

Health Systems in Transition

Vol. 15 No. 7 2013

Austria

Health system review

Maria M. Hofmarcher

Wilm Quentin (Editor) and Reinhard Busse (Series editor) were responsible for this HIT

Editorial Board

Series editors

Reinhard Busse, Berlin University of Technology, Germany
Josep Figueras, European Observatory on Health Systems and Policies
Martin McKee, London School of Hygiene & Tropical Medicine, United Kingdom
Elias Mossialos, London School of Economics and Political Science, United Kingdom
Sarah Thomson, European Observatory on Health Systems and Policies
Ewout van Ginneken, Berlin University of Technology, Germany

Series coordinator

Gabriele Pastorino, European Observatory on Health Systems and Policies

Editorial team

Jonathan Cylus, European Observatory on Health Systems and Policies
Cristina Hernández-Quevedo, European Observatory on Health Systems and Policies
Marina Karanikolos, European Observatory on Health Systems and Policies
Anna Maresso, European Observatory on Health Systems and Policies
David McDaid, European Observatory on Health Systems and Policies
Sherry Merkur, European Observatory on Health Systems and Policies
Philipa Mladovsky, European Observatory on Health Systems and Policies
Dimitra Panteli, Berlin University of Technology, Germany
Wilm Quentin, Berlin University of Technology, Germany
Bernd Rechel, European Observatory on Health Systems and Policies
Erica Richardson, European Observatory on Health Systems and Policies
Anna Sagan, European Observatory on Health Systems and Policies

International advisory board

Tit Albreht, Institute of Public Health, Slovenia
Carlos Alvarez-Dardet Díaz, University of Alicante, Spain
Rifat Atun, Harvard University, United States
Johan Calltorp, Nordic School of Public Health, Sweden
Armin Fidler, The World Bank
Colleen Flood, University of Toronto, Canada
Péter Gaál, Semmelweis University, Hungary
Unto Häkkinen, Centre for Health Economics at Stakes, Finland
William Hsiao, Harvard University, United States
Allan Krasnik, University of Copenhagen, Denmark
Joseph Kutzin, World Health Organization
Soonman Kwon, Seoul National University, Republic of Korea
John Lavis, McMaster University, Canada
Vivien Lin, La Trobe University, Australia
Greg Marchildon, University of Regina, Canada
Alan Maynard, University of York, United Kingdom
Nata Menabde, World Health Organization
Ellen Nolte, Rand Corporation, United Kingdom
Charles Normand, University of Dublin, Ireland
Robin Osborn, The Commonwealth Fund, United States
Dominique Polton, National Health Insurance Fund for Salaried Staff (CNAMTS), France
Sophia Schlette, Federal Statutory Health Insurance Physicians Association, Germany
Igor Sheiman, Higher School of Economics, Russian Federation
Peter C. Smith, Imperial College, United Kingdom
Wynand P.M.M. van de Ven, Erasmus University, The Netherlands
Witold Zatonski, Marie Skłodowska-Curie Memorial Cancer Centre, Poland

Health Systems in Transition

Maria M Hofmarcher, *European Centre for Social Welfare Policy
and Research*

Editor:

Wilm Quentin, *Berlin University of Technology and European
Observatory on Health Systems and Policies*

Austria:

Health System Review 2013



The European Observatory on Health Systems and Policies is a partnership, hosted by the WHO Regional Office for Europe, which includes the Governments of Austria, Belgium, Finland, Ireland, the Netherlands, Norway, Slovenia, Spain, Sweden, the United Kingdom and the Veneto Region of Italy; the European Commission; the European Investment Bank; the World Bank; UNCAM (French National Union of Health Insurance Funds); the London School of Economics and Political Science; and the London School of Hygiene & Tropical Medicine.

Keywords:

DELIVERY OF HEALTH CARE

EVALUATION STUDIES

FINANCING, HEALTH

HEALTH CARE REFORM

HEALTH SYSTEM PLANS – organization and administration

AUSTRIA

© World Health Organization 2013 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies).

All rights reserved. The European Observatory on Health Systems and Policies welcomes requests for permission to reproduce or translate its publications, in part or in full.

Please address requests about the publication to:

**Publications,
WHO Regional Office for Europe,
UN City, Marmorvej 51,
DK-2100 Copenhagen Ø, Denmark**

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office web site (<http://www.euro.who.int/en/what-we-publish/publication-request-forms>).

The views expressed by authors or editors do not necessarily represent the decisions or the stated policies of the European Observatory on Health Systems and Policies or any of its partners.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the European Observatory on Health Systems and Policies or any of its partners concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Where the designation “country or area” appears in the headings of tables, it covers countries, territories, cities, or areas. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the European Observatory on Health Systems and Policies in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The European Observatory on Health Systems and Policies does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Printed and bound in the United Kingdom.

Suggested citation:

Hofmarcher M, Quentin W. Austria: Health system review. *Health Systems in Transition*, 2013; 15(7): 1–291.

Contents

Preface	v
Acknowledgements	vii
List of abbreviations	xi
List of tables, figures and boxes	xv
Abstract	xix
Executive summary	xxi
1. Introduction	1
1.1 Geography and sociodemography	2
1.2 Economic conditions	4
1.3 Political conditions	5
1.4 Health status of the population	10
2. Organization and governance	17
2.1 Overview of the health-care system	17
2.2 Historical background	19
2.3 Organization	23
2.4 Decentralization and centralization	40
2.5 Planning	42
2.6 Intersectorality	45
2.7 Health information management	46
2.8 Regulation	50
2.9 Patient empowerment	66
3. Financing	75
3.1 Health expenditure	76
3.2 Sources of revenue and financial flows	83
3.3 Overview of the health insurance system	88
3.4 Private household spending	104
3.5 Private health insurance	111

3.6 Other sources of finance	116
3.7 Payment mechanisms	117
4. Physical and human resources	135
4.1 Physical resources	136
4.2 Staff	146
5. Provision of services	167
5.1 Public health service	168
5.2 Patient pathways	178
5.3 Ambulatory care	181
5.4 Inpatient care	189
5.5 Emergency care	193
5.6 Pharmaceutical care	194
5.7 Rehabilitation	196
5.8 Long-term care	199
5.9 Services for carers	204
5.10 Hospice and palliative care	205
5.11 Mental health-care	207
5.12 Dental care	209
5.13 Complementary and alternative medicine	210
5.14 Transplant system	212
6. Principal health reforms	215
6.1 Analysis of reforms since 2005	217
6.2 Future developments	236
7. Assessment of the health system	241
7.1 Stated objectives of the health system	242
7.2 Financial protection and equity in financing	243
7.3 Patients' experiences and equity of access to health-care	245
7.4 Health outcomes, health service outcomes and quality of care	250
7.5 Efficiency of the health-care system	256
7.6 Transparency and accountability	264
8. Conclusions	267
9. Appendices	271
9.1 References	271
9.2 HiT methodology and production process	289
9.3 The review process	291
9.4 About the authors	291

Preface

The Health Systems in Transition (HiT) series consists of country-based reviews that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each review is produced by country experts in collaboration with the Observatory's staff. In order to facilitate comparisons between countries, reviews are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a report.

HiTs seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe. They are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems;
- to describe the institutional framework, the process, content and implementation of health-care reform programmes;
- to highlight challenges and areas that require more in-depth analysis;
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries; and
- to assist other researchers in more in-depth comparative health policy analysis.

Compiling the reviews poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources,

including the World Health Organization (WHO) Regional Office for Europe's European Health for All database, data from national statistical offices, Eurostat, the Organisation for Economic Co-operation and Development (OECD) Health Data, data from the International Monetary Fund (IMF), the World Bank's World Development Indicators and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate review.

A standardized review has certain disadvantages because the financing and delivery of health-care differ across countries. However, it also offers advantages, because it raises similar issues and questions. HiTs can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to info@obs.euro.who.int.

HiTs and HiT summaries are available on the Observatory's web site (<http://www.healthobservatory.eu>).

Acknowledgements

The HiT on Austria was produced by the European Observatory on Health Systems and Policies.

This edition was written by Maria M. Hofmarcher (European Centre for Social Welfare Policy and Research). It was edited by Wilm Quentin, working with the support of Ewout van Ginneken and Reinhard Busse of the Observatory's team at the Department of Health Care Management, Berlin University of Technology. The basis for this edition was the previous HiT on Austria which was published in 2006, written by Maria M. Hofmarcher and Herta Rack, and edited by Annette Riesberg.

The Observatory, and the author are grateful to a wide range of experts and officials who provided support and reviewed the report. Special thanks go to Gesundheit Österreich GmbH, which is the national institute for research and planning of the Austrian health-care system.

At Gesundheit Österreich GmbH the writing of the HiT was greatly supported by Regina Aistleithner, Eva-Maria Baumer, Waltraud Bednar, Andreas Birner, Gertrud Bronneberg, Ines Czasny, Gerhard Fülöp, Sabine Haas, Joachim Hagleitner, Claudia Habl, Anton Hlava, Christine Knauer, Arno Melitopoulos (director until 2011), Stephan Mildschuh, Claudia Nemeth, Elisabeth Pochobradsky, Maria Preschern, Elisabeth Rappold, Ingrid Rosian, Ingrid Rottenhofer, Katharina Sandberger, Gabriele Sax, Daniela Sinhuber, Heidi Stürzlinger, Sabine Vogler und Georg Ziniel (director since 2011). In addition, very valuable input was provided by Gerald Bachinger (Spokesperson of the Austrian Ombudsmen), Erika Baldaszi (Statistics Austria), Anna Bucsic (Federation of Austrian Social Security Institutions), Susanne Herbek (ELGA GmbH), Kai Leichsenring (Europäisches Zentrum für Wohlfahrtspolitik und Sozialforschung) and Sascha Müller (Federation of Austrian Social Security Institutions).

At the Federal Ministry of Health special thanks for important clarifications and support go to Gerhard Aigner, Magdalena Arrouas, Clemens-Martin Auer, Raphael Bayer, Peter Brosch, Paul Dukarich, Wolfgang Ecker, Gerhard Embacher, Sylvia Füzsl, Ludmilla Gasser, Verena Gregorich-Schega, Meinhild Hausreither, Michael Kierein, Peter Kranner, Monika Kreissl, Manfred Mayer, Franz Pietsch, Günter Porsch, Engelbert Prenner, Claudia Rafling, Ulrike Schermann-Richter, Johannes Schimmerl, Alice Schogger, Johanna Schopper, Michael Sigl, Reinhild Strauss, Patrizia Theurer, Susanne Weiss-Fassbinder, Ulrike Windischhofer, Thomas Worel and Siegfried Wötzlmayer. Very helpful comments were also provided by members of the cabinet of the Minister of Health, including Birgit Angel, Alexander Hagenauer, Petra Lehner and Markus Netter. Particular gratitude goes to Silvia Türk and Inge Leeb-Klaus who also coordinated the review process at the Federal Ministry of Health.

Furthermore, the HiT benefited from clarifications and constructive support provided by members of an advisory board (listed in alphabetical order): Gabriela Altenberger (Federal Ministry of Science and Research), Erika Baldaszi (Statistics Austria), Gottfried Endel (Federation of Austrian Social Security Institutions), Harald Gaugg (Health Fund Steiermark), Robert Gmeiner (Verbindungsstelle der Bundesländer), Christian Halper (Statistics Austria), Elke Jander (Federal Ministry of Labour, Social Affairs and Consumer Protection [BMASK]), Silvia Janik (Federal Ministry of Finance), Waltraud Kavlik (Statistics Austria), Christoph Klein (Federation of Austrian Social Security Institutions), Jeanette Klimont (Statistics Austria), Josef Kytir (Statistics Austria), Gabriela Offner (Federal Ministry of Finance), Manfred Pallinger (BMASK), Josef Probst (Federation of Austrian Social Security Institutions), Otto Rafetseder (Stadt Wien), Gerald Röhrling (Institut für Höhere Studien), Erich Schmatzberger (Federation of Austrian Social Security Institutions), Andrea Schmidt (Europäisches Zentrum für Wohlfahrtspolitik und Sozialforschung), Walter Stübler (Statistics Austria).

The author is deeply indebted to Eva Festl, Bernadette Hawel, Joy Ladurner and Leslie Tarver, who supported the management of the project and contributed to quality assurance and data management. Data management was also supported by Norbert Gruber.

Thanks are also extended to the WHO Regional Office for Europe for their European Health for All database from which data on health services were extracted; to the Organisation for Economic Co-operation and Development

(OECD) for the data on health services in western Europe; and to the World Bank for the data on health expenditure in central and eastern European countries. The HiT reflects data available in August 2012, unless otherwise indicated.

The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the Governments of Austria, Belgium, Finland, Ireland, the Netherlands, Norway, Slovenia, Spain, Sweden and the Veneto Region of Italy, the European Commission, the European Investment Bank, the World Bank, UNCAM (French National Union of Health Insurance Funds), the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. The Observatory team working on HiTs is led by Josep Figueras, Director, Elias Mossialos, Martin McKee, Reinhard Busse, Sarah Thomson and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Gabriele Pastorino. The production and copy-editing process of this HiT was coordinated by Jonathan North, with the support of Caroline White, Sophie Richmond (copy-editing), Steve Still (design and layout) and Mary Allen (proofreading).

List of abbreviations

Abbreviations	
AGES	Austrian Agency for Food and Health Safety
AGR	Annual growth rate
A-IQI	Austrian Inpatient Quality Indicators
ARGE	Working group
ASVG	General Social Security Act
AUVA	Austrian Workers' Compensation Board
AWG	Ageing Working Group of the Economic Policy Committee (EPC)
BAGS	Association for Employers in Health and Social Care Professions
GDP	Gross domestic product
BIQG	Federal Institute for Quality in the Health Service
B-KUVG	Act on Civil Servants' Health and Accident Insurance
BMASK	Federal Ministry of Labour, Social Affairs and Consumer Protection
BMF	Federal Ministry of Finance
BMG	Federal Ministry of Health
BMGF	Federal Ministry for Health and Women
BMGFJ	Federal Ministry for Health, Families and Youth
BMI	Body mass index
BMWF	Federal Ministry of Science and Research
BSVG	Farmers' Social Insurance Act
B-VG	Federal Constitutional Law
BZÖ	Alliance Future Austria
CAM	Complementary and Alternative Medicine
CARE	Cooperative for Assistance and Relief Everywhere
COFOG	Classification of the Functions of Government
DIAG	Documentation and Information System for Health Care Analyses
DRG	Diagnosis-related groups
EC	European Community
ECTS	European Credit Transfer and Accumulation System
EEA	European Economic Area

Abbreviations	
EHIC	European Health Insurance Card
ELGA	Electronic health file
ESA	European System of Accounts
EU	European Union
EU15	Member states that joined the EU before 2004
EU27	All EU member states
FPÖ	Freedom Party of Austria
GAMED	International Academy for Holistic Medicine, Vienna
GDP	Gross domestic product
GÖG	Gesundheit Österreich GmbH
GP	General practitioner
GR	Growth rate
GSBG	Health and Social Assistance Act
GSVG	Act on Social Insurance for the Self-Employed
GuKG	Health and Care Act
HBSC	Health Behaviour in School-Aged Children
HDG	Main diagnosis group
HTA	Health technology assessment
HVSV	Federation of Austrian Social Security Institutions
ICD	International Classification of Diseases
ICT	Information and Communication Technology
IMF	International Monetary Fund
KAKuG	Federal Hospitals Act
KAL	Catalogue of Ambulatory Services
LDF	Performance-oriented diagnosis-related group
LKF	Performance-oriented hospital financing
MEL	Single medical service
MTD	Higher Medical – Technical Services
MTF-SHD-G	Federal Law Regulating the Specialist Medical – Technical Profession and Paramedical Profession
NATO	North Atlantic Treaty Organization
NÖGUS	Lower Austrian Health and Social Fund
NMS	New Member-state (EU countries that joined the EU in 2004 or 2007)
ÖAK	Austrian Pharmacists' Association
ÖÄK	Austrian Physicians' Chamber
ÖBIG	Austrian Federal Institute for Health
ÖBVP	Austrian Federal Association for Psychotherapy
OECD	Organisation for Economic Co-operation and Development
ÖQMEd	Austrian Society for Quality Assurance and Quality Management in Medicine GmbH
ÖSG	Austrian Structural Plan for Health
ÖVP	Austrian People's Party

Abbreviations	
Pharmig	Austrian Association of Pharmaceutical Companies
PHIS	Pharmaceutical Health Information System
PPP	Purchasing power parity
PRIKRAF	Private Hospitals' Financing Fund
PROHYG	Organization and Strategy for Hospital Hygiene
RSG	Regional Health Plan
SAGES-Gesetz	Salzburger Health Fund Act
SHA	OECD System of Health Accounts
SPÖ	Social Democratic Party of Austria
VAEB	Austrian Miners' and Railway Workers' Insurance Fund
VVO	Association of Austrian Insurance Companies

List of tables, figures and boxes

Tables		page
Table 1.1	Demographic trends, selected years	3
Table 1.2	Key economic data for Austria, 2004–2011	4
Table 1.3	State expenditure and national debt in Austria, 2004–2010	5
Table 1.4	Life expectancy and mortality, 1980–2010 (selected years)	11
Table 1.5	Causes of death per 100 000 inhabitants, age-standardized mortality rate, 1995–2010	12
Table 1.6	Mortality and health indicators, 1995–2010	13
Table 1.7	Morbidity and factors relevant to health, selected years	15
Table 1.8	Child and mother health, selected years	16
Table 2.1	Overview of task allocation according to degree of centralization	42
Table 2.2	Minimum basic data set of hospitals' diagnosis and performance reports	48
Table 2.3	Regulations on licensing and analysis of need	54
Table 2.4	Overview of regulations on registration of the health-care professions	58
Table 3.1	Development of total health expenditure in Austria, 1995–2010 (selected years)	77
Table 3.2	Composition of health expenditure, as % of current health expenditure	82
Table 3.3	Public expenditure on applied and experimental research, 2007–2010	83
Table 3.4	Current health expenditure and growth by sources of finance	85
Table 3.5	Health insurance funds and insured persons (insurance relationships), 2011	89
Table 3.6	Health welfare institutions, 2010	92
Table 3.7	Social health insurance spending, nominal figures in € millions, 2005–2011	93
Table 3.8	Contribution rates in social insurance/health insurance, 2010	96
Table 3.9	Raising and pooling of public health funds	97
Table 3.10	Structure of private sector expenditure in € millions, 2004 and 2010	105
Table 3.11	Cost-sharing for ambulatory care, 2010	107
Table 3.12	Cost-sharing regulations by provider level and insurance fund, 2012	109
Table 3.13	Current expenditure of private health insurance funds in € millions, 2010	112
Table 3.14	Individuals insured against hospital costs under private insurance policies, 2010 (in € millions)	113
Table 3.15	Breakdown of private health insurance market, 2010	114
Table 3.16	Typical payment mechanisms of service providers, 2011	118
Table 3.17	Sources of hospital funding, 2004 and 2010	122

Tables

	page	
Table 3.18	Performance-oriented hospital financing system (LKF), 2011	124
Table 3.19	Development of the LDF system, selected years	125
Table 3.20	Distribution of budgeted funds by Länder, 2007	129
Table 3.21	Development of costs in fund hospitals	130
Table 3.22	Remuneration structure and development in specialist and generalist physician care (§ 2 insurers), 2010	134
Table 4.1	Health expenditure and investments, 2010	136
Table 4.2	Ratio of beds to inhabitants and investments in fund hospitals by Land, 2000 and 2010	139
Table 4.3	Bed provision and use in acute hospitals and long-term care facilities, 1995–2010	140
Table 4.4	Major equipment numbers in Austria, 2002 and 2010	142
Table 4.5	Access to and use of computers and the internet, 2002–2011	143
Table 4.6	Employment in the health-care system and in the whole economy 1997–2010	148
Table 4.7	Health professionals in EU member states, 2010, or most recent available figures	149
Table 4.8	Practising physicians, 2000–2010	152
Table 4.9	Staff in Austrian hospitals, 2000–2010	154
Table 5.1	Uptake of preventive examinations, number of appointments 2000–2010	176
Table 5.2	E-card ambulatory consultations per insured person, 2011	185
Table 5.3	Hospitals and available beds by responsible body, 2010	190
Table 5.4	Rates of long-term care allowance, from January 2011	200
Table 5.5	Number and level of care of long-term care allowance recipients, 2010	201
Table 5.6	Outpatient psychiatric care, 2007	208
Table 5.7	Acute inpatient psychiatric provision, 2010	209
Table 6.1	Main reforms and policy initiatives since 2005	218
Table 6.2	Positions and debates on health-care system reform and hospital reform	239
Table 7.1	Standardized five-year breast cancer mortality and 30-day-in-hospital mortality rate for heart attack and stroke	254

Figures

	page	
Fig. 1.1	Map of Austria	2
Fig. 1.2	Austrian population 2010–2020, by gender and age group	3
Fig. 2.1	Organization of the health-care system, 2012	18
Fig. 2.2	Organizational structure of social security	33
Fig. 2.3	The Austrian medications system, 2010	60
Fig. 3.1	Development of health expenditure as a % of GDP in selected countries, 1995–2010	78
Fig. 3.2	Health expenditure as % of GDP, 2010	79
Fig. 3.3	Health expenditure in US\$ PPP per inhabitant, 2010	80
Fig. 3.4	Public expenditure as % of total health expenditure, 2010	81
Fig. 3.5	Sources of financing in % for current health expenditure, 2010 and growth since 2005	84
Fig. 3.6	Health expenditure in € per adult, by sex and age bracket, 2007	86
Fig. 3.7	Financial flows in the health-care system, 2010	87

Figures

		page
Fig. 3.8	Bodies financing inpatient and ambulatory care in fund hospitals, 2010	124
Fig. 4.1	Level and development of per capita net capital stock in the health-care system, 2010	137
Fig. 4.2	Acute beds per 1 000 inhabitants, 1990–2010	141
Fig. 4.3	Number of physicians per 100 000 inhabitants, 1990–2010	147
Fig. 4.4	Number of physicians and nursing staff per 1 000 inhabitants, 2010 or latest available year	150
Fig. 4.5	Nursing staff numbers per 100 000 inhabitants, 1990–2010	151
Fig. 5.1	Ambulatory contacts with physicians per adult, 2010 (or last available year)	187
Fig. 5.2	Cases per capita in selected areas of provision, 2010 and average annual growth rate (AAGR) since 2000	188
Fig. 5.3	Indicators of care provision in specialist inpatient rehabilitation centres, 1999–2009	198
Fig. 5.4	Elements of graded hospice and palliative care	206
Fig. 7.1	The health expenditure system is marked by a mixed financing system	245
Fig. 7.2	Higher life expectancy could be achieved with the money invested	252
Fig. 7.3	Potential life expectancy gains (in years) in Länder	252
Fig. 7.4	Deviation of avoidable mortality rate per 100 000 inhabitants from OECD average	253
Fig. 7.5	Expenditure per care area (as percentage) and growth rate (GR) relative to health expenditure (elasticity)	258
Fig. 7.6	Comparison of individual health-care system expenses by Land, 2010	262

Boxes

		page
Box 5.1	A typical patient patient pathway	178
Box 5.2	Typical emergency care provision: example Vienna	193
Box 6.1	Contents and debates of the health reform 2008	221

Abstract

This analysis of the Austrian health system reviews recent developments in organization and governance, health financing, health-care provision, health reforms and health-system performance.

