of the youth ratios “20” and “5” does not show any uniform trends in the *Länder*. In the base year 2005, the new (eastern German) *Länder* and the city states have the lowest values, although these differences are largely due to differing birth rates. Assuming the harmonisation of birth rates throughout Germany, the reduction in the differences between the youth ratios of the *Länder* will follow. By 2050, some of the new *Länder*, such as Brandenburg, Saxony and Mecklenburg-Western Pomerania, will move to the top. The relatively high youth ratio in the new *Länder* in 2050 will then probably be due to the fall in the working population as a result of the influence of age on domestic migration patterns.

19. The two *Länder* Brandenburg and Hamburg are suitable for a more detailed regional analysis because their demographic developments differ greatly from one another and both also deviate heavily from the German average. According to the forecast, the population in Brandenburg will shrink by 30% between 2005 and 2050, twice as much as the German average, and the working population will fall by almost half. This fall in the working population is almost 20 percentage points higher than the German trend. By contrast, the population in Hamburg will fall by only approx. 4%, and

thus only moderately even in comparison with the German average. The proportion of young people, which will diminish by 43% in Brandenburg and 37% on average over Germany as a whole, will fall by only 25% in Hamburg. The working population here will fall by 18%, 11 percentage points less than in Germany as a whole. This cursory comparison already indicates that the respective demographic developments will confront these *Länder* with problems that differ greatly in terms of content and intensity.

20. Demographic developments will not only result in changes relevant to health policy between Federal *Länder*, but also within Federal *Länder* and between various settlement structures, in particular between urban and rural areas. Demographic change will alter the age structure in the rural areas of the new *Länder* in particular. In the period between 2006 and 2025, the population in the rural areas of the new *Länder* will fall by 18.3%, whereas it will remain constant in the rural areas of the western *Länder*. The proportion of people over 64 in the population as a whole, which accounted for differences of only 1.7 percentage points in 2006, will rise to 32.9% in the rural areas of the new *Länder* by 2025. It is thus 8.2 percentage points above the level in the rural areas of the old *Länder*. The problem of ensuring full provision of high-quality healthcare will thus have to be confronted in rural areas generally, but especially in the rural regions of the new *Länder*.

Table 8: Demographic Change: Comparison between Rural Regions in East and West

	West	East	Rural areas west	Rural areas east
Population Growth (in %)				
1990/2006	6.7	-8.7	8.3	-13.7
2006/2025	0.5	-10.7	0.2	-18.3
Proportion of Population 65 (85) and Older in Total Population (in %)				
2006	19.4 (2.0)	21.1 (1.9)	19.9 (2.1)	21.5 (1.7)
2025	23.3 (3.8)	29.3 (5.0)	24.7 (4.0)	32.9 (5.6)
Population Growth 65 (85) and Older (in %)				
1990/2006	35.7 (34.2)	39.1 (20.6)	35.6 (43.9)	48.9 (32.5)
2006/2025	21.3 (96.0)	23.9 (132.2)	24.6 (95.3)	25.2 (167.6)
Population Density (Inhabitants per km²)				
2006	264	153	114	73
2025	261	137	114	60

For reasons of clarity, the relevant maximum and minimum values are printed in bold.

Source: Own Calculation on the Basis of Data and Forecasts of The Federal Office for Building and Regional Planning (Bundesamt für Bauwesen und Raumordnung, BBR)

21. An international comparison of demographic developments shows that the future ageing of the population is not specific to the Federal Republic of Germany, but is an international trend. The values for the old-age ratio “65” shown in Table 9 are based on the “mean” version of demographic forecasts from the United Nations, which correspond roughly to the Federal Statistics Office’s basic forecast. Since the United Nations assumes a birth rate that rises markedly over time, the old-age ratio “65” in 2050 is noticeably lower at 58.70 (in comparison to 64.35 from the Federal Statistics Office). Nevertheless, at 12% above the European average of 52.13 Germany has the highest old-age ratio “65” behind Japan, Spain and Italy. The picture is similar for the old-age ratio “85”, where Germany, at 14.34, is in third place behind Japan and Italy.

Table 9: The Old-Age Ratio “65” in an International Comparison

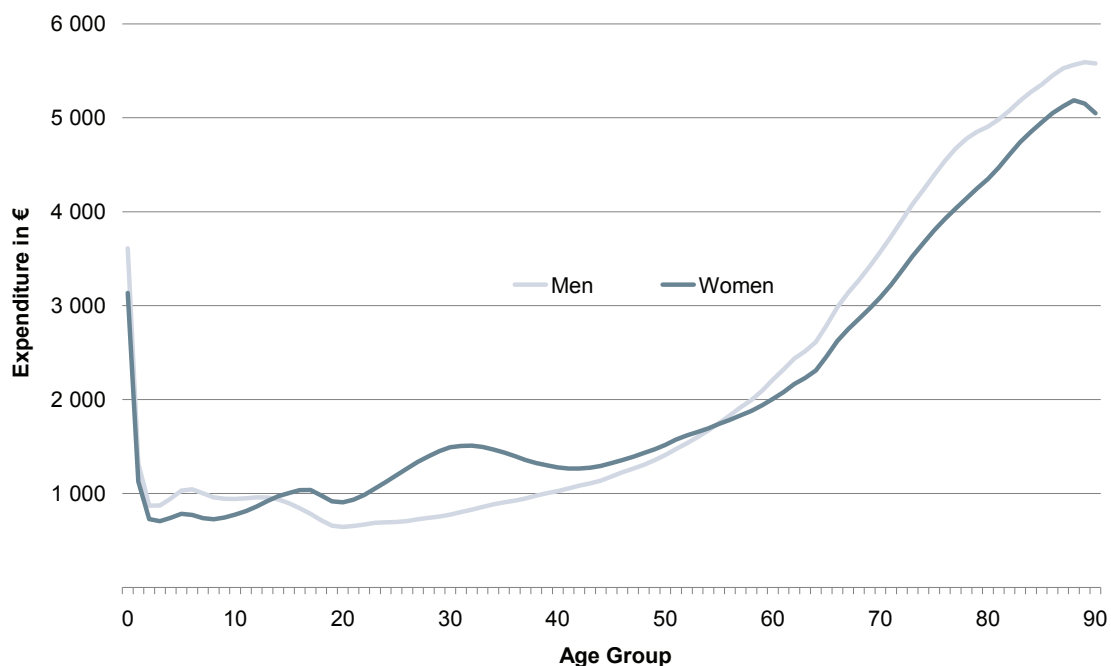
Country	2005	2015	2025	2040	2050
Germany	30.80	34.15	41.89	58.51	58.70
France	27.71	32.14	38.94	47.68	49.37
United Kingdom	27.08	30.72	34.85	43.70	44.34
Italy	32.15	36.98	42.34	62.34	65.93
Austria	26.01	30.05	36.64	53.92	55.99
Spain	26.55	29.69	36.15	56.23	69.31
Switzerland	24.90	30.60	37.64	48.13	46.53
Netherlands	23.10	30.30	38.66	50.86	47.53
Norway	24.75	28.92	34.50	43.87	43.71
Sweden	29.29	34.98	39.55	45.12	44.79
Russia	21.98	19.84	27.66	33.30	42.41
Turkey	9.85	10.79	14.63	24.11	31.69
Brazil	10.81	13.21	18.00	26.71	34.11
Canada	20.97	25.86	35.79	45.65	48.07
United States	20.54	23.70	31.35	36.58	37.70
China	12.38	14.83	21.83	39.44	42.47
India	9.57	10.31	13.12	18.32	23.66
Japan	32.25	46.27	53.50	69.67	80.20
Australia	21.67	26.88	34.44	43.28	45.26
Africa	7.67	7.75	8.59	10.06	12.36
Europe	25.89	27.92	35.02	45.91	52.13
South America	11.57	13.61	17.90	25.84	32.32

People aged 65 and older per 100 persons aged between 20 and 65

Source: United Nations 2006, own data

22. Against the background of rising life expectancy and growing older age groups, age- and sex-specific expenditure profiles are of interest with regard to the future expected demand for healthcare services and expenditure developments. As Fig. 1 shows, expenditure by statutory health insurance companies (SHIs) rises markedly for both sexes over the age of 50. The biggest increase is in the age range between 50 and 80 and the trend is reversed only at around 88. The corresponding average expenditure on hospitals and medicines is similar to the SHIs' total expenditure profiles, with expenditure on medicines showing the highest dependency on age. Compared with these expenditure profiles, the average expenditure on outpatient treatment increases much more slowly and, over the age of 73, the average age-specific expenditure for women hardly rises at all and that for men only very moderately. In view of the predicted ageing of the population, these noticeable differences in the expenditure profiles for hospital and outpatient treatment emphasise the need to substitute inpatient with outpatient services as much as possible in the future.

Figure 1: Age- and Sex-Specific Expenditure Profiles at SHIs



Values without pensioners with general and occupational invalidities/without risk structure compensation pool

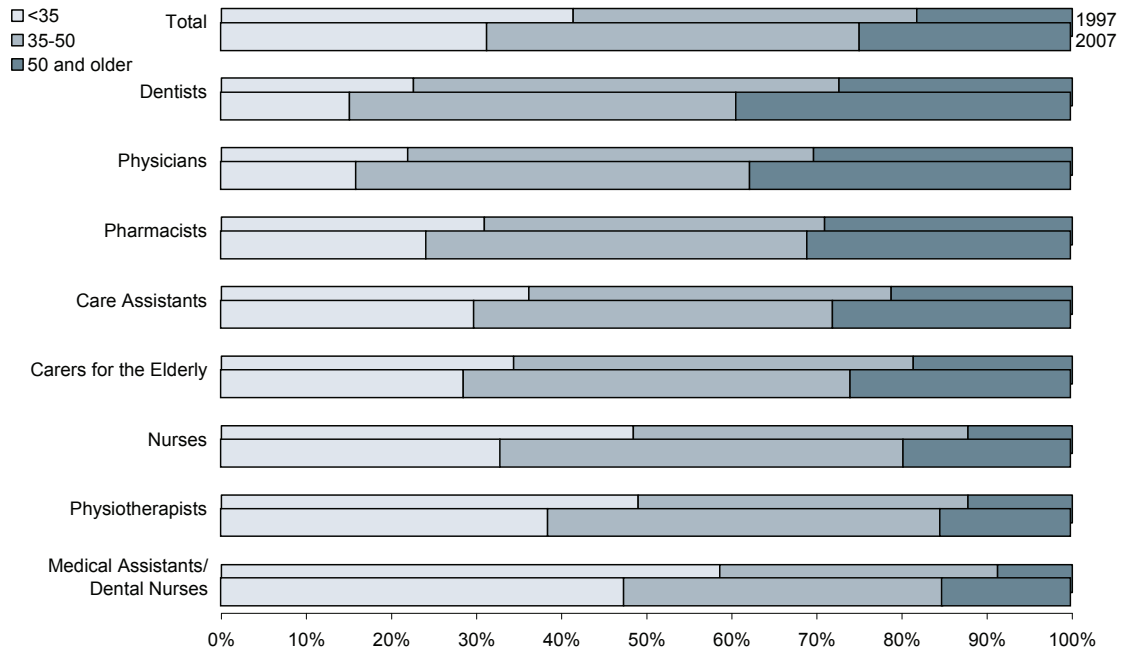
Source: German Federal (Social) Insurance Office 2008, Own Data, Own Graph

23. In view of rising life expectancy, the question as to the health condition in which people will spend these extra years of their lives in the future emerges, both from epidemiological and welfare-theory points of view and cost- and expenditure-oriented aspects. In principle, the extra years of life increase health outcomes and thus the welfare of those affected, however this is more the case if these extra years are years of health. The theory of absolute morbidity compression assumes that the onset of chronic diseases will be delayed, mainly because of successful changes to individual behaviour patterns and conditions conducive to health maintenance. Thus the length of life spent in illness will fall as life expectancy rises. According to the relative version of this hypothesis, only the proportion of life with a chronic disease declines in relation to the higher total number of years lived.

24. In contrast to this, the hypothesis of absolute or relative morbidity expansion states that due to medical and technical progress, the number of years of life spent in illness will increase absolutely, or its proportion of total years lived will rise. Compared to the hypothesis of morbidity expansion, that of morbidity compression does make financing healthcare easier, all other things being equal, but without knowledge of the future costs of illness and death, no sound statements can be made about the effects of increasing life expectancy on expenditure. If the costs of dying rise strongly over time, morbidity compression can also be associated with a rise in health expenditure. Vice versa, it is also possible that morbidity expansion will result in only a moderate development in expenditure, thanks to cost reduction stemming from effective tertiary prevention measures.

25. A look at the age structure of persons employed in the healthcare system in Figure 2 shows that the proportion of those aged over 50 rose from 18.3% in 1997 to 24.8% in 2007 over all of the reviewed healthcare professions. In comparison to inpatient care, the number of doctors aged below 40 in outpatient care fell at an above average rate between 1995 and 2007 and the most marked ageing is among general practitioners. Developments to date in the health professions and the current age structure thus underline the challenge to health policy of ensuring high-quality nationwide care in the future.

Figure 2: Age Distribution among Professional Groups in the Healthcare System, 1997 and 2007



Source: Own Calculation on the basis of data from "Health Personnel Calculation" (Gesundheitspersonalrechnung) (www.gbe-bund.de).

3. Special Care Requirements for Children and Adolescents

3.1 Introduction and Overview

26. Currently, the average life expectancy is 82.3 years for newborn girls and 76.9 years for newborn boys. In the decades following the Second World War, which were mainly characterised by economic growth, external and internal peace, educational improvements and well-developed social security and healthcare provision, these figures have risen by more than twelve years.

27. In recent years, increasing attention has been paid to the public concern about the physical, mental and social well-being of children and adolescents. Violence as a feature of children's upbringings has fallen markedly. Parental child-rearing styles nowadays are mainly democratic, egalitarian or permissive compared to the more authoritarian and autocratic methods a few decades ago. Children and young people thus experience a different way of living. They live and experience freedom, but also experience the responsibility of bringing forward central biographical moments to earlier phases of their lives; many of these freedoms prove to be "risky opportunities". Most young people feel well integrated in their communities; in this respect, the 15th Shell Study of Young People talks about the "pragmatic generation" currently growing up.

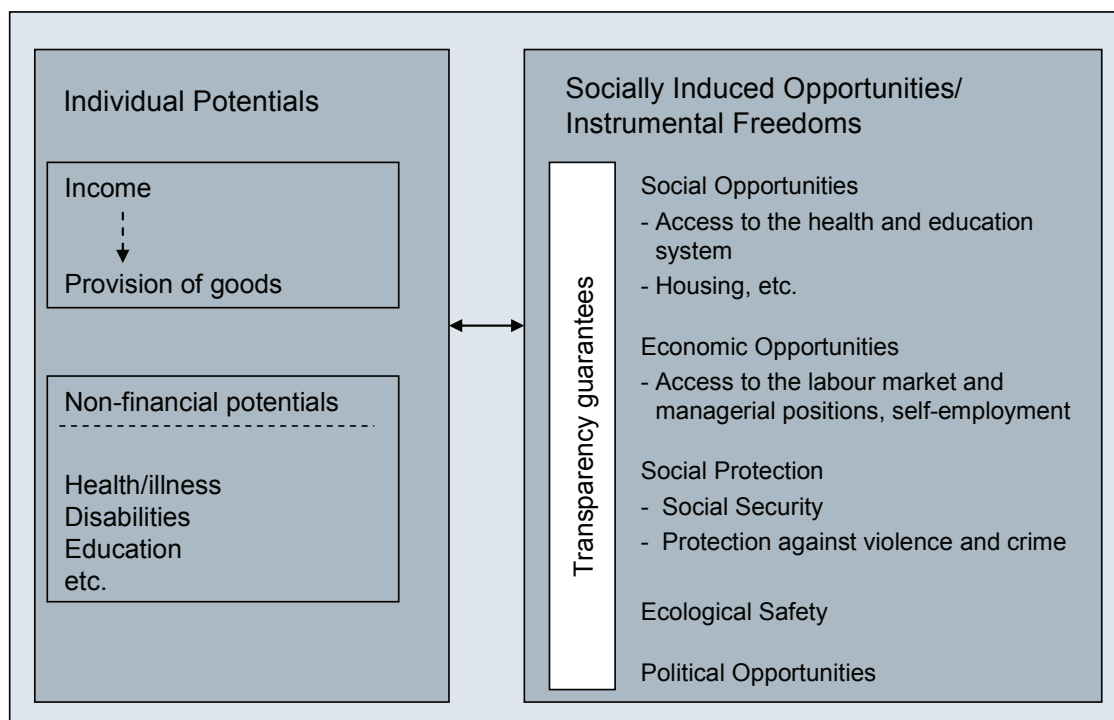
28. While looking at these great successes of a largely stable phase of improvement in living conditions and thus also the health of children and young people, the problematic sides should not be ignored. Of approximately 700,000 children born in Germany each year, around one in five – that is 140,000 children per birth year – undergoes serious, mainly psycho-social stress and severe shortages of material and social resources. The most important causal factors for the increased health risks of socially disadvantaged children can be found in the parents' personal circumstances, making their children especially vulnerable: unemployment, little formal education, single parents, immigrant background, several children, mental illness among the parents – always in combination with material poverty. The collective term "social disadvantage" does not refer to a homogeneous group, but to a vast sociological, economic and socio-psychological array of constellations and vulnerable groups with a correspondingly differentiated need for intervention (Special Report 2007, Chapter 4). The central challenges for a generation-specific health policy for children and young people are thus to reduce child poverty (material poverty and poverty of care), and to increase educational opportunities, especially in pre-school, and social support appropriate to target groups. The aspect "social support" in particular, meaning helpful mutuality, is a central goal of multimodal and participative community health projects.

Children and young people today have a much higher poverty risk than all other age groups. 15-20% of children and young people are affected by relative poverty with all of the resultant difficulties and deficits in participation. Even though the social gradient with respect to health only starts to manifest itself in childhood and adolescence, the particular importance of childhood and adolescence can be seen in that key patterns for the future development of physical and mental health are set in this phase. The ability (in the sense of wanting and being capable) to make use of health potentials in future life (or to avoid risks) and thus also the chances of good health largely depend on skills and orientations taught in the early phases of life. Development shortcomings and health problems in childhood and adolescence will probably develop into a long-term health condition and can permanently impair the quality of life. Even before the pubertal growth spurt, attitudes and behaviours that are relevant to health are formed that will become more fixed as life goes on and are then hard to change. It is obvious that these social factors are highly relevant from a health and scientific point of view. Positively, they are predictors of good health. Negatively, they increase the risk of disease, disability and premature death.

29. From an intervention and political point of view, the link between social situation and health opportunities requires ideas that integrate the multifactoral aetiology of social and health disadvantages and the fields of policy that can help to mitigate this inequality.

These requirements are met by the capability approach concept, which goes back to the winner of the Nobel Prize for Economics, Amartya Sen.

Figure 3: Dimensions of the Capability Approach



Source: Arndt et al. 2006: 8

The capability approach refers to people’s opportunities or the total of their capabilities to live a life that they were able to decide upon for good reasons and that does not throw the foundations of self-respect into doubt. A significant advantage of this approach for analysis and strategy-finding lies in the fact that a distinction can be made between “Individual Potentials” and “Socially-Induced Opportunities” on the one hand, without denying their interdependency on the other. The capability approach thus proves to be made up of individual potentials and socially-induced opportunities.

This means there are four joint fields of action for a social and health policy that aims to improve or maintain opportunities for self-fulfilment:

- Ensuring an income that will secure a minimum subsistence level and the provision of goods needed to enable participation in life in society.
- Encouragement to take advantage of educational services as well as deal with health/illness, disability, etc. as well as possible.
- Establish or ensure access to the health and education system, the labour market and career development, access to welfare benefits to protect against poverty,

protection against violence and crime, access to an ecologically sustainable, working environment and the chance for political participation.

- Establish and ensure transparency with regard to opportunities to make use of instrumental freedoms.

The capability approach concept builds the foundation for the Federal Government's reporting on poverty and wealth and forms the – frequently implicit – basis for many of the Federal Government's social and health policy programmes. This development should be welcomed from a health and health-policy perspective because it is making an important contribution to the both scientifically and practically necessary integration of health, education and social policy.

Findings from developmental psychology and socialisation theory show that deficits in the sense of the capability approach make it more difficult for individuals to cope with the development tasks in the individual phases of childhood and adolescence. These tasks comprise acquiring emotional, social, ethical, cognitive, sensory and motor orientations and skills that are needed to establish identity and individuality and for successfully coping with the challenges of life and thus also form a decisive basis for a healthy life.

In conjunction with existing research findings in all the involved scientific disciplines, the concepts of both the capability approach and health promotion, as well as their more precise definition with respect to children and adolescents in the form of the “development tasks” concept, emphasise the complexity of the interaction of material and immaterial as well as subjective and objective influencing factors on health and well-being. To date, the practice of compensatory and/or preventive interventions has inadequately portrayed this complexity.

30. Legally binding commitments to the material and social conditions that are necessary if children and adolescents are to have the opportunity to cope with the development tasks fitting for their age are included in the preamble and the 54 Articles of the Convention on the Rights of the Child (UN Children's Rights Convention) of 1989 and in Social Code, Book VIII, among other places.

Concepts, programmes, strategies and measures that follow the aim of reducing the socially-induced inequality of health opportunities against the background of the generally good health situation of children and adolescents in Germany should be based on four principles:

1. Strategies and interventions to improve the health opportunities of children and adolescents should start as soon as possible in life. The logic of “the earlier the better” should be combined with the maxim “the broader the more effective”. The connection between different areas of policy and intervention, which has meanwhile been made in the Federal Government’s reporting on poverty and wealth on the basis of the capability approach, can be seen as setting an example here and should increasingly be put into practice.
2. In agreement with the WHO (2008) and many of the available programme documents, the Council agrees with the view that child poverty – both monetary poverty and poverty of care (relative to the general population) – is the most important causative factor of health and development shortcomings and that reducing child poverty thus must have top priority in health policy too. International comparisons clearly show that attempts to reduce inequalities of health opportunities are only ever successful in the long term if a minimum level of income or care is guaranteed and, at the same time, inequalities of distribution across society as a whole are reduced.
3. From this point of view, an effective social and educational policy, i.e. one that improves capabilities in life, must be considered to have a direct effect on health policy for children and adolescents. In particular, early educational opportunities that consider the capabilities and needs of socially disadvantaged children seem to be one of the keys to a healthy lifestyle. Combining (objective) conditions of well-being with the (subjective) factors of a stable, secure and healthy lifestyle create a forward-looking perspective for a health policy aiming for equality of opportunities.
4. The monotony of the findings on the link between (relative) poverty and educational shortcomings on the one hand and poorer health and developmental opportunities on the other hand must not lead to the wrong conclusion that those affected are a more or less homogeneous group. In reality, material poverty, poverty of care and educational poverty can be found in very many and very different groups, living situations and communities, in many different patterns and intensities and with differing compensatory factors. A health and social policy that aims to do justice to this must not exhaust itself in general improvements to the material situation and provision of supporting and educational services, no matter how important and urgent they may be. It must rather acknowledge this diversity and see it as an opportunity to develop chances for activation and orientation towards the expansion and use of the capability approach. This should be carried out decentrally and in cooperation with the target groups in the communities concerned. Both the differentiating concept of

primary prevention with vulnerable groups (Report 2007) and the approach of the participative development of settings conducive to health (Report 2005) can act as strategic guidelines here.

The Council advocates that these areas of policy be considerably intensified with respect to their effects on the future development of the health of the population.

3.2 Health Conditions, Health Behaviours, Health Risks and Use of Health Services

31. The health condition of children and adolescents has many facets and is influenced by various components. This is also shown in the Report “The Health of Children and Adolescents in Germany Specific to Life Phases – Results of the German Health Interview and Examination Survey for Children and Adolescents (KiGGS)”¹ including the specific preparation of the KiGGS results that the Robert Koch Institute produced for the Council of Experts, which takes particular account of different phases of life. KiGGS provides representative and reliable information on the distribution of the material, psychosocial and medical chances for a positive development in childhood and adolescence for the first time in Germany and thus also on the chances for a successful life, both socially and in terms of health. KiGGS enables conclusions to be drawn about many important aspects of the health situation of children and adolescents. At a largely very high significance level, it shows that increased incidences of practically all health stresses and deficits with respect to health resources can be detected above all among children of low socio-economic status. Specific differences between children and adolescents with an immigrant background and those without can also be detected in all aspects of health. Furthermore, in recent decades a marked change can be detected in the morbidity spectrum of adolescents, towards a so-called “new morbidity” where chronic illnesses, such as allergies and mental illnesses, play an increasingly important role.

1 The complete Report (RKI 2008a) can be downloaded from the website of the Council of Experts (www.svr-gesundheit.de).

3.3 Programmes for Prevention and Health Promotion provided by Non-Physician Healthcare Professionals

32. There are many specific Federal Government, and sometimes *Land* government programmes, to improve the health situation of children and adolescents. These problem areas also play a prominent role in interdisciplinary government programmes. Added to this are programmes and activities by non-governmental players, mainly the SHIs and non-governmental organisations (NGOs). Section 3.3 contains an overview and in-depth analyses of the players involved, their programmes and activities, taking account of the demands for a modern structure of interventions and quality assurance, notably in the 2005 and 2007 Reports. The Council welcomes the increase in the number and the quality of these activities, especially since in many cases they make the objectively necessary links between health, education and social policy. Furthermore, the orientation towards community or setting interventions and the prioritisation of interventions with socially disadvantaged children and adolescents repeatedly recommended by the Council is increasingly establishing itself. The Council criticises the fact that the relations between the many programmes and plans, as well as (within the programmes) the relationship between achievement reports, declarations of intent and genuinely new programmes, often remains opaque. Cooperation between the Federal ministries on matters concerning health problems and target groups appears to be in need of improvement. The “Federal Government's Strategy to Promote Children's Health” (2008), which largely summarises the programmes, plans and activities of the Federal ministries involved, could act as a starting point for better coordination and as a basis for the identification of gaps in provision and quality deficits.

The problem areas of diet and exercise, increasingly combined with efforts to overcome stress, are at the heart of prevention efforts that take a cognitive and psycho-social approach, in particular of those stemming from governmental institutions. The Council has tried to make a contribution to the urgently required transparency in this field by asking the most important players for a picture of the extent and direction of primary prevention provided by non-physician healthcare professionals for children and adolescents. As a result, the impressive number of 419 programmes has been identified.² The deficits with regard to target orientation, structure, duration and quality assurance that the survey revealed appear to be more important for future development. Contrary to the programmes' own claims, the activities are often inadequately aimed at

2 In this number, however, it must be remembered that many programmes were counted more than once because they have sponsors from several categories, e.g. both *Land* ministries and the *Land* Association for Health. The numbers also include sub-programmes of larger programmes because they are often independent in terms of organisation and concept.

target groups – especially socially disadvantaged target groups. With respect to the structure, approaches that focus on individual, behaviour-related health risks (exercise, diet or dealing with stress, individually or in combination) still tend to dominate. The Council has repeatedly recommended an orientation towards and prioritisation of interventions that make the communities themselves (nurseries, schools, leisure centres) the subject of the intervention, with their obvious and hidden, material and immaterial incentives for risky health behaviour, and recommended they be adapted to the needs of the users within a structure that is as participative as possible. Apparently, this is only slowly establishing itself in practice without any further incentives or control. A broad transition from “health promotion in settings” to “development of health-promoting settings” would appear to be necessary. Admittedly, the predominant promotion periods of rarely more than three years are inadequate for such complex interventions. In very many cases, the quality and effectiveness of the interventions cannot be assessed because there is no appropriate quality assurance and evaluation of the interventions. By contrast, in recent Federal programmes, quality assurance and evaluation has increasingly been planned and conducted from the outset. The SHI is also increasingly using quality assurance instruments for its activities. The financers and other players involved in primary prevention and health promotion have access to increasingly elaborate and differentiated methods provided by the health sciences. In this way, the Council considers that its own recommendations from earlier reports have been implemented. However, in Germany there is no place where findings and experience with different approaches and methods of quality assurance and assessment are summarised, evaluated and reported back to the financers and other players as part of a learning circle. What is missing is a national expertise centre for measuring and developing the quality of prevention by non-physician healthcare professionals and health promotion that, as it falls within its area of competence, should be located within the Federal Centre for Health Education (BZgA), or – possibly – in the new quality institute pursuant to Article 137a of Social Code, Book V.

3.4 Growing Up Without Violence

33. The manifestations of violence against children and adolescents, such as mental and physical abuse, sexual abuse as well as neglect, are a very serious health problem in Germany. Neglect and parental violence always go hand in hand with an impairment of the development opportunities of the affected children and adolescents and are associated with physical, socio-emotional, mental and cognitive consequences. The effects of experiencing domestic violence, usually by the father against the mother, are

just as far reaching. The impact of experiencing violence between parents is far reaching and associated with a moderate to strong influence on the number and intensity of behavioural problems. It also increases the probability of exercising (domestic) violence oneself and, for boys in particular, can form the background for criminal tendencies. Lasting damage to their future lives resulting from childhood experiences of violence emphasises the importance of child protection for the prevention of violence and crime in society as a whole and for diminishing violence in the relationship between the sexes. Families suffering from particularly high stresses must therefore be recognised at an early stage and supported to reduce the probability of violence and resultant developmental damage to children and adolescents.

34. It is hard to assess whether the number of cases of child welfare risk has increased in recent years because there is no reliable information on the number of children and young people affected. In particular, there is a lack of reliable empirical data on the number of children and adolescents affected by mental abuse and neglect. Furthermore, no statements can be made about how many cases have been processed by the General Social Service of the Youth Welfare Offices and how many cases of neglect and abuse have led to measures being taken. The evaluations and analyses of official child and youth welfare statistics show a rise in assistance with rearing children, as well as taking-into-care and removals of custody, but this cannot necessarily be explained by increased risk. For example, an increased awareness in the social environment and by the social services about neglect and abuse of children and adolescents, combined with possible uncertainty among the experts about the danger of not intervening or intervening too late, may have an influence. Furthermore, the rise in assistance with child-rearing can be seen as a sign of greater acceptance of assistance and support by the families. The current lack of reliable information also concerns information on the quality of the German child protection system (i.e. information on the effectiveness of preventive measures and the efficiency of the means used as well as the extent of unintentionally negative consequences of interventions by the child protection system). Representative, valid and continuously collected data containing differentiated statements on the health consequences and contexts of a specific social situation and living conditions are required for qualified health reporting on the prevalence of violence against children and adolescents. Furthermore, an improved empirical foundation concerning the number of the reported and processed cases of risks to child welfare and the assistance measures taken is appropriate.

35. Parliament has passed an Act Outlawing Violence in Education, in which it clearly formulates that children are entitled to an upbringing free of violence and that corporal punishment, mental injuries and other degrading actions are not permitted. Other legal

framework conditions, such as the Children's Rights Improvement Act (see Article 1666 German Civil Code) and the duty to provide protection if a child's well-being is under threat (see Article 8a Social Code, Book VIII) as well as the "Act to Facilitate Family Court Action where Children's Well-being is at Risk" expand the legal protection options for children and adolescents against violence. In principle, the Federal Government's initiative to merge necessary regulations on the improvement of child protection into a Child Protection Act should also be welcomed.

36. Child and youth welfare is based on the protective duty to ward off risks to children's well-being as well as provide the services to help bring them up in the form of supplementary support, care and encouragement. In addition to the state's protective duty, the statutory strengthening of prevention and health promotion into a separate mainstay in the health service is a structural prerequisite for the improvement of children's health and promotion of their welfare and thus essential to protect children from neglect, family violence and sexual abuse.