The Austrian health system provides universal coverage for a wide range of benefits and high-quality care. Free choice of providers and unrestricted access to all care levels (general practitioners, specialist physicians and hospitals) are characteristic features of the system. Unsurprisingly, population satisfaction is well above EU average. Income-related inequality in health has increased since 2005, although it is still relatively low compared to other countries.

The health-care system has been shaped by both the federal structure of the state and a tradition of delegating responsibilities to self-governing stakeholders. On the one hand, this enables decentralized planning and governance, adjusted to local norms and preferences. On the other hand, it also leads to fragmentation of responsibilities and frequently results in inadequate coordination. For this reason, efforts have been made for several years to achieve more joint planning, governance and financing of the health-care system at the federal and regional level.

As in any health system, a number of challenges remain. The costs of the health-care system are well above the EU15 average, both in absolute terms and as a percentage of GDP. There are important structural imbalances in health-care provision, with an oversized hospital sector and insufficient resources available for ambulatory care and preventive medicine. This is coupled with stark regional differences in utilization, both in curative services (hospital beds and specialist physicians) and preventative services such as preventive health check-ups, outpatient rehabilitation, psychosocial and psychotherapeutic care and nursing. There are clear social inequalities in the use of medical services, such as preventive health check-ups, immunization or dentistry.

One of the key weaknesses of the health-care system is in the prevention of illness. Spending on preventive medicine, at 2% of total health spending, is significantly lower than the EU15 and OECD average (both 3%), and also shows a below-average rate of growth. It remains to be seen whether the focus on health promotion and prevention of the “framework health goals” approved in 2012 will be translated into concrete measures, whether clear responsibilities for implementation can be assigned, and whether sufficient funding will be made available. This would be likely to improve the health of the Austrian population and would help to reduce costs associated with preventable diseases.

Executive summary

The confederation of Austria is made up of nine regions (the Länder). Each region (Land), except the capital city, Vienna, is divided into districts (administrative regions), which are themselves divided into local authorities. The 8.4 million inhabitants of Austria are among the wealthiest in the EU, with a GDP per capita of about €35 800. The majority of the country is in the Alps, and only a third of its landmass lies lower than 550 m above sea level. Like the rest of the Eurozone, the Austrian economy experienced a recession in 2009, from which it swiftly recovered in 2010 and 2011.

The Austrian health system has been shaped by three important institutional characteristics: (1) The constitutional make-up of the state with health-care responsibilities being shared between the federal level and the Länder; (2) a high degree of delegation of responsibility to self-governing bodies; and (3) a mixed model of financing, to which the state and social health insurance contribute almost equal shares.

Since 1980 life expectancy at birth has risen by 8 years, and in 2010 stood at 78 years for men and 83 years for women (above the EU27 averages of 75.3 and 81.7 respectively). Circulatory illnesses and cancer are the most common causes of death and together are responsible for more than two thirds of deaths. However, age-standardized mortality rates for circulatory illnesses, particularly ischaemic heart disease and cerebrovascular accidents (strokes), have fallen more than 40 per cent since 1995. In 2010 just under 70 per cent of all Austrians assessed their own state of health as “very good” or “good” (again somewhat higher than the EU average of 67%). Income-related inequality in states of health has increased since 2005, though it remains relatively low when compared internationally.

Organization and governance of the health-care system

Almost all areas of the health-care system except inpatient care are constitutionally a federal responsibility, overseen by the Federal Ministry of Health assisted by a range of national institutions. However, in practice the Austrian health-care system is highly decentralized and involves multiple actors. It is characterized by regionalized provision within a regulatory framework determined at the federal level, delegation of statutory tasks to legally authorized stakeholders in civil society, and a wide degree of consensus required for decision-taking.

Implementation of health insurance and ambulatory care has been delegated to social security institutions, which are managed as self-governing bodies, brought together in a national Federation of Austrian Social Security Institutions (HVSV). The hospital sector is treated differently, with only the basics defined at federal level, the specifics of legislation and implementation being the responsibility of the Länder. There is an overall national structural plan for the health system (the ÖSG), which sets the parameters for regional and local provision. Planning in the Austrian health-care system is largely input-oriented. The medium-term goal for planning in the health sector is “needs-based planning”, where need is calculated according to morbidity statistics. However, the necessary data and information are not yet available.

In the ambulatory and rehabilitation sectors, as well as in the field of medication, health-care is organized through negotiations between the social security institutions and the Chambers of Physicians and Pharmacy Boards together with the representatives of other health-care professions. The annual collective contracts encompass payment regulations, service volumes, and a location-based capacity plan, which sets out the local distribution of contracted physicians and group practices.

For hospital (inpatient) care, the Länder are obliged to provide sufficient facilities for their population. In principle, they do this in compliance with federal requirements and in cooperation with the social security institutions. However, there are only limited sanctions if Länder do not comply with federal requirements. Länder also license health-care providers (except independent physicians and group practices). The Federal Health Agency (BGA) is the central facility for supra-regional and cross-sector planning, governance and finance of the health-care system. The BGA also channels federal resources to nine regional health funds, which pool resources for the financing of inpatient care at the Länder level.

The Federal Health Agency's governing body brings together a wide range of stakeholders, and decisions generally require agreement between the federal government, the Länder and the social security institutions. The regional funds similarly have a broad range of stakeholder involvement and require a broad consensus to make decisions; this is intended to improve cooperation between social security and the Länder, in order to make cross-sector improvements to care and to the health-care system as a whole.

Management of public hospitals is outsourced to private hospital management companies in every Land except Vienna. Church institutions are also important in the health system. In particular, there are numerous hospitals run by catholic orders or by the social welfare branch of the evangelical church, and these play an important role in supporting the severely ill and in providing palliative care.

Public health services (ÖGD) are generally coordinated and supervised at federal level but implementation is mostly delegated to local and Länder authorities, as well as social security institutions.

Financing

Total health expenditure in Austria in 2010 amounted to €31.4 billion or approximately €3750 per resident. It was higher than the EU15 average, at approximately 11% of GDP (the EU15 average is 10.6%). The proportion of public health expenditure (taxes and social insurance contributions) within that total expenditure was 77.5%, which is slightly above the EU15 average of 77.3%.

Social insurance funds are the largest source of finance, accounting for approximately 52% (€13.3 billion) of current health expenditure (though only 0.7% of long-term care expenditure) in 2010. The federal level, Länder and local authorities covered approximately 24% (€6.1 billion) of expenditure on health-care and 81% (€3.6 billion) of expenditure on long-term care. Debt has also been a significant source of financing in Länder. These debts have often been "outsourced" from Länder (the owners of hospitals) to hospital management companies. Consequently, the national growth and stability pact agreed in 2012 has had an important influence on hospital financing as hospital debts now had to be included in regional accounts. In 2009, the total debt of hospitals or their owners to the capital markets was approximately €3.3 billion, and had doubled since 2006.

Almost the entire population (99.9%) had health insurance coverage in 2011. Membership of a health insurance scheme is determined by place of residence and/or occupation, so there is no competition between funds. Social insurance contributions are determined at federal level by parliament. In recent years, they have been fixed at 7.65% of income for most of the population, but individuals earning more than €4110 per month (or €4795, depending on the type of insurer) do not have to pay contributions for income exceeding this threshold. Any person insured by a social insurance fund has a legal entitlement to a broad range of in-kind and financial benefits. The guiding principle behind the system is that the provision of treatment must be sufficient and appropriate, but should not exceed what is necessary.

In 2010 private health insurance funds financed approximately 4.7% of current expenditure, predominantly through supplementary insurance schemes, which principally cover services in hospitals (“hotel services” and freedom to choose physicians). Patients contributed almost 17% of current expenditure through out-of-pocket payments (mostly additional payments for health-care services; almost 25% related to pharmaceuticals). Low-income individuals, or individuals with chronic illnesses can be exempted from prescription fees and other surcharges.

Payment of providers differs depending on the source of financing and the type of provider. Public and non-profit hospitals providing statutory services receive a ‘Diagnosis-Related Group’ (DRG)-based budget from the regional health fund. Most health insurance funds pay for ambulatory services using a mixed payment system, combining flat-rate payments (per patient, per quarter-basic service compensation) and fee-for-service payments. The allocation of these payment elements varies by specialty and Land. While overall remuneration for staff within the public system is perceived as relatively low, income for GPs is around the average for OECD countries, and the income of specialist physicians is amongst the highest in the OECD (although behind that in Germany and the Netherlands).

Physical and human resources

The level of investment in health-care infrastructure is high by international standards. Also, compared to other OECD countries, the Austrian population enjoys above-average access to major medical-technical equipment, particularly in the area of computed tomography and magnetic resonance imaging. However

the amount invested into infrastructure varies between Länder. In the hospital sector, some Länder grant no investment subsidies, while in other Länder, up to 70% of investment costs are covered by the regional health fund.

There are around 270 hospitals in Austria, of which 178 provide acute inpatient care. One of the stated aims of Austrian health-care planning has been to reduce the number of hospital beds. Between 2000 and 2010, the average reduction in bed numbers across Austria was 10%, though with much variation between Länder. However, compared to the rest of the EU, bed numbers per head in Austria are still amongst the highest, though approximately level with Germany.

Use of information and communication technologies within the health-care system is generally good, though more so in hospitals than in the ambulatory sector. An electronic social insurance card was introduced throughout the country in 2005; piloting is underway to introduce an electronic health file.

At 4.8 physicians per 1000 residents, Austria has the second highest physician-to-population ratio in the EU, after Greece. Austria trains an above-EU-average number of medical students, and (unusually for a west-European country) is a net exporter of physicians; there is concern within Austria about the potential risks from such migration. The number of nurses per 1000 residents, however, is slightly below the EU-27 average. This means that Switzerland, Germany and many northern European nations have significantly more health-care staff overall per head.

Provision of services

Although there is a national public health service (ÖGD), preventive activities are not well coordinated and both implementation and financing remain heavily fragmented. One example is vaccination: by the age of two, one-fifth of children have not had their standard vaccinations. Compared across the OECD, Austria's vaccination rate is very low at 74 per cent for measles and 83 per cent for pertussis (whooping cough).

A fundamental characteristic of the Austrian health-care system is that all members of the population have relatively unrestricted access to all levels of care (general practitioners, specialists and hospitals). This advantage is, however, counterbalanced by the fact that the maze of different care options often makes it difficult for patients to find the right one. Although attempts are

made to improve care for chronically ill patients with the help of structured disease management programmes (such as for diabetes), most patients are still confronted with high ‘search costs’.

In the ambulatory sector, patients can choose between single-doctor practices, hospital outpatient clinics, freestanding outpatient clinics and, since 2010, group practices of doctors; just under half of all active physicians in Austria work in independent practice. An exact division between primary care and secondary care is not possible, as hospital outpatient clinics also provide a lot of primary care. Treatment by specialist physicians is also available at individual practices as well as at freestanding and hospital-based ambulatory clinics.

In 2011, patients consulted a general practitioner, specialist physician or other social security contracted service provider an average of 14 times. However, about 44% of independently practising physicians were not contracted to any health insurance fund. If patients go to one of these physicians, they have to pay the fee directly but will be reimbursed up to 80% of the fee that would have been paid to contracted physicians for equivalent services.

For inpatient care “standard” (basic secondary care services), and “specialist” (eg orthopaedic surgery) hospitals as well as highly developed “central” (full secondary and tertiary services, eg university) hospitals are available. Attempts have been made over many years to replace inpatient with ambulatory care, where appropriate. The main point of conflict in this process is how to compensate social security institutions for an increase in ambulatory care costs if inpatient care (the responsibility of the Länder) is scaled down. In general, the coordination of primary and secondary care as well as of acute and long-term care suffers from fragmented responsibilities.

The Federation of Austrian Social Security Institutions provides a positive list of pharmaceuticals, the so-called Reimbursement Codex (EKO). Of the approximately 9,800 permitted medications in Austria (variations in form and dosage counted separately, but not variations in pack size), around 4200 were contained in the reimbursement codex at the start of 2010. All insured patients in Austria have free access to any physician-prescribed medication listed in the reimbursement codex upon payment of a prescription fee (€5.15 in 2012). New patent-protected medications included in the reimbursement codex are not permitted to be above the average price for the EU; generics are subject to substantial compulsory price reductions.

Long-term care policy is rooted in the goals and values of the current social welfare model, where family responsibility for care of dependents comes before that of the state (principle of subsidiarity). A needs-oriented long-term care allowance enables people in need of long-term care to organize and direct their own care provision as required. Patients have a right to claim long-term care allowance payments irrespective of their income if care is expected to be needed for at least six months. At the end of 2010, 443 395 persons or almost 30% of the population above 65 received long-term care allowances. Up to three-quarters of all older people who require care are cared for chiefly by family members, 80% of whom are women; there is provision for financial support as well as respite care.

Principal health reforms

Health reforms between 2005 and 2012 can be ordered into the following broad thematic areas:

(1) Improvement in coordination and governance of the health-care system: since the health-care reform of 2005 and the establishment of the Federal Health Agency, all the main stakeholders in the health-care system are included in the development of the main planning instrument, the Austrian Structural Plan for Health (ÖSG). Consequently, national planning and governance now extends to the whole provision structure (inpatient, ambulatory and rehabilitation). At the same time, national planning has been reduced to defining only the care provision framework, while detailed planning is decentralized and carried out by regional health funds. As regional level bodies bring together Länder, municipalities and social security institutions for joint regional planning, coordination between inpatient and ambulatory provision was intended to be improved. In addition, the introduction of “reform pool” funding at regional level was intended to provide financial incentives for shifting care provision away from the inpatient and towards the ambulatory sector. However, the implementation of joint planning is difficult as responsibilities remain fragmented in the health-care system. The decision-making rules of regional health funds give veto power to Länder and social security for their areas of responsibility and, thus, hinder reorganization of care across sectors.

(2) Securing financing for the health insurance funds and for long-term care: in order to reduce the level of indebtedness of the health insurance institutions, the federal authorities created a Structural Health Fund for Health Insurers in 2010 that was funded until 2014 with a total of €260 million of general

tax revenue. Through this fund the federal government has obtained strong leverage over health insurers as it may link the disbursement of funds to the achievement of agreed targets, particularly concerning financial consolidation. For the financing of long-term care, the Parliament decided in 2011 to establish a long-term care fund, which is intended to cover the increases in costs experienced by Länder and local authorities from 2011 to 2014. In total €685 million will be paid into the fund, two thirds of which come from the federal level and one third from the Länder and local authorities.

(3) Expansion of health insurance protection and limitation of financial burden: the introduction of the need-based minimum income in September 2010 brought the recipients of this benefit (previously social benefit) into the general statutory health system. In addition, the 2008 introduction of a cap on prescription fees for all insured individuals has limited the (sometimes considerable) financial burden caused by the prescription fee. Individuals for whom expenditure on prescription fees reaches more than 2% of their annual net income are exempt from paying the fee for the rest of the calendar year.

(4) Unification of responsibilities for medications and medical devices, opening up of the pharmaceutical market, slowing of growth in costs: in January 2006 AGES PharmMed was founded as the national licensing authority for medications in Austria. Subsequently, PharmMed was integrated into the Federal Office for Safety in Health care (BASG) and renamed the Medicines and Medical Devices Agency. Since 2006 there are also less stringent restrictions in force for licensing of pharmacies, in an attempt to encourage more competition. Pharmacies can now also open in areas where physicians run their own in-house pharmacies. To slow the increase in medication costs, a framework contract for pharmaceuticals agreed in 2011 stipulates that the pharmaceutical industry and wholesalers have to refund some €82 million of their profits earned during the period up to 2015 to the Federation of Social Security Institutions. However, in exchange, the federation has refrained from introducing measures which would allow more price competition or that might lead to an increased use of generic drugs. In addition, an agreement with pharmacies was recently renewed, specifying that pharmacies will have to pay €6 million annually to the Federation of Social Security Institutions.

(5) Other principal reforms concern the new scheme of group practices (Ärzte-GmbHs), promotion of care at home, the planned introduction of electronic health files, the expansion of quality assurance in hospitals, linking the amount of subsidy to hospitals from public budgets to a proportion of the

total level of taxation income, expansion of prevention through screening measures, a National Nutrition Action Plan, a Children's Health Strategy and the development of framework health goals for Austria.

Assessment of the health system

Austrian health policy follows the principle of ensuring equal access to high-quality care for all, irrespective of income, age and gender. In many respects, the Austrian health-care system comes very close to achieving this aim: universal health insurance coverage guarantees access to a wide range of services. Although the level of user-charges and direct payments is relatively high compared to other countries, access to health-care is ensured by numerous exemptions, such as the prescription fee cap. Besides social health insurance, the progressive tax system also makes a significant contribution to the financing of the Austrian health-care system. As a result, the health-care system is funded in a way that is comparatively fair.

Only around 2% of the population complain of difficulty accessing services, with only a very small proportion making reference to barriers resulting from costs. According to OECD comparative studies, income-related inequality in access to general practitioners is very low. In public satisfaction surveys, the health-care system regularly performs very well: more than 90 per cent of people surveyed think that the Austrian health-care system is good or quite good.

Nevertheless, the Austrian health-care system has many areas that require improvement. Firstly, there are obvious imbalances in the structure of care: the inpatient care sector is particularly dominant while proportionately less funding than in other countries is available for ambulatory care, including hospital outpatient departments, and for preventive medicine. At the same time, there are stark regional differences in utilization, both in curative services (hospital beds and specialist physicians) and preventative services such as preventive health check-ups, outpatient rehabilitation, psychosocial and psychotherapeutic care and nursing. There are clear social inequalities in the use of medical services, such as preventive health check-ups, immunization or dentistry. Income-related inequality in health has increased since 2005, although it is still relatively low compared to other countries. The availability and comparability of data to monitor the health system is also limited, and is complicated by the multitude of systems and the lack of consistent standards within Austria.

The costs of the Austrian health-care system are high. Both in absolute terms and as a percentage of GDP, they are well above the EU15 average. However, the number of healthy life years in Austria was almost three years below the EU average in 2010. International and Austrian studies indicate that there is much room for improvement regarding the efficiency of the health-care system. One fundamental cause of inefficiency is the fragmentation of responsibilities and the concomitant fragmentation of financing. The variety of different payment systems within individual sectors clearly contributes to imbalances in provision. Although a concerted effort is now being made to shift service provision away from the inpatient sector, the development of the ambulatory sector is lagging behind. The coordination of care is often poor. This applies not only to inpatient and ambulatory care but also to coordination between different levels of ambulatory care, between acute inpatient care and long-term care, and between physicians and other health-care professionals. The areas of health promotion and preventive medicine also require significant improvement.

Conclusions

The history and structure of the Austrian health-care system has been shaped by both the federal structure of the state and a tradition of delegating responsibilities to self-governing stakeholders. On the one hand, this enables decentralized planning and governance, adjusted to local norms and preferences. On the other hand, it also leads to fragmentation of responsibilities and frequently results in inadequate coordination. For this reason, efforts have been made for several years (particularly following the 2005 health-care reform) to achieve more joint planning, governance and financing of the health-care system at the federal and regional level.