37. The quality of the child protection system in Germany has been the subject of critical discussion in view of current case analyses of fatal failures. When systematically examining and discussing problematic or flawed child protection cases, more attention must be paid to the question of the institutional conditions, organisational structures and culture as well as personnel and financial resources. By the same token, the welcome strategy paper must not obscure the fact that many areas of child protection currently face radical cuts in spending.

38. In addition to the standard child and youth welfare services, marked activities at Federal, *Land* and local authority level in the form of increased early and preventive offers of assistance are visible. The mostly selective prevention programmes are faced with the challenge of developing methods to identify stressed families that require special help. With the aim of recognising the signs of risk as early as possible in order to offer appropriate help, early warning systems presuppose a systematic recognition of relevant risk factors on the basis of access to the community that is as extensive as possible. The foundation is systematic networking and obligatory cooperation between specialists in child and youth welfare in both the public-and private-sectors, the health system and other family-related players. There is hardly any reliable knowledge about how the early warning systems work in Germany. Projects are often limited to the context of local conditions and are not given scientific support or evaluated with regard to their effectiveness. The offers of help and support range from the more individualised (e.g. outreach family assistance, parental assistance, family midwives) and the more standardised (e.g. parenting courses) to mediators (e.g. visits associated with birth,

visiting services provided by non-professionals). The principal problem for all access routes remains how to reach isolated families with problems that are often difficult to detect from outside. Approaches with a so-called “come structure” require those concerned to independently seek out assistance, whereas offers with a “go structure” implement outreach help. The pilot projects within the context of the National Centre of Early Assistance, as well as in many other projects on early help in many regions and local authority areas, have problems with consistency and standardising their work. The provision of resources, qualifications and cooperation have been identified as three key development fields in the area of early assistance for the sustainable functioning of the child protection system.

39. Recently, obligatory early screening for children has been realised as a central instrument for the improvement of child protection in many *Länder*. The effectiveness of interventions to increase the uptake of screening will, however, have to be checked for their effectiveness in increasing participation, especially by children of low social status or with an immigrant background. It is questionable whether mandatory or binding examinations will be able to achieve the desired effect of identifying more cases of abuse or neglect than in the past. The expected incremental benefit must be thoroughly weighed up against unwanted effects. A considerable strain on the trust between doctors and other medical professions and the families or parents is to be expected. However, it is this relationship of trust that enables them to develop contact to stressed families earlier and more easily than is possible for other state offices. In order to be able to guarantee successful cooperation between sectors, interdisciplinary understanding about the basic knowledge required for assessing family risks for a child’s development, and about the preconditions and process steps for passing on information and informing all players involved about the various available offers of help, are also needed. Focussing solely on increasing participation rates by means of an obligatory invitation system neglects the need to improve the quality of the examinations and to promote cooperation between health welfare and child and youth welfare. Monitoring and sanctioning mandatory screening for children may also overload the health system with dysfunctional control tasks and overburden the child welfare system with cases that are not very serious, thus reducing protection for at-risk children. As they are designed at the moment, screening is not a targeted instrument with respect to the detection of important indications of child abuse or neglect. Overall, it is questionable whether the introduction of a binding invitation system will actually improve access to stressed families or make it even worse. As it appears the sensitivity of the examinations in the form they have taken to date with regard to possible signs of neglect or abuse - such as slow development, behavioural problems, or bonding problems - is considered to be low, the question of how to improve them while assuring quality arises. The Council

assumes that the Federal Joint Committee (G-BA) will discuss these options and their limitations in the current review of the content of the Child Guidelines. A quick conclusion to the guideline review is to be welcomed.

40. Responsible and well-founded action by experts depends on their technical and personal qualifications. Relevant specialist knowledge about the various risk situations (including thorough assessment of risks and dangers) as well as about the effectiveness of assistance form the foundation for this. Experts, who make decisions about the type of support together with the families, not only need relevant knowledge about the effectiveness of assistance, but must also be in a position to offer appropriate assistance. The help offered after risk events must be checked with respect to whether it represents the intervention that holds out the greatest promise of success. The importance of preventive health for intervention and prevention of violence must be taught in the basic, continuing and further training of all professional groups in the healthcare system, and the various professions must be made aware of the subject. In order to enable medical and non-physician health and assistant health professionals to perform their key role in the prevention of violent attacks and in treating the consequences of violence, the subject matter must be included in the relevant training and university curricula.

41. Studies on the accessibility of psycho-socially highly stressed families are necessary alongside more extensive research into all forms of violence against children and into child neglect in particular. Furthermore, studies on the quality of the German child protection system, e.g. with systematic case-related analyses of institutional errors in child protection are also needed. With respect to the need for research, reference is also made in particular to the largely unresearched field of the health consequences of violence on vulnerable groups (e.g. children and adolescents with an immigrant background, disabled children and adolescents).

3.5 Antenatal Care, Screening and Childhood Vaccinations

42. In comparison to the social determinants of capabilities and thus also the health of children and adolescents, the health risks for pregnant women and children that can be processed within the healthcare system are dealt with much more systematically and show a high level of professionalism. Principle considerations regarding benefits and harm as well as the methodology of community-based screening are the starting point. Whereas Germany occupies a leading position here in terms of quantity, with respect to quality it can be seen that although many are undoubtedly useful and necessary, the

current benefits catalogue of the SHIs contains many services whose advantages have not been proved or are dubious, or whose desired effects do not outweigh the unwanted ones. When licensing and assuring the quality of screenings and when examining the benefits of existing programmes, doctors, the G-BA and the health policy bodies should consider the following basic rules:

1. Early detection is not only defined by a “diagnostics for everyone” approach, but rather has its own biological and bio-statistical peculiarities that have to be considered when introducing and conducting screening and screening programmes.
2. Early detection can have a demonstrable benefit. But it can also cause harm. Both should be assessed differently to diagnostics among patients with symptoms.
3. Early detection primarily has a benefit for the community. The entire logic of conducting screening programmes is characterised by the community-based approach.
4. The individual medical benefit is mostly very small – except when offering screenings only to people at high risk – even though it is expressed as an absolute risk reduction to screening participants.
5. Potential participants in early detection screening must be informed about the potential individual benefits and harms before they consent to an examination.
6. A screening programme represents an optimised, systematic programme based on a study with respect to the ratio of benefits to harm. Changes to an operationalised programme may result in shifts in the ratio of benefits to harms.

43. Against this background and with respect to practice, the Council has made some critical findings and recommendations:

1. In Germany, changes are not infrequently made to existing systematic programmes and they are then sometimes carried out in an individualised manner. This is a quality deficit and may mean a risk to the participants.
2. In addition to the defined and licensed programmes, “private programmes” and/or individual non-covered health services are offered for which there is no evidence of any benefit and which may even cause damage.

3. Since the individual insured person/patient cannot assess the benefit, harm, quality and relevance of such changes to programmes, there is a need for regulation here. To reduce inappropriate care of this kind, “screening” should be licensed.
4. With respect to the SHI screening benefits, the Council recommends an addition to Article 25 para. 3 Social Code, Book V (health examination): A new No. 5 should be added to the four preconditions for the (screening) examinations within the scope of SHI cited there: “(that) the medical and community-related benefit has been proved.”

44. Preventive care in pregnancy takes place in various settings and is provided by various institutions. Many preventive measures are also provided by the SHI or private health insurance (PHI). They are laid down in the so-called “maternity guidelines”. Furthermore, prevention takes place in many forms, e.g. by adhering to statutory provisions with respect to working hours and with respect to working restrictions for pregnant women, information on medication during pregnancy (leaflet), or campaigns and publications that refer to the risks to mothers and babies during pregnancy. Midwives and social workers conduct individualised interviews and, where appropriate, offer support during pregnancy and after the birth. Within this context, the Council has examined the programmes in the “maternity guidelines” and comes to the following conclusions:

1. The “maternity guidelines” describe a detailed programme of examinations at fixed intervals that is outstanding in its breadth in an international comparison.
2. The benefits of part of the programme have been proved by means of trials, or the direct plausibility of the benefits has been demonstrated.
3. The benefits of other parts have not been adequately proved or should even be classified as “without proof of benefit” with good trial results – as is the case for ultrasound examinations during pregnancy.
4. Some examinations possibly once had a benefit, but nowadays have an unfavourable cost/benefit ratio in the routine situation because of changing illness prevalence. This applies to examinations for syphilis, German measles and hepatitis B.
5. To achieve better foundations for decisions using empirical data, there would need to be relatively little additional documentation; this should be called for.

6. The advisory services included in the programme have not been operationalised. This is a quality deficit and also hampers the acquisition of data on effectiveness and benefits.
7. With respect to genetic testing, there are no specifications for indications and advice.
8. To date, the programme has not included scientifically disputed broad-based screening for toxoplasmosis or gestation diabetes, which is often demanded in Germany. But it would be important to find out how often this is conducted outside the programme – i.e. “unlicensed”.
9. Even though the German maternity guidelines are unusually broad in terms of examinations and frequency, in comparison with countries at a similar general development level (western Europe), Germany holds no outstanding positive position with respect to the central outcomes of infant and maternal mortality, which could mean a need for improvement in the programme and/or implementation.

45. Childhood and adolescence are phases of life that are characterised neither by high nor – with the exception of a few cases – serious morbidity, let alone mortality. In addition to other prevention efforts relevant to this phase of life, which are mainly conducted by non-physician healthcare professionals, screening examinations aim to detect a few rare serious illnesses or disruptions to a child’s development. Section 3.5.3 (Screening in Childhood) focuses on the area of care provided by paediatricians and, later, GPs, i.e. examinations and health advice in line with the “Child Guidelines” (U1 to U9).

As a result of a systematic analysis of the programme, the Council has come to the following summary of findings and recommendations:

1. The childhood screening programme conducted in accordance with the “Child Guidelines” is characterised by many, extremely close examination appointments for many largely somatic target illnesses. Similar programmes are established in many other countries – with a different number of examination appointments and target illnesses from the German programme.
2. Screening aims at the asymptomatic stages of illness. With respect to the screening programme in childhood, “asymptomatic” usually means that the parents assess their child as healthy and unremarkable. Some of the target illnesses named in the Child Guidelines (e.g. skin diseases) are obviously not asymptomatic and therefore do not require screening in the usual sense. The programme structure reflects the

3. What is noticeable about many target illnesses is that conducting and evaluating the examination has only partially been operationalised. This means that many of the preconditions for quality assurance and measuring benefits are not in place. Exceptions include the “extended newborn screening” or ultrasound examination for hip joint anomalies.
4. Many of the examinations included in the German programme are acceptable from a purely diagnostic point of view. But there is no proof of benefits of possible therapeutic consequences (e.g. identifying height and weight or screening the hearing of newborn babies).
5. Some examinations could be improved, such as detecting amblyopia and its risk factors (e.g. by ophthalmologists and orthoptists) or detecting congenital heart defects (by means of newborn pulseoximetry screening).
6. The data situation with respect to recording the target illnesses and their treatment and with respect to the quality of records within the programme is meagre overall. Almost all of the studies come from abroad. This means that results can only be transferred to a limited extent. More research is needed in order to raise and safeguard quality.
7. The sequence of examination and treatment – i.e. the health benefits of the screening examination – is very rarely studied. The advantages can be recognised in some target illnesses of “extended newborn screening”. However, no advantages can be demonstrated, for example, of examinations for hearing damage in toddlers or pre-school children.
8. In addition to finding the target illnesses stipulated in the Child Guidelines, the childhood screening examinations also have other functions: they confirm to parents that their children are developing normally and offer an opportunity for advice. For many paediatricians, the focus of the screening examinations is actually on these advisory measures. Account should be taken of this in the inclusion of advice in the preventive programme, provided that its effectiveness and benefits have been proved.
9. The proportion of advice seems to have been increasing in recent years. Together with extensive examinations to detect target illnesses, the wide-ranging nature of

many consultations is not practicable, however, both because of the amount of time consumed and because of the wealth of information.

10. A better design could be as follows:

- a) Preventive consultations and specific advice on child-rearing should have an official place in screening examinations – provided that their effectiveness has been proved (in Germany, if possible).
- b) Unlikely target illnesses and inappropriate examinations should be cut from the screening programme.
- c) Plausible screening examinations should be operationalised. Ideally they would have proven effectiveness that allows for a clear procedure and documentation that can be used for quality assurance and supporting research.
- d) Extensions to screening examinations – both in terms of the number and frequency of the examinations and of the target illnesses – should be made only if effectiveness has been proved.
- e) With respect to the SHI screening benefits, the Council recommends an addition to Article 25 para. 3 Social Code, Book V (health examination): A new No. 5 should be added to the four preconditions for the (screening) examinations within the scope of SHI cited there: “(that) the medical and community-related benefit has been proved.”

46. When vaccinating, the body is exposed to a weakened pathogen or parts thereof and an immunological rejection reaction is thus induced. This means that if the body comes into contact with the real pathogen, it is rejected and the illness does not develop, or only in a very mild form. Vaccinations are among the most effective – and occasionally also only possible – preventive measures against sometimes serious infectious diseases.

Individually, vaccinations can have fairly serious to serious side effects that, however, have to be extremely rare if a vaccination is to be licensed at all. Something that can be considered a side effect at the population level is that only specific infectious bacteria are selected for vaccinations. This means vaccinations never affect all types of a pathogen, with the result that so-called “problem bacteria” remain or even occur at greater levels, and the vaccination remains ineffective against them.

Vaccinations are protective measures that target different people in need of protection. Vaccinations thus lie between individual prevention and prevention for the community

as a whole. Some vaccinations (e.g. tetanus) are primarily about individual protection, others are both about individual protection and protection of the community (e.g. whooping cough, German measles) and, finally, there are also vaccinations that aim to eradicate a primarily community-related target (e.g. hepatitis B). Each of these health or health policy goals makes sense in principle, but none of them can justify mandatory vaccination.

In Germany, vaccination recommendations are made by the Standing Committee on Vaccination (STIKO). The STIKO is an institution organised under public law, which means it is an institution under governmental supervision but independent in its decision-making. The members are appointed by the Federal Ministry of Health in conjunction with the supreme *Land* health authorities. Because of the considerable health and commercial consequences of their decisions, its members must be above all suspicion of partiality. After a decision by the G-BA, the STIKO recommendations are usually adopted by the SHIs, which then pay for their members to have these vaccinations. The job of the STIKO is to make recommendations on the basis of available data about the benefits and harm of vaccinations, especially new ones that may be introduced. Comparisons between the effectiveness and efficiency of vaccinations and other preventive or therapeutic strategies, including health-economic assessments, are not among the STIKO's key responsibilities. The G-BA and the bodies that work for it have to check the efficiency and necessity, as well as the benefits and harms, when including vaccinations in the SHI benefits catalogue.

On the basis of the standard vaccinations recommended by STIKO, the Council comes to the following summarised evaluations and recommendations:

1. Vaccination protection for children in Germany is extremely dense and high on an international scale.
2. All of the recommended vaccinations are aimed at diseases or their consequences that occur very rarely – partly due to the success of long-established vaccination programmes. The resulting reduction in the benefit of the vaccination must be continuously weighed up against the possible harm (safety of the vaccine materials). Target-group-specific vaccination programmes can greatly improve this relation.
3. Part of the population is sceptical about vaccinations. For this reason, and due to a general right to adequate information, transparency is very important in decisions and recommendations on this subject. In addition to objective information on the patient-relevant benefits and harms, this also concerns information on whether the

main reason in favour of a specific vaccine is rather to benefit an individual or the community.

4. More recent recommendations by the STIKO and decisions by the G-BA on the introduction of new vaccines (in particular chicken pox and HPV) beg the question whether effectiveness and efficiency comparisons with other preventive or therapeutic alternatives should be included in the decision-making process and not just the effectiveness of the vaccine. In the Council's view, this would be a task for the IQWiG (Institute for Quality and Efficiency in Health Care).
5. Vaccinations against certain pathogens or pathogen subgroups can result in the number of illnesses caused by them falling, but illnesses resulting from other pathogens (subgroups) increasing. Long-term monitoring of such changes should be part of all vaccination programmes.

47. Underprovision in medical prevention for children and adolescents takes place when there is low participation in screening and vaccinations that have proved to be effective. This is more widespread among people of low socio-economic status, but can also be found in highly educated groups with philosophical reservations. There are hardly any socio-cultural differences with respect to the utilization of the vaccination programme. By contrast, in the screening programme for children from the U3 onwards there are social differences in use, which range between 20 and 30 relative percent between social classes and between children from families with and without an immigrant background. These differences can no longer be seen at J1 (adolescents' health examination), which has a very low take-up overall.

There are therefore good reasons to increase the participation of children and adolescents from socially stressed backgrounds, particularly in screening programmes. To do this there is a whole set of tried and tested instruments – mostly from abroad – that are relatively simple and also effective. Whether they will also be useful with respect to children and adolescents in the German context has not been investigated. They are mainly personal invitations, reminder systems (call-recall systems), economic incentive systems (monetary payment on participation, bonus), outreach measures (preventive care on-site: e.g. in schools and kindergartens; mobile examination units) and increased awareness in society with campaigns such as that currently being conducted by the BZgA (“Ich geh zur U! Und Du?” [I'm going for a check-up! And you?]).

The Council recommends that all of the internationally successful interventions to increase take-up should be investigated with respect to their application in the German context and be tested in pilot projects with scientific support. In this context, it should

also be examined whether the specific use of examiners of the same cultural/immigrant background as those to be examined results in higher participation and, where applicable, a higher problem discovery rate – especially in the psycho-social sphere. Prior to general use, the measures that have been successful abroad must undergo social and cultural adaptation for socio-culturally aware use because they are generally primarily aimed at the German middle class.

However, a target-group-oriented increase in the uptake of screening can be expected to make only a moderate contribution to reducing the socially induced inequality of health opportunities. The programme records many health problems that are distributed unevenly across society and that are part of the childhood screening programme: obesity, eating disorders, mental problems, psychosomatic illnesses, the use of alcohol and tobacco, unhealthy diets, poor teeth, accidents and vision, speech and psycho-motor problems. However, of these, only vision, speech and psycho-motor problems can be treated medically. All of the other problems fall into the area of health behaviour heavily determined by lifestyle. There is limited, far from encouraging evidence of doctors influencing health behaviour. It is therefore necessary to conduct more precise research into the possibilities and limits of systematic behavioural prevention with socially disadvantaged patients when carried out by or with the help of a doctor – and, for example, compare the results with setting approaches. Only when increased participation in screening programmes really does result in a reduction in health burdens and, as a consequence, a reduction in morbidity, can investments in increasing the uptake of these programmes be considered high priority.

3.6 Drug Therapy for Children and Adolescents

48. The provision and treatment with drugs for children and adolescents, although of good quality overall, reveals some characteristic problems in the quality of the structure and process:

1. Many drugs that are used in the outpatient sector for infants, toddlers, school-children or adolescents have not been specifically examined or licensed for these age groups; off-label use is still a characteristic of drug therapy in paediatric care. In outpatient care this concerns approx. one sixth of the drugs used, the proportion in inpatient treatment is much higher and can be as high as 90% in intensive care units. It is therefore urgently necessary to conduct clinical studies on drug use by children because this is the only way that the effectiveness and safety of drug therapies for children can be increased. A consistent implementation of the EU Regulation of

January 2007 on conducting clinical trials with children if drugs are essential for treatment in paediatrics is therefore necessary.

2. The diagnostics and treatment of rare diseases (orphan diseases, which occur in fewer than 5 in 10,000 people according to the European classification) must be improved. This includes research and development in improving drug therapies, which often appears commercially unattractive to pharmaceutical companies. Corresponding research programmes in the EU are based on monetary incentives for research activities of this kind offered to pharmaceutical manufacturers (e.g. extended patent terms) and, like increasing public awareness of rare illnesses, they are an important instrument to improve care for these patients.
3. Existing guidelines are implemented inadequately. This is the case in particular for the use of psychostimulants for ADHD and antibiotics for infections of the upper and lower respiratory tracts. Keeping to the rules of evidence-based medicine is not only necessary to improve the quality of care, but also to prevent the risk of the spread of antibiotic resistance.

3.7 Care for Mentally Ill Children and Adolescents

49. Mental illnesses can occur very early in life and also have high co-morbidity. No increase or fall in mental disorders among children and adolescents has been detected overall in the last few decades. In principle, equating the diagnosis and the (necessary) need for treatment due to various factors such as spontaneous progression or the variability of resultant limitations and disabilities is not unproblematic. Research into spontaneous progression, the influence of changeable and, wherever accessible to primary prevention by non-physician healthcare professionals, family and social factors, as well as into improving differential diagnostics is necessary. Currently, the extent of surplus, inadequate or incorrect care cannot be seriously estimated.

Measures are needed to remove stigmata and dismantle prejudices. Parents can also be guided by prejudices about mental illnesses, which may make the search for, or finding appropriate help for their children more difficult and be an obstacle to overcoming the illness. This can be counteracted by raising public awareness.

The availability of professional psychiatric and psychotherapeutic care for children and adolescents has expanded greatly since the 1970s - in parallel to the fall in the number of children and adolescents. As a trend, urban regions have a higher density of care both

in outpatient and inpatient care. The eastern German *Länder* have better inpatient care and the western German *Länder* better outpatient care.

The different manifestations and degrees of severity of mental disorders and illnesses and a variety of possible treatment approaches and concepts make general statements about the appropriateness of inpatient and outpatient treatment difficult. Deficits can be seen in the coordination of required treatments and the cooperation structures in the field. In psychotherapeutic care in particular, it can be assumed that supply-induced demand exists in certain regions.

The care of mentally ill children and adolescents is not solely a task for medical or psychotherapeutic treatment. The cause and the effects of mental illnesses in children and adolescents are embedded in a developmental psychological context that must be considered in diagnostics and treatment. Mental and psycho-social problems in childhood and adolescence are often not recognised or adequately treated in accordance with their pathological significance. The absence of adequate treatment approaches can result in the illness becoming more chronic and reduce the chances of a cure, sometimes increasing the uptake of somato-medical services.

Therefore differentiated care for mentally ill children and adolescents is needed that includes making use of the potential for self-help (although this may vary despite heterogeneous target groups and care needs). Regional networking for coordination and cooperation of the different help services must be guaranteed in this context. There is also still a need for research into the aetiology and determinants of psychological disorders, on primary and secondary prevention, indications and on the quality of the various treatments and concepts.

3.8 Growing Up in Mental Health – Aspects of Care for Children and Adolescents with ADHD

50. Attention deficit/hyperactivity disorder (ADHD) is a commonly diagnosed mental disorder/illness of childhood with often serious health and social consequences for a lifetime, for both children and parents. The subject of ADHD has attracted increasing attention in recent years. On the one hand, this is due to high and rising prevalence rates and to a parallel rise in the prescription of ADHD-specific drugs. But on the other hand, the fact that ADHD is increasingly being recognised as a (lasting) problem in adulthood is also raising the importance of this symptomatology. Of the therapeutic measures used by practising doctors, treatment by drugs alone takes priority although multimodal

therapy forms (e.g. psycho-education, family therapy, behavioural therapy, ergotherapy, also in combination with drug therapy) are recommended. Behavioural therapy methods have been particularly successfully used in controlled studies, but correct implementation in everyday practice is not always ensured. On the other hand, it seems to be much more difficult to obtain behavioural therapy for the affected child than a drug prescription. Therapy places are sometimes not available, or only after long waiting times. As a result of the increasing prevalence of children's disorders that are treatable with behavioural therapy, the responsible specialist associations should raise its availability.

51. Overall, the aetiology of ADHD remains more unclear than the predominant and apparently targeted drug therapy to increase the dopamine concentrations in the brain appears to imply. Multi-factoral triggers and influences are suspected (e.g. family and social environment, media consumption), with the result that intensified multi-disciplinary research (e.g. medical, psychological, sociological, etc.) is necessary so that an adequate and differentiated therapy can be provided. The research results should also help to clarify the extent to which the possibilities of primary prevention can be used to help prevent early and often premature medicalisation and stigmatisation of children as ADHD sufferers. The widespread, often useful, pharmacological intervention should not block the use of other practical and equally effective therapeutic options.

52. The diagnosis and the therapy decision based on it must be improved, both with respect to therapists' qualifications and to organisational and temporal aspects. The first contacts are very often paediatricians, or GPs in rural areas. Neither of these specialist groups is usually specifically trained to diagnose and treat mental disorders in children or ADHD. That is why cooperation with child and adolescent psychologists or psychiatrists should be sought out ("sponsorships" in the form of consultants), even though this does not always appear to be easy because of the small number of child and adolescent psychiatrists. However, electronic patient files could facilitate communication between the doctors and speed up and improve decision processes to the benefit of the children and adolescents, as well as their parents or guardians. Furthermore, an analysis of the diagnostic methods carried out shows that detailed clarifying interviews are conducted less frequently than psychometric or high-tech tests, for example. If this is a consequence of the higher reimbursement of these services, personal-communicative services should be better remunerated specifically with respect to this illness and these symptoms. Overall, because of the uncertainties and the great fuzziness in diagnosis, it remains unclear whether the real incidence and prevalence really is increasing to the extent the rise in drug prescriptions makes it appear.

53. The children and their teachers are too infrequently involved as a source of information and as cooperation partners. But a close exchange between doctors and teachers is one of the strongest predictors for the success of a therapy. More attention should therefore be paid to this aspect in future. Alongside such “cooperation partnerships”, public awareness of the symptoms and illness should be encouraged to counteract prejudices, improve acceptance for the children, prevent exclusion and isolation (e.g. these children are no longer invited to their fellow pupils’ parties) and thus to arouse understanding for the parents and children involved. Support for parents is therefore just as important as problem-oriented information and intervention suggestions for carers in kindergartens and nurseries, and for school teachers. Proposals on changes in how schools, kindergartens and nurseries are materially equipped so that children with ADHD have opportunities to exercise their urge for movement (e.g. in rooms with sports equipment, etc.) should also be taken seriously.

54. It can also be seen that insufficient account is taken of the gender-specific differences in ADHD symptoms. This results in girls possibly being given insufficient care because of their less frequent hyperactivity and associated lower disruption to the social environment, but on the other hand this protects them against hasty medicalisation. Better education concerning these gender-specific differences, both with regard to frequency (approx. 80 % boys, 20 % girls) and with respect to the nature of the symptoms, is therefore necessary. Differences in the socio-economic status of the children must also be considered. ADHD is more frequently diagnosed among children from lower status families than among children of middle or high status. Children from an immigrant background are diagnosed less often than children without an immigrant background. No differences were found between east/west and city/countryside.

55. The most common psycho-stimulant prescribed to treat ADHD is still methylphenidate (MPH). The increase in the dopamine level associated with this apparently reduces agitation, attention deficits, impulsiveness, depressed moods and irritability without a tolerance developing. In principle, an exact determination of the individually required dose in the initial phase (titration) is necessary, as is continuous consultation at monthly intervals, monitoring of any disruptive effects (e.g. disruptions to sleep or growth), as well as regular, controlled treatment breaks. In other countries (e.g. Finland and Sweden), prescriptions have been limited thanks to strict conditions (approval by the medications authority, prescription permit valid for one year). A second opinion (according to Article 73 d Social Code, Book V), in which experts in child and adolescent psychiatry would be involved, could also raise the sensible use of medication therapy in Germany.

This should also apply to the use of the active agent atomoxetine, which is, however, used less (10% of prescriptions in comparison to methylphenidate) and is classed as a second-line drug after methylphenidate because of its less reliable effectiveness and possible unwanted side effects (tiredness, dizziness, “hostility”, increasing suicidal tendencies, etc.).

56. In future, more attention will have to be paid to the patients’ age-related transition problems. There are a number of studies on the use of medication treatments for children and adolescents aged between 6 and 18, which enable a differentiated decision to be made for a specific therapy. No drugs containing methylphenidate have been licensed in Germany for adolescent patients over the age of 18 who still suffer from the symptoms of ADHD; a prescription is only available off-label. It is therefore worth considering whether the example of other European countries (e.g. Denmark or the United Kingdom) should be followed, where therapy that started with children and adolescents under the age of 18 can be continued for adolescents and adults over the age of 18. Otherwise, the only other possibility is the prescription of atomoxetine for this group of persons, which can be recommended as an alternative only to a limited extent. The number of older patients diagnosed with ADHD is rising. Studies on these populations as a basis for well-founded therapy decisions are therefore urgently required.

57. Of the psycho-social interventions, educational interventions during lessons (on the basis of a behavioural therapy) as well as behaviour therapy interventions in the family (parental training) have proved to be effective. By the same token, the effectiveness of preventive approaches on the basis of behavioural therapy has been proved. In particular, parents who suffer from ADHD themselves need more support. Account must be taken of the problem of parental ADHD when treating the affected children. There should also be more research into the possibilities of interventions in pre-school children because various studies indicate the high preventive potential of such intervention programmes. Based on the current level of knowledge, the progression and severity of the disorder can be influenced positively by early intervention. Particular attention must therefore be paid to socially disadvantaged families. There is also considerable need for advice since most affected parents feel that although they are well informed about ADHD in general and about the possibilities and limitations of drug treatment, the level of information is lacking on appropriate schools/kindergartens, self-help groups near to where they live, and treatment options in adulthood. Furthermore, with regard to the interdisciplinary direction of an optimum ADHD treatment involving various experts (multi-modal therapy concept), complex decision situations result in a corresponding need for coordination. The establishment of an internet-based patient and

family information system within the context of the nationwide ADHD network funded by the Federal Government (www.zentrales-adhs-netz.de) and support for self-help associations are important steps towards satisfying this need for advice.

4. Special Care Requirements in the Transition from Adolescence to Adulthood

58. Transition in healthcare in this section means the transitional period from adolescence into adulthood, where people with special medical care needs are transferred from paediatrics to adult medicine. Transition is a multidimensional and multi-disciplinary process that not only includes the medical needs of the young person during the transition from paediatrics to adult medicine, but also psycho-social, school and work aspects. The transition is a planned and coordinated process, and the transfer, as an individual transitional event, is a component of transition.

59. International experience, local German projects and scientific literature reveal the picture below on care in the transition from adolescence to adulthood:

- During the transition from paediatric to adult care there is the risk of insufficient care, which is primarily caused by a lack of process coordination. This underprovision of care is well documented for several chronic childhood illnesses and expresses itself in an increase in interrupted therapy or inadequate adherence to medication (with the consequence of increased transplant rejection rates, for example, among children receiving a kidney transplant).
- Some important groups of chronic childhood illnesses in which transition is important include (possibly rare) endocrinological illnesses including diabetes mellitus type 1, cystic fibrosis, complex congenital heart defects, terminal kidney failure and juvenile rheumatoid arthritis.
- As a consequence of shortcomings in coordination, transfers to adult care are unplanned, sometimes as a result of emergencies, and do not leave any space for the coordinated support of the young adult in the transition process.
- The significance of the lack of coordination is increased by the pleasing fact that due to innovative therapeutic methods, the survival rates among chronically sick children has improved so much in recent years that they usually reach adulthood and sometimes continue to be treated for decades. This is a new task for adult medicine, unprecedented on this scale.
- Other important factors can be seen in the differing organisation of care which is more holistic and family orientated in paediatrics and more organ-specific and personal in adulthood. Different treatment styles are associated with this: more paternalistic and seeking harmony with family members (triangular) in childhood

and with more emphasis on the autonomy of the individual (bipolar) in adulthood. On the part of the patient, this coincides with a change in the need for treatment, because during puberty other questions are of high priority alongside the chronic illness, such as sexuality, separation from the parental home and career planning.

60. In a survey of involved German institutions conducted by the Council within the context of this Report, the statements, justifications and recommendations of those questioned often showed that the organisations are intensely concerned about the described situation in transitional care and its general conditions, but that the available data do not currently allow reliable statements to be made on the extent of any over-, under- and misdirected provision of care. However, most of the institutions questioned indicated that inappropriate care does occur. There is still a need for research here.

As a consequence, the subject of transition must be understood as a problem of the responsibility of the professional groups and specialist disciplines involved. However, the problem of care structures and financing should also be addressed as part of the current discussion. There is no specific remuneration for the increased effort in the paediatric and adult sector, at least not for the transitional phase.

61. Experience with the following approaches has been gathered internationally and to a limited extent in Germany:

- Transition is a process and only in the rarest cases is it a single event, and the young patient must be supported step by step.
- Research results show that an individualised approach is necessary during transition. The patient himself should (help to) decide on the timing of the transition into adult medicine. Transitional planning should be part of all clinical programmes for children and adolescents with special care needs. Incorporating young patients and their families in the development of transition programmes is desirable.
- Transitional consultation hours are a good means of achieving successful treatment and lasting adherence. When adult doctors accept the patient, an evaluation of the previous paediatric therapy is recommended and should be agreed upon with the doctor who will continue treatment. The new doctor should make an effort to cooperate intensively with the paediatrician and other disciplines and avoid interrupting the treatment. Patients should be able to actively detach themselves from their paediatricians. Furthermore, training of the medical staff, the patient and his family is also necessary.

- For the inpatient sector, in certain cases (e.g. child cardiology, child oncology), the establishment of transitional wards makes sense, i.e. separate wards for adolescents.
- Transitional wards and transitional consultations hours must be adapted to the illness and the needs of the patients. A distinction should be made between four transitional concepts, ranging from direct through sequential transition (marked change in roles) and development-oriented transition (individually tailored) to institution-oriented concepts.
- The transitional process must always be viewed against the background of the individual family structure and must take into account the needs and development necessities of the family. Equally, the means for additional primary physician care must be available to the young patient, alongside the care of his chronic illness which is at the heart of the transition problem.

62. Transitional programmes like those in Australia, the United Kingdom or the USA are not yet in place in Germany, there are only local solutions of joint consultation hours and interdisciplinary wards, meaning that the care situation is deficient. There is an urgent need for the provision of, training in and research into transitional care. The process should be guided by structured policy, guidelines, and an assessment following transition. To assure the quality of transitional programmes, continuous cooperation between the multi-professional teams and further interdisciplinary training is necessary.

Recommendations

63. The Council of Experts recommends that the legislator, the organs of self-government, in particular the Federal Joint Committee, the medical specialist associations and the centres for quality assurance specifically take on the subject of the transition of chronically ill children and adolescents into adult care. Transitional programmes should have a firm place at a system level (e.g. financing), at the institutional level and at the level of the health professions. In this context, transition should be understood as a process in which the change in care structures should be designed actively and with the involvement of the young patients, while taking individual developments into account at the same time.

64. Based on the results of the conducted survey, the following measures are worth recommending:

1. Increased Support for Pilot Projects

The models for transitional care should be developed in an interdisciplinary manner that involves the affected parties and their families, as well as self-help groups. The various instruments to support coordinated transitional care (e.g. transitional consultation hours, adolescents' wards and training programmes) can initially be tried out at university hospitals. The hospitals can cooperate with Medical Service Centres, for example, so that care can be close to the patient's home. Model projects should also be used to examine whether establishing a Medical Home improves transitional care. The model would simplify the coordination of care, in particular for patients with mental and physical disabilities, and their families. After evaluation, the programmes could be used for a nationwide launch and to establish dedicated centres for specific rare illnesses with a particular progression.

2. Inclusion in the Catalogue of Highly Specialised Services according to Article 116b Social Code, Book V

It should be tested whether a supplement to the catalogue in Article 116b Social Code, Book V would ensure multi-disciplinary care for children and young people in the transition from adolescence into adulthood. The G-BA should examine whether chronic childhood illnesses with a special need for regulated transition, along with necessary services, are to be included in this catalogue.

3. Strengthening the Multi-Professional Perspective

A regulated transition should have a multi-professional structure. The additional effort of multi-professional care must be taken into account in personnel planning and the personnel should be trained accordingly. Cooperation with self-help groups should also be promoted.

4. Development of Quality Assurance

Publication of the provision of transitional programmes in the quality reports of outpatient and inpatient institutions is recommended to promote quality assurance and increase competition.

5. Increasing the Degree of Networking among the Institutions Involved

In addition to better coordination and cooperation among institutions, integration of the inpatient and outpatient sectors is essential to an improvement in transitional care, wherever possible close to the patient's home. At a European and international level, it

makes sense to network personnel with specific qualifications and expertise on very rare illnesses.

6. Adjusting Pay for the Interdisciplinary Care of Patients with Complex Conditions

65. The supply of healthcare services must take the necessary development of the families involved into account and consider the aspect of primary physician care. In conjunction with the other recommendations made in the Report on the development of decentralised, regional and community-based care systems with a partial combination of the financing (insurance) and service functions, particular attention should be paid to the problem of transition. The Council is of the opinion that these structures are well suited for this change and should be gauged in terms of how successfully they overcome the problem.

5. Special Care Requirements for Elderly and Old People

5.1 Multimorbidity and Guideline Requirements

66. As a result of demographic developments and medical progress, the number of elderly and very old patients with multiple illnesses will increase in all areas of care. Multimorbidity is more than the sum total of individual illnesses. As well as the stresses from the individual illnesses, symptoms such as incontinence, cognitive deficits, immobility, the risk of falls, pain and other complicating factors are added to the mix. Limitations on functioning and disabilities that affect old people's abilities to cope with everyday life develop. The emphasis of treatment for these patients should therefore be on the ability to function and should not be primarily focussed on illnesses.

67. Multimorbidity has a negative impact on the quality of life, the subjective state of health and physical functions. The risk of other chronic illnesses rises. The consequences of multimorbidity also include increased contacts with doctors, more frequent and longer stays in hospital, a rising number of prescriptions with the risk of unwanted side effects and a higher risk of developing a need for long-term care.

68. In spite of the increasing importance of multimorbidity (approx. two thirds of people over the age of 65 have at least two chronic illnesses) only inadequate data is available on the special aspects of caring for these patients. Even when defining and measuring multimorbidity, considerable differences exist which have an impact on the recorded prevalence. For example, in many studies only the number of illnesses is counted, but the severity and the emerging syndromes, which are important in the geriatric sphere in particular, are not considered. Psychiatric co-morbidity is also not considered, which can have serious consequences because, for example, depression has a strong influence on the development of a patient's health. The Federal Ministry for Education and Research has adopted earlier recommendations from the Council of Experts and, under its funding priority "Health in Old Age", has included financial support since 2007 for six major network projects with a focus on the care and epidemiology of patients with multimorbidity. Hence more detailed study results can be expected in the future.

69. As early as 1994 the Council of Experts advocated the development and implementation of evidence-based guidelines as systematically developed action and decision-making corridors for patients and service providers. Although positive developments have been seen since then (such as a rising number of high-quality guidelines along the lines of the German Instrument on Methodological Guideline Evaluation (DELBI) and strategies for the implementation of guidelines), there are only very few

guidelines relating to elderly patients with multiple chronic illnesses. This lack was also commented on by the delegates of the German Medical Assembly (2008), who asked for elderly patients in particular and those with multiple illnesses to be given greater consideration in treatment recommendations and guidelines.

70. The main reason for this deficit is the lack of evidence. Many randomised controlled trials exclude patients with multimorbidity. Patients with a walking impediment or suffering from dementia cannot visit study centres. Moreover, investigations show that the inclusion criteria for important illnesses, such as heart failure, do not reflect everyday clinical life and that there are therefore no pragmatically designed studies with the typical consumer of a medicine after market launch. In particular, there are also major shortcomings in the field of “generics”, i.e. interventions that are relatively independent of a diagnosis, and which emphasise the importance of activation, encouragement of self-management and the preservation of an independent lifestyle.

71. Furthermore, there is a fundamental problem in the fact that guidelines for patients with multiple illnesses have to have a different structure from those for individual diagnoses. They have to set treatment priorities, be adapted to the overall condition of the patient and his resources and abilities, and take account of his life expectancy and individual situation. They thus help with decision-making, but do not relieve the doctor of the need to make decisions due to the complexity of the situation. Furthermore, guidelines must also focus on the treatment structure and care process and contain specific agreements at the interfaces between them. In this connection, the development, spread and implementation of medical guidelines in Germany must be viewed as part of care. In spite of a broad acceptance of guidelines for individual illnesses, their implementation still remains a major challenge.

72. The barriers to implementation are diverse and include the reservations of the service providers, such as a possible limitation on autonomy, treating people like children and a lack of practical orientation. This must also be taken into account in future guidelines on the care of patients with several chronic illnesses. Help is promised by a combination of implementation strategies (for example making them an integral part of basic, further and continuing training and asking the target group to provide feedback on their application, perhaps within the context of quality circles. This could then be combined with financial incentives) and consistent evaluation with the possibility for continuous improvement. Since the care of elderly patients with multimorbidity requires continuous, ideally cross-sectoral, long-term care by a team and good coordination between the different healthcare professions and care levels, shared

goals and a structured process are decisive. This should support the implementation of the guidelines.

73. In summary, when developing guidelines for the care of patients with multimorbidity, the initiation of studies is recommended that provide evidence for frequent illness combinations and polypharmacotherapy, as well as for the prioritisation of the main risks and health problems. In this context, patient selection should be avoided where possible or made transparent. Furthermore, cross-sectoral care processes and the interfaces between sectors should be described in addition to the requirements of interdisciplinary cooperation between the healthcare professions. The development and updating of guidelines must be controlled by an independent, multi-disciplinary team and it must be adequately financed. When implementing the guidelines, different strategies must be used, which means incorporation in basic, further and continuing training and in quality assurance, as well as strategies involving feedback and the participation of the target group (as in quality circles), as well as financial incentives. An evaluation of the implementation of guidelines is urgently required.

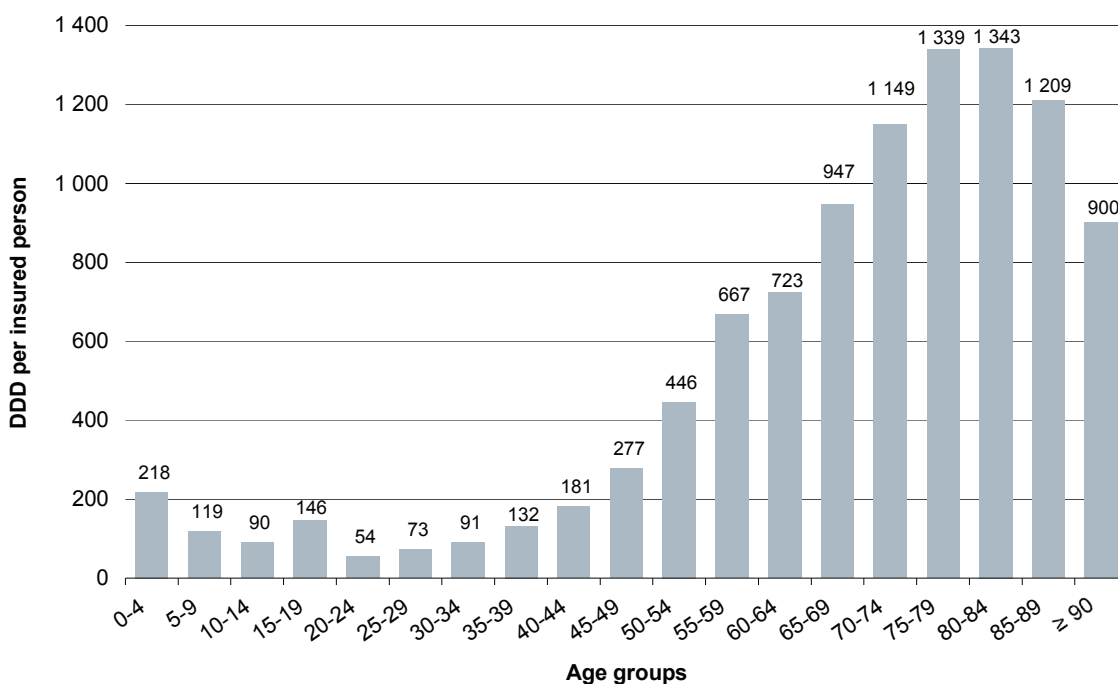
5.2 Multimorbidity and the Requirements of Drug Provision in Old Age

74. Age is one of the most important determinants for the use of the healthcare system. Whereas children and young men (0-39) visit an SHI-physician on average between 7.5 and 17.1 times per year and women on average between 9.0 and 17.5 times per year, this figure rises constantly over the age of 40. Over the age of 85, irrespective of sex, there are around 40 contacts with doctors per year. Adults over the age of 60 may make up only around one quarter (26.7 %) of all people with statutory health insurance, but they account for 64 % of the volume of prescribed medicines (in DDD) or 54 % of turnover.

75. Prescribing several medicines at the same time is called polypharmacy or, more rarely, polypragmacy. Increasing multimorbidity with age often means that elderly people are prescribed an array of different active agents at the same time or take them as self-medication. Only 68 % of the medicines used in the previous 7 days had been prescribed by a doctor, and around a quarter were bought without a prescription or were already in the medicine cabinet. A not inconsiderable proportion of prescriptions, including those for benzodiazepines for elderly people with statutory health insurance, are on private prescriptions, apparently a strategy increasingly used by SHI-accredited physicians, possibly to circumvent the discussion by the health insurance fund or the

regional Association of Statutory Health Insurance Physicians on the inappropriate frequency and duration of use of these sometimes addictive drugs.

Figure 4: Drug Consumption in Defined Daily Doses (DDD) per Insured Person in SHI 2007



Source: Schwabe/Paffrath 2008

76. The fact that older people receive more drugs and take them more frequently than younger people has been shown in many analyses. A Danish research group examined the extent of polypharmacy for 1994. Over all of the older age groups approximately 23.6 % of the population had had a phase in which they had been prescribed two to four medicines, 5.1 % received five or more medicines (which the authors called “major” polypharmacy), and 3 % of the inhabitants of Fünen were being prescribed ten or more medicines. This problem becomes even clearer when analysing the prescriptions financed by the Gmünder Ersatzkasse GEK (an SHI) in 2005: around 35 % of men and 40 % of women over 65 receive nine or more drugs on a repeat prescription.

77. The problems of polypharmacy in old age are mainly to be found in compatibility and the possible negative consequences for the patients concerned. According to a study by the national pharmacovigilance centres, 10.2 % of inpatient stays due to undesirable adverse effects were due to digitalis glycoside-associated side effects. Elderly women were affected in particular. For this reason, a function-oriented geriatric diagnosis

(geriatric basic assessment) is recommended in order to be able to reliably assess available resources with respect to drug treatment. In comparison to younger patients, the risk of adverse drug reactions rises with age. Overall, in a study in the United Kingdom, 6.5 % of admissions to hospital were because of undesirable side effects, and, in the opinion of the authors, almost three quarters of these incidents (72 %) could have been prevented. Patients with adverse drug reactions spent a much longer time in hospital than people without incidents (median: 20 vs. 8 days). Of the undesirable side effects, over half were the result of drug interactions (59.1 %). In total, 2.8 % of the patients with undesirable side effects died as a direct or indirect consequence of the incident. Surveys from regional pharmacovigilance centres show similar results for Germany.

78. Unwanted effects and interactions are especially important for elderly people with dementia because a large number of psycho-pharmaceuticals (e.g. sleeping tablets or tranquilizers containing benzodiazepine or neuroleptics) worsen cognitive abilities and can put elderly people in great danger. In particular, the prescription of neuroleptics to patients with dementia should be viewed extremely critically because use is associated with higher mortality. All neuroleptics are meant in this context (e.g. haloperidol, olanzepine or risperidone). Use should only be in the short-term and is only defensible if there would otherwise be risks to the patient himself or his environment that cannot be mastered otherwise.

79. Irrespective of the number of drugs prescribed, particular attention should be paid to the problem of the use of potentially inappropriate medications (PIMs). In this context, “inappropriate” means that the choice of the pharmaceutical in general or the dosage or duration of treatment is not recommended because the potential risks outweigh potential benefits, and there are safe alternatives or the therapy is not considered to be sufficiently effective. In conjunction with inappropriate medicine use among elderly people, particular importance was attached to the Beers List, compiled by a group of American scientists around Mark Beers. In 2003, the most recent update of the Beers List of potentially inappropriate medications for elderly people (that should not be used in outpatient care or in nursing homes if possible) was published. The resultant list comprises a total of 48 active agents or groups of active agents that are considered to be inappropriate for elderly people irrespective of their diagnosis. A second part of the List contains medicines that should be avoided for specific illnesses. The majority of these medicines are drugs that influence the nervous system (e.g. flurazepam, amitryptiline, promethazine, diazepam). Adapting the Beers List for the German drugs market would be a way of increasing drug safety for older people. Table 10 provides an overview:

Table 10: Beers List of the Preparations Available in Germany

Active agent/groups of active agents	Reservations for elderly patients	Classification
Indomethacin (Indomet)	NSAID with the most adverse effects on the central nervous system	++
Muscle relaxants/spasmolytics: Methocarbamol (Ortoton), Oxybutynine (Dridase)	Most muscle relaxants and spasmolytics are poorly tolerated by elderly patients (sedation, weakness due to anticholinergic effects)	++
Flurazepam (Staurodorm Neu)	Very long half-life (several days) in elderly patients, prolonged sedation increasing the incidence of falls and fractures	++
Tricyclic antidepressants: Amitriptylin (Saroten), Doxepin (Aponal)	Strong anticholinergic and sedating effects	++
Short-acting benzodiazepines (higher dose): >3 mg Lorazepam (Tavor), >60 mg Oxazepam (Adumbran), >2 mg Alprazolam (Xanax), >15 mg Temazepam (Planum), >0.25 mg Triazolam (Halcion)	Increased sensitivity to benzodiazepines in elderly patients	++
Long-acting benzodiazepines: Chlordiazepoxide (Librium), Diazepam (Valium), Dipotassium Clorazepate (Tranxilium)	Long half-life (several days) in elderly patients, prolonged sedation increasing the incidence of falls and fractures	++
Digoxin (Lanicor) in doses >0.125 mg/d (exception: Treatment of atrial arrhythmia)	Toxic effects due to reduced renal function (arrhythmia, disturbed colour vision, confusion)	+
Methyl dopa (Presinol)	May cause bradycardia or depression in elderly patients	++
Reserpine (Briserin N) in doses >0.25 mg	Depression, impotence, sedation and orthostatic hypotension	+
Stomach and bowel spasmolytics: Atropine sulphate (Dysurgal) etc.	Strong anticholinergic effects possible, uncertain effectiveness	++
Anticholinergics, antihistamines: Chlorpheniramine (Balkis), Diphenhydramine (Dolestan), Hydroxyzine (Atarax), Cyproheptadine (Peritol), Promethazine (Atosil), Dexchlorpheniramine (Polaronil)	Many (including non-prescription) antihistamines have strong anticholinergic effects; confusion, sedation possible with diphenhydramine (do not use as a hypnotic)	++
Ergot alkaloids: Dihydroergotoxin mesilat (Hydergin)	Effectiveness uncertain	+
Iron (II) sulphate (Plastulen) in doses >325 mg/d	Increased risk of constipation	+
Barbiturates (except Phenobarbital, unless for epilepsy): Thiopental (Trapanal)	High addiction potential, stronger adverse effect than other sedatives/hypnotics	++
Pethidine (Dolantin)	Confusion, disadvantages over other narcotics	++
Ticlopidin (Tiklyd)	Thrombocyte aggregation blocker with strong adverse effects (e.g. agranulocytosis), effectiveness no better than with aspirin	++

Strong (++) or slight (+) rejection. Abbreviations: NSAID = non-steroidal anti-inflammatory drug)

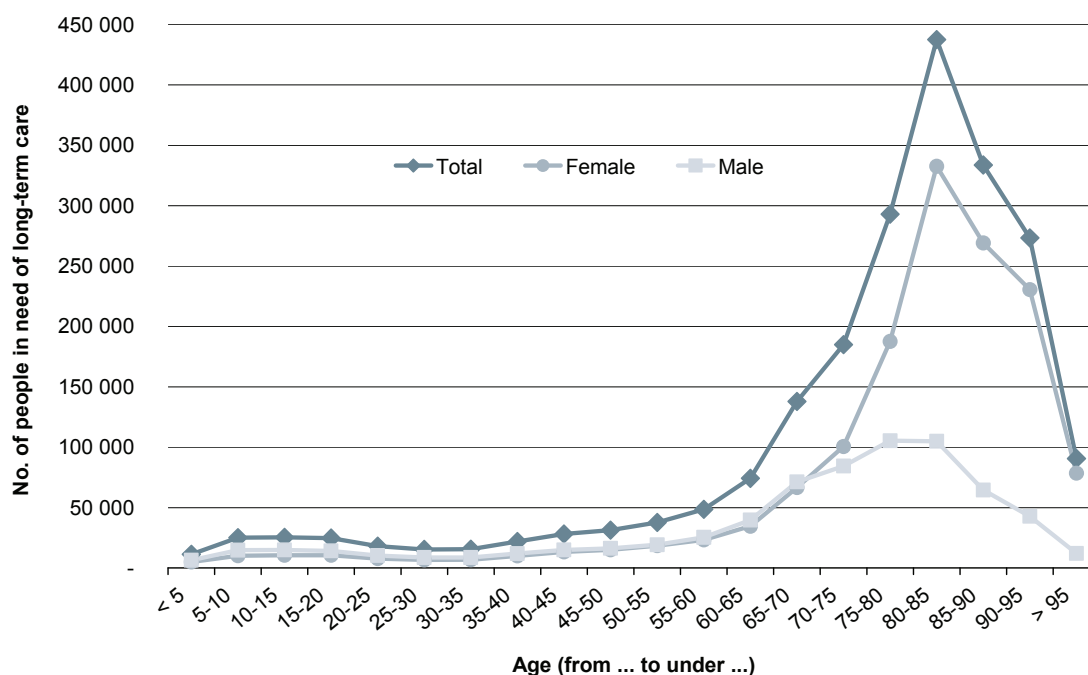
Source: According to Fick et al. 2003

80. A cross-sectional study published in 2005 examined the use of inappropriate medicines for elderly people in eight European countries (Czech Republic, Denmark, Finland, Iceland, Italy, Netherlands, Norway and the United Kingdom). In total, 19.8 % of participants had taken at least one inappropriate medicine in the previous 7 days. The highest prevalence was reported from the Czech Republic (41.1 %) the lowest, at 5.8 %, from Denmark. In addition to different prescribing practices, the authors attribute these variations to different licensing within the individual countries. Between 31.6 % (Norway) and 70.9 % (Italy) of the medicines analysed were licensed in the European countries concerned. However, one major criticism of the Beers List is that to date there is little or inconclusive evidence for the view that not prescribing inappropriate medicines will result in a reduction in mortality or the frequency of hospital admissions. In principle, what is missing are randomised controlled trials (RCTs) as these are considered to be the means of choice for proof of benefit and show that screening for prescriptions of the medicines concerned or the avoidance of screening will lead to a benefit relevant to the patient. That is why the call is long overdue for drugs to be tested on the patient populations that will need them for their treatment after licensing. For children, a European regulation has been in force since January 2007 that requires licensing studies for children if the medicines concerned are classified as necessary in paediatrics. But a mandatory regulation of this kind is still missing for the much bigger problem of the adequate provision of medicines for elderly people.

5.3 The Need for Long-Term Care in Old Age

81. The need for long-term care has also become a characteristic health risk in ageing societies. The condition of a person in need of long-term care is characterised by an extreme level of physical, mental and social vulnerability which means that everyday life can be maintained only with outside help. Although children or young adults can be in need of the highest levels of long-term care, for example after an accident, age-specific long-term care rates show that the need for long-term care rises with age. 82 % of all those in need of long-term care are aged 65 or older. One in three of people in need of long-term care in Germany is over 85 years of age. Half of the population aged over 90 in Germany needs long-term care. Women are affected more often than men. In future, the need for long-term care must be treated as a specific health risk for women and men who become very old. The need for long-term care is a health condition that triggers more complex care requirements in medical, nursing, domestic, social and other areas in comparison to other disease risks.

Figure 5: Long-Term Care Needs according to Age and Gender in 2005



Source: Federal Statistics Office 2007a

82. Currently, 2.13 million Federal citizens are in need of long-term care under the definition in Social Code, Book XI. To date, the Long-Term Care Insurance Act has been based on a somatically narrow definition of long-term care in which long-term care is reduced to support when physical self-care and functioning has been compromised. It disadvantages people with differing long-term care needs, e.g. caused by cognitive and social functioning impairments – mainly people with dementia and mental illnesses. An extension of the narrow definition of long-term care has therefore been demanded for a long time. An Advisory Council set up by the Federal Ministry of Health has now submitted proposals for a new definition and a new assessment instrument – based on an analysis of different definitions of the need for long-term care. The new instrument avoids simply reducing the need for long-term care to a need for help in everyday life and also takes account of impairments to independence and functional restrictions in the following areas: (1) mobility, (2) cognitive and communicative abilities, (3) behaviour and mental problems, (4) self-care (feeding, dressing, washing, eliminations), (5) dealing with the requirements of an illness and treatment, (6) structuring everyday life and (7) social contacts, (8) activities outside the home, housekeeping.

The first six areas are considered to be constitutive for the need for long-term care. By contrast, impairments to autonomy with regard to activities outside the home and housekeeping are seen as a need for help because the resultant need does not have a primarily nursing nature, but domestic or social character.

Unlike today's assessment process, a person's independence is now the yardstick for the need for long-term care and not the amount of time taken up in providing it. This means that the actual need for support of people in need of long-term care can be better illustrated, and a basis for appropriate long-term care planning can be created. With these proposals for a new definition of long-term care and a new assessment instrument it should be possible to greatly improve the fairness of the provision of long-term care for those in need. The Council recommends that the Advisory Council's proposals be enshrined in law and implementation be initiated.

83. Little is known about the determining factors that ultimately trigger the need for long-term care. This knowledge deficit makes the justification of the need for long-term care difficult and means that the diagnosis justifying long-term care in the current assessment process is often invalid. Mental and behavioural problems are the most common major group of diagnoses establishing the need for long-term care, whereby the significance rises markedly as the care level rises. Diseases of the nervous system and neoplasms are becoming more important as a diagnosis justifying care as the level of required care rises, with their proportion among men much higher than among women at all care levels. Among women, by contrast, diseases of the musculoskeletal system and the connective tissue are more significant, which is very often the diagnosis justifying long-term care in long-term care level I. Elderly people do not generally suffer from just one but several chronic health impairments. Having multiple illnesses represents an increased risk of functional impairments. They reinforce each other in a complex way and often result in the need for long-term care in very old people. The Council recommends that interdisciplinary research on the causes for the emergence of the need for long-term care be increased.

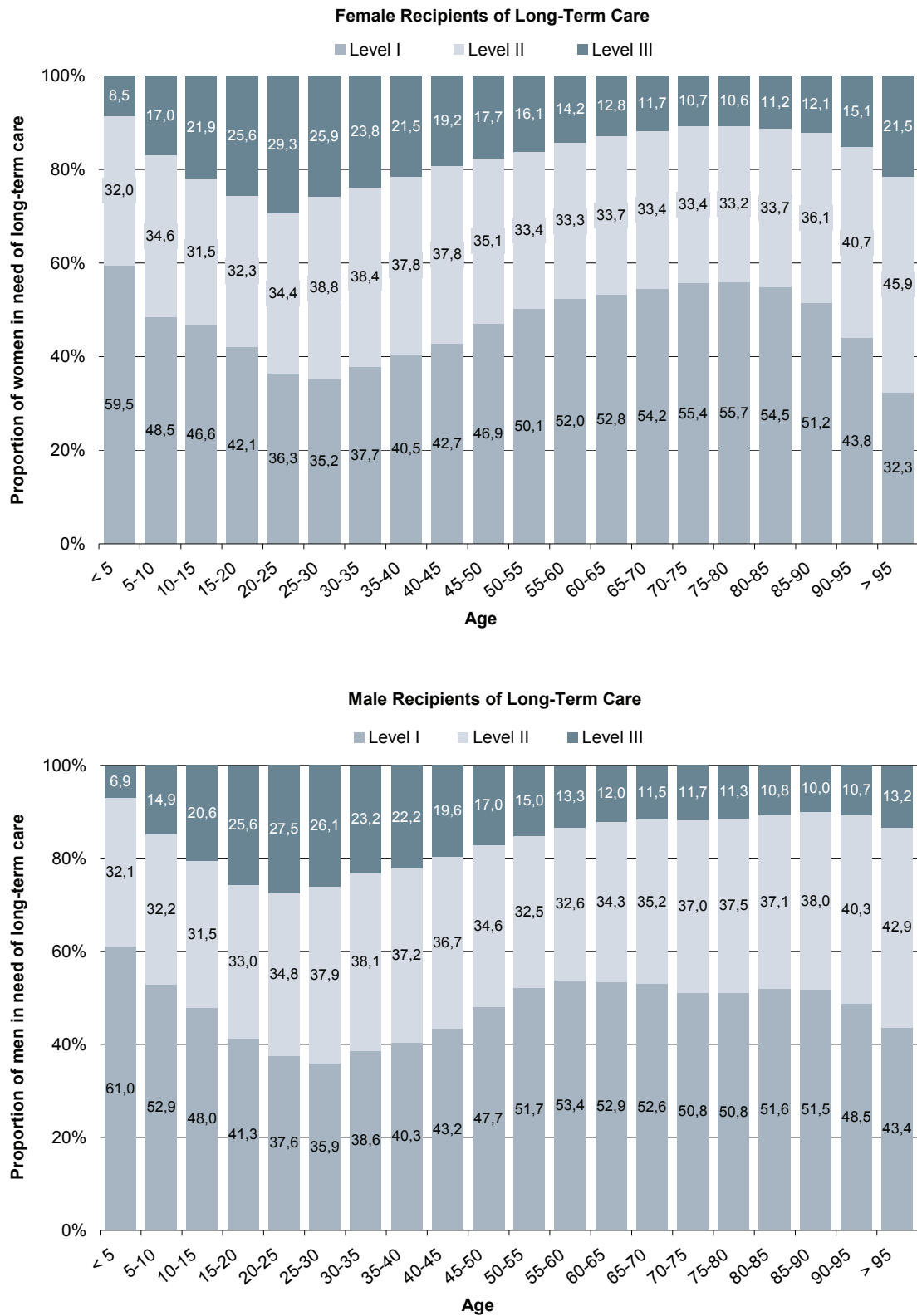
84. The living situation of an old person in need of long-term care is characterised by limitations in the everyday tasks of showering/washing, followed by getting dressed and undressed, using the toilet and feeding. But people in need of long-term care are often also dependent on the help of others to perform essential activities, such as shopping, cleaning, preparing meals and taking care of financial matters. The extent of functional limitations can be seen even more clearly among people in need of long-term care in inpatient facilities. Here, 90 % of inhabitants have problems showering and washing, 50 % in getting dressed and undressed, continence, using the toilet independently and

moving around the room, and 40 % can no longer eat and drink on their own. The particular complexity of the care situation that has arisen can also be seen in these characteristics of dependency on long-term care. They need more complex answers and integrated processes on the part of the caring institutions.

85. The overall proportion of people in need of long-term care as a percentage of the German population within the meaning of Social Code, Book XI has risen only slightly in recent years. However, it is interesting that the “long-term care rate” differs greatly between *Länder*. The highest long-term care rate can be found in Bremen and Saxony-Anhalt at 3.06 %, followed by Mecklenburg-Western Pomerania at 3.00 %. The lowest long-term care rates can be found in Baden-Württemberg at 2.10 %, followed by Hamburg (2.38 %) and Rhineland-Palatinate (2.41 %). At local authority level, the long-term care rate varies between less than 1.60 % (Böblingen and Tübingen districts in Baden-Württemberg, as well as Erding and Freising in Bavaria) to over 4.00 % (Osterode district in Lower Saxony, Werra-Meißner district in Hesse, free cities of Passau and Hof in Bavaria). For social and long-term care planning, these figures in conjunction with data on developments among over 75-year-olds in the community provide those responsible in local authorities with clear information on expected requirements and needs. The Council recommends that in order to meet demand, local authorities take more responsibility for securing the provision of long-term care for the elderly. It also recommends forward-looking local authority planning of a mix of care provision as well as outreach support and advice for elderly and old inhabitants on the effectiveness and efficiency of different types of care available close to where people live.