Together with health insurance, the tax system makes a considerable contribution to the financing of the Austrian health-care system. This mixed financing model ensures that the health-care system is financed in a way that is relatively fair through progressive taxation. Another advantage is that the labour cost burden of health insurance contributions is relatively small. However, these advantages are balanced out by the costs of coordinating the interaction between health insurance-funded ambulatory primary and specialist care on the one hand, and on the other hand inpatient care, which is funded equally through both capped health insurance contributions and taxes. Although

empirical evidence is poor, efficiency may be improved by shifting inpatient care provision towards the ambulatory care sector. Also, continuity of care needs improvement, in particular for chronic diseases.

Furthermore, one of the key weaknesses of the health-care system is in the prevention of illness. Spending on preventive medicine, at 2% of total health spending, is significantly lower than the EU15 and OECD average (both 3%), and also shows a below-average rate of growth. The current discussion around national “framework health goals” places great emphasis on health promotion and prevention. It remains to be seen whether these goals can be translated into concrete measures, whether responsibilities for implementation can be assigned, and whether sufficient funding will be made available. This would be likely to improve the health of the Austrian population and would help to reduce costs associated with preventable diseases.

1. Introduction

In 2010, Austria had 8.4 million inhabitants, of whom 51.2% were women. Austria is a federal republic made up of nine Länder. Every Land (except Vienna) is divided into districts (administrative regions), which are themselves divided into local authorities. The majority of the country is in the Alps, and only a third of its landmass lies lower than 550 m above sea level. The legislative process is run on a bicameral system at federal level. The two chambers are the Nationalrat and the Bundesrat, which represents the Länder. At Länder level the legislative process is unicameral, and legislation is carried out by the Landtag. Cooperatively self-governing social insurance funds also have a lot of influence on the development of health and social policy.

In 2011, gross domestic product (GDP) totalled around €301.31 billion, or around €35 800 per head, significantly above average for the Eurozone. Like the rest of the Eurozone, the Austrian economy experienced a recession in 2009, from which it swiftly recovered thanks to relatively high growth rates.

Since 1980 life expectancy at birth has risen by eight years, and in 2010 stood at 78 years for men and 83 years for women. Circulatory illnesses and cancer are the most common causes of death and together are responsible for more than two-thirds of deaths. Age-standardized mortality rates for circulatory illnesses, particularly ischaemic heart disease and cerebrovascular accidents (strokes), have fallen more than 40% since 1995. In 2010, just under 70% of all Austrians assessed their own state of health as “very good” or “good”. Income-related inequality in states of health has increased since 2005, though it remains relatively low when compared internationally.

1.1 Geography and sociodemography

Austria is a federally administered parliamentary republic in Central Europe. A landlocked state of approximately 84 000 square km, it borders Switzerland and Liechtenstein to the west, Germany and the Czech Republic to the north, Slovakia and Hungary to the east and Slovenia and Italy to the south (Fig. 1.1). The lowest point is 114 m above sea level in the Pannonian Basin to the east of the country. The highest point, at 3798 m, is the Grossglockner mountain in the High Tauern (Eastern Alps). Around a third of the land mass lies less than 550 m above sea level. More than 40% of its area is covered by forest.

Fig. 1.1

Map of Austria



Source: Weltkarte (2012).

In 2010 Austria had a population of 8.39 million inhabitants, 51.2% of whom were women (Table 1.1). Since the year 2000, the population has increased by 4.7%. A population increase of almost 4%, to 8.71 million inhabitants, is predicted by 2020; the proportion of under-15s is expected to drop to 14.3% (from 17% in 2000), while the proportion of over-64s is set to rise to 19.5% (from 15.5%) (Fig. 1.2).

Table 1.1
Demographic trends, selected years

	1980	1990	2000	2010
Population (average for the year)	7 549 433	7 677 850	8 011 566	8 389 771
% change	–	1.7	4.3	4.7
Female population, %	52.7	52.1	51.6	51.2
Population aged 0–14, %	20.5	17.5	17.0	14.7
Population aged 15–64, %	64.2	67.6	67.6	67.7
Population aged 65+, %	15.4	14.9	15.5	17.6
Fertility rate (live births per woman)	1.6	1.5	1.4	1.4
Change	–	– 0.1	– 0.1	0.0
Birth rate (per 1000 adult women)	12.1	11.6	9.6	9.4
Change	–	– 0.5	– 1.0	– 0.2
Mortality rate (raw result per 1000 inhabitants)	12.3	10.7	9.5	9.2
Change	–	– 1.6	– 1.2	– 0.3
Proportion of the population in rural areas, %	34.6	34.2	34.2	32.4

Source: World Bank (2012).

Fig. 1.2
Austrian population 2010–2020, by gender and age group



Source: Based on data from Statistics Austria (2012b).

The numbers of inhabitants in each Land in 2010 ranged from 284 000 (Burgenland) to 1.71 million (Vienna). In 2009, the proportion of 25–64-year-olds with a tertiary-level qualification stood at 11.1% (men 11.9%;

women 10.2%); in 2001 this figure stood at 7.5% (men 8.8%; women 6.2%). Alongside that, the proportion of people who had completed only compulsory schooling decreased from 26.2% in 2001 to 19.5% (Statistics Austria, 2012b).

1.2 Economic conditions

After experiencing a period of moderate growth (at a rate of between 1 and 2%) in the early part of the new century, the Austrian economy experienced a spurt of growth from 2005 to 2007 (Table 1.2). As a result, in both 2006 and 2007, the Austrian economy grew 3.7% in real terms. The world economic crisis, which began in 2008, halted this upturn. As the crisis only broke out in the second half of the year, the slump is first recognizable in the 2009 figures. The Austrian economy shrank that year by 3.8% in real terms, though losses in comparison to other countries were relatively small. By 2010 the Austrian economy had already returned to a real growth rate of 2.3%, which increased to 3.1% in 2011.

Table 1.2

Key economic data for Austria, 2004–2011

	2004	2005	2006	2007	2008	2009	2010	2011
GDP, real terms (year 2000 prices), billion €	221.3	226.6	234.9	243.6	247.0	237.6	243.1	250.6
% change	–	2.4	3.7	3.7	1.4	–3.8	2.3	3.1
GDP, nominal, at market prices, billion €	234.7	245.2	259.0	274.0	282.8	274.8	286.2	301.3
% change	–	4.5	5.6	5.8	3.2	–2.8	4.1	5.3
Consumer price index (base year 2005 = 100)	97.9	100.0	101.7	103.9	107.3	107.7	109.5	113.4
% change	–	2.1	1.7	2.2	3.2	0.4	1.7	3.6
Employed (000s)	3 170	3 306	3 386	3 435	3 511	3 513	3 511	–
% change	–	4.3	2.4	1.4	2.2	0.0	–0.1	–
Employee compensation according to national accounts, current prices, billion €	115.4	119.5	125.1	131.5	138.5	139.7	143.0	149.7
% change	–	3.6	4.7	5.1	5.3	0.9	2.4	4.7
Compensation per employee, € x 1000	36.4	36.2	37.0	38.3	39.4	39.8	40.7	–
% change	–	–0.6	2.2	3.6	3.0	0.8	2.4	–
Unemployment rate (registered unemployed, nationally), in %	7.1	7.3	6.8	6.2	5.9	7.2	6.9	6.7
Unemployment rate (EUROSTAT definition), in %	4.9	5.2	4.8	4.4	3.8	4.8	4.4	–
Nominal unit labour cost index (base year 2005 = 100)	98.8	100.0	101.1	102.2	106.1	111.3	111.3	112.8

Sources: Eurostat (2012); Statistics Austria (2012b); unemployment rate – National Register of Unemployed.

The number of people employed reached 3.5 million in 2008, but stagnated in the following year of crisis. This is also apparent from the unemployment rate, which increased from 5.9% (nationally registered unemployed, 2008) to 7.2% (2009). Nonetheless Austria still has one of the lowest unemployment rates in Europe. The post-2009 improvement in the economic situation is reflected in 2010 and 2011 figures.

At the outbreak of the crisis, the Austrian federal government attempted to alleviate its negative effects with rescue packages for the economy and the banks (BMF, 2010). This was noticeable in the increase in public spending from 2008 to 2009. Government spending as a percentage of GDP grew 3.6% between 2008 and 2009 (Table 1.3). Correspondingly, the primary balance worsened, resulting in an increase in national debt, which increased from around 60% in 2007 to as much as 70% by 2010.

Table 1.3

State expenditure and national debt in Austria, 2004–2010

	2004	2005	2006	2007	2008	2009	2010
Government spending, % of GDP	53.8	50.0	49.1	48.6	49.3	52.9	52.5
Change	–	–3.8	–0.9	–0.5	0.7	3.6	–0.4
Primary balance, % of GDP	–1.6	1.2	1.2	1.9	1.7	–1.3	–1.7
Change	–	2.8	0.0	0.7	–0.2	–3.0	–0.4
National debt, % of GDP	64.7	64.2	62.3	60.2	63.8	69.5	71.8
Change	–	–0.5	–1.9	–2.1	3.6	5.7	2.3
Public spending on health-care, % of GDP	7.6	7.6	7.6	7.5	7.8	8.3	8.1
Change	–	0.0	0.0	–0.1	0.3	0.5	–0.2

Source: Eurostat (2012).

Public health expenditure as a percentage of GDP remained constant from 2004 to 2007. Due to a reduction in GDP, public health expenditure as percentage of GDP increased in 2009 to 8.3% before dropping back to 8.1% in 2010.

1.3 Political conditions

Austria is a democratic republic and a federal state composed of nine Länder: Burgenland, Carinthia, Lower Austria, Upper Austria, Salzburg, Styria, Tyrol, Vorarlberg and Vienna. Every Land (except Vienna) is divided into districts (administrative regions), which are themselves divided into local authorities. The federal capital and seat of the highest governmental bodies is Vienna.

The federal legislative process is carried out by the Nationalrat in tandem with the Bundesrat. The Nationalrat has 183 members and is, in general, elected for five-year terms, although the term can be shortened under exceptional circumstances.

The Bundesrat represents the legislative interests of the Länder at federal level. Its members are elected by the Landtag of each individual Land for the duration of that Land's legislative term. The number of members sent by each Land corresponds to the population of that Land relative to that of the most populous Land, down to a minimum of three members per Land. The Bundesrat has a "suspensive" (postponing) right to veto and can appeal against legislative decisions of the Nationalrat. If the Nationalrat repeats its original decision without amendments (a *Beharrungsbeschluss*), the act will still become law. However, in certain cases, laws require the agreement of the Bundesrat to be passed.

At the start of each legislative period, the Nationalrat is obliged to establish committees, which prepare the debates for the plenum. Committee members are nominated and selected from among the members of the Nationalrat. The following committees must always be established:

- the Steering Committee (through which the Nationalrat plays its part in the executive branch of the federal government);
- the Standing Subcommittee, which is chosen by the Steering Committee (also exists during times when there is no Nationalrat and grants approval to emergency decrees by the President);
- other standing committees (e.g. Audit Committee and Subcommittee, Immunity Committee, Budget Committee and Subcommittee).

In addition, committees are usually established for certain specific areas of governmental responsibility (e.g. Constitution Committee, Justice Committee, Health Care Committee).

The initiative for a new law or the amendment of an existing one can come from a variety of stakeholders, mostly from within the government (government bill), but also from unions or industry, as a result of the Austrian tradition of social partnership. The parliamentary process is divided into phases (readings). The final text of a law is passed during the third reading before it is handed over to the Bundesrat, after whose approval the law must be certified by the President and promulgated by the Chancellor.

At Länder level the legislative process is unicameral, and legislation is carried out by the Landtag. The federal government has the right to object to resolutions by a Landtag, if there is a possible danger to federal interests.

Federal administration can be carried out either by national bodies (direct administration) or by Land-level ones (indirect administration). Indirect federal administration at Land level is taken care of by the state governor (*Landeshauptmann*) and his or her subordinate authorities but the state governor is bound to follow the direction of the responsible federal minister.

The local authorities are the smallest unit of government of the Austrian state and, in contrast to the governmental authorities at federal and regional level, have no legislative power. The Federal Constitutional Law gives local authorities the right to self-government. The latter authorities manage their own budgets and absorb duties of local ambit which are suitable to be carried out at this level (e.g. local town planning). Alongside this, these local authorities can be handed additional tasks by the legislative bodies at federal and regional level, which are then carried out under instruction on behalf of the relevant authority.

The average level of trust in political institutions in Austria is relatively high in comparison to Germany and France. However the public's mutual trust seems to be lower than in France, for example (Eurofound, 2009). With regard to trust in public administration, Austria is in 15th place (10th in Western Europe) out of 178 countries surveyed (Transparency International, 2010a). In this, Austria stands level with Germany, but behind Switzerland and Luxembourg, and significantly better than both France (25th place) or Italy (67th place).

The Republic of Austria is marked by the influence of two big political parties, the conservative Austrian People's Party (ÖVP) and the social democratic SPÖ. In the 1980s the party political system, which had been relatively static up to that point, opened up, on the one hand through the entrance of a new party, the Greens, and on the other hand through the new positioning of the Freedom Party (FPÖ) as a populist right-wing party. In 2005 the FPÖ experienced a split when the BZÖ (Alliance Future Austria) was founded. In the Nationalrat elections in 2008, the FPÖ and BZÖ together reached around the same total strength as the ÖVP. The political landscape in Austria is currently dominated by the SPÖ, as the government party with the largest mandate, followed by their coalition partner the ÖVP.

1.3.1 Federal constitution and division of powers

Division of powers (division of responsibility) lies at the core of the Austrian Federal Constitution. Articles 10 to 15 of the Federal Constitutional Law regulate the division of responsibility between the federal and Land level in law-making and execution of laws (administration) of laws. Depending on the issue, the division of responsibility differs. There are four main categories of responsibility:

- Legislation and administration are a federal responsibility (e.g. federal finances, lending, the monetary and banking systems, civil and criminal law, motoring, business and industry, the military, social insurance, the health-care system and nutrition, including food safety).
- Legislation is a federal matter, administration is the responsibility of the Land (e.g. citizenship, social housing, traffic policing).
- Framework legislation is a federal matter, implementing legislation and administration is the responsibility of the Land (e.g. land reform; maternity, infant and children's services; hospitals and nursing homes, and the health spa system).
- The general clause in favour of the Länder rules that all unspecified matters of both legislation and administration are the responsibility of the Länder (e.g. farming, tourism, the ambulance service, cinema and other events, kindergartens and crèches, the fire service and matters related to funerals).

There is a clear hierarchical relationship between the federal government and the Länder (Öhlinger, 2004). From this point of view, the Austrian federal state is more akin to a centralized state with some decentralized elements.

1.3.2 Financial equalization and agreement under Article 15a of the Federal Constitutional Law

The Constitutional Finance Law establishes a framework for financial relations between the federal government, the Länder and the local authorities. It stipulates that, in principle, each body must cover its own expenses. It gives responsibility for allocating taxation rights to the federal government and gives it powers to make contributions to Länder and local authorities. Furthermore, it emphasizes the need to take into account the performance of each body when allocating finances.

The Financial Equalization Act is a temporary law, re-negotiated typically every three to six years, which regulates the financial relations between the regional bodies. It deals with the allocation of tax income among regional bodies, and regulates contributions from the federal level to Länder and local authorities. A significant amount of funds is allocated through the financial equalization system – both on the level of targeted subsidies for hospitals, as well as on the level of tax yields for Länder and local authorities. The 2008 agreement on financial equalization brought substantive change, under which all regional bodies' financial contributions for hospitals are based on general tax revenue (Financial Equalization Act 2008; see Chapter 6).

Under the National Growth and Stability Pact, the Länder have to reduce their deficits from the current level (0.54% of GDP) and achieve a surplus of 0.01% by 2016. Similarly, local authorities must balance their accounts. Should the Court of Auditors find irregularities in Länder's budgets, an independent committee can be convened to rule on the matter. If it is determined that the stability pact has been broken, sanctions can be levied against the offender. The relationship between the federal government and the Länder requires a high degree of coordination and cooperation. One important instrument for cooperation between the federal government and the Länder are agreements under Article 15a of the Federal Constitutional Law, which can be made between the federal government and (all or individual) Länder. This instrument was further developed by the 1974 amendment to the Federal Constitutional Law. Developments in health and social care, particularly the management of hospital provision, have been determined through the use of this instrument (see Chapters 2, 3, 5 and 7).

1.3.3 The Austrian Economic and Social Partnership

The Austrian Economic and Social Partnership is a special system in which major economic interest groups cooperate with one another and the government. This informal collaborative group is made up of the Austrian Trade Union Confederation, the Austrian Federal Economic Chamber, the Austrian Chamber of Labour and the Austrian Chamber of Agriculture. These interest groups commit themselves to shared, long-term economic and socio-political goals, sharing the conviction that these goals will be better achieved through joint effort. The most important body within the Social Partnership is the Parity Commission. The Advisory Council for Economic and Social Affairs carries out research, and develops joint recommendations. The latter are implemented in the Austrian political system in various ways. During the legislative process, the associations have the right to review bills, and the social partners play

a role within the administration through numerous commissions, advisory councils and committees (e.g. the apprenticeships board). Within the judiciary, they make recommendations for the appointment of lay judges in labour and social courts. Since the beginning of the 1930s, representatives of the social partners have been assigned to illness and accident insurers, where their role is to lead the self-governing body. The development of health and social policy is therefore determined to a considerable extent by the self-governing body within social security, run by the social partners.

1.3.4 International relations

Austria has been a member of WHO since its founding in 1948, and is also a member of the World Trade Organization and the International Monetary Fund. It is one of 33 Organisation for Economic Co-operation and Development (OECD) member states, and works with NATO (North Atlantic Treaty Organization) under the “Partnership for Peace” programme. However, due to a long-standing policy of neutrality, it is not a member of NATO. Austria is also a member of Amnesty International, World Vision International and CARE (Cooperative for Assistance and Relief Everywhere), as well as Light for the World, a national confederation whose members include the Czech Republic, Belgium, and the Netherlands. Austria has been a member of the European Union (EU) since 1995, and has subsequently joined the European single currency (Eurozone). The euro has been the official currency since 1 January 2002.

1.4 Health status of the population

The period 1980–2010 saw a sharp rise in life expectancy, which grew by approximately one year every five years for women, and even more quickly for men (Table 1.4). While the gender gap was still seven years in 1980 (69 for men, and 76 women), this gap had narrowed to five years by 2010 (78 for men and 83 for women).

Regarding the difference between the sexes, a similar picture is apparent in age-standardized mortality rates: here too the men have been catching up with the women, reducing the gap. While the rate per 1000 men fell from 10 in 1983 to 5 in 2010, the rate for women fell from 6 (1983) to 3 (2010) per 1000 women. Overall, the trend has been positive for both men and women.

Table 1.4

Life expectancy and mortality, 1980–2010 (selected years)

	1980	1990	1995	2000	2005	2010
Life expectancy at birth, combined	72	76	77	78	79	80
Life expectancy at birth, men	69	72	74	75	77	78
Life expectancy at birth, women	76	79	80	81	82	83
Age-standardized mortality rate per 1000 men	10 [1983]	8	8	7	6	5
Age-standardized mortality rate per 1000 women	6 [1983]	5	4	4	3	3

Sources: World Bank (2012); Statistics Austria (2012b) – age-standardized mortality rate.

Table 1.5 shows the most common (age-standardized) causes of death in Austria by major diagnostic category (ICD-10) in 1995, 2000, 2005 and 2010. Over the observed period, diseases of the circulatory system are the most significant cause of death, in both men and women. Within this group, ischaemic heart disease and cerebrovascular illness (stroke) are of particular significance. However, a significant reduction in the standardized rates of these conditions was achieved during this period. Although a reduction in the second most common cause of death, malignant neoplasms (cancer), was also achieved, their incidence did not fall as much as diseases of the circulatory systems. Of particular significance within the group of malignant growths are the smoking-related cancers in the larynx, trachea, bronchi and lungs. This is the case for both men and women. Breast cancer also plays a significant role in women.

In contrast to the general trend of falling death rates, there has been a rise in mortality for infectious and parasitic diseases, such as the hepatitis virus (see section 5.1). Also rising was the age-standardized mortality figure per 100 000 residents in the diabetes mellitus cohort, which increased particularly sharply between 2000 and 2005 (see section 5.2). Finally, the rise in mental illness and behavioural disorders is noteworthy, becoming increasingly significant over the observed period. Furthermore, such disorders are now the second most common reason for new referrals to incapacity benefit after musculoskeletal diseases (Statistics Austria, 2010d).