86. Of the 2.13 million people in need of long-term care in Germany, over half (1.07 million) are grouped in long-term care level I. The number in long-term care level II is 768,093 and in long-term care level III 280,693 persons. As age rises, the proportion of women in long-term care levels II and III rises. Among men, however, the spread across the ages remains more constant (cf. Figure 6).

Figure 6: Proportions of People in Need of Long-Term Care according to Level of Care and Gender



Source: Federal Statistics Office 2007a

The higher the long-term care level, the shorter the survival of those affected. Nevertheless it can be seen that the need for long-term care is often a long-lasting condition as the median survival time for women in long-term care level I is 39 months and 25 months for men in the same category. Even though the average survival time of a person in need of long-term care at level III falls to 2 months, it cannot be ignored that 10 % of men survive for 25 months and 10 % of women for 29 months at this level of long-term care. In comparison to men, women in need of long-term care generally survive for longer. For healthcare in an ageing society this means, on the one hand taking account of the gender-specific availability of care in old age and, on the other, establishing the long-lasting provision of long-term care in old age as an important objective. But this also means asking what good long-term care is worth to an older society and, in dialogue with those affected, drawing up the premises of good long-term care. This dialogue should include the subjects of palliative care and death with dignity. The Council recommends that all those responsible in the German health system provide opportunities for such debates, not leaving responsibility to doctors or long-term care alone, and support an open discussion on patients' instructions, patients' rights and supported dying. One reason for this is because according to credible model calculations the number of people who will have to live with the need for long-term care will rise considerably in the future.

87. The prognoses for the development of the need for long-term care in Germany illustrate that the long-term care sector will continue to grow with considerable dynamism in the future. This finding applies irrespective of changes in the health condition of the population because although potential improvements may restrict growth they will not be able to stop it.

An overview of alternative forecasts on the development of people in need of long-term care by 2050 shows that the values identified by the Council of Experts largely agree with the orders of magnitude of comparable estimates. For 2030 the bandwidth of status quo forecasts ranges from 2.61 to 3.36 million people in need of long-term care, but when more up-to-date projections based on the years 2005 and 2007 are considered, the range narrows to 3.09 to 3.36 million. The 3.28 million predicted by the Council is in the middle of the latter range. Among the forecasts that build upon the assumption of morbidity compression, the Federal Statistics Office comes to almost the same result as the Council: 2.95 million people in need of long-term care in comparison to 2.93 million.

The Council's status-quo prognosis has the highest number of people in need of long-term care at 4.35 million in 2050, but other, more recent calculations also reach orders of magnitude of around or over 4 million.

Table 11: Overview of Forecasts on the Development of Long-Term Care Needs (in Millions)

Forecast	Year	Base Year	2010	2020	2030	2040	2050
Own Calculation	SQ ¹		2.38	2.86	3.28	3.77	4.35
	KT ²	2.24 (2007)	2.35	2.69	2.93	3.19	3.50
Rothgang 2001	SQ	1.86 (2000)	2.13	2.47	2.71	2.98	-
	KT	1.85 (2000)	2.01	2.21	2.38	2.59	-
Federal Statistics Office 2008	SQ		2.40	2.91	3.36	-	-
	KT	2.13 (2005)	2.30	2.68	2.95	-	-
Rürup-Kommiss. 2003	SQ	1.90 (2002)	-	-	3.10	3.40	-
Blinkert/Klie 2001	SQ	1.81 (1998)	2.21	2.58	2.81	3.11	3.45
Dietz 2002	SQ	1.82 (2000)	2.04	2.37	2.61	2.87	3.17
Otnad 2003	SQ	2.01 (2002)	-	-	3.11	-	4.00
Häcker/Raffelhüschen 2006	SQ	1.93 (2004)	-	-	-	-	3.79
Häcker et al. 2005	SQ	1.97 (2005)	2.21	2.70	3.09	3.60	4.25

¹ Status quo forecast; ² Forecast when assuming the morbidity compression theory

Source: GBE 2009; Federal Statistics Office 2006a; Rothgang 2001; Federal Statistics Office 2008; Rürup-Kommission 2003; Blinkert/Klie 2001; Dietz 2002; Otnad 2003; Häcker et al. 2005; Häcker/Raffelhüschen 2006, own presentation, own calculation

Current forecasts need adjusting if the recommendations from the Advisory Council's Report on Reviewing the Definition of the Need for Long-Term Care published on 26th January 2009 are implemented and the definition of the need for long-term care is expanded. Overall, on the basis of the forecasts there can be no doubt that developments in the number of people in need of long-term care will confront health policy with considerable challenges in future.

6. Status Quo and the Need for Action in Healthcare

88. In past Reports (Report 2000/2001, III.1-7.4.7; Report 2003, II-6) the Council explicitly pointed out that the change to the morbidity spectrum that will accompany the portrayed demographic change makes targeted changes to the German health system necessary. Instead of (just) acute care for the community, the most important task in future will lie in adequate care for patients with chronic or multiple conditions and in a concept of generation-specific healthcare corresponding to changing needs over the course of a lifetime. Coordination of care will become the guiding principle. Within the context of interdisciplinary cooperation, GP, outpatient and inpatient specialist and nursing treatment services will have to be practically linked to services for prevention³, rehabilitation, drug provision and other services provided by social institutions and patient organisations.

This Chapter will summarise the current situation and the need for action in GP, specialist, nursing care and in drug provision. The various concepts will then be analysed, paying particular attention to the managed care approach with respect to its suitability for ensuring generation-specific and community-based care in the German healthcare system (Chapter 7). Finally, a future concept for coordinated and community-based care will be shown that has been developed on the basis of this analysis (Chapter 8).

6.1 GP Care

89. In the German health system, care provided by family doctors performs key functions in primary healthcare. Its continued functioning is therefore decisive if the health concerns of the German population are to be met successfully. Viewing care provided by family doctors separately is currently particularly necessary because, on the one hand, its sustainability does not appear to be ensured (including a lack of newly qualified GPs) and, on the other, primary medical care for the most common health problems will be faced with particular challenges due to demographic change and the shift in the population's illness spectrum.

Currently, the German health system is still strongly characterised by patterns associated with acute medical care and specialist care. Whereas great importance has traditionally been ascribed to specialist interventions for the care of chronic diseases,

³ This mainly means secondary and tertiary preventive options and not so much the often setting-specific primary preventive approaches.

too little consideration has been given to the importance of life-long support for chronically sick patients in primary care. This is the case although this is the area of care in which most patients' problems are solved, and although important progress has been made worldwide in this field thanks to the introduction of the concepts of structured and graduated care. In spite of the establishment of some disease management programmes, innovation bottlenecks are emerging in Germany that will continue to deteriorate dramatically if the imminent shortage of care in the GP sector cannot be overcome. In this Report, a concept of GP care is therefore proposed as an important element of community-based care that does particular justice to the individual concerns of the growing number of the chronically sick. It also suggests that the full potential of preventive possibilities be tapped, as in view of the scope of GP care, the foreseeable problems can hardly be solved any other way.

Definitions of Terms

90. Since the terms general practice, GP care and primary care as well as the various names for the specialist medical groups involved (specialists in general practice, specialists in internal medicine working in general practice, specialists in internal medicine and general practice as well as general practitioners) often cause confusion, they are explained briefly in this overview:

Table 12: Definitions of Terms

Specialist Discipline/Area of Care	
General practice	Medical specialist or scientific discipline with its own features, core skills and implementation areas, or areas of activity. Mandatory subject in German medical studies. International: <i>general practice</i> or <i>family medicine</i> .
GP care	Area of activity defined as separate from specialist care according to Article 73 para. 1 Social Code, Book V: "Care by SHI-accredited physicians is broken down into GP and specialist care."
Primary care	Area of basic medical care in which primary (also due to unfiltered first utilisation), comprehensive and individual care of all health concerns occurs. Primary care comprises low-threshold care, also provided by other health professions and within families as well as local authority structures. International: <i>primary (health) care</i> .
Specialist Groups of Doctors Working in these Care Areas⁴	
General practitioners	Doctors without further training in one of the following areas (either without having completed further training or with further training in a specialist field not suited to GP care). As they are no longer entitled to register, numbers are falling. 2007 = 7,928 SHI-accredited general practitioners (there were still 15,640 in 1997).
Specialists in general practice	Specialist doctors with five years of structured further training in hospitals and surgeries according to the Further Education Rules and, having passed a specialists' examination, who are entitled to register in the GP sector. 2007 = 34,798 SHI-accredited specialists in general practice.
Specialists in internal medicine (working as GPs)	Specialists in internal medicine who have decided on GP care. In 2007 14,623 specialists in internal medicine were working as GPs and 7,520 as specialists. According to a 2007 decision of the German Medical Assembly, specialists in internal medicine without a key focus due to a lack of further outpatient training in GP care should only work in hospitals in future.
Specialists in internal and general practice (GP)	A name for a specialist introduced by the German Medical Assembly in 2003 to overcome the separate further training of specialists in general practice on the one hand and specialists in internal medicine working as GPs on the other (now implemented by 16 out of 17 <i>Länder</i> Medical Associations in their Further Education Rules ⁵). Requirements: Five years of further training (3 years in internal medicine, other patient-caring subjects are accepted), 2 years in general practice (possibly including six months surgery) and 80 hours of further training seminars in psychosomatic basic care.

Source: Own presentation; doctors' figures: BÄK 2009

4 Specialists for paediatrics can choose between GP and specialist care; they are not considered separately here (because of the clear delineation).

5 Instead, the *Länder* Medical Associations of Berlin and Mecklenburg-Western Pomerania have retained the previous term "Specialist in General Practice".

Position and Performance Criteria within the System of Primary Health Care

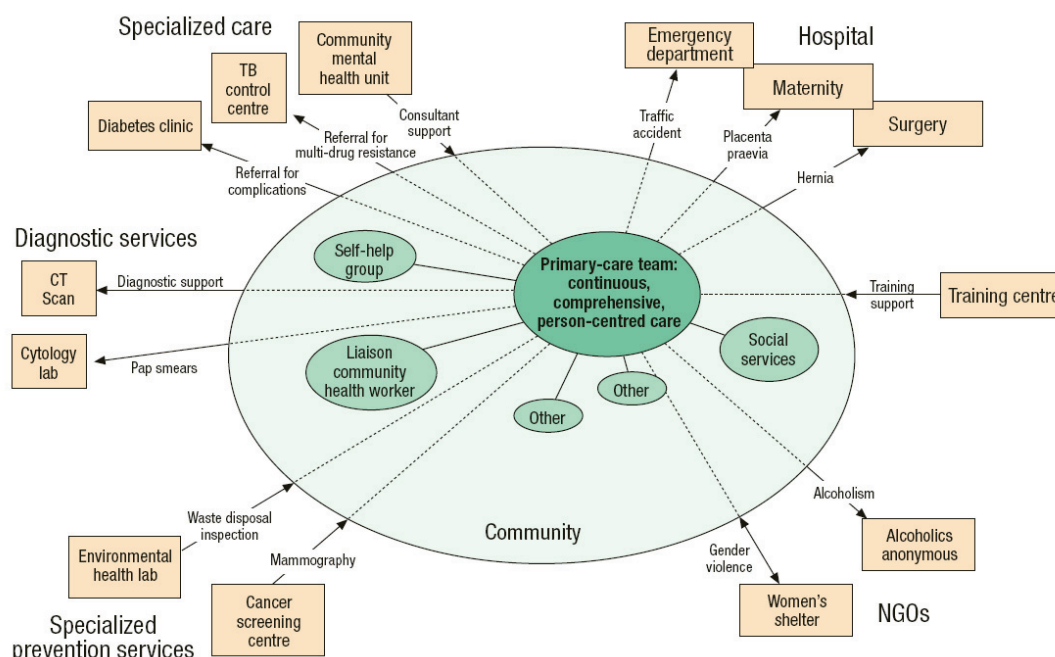
91. Primary care – a concept originally developed in the United Kingdom in the 1920s – goes beyond general practice or care by a family doctor in that it comprises various models with respect to their task of providing care, including all the various professions themselves, and their *Länder*- and resource-specific manifestations. If the provision of healthcare is in the spotlight, the question which mature care structures will be in a position in the future to satisfy the population's needs for primary care for all health concerns is important.

On October 14, 2008, the World Health Organisation (WHO) published the *World Health Report 2008* entitled “*Primary health care: now more than ever*”. The WHO Report justifies the need for strong primary care with the increasing challenges of an ageing population and the increase in chronic diseases. Many health systems are currently drifting from one short-term measure to the next. The increasing fragmentation of healthcare can be recognised, and there is often no awareness of preparation for the challenges ahead. “*Business as usual*” is not a viable option for healthcare systems. The WHO urgently calls upon all nations (including industrialised countries) to give their healthcare systems a stronger primary healthcare orientation (PHC).

In recent re-evaluations of the Alma Ata Declaration and its goals, other authors also come to the conclusion that “re-animation of the PHC concept” is necessary. In this connection, primary healthcare is always viewed as the key to a modern healthcare system in order to be able to provide good, cost-effective and equitable care.

In its World Health Report of 2008, the WHO once again emphasised the sense in and need for the coordination of primary healthcare teams. Figure 7 describes their role as part of a network close to the home.

Figure 7: Primary Care as a Central Element in a Network Close to the Home



Source: WHO 2008

The following terms are used in international literature as key performance criteria in primary care: accessibility, equity, appropriateness, quality, efficiency, long-term continuity, community/public health oriented.

Contribution to the Health of the Population

92. To examine the contribution of GP-oriented care to the health of the population, the Council commissioned an evidence report (detailed version at www.svr-gesundheit.de).

The methodological quality of the included overviews and primary studies was not uniform. Both of these make it difficult to definitively assess the situation. In particular, there is a lack of high-quality health economic evaluations of comparisons between GP-oriented and specialist-based care.

In the 22 international reviews, which combine a total of more than 1,000 studies, there is ample proof of the importance of all the core elements and the above-mentioned performance criteria of general practice care:

Accessibility: There are studies that show that GP-oriented care can reduce access barriers (including waiting times). There is also evidence that GP-oriented care with low access barriers goes hand in hand with an improvement in health indicators, the reduced uptake of emergency services and a lower hospitalisation rate. Simplified access to the health system also appears to be associated with higher satisfaction.

Continuity: Many studies demonstrated the positive effects of continuous medical care. High continuity in care was shown to result in better health outcomes, higher patient satisfaction, lower hospitalisation rates, reduced use of emergency services, fewer laboratory investigations, more frequent use of preventive measures, better compliance and lower costs.

Doctor-patient relationship: A good doctor-patient relationship, which is also characterised by longer consultation times, is associated with quicker recovery and improvement in health, as well as lower health spending due to fewer medical tests and less frequent referrals. Doctors whose consultation times are longer than average prescribe fewer medicines and are more likely to make recommendations about lifestyle and preventive measures. Not least, the long-term relationship between GP and patient within the context of GP-oriented care supports the establishment of a “health-promoting” doctor-patient relationship.

Coordination: Various publications show the positive effect of care at the outpatient level being coordinated by primary care teams, especially on parameters of process quality, such as appropriateness, communication, information flow between service providers and accessibility.

Quality: The general superiority of general practitioners over specialists or vice versa in patient care could not be established. The results of the studies show the following tendency: general practice care is especially beneficial for chronic diseases, the advantage of specialist care seems to be in cases of rare diseases and for some acute illnesses.

Cost effectiveness: It was shown that health expenditure can be reduced with GP-oriented care. However, there is evidence that care by experts may not only be associated with better clinical outcomes, but also with lower health expenditure in cases involving complicated progressions of certain illnesses (e.g. asthma).

International and interregional comparisons of health systems show that countries with a strong orientation towards the characteristics that comprise GP-oriented care have

advantages with respect to various indicators describing the general health condition of the population.

Use of GP Care

93. Over 90 % of the adult population in Germany have a GP, and the figure is as high as 96 % for those aged over 65. In 83 % of cases, the GP is a specialist in general practice. General practitioners are the most frequently consulted group of specialists. In 1998, 46 % of all men's doctor contacts and 38 % of all women's were with GPs. Patients with a GP consult him approximately four times a year, i.e. once a quarter on average. People of lower social status are more likely to have a GP than people of higher social status and consult them more frequently. In the first quarter of 2005, 42 % of those insured only consulted a GP, 46 % consulted a GP first and then a specialist, while only 11 % went directly to a specialist.

An analysis of the care data from the Gmünder ErsatzKasse (GEK) showed that 92.6 % of those insured had consulted at least one doctor working on an outpatient basis within the previous year. Insured persons contacted a doctor an average of 17.9 times per year and frequented an average of 1.8 doctors (all outpatient specialists) every quarter. 54 % of patients had visited at least four specialists within the previous year. This contact frequency, which is extraordinarily high on an international scale, is also clearly illustrated by the fact that on any given Monday almost 8 % of the population in Germany has a doctor's appointment. On peak days, such as 1st October 2007, 11.75 % of the population (= 9.7 million people) sat in the waiting room of an SHI-accredited doctor (every surgery cared for an average of 75 patients on this day). On average over the year, SHI-accredited doctors in Germany saw the internationally very high number of 34 patients per day.

The 2003 telephone health survey by the Robert Koch Institute, which is representative only to a limited extent, included questions about the frequency of patients' contacts with their GPs (without making use of specialists). The number of contacts rises with age. Accordingly, over 65-year-olds consult their GPs on average six times per year and the proportion of patients who had visited their GPs in the last quarter rose from 50 % of under 50-year-olds to 80 % of over 65-year-olds. The number of doctor contacts per year is twice as high among those with multiple illnesses as among those without (12 versus 6 consultations per year). In this connection, patients of lower social status are particularly frequently affected by multimorbidity and at an earlier age (Report 2000/2001).

As far as outpatient usage in the care of children and adolescents is concerned, the results of the National Health Interview and Examination Survey for Children and Adolescents show that almost every child was presented to a paediatrician in the first two years of life for screening, advice, diagnosis or treatment. As the child's age rises, the utilisation rate of paediatricians falls, however, to 25 % among 14 to 17-year-olds. At the same time, the rate among general practitioners rises from 12 % to 53 %. In rural regions, the utilization rate of paediatricians is well below that in cities.

Sickness Burden of Chronic Diseases in a GP's Surgery

94. The high prevalence of single illnesses as well as the high degree of co-morbidity and high-risk constellations in a GP's surgery result in high routine stress and complex demands on treatment and long-term management of these patients. The high prevalence of cardiovascular risk factors in particular shows the importance of the GP for (secondary) preventive tasks in this area. For example, in the DETECT study, a one-day random prevalence of 37 % was noted for hypertonia, 12 % for coronary heart disease (CHD) and 15 % for diabetes mellitus (mainly type 2), each of which rose with age. The majority of affected patients in all age groups also had more than one of the named diseases. Three or more cardiovascular risk factors were present in around 60 % of patients, i.e. they were high-risk patients. In the ADT Panel of the Central Research Institute of Ambulatory Health Care (n=71,915 GP patients), in the first quarter of 2008 31 % of patients had an invoicing diagnosis of hypertonia, 23 % hyperlipoproteinaemia, 10 % CHD and 9 % diabetes mellitus type 2.

Challenges for GP Care

In Germany, as in many other developed countries, GP care is faced with considerable challenges. In addition to the rise in the care burden for chronic disease and multi-morbidity, there is also the noticeable shortage in the next generation of GPs. Below, some of the important challenges will be examined in more detail. The extent to which these are accepted and overcome will be of great importance to the quality of healthcare for the general population.

Securing the Next Generation of GPs

95. In a study by the Berlin Charité Teaching Hospital, only 7 % of students on their internship stated that general practice was their first choice of specialist field. Various factors that could make the decision to become a GP in private practice more difficult were cited. The main reason was an anticipated dissatisfaction with the medical working conditions.

The need for not inconsiderable personal indebtedness in order to establish a new surgery or (nowadays more common) “buy into” a surgery is often seen as a burden. This factor alone makes work as a salaried employee an attractive alternative to accreditation in one’s own surgery.

Future female GPs, but also young male doctors, will probably be less willing than previous generations to accept the traditionally very long weekly working hours in one's own surgery. It is already clear that part-time employment is preferred more often than in the past. In future, this development must be taken into account when planning requirements. Even while maintaining the same accreditation figures (“heads”), the actual care capacity will probably fall because of fewer full-time equivalents (shorter working hours even with full accreditation).

The general change in social roles (in this case the job of a doctor) and the future higher proportion of female GPs could mean that it will be more difficult to attract the next generation of female doctors to work in rural regions because, for example, an inadequate infrastructure (kindergartens, schools, cultural offerings, transport links, adequate jobs for partners) will reduce their willingness to move.

General practice as an overall subject is more heterogeneous than other disciplines, which often concern only one organ system (e.g. cardiology, ophthalmology) or one technology (e.g. radiology). The diversity that is so appreciated by patients makes it more difficult to form a common identity. And the size of the specialist group (a total of around 58,000 GPs) hinders shared identification and orientation, as well as a clearly profiled, transparent and attractive representation to the outside world (including the next potential generation, other specialist groups, funding agencies, etc.).

Working Conditions using the Example of Contact Figures and Documentation

96. If we look at the high number of short doctor-patient contacts in Germany on an international comparison, it reflects high fragmentation seen from the point of view of

the desired continuous, planned care characterised by evidence-based services. If, at the same time, 80 % of GP patient contacts actually concern chronic illnesses, the utilization pattern still appears to be taking its cue from acute medicine (“tyranny of the urgent”) which must leave the GP dissatisfied because he can make little use of his qualifications. This means that inadequately planned consultations generally come into conflict with the needs of well thought-out and planned care and provision for the chronically sick. Even consultations of an average length of 15 minutes (which is well above the German average) are not enough to perform the preventive and advisory tasks that are necessary for many of the chronically sick. It was also shown that for each GP consultation with elderly patients, an average of 3.88 different health problems or needs for advice had to be dealt with, and with patients with diabetes there were actually 4.6 of these. This requires careful planning and prioritisation in the implementation of necessary care concepts for chronic diseases.

In future, GP documentation must not only be able to appropriately portray the health progression of the individual patient in primary care, but also support the GP in reaching the right conclusions from available information (example: a warning about an existing medication risk is generated from existing laboratory data on renal function). Furthermore, by preparing the necessary statistics on his patients, the documentation should allow him to complete his task of ensuring quality promotion. Among other things, routines to support vaccination medicine, monitor chronic illnesses, or support medication treatments, are necessary for effective primary care by a doctor. Support for structured care as well as possibilities for feedback on guideline-based treatment or any peculiarities in the surgery have hardly been realised in the past. To date it can be seen that the equipment in surgeries with IT (where used) has been totally inadequately set up for carrying out the primary medical functions of a GP. The importance of IT in the modern GP’s surgery is demonstrated in the fact that the data collected is always valuable for additional functions (treatment safety, quality promotion, community medicine and economic overview) and not simply to justify an invoice, which has been its most important function to date. In many neighbouring European countries (e.g. the Netherlands, the United Kingdom, Belgium) pioneering efforts have now been made to optimise GP documentation. One of the results is that the coding of detected illnesses according to ICD-10 in primary medical care is impractical because it means diagnostic terminology must be adhered to prematurely, whereas in GP medicine early stages of an illness or even mere risk constellations are often seen and treated. The International Classification of Primary Care (ICPC 2e) offers an alternative here in that it allows patient concerns and disease conditions that cannot yet be diagnostically explained to be encoded. A table merging this with ICD-10 has been compiled. Moreover, in long-term GP care, documentation of the patient’s health concerns in the form of an episode

reference (replaced by the quarterly recording of a “case” without continuity) plays an important role. Appropriate GP documentation also builds an important foundation for epidemiological research in general practice. Germany is still lagging behind countries such as the Netherlands and the United Kingdom, which have had large general practice morbidity databases for over a decade.

Training

97. With regard to recruiting an adequate number of GPs in the future, the university education of doctors has proved to be a central sphere of influence. Some studies reveal the extent to which access (admission) to and the specific structure of medical studies impacts motivation to subsequently work as a GP and, in particular, willingness to provide such care in rural areas.

In countries such as the United Kingdom, the Netherlands and Scandinavia, in which general practice has a high standing and accounts for a large share of healthcare, general practice is also much more strongly established as an academic subject at corresponding universities than has so far been the case in Germany. For example, in the United Kingdom there are a total of 31 academic departments with 66 professors for general practice. Around a third of all general practices in the United Kingdom is now involved in training students, and general practice is responsible for 9 % (6-12 %) of the entire medical curriculum.

Several countries (including the USA, Scotland, Australia, Canada and New Zealand) have reacted to the risk to basic medical care, particularly in rural areas, with the targeted training of medical students for poorly developed regions. Studies and reviews describe various influencing factors on a university and curricular level that can lead to the improved recruitment of future GPs and encourage them to stay in rural areas. The following have proved to be particularly effective: Selecting and supporting motivated new students from rural areas, a curricular emphasis on FP care including teaching in this setting (community-based teaching) as well as sponsorship programmes in rural surgeries.

Analyses at various German universities (including Frankfurt, Halle-Wittenberg, Heidelberg, Marburg, Magdeburg) show that GP placements in an academic teaching practice (duration of placement over five days) can motivate students to decide to become a GP. “Course-inherent” aspects, especially the relevance of a subject in examinations, also play an important role. The low representation of the subject of general

practice in central examinations is obviously associated with its lower significance in the perception of students. The introduction of a mandatory quarter in general practice during the internship would also result in an obligatory state examination for all graduates in the subject of general practice and thus improve the visibility and perceived relevance of general practice in medical studies.

Further Training

98. In recent years, discussions on further training in Germany have mostly concentrated on aspects of professional politics. As a result of the legal specifications of the profession with respect to further training codes this is comprehensible, but in terms of content and teaching quality it has also led to broad neglect in the support of future generations of doctors. From the point of view of the doctors concerned, further training is portrayed as part of a career in which primary services as assistant doctors have to be performed; targeted support, individual feedback, an exchange of views with a mentor, coordinated career paths etc. have so far mostly been left to chance and are largely lacking. Against the background of international experience with the further training of doctors, opportunities to support and motivate the next generation of doctors are not taken advantage of in Germany.

Healthcare legislation in the *Länder* has given the medical associations responsibility for further training. However, the associations have not yet made good use of modern teaching theory in further medical training. A teaching qualification for the trainers is practically unknown in Germany, and authorisation is largely granted on the basis of formal criteria. There is hardly ever an assessment of the quality of further training institutions by means of external inspections, or an evaluation of the training by the doctors themselves.

Anyone in Germany who wants to become a GP or a specialist in general practice is faced with the often not simple task of arranging the required further training segments in hospitals and surgeries as seamlessly as possible and, in terms of content, orienting himself as closely as possible to his subsequent field of activity. International experience shows that the organisation of further training as a combined system (so-called “combined” or “rotation training”) makes sense and is standard in countries with high-quality further training (e.g. the Netherlands, Canada, the UK) in all clinical subjects. The key elements are a previously specified, structured curriculum as well as a uniform and fair remuneration contract for all inpatient and outpatient segments of further training. As a result

- the doctors concerned will be given a certain degree of planning security for time spent in further training, and without unwanted interruptions,
- the individual sequence of further training segments can be optimised according to the objectives of the training (e.g. not only for a maximum care hospital but above all standard/basic care to enlarge the spectrum of experience),
- the quality of further training in the institutions involved can be specifically evaluated and further developed (including removal from combined further training in the event of repeated negative assessments),
- the motivation of young doctors can be specifically encouraged (e.g. by mentors).

According to Article 8 of the Act on the Promotion of Solidarity in Statutory Health Insurance, most recently amended in 2008, regional projects to promote general practice can be agreed upon in the future. Although the German Medical Association has submitted a concept for action for combined further training, implementation by the *Länder* Medical Associations is often still vague. Examples from Germany include the “Coordination Centre for Further General Practice Training (KOSTA)” at the Saxony-Anhalt Medical Association and the “General Practice Centre of Excellence” established in Baden-Württemberg as a network-like merger of the five medical faculties. The targeted establishment and support of regional further training alliances is an important goal. In addition to central recruitment, higher-level further training support for further training assistants and the networking of surgeries, hospitals and universities is intended. Mentors will also support the further training assistants in their career planning.

It is to be assumed that a considerable part of the overuse, underuse and misuse repeatedly noted by the Council in its reports is also due to the fact that the number of further training courses per discipline and the resultant relative shares of different specialist groups do not correspond to the actual care needs of the population. Thus, for example, while an increasing shortage of GPs and surgeons can be identified in city centres and conurbations in particular, there is simultaneously a dramatic surplus of other groups of specialist doctors. With regard to the number of specialist doctors with further training and their resultant shares in the private sector in particular, we can observe surplus, under-supply and the incorrect provision of doctors. This makes it all the more astonishing that there has not yet been a discussion in Germany about the control of the distribution of doctors as a goal for the next generation of further training.

Continuing Education

99. The structure of continuing medical education that is widespread in Germany ensures a serious distortion of information reaching the prescribing doctor because of the frequent link to industrial interests (pharmaceuticals, medical products). Continuing medical education journals that depend solely on advertising (so-called “non-controlled distribution magazines/newspapers”) are no longer unbiased in their editorial sections with regard to products currently on the market. Whereas international scientific publications have now moved towards having to reveal possible conflicts of interest, this obligation is still largely absent from continuing medical education in Germany.

Positive mention must be made of the quality circles in which many doctors in private practice structure the majority of their continuing education. This type of mostly interactive continuing education makes it possible to address the participants’ learning requirements, systematically deal with the specific quality problems of those involved (surgeries, hospitals, departments, etc.) and discuss possible solutions that could be implemented.

With respect to the often unsatisfactory situation of doctors’ continuing education in Germany, the German Society of General Practice and Family Medicine (Deutsche Gesellschaft für Allgemeinmedizin und Familienmedizin, DEGAM) has formulated criteria that continuing education for general practice should satisfy:

- Learner-centred: Doctors take the initiative themselves to identify a need for learning, the formulation of learning objectives and the implementation and evaluation of personal learning projects. This is helped by methods such as portfolio learning, mentorships, learning agreements, working in small groups, work experience in hospitals, in addition to individual learning and attending relevant lectures and presentations.
- Contextual relevance: Content and representation must take account of the circumstances of general practice.
- Evidence-based: The organisers or authors must justify the contents, recommendations, etc. in a transparent fashion. This includes, among other things, systematically taking the results of scientific studies into account.
- Patient-oriented: Since the needs, emotions and expectations of patients play a special role in general practice, it should be possible to learn strategies for providing effective and sound patient advice from continuing education.

- Tools instead of content: Because of the large number of subjects and questions that are relevant to general practice, strategies for practice-related information management must be taught; this means that GPs can then deal with their individual questions quickly and flexibly.
- Balanced and transparent financing: Organisers, lecturers, authors, etc. must reveal all their material interests (links to industry) so that the target group can assess possible conflicts of interest.

Payment

100. In line with the demand from the Conference of Health Ministers of the *Länder*, the remuneration of GPs and other advice-intensive services provided directly to the patient should be relatively improved in order to ensure its basic provision to the population. Since threats of recourse, in particular, have the effect of a deterrent on the next potential generation, alternatives should be found (e.g. advice concepts) over the short term to reduce individual financial risk and to limit the amounts involved. When specifying budgets, sufficient account must be taken of the particular care situation of GP surgeries, especially in rural areas.

6.2 Specialist Care

101. In future, specialists in private practice will perform important functions between primary care by general practitioners and highly specialised inpatient treatment. With regard to the development of care by SHI-accredited doctors and specialists, the falling number of GPs in the last 10 years and the low growth in specialists who provide GP-like services indicates supply problems, especially in poorly developed regions. To ensure full coverage at the desired level, what is needed is extensive promotion of the profession of GP on the one hand, and diverse incentives for specialists to settle in these areas or to provide care there at least a few days a week on the other. In addition, there are already deficits in nursing homes with regard to high-quality care by specialist doctors. The problem concerning care by specialist doctors does not primarily lie in the fact that there are too many doctors, but rather in their regional distribution, the lack of coordination in treatment, especially with the inpatient sector, and in the lack of competition between SHI-accredited doctors and hospitals in the field of outpatient care.

102. Against the background of foreseeable demographic developments and the possibilities opened up by medical and technical progress, outpatient training at the interface between the outpatient and inpatient sectors is gaining in importance. Fair and appropriate competitive conditions for competing service providers, i.e. for hospitals and specialists are lacking. The cross-sectoral optimisation of care, supported by more intense competition, requires harmonisation with regard to the definitions of services, quality standards, remuneration (including investment financing and contingency costs), approval of new treatment methods, prices for initiated services, and regulations, the latter possibly in terms of minimum or limited quantities. Under these conditions, alliances of hospitals and Medical Service Centres or networking between associations of hospitals and outpatient group practices could make better use of their rationalisation potential under the Panel Doctors' Rights Amendment Act and become "drivers" of cross-sectoral care. Further training should adjust to these changing conditions, whereby a large part of it should perhaps be in the outpatient sector in the future, possibly in parallel to further training in hospitals. In this way, the upcoming generation of doctors will become familiar with cross-sectoral patient care in an early phase of their further training.

6.3 Drug Provision

103. The expansion of the primary care and secondary specialist care sectors with a simultaneous rise in chronic illnesses in a society with a higher life expectancy will increase the proportion and significance of outpatient drug therapy. Drugs are the most commonly used form of treatment in outpatient care and, used correctly, are among the most effective and efficient instruments of medical assistance. In addition to existing drugs to treat chronic illnesses, the genetically engineered biologicals (and their replica products biosimilars) will further the possibilities for the effective treatment of even serious illnesses in an outpatient setting. Furthermore, they increase the survival time of many patients with cancer or autoimmune diseases and thus the need to support drug treatment in an expert and qualified manner over a long period of time.

104. Because of the growing importance of drug treatment, the need for interdisciplinary cooperation in the sense of coordinating the various care areas will have to be intensified. From this point of view, the involvement of pharmacists is essential, however only if certain conditions with regard to quality and qualification in cooperation and communication are met. The objectives are appropriate drug provision to the population in Germany (e.g. observing the need for a prescription, giving adequate information on use, storage and the beneficial effects and adverse effects), the

encouragement of treatment safety and correct drug use, pharmaceutical care, especially for the chronically sick, and the prevention of adverse effects and interactions (interaction checks, CAVE check, etc.).

105. As members of a non-physician health profession, pharmacists provide support and care for taking or using prescribed and over-the-counter medicines in primary and secondary medical care. The aim of primary care in the future is that patient orientation be improved in this respect. Pharmacies will thus become advice centres for drug treatment within the context of a treatment network or of integrated care, both for the doctors and the members of other health professions, as well as for patients and consumers.

106. Examples from abroad (e.g. from the United Kingdom, the Netherlands and Australia) show many possibilities for cooperation in which pharmacists can be involved. In none of these examples do the organisational form and ownership of the pharmacy play a noticeable role (owner-managed pharmacy, mail-order pharmacy, pharmacy owned by others, e.g. a chain of pharmacies), either negatively or positively. Pharmacists taking on professional responsibility and providing drug-oriented expertise within the context of cooperation with other service providers is, however, linked to certain training or further training measures to raise their qualifications. Moreover, another prerequisite is that the medication overview for each patient is transparent and complete.

107. In a future system of cross-sectoral, community-based care, pharmacies must position themselves as institutions that bear more responsibility than now for the quality and cost-effectiveness of the choice of drug (community pharmacies). They are then involved in an integrated care network with a flat-rate payment related to the insured person that follows the strategy of removing the provider-payer split, and they are jointly responsible for the financial and qualitative effects of drug therapy for the relevant community. This responsibility also includes Pharmaceutical Benefit Management (price and delivery agreements for a certain range of medicines, “net positive list”).

108. If the health system is further developed towards coordinated, generation-specific and regionally differentiated care, a pharmacy in cooperation with doctors must take responsibility for the choice and provision of drugs and actively participate in patient-oriented pharmaceutical care and support (pharmaceutical care, medication reviews, etc.). In this case, payment of pharmacists would be regulated according to internally agreed distribution patterns in the same way as that of the doctors and non-physician health professionals involved within the context of the capitation model.

109. Future care units can be organised both regionally and supra-regionally. In such cases associations of pharmacies that agree on communicable and verifiable quality standards would be a sensible solution. If network pharmacies do not have an adequate financial basis in sparsely populated regions, branch pharmacies of such associations can take care of drug provision there. Mail-order from pharmacies or local prescription collection points belonging to the network pharmacies (pick-up stations, e.g. in supermarkets) is another way of maintaining drug provision. The collected prescriptions are then picked up by network pharmacy employees, and the prescribed drugs dispensed at the prescription collection point the following day. However, in such cases it must be ensured that telephone consultations are possible at all times.

110. In principle, all pharmacists still have the freedom to run their pharmacies as small businesses without network affiliation and to provide drugs to people with statutory or private health insurance and to consumers. But network pharmacies, too, are free to provide services outside the network, e.g. within the context of self-medication or for people with private health insurance. Cooperation with doctors within the context of community-based care makes special professional qualifications appear essential (e.g. training or completion of a postgraduate course in clinical pharmaceuticals, communicative skills vis-à-vis network colleagues, patients and insured persons).

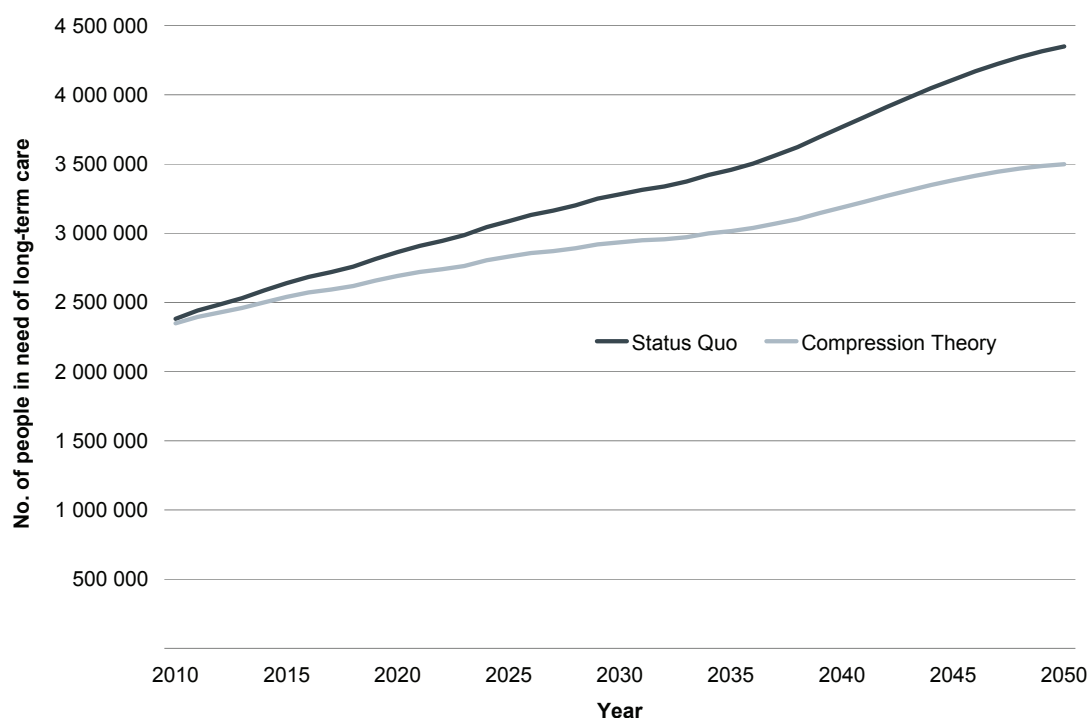
111. Promoting a development of this kind leads to desired differentiation in the pharmacy sector and the liberalisation of the existing “Collective Contract” (Framework Agreement on Drug Provision according to Article 129 Social Code, Book V) for pharmacies participating in SHI supply. In a similar way to primary and secondary doctors’ care, the competition over contractual models for drug provision that is then possible will lead to more integration and cooperation in medical treatment processes and, as a result of more cooperation between the professions, to greater involvement of pharmacists in the responsibility for patient care. In this way, the role of pharmacists will change from the current rather passive institution for the distribution of medicines into an institution that, in combination with doctors and members of non-physician health professions, is actively involved in successful procurement, the right choice and effective use, as well as in passing on information that is independent of industry and established on the results of evidence-based medicine and in monitoring drug treatment. This would all take place within the context of the changed organisational and financing structures.

6.4 Health Services for People in Need of Long-Term Care in Old Age

112. Longer lives and the rise in the proportion of elderly and old people require adjustments at all levels of society – the health service is particularly affected by this. Many challenges have still to be mastered in order to ensure the availability of demand- and needs-based medical and nursing services for all generations, but especially for the ever growing number of old people in need of long-term care. This is all the more so because the number of people in need of long-term care will rise sharply in the years ahead and marked growth in demand is to be expected in the long-term care sector. According to the Council's model calculation, the number of people in need of long-term care will rise to 4.35 million by 2050, i.e. growth will be approximately 94 %. Even assuming that morbidity can be further compressed, subsequent generations will reach great ages more healthily and will need long-term care at older ages than today, the number of people in need of long-term care and assistance will rise to around 3.5 million in 2050 (cf. Figure 8).

113. Providing long-term care is a long-term task. Long-term care has different characteristics and goals from acute care. The goal of providing long-term care for old women and men is to regain or maintain an appropriate quality of life and independence. In order to be able to meet the future growth in demand for long-term care for old people, different challenges will have to be mastered. Initially, high priority will be attached to avoiding or delaying the need for long-term care in old age and generally expanding age-specific prevention and health promotion.

Figure 8: Comparison of the Development of Long-Term Care Needs



Source: GBE 2009, Federal Statistics Office 2006a, own figures, own calculation

Prevention of the Need for Long-Term Care in Old Age

114. Longer lives have brought many people extra healthy years of life. This means that someone who is 70 today is in many respects the same as a 65-year-old from the previous generation. So far, this development has been limited to earlier old age. At very great ages, the probability of the emergence of health problems and the proportion of those suffering from limited functions, chronic illness, multimorbidity and the need for long-term care rises. Extending the period of healthy ageing before the onset of health and functioning problems as well as preventing the need for long-term care, or at least delaying it, is an important task of prevention and age-specific health promotion. Its current excessively low standing in health work urgently needs correction (Report 2007, II- 6.22). However, it will not be enough only to develop strategies to reduce the onset of illness and the need for long-term care. Greater attention needs to be paid to life in “limited health”, and measures to maintain a state with already impaired health are necessary. This is especially important in old age in order to limit the consequences and

extent of restricted health and to maintain the greatest possible independence with and in spite of health impairments.

115. The considerable differences in the portion of life spent in good health, which range from 45 % to over 80 % for men and from 37 % to 76 % for women, indicate that the preventive potential for elderly people has not been exhausted. Furthermore, there is plenty of empirical evidence for the effectiveness of preventive measures in old age. For example, it is clear that physical activities have an effect on cognitive abilities. Accordingly, increased physical activity can result in a spontaneous improvement to memory of 35 %. It is not only behavioural changes by old people that have a preventive effect. Successes in the setting-based prevention of dependency on long-term care have been shown in meta-analyses and systematic reviews, for example in the “preventive home visit”. According to this, there is evidence of the effectiveness of preventive home visits with respect to a reduction in mortality and the number of admissions to hospital and nursing homes. To raise these health reserves, it is urgently necessary to develop and exploit the inactive preventive skills of the health professions and achieve a prevention-oriented healthcare system. In particular, this includes long-term care, where the preventive orientation is enshrined in the Long-Term Care Insurance Act, but has been more of a theory than reality. The Council recommends that the prevention of the need for long-term care be made a declared health goal of the ageing society.

Infrastructure of Providing Long-Term Care for the Elderly

116. The extent to which the phase of old age – including that with limited health – exhibits a high quality of life in the future, i.e. whether very old people can live independently in spite of needing long-term care is dependent to a large degree on how long-term care is structured. In the recent past, much has been done to improve the infrastructure and quality of long-term care, but there nevertheless remain many developmental challenges. The needs-based care of old people requiring long-term care first of all presupposes adequate capacities in long-term care provision. For this, the Long-Term Care Insurance Act has set many incentives as a consequence of which the supply of long-term care has been greatly expanded. Today there are 21,421 licensed long-term care facilities in Germany: 10,997 long-term care services for outpatients and 10,424 nursing homes for full or partial inpatients. But it is doubtful whether these capacities will be sufficient to cope with the expected growth in demand. Our own calculations also show that there are shifts in demand towards professional long-term care in the outpatient and the inpatient sectors (cf. Table 13). In future, the provision of

long-term care facilities will therefore need to be further expanded. But these facilities will only be able to work successfully if they have adequate and well-qualified staff. The Council recommends the launch of a campaign to advertise for future staff for all health professions, but also the initiation of a catalogue of measures that will help to contain the fluctuation in the health professions, make it possible for men and women with children to stay in a health profession thanks to the provision of childcare and opportunities to work part-time, give former employees the opportunity to return to the profession and, overall, increase the attractiveness of health professions.

Table 13: Development of Type of Care (in percent), taken from Social Code, Book XI

	Inpatient (%)	Outpatient (%)	Long-Term Care Allowance (%)	Long-Term Care Level		
				I (%)	II (%)	III (%)
2007	31.4	22.6	46.1	51.6	35.1	13.3
2010	31.7	22.8	45.6	51.6	35.2	13.2
2020	32.9	23.4	43.7	51.4	35.5	13.1
2030	34.2	23.6	42.3	50.8	36.0	13.2
2040	34.5	24.1	41.4	51.2	35.9	12.9
2050	36.3	24.4	39.3	50.5	36.4	13.1

Source: GBE 2009, Federal Statistics Office 2006a, own presentation, own calculation

117. Merely expanding the outpatient care infrastructure according to the motto “More of the Same” will not solve the existing problems. New models and concepts are required so that long-term care can respond appropriately to health problems in old age and to the priorities of people growing old. The majority of old people prefer to remain in their familiar home environment when they need long-term care. A representative study shows that only 10 % of those questioned want to live in a nursing home when they can no longer cope with everyday life on their own. In this case, 30 % of those questioned want to live at home with professional support, 21 % at home with regular help from children/family and 29 % at home with regular help from children/family and professional help. According to forecasts, this development will continue in future and has already brought about wide-ranging changes, but the provision of long-term care has not been able to keep up with care needs.

Situation of Outpatient Care and Its Improvement

118. Today's profile of available services for long-term outpatient care is relatively narrow and does not meet the needs of many problem situations. Primarily, people with dementia, the chronically sick in the late phases of disease progression, the seriously ill with a need for technologically intensive long-term care and the dying as well as elderly people living alone, the disabled, immigrants and homosexuals are confronted with gaps in the provision of healthcare. Politicians have introduced specific improvements only for people with dementia and the dying. Creating the conditions in long-term outpatient care needed to be in a position to react flexibly and expertly to all the user groups that will grow more important in the future is one of the major developmental challenges in the opinion of the Council. To do this it is necessary, among other things, to advance the overdue further development of quality and differentiation in long-term outpatient care and aim for service and availability profiles that meet the entire spectrum of demand (including the user groups that will grow in the future) and comprise the entire range of long-term care strategies (from health-promotion to palliative care).

119. Elderly and old people who suffer from chronic illnesses, multimorbidity and/or need long-term care require integrated and continuous care. To keep the condition of those affected stable during prolonged disease and care processes and to control the provision of healthcare in such a way that tailored care (neither too much, too little or incorrect care) is available, it is necessary to coordinate the services of different institutions and providers, to harmonise them and integrate them. In this connection, many interfaces need to be overcome and patient information relayed to the right places. This is a particularly difficult task in the outpatient care sector because of the degree of fragmentation. These cross-sectoral care sequences must also be included in guidelines on the treatment of patients with multiple illnesses in general and people in need of long-term care in particular (cf. 5.1).

For a long time, long-term care was not included in efforts to create integrated care models. This was corrected with the Act to Strengthen Competition in the SHI System (cf. Social Code, Book XI Article 92 b "Integrated Care"). This, and the Long-Term Care Further Development Act, introduced steps to improve the bridges at the interface between inpatient and outpatient care. The consequences of these legal options cannot yet be clearly predicted. But past experience indicates that many of the reform incentives to improve integration will not meet with the desired success because cooperation routines, familiar patterns of work and the allocation of responsibilities in the German health system are resistant to change. It is mainly the change to cross-professional cooperation that is proving to be most difficult and is in conflict with the hierarchical

gulf between the health professions, which is more marked in Germany than in other countries. The Council recommends that all health professions make use of the possibilities of “pilot projects” to test collaborative care and try out new forms of cooperation and work allocation in the interests of improved patient care (cf. Report 2007; Long-Term Care Further Development Act; Social Code, Book V Article 63b, 63c).

120. Case and care management are elements of high-quality care for those in need of long-term care. Case responsibility will be one of the key tasks when care is a question of supporting the often prolonged long-term care progressions of old people and ensuring the continuity of care. The Long-Term Care Further Development Act sets the course for the introduction of case management, which is to be given a high standing in the long-term care support centres currently being established. The extent to which these reforms bring about lasting effects will mainly depend on how successful the implementation of these long-term care support centres is. This process would probably be hard to manage without systematic evaluation. A systematic scientific evaluation of the introduction of long-term care support centres and case management above and beyond ongoing scientific support is therefore recommended.

121. Advice can make an important contribution towards strengthening the user position and enabling a higher quality of life. From this perspective, the establishment of long-term care support centres is appropriate as a new structural element in high-quality long-term outpatient care. But information provided there must be available at all times, be easily accessible, tailored to target groups and be easy to understand. New information media – such as the internet – should be involved more than in the past and information channels should be sought that also reach vulnerable population groups. The creation of a channel for providing information is not enough in itself.

122. Good advice on long-term care is not only of the utmost importance in the use of long-term care services and, by the same token, not only available for a short time or sporadically when remedying an acute problem situation or an information deficit. It has longer-term tasks of support and individual care planning and control above and beyond advice in the narrow sense. It should be available to people in need of long-term care as a supporting body and to ensure that they receive care that corresponds to their individual needs and is tailored to them during the entire progression of impairment and when in need of help. This presupposes that the existence of this possibility is adequately enshrined in the awareness of the population/insured people and that relevant expertise and qualifications for such work exist.

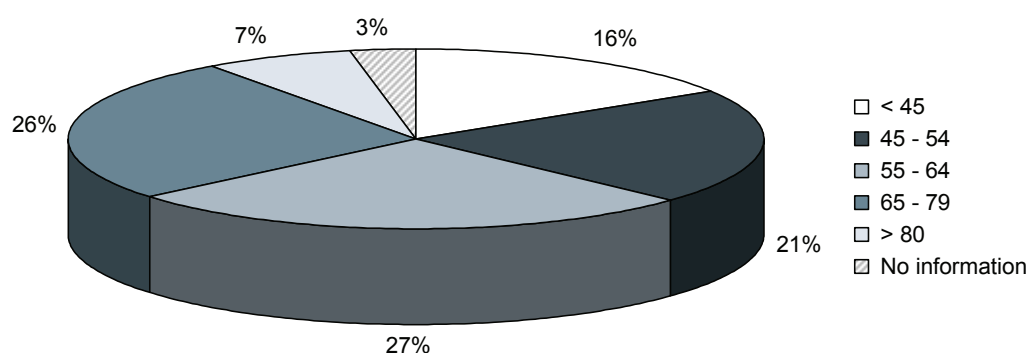
Long-Term Care Provided by Families

123. Furthermore, ensuring the provision of long-term care will decisively depend on the extent to which the potential for informal help is strengthened and a productive interaction of professional and informal help achieved.

Family members still provide the majority of domestic care for people in need of long-term care in Germany. They not only bear the main burden of long-term care, but are also responsible for it. Generally, they also manage all aspects of long-term care and provide most of it themselves. As studies show, family members providing long-term care often suffer from overload and often also have health problems due to stress. Sustainable concepts to conserve resources as well as encourage skills and relieve family members need more attention to avoid such incidents and to help maintain long-term care arrangements in the home.

124. Encouraging the support and long-term care potential of families and cooperation with family members providing long-term care also needs particular attention because current forecasts predict the long-term care potential of families will become more unstable in future on account of the effect of the age structure. The elderly children of very old parents are themselves often in vulnerable health situations (Figure 9). It is therefore necessary to increasingly set up mixed long-term care arrangements in the future. Arrangements of this kind presuppose the integrated interaction of professional and informal long-term care providers. In terms of long-term care, they require that work centred around the individual is superseded by a family-oriented way of doing things – such as that at the heart of the WHO Family Health Nursing Concept.

Figure 9: Age of Family Members Providing Long-Term Care



Source: Schneekloth/Wahl 2005

125. The support requirements of family members providing long-term care should be evaluated as precisely as possible in future on the basis of standardised assessments so that suitable help, such as nursing courses, can be offered. Against the background of the current low uptake of nursing courses by family members, future support measures should be individually tailored and oriented towards their needs, and health insurance funds and prevention providers should increasingly focus their efforts on offers that take the specific long-term care arrangement and the individual needs of family members into consideration.

126. At the start of their long-term caring situation most family members providing long-term care (carers) cannot foresee the consequences that the decision will have for them and their families. There is often a discrepancy between the expectation to be able to meet demands, and the reality of the long-term caring situation. It is important that supportive offers are made to the main carer in the early phases of taking on long-term care. The guidelines “Family Members Providing Long-Term Care” by the German Society of General Practice and Family Medicine (Deutsche Gesellschaft für Allgemeinmedizin und Familienmedizin, DEGAM) emphasises the importance of the health condition of family members providing long-term care with the guiding principle “Long-term care can only succeed if the carer himself is well”. The guidelines thus have the following goals: identify patients whose own health is at risk or who are ill as a consequence of their function as a “family member providing long-term care”, ensure sensible diagnoses, introduce preventive measures, and ensure effective, appropriate and low-cost support from the GP. The guideline is thus pointing in the right direction.

Table 14: Provision of Long-Term Care (taken from Social Code, Book XI, 1999 and 2005)

Type of Provision	1999	2005	Changes 1999 to 2005 in %
Long-term care solely by family members (recipients of long-term care allowance)	1,030,000	980,000	- 4.6
Long-term care by outpatient services	415,000	472,000	+ 13.5
Long-term care in a nursing home	573,000	677,000	+ 18.0

Source: Federal Statistics Office 2001, 2007, own presentation⁶

⁶ The official care statistics are published only every two years. The figures that were published in 2007 are from 2005 and were the most up-to-date at the time this section of the Report was written. The data for 2007 were not published until February 2009.

Situation of Inpatient Care and Its Improvement

127. The current infrastructure, efficiency and quality of long-term outpatient care for old people as well as the rising complexity of their care needs means that it is questionable whether the transfer to an inpatient nursing home is always the worse alternative. After all, moving into a nursing home can also be a self-determined, planned decision; especially since long-term care situations at home are not always free of shortcomings and are often characterised by serious stresses for the carer and/or strong feelings of loneliness among those in need of long-term care. Furthermore, given current population statistics, at most one third of all working people can expect support from their own children if they need long-term care, and existing family members providing long-term care are themselves older when they take on caring duties because of rising life expectancies. This means that the boom and diversification of the home sector will in all likelihood continue to grow (cf. Table 14).

128. The challenges facing long-term inpatient care, the nursing home sector, are no smaller than those confronting the long-term outpatient care sector. It has visibly come under pressure in recent years because the clientele in nursing homes has changed fundamentally: it has grown older (the age at which people move into nursing homes has risen), it is sicker and stays for a shorter time (often less than two years). Instead of places where people live for many years - as once postulated - nursing homes have long since become places of long-term care dealing with sickness in the late stages of chronic illness or at the end of life. They are thus exposed to far-reaching changes in demand that long-term care concepts and strategies have not kept up with. The predicted growth rate in utilisation shows how urgent it is to address the changed demand with new concepts; estimates of demand assume an increase of between 50 % and 60 % for the inpatient sector.

129. Nursing homes as places of long-term care that are required to deal with illness in the late and final stages of chronic illness or at the end of life will need sufficient and appropriately trained staff as well as greater networking between organisational concepts and personnel development. They will also need more professionalism in long-term care, which, on the one hand, concerns the implementation of long known technical standards (assessment and long-term care planning, risk assessment and prevention) and, on the other, means the further development of expertise when dealing with cognitive deficits, mental problems and disturbed behaviour, including the optimisation of process control and healthcare coordination that this entails. Furthermore, resource-oriented long-term care must be implemented with the help of evidence-based concepts and tools that include both mobility promotion and support for

cognitive resources. The development and implementation of appropriate concepts for care at night and professional support for dying nursing home residents are also among the most important development tasks for the facilities today.

130. The realities in many nursing homes make a sustainable innovation push urgently necessary. For this reason, the first thing to do is to fundamentally increase the transparency of the services and living and working conditions in nursing homes, and to raise the general awareness of these. To date it has not only been difficult for potential users to receive a reliable overview of the quality of inpatient care, but academia and politicians are also often confronted with inadequate data or estimates.

131. The quality of care in nursing homes is closely linked to existing personnel resources, i.e. the number, qualification and expertise of the staff. In view of the increased need for medical and nursing care among nursing home residents, a permanent medical presence in nursing homes should be considered – something that has now been made possible by parliament. The advantages and disadvantages of various models of medical care in nursing homes must also be weighed up (including care of all residents by the same doctor versus the continuation of long-term care relationships with a known and trusted doctor), as well as regional and local characteristics and demand situations. The final structure of the interface between nursing and medical care is still uncertain and a future task for nursing homes. In particular, this refers to the better integration of nursing, GP and specialist medical care, to the structure of a care interface between the nursing home and hospital that is oriented towards the patient, and to the systematic improvement in care provided by family members.

132. The rising working requirements and work intensity in nursing homes are accompanied by a growing need for personnel that often cannot be adequately met because of a lack of finance. Furthermore, it is obviously becoming increasingly difficult to find appropriate staff and even the further training prescribed for managerial positions is proving to be inadequate in many areas. Retraining initiatives to prepare the long-term unemployed for work as care assistants should therefore be welcomed in principle, but should not divert attention from the growing need for nursing expertise. Finally, the foreseeable consequences of demographic change will continue to force all involved to enter into a dialogue about how the performance level of nursing homes can be structured and financed in future.

Quality of Dental Care and Its Improvement

133. Dental care for old people in need of long-term care must be improved. Scientifically backed prophylaxis programmes for people in need of long-term care demonstrate that “prevention” in old age definitely makes sense. In the quality management of long-term care facilities for the elderly, prophylactic dental measures for the patient should be precisely defined because the standing of oral hygiene in the context of general patient hygiene is very low due to a lack of time and a knowledge deficit among care staff.

134. The oral hygiene measures defined in the framework curricula for the caring profession should be reviewed and supported by a modular basic and continuing training system in carers’ schools, as there is often a noticeable lack of knowledge in the field of oral and denture hygiene, even among trained carers for the elderly.

135. Dental oral hygiene courses for caring staff and old people cannot be provided on a voluntary basis in the long term. It is therefore necessary to make the relevant resources available in order to ensure uniform financing for these projects across the country. The usefulness of dental oral hygiene courses for caring staff and old people has been scientifically proved. In the past, these courses have been conducted on a voluntary basis by dentists. As a consequence of demographic developments, rising demand for these courses is to be expected.

136. Article 22 Social Code, Book V could be amended to the effect that the allocation of funds from statutory health insurance funds be oriented to meet the needs of the target group. It makes sense to make self-determined adults responsible for their dental care. This does not make sense for people in need of long-term care because the costs of long-term care often offer no financial leeway. Prophylaxis support for people in need of long-term care would centralise and solve important problems with dental care:

- a) Regular contact between the person in need of long-term care and the dentist means that preventive and treatment needs can be identified at an early stage. This means there is less emergency treatment, which is expensive and difficult to organise and mostly results in lost teeth.
- b) The caring personnel become acquainted with the dentist as a partner and first point of contact who can answer important questions about oral and denture hygiene to the benefit of the person in need of long-term care and the carer.
- c) Certain prophylaxis services can be conducted by specially trained team members (observe delegation principles), although the German Dental Association (Bundes-

zahnärztekammer, BZÄK) is currently agreeing on models for continuing training concepts for dental prophylaxis together with the German Society for Gerodontology (Deutsche Gesellschaft für AlterszahnMedizin, DGAZ). Services that can be delegated allow the dentist to precisely plan and organise preventive care requirements by expert specialists. The statutory health insurance companies will need to provide financial security here too.

Quality Assurance of Nursing Care

137. The debate about quality in long-term care is again very topical due to published deficits in care and the reactions of the legislator in the shape of the Long-Term Care Further Development Act. For many years there has been no evidence base for nursing care, hardly any research into the measurable results of high-quality long-term care, measuring instruments have not been valid, and the standard development of tools for quality assessment not sufficiently patient-oriented. However, these tasks cannot be solved without further continuous investment in quality development and the research into long-term care that is necessary to support this. Examples of this include the “National Expert Standards in Long-Term Care” so important for improvements in long-term care quality, as well as in the “Reference Models in North Rhine-Westphalia, NRW”. These trials will only have a lasting effect if they are continually developed. In medicine and in long-term care, quality development not only needs sporadic, but continuous attention and corresponding financial support. This presupposes support for basic research by care scientists into quality assurance in long-term care and an evidence base.

138. Since the introduction of the Long-Term Care Insurance Act the externally audited quality assurance of the quality of structures, processes and results has been mandatory. Internal institution management was advanced by the Long-Term Care Quality Assurance Act. Quality in long-term care is examined by various bodies: the Medical Review Board of the Statutory Health Insurance Funds (*Medizinischer Dienst der Krankenversicherung*) on behalf of the long-term care funds, nursing home supervision bodies and auditing companies. The Long-Term Care Further Development Act introduces standardised annual audits for all licensed long-term care facilities and attaches the greatest importance to the quality of results. However, the process of developing auditing instruments remains in poor shape. Improvement promises greater transparency in audit results by creating consumer-friendly assessment systems – e.g. school marks – and advancing the preparation of quality criteria from the user’s perspective, as well as

increased promotion of measures for internal quality assurance in long-term care facilities.

139. Quality assurance in domestic, informal long-term care is currently only a matter of checking that long-term care is ensured. Criteria for the assessment of quality are lacking. The Council suggests openly conducting the discussion about quality assurance in so-called “amateur long-term care”.