Table 1.5

Causes of death per 100 000 inhabitants, age-standardized mortality rate, 1995–2010

	1995		2000		2005		2010	
	Women	Men	Women	Men	Women	Men	Women	Men
Infectious diseases								
Certain infectious and parasitic diseases	1.8	6.1	2.3	4.0	4.0	7.8	4.0	6.1
– of which: tuberculosis	0.4	1.5	0.4	1.1	0.3	0.7	0.3	0.4
– of which: viral hepatitis	0.1	0.1	0.2	0.5	2.2	3.9	1.7	2.5
– of which: HIV/AIDS	0.6	3.4	0.3	0.9	0.2	1.4	0.2	0.8
Non-infectious diseases								
Diseases of the circulatory system	307.8	464.6	261.6	384.7	203.0	287.2	170.7	252.7
– of which: ischaemic heart disease	109.0	211.9	95.0	182.5	85.5	146.7	68.8	132.9
– of which: cerebrovascular disease	74.9	92.5	62.7	73.9	36.6	46.0	30.5	33.8
Malignant neoplasms, total	153.4	249.8	140.9	225.4	132.5	215.7	125.4	198.4
– of which: colon	14.3	21.7	12.1	19.0	10.2	17.4	8.4	14.0
– of which: larynx, trachea, bronchi and lungs	14.5	65.3	17.2	57.9	17.2	53.0	20.0	48.2
– of which: breast	31.5	0.5	27.6	0.4	24.7	0.4	21.3	0.2
– of which: uterine neck (cervix uteri)	4.0	–	2.5	–	3.2	–	2.6	–
Diabetes mellitus	14.3	16.6	10.1	12.9	23.4	33.2	15.9	24.0
Mental illness and conduct disorders	1.9	7.3	2.0	7.3	3.4	11.7	3.9	12.2
Chronic lower respiratory diseases	11.1	32.0	11.5	29.0	13.7	33.8	12.7	26.8
Digestive diseases	25.5	57.4	22.7	45.2	19.7	41.9	16.4	35.3
External causes of death								
Transport accidents	6.4	22.2	4.9	17.3	4.1	14.1	2.8	9.8
Suicide	9.2	32.9	8.8	27.7	6.8	24.0	5.5	20.7
Incidents, circumstances unknown	0.3	1.0	0.3	1.0	0.7	1.1	1.4	2.9

Source: Eurostat (2013).

The age-standardized mortality rates are consistently higher for men than for women, with the exception of breast cancer (Table 1.5). In some cases, this figure is twice as high, for example in the area of malignant growths of the larynx, trachea, bronchi and lungs. Incidence of mental illnesses, conduct disorders (principally cases of alcoholism and drug addiction), and suicide is almost four times as high in men than in women.

While it has been possible to continually reduce mortality rates since 1995, a less favourable trend is evident in healthy years (Table 1.6). From 1995 onwards, particularly between 2000 and 2005, the number of healthy life years has fallen for both men and women. The last few years have seen a slight upwards trend. By contrast, disability-free life expectancy increased by more than one year for both sexes between the years 2000 and 2007. However, as data on healthy life years and disability-free life expectancy before and after 2005 are based on different sources, data are not necessarily comparable.

Just under 70% of all Austrians (69.6%) assessed their health status as “very good” or “good” in 2010. Men rated their health status as “very good” or “good” (72.1%) slightly more frequently than women (67.3%).

Table 1.6

Mortality and health indicators, 1995–2010

	1995	2000	2005	2010
Healthy life years, men	60.0	64.6	58.3	59.3
Healthy life years, women	–	68.0	60.1	60.7
Disability-free life expectancy, men, in years	–	68.6	–	70.5 ^b
Disability-free life expectancy, women, in years	–	72.7	–	74.2 ^b
Self-perceived health at “very good/good”, men, as % of over 15-year-olds	–	75.4 ^a	73.7	72.1
Self-perceived health at “very good/good”, women, as % of over 15-year-olds	–	71.9 ^a	69.8	67.3

Notes: ^a 1999, ^b 2007.

Sources: WHO (2012) for disability-free life expectancy; Eurostat (2012) for healthy life years.

There is a lack of standardized and reliable epidemiological data for many illnesses (Klimont, 2011). Good-quality data is available predominantly for disorders where there is a legal requirement to report. This mainly concerns the Austrian Cancer Register and the register of infectious diseases that have to be reported. Furthermore, the Austrian Health Survey conducted in 2006/2007 gives information on self-reported morbidity of common diseases (see section 2.7.1 *Information systems*).

Relevant information on the state of an individual’s health, particularly for the purposes of social security, is gathered in an employee exit interview. According to Statistics Austria (2011b), in 2010 3.5 million employee illnesses were recorded (1.9 million cases in men, and 1.7 million in women). Following a significant drop in employee illness in Austria between 1999 and 2004, its incidence has increased again since 2005. The average duration of employee absence due to illness (days per employee) also fell between 1999 and 2006 to 11.5 days. From 2006, however, it increased to 12.9 days per employee in 2010 (12.8 days for male, and 13 days for female employees). In 2010, the most common causes for employee absence due to illness were disorders of the respiratory organs (413.1 cases per 1000 employees), skeleton, muscles and connective tissue (162.4 cases per 1000 employees), as well as gastrointestinal infections (132.5 cases per 1000 employees).

The number of workplace accidents and occupational illnesses fell by roughly one-third between 1990 and 1998, then remained relatively stable until 2007 before increasing again between 2007 and 2008. Subsequently, the number of workplace accidents dropped back to the pre-2007 level, while occupational illnesses remained at a steady high level (Statistics Austria, 2011b).

As in many other countries, cardiovascular illnesses and cancer are among the most common serious illnesses. They are the most common cause for hospital stays (together accounting for roughly one-quarter of all stays) and deaths (more than two-thirds of all deaths). In 2009, more than 37 000 new cases of cancer were entered into the Austrian Cancer Register (about 19 600 men and 17 400 women (Table 1.7). These figures imply that age-standardized cancer incidence rates are just under the average of the 27 EU member states (EU27). The risk of both a new cancer case occurring and the death rate for cancer cases in Austria is on downward trend.

A subjective evaluation of the incidence of common illnesses is available from surveys. Over the survey period 2006/2007, disorders of the locomotor system were by far the most common self-reported diseases (spinal disorders 32.5%, joint disorders 15.4%, osteoporosis 5.4%). Increased blood pressure affected around one-fifth (18.9%) of those surveyed, while migraines and chronic headaches affected approximately one-seventh (15%).

An unhealthy lifestyle is the most important avoidable risk factor for cardiovascular disease, particularly excessive tobacco consumption, poor nutrition and inactivity. In 2008, 38% of Austrians reported that they smoked; 28% smoked daily (men: 31%, women: 26%). Over the decades, the proportion of women among smokers has grown continually, while the proportion of men among smokers over the same period has shrunk. Furthermore, smoking is prevalent among young people: 25% of 15-year-old boys and 29% of girls the same age smoked at least once a week in 2011 (BMG, 2011). The OECD average proportion of 15-year-old smokers is just 17% (OECD, 2009b). Alcohol consumption in this group is also above average, at 12.5 litres per person (OECD average 18.8 litres per person).

Obesity (adiposity, BMI > 30) is another risk factor for numerous diseases. Between 1999 and 2006, the incidence of obesity in women rose from 9.1% to 13.4%. In men, it rose from 9.1% to 12.8%. Obesity rates have risen rapidly in socially disadvantaged groups (OECD, 2010a). In Austria, 15-year-old males, together with their contemporaries in Poland and Lithuania, show the highest increase in obesity. A Health Behaviour in School-Aged Children (HBSC) study

in 2006 found that 9% of 15-year-old girls and 19% of 15-year-old boys were overweight or obese. The average reported obesity rate across all countries participating in the HBSC study was 13% in 15-year-olds (WHO, 2006).

Table 1.7

Morbidity and factors relevant to health, selected years

Self-reported morbidity, annual prevalence, as % of over-15-year-olds	1980	1990	2000	2010
Spinal disorders	–	–	–	32.5 ^g
Joint diseases (arthrosis, arthritis)	–	–	–	15.4 ^g
Osteoporosis	–	–	–	5.4 ^g
High blood pressure	–	–	–	18.9 ^g
Heart attack	–	–	–	0.5 ^g
Stroke, brain haemorrhage	–	–	–	0.8 ^g
Diabetes	–	–	–	5.6 ^g
Migraine, chronic headache	–	–	–	15.0 ^g
Anxiety, depression	–	–	–	6.8 ^g
New cancer cases				
Cases, absolute (men)	13 590 ^b	14 882 ^b	19 390 ^b	19 626 ^l
Age-standardized rate (men)	305.4 ^b	322.6	364.9	306.9 ^l
Cases, absolute (women)	15 839 ^b	16 405 ^b	17 742 ^b	17 413 ^l
Age-standardized rate (women)	242.6 ^b	242.4	252.9	229.3 ^l
Employee absence due to illness, days per employee per year	17.4	15.2	14.1	12.9
Decayed, missing or filled teeth at age 12 (DMFT-12 index)	3.0	4.2	1.0 ⁱ	1.4 ^h
Persons killed or injured in traffic accidents, per 100 000	853	808	698	554
Daily smoking, men over 35 years old, as %	35.3 ^a	34.6 ^c	30.0 ^d	31 ⁱ
Daily smoking, women over 15 years old, as %	13.6 ^a	17.5 ^c	18.8 ^d	26 ⁱ
Number of cigarettes smoked per person, per year	2 122	1 788	1 260	–
Pure alcohol consumption among 15–99-year-olds, litres per person	14.5	14.9	13.7	12.2 ^j
Obesity (BMI over 30), men over 15 years old, in %	–	–	9.1 ^e	12.8 ^g
Obesity (BMI over 30), women over 15 years old, in %	–	–	9.1 ^e	13.4 ^g

Notes: ^a 1979; ^b 1983; ^c 1986; ^d 1997; ^e 1999; ^f 2002; ^g 2006; ^h 2007; ⁱ 2008; ^j 2009.

Sources: Statistics Austria (2007, 2012b); Uhl et al. (2011) – pure alcohol consumption; LBI (2009b) – daily smoking.

More recent research into aspects of health inequality between population groups indicates that income-related health inequality has increased since 2005, though it is still at a relatively low level compared to other countries (Eurostat, 2010) (see section 7.4.3 *Inequity in outcomes is on the rise*). While the data and research available on income-related inequalities in health status

in Austria is somewhat patchy, increased efforts have been made in recent years to promote good health in target groups (see section 5.1.3 *Health promotion and prevention*).

Mother and child survival rates during and after pregnancy have improved greatly since 1980 (see Table 1.8): The number of stillbirths, and the mortality rate of newborn babies and infants almost halved in the 1980s, and has fallen significantly in the following decades.

The average age of women giving birth has risen continually in recent years. In 2010, it was 30.1 years, which is approximately four years older than in 1980. The proportion of all live births to women under 20 years old shrank from 12.3% in 1980 to 3.2% in 2010. Over the same period, the proportion of births to women over 35 almost tripled, from 6.9% to 19.8%. An indication of the increasing medicalization of pregnancy and birth is the rise in the use of caesarean sections: between 2000 and 2010, the number of C-sections rose from 17.2% to 28.9% of all live births. This puts Austria over the EU average for this indicator, which was at 26.3% in 2010.

Table 1.8

Child and mother health, selected years

	1980	1990	2000	2010
Births with mother under 20 years old, % of all live births	12.3	5.9	4.2	3.2
Births with mother over 35 years old, % of all live births	6.9	6.9	12.9	19.8
Average age of mothers giving birth	25.8	27.1	28.9	30.1
Caesareans, % of live births	–	–	17.2	28.9
Pregnancy termination rate	23.4	15.1 ^a	–	–
Infant mortality rate (deaths in first year of life per 1000 live births)	14.3	7.8	4.8	3.9
Neonatal mortality rate (deaths in the first month of life per 1000 live births)	9.4	4.4	3.3	2.8
Perinatal mortality rate (stillbirths and deaths in the first week of life per 1000 live births)	14.2	6.9	6.7	5.9
Maternal mortality rate, per 100 000 live births	7.7	6.6	2.6	1.3

Note: ^a 1988.

Sources: Eurostat (2012); WHO (2012); Statistics Austria (2012b) – maternal mortality rate.

While the sharp reduction in infant and maternal mortality over the last decades is mainly attributed to the effects of the “Mother–Child Passport” measures, there is a lack of in-depth studies into this question. In recent years, increased efforts have been made to further develop measures in the area of prevention and promotion of good health, with accompanying evaluation (see section 5.1). Furthermore, emphasis has been placed on the importance of intersectoral policy, which has led to the development of the National Nutrition Action Plan and the Child Health Dialogue (see Chapter 6).

2. Organization and governance

2.1 Overview of the health-care system

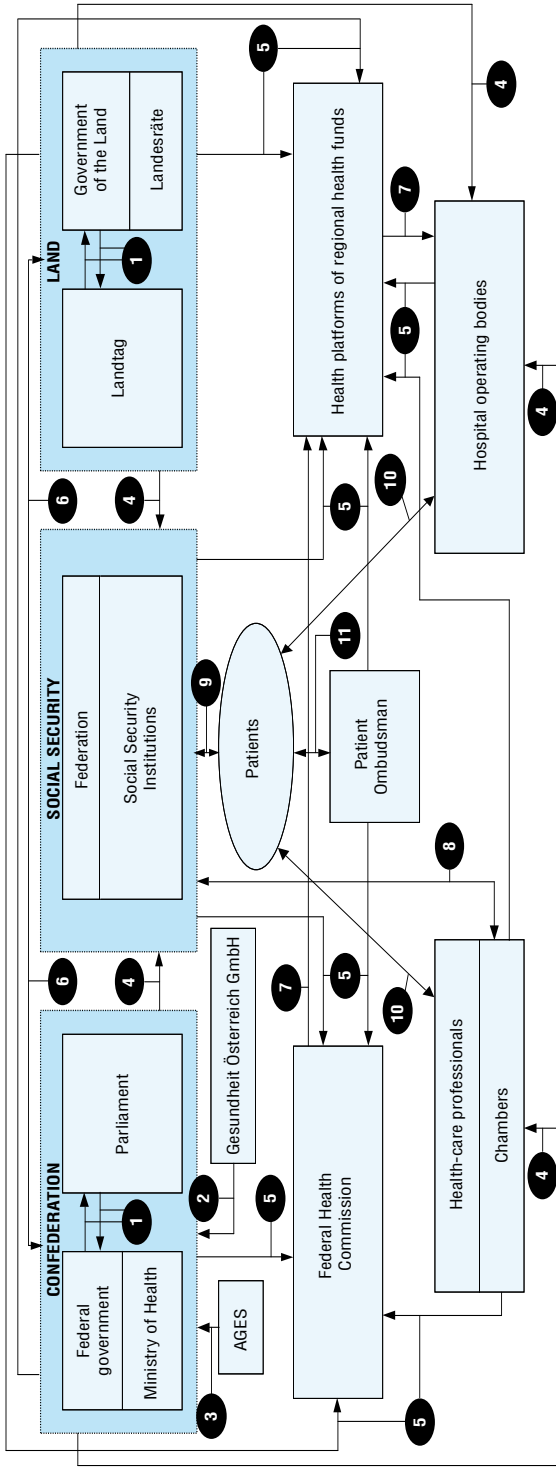
The Austrian health-care system has been shaped in its development since the mid-nineteenth century by three important institutional characteristics: (1) the constitutional make-up of the state with health-care competences being shared between the federal level and the regional level (“Länder”); (2) a high degree of delegation of responsibility to self-governing bodies; and (3) a mixed model of financing, where the state and social health insurance contribute almost equal shares.

Provision of the population with health-care facilities and governance of the health-care system are seen as largely the job of the state. The health-care system is 75% financed by social insurance contributions and from taxation, while almost 25% comes from private sources (user charges and direct payments; private health insurance; non-profit-making organizations: see section 3.4). Health care facilities are offered by state, private non-profit-making and private organizations, as well as individuals operating independently (see Chapter 5).

The Federal Constitutional Law stipulates that responsibility for regulation of most areas of the health-care system lies primarily with the federal government (see Fig. 2.1). However, the most important exception to this rule is the hospital sector, for which only the basic requirements are defined at the federal level, while the Länder are in charge of the specifics of legislation and implementation; and the Länder have to ensure the availability of sufficient hospital capacity for inpatient care.

There is a Regional Health Fund in each Land, which receives funding from the federal authorities, the Länder and social security institutions. The regional health funds are responsible for the implementation of federal guidelines and use the means at their disposal to finance inpatient care. Alongside this every Land has its own Regional Health Platform, the governing body of its Regional Health Fund, in which the Land and social security are equally represented, as well as the federal authorities and other relevant stakeholders (municipal authorities, chambers of physicians, hospital operating companies, etc.).

Fig. 2.1
Organization of the health-care system, 2012



- (1) (a) Draft legislation by the federal government (minister responsible) to Parliament, or by the Land government (minister responsible at Land level) to the Landtag.
 - (b) Agreement of federal law by Parliament, or Land law by the Landtag.
 - (2) Support to the Federal Ministry of Health.
 - (3) Support to the Federal Ministry of Health, particularly in the context of licensing medication (AGES = Agency for Food and Health Safety).
 - (4) Health administration:
 - (a) at federal level (e.g. health-care policing, sanitary supervision of hospitals, monitoring of social security institutions and legal bodies representing interest groups);
 - (b) at Land level (e.g. concerning permits to build and run hospitals, licensing processes for outpatient clinics and group practices, implementation of planning in the region, investment finance).
 - (5) Appointment of members of the Federal Health Commission or regional health platforms.
 - (6) Consultation mechanism between the federal level and local and regional authorities with regard to legislative measures (laws and regulations) which require additional expenditure.
 - (7) (a) Sanction mechanism: the Federal Health Agency (Federal Health Commission) can withhold financial resources from a regional health fund (health platform) if it contravenes compulsory plans and guidelines regarding quality and documentation.
 - (b) Regional health funds (health platforms) can designate a corresponding sanction mechanism for hospitals.
 - (8) Negotiations on market entry, services and tariff charges (collective and individual contracts).
 - (9) Legal membership of social security institutions (compulsory insurance).
 - (10) (a) Fundamental freedom of choice for patients over hospitals and independently practising members of the health-care professions.
 - (b) Obligation to treat, which exists for public and private non-profit-making hospitals and contracted independently practising members health-care professionals.
 - (11) Legal representation of patients in every Land.
- Source: Ministry of health.

In the ambulatory and rehabilitation sectors, as well as in the field of medication, health-care is organized through negotiations between the 22 social security institutions or the Federation of Austrian Social Security Institutions on the one hand, and the chambers of physicians and pharmacy boards (which are organized as public law bodies), and the statutory professional associations of midwives and other health-care professions on the other. This cooperation works within a legally defined framework to safeguard care and the financing of care (see Fig. 2.1). In some fields social health insurers fulfil their obligation to ensure care provision through their own facilities (see sections 5.3, 5.4, 5.7).

Sanitary supervision of hospitals is a federal responsibility (see section 2.3), as is legislation regarding health-care professions (see section 4.2). The 2012 Long-Term Care Allowance Reform Act repealed the preceding regional legislation on the issue and handed responsibility for legislation and implementation from the Länder to the federal authorities. A change in the Federal Constitutional Law created a separate category for the “Long-Term Care Allowance System”, so that it is now clearly laid out in law that matters concerning that system are carried out directly by the federal administration. The social security system is a separate area of responsibility and is also dealt with at federal level. On the basis of agreements (“state contracts”), the federal and regional authorities are mutually obliged to safeguard health-care provision in their areas of responsibility (agreements in accordance with Article 15a of the Federal Constitutional Law) (see section 1.3).

2.2 Historical background

This section provides an overview of developments in the health sector since the introduction of the General Social Security Act (ASVG) in 1955. The ASVG is the “basic law” of social insurance for employees in the Second Republic, upon which further developments in social insurance legislation were based. In Hofmarcher and Rack (2006) a more detailed account is given on the historic evolution of health-care coverage and financing, which is also summarized in the German edition of the current book.

2.2.1 The 1955 ASVG and pre-1990 reforms

The ASVG, which was passed in 1955, replaced all previously valid laws in the field of social security. The ASVG was the culmination of efforts made after 1945 to revise and standardize social insurance legislation for blue- and white-collar workers while eliminating the provisions remaining from imperial law. It integrated health, work accident and pension insurance for employees

in industry, mining, commerce and trade, transport, agriculture and forestry, and also regulated health insurance for pensioners. For some special areas of insurance, social insurance laws outside the scope of the ASVG continued to be valid.

In the field of health insurance, the law intended to maintain the existing levels of benefits and to carry out standardization. The ASVG regulates benefits and the organization, the administrative structure and the financing of the social insurance system. Since 1956, when the law came into force, it has been amended 75 times (up to 2011).

The proportion of the population with health insurance had reached about 70% of the population in 1955. Over the next few decades, it increased by almost 30% and reached around 96% in 1980 (Talos, 1981). This expansion was achieved partly by the introduction of acts regarding health insurance for farmers (1965) and civil servants (1967).

Unrestricted access to hospital care was also introduced, alongside new services such as preventive check-ups, check-ups for young people and rehabilitation services (see section 5.7). At the end of the 1970s, the first agreement in accordance with Article 15a of the Federal Constitutional Law was passed to cut back spending growth on inpatient provision (“income-oriented spending policy”). The founding of the Hospitals Cooperation Fund meant that specific governance-related tasks were taken over by the federal authorities for the first time. In this context, the first preparations for the Austrian performance-oriented hospital financing system (LKF) were made (see section 3.7.1 *Financing of hospitals*). It was also the start of systematic planning (Hofmarcher & Rack, 2001).