140. Too little attention is still paid to user orientation within the scope of quality efforts in long-term care. A relatively large choice of care providers on the one hand faces the user with the difficulty of finding the appropriate provider for himself. Putting more independence and a higher quality of life in the extra years also makes it necessary to further strengthen the position of the user in Germany. In recent years efforts have been made to move away from paternalistic ideas of patient treatment, to give patients and users more scope in the decision making process and to put them in a position to take on more responsibility for their own health. The information and advice needed for this have also been provided (Article 65b Social Code, Book V; planned long-term care support centres, etc.). However, these efforts have not yet changed everyday care. The international discussion on the importance of achieving a consumer driven healthcare system in the future has so far only been very gently approached here. Growth in demand and rising costs mean it will be important to encourage users to develop their health competence more than in the past, foster their self-management skills and strengthen their position. For this, expansion in the provision of independent information and advice, and ensured information transparency will be essential. In this context, it must not be forgotten that many population groups – including some elderly people and people in need of long-term care – do not have the necessary resources to tap into and acquire information. They need special measures tailored to specific target groups.

141. Taking the priorities of those involved in providing good long-term care into account means observing the following criteria: trusting, personal relationships between carers and patients, characterised by respect and appreciation, person orientation and communication (also on subjects other than care), sufficient time, personnel continuity, reliability and accessibility, carefulness, gentleness and commitment by the carers, and comprehensive support and relief.

6.5 Integrated Care

142. To realise cross-sectoral care and increase competition in the service sector, the legislator has implemented several regulations in the last ten years on the basis of which health insurance funds and service providers are moving away from conventional healthcare with its collective-contractual organisation and can conclude selective contracts instead. Unlike structural contracts, these are mainly special forms of care (Article 53 Social Code, Book V) that allow selective contracting between health insurance funds and service providers. In addition to special forms of care, Medical Service Centres (MSCs) as “interdisciplinary, doctor-led facilities” aim at care with at least an interdisciplinary orientation. Where MSCs are owned by hospitals, cross-sectoral cooperation is also an option. Furthermore, under Article 136 para. 4 Social Code, Book V to promote the quality of SHI-accredited doctor availability, the regional Association of Statutory Health Insurance Physicians can conclude comprehensive agreements with individual health insurance funds, *Land* associations of health insurance funds or associations of social health insurance funds that provide for certain services or quality-related remuneration in the form of bonuses.

143. Under Article 53 para. 3 Social Code, Book V, the special healthcare funds also comprise GP-centred care according to Article 73b Social Code, Book V, although this does not count as integrated care because of the lack of interdisciplinary and cross-sectoral orientation. But it can form a central component of integrated concepts within the scope of other approaches, e.g. of the types of integrated care pursuant to Article 140a-d Social Code, Book V. GP-centred care is the only form of care that health insurance funds are obliged to provide. The legal situation allows selective contracting without involving the regional Association of Statutory Health Insurance Physicians in four special care forms, and excludes their involvement as a contracting partner only in the event of integrated care forms. If the regional Associations of Statutory Health Insurance Physicians take part in special care as contracting partners of the SHIs, this is not within the context of collective contracts, but via selective contracts as with groups of service providers. The service guarantee of the regional Associations of Statutory Health Insurance Physicians can be restricted in connection with three types of health care.

144. The conceptual conditions of integrated care, which postulate a cross-sectoral link in their approach, are met only by the following types of special care

- the model projects according to Articles 63-65 Social Code, Book V,
- the integrated care forms according to Article 140a-d Social Code, Book V and

- the structured treatment programmes according to Article 137f-g Social Code, Book V.

Although these three variants create the legal basis for cross-sectoral coordination, they do not guarantee either this or integrated care. They can also limit themselves purely to sectoral coordination and cooperation. According to available data and within the context of integrated care, there was no cross-sectoral coordination in over 50% of cases. As far as the community basis of this form of care is concerned, the Council conducted a representative survey among SHIs with a feedback of 92.5 % of the insured parties. According to this, only 55 of the total of 6,183 contracts reported to the German National Institute for Quality Measurement in Health Care by the end of 2008 contained a reference to the community. There was a similarly weak reference to the community in the contracts for GP-centred care.

145. In order to realise functioning competition, especially in the field of outpatient treatment at the interfaces of the healthcare service sectors, the need for action is less with regard to the competitive parameters available to the contracting partners than with respect to the regulatory framework:

- In order to be able to intensify competition, especially in outpatient care, the insured parties need adequate transparency about treatment alternatives and service quality. In the event of the data being revealed, the conditions for a valid system of patient safety and quality indicators could be fulfilled.
- Target- and team-oriented cooperation between the health professions with a stronger, legally backed weighting of non-medical service providers, i.e. corresponding delegation and substitution processes, as well as strengthened cooperation with self-help groups and local authority facilities hold out the promise of an improvement in the efficiency and effectiveness of healthcare.
- For the SHIs, the new more morbidity-based risk structure equalisation fund reduces the incentives for investment in primary, secondary and tertiary prevention and thus worsens the cost-benefit relationship for integrated care projects that particularly encourage preventive measures. On the other hand, it removes the highly arbitrary link of some indications to the (old) risk structure compensation fund. Since structured treatment programmes according to Article 137f-g Social Code, Book V under medical and economic criteria are a variant of integrated care according to Article 140a-d Social Code, Book V, they should be included as types of integrated care.

- Currently there is no clearly superior variant of integrated care and thus also no need to require SHIs to provide by law certain care forms, such as GP-centred care according to Article 73b Social Code, Book V. In the interests of functioning competition it is sufficient to open up a spectrum of contract options to the SHIs and service providers and give them the choice of the preferred variant within the context of a search process.
- Selective contracts, just like competition with target aspects, are not an end in themselves, but an instrument to fulfil allocative and distributive functions. In the interests of efficient and effective care, the aim cannot be to replace collective contract forms with selective ones “at any price”. It is rather a matter of the comparative efficiency of the two contract forms. Competition with open results should therefore decide on the future relationship between collective and selective contracts on the basis of an appropriate legal framework.
- In the interest of fair competition in the field of outpatient treatment between hospitals and outpatient specialists, remuneration and the licensing of new treatment methods need a uniform cross-sectoral structure. Currently, this is contradicted by the validity of the authorisation right (Erlaubnisvorbehalt) in the outpatient sector and the prohibition right (Verbotsvorbehalt) in the inpatient sector. Furthermore, in addition to monistic financing, fair competitive conditions presuppose that public providers do not permanently cover deficits in their hospitals for an unlimited period.
- Although discount contracts for the supply of drugs according to Article 130a para. 8 Social Code, Book V are a competition-compliant instrument, they are part of an overregulated SHI drug market. Moreover, these contracts unilaterally concentrate only on price competition and largely neglect qualitative elements, such as risk-sharing contracts.

7. Selected Concepts for Generation- and Community-based Healthcare

146. In the following, selected approaches will be presented from various countries that could contribute to developing a coordinated, community-based care model in Germany. Particular attention will be paid to the managed care concept from the USA because it contains many elements that make sense for a future care model in Germany.

7.1 EU Concept on Primary Care

147. In preparation for the EU Presidency in the second half of 2004, the Dutch Health Ministry commissioned a report on the efficiency and further development of primary care provided by the national “Gezondheidsraad”. The results were presented at the EU Conference “Shaping the EU Health Community” in The Hague in September 2004. In view of different but sometimes converging primary care systems in EU countries, the aim of the report was to identify the core characteristics of good primary care, the effects of differing emphases on certain aspects in the various European countries, and development paths that can be recommended for primary care in the future.

Against the background of scientific evidence and the system comparison between the EU countries, desirable core elements of primary care were, centring healthcare around a GP, the obligatory registration of patients in a GP practice (but not necessarily gatekeeping) and, at least for the most part, a flat-rate remuneration system. Demographic developments and the increase in chronic illnesses, as well as greater individualisation and a changed entitlement attitude by patients, combined with the increasing cultural diversity resulting from migration, are cited as challenges for the future development of primary care. Primary care in the future will be increasingly measured in terms of patient safety, quality orientation and accountability. Scientific and technical developments will lead to new challenges in the field of information technology/e-health. In many European countries a shortage of (medical and non-medical) staff in primary care is to be expected.

Against this background, a number of recommendations are made:

- The role of primary care and its ability to solve problems should be strengthened in all countries. Over 90 % of the health problems for which people consult a doctor should still be solved within primary care, which means that primary care makes an important contribution to the efficiency of the entire health system. In particular, analyses must be carried out to find out where self-help and lay-help potentials (e.g.

due to the loss of family ties or social fragmentation) appear threatened and will have to be compensated for via the family and community basis of primary care.

- Primary care must strengthen its patient orientation to do justice to the changed demands and expectations and the higher information level of the population (evidence-based GP treatment, improved continuing and further training, more efforts to achieve patient safety, quality and efficiency).
- Shared decision-making will occupy a central role in the contact between primary medicine and the patient.
- Sustainable care for chronic illnesses requires a multi-disciplinary and integrated approach (shared and structured care). But the GP should remain the coordination and return point for care. Stepped care, i.e. the targeted use of the secondary care potentials, should be supported.
- GP surgeries must increasingly develop their cooperation with other service providers, i.e. think in terms of team care. In addition to coordination with long-term care services, potential cooperation with social workers, prevention and, above all, appropriate consideration of mental health problems, plays a role here.
- It is assumed that an efficient GP surgery in future will care for around 10,000 - 15,000 people, i.e. it should comprise five to seven GPs. Mandatory registration with a GP surgery and a strengthening of the coordination and navigation function is desirable.
- Further recommendations have to do with encouraging the next generation, opening up adequate career opportunities and encouraging general practice research.

7.2 Patient-Centred Medical Home

148. The concept of a medical home was described by the American Academy for Pediatrics (AAP) for the care of children with special needs for the first time in 1967. With the “advanced medical home”, it was extended to include all patient groups by the American Academy of Family Physicians (AAFP) within the context of the “Future of Family Medicine Project” and finally further developed into the “Patient-Centred Medical Home” to provide a special patient orientation in coordination with other specialist associations. The model assumes that patient-oriented medical care

coordinated by a personal doctor, and aimed at long-term support and continuity is necessary to improve healthcare. It comprises the following seven core elements:

1. Every patient has a personal doctor.
2. The personal doctor leads a team of health professionals that is responsible for treatment in its entirety.
3. The personal doctor is responsible for the “whole person”.
4. Patient care is embedded in the health system and in the community for its entire course (care is coordinated and/or integrated).
5. Quality and safety are the key features of medical practice.
6. Improved access to healthcare is made possible by open appointment structuring, extended opening times and new options, such as group visits and telephone surgeries.
7. These new values must be reflected in remuneration.

At the surgery level, orientation towards the medical home concept means the use of evidence-based guidelines, structuring surgery processes according to the principles of the chronic care model, drawing up harmonised, individual treatment plans for patients, offering improved and longer doctor contacts (including over the telephone or by e-mail), using appropriate information technology in the surgery and presenting clinical work on the basis of appropriate patient- and surgery-related indicators.

International study results show a medical home offers improved access to high-quality care (irrespective of insurance status and family background), higher treatment quality, fewer treatment errors and unnecessary duplicated examinations, as well as higher satisfaction with the treatment and doctor-patient communication. The evidence report initiated by the Council on GP-oriented care also shows that high continuity in care, as ensured by the medical home concept, is associated with better health outcomes, higher patient satisfaction, lower hospitalisation rates, reduced use of emergency rooms, fewer laboratory investigations, more frequent use of preventive measures, better compliance and lower costs.

7.3 The Bellagio Model

149. In April 2008 an international group of experts presented a comprehensive concept on basic elements of community-based primary care in the 21st century in Bellagio, Italy. The combination of ten complementary core elements is considered to be decisive for the success of this comprehensive approach:

1. Share leadership. Service providers, funding agencies, health experts and political decision-makers jointly develop a vision for primary healthcare in a country or a region and design the organisational structures in accordance with existing local conditions. The decision-makers in all institutions involved should jointly take responsibility for the overall result.
2. Public confidence in the reliability of politics, those with political responsibility and decision-making structures, as well as in the reliability and transparency of the healthcare system is essential. This concerns accessibility, efficiency and quality in particular.
3. Community-based management throughout the healthcare system reaches both the healthy (prevention) and the sick (acute or chronic).
4. The vertical and horizontal integration of health and social professions in the community or region must be strengthened.
5. The formation of local networks (networking of professionals), such as surgery networks, quality circles or professional associations, is encouraged.
6. The infrastructure of primary care can be expanded by providing evidence-based guidelines and information technology across sectors and settings.
7. A remuneration mix on the basis of capitation fees is supplemented by additional incentives for optimum patient care.
8. Standardised data collection using systematically developed indicators strengthens evidence-based decision-making at all levels.
9. Research and development in combination with studies on the clinical effectiveness of individual procedures, in addition to studies on community-based care research, support decisions by clinicians and managers.
10. Active surgery improvement programmes help to improve daily work.

This means that political will is associated with structural promotion and a change in everyday care: at control level or political decision level (macro), at management level (meso) and, not least, at the level of everyday clinical work (micro).

7.4 Roadmap of the Royal College of General Practitioners

150. The British primary care system is one of the best established and accepted GP-centred primary care systems in the world. Nevertheless, it is faced with very considerable challenges. Political changes in society, e.g. with respect to the roles of doctor and patient, globalisation and in the increasing use of the internet, create a climate of continuous change and lead to rising patient expectations of healthcare. Changing lifestyles, technical progress and demographic change lead to increased use of the health-care system. On the other hand, in the United Kingdom too, younger GPs in particular are dissatisfied with their working conditions. In a development plan (“The future direction of primary care – A roadmap”), the scientific association Royal College of General Practitioners (RCGP) proposes the following measures to meet these challenges:

- Flexible cooperation models that differ according to regions: Actual or virtual networking of various institutions, which may include specialists, pharmacists, psychiatric and social liaison services, mean that a broader and better coordinated service offer is possible than for single surgeries. Such forms of cooperation jointly care for a certain community and organise care responsibly for them (federated model). This results in a reduction in necessary referrals. A prerequisite for this is the registration model for patients that is already in place in the United Kingdom.
- Improving the infrastructure of GP surgeries and cooperation agreements: Appropriate premises must be made available for the recommended merger of GP surgeries into larger units with extended service offers.
- GP-led, interdisciplinary primary healthcare teams provide care to patients: For better coordination and continuity, the patient should be cared for by GP-led, interdisciplinary primary healthcare teams, as a result of which interfaces can be dismantled. A prerequisite for this is the common electronic patient file. The introduction of integrated clinical pathways could offer other possibilities. In this connection, patients should still be able to consult their GP and also be primarily cared for by him in the long-term along the lines of the medical home concept.

- Use of non-physician healthcare professionals: To relieve GPs and improve access and raise consultation times, the use of non-physician healthcare professionals to perform appropriate tasks in patient care is recommended.
- Integration of public health approaches: Within the context of caring for communities using primary healthcare teams, public health subjects and approaches to promote health (e.g. in schools and at work) can be integrated and addressed.
- New concepts in GP basic, further and continuing training.

The GP-led care model for the future developed in the summary of the RCGP recommendations mentioned above is based on three pillars:

1. The quality of interaction and the relationship between patient and the GP of his choice along the lines of the medical home concept.
2. the GP surgery as a learning organisation as well as
3. cooperation between various healthcare providers in the interests of an expanded, integrated primary healthcare team and the merger of surgeries in a care region in the interests of a federated model.

GP surgeries must subject themselves to a fundamental process of organisational development to become a “learning organisation”. GPs need support to acquire leadership qualities and the associated skills.

7.5 The Chronic Care Model for the Comprehensive Care of the Chronically Sick

151. The chronic care model describes the fundamental conditions for the appropriate and evidence-based care of patients with chronic illnesses. It was initially developed in a medium-sized US Health Maintenance Organisation (HMO), but has now received comprehensive empirical support and can be used as a development guideline both for single long-term care facilities as well as for larger care organisations and networks.

The development is based on an analysis of existing care for the chronically sick that reveals considerable deficits (the chronic care crisis).

1. Healthcare facilities are not well prepared for the rising prevalence of chronic illnesses.

2. Too little account is still taken of evidence-based diagnostic and therapeutic procedures in clinical care.
3. Most patients are still passive objects in treatment procedures. Too little account is taken of their needs and preferences. There is little patient activation and support for self-management.
4. Care is characterised by fragmentation and poor coordination.
5. Care is not sufficiently characterised by continuity (long-term planned care processes).

Overcoming existing deficits means a fundamental reorientation of mostly reactive healthcare towards a pro-active treatment approach. Better (functional and clinical) results are achieved if activated patients and pro-active surgery teams enter into productive interaction.

Key elements of the chronic care model can be developed at the level of individual healthcare facilities:

- Support for self-management, strengthening the patient role and expertise (empowerment).
- Structuring service provision, (re)designing care processes, especially by means of the responsible and effective allocation of tasks within the team, stepped care,
- Targeted support for decisions, e.g. by means of guidelines and clinical pathways,
- Clinical information systems that go beyond merely registering treatment documents (e.g. reminder systems).

Additional elements must be developed at the healthcare system and health policymaker level. In particular, this means the appropriate provision of local resources and services close to the community and the supportive design of decision-making structures and processes.

The model demands a lasting willingness to change among participants. Necessary further developments particularly affect the care of patients with multimorbidity, appropriate care styles and interventions (e.g. case management, cooperation of service providers in primary care).

7.6 Cooperation with Other Professional Groups

152. Following on from its deliberations in the 2007 Report, the Council welcomes the testing of new forms of cooperation between physician and non-physician healthcare professional groups. From the perspective of GP care, the GP workforce will be too small in the future (and with respect to simple routine tasks, also too expensive) to be able to reliably ensure all of the services provided today by high-quality primary care continue to be so. In the GP surgery of the future there will have to be a re-evaluation of certain services – especially in the areas of (secondary) prevention, patient activation, patient-centeredness, routine monitoring – that will entail substantial restructuring in the processes and allocation of work within the surgery team. The changes to GP practice-based primary care proposed here are thus also seen as a contribution to overcoming the future challenges of an ageing society. Which of the models shown as an example (e.g. AGnES, MoPra or VERAH) is ultimately implemented should be made dependent on the regional requirements and the results of the accompanying evaluation. Cooperation of this kind should not be limited to the delegation of home visits and to underserved areas, but should affect the whole structure of GP practice based care.

7.7 Managed Care

153. An analysis of the degree of integration in the provision of health services according to integration depth and breadth shows a spectrum that ranges from sector-specific care related to indication right up to cross-sectoral and cross-indication care comprising a whole community of insured people. The form of organisation and finance that most closely meets this maximum level of integration is found in the idea and intentions of managed care. The conventional definitions of this term refer to criteria that for the purpose of the argumentation in this report are divided into internal financing, declared objectives, as well as structures and instruments, and prioritised according to their importance. The integration of insurance and service provider functions is seen as the leading criterion, followed by the capitated payment system. The derived definition is:

A care system is called managed care if service provision and financing are combined to a greater or lesser degree. At the same time it envisages a capitated payment system. Managed care follows the goal of integrating sectors and service providers in the interests of regional, outcome-oriented healthcare and improving their efficiency, for example in terms of target group orientation and prevention, as well the generational reference. Selective contracting and the establishment of management structures for

funding agencies and service providers are used to achieve this. The choice of doctors can be more or less limited. Instruments such as gatekeeping, disease management, case management, quality management, guidelines and utilisation reviews are used in various combinations and to a varying degree.

154. The integration of service provision and financing function is the key incentive to prevent the supply-induced demand, which is inherent in a financing system based on fees for service reimbursement and payment per case, and to replace it with an incentive system aimed at achieving prevention and efficiency. This instrument is closely linked to capitation, by means of which service providers participate in the financial risk. For this reason the flat rate should initially be morbidity-adjusted as well as possible, and then passed on to the service providers. This should result in a marked reduction in costs for hospital treatment, but will require a much higher degree of organisation in the provision of outpatient services (e.g. group practices, regional alliances). Obviously, this approach does not contain an economic incentive for complete and careful care per se. For this reason, quality assurance, transparency and strengthening patient rights assume particular importance.

Instruments and Effects of Managed Care

Capitation

155. Capitation is a prospective remuneration system by means of which SHIs transfer the financial risk (depending on the structure, partially or entirely) to service providers by means of a flat rate paid ex ante. The (advance) payment can also be made irrespective of subsequent actual uptake. In comparison to the ex-post-oriented remuneration of individual services or even the cost reimbursement principle, not only the morbidity risk, but also the financial effects resulting from inefficient production, moral hazard and supply-oriented demand, are transferred from the SHIs to the service providers. With the help of capitation, SHIs try to encourage service providers to work efficiently, while gaining the greatest possible planning security with regard to their expenditure. For their part, the service providers can count on a secure income in the contract period and thus better plan their investment activities. Since there is more of a risk of inadequate supply or the withholding of the services required in comparison to payment for individual services, there is a substantial need for quality control on the basis of valid indicators.

156. The degree to which the financial risk is transferred depends on the group of people covered by capitation, as well as the nature and extent of the services involved. On the one hand, the spectrum can range from a patient with a specific illness to all insured people in the region concerned and, on the other, from a specific service within a treatment group to all services incurred in the contractual period. Capitation thus contains (with further delimitation) the following variants:

- Cost-sharing contracts for one or more defined service(s) within a treatment group,
- Diagnosis related groups (DRGs) for all services in a diagnosed case,
- Risk-sharing in the sense of “payment by result” for groups of insured people or patients and services defined in advance and
- A comprehensive prospective payment that includes all (registered) insured people and all services incurred, irrespective of contact (capitation in the narrow sense).

Systematic Review: Managed Care and Quality

157. For a comprehensive assessment of the impact of managed care on the quality of care, the Council commissioned a systematic review on the question “What impact does managed care have on the quality of healthcare?”. The review is based on a univariate explorative evaluation. The Council’s particular interest was in the question whether and to what extent the desired effects ascribed to this concept (increased effectiveness and efficiency) in comparison to the sometimes expected adverse effects (e.g. refusal of service, risk selection) are confirmed. Only controlled studies were included that describe the effects of specified end points on defined communities on the basis of primary data. At the heart of this are the effects on elderly patients with chronic and multiple illnesses.

Table 15: Overall Result of the Review: Number of Studies and Effect on Quality

Effect on Quality	Number of Studies	Proportion of Studies in %
positive	18	16.8
mainly positive	21	19.6
neutral	40	37.4
mainly negative	11	10.3
negative	17	15.9
Total	107	100.0

Source: Own Calculation

107 studies were identified, all of which were conducted in the USA and the majority of which were cohort studies (n = 58) and cross-sectional studies (n = 34). 6 studies were randomised and 5 studies had a quasi-experimental design (4 others). The following results were recorded:

1. No clear trend towards improvement or deterioration in the quality of care due to managed care can be proved. Although a third of the studies show a deterioration in quality, these studies must be seen alongside the one third of studies showing better quality and one third with a neutral result. Particularly the more recent studies showed an improvement in quality.
2. The type of managed care concept (HMO vs. other forms) does not play a demonstrable role.
3. Managed care programmes aimed at defined population groups (e.g. children, female insured parties) or insurance groups of low social status (Medicaid insurance) show great success.
4. The majority of the studies on care for elderly insured people and the chronically sick show better or the same quality of care. The negative studies for these two groups, which could be identified within the context of systematic reviews, are inferior to the studies with positive end points in terms of methodology. They also more frequently identified single end points, or were conducted in poorly integrated managed care programmes and thus less often in HMOs.
5. The results on patient satisfaction are mixed; for end points in the field of prevention there are positive effects on quality.

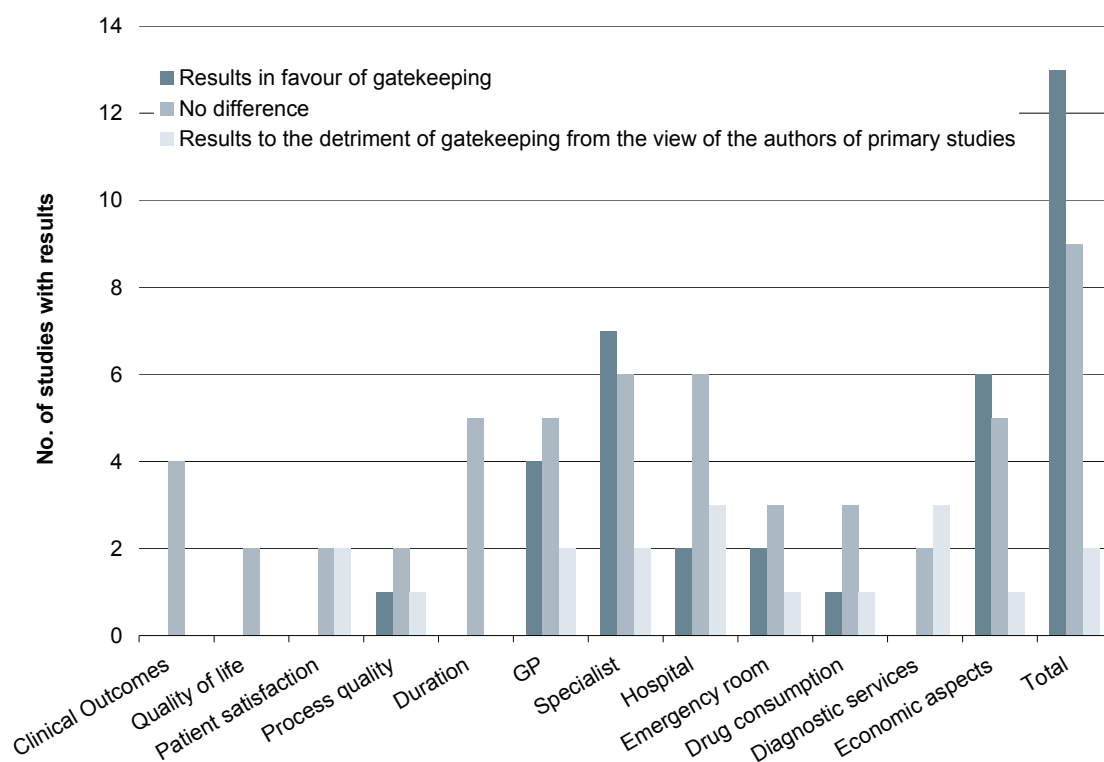
In studies with simple end points, no better care quality could be proved than in those with complex end points. In the same way, no trend towards an overestimation of care quality was identified in studies of an inferior study design. Cost savings were not given high priority in the review. The main limitations of the review lie in the fact that only studies and not patients were examined, that no conclusions could be reached about the single end points that formed the basis for complex end points, and in the question of the extent to which studies from the USA can be transferred to the German health system.

Systematic Review: Effects of Gatekeeping by GPs

158. The concept of gatekeeping means that every treatment episode starts with a visit to a primary doctor or GP. To study the effects of gatekeeping by GPs, which has been repeatedly proposed by various parties (e.g. Conference of Health Ministers of the *Länder*, Federal Association of SHI Physicians [*Kassenärztliche Bundesvereinigung*]) and is already established in other countries (e.g. United Kingdom, Netherlands, Denmark) and care systems (various HMOS, managed care organisations), the Council commissioned its own systematic review on the basis of existing original work. The most important results are summarised below. The detailed version (incl. questions, methods, limitations, etc.) is available to download as an Annex to this Report from the Council's website (www.svr-gesundheit.de).

29 publications with results from 24 studies were included. If we look at the summarising assessment of the effect of gatekeeping reported in the conclusions by the authors of each study, 13 out of 24 studies showed a positive effect, nine reported no differences and two came to negative conclusions.

Figure 10: Spread of Results according to Result Parameters



Source: Own data

159. The overall results must be considered subject to the reservation of a somewhat weak evidence basis. The available evidence indicates that gatekeeping for adults and children reduces the uptake of specialist outpatient care, as well as total health expenditure per capita and expenditure for specialised outpatient care. The indications of reduced uptake increase if gatekeeping is combined with financial control components for GPs and/or patients and a requirement to register with an individual GP. The order of magnitude of the differences in uptake of specialist outpatient services is small. In this way, the number of contacts per person falls by 0.3 to 1 contact(s) per year. The savings potentials are subject to great variation (5 % - 65 % of total health expenditure).

160. The question as to whether gatekeeping influences other parameters of the uptake of specialist services (hospital, emergency admission, drugs, diagnostic services), patient satisfaction or the process quality of care cannot be definitively answered because the evidence was not uniform.

161. The systematic review commissioned by the Council and the results outlined here indicate that gatekeeping can lead to care of the same quality at lower cost. However, it could not be shown that a GP with a gatekeeper function designed as a mandatory first stop body will bring about an improvement, particularly in the area of “hard” health outcomes. However, the review provides clear indications that it is useful for GPs to control or coordinate referrals to specialised regional doctors. In this publicly disputed point the Council is therefore of the opinion that strict gatekeeping does not make sense, but that in principle care models which foresee targeted and coordinated referrals to a specialist should be encouraged. Consequently, although gatekeeping is not favoured in isolation, coordinated care across all care levels should be ensured. The importance of this instrument and the choice of a doctor who enjoys one’s personal confidence is clear within the context of complex care concepts (e.g. patient-centred medical home).

Options for Generation-Specific Care

162. The ageing of the population makes a paradigm shift in the health system necessary because of the rise in the incidence of chronic illnesses and multimorbidity. In future, the most important task will lie in adequate care for patients with chronic or multiple conditions at a high age and in a concept of generation-specific healthcare that corresponds to the constantly changing needs of patients over the course of their lifetimes. Coordination of care then becomes the guiding principle and can make use of the options of normative regulation, the option of professional control and the option of scrapping provider-payer splits. Analysis shows that regulative approaches do not do justice to the complexity of the situation and that although professionally based approaches (e.g. guidelines) are essential, they need to be supplemented by external coordination and financial incentives. In principle, this means the decentralised transfer of service provision and financial responsibility to regionally organised institutions that offer comprehensive prevention and community-based healthcare.

163. The strongest argument in favour of this option, which is internationally classified as managed care, is the removal of the sectoral separation of healthcare service providers. In its current form, this could not be achieved by integrated care in accordance with Article 140a-d Social Code, Book V, although statutory regulations have certainly opened up further perspectives in this respect. Recently, competition between sectors has actually been given additional impetus by Diagnosis Related Group (DRG) financing in the inpatient sector. Although it must be clearly emphasised that the transparency required for the further development of the system could not be established

without the introduction of DRGs, the DRG system does also strengthen the coordination deficits resulting from risk selection and sector-related quantity incentives.

164. Currently in Germany three players can be identified who could play an active role in the implementation of managed care-type concepts of various designs: the institutions responsible for managing large hospitals, health insurance companies and associations of outpatient doctors organised in various different ways (“doctors’ networks”), possibly together with hospitals. In other healthcare systems, the network organisers were also able to offer the prospect of better coordination in comparison to traditional organisation. A distinction can be made between the following options for the further development of the German healthcare system:

- Option 1: Managed care as a basic universal model
- Option 2: Managed care only under the conditions
 - Option 2a: of a structural adjustment or limitation to the managed care concept with the aim of stemming negative effects on the quality of care,
 - Option 2b: of additional further-reaching concepts for “embedding” managed care that lie outside its direct implementation,
- Option 3: Managed care is not recommended because of possible negative impacts on the quality of care,
- Option 4: Managed care is introduced irrespective of the impacts on the quality of care because of savings that need to be made in the healthcare system.

Against the background of the systematic review on the quality of care in managed care, Option 2b in conjunction with Option 2a is possibly a realistic starting point. A thorough discussion of such conceptual questions may help prevent a situation arising in Germany like that in the USA in the mid-1990s when the overall quality of healthcare came into discredit because of doubts about the quality of care provided by managed care.

165. The development possibilities for managed care-like healthcare in Germany are presented in the following 8 hypotheses:

Hypothesis 1: Managed care and elements of managed care must prove themselves in competition with other care concepts.

Other concepts for coordination and finance are made possible (e.g. single case invoicing).

Hypothesis 2: No sensible restriction can be made with respect to the providers of managed care-like healthcare.

In a readjustment process, the above-mentioned three funding groups must prove their ability to offer reliable care structures that provide particular sustainability with regard to the challenges posed by societal developments (e.g. within the context of demographic change) and long-term health goals.