From 1980 onwards, economic collapse meant serious financial problems for health-care and social provision. The health-care system was marked by a significant growth in expenditure, above all on hospitals. The reasons for this were the continual expansion of services and the division of responsibilities between government authorities and social security institutions, which led to over-investments in the hospital sector, and which continue to make policy decisions difficult to reach even today (see Chapters 6 and 7).

Since the end of the 1970s, developments in the health-care system – particularly governance of hospital-based health-care provision – have been defined by the introduction of agreements in accordance with Article 15a of the Federal Constitutional Law (see section 1.3) and related financial equalization legislation and planning activities (see section 2.5).

At the end of the 1970s the competition between independent physicians and insurance fund-owned outpatient clinics (*Ambulatorien*) led to a dispute known as the *Ambulatorienstreit*. The Constitutional Court at the time came to the conclusion that regional governments may grant a permit to set up an outpatient clinic only if physicians' representatives and the Federation of Austrian Social Security Institutions can reach an agreement. If no agreement can be found, the regional government must examine whether there is a need.

2.2.2 The 1990s health reforms

Reforms in the 1990s were driven by a mixture of expansion of care provision and expenditure curbs and consolidation (Hofmarcher & Rack, 2006: Table 6.1). For example, psychotherapy was included in the statutory benefits basket (see sections 3.6 and 5.11), and rehabilitation care and prevention services were expanded. In addition, the introduction of a means-tested long-term care allowance in 1993 was the socio-political milestone of the decade (see section 5.8). At the same time, however, user charges, such as the prescription fee, were continually revised and increased. In 1997 a consultation fee (co-payment) for the first visit in a quarter to an ambulatory general practitioner (GP), specialist or dentist (see Table 3.11), and a 10% co-insurance rate for hospital stays was introduced for all patients insured under the ASVG (see Table 3.12).

Health policy measures to strengthen patients' right to self-determination (see section 2.9) and to improve preventive measures and health promotion (see section 5.1) were increasingly taken, including the founding of the Healthy Austria Fund in 1998 and the legislation promoting patient rights in 1999. Despite numerous changes and amendments to laws, both the organizational and financial structure of the health system were maintained as set out in the Federal Constitution of 1925 and as specified in the ASVG.

Several reforms were driven by the general economic aim of budget consolidation. It was in this context that DRG-based hospital budget allocation was introduced in 1997 (see section 3.7.1 *Financing of hospitals*), which was accompanied by the foundation of a structural fund at federal level and nine funds at Länder level. For the first time there was also a mutually agreed and binding Hospitals and Major Equipment Plan (see section 2.5) which functioned as an instrument of structural policy.

2.2.3 Health reforms 2000–2005

As in earlier legislative periods, health policy from 2000 onwards was driven by the basic goal of maintaining access to services for the whole population. While the ÖVP-FPÖ coalition had ambitious plans on entering government to reform the administrative structure of social security, the pace was slowed in the wake of the Constitutional Court rulings on organization of social security (see section 2.3) and the Equalization Fund (see section 3.3.3 *Pooling of public funds*) (Hofmarcher, 2006). However, an important change introduced when the centre-right coalition was in power was equal representation of employers and employees on social security governing boards, a demand which had already been made by employers during the introduction of the ASVG.

Under the title of “Uniting Health and Accident Insurance – Structural Reform of the Regional Health Insurance Funds” the 2003 government programme aimed at organizational reforms in social security. It was intended to reduce duplications in acute emergency care existing in the form of public accident and emergency departments and those owned by the Austrian Workers’ Compensation Board (AUVA) (see sections 2.3 and 3.6). AUVA’s responsibility was to be restricted to cash benefits. However, there was intense resistance and the intended reorganization was ultimately rejected by the Constitutional Court (Verfassungsgerichtshof, 2004).

The health-care reform of 2005 started with the aim of creating health-care agencies, which were to increase efficiency and to steer the entire health-care system of a region or Land, and thus to integrate care across sectoral borders (BMGF, 2004). The negotiations carried out from autumn 2004 onwards on the subject of financial equalization and a new agreement between the federal authorities and the Länder led to the Health Care Reform Act 2005, which was more comprehensive than previous legislation, and incorporated the Health Care Quality Act (see section 2.8.1 *Regulation and governance of third party payers*) and the Health Care Telematics Act (see section 2.7.1 *Information systems*). However, the bodies which had originally been envisaged as health-care agencies had been watered down to “health platforms”. Health platforms unite all relevant actors (including regional governments, social security, providers, etc.) but Länder continue to have veto power on issues concerning the inpatient sector, while health insurers can block decisions concerning ambulatory care (Hofmarcher, 2004). Yet, “reform pools” were established to provide funding for services at the interface between inpatient and ambulatory care.

The 2005 agreement in accordance with Article 15a of the Federal Constitutional Law basically took previous agreements as its model, but specified for the first time that local authorities and the social security institutions carried collective responsibility for health-care provision. For this, a Federal Health Agency and Federal Health Commission were established at federal level, and regional health funds with health platforms were established at the Länder level (see section 2.3), replacing the regional funds, which had been in existence since 1997. In addition, consolidation measures in the health-care reform of 2005 were aimed at reducing the deficit in the health insurance funds and curbing spending growth in the health-care sector, in particular in hospitals.

2.3 Organization

The current institutional structure was defined largely by reforms in the 1990s, as well as the Health Reform Act 2005, both of which led to a raft of organizational changes. In order to put organizational change into practice, the number, scope and content of the instruments for cooperation (arrangements in accordance with Article 15a of the Federal Constitutional Law), have been greatly increased over the past 20 years. Most matters concerning regulation of the health-care system are federal responsibility. Draft legislation is usually initiated by the Federal Ministry of Health. Administration of the health-care system is largely taken over by the Länder as part of the system of indirect federal administration, or is handed to social security institutions as part of their independent administration.

2.3.1 Federal level

Ministry of Health

The Federal Ministry of Health is the highest federal authority in matters relating to health-care, and has been known by this name since December 2008. It regulates social health insurers and professional bodies, and oversees adherence to the laws introduced to safeguard care. The Federal Ministry of Health has a number of advisory boards and commissions at its disposal (e.g. the Pharmaceuticals Board, the Board for Psychiatric Health, the Board for Geriatric Medicine, the Board for Traditional Asian Medicine, the Prescriptions Commission, the Pharmacopoeia Commission, the Independent Medicines Commission, the National Nutrition Commission, the Codex Commission).

The Federal Ministries Act lays out the allocation of tasks for the Federal Ministry of Health in three sections (BMG, 2010j).

The activities in Section I (Health care system, central coordination) include international coordination of health-care policy, coordination of departmental cooperation with the WHO and European Parliament. This area of activity also includes information management and matters relating to e-health and health-care telematics. Hospital finance, planning of structural policy, documentation, legal aspects of structural policy, quality management and health-care systems research are carried out as part of activities relating to health-care structure. Health and pharmaceutical economics are also dealt with in Section I. Alongside this, the section deals with management of the Federal Health Agency and develops guidelines for the allocation of resources to reform pools and for the implementation of projects (see section 6.1.1).

Section II (Legal matters and consumer health protection) is concerned with many different areas: general health-care law, health-care professions, and legal matters relating to physicians, clinical psychologists, health psychologists, psychotherapists, music therapists, medication, pharmacists, hospitals, infectious diseases, drugs, addictive substances and new psychoactive substances all fall into the remit of Section II, as do the technicalities of legislation and legal activities including audit and accounting of health-care and accident insurance. The areas of tobacco, alcohol and substance-independent addictions as well as the office of the ombudsman for the protection of non-smokers also find their home in Section II. Veterinary law; animal health; animal protection; food safety in meat production; food safety, quality and law; certain products; matters related to the food chain internationally and genetic engineering are also responsibilities that fall under Section II.

Section III (Public health service and medical issues) is responsible for the public health service, infectious and non-infectious diseases, prevention of epidemics, antibiotic resistance/hospital hygiene, crisis management, mental health, geriatric medicine, medication and medical products. Strategy relating to blood, tissue and transplantation systems as well as medical radiation protection, health promotion, prevention, vaccination programmes, HIV/AIDS, tuberculosis and women's, children's and youth health come under Section III.

Other federal institutions

The **Supreme Health Board** is a medical-scientific committee which advises the health ministry on medical questions (see section 2.2.). The Board is formed of expert volunteers (32 in total in 2011) from a variety of sectors: medicine, academia, physicians' chambers and pharmacy boards, nursing professions, social security and the public health service. The Supreme Health Board advises the health ministry on all basic medical questions and produces reports

based on the current position of medical science (and on top of that decides what constitutes “the position of medical science”). Recommendations by the Supreme Health Board are non-binding and do not oblige the ministry to take any particular decisions on health policy. Section III of the health ministry acts as the coordinator of the Supreme Health Board.

Gesundheit Österreich GmbH (GÖG) is the national institute for research and planning of the health-care system, and also has national responsibility for encouraging health promotion. The basis for the company is the federal law on GÖG of 31 July 2006. The federal government is the only shareholder and is represented by the Federal Minister of Health. GÖG is divided into three sections: The **Austrian Federal Institute for Health (ÖBIG)** plans the structural basis of the Austrian health-care system and, in particular, works on development of the “Austrian Structural Plan for Health” (see section 2.5). The Institute also manages the register of opt-outs from organ donation, the register of in vitro fertilization and the medical devices register. It supports the health ministry’s Pricing Commission by providing information on medication prices across the EU (see section 2.7.2 *HTA*). The **Healthy Austria Fund** supports projects in the fields of health promotion and prevention and carries out information campaigns on these topics. The Fund’s work is based on the Health Promotion Act 1998. The Fund is financed by a portion of VAT income in accordance with the current Financial Equalization Act and, as a result, is legally entitled to an annual income of €7.25 million. Both ÖBIG and the Healthy Austria Fund were already established as independent organizations prior to 2006. The third section, new in 2007, is the Federal Institute for Quality in the Health Service which is tasked with supporting development, implementation and regular evaluation of the entire Austrian quality control system, based on principles of patient-centred care, transparency, effectiveness and efficiency. The Institute maintains registers of the quality of outcomes in surgery, cardiac surgery, pacemakers and other heart implants, hip replacements, paediatric cardiology and stroke units, as well as carrying out patient satisfaction surveys (see section 2.7.1 *Information systems*). The Health Care Quality Act forms the basis of the Institute’s work. The GÖG as a whole works in accordance with federal authority, under the Federal Health Commission, but is free from directives in its scientific activities.

The **Austrian Agency for Food and Health Safety (AGES)** is contracted at national level to carry out a variety of tasks in the field of food safety. More than 1400 experts carry out interdisciplinary work together in five strategic areas (food security, food hygiene, animal health, public health, monitoring of the medicines market) and three generally applicable fields (data, statistics

and integrative risk assessment; radiation protection; knowledge transfer and applied research). AGES carries out testing and reports according to the Food Hygiene and Consumer Protection Act. The Federal Ministry of Health and the Federal Ministry of Agriculture, Forestry, Environment and Water Management are owner representatives of the federal government as a whole for the AGES.

The **AGES Medicines and Medical Devices Agency** is the national licensing authority for medication in Austria. It was originally founded in 2006 under the name of AGES PharmMed and received its current name only in 2012 (see Chapter 6). The agency operates as a section of AGES and is entrusted with numerous duties in the fields of medication licensing, clinical testing of medications and medical devices, drug safety (pharmacovigilance), vigilance regarding medical devices and inspection. The Agency is responsible for enforcement of the Medications Act, the Medical Devices Act, the Import of Medicines Act, the Blood Safety Act and the Tissue Safety Act. The Medicines and Medical Devices Agency works in partnership with the **Federal Office for Safety in Health Care**. The Federal Office for Safety in Health Care and others are responsible for monitoring the distribution of addictive substances by pharmacies. The Medicines and Medical Devices Agency has been appointed by the health ministry to administer the Austrian haemovigilance register.

The **Federal Health Agency** is a public fund and a separate legal entity at federal level. The Federal Health Agency is the central facility for supra-regional and cross-sectional planning, governance and finance of the health-care system and was introduced in 2005 as the successor to the structural fund which had been part of the Federal Ministry for Social Security and Generations. Federal resources are distributed by the Federal Health Agency to the nine regional health funds in accordance with a pre-agreed schema. The provisions laid out in the Federal Hospitals Act in accordance with Article 15a of the Federal Constitutional Law are the legal basis of the Federal Health Agency. The Federal Health Agency's responsibilities, aside from resource allocation, include among others: planning of the range of services offered (see section 2.8.2 *Regulation and governance of service providers*), development of quality rules and guidelines (section 2.8.2 *Regulation and governance of service providers*) and promotion of the implementation of modern communications technologies (see section 4.1.4 *Information technology*). The executive body of the Federal Health Agency is the Federal Health Commission. This has 31 members and is composed of the following: representatives of the federal government, the Länder, the Federation of Austrian Social Security Institutions, bodies representing local municipal authorities, the Austrian Episcopal Conference and the Evangelical Church Council (church hospitals), patients'

representatives, the Austrian Chamber of Physicians, the Federal Ministry for Science and Research, the Austrian Federal Board of Pharmacy, AUVA and a representative of the Austrian Federal Economic Chamber, representing private hospitals. The Federal Health Agency has majority federal representation on its board, however nearly all decisions require agreement between the federal government, the Länder and social security (see section 2.4). A Federal Health Conference is established to advise the Federal Health Agency. Working groups prepare resolutions for the Federal Health Agency and Federal Health Commission on topics such as planning, results-oriented hospital finance and documentation, telematics and quality.

The **Independent Medicines Commission** examines upon request decisions of the Federation of Austrian Social Security Institutions regarding the insertion of medications in as well as their removal from the Reimbursement Codex (see section 2.8.4 *Regulation and governance of pharmaceuticals*). The Independent Medicines Commission was established by the federal health ministry and is composed of a judge from either the Federal High Court or the High Court of one of the Länder and seven assessors. The office of the Independent Medicines Commission forms part of Section I of the Federal Ministry of Health.

The **Pharmaceutical Evaluation Board** was established by the Federation of Austrian Social Security Institutions in 2005. The Board meets once a month, has an advisory function and makes recommendations to the Independent Medicines Commission concerning the inclusion of medicines in the Reimbursement Codex (see section 2.8.4 *Regulation and governance of pharmaceuticals*). The Pharmaceutical Evaluation Board is composed of 21 members or stand-in members, who are nominated by a variety of different public bodies. Ten are representatives of social security institutions. The Pharmaceutical Evaluation Board examines the therapeutic uses of medication, carrying out evaluations based on pharmacological, medical/therapeutic and economic factors. Pharmaceutical firms can appeal against a negative decision by filing with the Independent Medicines Commission.

The **Genetic Engineering Commission** is part of the Federal Ministry of Health and advises the Ministry on fundamental questions on the applications of genetic engineering. The Commission is also tasked with providing the final wording of proposed sections of the Genetic Engineering Guidelines, which documents the current state of science and technology in all the uses of genetic engineering currently legally permitted in Austria (BMGFJ, 2008).

The Working Group on Electronic Health Files was active between 1 September 2006 and 31 December 2009, and was superseded on 1 January 2010 by the limited liability company **ELGA GmbH**. ELGA is an aspect of e-health and stands for *Elektronische Gesundheitsakte* or “electronic health files”. ELGA GmbH is tasked with coordinating and integrating all operational measures required for introduction of e-files, as well as the construction of system components and the support of pilot projects in accordance with the requirements of the Federal Health Commission and regulations on quality and acceptance management (see sections 2.6, 2.7.1 *Health information management* and 4.1.4 *Information technology*).

Alongside the Federal Ministry of Health, various other federal ministries have important responsibilities in the health-care system. Coordination of the various decision-makers and financing bodies is a fundamental responsibility of the Federal Ministry of Health.

The **Federal Ministry of Labour, Social Affairs and Consumer Protection** is responsible for matters relating to social security, with the exception of health and occupational health insurance. This covers in particular pensions, unemployment insurance and monitoring of the Federation of Austrian Social Security Institutions, the Austrian Pension Fund and various pension institutes. In addition, the social affairs ministry also deals with long-term care, as well as disabled and social care facilities (see section 5.8). The Federal Ministry of Labour, Social Affairs and Consumer Protection is in charge of one federal social affairs office which has a base in each of the nine Länder.

The **Federal Ministry of Science and Research** is responsible for university education of physicians as well as the legal and structural management of universities offering medical training. Clinic facilities and expenditure, building and development plans, as well as site development of universities providing medical training are also based in the Federal Ministry of Science and Research.

The web site www.familienberatung.gv.at (offering counselling to families) is an initiative of the **Federal Ministry of Economy, Family and Youth**. The family counselling centres promoted by the Federal Ministry of Economy, Family and Youth advise on crisis situations, aiming to help people to help themselves, and offer information and carry out preventive educational work. The promotion of family counselling centres was established in 1974 to accompany the law permitting early-term abortions. Most centres have teams of specialists on hand, including physicians, social workers, legal advisers, educationalists, marriage and family counsellors and psychologists, among others.

The **Federal Ministry of Finance** is responsible for taxation, budgeting, financial markets and financial equalization, among others. Financial equalization regulates taxation rights and the division of the resulting income between the federal authorities and the Länder and local authorities (see sections 1.3, 2.4 and 3.3.2 *Raising funds for health-care*). The current financial equalization agreement is set for the years 2008–2013. Together with the Federal Ministry of Health, the Federal Ministry of Finance organizes the Health Insurers' Structural Fund on behalf of the regional health insurance institutions (see section 3.3.3 *Pooling of public funds*). The Federal Ministry of Finance is also involved in the Healthy Austria Fund, which is mainly financed from taxation (see section 5.1.3 *Health promotion and prevention*). There is therefore one member from the finance ministry on the Fund's Board of Trustees.

The **Bioethics Commission** is based in the office of the **Chancellor**. It advises the Chancellor on societal, scientific and legal questions, which have ethical implications for the field of human medicine and biology. The Commission produces statements, makes recommendations and delivers an annual report (Federal Chancellery, 2009). The **Gender Equality Commission for the Private Sector**, which is responsible for equal treatment of men and women in the workplace and the **Gender Equality Ombudsman's Office** are now also based in the office of the Chancellor. Formerly they were part of the Federal Ministry for Health and Women.

Genetic engineering, environmental protection, food marketing regulations and laws relating to subjects with an impact on food products (e.g. animal feed and pesticide legislation) are dealt with by the **Federal Ministry of Agriculture, Forestry, Environment and Water Management**. There is, therefore, always overlap with the work of the Federal Ministry of Health.

The **Federal Ministry of Justice** and the **Federal Ministry of Defence and Sport** own certain individual wards and hospitals (e.g. army hospitals).

The Financial Market Authority is the federal organ that controls business activities of private health insurance funds. The Insurance Policy Act forms the framework for activities of both domestic and international private health insurers.

2.3.2 Länder and local authorities

The Länder and local authorities are key in the establishment, implementation and supervision of the various concerns of the public health-care system. Particularly important is the role of the Länder concerning hospital care as they are mandated by law to ensure adequate hospital capacity is available.

Besides that, the Länder take responsibility for public health services, the administration of social benefits, and they provide comprehensive preventive services. Until the end of 2011, the Länder also issued long-term care cash benefits (see section 5.8). In principle, a distinction is made in the Länder between administration of health-care and of hospitals. On a political level, these two tasks are sometimes distributed between different departments in the regional government.

The state governor of each Land is the highest authority in the health-care system at regional level. The office of the regional government and regional health board support the regional government and state governor in legal and practical matters relating to the health-care system.

Länder administrations have departments dedicated to combating notifiable infectious diseases and various advice centres, for example, for immunization, health promotion and health statistics. The Länder also administer personnel of public health-care facilities and monitor compliance with training requirements for non-physician medical staff.

On the level of the political district, the health offices within the district administrative authorities are responsible in the first instance for the administration of health-care. Some matters, such as health inspections at local level, are the responsibility of the local governments. Some local communities have also set up joint health districts (*Sanitätsdistrikte*). In the local communities, the municipal medical officers (*Gemeindeärzte*) or the district medical officers (*Sprenzel- or Kreisärzte*) act as experts for consultation purposes. In addition, some local authorities are the legal operators of hospitals.

The **regional health funds** are public law funds and separate legal entities. On the Länder level, they are responsible for overall planning, governance and financing of health-care. There are nine regional health funds; one fund per Land, each representing a funding pool at Länder level for the financing of public hospitals. The amount distributed to each hospital is calculated according to an Austrian version of DRGs (*Leistungsorientiertes Krankenanstalten-Finanzierungssystem*, LKF; see section 3.7.1 *Financing of hospitals*). The agreement under Article 15a of the Federal Constitutional Law on the organization and financing of health-care, and the implementation thereof in corresponding Länder laws form the legal basis of the Regional Health Fund. Alongside responsibility for creating detailed plans for each Land, the Regional Health Fund is responsible for ensuring the implementation of the requirements of the Federal Health Agency. The Regional Health Fund is made up of state health platforms, in which the Land and the social security fund have

equal representation, as well as the federal government. In addition, owners of hospitals financed by the Regional Health Fund, the physicians chambers, municipal and local authorities, as well as patients are all represented in the health platforms. The structure of the health platforms is intended to facilitate cooperation between the social security institutions and the Länder in providing health-care. This requires agreement between these players in the designated areas of cooperation. In matters for which only the Länder are responsible, they have the majority. For issues concerning ambulatory care, the social security institutions have the majority, since they are responsible for securing care in this sector.

The management of **public hospitals** has been outsourced to hospital operation companies organized according to private law in all Länder except Vienna. The organizational structure of these companies varies. One thing they have in common is that they implement the provision requirements of the Länder and execute strategic decisions on their behalf (see section 2.5).

As regards long-term care, the Länder are responsible for provision of benefits in kind but have to adhere to certain minimum standards determined at the federal level (see section 5.8). Since January 2012 the administration and issuance of the long-term care cash benefits is the responsibility of the federal government.

Church institutions are also important in the health system. In particular, there are numerous hospitals run by Catholic orders or by the social welfare branch of the evangelical church (see Table 5.3), and these play an important role in supporting the severely ill or in providing palliative care (see section 5.10).

2.3.3 Self-governing bodies

Except for the hospital sector, health-care provision for the Austrian population is organized through negotiations between the social security institutions or the Federation of Austrian Social Security Institutions and the chambers of physicians and pharmacy boards (those legally organized as statutory corporations), the legal representatives of midwives and the professional associations of other health-care professions. For the chambers of physicians, dentists and pharmacists, membership is compulsory for all practising professionals. This also applies to the professional body representing midwives, which, as a statutory corporation under public law also has to carry out statutory tasks. For the organizations of other health-care professions, which represent

the interests of their clientele on a voluntary association basis, there is no obligation to join (Table 2.3). The latter are, however, still able to agree to collective contracts in some cases.

Social insurance

According to the Federal Constitution, legislation and implementation in the area of the social insurance system are the responsibility of the federal government. However, implementation has been delegated to social security institutions, which are managed as “self-governing bodies”. The Austrian social insurance system has been administered according to the principle of self-government since its establishment, with the exception of the period 1939–1947. This means that insurance holders, service users and those who pay contributions participate indirectly in the administration of social insurance, through trade unions for example.

The social insurance system consists of the following areas: health insurance, pension insurance and work accident insurance. Unemployment insurance is organized independently, and is administered by the Public Employment Service. Health insurance is organized as mandatory insurance and ensures access to medical care in the event of illness. It covers insurable cases of illness, inability to work and motherhood, and affords benefits in kind or cash payments (see Table 3.8). Increasingly, health insurance also engages in preventive care (see section 3.3.3 *Pooling of public funds* and section 5.1).

At the present time, 22 social insurance providers are responsible for health, pension and accident insurance, of which 19 offer health insurance (Fig. 2.2, Table 3.5). Health insurance funds are divided up between both Länder and professions. The regional health insurance fund in each of the nine Länder is responsible for provision of health insurance in all those cases where no other health insurance institution is liable, as the regional insurers have overall responsibility (*Generalkompetenz*). In addition to the regional insurers, there are four other health insurance institutions: the Farmers’s Social Insurance Institution, the Insurance Institution for the Self-Employed, the Civil Servants’ Insurance Institution and the Insurance Fund for Railway Workers and Miners. In six Austrian firms there are company health insurers who provide health insurance for employees of the relevant firm (see section 3.2). Since 2003, the number of company health insurance funds fell from eight to six.

Fig. 2.2

Organizational structure of social security

Federation of Social Security Institutions			
Pension insurance	Health insurance		Accident insurance
Pension Insurance Fund	9 regional health insurers	6 professional health insurers	General Accident Insurance Fund
Insurance Institution for the Self-Employed			
Social Security Fund for Farmers			
Insurance Fund for Railway Workers and Miners			
Austrian Notaries' Insurance Fund	Civil Servants' Insurance Fund		

Source: HVSV (2010j).

As stipulated by law, all statutory insurance funds are members of the Federation of Austrian Social Security Institutions, founded in 1948 (see section 2.2). The Federation is responsible for looking after the general and common economic interests of the social insurance sector, providing core services for social insurance providers and coordinating the administrative procedures of individual insurance providers. The Federation is required to produce binding guidelines, legislative suggestions, expert reports and policy statements, and agrees collective contracts with professional bodies representing medical staff. It also deals with insurance data and produces statistical information.

Since January 2005, as a result of the 63rd amendment to the ASVG, the Conference of Social Security Institutions and the Federation Board are the authorized decision-making bodies of the Federation, replacing five different administrative bodies that previously performed the function.

The Conference of Social Security Institutions is composed of the chairs and deputy chairs of all the social security institutions and those of the company health insurance fund with the largest membership as well as senior citizens' representatives. The tasks of the conference include monitoring the management of the Federation and taking decisions on legislative activities of the Federation (guidelines, model statutes of health insurance funds, etc.) and approving framework service delivery contracts.

The **Federation Board** consists of 12 members, of which half are service providers, while the other half are service users. The members are elected for a four-year term by the Conference of Social Security Institutions, on the recommendation of employers' and employees' interest groups from the Presidential Conference of Austrian Chambers of Agriculture and the

Public Employees' Union. The Board elects a chairperson and two deputies for a four-year term. The Federation Board is responsible for representing the Federation externally, ensuring day-to-day operations, and preparing agreements for the Conference of Social Security Institutions. The Federation Board must set up at least the following committees: health insurance and disease prevention, provision for old age, work accident insurance and information technology.

Health welfare institutions are independent bodies within the Austrian welfare system. For federal civil servants, as well as those in the majority of regions and local authorities, the Civil Servants' Insurance Fund is the single institution responsible for both health and accident insurance. However, the legal position of civil servants in relation to insurance provision can also be more closely linked to their individual employing authorities, which means that alongside the Civil Servants' Insurance Fund there are another 16 health (and accident) welfare institutions at regional and local authority level (cf. Table 3.6). These health welfare institutions are not social security institutions, do not belong to the Federation of Austrian Social Security Institutions and are not subject to federal supervisions (see section 3.3.1 *Coverage*).

Professional bodies

Legally appointed professional bodies under public law have a mandate to negotiate with social security institutions on service volumes and payment levels and conclude collective contracts (see section 2.8.1 *Regulation and governance of third party payers*). This makes them different from voluntary associations, which may, however, play a role in determining prices for non-contracted care (see section 2.3.4 *Voluntary professional associations*).

The **Austrian Chamber of Physicians** is the legal representative body of physicians, whose membership consists of the nine physicians' chambers in the Länder. The main responsibility of the regional physicians' chambers is to participate in the creation of contracts regulating relations between physicians and the social security institutions. They also help develop primary and further medical training at medical universities. In order to practise independently, a physician must be on the medical register run by the Austrian Chamber of Physicians. Membership of a state's physicians' chamber is obligatory for all physicians. Negotiations are held periodically, usually once a year, between the legal representative bodies of physicians and social security institutions, in order to establish conditions for market entry, services and tariffs (see sections 2.8.1

Regulation and governance of third party payers and 4.2). However, these apply only to contracted physicians, while patients may also choose to obtain care from non-contracted physicians (see section 5.3).

The **Austrian Society for Quality Assurance and Quality Management in Medicine GmbH (ÖQMed)** is a subsidiary body of the Austrian Chamber of Physicians, and consists of quality managers and physicians. ÖQMed conducts quality assurance in Austrian physicians' surgeries by formulating specialized quality criteria, as well as directly monitoring quality by checking that these criteria are met. Furthermore, ÖQMed participates in the creation of specialized products for medical quality management, as well as interdisciplinary education and further training, in both full-time and part-time format. ÖQMed is made up of the Academic Advisory Forum and the Evaluating Advisory Forum. GÖG holds the presidency of the Academic Advisory Forum.

The **Austrian Dentists' Chamber** is the legal representative body of the dentistry profession, established on 1 January 2006. Previously, dentists and tooth, mouth and jaw specialists had been members of physicians' chambers. All members of the Austrian Dentists' Chamber are part of regional dentists' chambers, which have great independence in financial, staffing and statutory affairs. With the exception of dentists, members of the Austrian Dentists' Chamber are also members of the welfare fund of the relevant physicians' chambers, in whose committees they are represented on an equal basis. The tasks of the dentists' chambers include making professional, social and economic demands on behalf of the membership, including contracting with health insurance.

The **Austrian Pharmacists' Association** is the statutory representative body of pharmacists practising in public pharmacies and hospitals. As a public body, the Pharmacists' Association is self-governing, also taking on sovereign tasks. Membership is compulsory.

The **Pharmaceutical Salary Fund** for Austria, based in Vienna, is the social and economic institute for Austrian pharmacists. It is a body governed by public law and forms an administrative unit with the Austrian Pharmacists' Association. The membership of all of its committees is equally divided among representatives of employed and self-employed pharmacists. The delegates' assembly, the highest committee of the Pharmaceutical Salary Fund, is made up of the same people as the delegates' assembly of the Austrian Pharmacists' Association. The statutory responsibilities of the Pharmaceutical Salary Fund include the calculation and payment of the salaries of all pharmacists who work in a public pharmacy or a hospital pharmacy on the basis of a contract

of employment (see section 3.7), the settlement of health insurance fund prescriptions between pharmacists and the social security institutions, and the social and economic protection of pharmacists (e.g. helping them find employment, offering support services). Owners of small pharmacies in rural areas are supported through the welfare and support fund.

The **Austrian Midwives' Committee** is a public body representing the interests of all midwives, who work in hospitals or operate midwifery practices. Every midwife practising in Austria enjoys automatic membership, and pays an annual committee fee. The Austrian Midwives' Committee also acts as a liaison between midwives and mothers-to-be, and has an office in every state.

2.3.4 Voluntary professional associations

Except for physicians, pharmacists and midwives, all other health-care professions are organized into professional associations with voluntary membership. Examples of this are the Austrian Association of Higher Medical-Technical Staff, the Austrian Health and Nursing Care Union, the Association of Austrian Psychologists and the Austrian Federal Association for Psychotherapy (see also section 4.2.3 *Training of health-care staff*). Many specialist branches are also organized into associations, such as internists, surgeons, gynaecologists or rehabilitation specialists.

A number of professional bodies and voluntary professional associations have organized together to form the **Conference of Health Care Professions**, which, alongside holding annual conferences, also publishes statements on current health policy developments such as health-care targets (see section 6.1). Some professional associations nominate individuals of their governing boards (or others) to conduct negotiations with social security institutions or with the Federation of Austrian Social Security Institutions on tariffs for non-contracted care. If actual charged tariffs exceed these negotiated tariffs, the difference will have to be paid by patients out of pocket (see section 3.4).

The **Association of Austrian Psychologists** currently represents over 4350 members (as of September 2011), who either practise as freelancers, or are employed in all fields of psychology. Psychology students can also join the association. The association offers its members advice and support in legal and political matters pertaining to the profession, legal defence and professional indemnity insurance etc. The Austrian Federal Association for Psychotherapy was founded in 1992, and is the independent representative body

of all psychotherapists, as well as those in training (see sections 3.6 and 4.2.3 *Training of health-care staff*). It is made up of nine regional associations, and has approximately 3000 members.

The **Austrian Association of Higher Medical-Technical Staff** was founded in 1984, with headquarters in Vienna. It is composed of seven professional associations of higher medical-technical services (biomedical analysts, dietitians, occupational therapists, radiology technicians, physiotherapists, orthoptists and speech therapists). The **Austrian Health and Nursing Care Union** is the largest national professional representative body for the nursing professions, and represents the interests of its members independently on a non-profit basis.

2.3.5 Other stakeholders

The **Ludwig Boltzmann Institute for Health Technology Assessment** was founded in 2006 and provides scientific support for decision-making in the health-care system (<http://hta.lbg.ac.at/en/index.php>). For example, the Institute, commissioned by the Federal Ministry of Health, provides information on whether new medical interventions are suitable for reimbursement as single medical services (*medizinische Einzelleistungen* – MEL). In this, effectiveness and safety of interventions is systematically assessed and decisions prepared on whether a MEL will be accepted into the catalogue of MELs and thereby fulfil requirements for reimbursement as part of performance-oriented hospital funding (see section 3.7). The Institute also produces a health technology assessment (HTA) newsletter, which summarizes international HTA results (see section 2.7.2 *HTA*).

There is a very high number of organizations, networks, associations, etc. in the Austrian health-care system. This section presents only a selection of welfare and charitable organizations, self-help groups and patient representatives, as well as issue networks and interest groups.

Welfare organizations offer social services, including nursing care at home and fund their activities from fees charged for their services, which may be reimbursed by the health insurance funds (see Chapter 3), general tax revenue, donations and cost-sharing. Some of these organizations work together in the **National Association for Non-statutory Welfare**: Caritas (a Catholic welfare organization), Diakonie Austria (a Protestant welfare organization), Hilfswerk, the Red Cross and Volkshilfe. Their aim in doing so is to articulate shared socio-political concerns and improve the framework within which private charitable organizations work in Austria.

Charitable organizations include the Austrian Red Cross, the Arbeiter-Samariter-Bund Austria, the Malteser Hospitaldienst Austria, the Johanniter Unfall Hilfe and the Green Cross. The **Austrian Red Cross** is the largest voluntary charitable organization for emergency care with over 51 000 active volunteers and the greatest market share. The Red Cross is also the most significant provider of blood products, and it offers social services and care at home, as well as first aid courses.

Self-help groups and associations: Over 1000 of these are organized in the Austrian Working Group on Self-Help, which is formed of a range of umbrella groups and contact organizations and seeks to strengthen self-help organizations. Within the Healthy Austria Fund at the GÖG, there is a Service and Information Centre for Health Initiatives and Self-help Groups.

Every Land has **Patient ombudsmen's offices** or **patient representatives**, independent institutions whose purpose is to protect the rights and interests of patients and (in some Länder), those in need of long-term care. The patient ombudsmen's offices' competence extends primarily to hospitals, but in some Länder, it encompasses general practitioners' (GPs) surgeries, care homes and all other health and social care institutions. The patient ombudsmen's offices inform patients of their rights, act as a mediator in disputes, investigate failings and poor-quality care, and support patients when settling out of court following malpractice (see section 2.9). The patient ombudsmen's office services are free of charge. An Austria-wide association of patient ombudsmen (**ARGE Patientenanwälte**) has now been formed.

Issue networks: The **Austrian Network for Patient Safety** is an independent national network of relevant institutions and experts and was founded in 2008 with support from the Federal Ministry of Health. It is based at the Institute for Ethics and Law in Medicine at the University of Vienna.

The **Austrian League for Child and Youth Health** is a non-profit-making, multidisciplinary and multi-professional organization open to all those working in the area of child and youth health, as well as related societies and professional associations. It is also open to institutional service providers and relevant representative bodies, including those for self-help, parents and individuals concerned. It was founded in 2007, and is a non-profit-making, non-partisan and non-denominational initiative.

The **Austrian Network on Workplace Health Promotion** was founded in 2000. The aim of the Network, bringing together all relevant actors (the Federal Economic Chamber, the Federal Chamber of Labour, the Austrian

Trade Union Confederation and many more) is to achieve widespread awareness of workplace health promotion, and to establish competent centres of expertise in individual Länder. The current stage of development in the field of workplace health promotion (WHP) in Austria is in no small measure attributable to the work of the Network (see section 5.1.3 *Health promotion and prevention*).

The **Austrian Network of Health Promoting Hospitals** was founded in parallel with international developments on health promoting health-care facilities. Since 2006 the Austrian Network of Health Promoting Hospitals and Health Care Facilities has been active as a non-profit-making association, supported by the Federal Ministry of Health (www.ongkg.at).

The Unions and the Austrian Trade Union Confederation run a network portal (www.gesundearbeit.at) in order to provide access to information on work and health, along with firms' "best-practice projects" for members of staff councils, health and safety officers and all others interested in employee protection. The internet portal (www.arbeitundgesundheit.at) has been set up in cooperation with the Federation of Austrian Industries, the Workers' Chamber, the Federal Economic Chamber and the Austrian Trade Union Confederation. Protection of employees from damage to health caused at work and from factors at work that may adversely affect health are two of the particular activities carried out by the Workers' Chamber (see section 5.1.3 *Health promotion and prevention*).

Interest groups: In the pharmaceutical sector, there is the Austrian Association of Pharmaceutical Companies, which was founded in 1954 to represent the interests of the Austrian pharmaceutical industry. The Association has around 120 members, who provide almost 100% of the medication market in Austria. The Austrian Generics Association was founded in the year 2000, and is a collaboration between several generics manufacturers selling medicines in Austria. The Association represents approximately 80% of the generics market (Austrian Generics Association, 2010). The Forum of the Researching Pharmaceutical Industry is an organization formed by research-oriented international pharmaceutical companies in Austria. In addition, there is the Association of Pharmaceutical Wholesalers (ARGE Pharmazeutika; see section 2.8.4 *Regulation and governance of pharmaceuticals*), the Austrian Self-Medication Industry, and Austromed, the representative body for companies that develop, produce, prepare and sell pharmaceutical products in Austria (see section 2.8.5 *Regulation of medical devices*).

The **Association of Austrian Insurance Companies** represents the interests of all private insurance companies operating in Austria, and has 142 members. Private health insurance is a voluntary private supplementary insurance. UNIQA Assurances SA and Vienna Insurance Group had a combined market share of almost 70% in 2010 (see section 3.5; VVO, 2010).

2.4 Decentralization and centralization

The Austrian health-care system is characterized by regionalized provision within a regulatory framework determined at the federal level and delegation of statutory tasks to legally authorized stakeholders in civil society. There are practically no instances of duties being carried out by federal authorities acting on a regional basis (deconcentration). Constitutionally, certain tasks are transferred to the Länder (devolution, regionalization). In all Länder except Vienna, hospital management is outsourced to hospital operating bodies as part of the system of organizational privatization. This includes both public and private non-profit-making hospitals such as those run by the Vinzenz Hospitals Group. The regulatory and institutional structure of the health-care system, which is essentially based on decentrally organized contract relations with service providers, has its roots in:

- the division of work according to legal competencies between the federal level and regional bodies, and the related system of financial equalization (see section 1.3) and;
- the broad regional autonomy of insurance funds regulated under social insurance law.

Fig. 2.1 shows that in many areas responsibility for financing and regulation are separate, that is, the institution that pays does not necessarily decide on the use of funds (see sections 3.3.2 *Raising funds for health-care* and 3.3.3 *Pooling of public funds*). The division of these functions is to be found in all branches of the public sector. It is seen as inefficient (see Fuentes et al., 2006; Handler, 2007), and hinders consolidation efforts (OECD, 2011a; IMF, 2011; see also Chapter 7). The Federal Budgetary Framework Act, enacted in 2010 with a validity of four years, covers 75% of federal expenditure. However, this budgetary framework is of little significance for the health-care system, as only 5% of public health expenditure comes from the federal level (cf. Table 3.9). Of particular importance to the hospitals sector (see section 3.7.1 *Financing of hospitals*) is the National Growth and Stability Pact. This Pact defines

upper debt limits for Länder and local authorities (Austrian Stability Pact, 2012; see section 3.3.3 *Pooling of public funds*). Within the Länder's budgets, the individual Länder have widely differing rules for the provision of public services. Such "soft budget constraints" can often lead to regions passing on the expenditure burden for public service provision to higher administrative levels (Kornai, Maskin & Roland, 2003). Debt within the hospital sector is particularly significant in this regard (see section 3.7).

The division of competences, particularly within the hospital sector, and the concomitant "dual" financing, have long been seen as one of the most significant problems in the Austrian health-care system (see Table 3.17 and Fig. 3.8). Consequently, regular demands are made to centralize responsibilities and these demands are often reflected in discussions at the Constitutional Convention (e.g. Österreich-Konvent, 2005). In recent years, there has been a trend towards concentrating (centralizing) planning at the federal level through the development of framework plans, while concomitantly decentralizing (regionalizing) detailed planning and implementation.

In 1997, hospital plans and equipment plans were developed for the first time at the federal level, while decisions on the use of funds were regionalized to the newly introduced regional funds. The health reform of 2005 followed on from this development (see sections 2.2 and 6.1). With the creation of the Federal Health Commission (see section 2.3), involving all major stakeholders in the development of the Austrian Structural Plan for Health (see sections 2.5 and 5.2), the amount of flexibility regional bodies have in the range and quality of provision has become smaller. However, the Länder now have more operative autonomy, although the detailed regional plans must follow federal guidelines.

Within the constitutional framework, this centralization and concomitant decentralization has to be realized with the help of the coordination instrument in accordance with Article 15a of the Federal Constitutional Law. Consequently, these Article 15a agreements have become more and more important, in particular for planning (see section 2.5) and e-health (section 4.1.4).

Centralization is also evident at the level of social security institutions. On the one hand, attempts are being made by social security institutions to unify regulation of processes in the ambulatory sector via introduction of nationwide collective contracts (see section 2.8.2 *Regulation and governance of service providers*). On the other hand, the federal authorities have recently gained more influence on the nine regional health insurers and can for the first time interfere with autonomous matters relating to insurers (Hofmarcher, 2009a). This is related to the federal authorities' control of funds distributed

from the Health Insurers' Structural Fund (see section 3.3.3 *Pooling of public funds*) to reduce deficits of health insurers. However, the high number of social security institutions (insurers) continues to contribute to a high degree of decentralization (fragmentation) in their area of responsibility, that is, the ambulatory sector (Table 2.1). Efforts to centralize governance functions of social security institutions failed with the health reform 2008 (Chapter 6).