Hypothesis 3: Different forms of managed care have different impacts on the quality of care.

The systematic review conducted within the context of this Special Report does not show poorer results by HMOs than other forms of managed care. However, in other overviews there are indications of the poorer quality of HMOs when financing and the provision of services are very heavily integrated. To structure the discussion and be able to conduct appropriate investigations in the medium term, the following system consisting of various managed care concepts would appear to make sense for the German system:

- Type 1: Direct employment of outpatient doctors by the managed care providers, hospitals owned by these providers (1a) or independent (1b),
- Type 2: Doctors' networks and hospitals contract freely with managed care organisations, but, as service providers, receive capitation,
- Type 3: Freely contracting doctors' networks and hospitals participate in the financial risk of capitation by means of other methods (e.g. via pay for performance).

Hypothesis 4: There is a danger of risk selection under managed care.

Active and passive risk selection can be proved in the USA. For the discussion in Germany, it therefore makes sense to adjust the financing between the managed care providers as recipients of capitation and service providers, possibly by taking account of risk by using components of the morbidity-adjusted risk structure compensation fund.

Hypothesis 5: Community-based quality indicators must be developed and a focus placed on older insured people and the chronically sick.

The review does not provide any indications that managed care programmes with a focus on so-called vulnerable groups result in a deterioration in quality in principle. Nevertheless, community-based area indicators must be developed; provider-specific indicators are not enough under managed care.

Hypothesis 6: In principle, medical prevention is promoted by managed care, but is dependent on an appropriate time frame.

The systematic review in this Report also supports the view that managed care promotes prevention, however the time frames for financial planning and the preventive measures must be the same. Two competing goals therefore have to be harmonised; on the one hand, competition between the managed care organisations must be maintained, on the other, frequent swapping from one to another due to the lack of an incentive to provide effective preventive measures is not desirable. A one-year notice period in combination with bonus systems that promote longer ties to the provider is worth considering.

Hypothesis 7: Particular attention must be paid to healthcare in rural areas.

The problem of access (cf. Report 2007, No. 491 ff.) must be taken into account in the current discussion, including the risk that managed care organisations in rural areas may attain a monopoly position.

Hypothesis 8: Particular attention must be paid to the relationship between GP and secondary specialist care as well as the gatekeeping concept.

In the context of managed care, harmonisation between primary care and secondary specialist care is particularly important because, on the one hand, access to secondary specialist care is one of the central criticisms levelled at managed care in the USA and, on the other, because duplicate medical equipment and a lack of coordination of specialist care in Germany present problems that urgently need to be solved. At a regional level, decentralised decisions based on efficiency criteria are made on how and where patients will receive care at the former outpatient-inpatient interface. The focus will be on the “outpatient potential” of the inpatient sector. A managed care-like concept that is to be sensibly discussed in Germany can thus not be limited to integrating the classic sectors, but must also contain a viable concept for secondary specialist care.

8. Future Concept for Coordinated Care with a Regional Dimension

8.1 Central Starting Points for Improved Care

166. Structural effectiveness and efficiency reserves as well as efforts to tackle demographic change necessitate an improvement in coordination, healthcare that is related more to the needs of specific generations, and improved regional harmonisation. In the German healthcare system, better coordination of access to care is needed just as much as a reorganisation of specialist secondary care, whether the latter be outpatient or inpatient. Overall:

- Increasing effectiveness and efficiency through the improved coordination of primary care and specialist secondary care is achievable.
- Demographic change, chronicity and multiple illnesses necessitate different structures to the current ones, which primarily target acute care.
- Changing lifestyles, including those of healthcare professionals, i.e. greater significance attached to private life in comparison to working life (work-life balance, part-time work, returning to work).

167. Against this background, further developments are based on four approaches that stem from inherent momentum that is already gathering and will have to be harnessed, reinforced and combined in order to develop future healthcare concepts:

- Outpatient care will increasingly be provided by developed organisations.
- The various sectors of the healthcare system will change their functions and coordinate care on the basis of a different division of labour.
- Financing will be further developed in a community-based manner, using approaches related to insured persons but which can be structured differently from region to region.
- The reorganisation of specialist secondary healthcare will create the decisive medical and economic potential that will be the key engine for change – especially with regard to outpatient care provided by SHI-accredited doctors and hospitals.

8.2 Developed Organisations: Future Concepts using the Example of Primary Care

168. The development of organisations in the field of outpatient, primary medical service providers is important for two main reasons: Firstly, to put GPs who generally used to provide healthcare from their small practices in a position to do justice to future demand, and secondly to put the GPs in a position – especially with respect to the option of strengthened cross-sectoral structures – to develop adequate management skills for use in a practice team but also within bigger structures (provider networks, etc.) and thus to be able to react productively to the incentives stemming from the new structures. To this day, network management and the adaptation of practice processes are key bottlenecks in most networks or integrated care forms.

Tasks of General Practice Healthcare and Development Recommendations in International Models

169. In spite of the different theoretical starting points and the different conditions obtaining in the national healthcare systems in which the models and concepts shown were developed, there are remarkable common features between them. They will be summarised here because they are also the starting points for the further development of the traditional GP practice into a “primary care practice” proposed below.

- Initially, there are common features between the model concepts in that GP/primary medical care is oriented towards altered morbidity conditions (with the predominance of chronic diseases) as well as altered public or patient expectations of primary care.
- Secondly, it is generally recognised that, against this background, it is not a question of merely adapting selected features but rather that systematic changes and further developments are needed that encompass all of the components of the care process including the direct interaction between patients and providers, the organisation of service provision and the healthcare system as a whole.
- Thirdly, where possible, the individual elements of care or service provision must , in order to meet patients’ healthcare needs, be oriented towards integrated concepts of provision coordinated across different levels of healthcare.

- Fourthly, it is emphasised – not only in the GP-centred model concepts, but also, for example, in the chronic care model – that good primary care is a key condition for success and a basic requirement for all integrated care models.

170. At the level of the direct doctor-patient relationship (possibly also the relationship between non-physician health professionals and patients), three developments are considered to be necessary:

- a) The maintenance of personal continuity in the doctor-patient relationship even under different organisational conditions (patient-centred medical home),
- b) Increased consideration of patient preferences (as well as cultural backgrounds, etc.) and a shift towards shared decision-making) and
- c) The active inclusion of patients in the treatment or care process.

171. Organising the provision of healthcare services in a GP practice requires fundamental changes over the medium to long term. The starting point for consideration is not the practice traditionally grouped around the GP, but the question of a more practical care organisation (along the lines of a clinical micro-system). An analysis of the clinical micro-system starts out from the four Ps: characteristics of patients, personnel, processes and patterns of care. In detail it comprises

- a) Enhanced integration of processes within the GP practice (team building) and in cooperation with other service providers (specialist secondary care as well as with non-physician healthcare professionals),
- b) Increased involvement and use of the potentials offered by new information technologies (and in the implementation of guideline-oriented care),
- c) Increased individual patient orientation,
- d) Development of community-based care strategies in the GP's practice (including patient loyalty and a sickness and risk factor-specific patient register), associated with advance planning of care processes in the case of chronic diseases and
- e) Specific consideration of quality development strategies.

172. Major changes result for all employees (entire practice team) in the GP practice:

- a) All international model concepts assume growth in the size of future GP practices because the traditional single-handed practice does not appear to be adequately

equipped for the challenges of caring for the chronically sick. Ideas about the right size range from the typical group practice, as is already standard in many European countries with 2 to 4 GPs, to larger networks with 5 - 10 GPs, which will then be jointly responsible for 10,000 to 20,000 citizens.

- b) Within practices of this kind, there will be a restructured division of labour and expertise, and in general there will be a marked increase in the tasks and qualifications of non-physician healthcare professionals.
- c) Together with an increased focus of physician practice members on pure medical tasks, there will be a redefinition and redesign of treatment roles, with medical assistants or nurses being given independent (partial) responsibility for the continuity of care processes and in the case of chronic diseases doing this in close cooperation with patients. At the same time, personal continuity, which is very important to patients, is to be maintained or (as is expressed in the term ‘productive interactions’ in the chronic care model) even strengthened. In this sense, cooperation models can, for example, be small teams (so-called duos or teamlets) made up of a doctor and one or two medical assistants.
- d) Moreover, specific skills in the GP practice team must be strengthened (e.g. providing advice, encouraging patient activation, etc.).

173. Important changes are also recommended at the level of the healthcare system as a whole and in the health policy framework governing GP care processes, which, among other things, affect cooperation between different service providers and the integration of care processes as well as a suitable remuneration system. Greater patient loyalty to the GP practice along the lines of a registration system is recommended more or less unanimously as an important basic condition in the models above. There is also broad agreement about the basic features of an adequate remuneration system for primary care that should be decoupled from the provision of individual services and personal uptake where possible (among other things, to prevent quantity effects or “hamster wheel” effects). The basic features of the remuneration system should thus be:

- Payment of a capitation fee per registered patient as a basis,
- Part of this payment should be dependent on proven care quality,
- Specific individual services (including those by non-physician healthcare professionals) will be paid separately if there is particular interest in performing them (e.g. prevention, home visits),

- Remuneration should be largely independent of contact so there is no incentive to raise the personal contact rate (which is already too high in Germany).

174. The following Table 16 summarises important international proposals for the further development of GP primary care.

Table 16: International (Further Development) Proposals for the Primary Care of the Future

Section	Task/Partial Recommendation	Example
Level 1: Doctor/team-patient relationship		
Promote personal continuity	Individual doctor/team member remains personal contact	Care and coordination of treatment of patients with multiple illnesses from a single source
Strengthened team orientation	Non-physician healthcare professionals in the team supports chronically sick patients and may initiate necessary care steps	Medical assistant conducts planned monitoring (e.g. blood pressure, weight, HbA1c) and makes appointments
Develop and maintain continuing therapeutic relationship	Promote trust and understanding	Address fears before operations on the basis of previous experience
Shared decision-making	Where the patient is willing to do this or capable of it Decision about individual therapy objectives Patient information	Discuss patient preferences Weigh up treatment intensity and quality of life Jointly discuss the threshold benefit of further tests or interventions
Involve the patient in the care process	Patient activation and strengthening “self-management” Developing individual treatment plans with patients Patient training	Exercise programme, support when measuring own blood pressure Individual plan for flexible, but regulated adjustment of medication for heart failure Hypertonia training
View the patient in the context of the community and his environment	Take account of family medicine and public health aspects	Carry out vaccinations, take account of stressful long-term care by family members as well as risks at work
Level 2: Organisation of the care process (“micro-system”)		
Integration of care processes in practice	Findings by specialists and non-physician healthcare professions are combined	Within the practice, care team jointly agrees appropriate therapy for those with multimorbidity
Improved cooperation with other service providers	Shared, proportionate care of the chronically sick	Liaison consultation hours offered by specialists in the GP practice
Improved patient orientation	Needs of the patients, less those of employees, determine offers (patient-focused care)	e.g. improved accessibility of the practice, optimisation of the length of consultation

Continued on next page

Section	Task/Partial Recommendation	Example
Development of community-based strategies	Register/statistical overview of patients with chronic diseases/risk factors	Benchmark the proportion of chronically sick vaccinated against the flu against other practices
Use of modern information technology	Electronic patient file, email contact to patients	Individual care plan is available to all involved
Consideration of quality promotion strategies	Use of meaningful quality indicators and an (internal) quality management system Promoting patient safety	Targeted team discussions on care quality for individual illnesses Internal practice team discussions on the basis of an error book
Work organisation in large practice teams	Combination of previously independent GPs in different types of practice Implementation of evidence-based guidelines Increasing efficiency in the team	Shared use of various skills and knowledge Separate surgeries for the chronically sick Harmonisation of internal practice care paths
New forms of work allocation/skill allocation in the team	Formation of duos or teamlets, joint planning of task allocation in the practice Promotion of the comprehensiveness of care, recognising own shortcomings in care	GPs and medical assistants care for the chronically sick as a small team: GP delegates certain tasks (e.g. monitoring examinations, incl. documentation)
New role designs	Medical assistants take over case management Relieving the doctor	Telephone monitoring by medical assistant with standardised protocol for arthritis or major depression
Human resource continuum	Targeted personnel development/professionalisation for the whole practice team Promotion of an organisational culture in the practice ("learning organisation") Strengthening advice skills	Individual continuing and further training plans for practice team Management sets an example of learning from mistakes Targeted continuing and further training for communication skills
Level 3: Healthcare system/health policy framework		
Cooperation/networking between GP practices (local networks), new forms of cooperation	Depending on need and local situation (e.g. town, country): networked single practices, primary care practices, Medical Service Centres and others	(Freelance) association in "health buildings", foundation of patient training associations
Cooperation with other service providers (from other sectors)	Implementation of evidence-based treatment paths, contracts for integrated care, organisation of liaison consultation hours	Coordination of professional psychotherapeutic support and self-help groups for cancer sufferers.
Strengthen patient loyalty, increase continuity	Care for a defined population	Registration of insured people in regional care models
Ensure qualified first contact with the healthcare system	Low-threshold access for initial assessment of health problems	Distinguish as reliably as possible an anxiety disorder from coronary heart disease

Continued on next page

Section	Task/Partial Recommendation	Example
Reform of the remuneration system	Introduction of (full) capitation systems, remuneration (or fund-holding) within the context of integrated care Payment mix taking account of incentives to promote quality	Payment of all costs for care of a defined community, independent of contact (approx. 80 - 90 % full capitation) plus targeted incentives, e.g. for flu vaccinations, palliative medicine (approx. 10 - 20 % pay for performance v. inadequate care)
Align healthcare needs of the population with resources of the healthcare system	Improve efficiency and appropriateness of care	Counteract demand-side factors for excess uptake (e.g. imaging methods), conduct recommended vaccinations
Enhance the quality of care by means of targeted general practice research and put results into practice	Test the "effectiveness" of strategies previously developed in clinical studies under the conditions of everyday practice	Test the long-term consequences of a new medicine in (average) patients of a GP practice with multimorbidity

Source: Own data

Primary Care Practices as Possible Elements of Patient-Centred and Community-based Care

175. The concept of primary care practices close to patients' homes described below – initially established on a model basis – represents an attempt to condense previous analyses and findings into *one* specific concept for future-oriented, generationally fair basic care for the population in Germany. On the one hand, the proposal attempts to take account of the changing conditions (e.g. the changed motives and interests of the next generation of doctors) and, on the other, to maintain the essentials of GP care (especially the personal doctor-patient relationship). In this connection, proposals to implement the elements named in Table 16 in German outpatient care are made.

176. A GP would need around 18 hours per day to implement all of the recommended measures for the appropriate prevention and care of his chronically sick patients. For this reason, amongst others, an average of less than half of an evidence-based care programme is actually being realised. The more strongly demands on and the care burden of basic care grow, and the less GP labour is available (fewer GPs and at the same time lower per-capita working capacity), the greater the objective and perceived discrepancy. One first obvious consideration would be to reduce the number of patients per doctor. However, this is a major challenge. In Germany, doctors' surgery hours are 30 % shorter per patient than the European average and are thus the shortest in Europe. Nevertheless, doctors in Germany have longer working hours. Appropriate consultation times would only be achievable without a further intensification in the shortage of GPs

if, at the same time, the (very high in an international comparison) frequency of annual doctor-patient contacts were to be reduced. Alternatively – if an overall roughly equal number of patients is to be cared for with continuing high contact numbers – a much greater re-allocation of tasks (within the practice team) should be considered. This should go hand in hand with the delegation of certain tasks to other, non-physician healthcare professionals in the team. But this is only possible if the structures also offer scope for the appropriate payment of these team services. Furthermore, in a primary care team GPs would have to take on the role of a coordinator and moderator with ultimate responsibility much more than in the past.

177. In addition to the actual doctor-patient contact, as part of a test for the recommended community-based care, one of the tasks of primary care practices or practice teams is to view and care for their practice community systematically and as a whole (so-called panel management). At the same time, this poses a number of questions of which the following are examples: How many diabetics do we care for? How can we make support offers to this group? How do we organise a reliable and lasting, i.e. systematic system for long-term care with a programmed invitation to return for control visits and internal practice reminders of imminent control examinations (e.g. examinations of the back of the eye) for all diabetics? The organisation of a systematic vaccination recall, or the planning of (preventive) house calls could belong to these tasks. The focus thus shifts to sustainable and comprehensive care for the (as healthy as possible) community.

178. In particular, the individual stratification of the chronically sick in line with their actual care needs achieved in this way enables structured and differentiated healthcare planning as well as operational task allocation within the primary care practice team. For example, differentiating between acute surgeries, preventive surgeries and surgeries for the chronically sick could be considered. Experienced nurses and medical assistants, specially trained for their new tasks, could take on work that does not necessarily require a doctor's qualifications, particularly in the field of preventive medicine (including patient training, vaccinations), documentation, notification of normal results (including by telephone or email) and when it concerns minor problems (changing dressings, advice on coping with chronic diseases on a daily basis). Monitoring of chronic diseases could also be successfully conducted by medical assistants with the help of simple, highly structured and validated monitoring lists (e.g. depression monitoring list, arthritis monitoring list).

179. Differentiation according to need is only possible when the primary care practice is a certain size. For example, synergies can be realised when tasks such as patient

training, wound management, incontinence therapy, social-medical advice for family members, etc. are provided, along with related services, from a single source. Caring for patients with mental problems or addiction problems could be supported by nurses with experience in behavioural medicine or addiction therapy – under GP supervision and in cooperation with psychiatrists/psychotherapists, etc.

180. The changes that could be brought about in everyday working life in a practice are to be illustrated using a fictitious example in which – somewhat pointedly – the everyday practice of today and the practice or primary care practice of tomorrow are compared (box).

Case Study 1: Everyday practice today

Mr Müller, diabetic, 64 years old, turns up in Dr Schmidt's GP practice on a Monday morning with acute knee pain. After clarifying the acute symptoms, Dr Schmidt asks about his patient's blood sugar levels and receives the answer that they are "OK". Since Dr Schmidt searches in vain for the most recent lab results in the patient file and the ophthalmologist's report and Mr Müller does not have his diabetic passport with him, Dr Schmidt takes his blood pressure and arranges for a blood sample to be taken immediately. The lab results received in the evening reveal, among other things, an HbA1C of 8.5 %. Dr Schmidt decides to deal with the subject of diabetes in more detail the next time the patient visits the practice.

The following is noticeable about this example:

1. The patient comes with acute complaints and determines the timing (Monday morning).
2. His chronic illness remains in the background. If he does not come again on his own initiative there will be no further contact.
3. The practice does not have an established routine for illness-specific monitoring. The patient files are not managed systematically and do not give the doctor an appropriate overview of the treatment progression and tasks to be performed. Practical plans for illness-specific observation of the results are also not in place (for example, regular checks of blood sugar and blood pressure). That is why omissions (in this case, no examination of the back of the eye) are noticed more by chance.
4. The practice team and patient are inadequately prepared for the current meeting. Even the tight time frame on a Monday morning hardly allows for detailed advice or forward-looking planning. The urgent dominates here, i.e. solving the current problem. On this day, outstanding tasks – just like clear agreements with the patient on the objectives of treatment – can no longer be caught up on.
5. The patient is not very involved and uninformed and therefore has a more "wait and see" or passive attitude.

Case Study 2: The primary care practice of tomorrow

Ms Meier comes to the primary care practice for her planned routine appointment. As she has learned in her self-management group, she hands her diabetic passport to the medical assistant – not the doctor. The medical assistant enters the data into the electronic patient file and prints a progression curve of the HbA1C levels for Ms Meier and her personal GP Dr Becker. When the patient file is opened, a reminder for the outstanding examination of the back of her eye appears automatically. The curves of the progression parameters, that the doctor and the patient view together, are unremarkable – including the blood pressure – with the exception of a rise in the LDL level. Dr Becker agrees on a treatment plan to reduce cholesterol with his patient – at this opportunity she is given a new prescription for a statine – and he specifies the treatment goals together with Ms Meier. The medical assistant makes two appointments for Ms Meier, one with the ophthalmologist and one with the dietician. Dr Becker is pleased to see in his practice statistics that the proportion of “his” diabetics with annual examinations of the back of the eye has risen from 45 to 67 %.

The following is demonstrated by this stereotype example of a primary care practice “of tomorrow”:

1. The primary care practice is prepared and practises forward-looking care. The practice is not limited to reacting, but also has a clear, forward-looking concept.
2. The patient is informed and “activated”. She brings her diabetic passport with her and knows what is important.
3. This is in no way treatment in the same old way, but treatment consistently oriented to the individual risk profile.
4. In the background, the practice has a current knowledge base, for example in the form of evidence-based practice guidelines.
5. The care processes are structured. There are defined interfaces, the nurses are involved and the patient, too, knows her role.
6. Results are measured. The practice knows where it stands, both in terms of individual patients and in terms of the group of all of the chronically sick (diabetics). The identification of its position is, in turn, a prerequisite for a systematic, continuous care process.
7. Various organisational aids and tools are used that are supported by modern practice software.

181. Depending on employees’ qualifications and previous experience, the individual bio-psychosocial situation of the patient and, based on this, an assessment of risks and needs, the doctor can make decisions about the appropriate nature and extent of the delegation of services. On the one hand, the professionalisation of the practice team results in the acquisition and permanent employment of qualified and motivated staff due to the opening up of new career perspectives and income opportunities and, on the other hand, GPs can concentrate on what is most important: the doctor-patient relationship. More working hours performing a GP’s tasks and more attention for patients would thus be available, in particular for those with complex health problems (multimorbidity, polypharmacy, frequent uptake, palliative care, supported dying).

182. The sustainable care of a defined community described here necessitates a registration system that allows the insured parties to choose a primary provider and register accordingly. Clearly belonging to a practice is important for all community-based preventive measures, for sustainable long-term care and for questions of care quality or health services research. If fees (bonuses), for example, are to set incentives to carry out certain prevention measures, they can only be sensibly controlled from a public health point of view using a perspective related to a defined community. This is also true with respect to coordinated demand planning: The exact allocation of defined communities to GP practices or primary care practices allows the more precise, earlier and more reliable identification of even small-scale tendencies towards overuse or inadequate care. From the point of view of the insured parties, the following questions can (and will be) answered by a registration system based on primary care close to the home: Who is responsible for me? To whom can I turn?

183. Maybe the biggest challenge for a possible transition from a single practice to a primary care practice with several parties involved is the maintenance of meaningful, personal doctor-patient relationships. Many patients fear the anonymous and changing, almost random contacts with professional service providers in large organisations (e.g. clinics) and prefer a personal tie to a helper whom they trust. To transfer patients' trust in an individual doctor to a team and to maintain personal responsibility, small teams (teamlets), comprising one GP and one (or two) medical assistants should be used consistently. There are many advantages of patients accepting such a teamlet solution within much larger primary care practices and building up the permanent relationship and tie to them that they want (and often need). This should be specifically tried out.

184. A shared electronic patient file has demonstrated its worth in order to ensure the optimum flow of information and thus continuity of care within a primary care practice. For patients with multimorbidity in particular, often with many contacts with therapists, these should provide for decentralised data storage on the coordinating primary care level, but also enable the cross-interface exchange of information, i.e. that goes beyond the primary care level.

185. At this point we would like to point out a new means of splitting up SHI-accredited doctors' practices and permitting the gradual implementation of corresponding primary care practice concepts. The Panel Doctors' Rights Amendment Act (VÄndG), which has been in force since 2007, allows SHI-accredited activities, in principle, to be divided up to improve outpatient care and make it more flexible. The aim of this amendment was to let practice owners employ another doctor on their own licence, or to work at two different locations. This would enable practice owners to buy

into a primary care practice or a Medical Service Centre with a part of their practice, for example, or flexibly arrange their retirement from the profession and hand over the practice to a successor. The Act on the Further Development of Organisational Structures in Statutory Health Insurance (GKV-OrgWG) reworded the relevant Article 103 Social Code, Book V and made it unambiguous, with the result that since 2009 it has been possible to implement this regulation without complication.

186. New organisational forms should make creative use of this scope, depending on local needs and individual preferences. The Council has *no* preference for a specific provider, operator or legal form, but believes that the decision can and should be taken by those involved locally under their own responsibility. For example, liaison models between GPs and specialists in private practice or hospitals should be just as possible as further training rotation for future specialists in general practice. With particular regard to the changing career preferences of the next generation of medical professionals, part-time employees and employment on a salaried basis may be attractive and be considered as alternatives to the traditional purchase of a practice. New forms of work allocation within the practice are also conceivable. For example, the introduction of shift systems with which several GPs and maybe specialists work together and share rooms, allowing the primary care practice to be open all day, six days a week, while simultaneously realising an individual 4-day week.

Special Structure and Testing of Models in Rural Care Areas

187. In rural areas, currently mainly in eastern Germany, but increasingly also in western Germany, future GP care is at risk because of a shortage of young doctors. On the one hand, countermeasures could include greater centralisation (concentration of the infrastructure services in central locations), on the other in greater decentralisation with a greater proportion of mobile services. A working group “Securing Medical Care in the Mecklenburg Seenplatte Region” has specified the town planning approach of so-called “central locations” in the “GP Care Centres in Central Locations” proposal. Several GPs are supposed to work together in such a GP care centre “in central locations” and possibly be joined by specialists. The programme provides healthcare system facilities for all central locations (doctor, pharmacy). It should be possible to reach central locations in the local area within a maximum of 30 minutes. As early as 2005 the *Land* parliament of Mecklenburg-Western Pomerania decided on a master plan to ensure medical care, which includes deficiency guarantees for those setting up practices, administrative investments, practice takeovers and other measures to create attractive working and living conditions and community involvement.

188. For town planning purposes, an estimate of the GP care situation in the Hersfeld-Rotenburg region in the *Land* of (Hesse) resulted in two contradictory scenario projections for 2020, which could also be used in parallel to each other in view of the “partial area differences”:

- a) **Decentralised GP care:** Every community is to be a “basic centre” and thus also the location for the provision of basic medical care. In communities without their own GP, care should be maintained by cooperation practices. Communities with a population density of below 100/km² will be considered to be “rural doctor areas”. In these, GPs would receive a fee bonus of approx. 25 % (possibly higher for home calls and emergency services). Regional associations of SHI-accredited physicians should establish the status of a “rural doctor accreditation worthy of special promotion”.
- b) **Centralised GP care:** In this scenario, basic GP care for the community would be provided at central locations in the shape of medium-sized centres. The idea basically foresees Medical Service Centres, in which several GPs and specialists work together.

189. Proposals by the interministerial cabinet working group “Rural Areas” from the Baden-Württemberg *Land* government offer, among other things, cheap loans, low-cost residential and practice premises for young doctors, expanding childcare, better connections of doctors’ practices to the public transport network, “rural doctor taxis” and tele-medical support.

190. If there are no individual practices in the countryside, so-called “rolling transport services” (taxi on-call, citizens’ bus) could take patients from their homes to primary care practices in medium-sized centres and, at the same time, make it easier for employees in primary care practices to perform their jobs, or even make it possible for them to do them at all, by taking their children to kindergarten, school or sporting activities.

191. Under proposals made by the Conference of Health Ministers of the *Länder*, the higher costs of covering long distances to get to a GP surgery and of external surgeries in rural regions should be compensated for. Furthermore, compensation and grants from local authorities and the *Länder* should be paid to cover the costs of setting up and equipping practices. The following measures are already being implemented in the new *Länder*: higher travel expenses for home calls, turnover guarantees for new doctors in problem regions, district nurse pilot projects, new cooperative organisational forms such as Medical Service Centres, premiums (so-called safeguarding bonuses, investment flat

rates) for young doctors who take over a rural practice in an area with inadequate healthcare, exemption of doctors aged over 61 from medical after-hours services, new pay regulations for after-hours services, a higher number of funded further training opportunities, reorganisation of planning areas to favour the establishment of practices in rural areas, bonus payments if average case figures are exceeded, additional funding for further training assistants when undertaking to perform SHI-accredited work in regions with inadequate healthcare for at least three years.

8.3 Change in the Division of Labour

The following play a key role in the current division of labour between sectors and areas in the German healthcare system:

1. the distinction between primary care and secondary specialist care provided for outpatients,
2. the division of labour between secondary specialist care in the outpatient and hospital sectors,
3. cooperation between physician healthcare and nursing and
4. interaction and shared responsibility for prevention and healthcare.

192. The great importance of primary care in the future is explained in detail in this Report. However, a solution cannot be considered without an answer to the problem of the distinction between primary medical and secondary specialist care that must also include the hospital sector. This concerns direct access and the organisation of secondary specialist care, which is currently provided by two competing sectors. Since the coordination of care through an uncontrolled mix of primary medical and secondary specialist care nationwide is not conceivable in view of the expected increase in chronic illnesses, we will not be able to manage without the instrument of gatekeeping, although the scientific evidence for its effectiveness is far from clear.

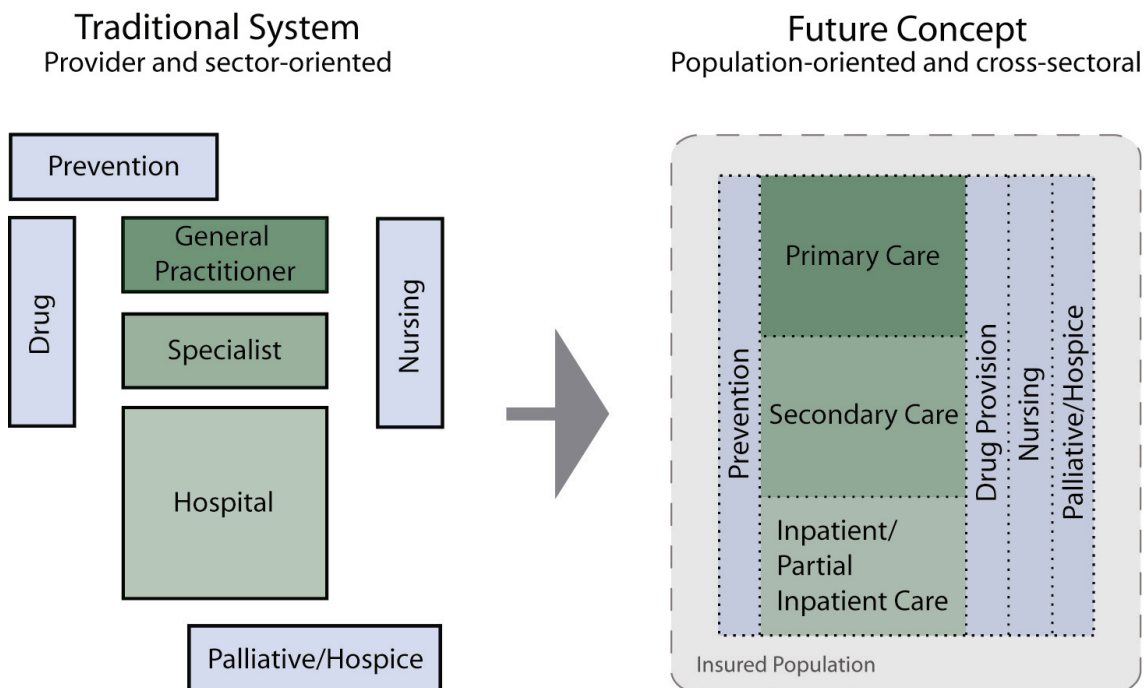
193. A more clear-cut structure of access to specialists will, however, put the outpatient secondary specialist sector under massive pressure, meaning that from this perspective too, a solution to the previously inefficient competition between outpatient and specialist services provided in hospital will be inevitable. The establishment of functioning primary care that satisfies the future demands of coordination and continuity cannot

therefore be solved without the reorganisation of secondary specialist care at the interface between the outpatient and inpatient sector.