Table 2.1

Overview of task allocation according to degree of centralization

Centralization level	Governance	Fundraising and distribution	Use of funds	Provision
High	Basic and framework legislation for all sectors including medication, training	Collection and distribution ^a of taxes, determination of contribution levels to health insurers	–	Disaster management
Medium	Agreements according to Article 15a B-VG, collective contracts			
	Quality, health promotion, prevention, planning	–	Hospitals, care homes, etc.	Vaccination
Low	Hospitals, ambulatory care, mobile services, care homes	Collection and amalgamation of contributions	Public health service, health promotion/prevention, ambulatory care, provision of medication, mobile services, hospitals, long-term care homes	

Note:^a Tax revenue is distributed according to agreements under Article 15a of the Federal Constitutional Law (B-VG).

Source: Author's own compilation.

2.5 Planning

Planning in the Austrian health-care system is largely input-oriented and is – in accordance with the fragmentation of responsibility – carried out and implemented by a variety of stakeholders. This remains true, in spite of the fact that the Article 15a agreement for 2005 to 2008 aimed to overcome – at least on paper – the traditional separation of responsibility by assigning to states and social security institutions a “collective responsibility” for health-care provision in general.

In principle, plans for hospitals are made by the Länder on the basis of a national plan, and plans for general and specialist care by physicians are made by the regional health insurers in agreement with the chambers of physicians (location-based capacity plans on the basis of national guidelines from the Federation of Austrian Social Security Institutions within the REGIOMED framework) (Mossialos, Merkur & Ladurner, 2006b; see also section 2.8.2

Regulation and governance of service providers). Since 2008, health-care planning includes rehabilitation (see section 5.4), and ambulatory care (section 5.3 and Table 2.3), as well as long-term care (section 5.8), where it interfaces with health-care provision (Chapter 6). In addition, long-term care plans exist at the Länder level (see section 2.5.3). The medium-term goal for planning in the health sector is “needs-based planning”, where need is calculated according to morbidity statistics. However, the necessary data and information are not yet available.

The central federal-level coordination instrument in the development and implementation of plans is the agreement in accordance with Article 15a of the Federal Constitutional Law on the organization and finance of the health-care system (section 1.3). Binding plans for acute care provision have been established on this basis since 1997 (section 2.2), including the Austrian Structural Plan for Health. However, the federal authorities have limited ability to impose sanctions in the case of non-compliance with national requirements, meaning that Austria still has one of the highest inpatient bed capacities when compared internationally (OECD, 2010a; Chapter 7).

2.5.1 Austrian structural plan for health

The binding framework for integrated planning of Austria’s health-care provision structure is set out in the Austrian Structural Plan for Health. The Plan is the basis on which all the detailed planning by the Länder is built. It provides a framework for planning of health-care provision in all sectors of the health system within a region. While, previously, hospital plans determined the necessary (or maximum) inpatient capacity per hospital in terms of beds, the Austrian Structural Plan for Health now defines only 32 provision regions and 4 provision zones and determines the amount of services that will be necessary to fulfil population needs, specifying the expected number of inpatient admissions per DRG. Länder are then free to translate these inpatient service provision requirements into the details of hospital infrastructure.

The Plan also contains an analysis of the situation in fields of ambulatory provision at regional level, as well as definitions of criteria on the function of interface management in individual provision regions. In addition, planning is no longer restricted to within Länder borders and makes recommendations on combining complex specialized areas of service provision (reference centres). Furthermore, quality assurance criteria were established, mostly for acute care hospitals.

In the rehabilitation sector, the Plan was able to build on federal rehabilitation plans that have been developed by social security institutions since 1996. These plans determine the need for inpatient rehabilitation and envision an expansion of outpatient rehabilitation but are not legally binding.

One major change introduced as part of the 2010 Austrian Structural Plan for Health is the increased flexibility in hospital structures (e.g. definition of standard basic hospital facilities), which has the potential to instigate structural change (see section 6.2).

2.5.2 Regional health plans

Regional plans for inpatient and ambulatory care are developed by the regional health platforms and must be agreed upon by the relevant Land and social security institutions. The hospital section of a regional health plan must be approved by a resolution of the Land, implying that Länder have veto power concerning planning in the inpatient sector. Regional health plans are the basis for determining whether care provided by a hospital is necessary, which is important as social security institutions are legally obliged to contract only with those providers that are deemed to be necessary, that is, included in the hospital plan (section 2.7.2). Regional health plans must adhere to the guidelines and regulations in the Austrian Structural Plan and the Federal Health Agency must be notified of the regional plans. Since 2006 all nine Länder have created hospital plans as part of their regional health plan and some were later updated and/or expanded. Although the basic structure of a regional health plan follows the framework set out by the Austrian Structural Plan for Health, there is great variation in the level of detail.

Planning in the ambulatory sector is difficult because hospital-based outpatient clinics as well as registered physicians working in individual practices, free-standing outpatient clinics and group practices, must all be taken into account. When agreeing contracts with chambers of physicians, social security institutions must take the relevant regional plan into consideration. However, in the end, the number of contracted physicians is determined by collective negotiation between social security institutions and physicians (and not by the regional health plan) (see Table 2.3). The social security institutions are also obliged to ensure that contracts with service providers do not contravene the Austrian Major Equipment Plan.

2.5.3 Long-term care plans

For long-term care, legally the responsibility of the Länder, “need and development plans” are drawn up between the federal government and the Länder on the basis of the relevant agreement in accordance with Article 15a of the Federal Constitutional Law. The goal is to secure an adequate and varied offering of home-based care and nursing services, as well as inpatient and mixed facilities for individuals in need of long-term care (see section 5.8). These plans take into consideration ambulatory and home-based services (social, medical and nursing provision), mixed facilities (e.g. day- and night-care centres) as well as inpatient care (care homes, homes for the elderly, shared living arrangements for the elderly, etc.), and also regulate facilities for coordination and cooperation (e.g. administrative districts for social and health-care). Similarly to regional structural plans, need and development plans are very diverse, and aimed at problem areas specific to each Land.

2.6 Intersectorality

2.6.1 “Health in All Policies”

In the last few years, the federal “Health in All Policies” approach has been applied to the National Nutrition Action Plan and the Child Health Research initiative, among others. The National Nutrition Action Plan emphasizes the need for a holistic policy approach that promotes health by taking into account the effect of all policies on nutrition and, consequently, health (BMG, 2011e). The Child Health Research initiative (BMG, 2010h) sought to draw up a children’s health-care strategy that integrates all policy areas (BMG, 2011a). The focus was on promotion of health and structural prevention in line with a “Health in All Policies” strategy (Hofmarcher, Hawel & Tarver, 2010). Along with this, the basis for a “Health Impact Assessment” was established. One of the effects of that Health Impact Assessment was the instigation of the “Public Health Service Handbook”, currently still in draft form, that defines the functions of the public health service (see Chapter 6).

2.6.2 National framework health goals

Since 2011, efforts have been made to develop a set of framework health goals to promote health prevention and health promotion. The creation of national framework health goals is rooted in the current programme of government (Federal Chancellery, 2008). The framework health goals highlight the

importance of other sectors for improving health and aim at raising healthy life expectancy by two years by 2020. In addition, they build the basis for governing care provision in the context of new reform initiatives (see section 6.2).

2.7 Health information management

2.7.1. Information systems

In the past few years great efforts have been made to build and expand information systems in the health-care system with the principal aim of increasing transparency. A series of national guidelines on the systematic documentation of services and costs, particularly in inpatient care, were recently issued or refined (BMG, 2011h). Another important step was the Health Care Telematics Act, passed in 2005 as part of the health-care reforms at the time (see section 2.2 and Table 6.1). Alongside this is a series of national expert systems, indices, registries and information platforms, such as the public **Health Portal** (see section 2.9.1 *Patient information*). The expert systems include the DIAG (Documentation and Information System for Health Care Analyses) Extranet, the Austrian Clinical Information System with the Regional Health Information System extension option, the e-database of addictive substances, monitoring and licensing of medication by the Medication Market Monitoring Agency (formerly AGES PharmMed) in cooperation with the Federal Office for Safety in Health Care (see section 2.8.4 *Regulation and governance of pharmaceuticals*), the quality platform (section 2.9.2 *Patient safety and patient choice*), the Epidemiological Reporting System for infectious diseases connected to TESSy (the European Surveillance System) and the consumer information system VIS (previously the Veterinary Information System).

These information systems are run and maintained by the Federal Ministry of Health or by agencies on its behalf such as GÖG, the regional health funds, the health and social departments of individual Länder, the Federation of Austrian Social Security Institutions or Statistics Austria. Data on spending and care provision generated by Statistics Austria or other relevant sources are regularly transmitted to Eurostat, the OECD and WHO in accordance with existing reporting deadlines. The data includes costs, expenditure and performance statistics from every area of provision, information which is made accessible in the international databases. In the following section, some of the key information systems are briefly explained.

The federal agency Statistics Austria captures data on health expenditure for the Federal Ministry of Health according to **OECD System of Health Accounts (SHA)** standards (Statistics Austria, 2010d). This data collection is carried out alongside calculation of health expenditure based on the European System of Accounts (ESA 1995). The SHA standards offer a far more flexible range of possibilities for data representation, which means that expenditure is easier to compare internationally. Public and private health expenditure and components of each are available in time series from 1990 onwards. The International Classification for Health Accounts enables 3D representation of health expenditure. The three dimensions, or axes, are HF (health-care financing), HP (health providers) and HC (health-care functions). Within these three types of representation there are various matrix combinations (HF and HC, HC and HP, HP and HF etc.; see e.g. Table 3.4).

The **Austrian Health Survey** is a survey of the Austrian population carried out irregularly as part of the microcensus. The last Health Survey took place in 2006/2007. Fifteen thousand randomly selected individuals were questioned on their state of health, healthy behaviour and uptake of various service options in the health-care system. The questionnaire compiled by the European statistics office (Eurostat), which seeks to enable standardization of results of health surveys across the EU, was used here for the first time in Austria (Statistics Austria, 2007; see also Chapter 7).

The Federal Institute for Quality in the Health Service was commissioned by the Federal Ministry of Health in 2010/2011 to plan the first **cross-sector patient satisfaction survey**. The aim of the survey is to continually optimize care processes across the various sectors, in a strategy informed by patients' subjective perceptions of what is on offer. The survey was carried out in 49 hospitals, where 99 000 questionnaires were given out in interviews at the time of patient discharge. The response rate was 22%. Initial results pointed to potential for improvement above all in interface management and in cooperation between various health-care service providers (GÖG & BIQG, 2011; see also Chapter 7).

The **DIAG Extranet** was introduced as an encrypted web portal that gives regional health funds and social security institutions, in their roles in the Federal Health Care Agency (see section 2.3), access to performance, costs, staffing and epidemiological data in public hospitals. The legal framework for diagnosis and performance documentation in hospitals is formed by the Federal Act on Documentation in the Health Care System, initially passed in 1996 and amended in 2004, with an implementation order dated 2010. Guideline

handbooks are published by the Federal Ministry of Health to assure national documentation standards. These include the stipulation that funded hospitals must provide monthly diagnosis and performance reports to the Land or Regional Health Fund as a basis for DRG-based payment (see Table 2.2 and section 3.7.1 *Financing of hospitals*).

Table 2.2

Minimum basic data set of hospitals' diagnosis and performance reports

	Admissions data	Patient data
Administrative data	Hospital number	Date of birth
	Admission number and admission date	Gender
	Type of admission	Citizenship
	Admitting department, transfers	Main address
	Payer	Discharge date and type of discharge
Medical data	Main diagnosis (according to ICD-10 BMSG 2001, four-digit)	
	Secondary diagnosis/diagnoses (according to ICD-10 BMSG 2001, four-digit)	
	Procedures (according to BMG Catalogue of Services 2010)	

Source: BMG (2011b).

The **Minimum Basic Data Set** for each hospital inpatient stay is the basis for calculation of hospital budgets according to the DRG-based hospital payment system (section 3.7). The Minimum Basic Data Set also serves as a source of information for analysing the current condition and for planning. The introduction of nationally standardized diagnosis and performance documentation meant the creation of a common basis for data, which enables national and international comparisons of the hospital diagnosis and performance spectrum. To guarantee data quality, criteria are applied on completeness, accuracy and plausibility. To guarantee plausibility of points included in calculations, the coding is checked. Warnings show up when, for example, data within a set appears implausible, though not impossible. Errors show up where there is data that is medically highly improbable, wrong or entirely missing. Exceptions can be allowed by hospitals, the regional health funds or Private Hospitals Financing Fund (PRIKRAF), however (BMG, 2010a, 2011b).

The **Austrian Clinical Information System** was intended to be a geographical information system. Its database is fed with epidemiological information and practically all performance and provision statistics. The Information System is maintained by GÖG and includes representations by maps and time series as well as simple statistical methods of analysis of all basic epidemiological statistics (e.g. life expectancy, mortality rates, cancer

rates, hospital admissions, subjective state of health). The Information System is also able to provide detailed information on nearly all sectors of the health-care system (e.g. intensive care units, independently practising physicians, rehabilitation centres, care homes and homes for the elderly, mobile services and emergency provision).

Key data provided by the Austrian Clinical Information System on health indicators is published in maps at <http://regis.oebig.at> as part of the **Regional Health Information System**. In addition, the GÖG web site provides access to an archive of all the federal, regional and some local authority health reports that have appeared to date (<http://www.goeg.at/de/Bereich/GB-Archiv.html>), which show an array of epidemiological and health-care system indicators. Some Länder have also begun to capture relevant health indicator statistics via the Health Information System and are putting them online (see e.g. <https://portal.tirol.gv.at/TigedatWeb/app>).

While the quality of performance statistics in the inpatient sector has significantly improved in recent years, there are still gaps and quality issues with documentation of service utilization and costs of hospital outpatients services (Court of Auditors, 2011a). There are currently pilot projects ongoing in four Länder (Lower Austria, Upper Austria, Vorarlberg and Styria), which are aimed at better recording hospital outpatients statistics and converting them into a **Catalogue of Ambulatory Services**, which could also be extended to the whole ambulatory care sector. The data reported by the Länder during the pilot phase is incorporated into the DIAG for evaluation where pilot participants have access to it for further data quality and plausibility tests. The legal basis for the data transfer is found in the Health Care Documentation Act Implementation Regulations (2010). In the long term, there are plans to bring in one catalogue across all the Länder (BMG, 2010b). The new calculation in 2009 of the hospital financing model (section 3.7.1 *Financing of hospitals*) brought its systems into line with those in the Catalogue of Outpatient Services. The Catalogue is therefore an important building block for flexible and need-appropriate care provision (see section 6.1).

The Federation of Austrian Social Security Institutions makes available both detailed **physician charges statistics** (Table 3.22) and financial statistics organized by social security provider. The **financial statistics** list the budgets for each individual social security institution alongside administration and accounting costs, as well as showing analysis of the Federal Long-Term Care Financing Act. The **Statistical Handbook** contains general information on the employment market and income from compulsory contributions as well as

specific data on health, pension and accident insurance. It also shows detailed information on the amount and range of long-term care allowance income (see section 5.8). The **LIVE 2006** data on provision for insured people provides calculations of health expenditure by age and gender. The data (base year 2006) is collected by all social security providers and contains, among other things, costs for services consumed by those insured, in aggregate form by age group and gender. This data set from the Federation of Austrian Social Security Institutions is transmitted to Statistics Austria to assist depiction of health expenditure according to the SHA.

2.7.2 HTA

The provisions in accordance with Article 15a of the Federal Constitutional Law on financing and organization of the health-care system require evidence-based medicine and HTA to help nationwide quality assurance. While increasingly demanded by public payers results of HTA are not systematically incorporated into public decision-making, for example, concerning the inclusion or exclusion of technologies from the benefits basket. Yet, a national HTA strategy was published in 2010, establishing common goals of the major decision-makers in the health-care sector and creating a framework for expanding the use of HTA. In fact, on behalf of the Federal Ministry of Health, GÖG has been working on drafting the strategy since 2008, in partnership with the HTA Working Group of representatives from the Federal Ministry of Health, the Länder and social security institutions. The working group has specialist support from a pool of national and international experts.

A process manual is published as part of the work towards a national HTA strategy. There is also a pilot project under way allowing public subject submission online, in order to enable a transparent process of subject selection and prioritization. Austrian HTA providers are currently working together on a common methodology handbook, which is intended to provide the model for all future publicly commissioned HTA reports. In future, in agreement with EUnet HTA Joint Action, all stakeholders will have access to all Austrian publicly commissioned HTA reports via a common central entry point.

2.8 Regulation

In accordance with the constitutional division of responsibility for the health-care system, its regulation and governance is spread across many levels. In the course of significant structural reforms over the past 15 years, a series of

public governance responsibilities have been decentralized or passed to cross-stakeholder institutions, for example the Federal Health Agency (see sections 2.2 and 2.3). Social security is a self-governing area of organization. Federal-level supervision of social security is restricted to examination of the legal conformity of its administration processes.

2.8.1 Regulation and governance of third party payers

Federal government, Länder and local authorities as payers

The legal framework regulating availability and financing for social and health-care facilities is formed by social security law, as well as financial equalization measures and the agreements between the federal government and the Länder in accordance with Article 15a of the Federal Constitutional Law. Social security contributions are set nationally by Parliament. The federal government's responsibilities encompass supervision, planning and regulation in almost all areas of health-care provision and include determining the mechanisms of financial equalization between various local bodies, particularly in the inpatient sector.

The Federal Health Agency determines these mechanisms of financial equalization and distributes tax money to the regional health funds according to legally predefined proportions (see section 3.7.1 *Financing of hospitals*). Since 2009 these resources have been drawn from the totality of taxation revenues as a result of the reforms to the financial equalization agreement 2009–2013. The distribution among the Länder according to set quotas has been retained. Management by the Federal Health Agency is subject to control by the audit office. Federal authorities are able to withhold about 2% of funds for hospitals, particularly in the case of Länder not complying with planning and quality guidelines or contravening documentation requirements (see sections 2.5 and 5.4). However, this sanction mechanism has never been applied.

At Länder level, payment for public hospitals is managed by the regional health funds (see section 3.7.1 *Financing of hospitals*). The implementation of performance-oriented financing for these hospitals led to diverse Länder-specific reimbursement models (see section 3.7). Until the end of 2011, their responsibility also covered large amounts of the allocation of long-term care benefit (see section 5.8 and Chapter 6) as well as legal minimum income and other welfare benefits. Since the introduction of the need-based minimum income, existing Länder-level welfare systems have been unified.

Local authorities play only a minor role as public payers in the health-care system and are therefore not involved in financial governance and regulation. Nonetheless local authority participation in hospital financing is significant in some Länder (see Chapter 3, especially Fig. 3.8). In this context, some Länder implement taxation legislation as part of their responsibilities and oblige local authorities to make resources available. The range and type of this participation by local authorities in the hospital sector is very varied in its organization and information on instrumentation used is sparse.

Social security and private health insurance

The legal framework regulating social security is formed by social security law. Different laws exist for different groups of the population, which are each covered by different types of health insurance funds. The ASVG regulates regional health insurance funds, which insure approximately 80% of the population. Other laws (the Act on Social Insurance for the Self-Employed [GSVG], Farmers' Social Insurance Act [BSVG], Act on Civil Servants' Health and Accident Insurance [B-KUVG]) regulate insurance for specific groups of the population (self-employed, farmers and civil servants). The laws determine the right to insurance and rules of eligibility for a particular type of insurance fund, implying that insurance holders do not have free choice. The legal minimum benefits package, which is standardized across all health insurance funds, is defined by the ASVG. However, insurance funds may also offer "voluntary services" in addition to the minimum benefits package, according to the funds' financial ability to do so, for example, certain preventive care services (for more details see section 3.3).

Supervision of all social security institutions is carried out at federal level by the Federal Ministry of Health. Until March 2010, monitoring of smaller regional insurance funds (those with up to 400 000 insured) was carried out by the head of government of each Land as the direct regulator, with the Federal Ministry of Health as the supervisory regulator (see section 1.3). The Federation of Austrian Social Security Institutions is monitored by different ministries, that is, the Federal Ministry of Labour, Social Affairs and Consumer Protection, and the Federal Ministry of Health, are tasked with monitoring their respective areas of responsibility. The Federal Minister of Finance is entitled to send a representative to governing body meetings of pension funds, nationwide specialist insurers and the Federation of Austrian Social Security Institutions in order to protect the financial interests of the state. This representative also has a right to pose objections. The control rights of the supervising authorities (the Federal Ministry of Labour, Social Affairs and Consumer Protection, Federal

Ministry of Health and Federal Ministry of Finance) include examination of the cost-effectiveness and economic efficiency of the institutions, as well as whether they are fit for purpose.

While decentralization of governance by the state has only been strengthened in recent years, social health insurance has been characterized by significant decentralization since the adoption of the 1955 ASVG (see section 2.2). In contrast to centrally collected taxation, social security contributions are collected by individual institutions, which also organize their own contracts with service providers (except hospitals). Contract drafting and tariff negotiation are somewhat influenced by the Federation of Austrian Social Security Institutions by their publication of, for example, templates for fee agreements. However, as with hospital provision, final contract and fee agreements are very diverse across different social security institutions and Länder (see section 3.7).