194. Cooperation between all professional groups involved in community healthcare must be further improved (cf. Report 2007, I-2). In particular, doctors and nurses can benefit greatly from each other by means of team structures and the mutual use of skills and, in contrast to often expressed fears, gain in autonomy and professional expertise. Far-reaching cooperation between these professional groups is an essential prerequisite if coming demands are to be met.

195. A fourth area that is constantly criticised for implementation deficits and the need for action and in which no real progress has been made is the area of prevention, and this is true on all levels. The joint assumption of responsibility is needed here, which also comprises immaterial support along the lines of creating a positive attitude and positively assessing measures taken in sectors to which one does not belong.

Figure 11: From Sectoral to Community-Oriented Care



The sectoral delimitations become less significant, and regional structures decide on the location of service provision.

Source: Own data

8.4 Financing: Concepts based on Insured Parties rather than Indications, including Elements of Managed Care

196. To encourage the accountability of partners in the healthcare system on all four levels – healthcare system, organisation, individual and patient (cf. Report 2007, No. 693) – system- and structure-related considerations beyond the institutional level are necessary that take account of demographic change, changes to the illness spectrum and regional differentiation. It is also necessary to set the financial incentives in such a way that chronically sick, elderly patients receive care that is ideally coordinated to their treatment needs and is in line with the latest medical knowledge. Because of the regional differences in the development of age and population structures, concentration of doctors, etc, incentives must allow and encourage a search for differentiated regional solutions. But this approach also automatically means that the regional healthcare agencies and the associated service providers bear at least part of the financial risk, so there will be convergence in insurance and service provider functions.

197. In regional models, capitation independent of contact and adjusted for risk should be tried out to cover comprehensive basic care over the long term, with some targeted incentives (pay for performance, e.g. for implementing preventive measures/achieving certain vaccination rates). As a result, the potential disadvantages of these forms of finance (lack of economic incentives for complete and conscientious care for patients who require special effort for medical or social reasons) are partially neutralised. Furthermore, this financial model would create strong incentives (and new opportunities) to overcome sectoral boundaries and for comprehensive cooperation between specialist disciplines and professional groups.

198. Model remuneration must take account of the new concept of care and support it. Currently existing adverse incentives (e.g. for expanding the extent of care when not medically indicated) must be avoided. In this connection, the following proposals should be considered:

- Pay should also take account of the value of coordination work that does not directly have to do with doctor-patient contacts, including coordination by non-physician care and practice team members.
- Cross-practice coordination and cooperation should also be given targeted support.
- The introduction, use and further development of IT solutions to improve care should be encouraged.

- Pay should support investments in improved accessibility (e.g. including services by telephone or email).
- Telemetry or monitoring of clinical data should also receive targeted support.
- Pay should be risk-adjusted and take account of case mix differences in the communities receiving care.
- The pay system should give outpatient practices the opportunity to keep savings that have been achieved e.g. by avoiding admissions to hospital.
- The pay system should foresee targeted bonuses on top of additional payments for desired, measurable quality improvements.

199. Whereas the integration of the insurance and service provider functions is demonstrably effective as a leading criterion for managed care with respect to coordination and raising efficiency, the risk of a deterioration in quality cannot be ruled out, in particular with respect to withholding services, and risk selection to the detriment of patients with multiple and chronic illnesses. When the results of the systematic review on the influence of managed care models on the quality of care were examined, four managed care options were discussed, with Option 2a (introduction while limiting possible negative effects) and Option 2b (introduction “embedded” in further-reaching structural change) being given a clear preference for a possible adaptation of managed care elements here in Germany.

8.5 Medical and Economic Potential

Towards More Efficient and More Effective Integrated Care

200. Medical and economic development potential can mainly be found at interfaces between service sectors and, in Germany, mainly between the outpatient and inpatient sectors. Against the background of demographic developments and medical-technical progress, the reorganisation of secondary specialist care in conjunction with changes to the hospital sector will become more important because the possibilities for substitution between inpatient and outpatient treatment will further increase in the future. As far as incentives are concerned, the conditions for the successful provision of efficient healthcare services are most promising when the service providers involved do not work on their own account, but for a joint budget and receive a (cross-sectoral) flat rate for

this. This could be one company or a combination of largely self-employed service providers.

201. A cross-sectoral flat rate for certain service packages is already available as a type of payment for hospitals that also act as the institutions responsible for Medical Service Centres. If the hospital and the Medical Service Centre are oriented towards a shared economic goal, they can achieve it only by means of an efficient split between inpatient and outpatient treatments. If the hospitals alongside Medical Service Centres also increasingly operate rehabilitation and long-term care facilities in future, they can offer certain services across all sectors and conclude selective contracts with flat-rate payments with health insurance funds. If such complex flat rates within the context of selective contracts prove themselves effective, their use as a payment element in care organised on the basis of collective contracts could also be discussed.

202. The integration of care across current sectoral limits will become even broader if a care unit “under one economic umbrella” is in a position to offer a comprehensive range of preventive and therapeutic services in a specific region. This comprehensive care unit may comprise one large company or an alliance of largely self-employed service providers. A health insurance fund that concludes a contract with a care unit of this kind could offer its insured clients a diverse range of services, depending on what is legally possible. Such a comprehensive care unit, which may offer all required healthcare services in a certain region, is a target-oriented concept from a current standpoint. But from a regulatory policy point of view, the objective is not to implement such a care concept with the help of statutory measures, but only to open up the opportunity for it within the context of competitive processes. The decision as to which organisational form should be preferred in each case should primarily lie with the insured parties and patients and could differ regionally and over time.

Ensuring Care in Areas with a Poor Infrastructure

203. Ensuring high-quality, full-scale care in sparsely populated areas with poorly developed infrastructures will be a particular challenge in the future. Here there can no longer be competition between comprehensive care units due to low supply capacities, and there can be hardly any competition between outpatient and inpatient service providers. Irrespective of the relationship between collective and selective contract structures, the responsibility for ensuring adequate full-scale healthcare ultimately lies with the state. Continuous monitoring, which is based, among other things, on quality indicators in conjunction with appropriate benchmarking, could be used for the early

recognition of shortcomings in care and of quality deficits. In recent years, the Federal Government has decided several measures that could help to prevent under-provision in sparsely populated areas.

- Medical Service Centres prevent economic risk and facilitate part-time employment for the individual doctor.
- The VÄndG has made it possible to work as an SHI-accredited doctor more flexibly and allows doctors to provide outpatient care in areas with a poor infrastructure on several days a week, for example in addition to their work at another location or at a town hospital.
- In the event of undersupply, Article 87a para. 2 Social Code, Book V provides for incremental supplements to the multipliers used when calculating health service compensation for SHI-accredited doctors from 2010 onwards.
- The contracting parties can agree on bonuses to ensure hospital care.

In addition to these statutory options, in the event of imminent regional under-supply, the following measures or instruments could be considered:

- As a centralised solution, patients who live in places without outpatient practices and hospitals could be brought to care centres in central locations with the help of transport services.
- Increased delegation and substitution of activities to and by non-physician healthcare professionals results in relief and thus more flexibility for the doctors concerned.
- Higher admission figures in medical schools will not only intensify future competition, but also take account of the fact that female students now predominate, of whom at least some will not work full time, without interruptions, for their whole lives.
- Requirements planning, which from a regional point of view carries forward the far from optimum care situation in 1990, should be based on the morbidity structure of the respective community.
- As well as promoting a system in which GPs can also work in hospitals, financial support could also support mainly cooperative care structures. For example,

material incentives could comprise grants to finance investments, cheap loans, deficiency guarantees and low-cost residential and practice premises.

- Within the context of vocational training, grants could be tied to the condition that the recipient practise in a region with a poor infrastructure for a certain period of time.

204. Irrespective of the need or justification for financial and non-monetary incentives, health policy will probably not be in a position to find a satisfactory solution to the core problem of imminent under-supply, which is primarily rooted in the lack of appeal of the regions concerned. Regional and town planning authorities will have to make the regions concerned more attractive, at least to a certain degree, to young graduates and their families. These considerations show that ensuring high-quality care in poorly developed regions is a general problem and not specifically one of healthcare organised by means of selective contracts.

8.6 Recommendations on Implementation

205. When searching for a coordinated, community-based and regionally differentiated healthcare model we are not thinking of an unthinking 1:1 adoption of US-American managed care models, but of an adaptation of elements and measures that appear to make sense. The provision of a service at a sub-optimum level reduces the profit or surplus to the community, meaning that inefficient processes run counter to the corporate benefit calculation and to individual rationality. If a company offers the services concerned, sector-specific pay no longer plays a role and the payment question is now (only) an internal allocation problem even in the case of a combination of largely self-employed service providers.

206. By using capitation as a prospective payment system, the financial risk is transferred either partially or wholly to the service provider, depending on the structure; this includes not only the morbidity risk but also the financial impact of inefficient service provision, moral hazard and supply-oriented demand. The extent to which risk is transferred depends on the group of people covered by the flat-rate payment, as well as the nature and extent of the services involved. Specifically, the following instruments should be considered and tried out:

- Cost-sharing contracts for defined services belonging to one kind of treatment,
- Diagnosis related groups (DRGs) for a completed case,

- Risk-sharing along the lines of payment by results and
- comprehensive capitation that includes all services incurred for all (registered) insured people (capitation in the narrow sense).

In all of these variants, the risk of patient selection and quality deficits (e.g. due to refusal of services) can be countered mainly by means of quality assurance, transparency and strengthening patient rights.

207. The removal of the sectoral separation of healthcare service providers that results from capitation, which was made possible by integrated care according to Article 140a ff Social Code, Book V in conjunction with other special forms of care, has not been able to establish itself in practice to date. It is the most important structural means to reliably combat the future problems in healthcare provision associated with demographic change. As a consequence, there will be a rise in the intensity of competition, with the current need for further action having more to do with the remaining general legal conditions than competitive parameters. These legal conditions will ensure efficient coordination at the service sector interfaces, in conjunction with functioning competition.

208. Gatekeeping by GPs/doctors in primary care is an instrument to improve cross-sectoral and community-based care that is commonly used internationally and means access to specialist care follows referral by the primary service provider. In addition to raising quality by optimising treatment processes, the aspect of cost reduction or improving cost effectiveness by controlling service provision are of primary importance. On the basis of conducted reviews, there are indications that there are no differences in patients' health results and the health-related quality of life between care systems with gatekeeping and free access. The Council's recommendations are thus for the context-related use of gatekeeping, not as an instrument to be used independently but rather in conjunction with simultaneous changes to other structural parameters.

209. In its 2007 Report, the Council of Experts dealt with quality-related incentive systems in detail, in particular with public disclosure (Report 2007, No. 684 ff) and pay for performance (Report 2007, No. 725 ff). In contrast to managed care and capitation, what both approaches have in common is that they are based on external quality measurements that either in the form of a ranking, or financial incentives, have an influence on service providers. In the light of international discussions and with respect to the discussion in the German health system over the last few months, it would make sense to use both control instruments from the point of view of cross-sectoral, community-based healthcare, but – as with capitation – not to expect structural and

coordination deficits to disappear as a result of these instruments alone. Insured individuals still have too little transparency concerning treatment alternatives and service quality. Furthermore, service providers for their part have too few possibilities to advertise their specific qualifications and skills in order to attract patients and attain selective contracts with health insurance funds.

210. In Germany, three provider groups intend to offer cross-sectoral and community-based healthcare concepts: hospitals and their networks, health insurance companies and groups of doctors in private practice alongside external providers of capital. Structurally, two development options can be considered for the German healthcare system, which will have to be controlled to prevent any negative effects on the quality of care in particular for patients with chronic and multiple illnesses (Option 2a) and are “embedded” in additional, further-reaching concepts outside the implementation of managed care (Option 2b). The untested introduction of managed care on the basis of an indiscriminating positive assessment of its impact appears to be as little justified as a complete rejection of managed care elements and concepts. For the purposes of structuring the discussion and scientific evaluation, the Council proposes a breakdown into three types of managed care, ranging from the direct employment of doctors by managed care providers (type 1), free contracting with capitation (type 2) to free contracting with quality-related pay instead of capitation (type 3). Primarily, type 2 and possibly type 3 should be considered and tried out on a broad base as options for the further development of the German healthcare system.

211. In its report of 2007 the Council pointed out that the prerequisites for the introduction of managed care elements are largely in place in German social legislation (Report 2007, No. 378 ff). The need for further action is therefore less due to the extent of social legislation implementation than with respect to the remaining general legal conditions. These are particularly necessary in order to realise efficient coordination at the interfaces between the service sectors, in conjunction with functioning competition. In particular, the following aspects must be emphasised:

- In the interests of functioning competition a range of contract options should be made available to health insurance companies and service providers and these should be given the choice of searching for their preferred variant. Currently there is no version of integrated care that is superior in every respect, meaning that there is no need for the mandatory offer of a certain special form of care, such as isolated GP-centred care.
- Applying medical and economic criteria, structured treatment programmes in accordance with Article 137f-g Social Code, Book V are a variant of integrated care

- The validity of the authorisation right in the outpatient sector and the prohibition right in the inpatient sector no longer satisfies current conditions governing the provision of healthcare services in these fields. Fair competitive conditions between hospitals and between hospitals and secondary (specialist) doctors working with SHI accreditation presuppose monistic financing and a uniform payment system so that certain public providers do not cover all possible deficits for an unlimited period.
- Risk structure compensation oriented towards multimorbidity is essential, both for functioning competition between health insurance companies and for the prevention of risk selection. At the same time, the new risk structure compensation, like practically all of the more morbidity-based equalisation systems, reduces incentives for investment in primary, secondary and tertiary prevention. It therefore worsens the internal cost-benefit ratio for integrated care projects that specially promote preventive measures.
- Goal-oriented cooperation between the healthcare professions in the sense of – legally guaranteed – greater weight being given to non-physician healthcare professionals, and the inclusion of self-help groups and local authority facilities in conjunction with a larger focus on disease management programmes, will probably lead to an improvement in the efficiency and effectiveness of healthcare provision and should be viewed as necessary within the context of the proposed structural changes.

212. The review presented in the Report on the link between quality and managed care shows there is a whole series of studies that link managed care to a deterioration in quality. It therefore seems appropriate to consider targeted measures to prevent deterioration in quality. Primarily, the following procedures could be considered:

- Development of area indicators (e.g. by a technically independent institution under Article 137a Social Code, Book V), which supplement the previously predominant provider indicators in Germany (Report 2007, No. 501);
- Increase in indicators describing access to services at all levels (for the subject of access indicators, geographic dimension, cf. Report 2007, No. 491 ff);

- Development of quality indicators that will give greater priority to the care of patients with multiple or chronic illnesses than has been the case in Germany to date (commission to institutions according to Article 137a Social Code, Book V).

213. Against the background of rising life expectancy, prevention will gain in significance at all levels. The studies identified in the systematic review on the effect of managed care on the examined prevention end points reveal an encouraging picture. It is therefore inevitable that prevention be given a high status in structural implementation, evaluation and internal control. Quality incentives should be used sensibly as instruments to achieve this (e.g. pay for performance). At the same time, it should be borne in mind that the incentive for the managed care programmes to invest in prevention will decrease when termination periods are short and where there exists a high propensity to move from one programme to another or from managed care programmes to other forms of care. Possible solutions may be found in longer-term contracts between funding agencies and service providers, as well as medium-term termination periods for insured people in conjunction with incentive systems that encourage longer-term stays in the programmes. Bonus systems and the provision of additional services according to the duration of the insurance should be considered in this regard.

214. As a supplement to these cross-sectoral recommendations, sector-related changes are necessary at several levels. Primary medical care, which in an international context is heavily involved in the coordination of healthcare provision, plays a key role in this respect. Considering the demographic challenges that must be faced, there are hardly any alternatives to strengthening primary medical care, in particular in the countryside and in view of the medium-term development of the number of doctors, but also against the background of coordination requirements for the care of elderly patients and those with multiple and chronic illnesses. However, this is the case only on condition of a simultaneous change and clear expansion in present care structures. After a detailed analysis of international experience and scientific evidence the Council proposes the concept of primary care practices close to patients' homes. This represents an attempt to condense previous analyses and findings into *one* specific concept for future-oriented, generationally fair basic care for the community. International care models, such as the patient-centred medical home and the Bellagio model are essential with regard to comprehensive community-based primary care.

215. The main elements in patient-centred and community-based care, taking particular account of high-quality primary care of the community, can be summarised as possible:

- Defined community as a basic requirement for all community-related approaches, in the typical case including registration and the transfer of as much decision-making power as possible to the regions and to those responsible locally,
- Person-centred with a focus on the needs of sick individuals, especially the chronically sick,
- Comprehensive, co-ordinated care along the lines of improved vertical coordination across traditional sectoral boundaries,
- Long-term continuity avoiding loss of information and interrupted care, especially for the chronically sick,
- Available, accessible, equitable, meaning low-threshold accessibility for all population groups to secure healthcare according to objective demand and subjective needs,
- Further development in the remuneration/payment systems into comprehensive, risk-adjusted capitation in combination with targeted incentives,
- Trials and the evaluation of primary care practices close to patients' homes,
- Regional or local adaptation along the lines of regional adjustment to existing care structures.

216. It is foreseeable that GP care will be endangered, especially in rural areas, meaning that special measures will be needed here. Depending on the regional circumstances, either far-reaching centralisation along the lines of centralised GP care concentrated in central locations, or the decentralised concepts of GP care, where every community is considered a location for basic medical care and care is ensured by “cooperation practices” and “rural doctor areas”, should be considered. Communities with a population density of below 100/km² should be called “*rural doctor areas*” with a corresponding adjustment to pay.

217. Strengthening primary medical care with the aim of doing justice to the coordination tasks of the future is possible only if the previously inefficient sectoral competition between outpatient and inpatient services is overcome in the field of secondary medical care. Against the background of “financing from a single source” and within the context of cross-sectoral, community-based care, the position and responsibilities of all four areas, from primary medical care, outpatient care, secondary specialist medical care provided in a hospital to full inpatient care in the narrow sense, need to be redefined. Secondary medical care will be strengthened by the fact that competing to provide

healthcare services through inefficient structures with high investment and contingency costs is ended, and this area finds its way to a consistent structure, in which the location for the provision of healthcare - outpatient structure versus inpatient structure - is decided on the basis of medical and nursing aspects, but not according to the priorities of the optimisation of sectoral results. Prevention, palliative medical care, and drug provision represent shared tasks for all four areas.

218. In a future system of cross-sectoral, community-based care, pharmacies must position themselves as institutions that bear more responsibility than now for the quality and efficiency of the choice of drug (community pharmacies). They are then involved in an integrated care network with a community-based flat-rate payment (capitation) related to the insured person that follows the strategy of removing provider-payer splits. Future care units can be organised both regionally and supra-regionally in which cases associations of pharmacies that agree on communicable and verifiable quality standards would be a sensible solution. In more sparsely populated areas, branch pharmacies of such associations could take on responsibility for drug provision. Cooperation with doctors within the context of community-based care makes special professional qualifications appear essential (e.g. in clinical pharmacy). The resultant differentiation between pharmacies and the liberalisation of the “collective contract” that has been in existence to date (framework contract according to Article 129 Social Code, Book V) for the pharmacies involved in SHI care, as well as competition for contract models in drug provision, will lead to more integration and cooperation in medical treatment processes, as in primary and secondary medical care. The role of pharmacists will change from the current passive institution for the distribution of medicines into an institution that, together with doctors and members of non-physician healthcare professions and within the scope of changed organisational and financing structures, is responsible for successful purchasing, the right choice, the effective use and a flow of information that is independent of industry and based on the results of evidence-based medicine as well as the monitoring of drug treatment.

219. In order to be able to take account of the future rise in demand for long-term care, different sorts of challenges will have to be mastered. Initially, high priority will be attached to avoiding or delaying the need for long-term care in old age and generally expanding age-specific prevention and health promotion, with particular attention being paid to life in “limited health”. It is urgently necessary to arrive at a preventive healthcare system. The future healthcare infrastructure for people in need of long-term care in old age not only requires adequate capacities in nursing care and adequately and well trained personnel, but also new structures, in particular in conjunction with family and professional help in the outpatient context. Dental care for old people in need of long-

term care must be improved. Prophylactic dental measures for patients should therefore be defined precisely as part of the quality management of nursing homes for the elderly. The Council recommends that more attention be paid to the provision of long-term care by families because they still provide the majority of domestic care for people in need of long-term care in Germany. For the long-term care sector, the individually oriented approach to work must be superseded by a family-oriented approach (WHO Family Health Nursing Concept). The support requirements of family members providing long-term care should be assessed as precisely as possible in future on the basis of standardised assessments so that professional and non-professional support can be made available at an early stage. The quality of outpatient care and its improvement is an urgent objective, especially with regard to the integrated and continuing long-term care on which elderly and old people with chronic illnesses, multimorbidity and/or a need for long-term care depend. Since long-term outpatient care was only formally included in integrated care by the GKV-WSG, and the legal foundations for care and case management only came into place with the Long-Term Care Further Development Act, it is only now that systematic experience with the role of long-term care within these care concepts is possible. Long-term care advice in conjunction with support and individual care planning and control contribute greatly to strengthening the user position and raising the quality of life. From this perspective, the Council explicitly advocates the establishment of long-term care support centres as a new structural element of high-quality long-term outpatient care and healthcare. Quality assurance in care provision is once again very topical because of published long-term care deficits and the reaction of the legislator in the Long-Term Care Further Development Act. An evidence base for long-term care provision, measurable results for high-quality long-term care, measuring instruments and the development of standards to enable quality assessment require further continuing investment in quality development and long-term care research.

220. In recent years, the Council has repeatedly called for an intensification of health services research, especially when the newly worded regulatory framework for SHI opened up innovative contract or care options whose consequences were hard to estimate (“research into the consequences of policy”). An obligatory evaluation is still only planned for model projects according to Articles 63-65 Social Code, Book V, but not in connection with GP-centred care according to Article 73b Social Code, Book V, discount contracts for drugs according to Article 130a para. 8 Social Code, Book V or Integrated Care according to Article 140a ff Social Code, Book V. And there are still no adequate evaluation plans that, within the context of a controlled design, would allow valid conclusions to be drawn about the costs and benefits of DMPs that have been available for a long time. This is even less understandable because as early as 2000 the legislator implemented framework conditions for a scientific evaluation by SHIs in the

form of Articles 303a ff Social Code, Book V. To date, however, the insurance companies' bodies involved in implementation and the Federal Association of SHI Physicians [*Kassenärztliche Bundesvereinigung*] have not been able to come to any agreement on a concept on how to use and merge data from physicians and insurance companies and on the focuses of an evaluation. In this connection, it may be a deficit that no provision has been made for the participation of scientific experts in this statutory regulation and that the data protection provisions only allow sensible use of existing data to a limited extent. In the meantime, however, concepts do exist that enable personal evaluations using pseudonyms and respecting data protection. Here, practicable ways should be found that enable a simplified merger of care information for scientific purposes.

This Report suggests far-reaching changes to the German healthcare system. Such developments must be scientifically supported and evaluated so that the consequences for insured people, for service providers, for funding agencies and for the entire system can be identified and evaluated. Only on this basis can decisions be taken as to whether new care concepts should be pursued further and broadly implemented. Furthermore, studies on the evaluation of new care concepts should be assured with respect to financing. Since the results are particularly important for the further development of statutory health insurance, health insurance funds should have the legal option of financing such studies through the investment of a fixed percentage of their expenditure.

Appendix

Legal basis for the activity of the Advisory Council on the Assessment of Developments in the Health Care System (since 1 January 2004)

Social Security Code, Book Five

Chapter Five

Advisory Council on the Assessment of Developments in the Health Care System

Article 142

Support for Concerted Action, Council of Experts

(1) The Federal Ministry of Health and Social Security shall appoint an Advisory Council on the Assessment of Developments in the Health Care System. The Federal Ministry of Health and Social Security shall establish an office to support the work of the Advisory Council.

(2) The Advisory Council shall have the task of preparing expert reports on the development of health care services, including the medical and economic effects. In the framework of the expert reports, the Advisory Council shall, giving consideration to the financial framework conditions and existing efficiency reserves, develop priorities for the reduction of medical services deficits and existing overuse, and indicate ways and means of further developing the health care system; it may include developments in other branches of social security in its reports. The Federal Ministry of Health and Social Security may define the subject of the reports in detail and also commission the Advisory Council with the preparation of special reports.

(3) The Advisory Council shall prepare the report at intervals of two years and submit it to the Federal Ministry of Health and Social Security, generally on 15 April and starting in 2005. The Federal Ministry of Health and Social Security shall present the report to the legislative bodies of the Federal Government without delay.

Members of the Advisory Council on the Assessment of Developments in the Health Care System

Prof. Dr. rer. pol. Eberhard Wille

Chair of Economics
University of Mannheim
(Chairman)

Prof. Dr. med. Matthias Schrappe

Institute for Patient Safety
University of Bonn (since December 2009)
(Deputy Chairman)

Prof. Dr. med. Ferdinand M. Gerlach, MPH

Institute for General Practice
Johann Wolfgang Goethe University Frankfurt

Prof. Dr. rer. nat. Gerd Glaeske

Centre for Social Policy (ZeS)
University of Bremen

Prof. Dr. med. Marion Haubitz

Nephrology Department
Hanover Medical School

Prof. Dr. phil. Adelheid Kuhlmei

Institute for Medical Sociology
Centre for Human and Health Sciences
Charité University Hospital, Berlin

Prof. Dr. rer. pol. Rolf Rosenbrock

Working Group on Public Health
Social Science Research Centre, Berlin

Reports from the Council of Experts

Annual Report 1987

Medizinische und ökonomische
Orientierung
(Medical and Economic Orientation)
Baden-Baden 1987

Annual Report 1988

Medizinische und ökonomische
Orientierung
(Medical and Economic Orientation)
Baden-Baden 1988

Annual Report 1989

Qualität, Wirtschaftlichkeit und
Perspektiven der Gesundheitsversorgung
*(Quality, Efficiency and Prospects of
Health Care Provision)*
Baden-Baden 1989

Annual Report 1990

Herausforderungen und Perspektiven der
Gesundheitsversorgung
*(Challenges and Prospects of Health
Care Provision)*
Baden-Baden 1990

Annual Report 1991

Das Gesundheitswesen im vereinten
Deutschland
(The Health Sector in United Germany)
Baden-Baden 1991

Special Report 1991

Stabilität ohne Stagnation?
abgedruckt im Jahresgutachten 1992
*(Stability without Stagnation?
printed in Annual Report 1992)*
Baden-Baden 1992

Annual Report 1992

Ausbau in Deutschland und Aufbruch
nach Europa
*(Expanding in Germany and Setting
Out for Europe)*
Baden-Baden 1992

Situation Report 1994

Gesundheitsversorgung und Kranken-
versicherung 2000 – Eigenverantwortung,
Subsidiarität und Solidarität bei sich
ändernden Rahmenbedingungen
*(Health Care Provision and Health
Insurance 2000. Self-Responsibility,
Subsidiarity and Solidarity under
Changing Framework Conditions)*
Baden-Baden 1994

Special Report 1995

Gesundheitsversorgung und
Krankenversicherung 2000 – Mehr
Ergebnisorientierung, mehr Qualität und
mehr Wirtschaftlichkeit
*(Health Care Provision and Health
Insurance 2000. More Outcome
Orientation, More Quality and More
Efficiency)*
Baden-Baden 1995

Special Report 1996

Gesundheitswesen in Deutschland,
Kostenfaktor und Zukunftsbranche
(*Health Care System in Germany – Cost
Factor and Sector of the Future*)

Vol. I:

Demographie, Morbidität,
Wirtschaftlichkeitsreserven und
Beschäftigung
(*Demographics, Morbidity, Efficiency
Reserves and Employment*)

Baden-Baden 1996

Special Report 1997

Gesundheitswesen in Deutschland,
Kostenfaktor und Zukunftsbranche
(*Health System in Germany – Cost
Factor and Sector of the Future*)

Vol. II

Fortschritt und Wachstumsmärkte,
Finanzierung und Vergütung
(*Progress and Growth Markets, Finance
and Remuneration*)

Baden-Baden 1998

Report 2000/2001

Bedarfsgerechtigkeit und
Wirtschaftlichkeit
(*Appropriateness and Efficiency*)

Vol. I:

Zielbildung, Prävention, Nutzer-
orientierung und Partizipation
(*The Formulation of Aims, Prevention,
User Orientation and Participation*)

Vol. II

Qualitätsentwicklung in Medizin
und Pflege
(*Improving Quality in Medicine and
Nursing*)

Vol. III

Über-, Unter- und Fehlversorgung
(*Overuse, Underuse and Misuse*)

Vol. III.1

Grundlagen, Übersichten, Versorgung
chronisch Kranker
(*Introduction and Overview; The Care of
Patients with Chronic Diseases*)

Vol. III.2

Ausgewählte Erkrankungen: ischämische
Herzkrankheiten, Schlaganfall und
chronische, obstruktive Lungenkrank-
heiten
(*Selected Illnesses: Ischaemic Heart
Disease, Stroke and Chronic Obstructive
Lung Disease*)

Vol. III.3

Ausgewählte Erkrankungen: Rücken-
leiden, Krebserkrankungen und
depressive Störungen
(*Selected Illnesses: Back Pain,
Oncological Diseases and Depressive
Disorders*)

Vol. III.4

Zahn-, Mund- und Kieferkrankheiten
(*Dental, Oral and Orthodontic Health*)

Addendum

Zur Steigerung von Effizienz und Effekti-
vität der Arzneimittelversorgung in der
gesetzlichen Krankenversicherung (GKV)
(*Improving the Efficiency and
Effectiveness of the Supply of Medicines
in Statutory Health Insurance*)
Baden-Baden 2002

Report 2003

Finanzierung, Nutzerorientierung und Qualität
(*Finance, User Orientation and Quality*)

Vol. I

Finanzierung und Nutzerorientierung
(*Finance and User Orientation*)

Vol. II

Qualität und Versorgungsstrukturen
(*Quality and the Health Care Infrastructure*)

Baden-Baden 2003

Report 2005

Koordination und Qualität im Gesundheitswesen
(*Coordination and Quality in the Health Care System*)

Vol. I:

Kooperative Koordination und Wettbewerb, Sozioökonomischer Status und Gesundheit, Strategien der Primärprävention
(*Cooperative Coordination and Competition, Socio-Economic Status and Health, Strategies of Primary Prevention*)

Vol. II

Schnittstellen zwischen Kranken- und Pflegeversicherung
Hilfs- und Heilmittel in der GKV
Einflussfaktoren auf die Verordnung von Arzneimitteln
(*Interfaces Between Health Insurance and Long-Term Care Insurance
Therapeutic Appliances and Remedies in SHI
Factors Influencing the Prescription of Drugs*)

Stuttgart 2006

Report 2007

Kooperation und Verantwortung - Voraussetzungen einer zielorientierten Gesundheitsversorgung
(*Cooperation and Responsibility – Prerequisites for Target-Oriented Healthcare*)

Vol. I:

Kooperation und Verantwortung als Voraussetzungen einer zielorientierten Gesundheitsversorgung
Die Entwicklung der Zusammenarbeit der Gesundheitsberufe als Beitrag zu einer effizienten und effektiven Gesundheitsversorgung
Integrierte Versorgung in der GKV: Entwicklung, Stand und Perspektiven; Finanzierung und Planung des Krankenhauswesens
(*Cooperation and responsibility as prerequisites for target-oriented health care
The development of cooperation between the healthcare professions as a contribution towards efficient and effective healthcare provision
Integrated healthcare in SHI: development, status and prospects
Financing and planning the hospital sector*)

Vol. II

Qualität und Sicherheit: Angemessenheit und Verantwortlichkeit in der Gesundheitsversorgung
Primärprävention in vulnerablen Gruppen
(*Quality and safety: appropriateness and responsibility in healthcare provision
Primary prevention in vulnerable groups*)

Baden-Baden 2008