Private health insurers, unlike the public social security system, have no obligation to take on any individual as a customer. This type of insurance is based on a freely arranged, voluntary agreement (see section 3.5). Private health insurance firms are regulated by the financial services regulator (see section 2.3).

2.8.2 Regulation and governance of service providers

Table 2.3 summarizes service provider licensing responsibilities for the main service areas. With the exception of group practices and independently practising physicians, the government of each individual Land is responsible for licensing health facilities. Independently contracted physicians' licence to practise is agreed between regional health insurance institutions and chambers of physicians. Although the Structural Plan for Health includes planning of ambulatory care, it remains the responsibility of individual Länder to include this area of provision in their regional structural health plans (see section 2.5).

Table 2.3

Regulations on licensing and analysis of need

Regulatory instruments		Type of service	Licensing	
Public law: federal and regional Hospitals Acts	ASVG, agreements in accordance with Article 15a B-VG	Hospitals, including hospital outpatient clinics	Regional government	Based on the ÖSG or Regional Structural Plan based on existing provision in the in- and ambulatory sectors
Law governing the profession, e.g. Physicians Act		Outpatient clinics "Ärzte-GmbHs" (group practices)		
		Independently practising contracted physicians	Regional health insurers and chambers of physicians, guided by location-based staffing plans	

Source: Authors' own compilation.

Hospitals, and free-standing outpatient clinics and group practices need to obtain approval for both their construction and their operation. In this, the responsible authorities examine whether there is a need. Needs assessment was extended to free-standing outpatient clinics and group practices in 2010. The process of obtaining approval is influenced by reports from relevant planning bodies, such as Gesundheit Österreich GmbH. In addition to this, the health platforms have the opportunity to submit a statement. Needs assessment is not required when only services that are not reimbursable by social security funds are offered.

Needs assessments take socio-demographic factors into account, including transport links to the facility, usage statistics, average burdens on current service providers (for services that can be reimbursed by social security) as well as new trends in medicine and dentistry. The motivation behind the assessment of need is ensuring availability of high-quality, well balanced and universally accessible health-care, while at the same time safeguarding the financial balance of the social security system by avoiding supplier-induced demand.

The interests of involved parties are guaranteed by the right to submit comments in the process of need assessment and the right for objections to be dealt with before a court.

Sanitary inspection of hospitals is regulated by hospitals legislation at federal and regional level (see Chapter 6, Table 6.1). Sanitary inspection comes under the banner of indirect federal administration and as such is administered by local authorities and carried out by local authority medical officers (see section 5.1). This inspection is to be carried out at all approved facilities (general and specialist hospitals, care units for the chronically ill, sanatoria

and free-standing outpatient clinics), without needing a particular reason for the inspection. It is up to the local authority to carry out a risk assessment of how often and in how much depth these inspections need to be carried out.

Contracting law and location-based staffing plans

In order to safeguard physician care for the population and to regulate relationships between the health insurance institutions and independent physicians, collective contracts are negotiated. These collective agreements are made between regional chambers of physicians and the Federation of Social Security Institutions, and must be agreed to separately by each individual social security provider (Article 341, paragraph 1, ASVG). The involvement of the Federation is intended to ensure that contracts are established on the same basis for all health insurance institutions. The Austrian Chamber of Physicians can agree a contract on behalf of the regional chambers with their consent. Among other things included in the collective contracts are the rights and responsibilities of contracted physicians, as well as the fee schedule. The collective contract also includes regulations on the number and regional distribution of contracted physicians and group practices. The final step of the contracting process is the conclusion of individual contracts between physicians or group practices and the social security institutions, although the content of these contracts is largely determined by the collective contracts.

Collective contracts are also in place to regulate preventive check-ups as well as for specialist services in the field of occupational health (see section 5.1.3 *Health promotion and prevention*). Services relating to clinical psychological diagnostics are controlled by a collective contract with the professional Association of Austrian Psychologists. Provision of medication is also controlled by a collective contract between the Austrian Federal Board of Pharmacy and the Federation of Austrian Social Security Institutions (again with agreement of individual health insurance providers). Social security law also provides for collective contracts with other providers (opticians, makers of surgical trusses, orthopaedic technicians, makers of orthopaedic footwear, etc.). In practice such collective contracts are agreed between the Federation of Austrian Social Security Institutions and the relevant part of the Federal Economic Chamber. Alongside pricing, the contracts also regulate the function and quality specifications of the products in question.

Contracts between insurance funds and physicians or group practices are handed out in accordance with the location-based staffing plan. The location-based staffing plan is negotiated by regional health insurance institutions and the corresponding regional chambers of physicians, and controls the number

and distribution of contracted physicians based on need and existing provision of physician care by hospitals. These plans are divided according to medical specialties. As a rule each insured person should have a choice between at least two appropriately qualified providers, either individual contracted physicians or group practices covered by the contract, which should be located within a reasonable travel distance.

The contracting system combined with fee negotiations leads to comprehensive control of resource consumption in health-care outside of hospital provision. The downside of this is that it means that establishment and expansion of ambulatory service provision in order to reduce the burden on the inpatient sector (see section 5.3) is progressing only slowly. While enactment of group practice legislation is aimed at extending ambulatory capacity, regulations on licensing and analysis of need still present a significant obstacle to engaging service providers that are currently not involved in contracts with health insurance institutions (Hofmarcher & Hawel, 2010).

In fact, non-contracted physicians account for an important proportion of all practising physicians (see section 4.2) and any licensed physician registered with the Chamber of Physicians (see section 2.8.3 *Registration and planning of health-care professionals*) has the right to open a practice (freedom to practice).

Quality strategy for the Austrian health-care system

Nationwide quality projects have been carried out since the beginning of the 1990s. Some 50 federal regulation documents contain directives relating to quality.

The Health Care Quality Act (2005) is the most important law, regulating health-care quality in Austria. The act provides a legal basis for the strategic development of quality assurance projects by the Federal Ministry of Health. The act lays out quality standards and quality assurance work, defines reporting and controlling systems, and enables appropriate support and incentives. A nationwide Austrian quality strategy was agreed between federal and Land authorities, as well as social security institutions, and this was passed by the Federal Health Agency in June 2010 (GÖG, 2010b). On the basis of this strategy, operational goals are developed and cooperatively put into practice. In the field of HTA, this enabled development of a national HTA strategy (see section 2.7.2 *HTA*).

The emphasis of nationwide quality assurance work is on establishment of a quality platform for health service providers, as well as compilation of quality reports, operation of cross-sector patient surveys (see section 7.3), development

and management of quality registers, patient safety measures, development of federal quality guidelines, interface management between in- and outpatient provision, as well as creation of an HTA process manual.

In mid-2009 the first federal quality guidelines for diabetes mellitus type 2 were established in partnership with all major stakeholders, on the basis of the Health Care Quality Act, introducing the first disease management programme in Austria (see section 5.2).

Another important aspect of the expansion and safeguarding of quality assurance is e-health. In Austria work on this is carried out under the ELGA banner. ELGA is a system for administering all of citizens' relevant health-care data electronically (see sections 2.9.1 *Patient information* and 4.1.4 *Information technology*).

2.8.3 Registration and planning of health-care professionals

All health-care professions are subject to regulations put in place by federal legislation. The highest administrative authority in the health-care system is the Federal Ministry of Health. Regulation of health-care professions covers training (see section 4.2.3 *Training of health-care staff*), career path, nomenclature, rights to practise, practice obligations and disciplinary procedures. To practise it is necessary to have the appropriate permission. Obtaining this requires successful completion of the appropriate (legally defined) training, legal capacity to practise as well as being able to prove your own adequate state of health and trustworthiness. Certain health-care professions require compulsory entry in a public register before starting to practise. These registers are currently operated separately for each profession, either by professional bodies or chambers, or by the Federal Ministry of Health (see Table 2.4). The professional is then only allowed to practise for as long as he or she remains on the register. For physicians, pharmacists, midwives and dentists, the registers are run by their legally appointed professional bodies. The following groups' registers are run by the Federal Ministry of Health: qualified cardiovascular technicians, music therapists, clinical and health psychologists and psychotherapists.

Introduction of compulsory registration is also planned for the following professions in the coming years: qualified nursing staff, allied medical professions, therapeutic masseurs, medical masseurs, specialist medical technicians, carers, members of medical transport services, paramedics and dental technicians. It is yet to be established who will carry out the task of registration for these professions.

Table 2.4

Overview of regulations on registration of the health-care professions

Health-care profession	Registration by	Law governing the profession
Pharmacist	professional body	Pharmacists Act, RGBl no. 5/1907
Physician		Physicians Act 1998, BGBl I no. 1689/1998
Midwife		Midwives Act, BGBl no. 310/1994
Dentist		Dentists Act, BGBl I no. 126/2005
Qualified cardiac technician		Cardiac Technicians Act, BGBl I no. 96/1998
Music therapist	Federal Ministry of Health	Music Therapy Act, BGBl I no. 93/2008
Clinical psychologist or health psychologist		Psychologists Act, BGBl no. 360/1990
Psychotherapist		Psychotherapy Act, BGBl no. 361/1990
Qualified nurse		Health and Nursing Care Act (GuKG), BGBl I no. 108/1997
Higher medical-technical staff		Federal Act on Regulation of Higher Medical- Technical Staff (MTD Act), BGBl no. 460/1992
Therapeutic masseur	no registration	Medical Masseurs and Massage Therapists Act, BGBl I no. 169/2002
Medical masseur		Medical Masseurs and Massage Therapists Act, BGBl I no. 169/2002
Specialist medical-technical staff		Federal Act on Regulation of Specialist Medical-Technical Staff and Ambulance Staff (MTF-SHD-G), BGBl no. 102/1961
Carer		Health and Nursing Care Act (GuKG), BGBl I no. 108/1997
Ambulance staff		MTF-SHD-G, BGBl no. 102/1961
Paramedic	Paramedics Act, BGBl I no. 30/ 2002	
Dental technician	Dentists Act, BGBl I no. 126/2005	

Source: GÖG compilation.

2.8.4 Regulation and governance of pharmaceuticals

Licensing, monitoring and advertising

Regulation of pharmaceuticals is a federal responsibility. The most important piece of legislation is the Medications Act, which contains fundamental definitions and regulations on manufacture and distribution of pharmaceuticals. Further important legal frameworks are set out in the Pricing Act and the scale of medication charges (both pertaining to pricing), while reimbursement is covered by the ASVG.

EU legislation is also of particular relevance regarding licensing of medications. Regulation of pricing and reimbursement is left to individual member states. Medication licensing in the EU was reformed in the 1990s and again in 2004 (Human Medicines Code 2004, Directives 2001/83/EC and 2004/27/EC, Regulation (EC) 726/2004), which hands responsibility at European level to the European Medicines Agency. Proof of a medicine's quality,

safety and effectiveness is required for it to be permitted (see Fig. 2.3). The Federal Office for Safety in Health Care is the national body (see section 2.3) that carries out tasks relating to control and licensing of medication and medical devices. These tasks include licensing of medications, pharmacovigilance (safety of medications), market monitoring of medical devices, inspection of pharmaceutical firms, haemovigilance and monitoring of tissue, scientific advice, medication quality testing, clinical testing and representing Austria in various international pharmaceutical bodies.

According to the Austrian Prescription Requirement Act, the Federal Minister of Health must determine by decree which medications require prescriptions, that is, those which even if used according to guidelines could endanger human life or health without medical supervision. The Federal Ministry of Health is supported in classification of medications as prescription or non-prescription by the Prescription Requirement Commission.

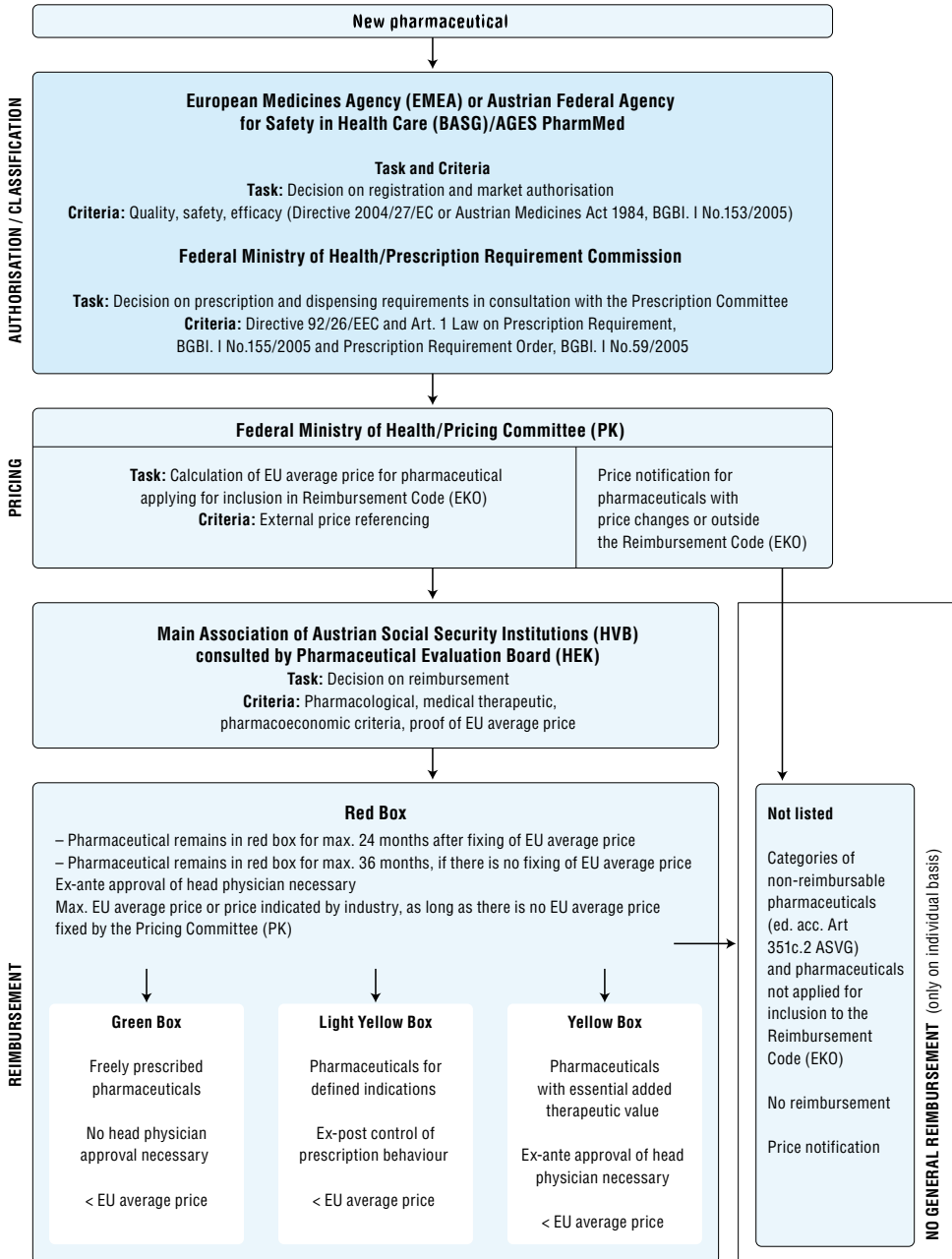
It is the responsibility of the Federal Office for Safety in Health Care, along with local authorities, to monitor advertising of medication. Advertising aimed at consumers is not allowed for prescription medications. However firms can make product-specific information available, if there is a demand from patients. Non-prescription medications are also sometimes subject to an advertising ban, if they are listed in the Reimbursement Codex. Other over-the-counter products may be advertised via any medium.

The medication trade

In Austria, prescriptions outside of hospitals are dispensed by some 1200 general pharmacies and almost 1000 physicians running their own in-practice pharmacy (see section 5.6). Internet pharmacies and distance-selling of prescription medications are not permitted in Austria. Cross-border distance-selling of non-prescription medications, however, is permitted, according to the “DocMorris” ruling by the European Court of Justice.

General pharmacies are largely supplied by around 35 wholesalers, organized in Austria as a multi-channel distribution system. Wholesalers can only have a limited proportion of the ownership of a pharmacy (up to 49.9%). Direct supply from the pharmaceuticals industry is possible, but not usual practice. Physicians with in-house pharmacies are legally permitted to purchase medications only from a general pharmacy within the European Economic Area (EEA).

Fig. 2.3
The Austrian medications system, 2010



Sources: GÖG (2008); GÖG and BMG (2010); Leopold et al. (2008); Vogler and Leopold (2010).

Operation of a general pharmacy, in accordance with the Pharmacists' Act, may only be done under licence from the authorities by those fulfilling certain individual (e.g. pharmacy degree from an EEA country, minimum of five years professional experience in a pharmacy) as well as material (e.g. minimum size of operating space) requirements. For new establishment of a pharmacy, analysis of need in accordance with the Pharmacists' Act is of most relevance, and there must be a minimum distance of 500 metres between two pharmacies, and a minimum customer base of 5500 people.

Non-pharmacists may own up to 50% of a pharmacy. A further requirement for new establishment of a pharmacy is that a physician who does not operate an in-house pharmacy must have his or her practice within the local authority district. Pharmacists may have only one pharmacy licence and may only run one pharmacy. However a maximum of one further branch of each pharmacy may be opened under the supervision of a general pharmacy.

Generic substitution, that is, dispensing a medication with identical active ingredients and effect in the place of the named preparation is not permitted in Austria. Physicians may not prescribe using International Nonproprietary Names, but must use the brand name. In spring 2008 draft legislation was created that provided for introduction of a system of reference prices in tandem with obligatory generic substitution and prescription by active ingredient. The legislation and related health reform, however, were not introduced in Parliament (GÖG & BMG, 2009; cf. Box 6.1, section 6.1).

There is no explicit clawback system in Austria, however there are special reductions for preferred buyers (particularly health insurance institutions) at a rate of 2.5% of the amount of pharmacy income that is in excess of the national average (GÖG, 2008).

Pricing

The basis for medication pricing in Austria is formed by the Pricing Act 1992 as well as an extension agreement on price reporting. According to the pricing law, the Federal Ministry of Health is entitled to define "economically justified" prices to the manufacturers. Retail prices of medications in the Reimbursement Codex are regulated, independently of whether they require a prescription or not. New patent protected medications included in the Reimbursement Codex are not permitted to be above the average price for the EU. The relevant legal basis for this is the ASVG (Article 351c ff), the Reimbursement Codex and the regulation on actions taken by the Pricing Commission in establishing EU average pricing.

The EU average price is established by the Pricing Commission, which operates out of the Federal Ministry of Health, on the basis of reporting by the licensed vendor. The Commission is supported by GÖG, which checks reported prices in cooperation with the Pharma-Price Information Service. For these calculations it is necessary to have factory prices for identical medicines for at least half of the EU member states, or at least two in the case of generic medicines. If these are not available, a price evaluation is carried out every six months and an average price is calculated after the second evaluation from the information available. If this price is below the factory price reported by the licensed vendor, the company must reimburse the difference to the social security institutions at the end of the year.

For generic drugs included in the Reimbursement Codex (defined as medications which do not contain active ingredients subject to a current patent) different pricing regulations apply. The price of the first generic follow-up product with identical active ingredients must be 48% less than the price of the original product. The second generic follow-up product must come at a price 15% lower than that of the first follow-up. The vendor of the original product is obliged to reduce its price by at least 30% within three months of acceptance of the first generic equivalent in the Reimbursement Codex. With the acceptance of the third generic follow-up, the price of which must be at least 10% lower than the second, both the vendor of the original product and the firms offering the first and second follow-up products must reduce their prices to the same level as that of the third generic product within three months of its entry in the Codex. All additional generic follow-up products must be at least 10 cents cheaper than the cheapest generic product with identical active ingredients listed in the Reimbursement Codex to date. If these price reductions are not carried out, the medication affected should be removed from the Codex.

For non-reimbursable medications, which frequently do not require a prescription, the pharmaceutical firms can freely determine the factory price. At wholesaler and pharmacy level, the prices of all medications are nationally regulated by means of a degressive mark-up system. Two different scales are used by wholesalers, depending on whether the medication is reimbursable or not. Both list the official highest mark-up rates, which are degressively graded and nationally regulated (see section 3.7).

Reimbursement

The Federation of Austrian Social Security Institutions provides a positive list, the so-called Reimbursement Codex. Of the approximately 9800 permitted medications in Austria (variations in form and dosage counted separately, but not variations in pack size), around 4200 were contained in the Reimbursement Codex at the start of 2010.

The Federation of Austrian Social Security Institutions decides on the acceptance of medications into the Reimbursement Codex. To be accepted, medications must have a therapeutic effect observed in experiences in Austria and internationally, as well as according to current scientific opinion, and be of benefit to patients as part of their treatment in the case of ill-health (Article 31, para. 3 Z 12 ASVG). The Federation of Austrian Social Security Institutions is advised by the Pharmaceutical Evaluation Board (see section 2.3). If the decision in favour of reimbursement is made, the full price of the medication is reimbursed. However, a prescription fee has to be paid in the ambulatory sector per pack of prescribed medicine (see section 3.4).

The Reimbursement Codex, introduced in 2005, is divided into various sections (“boxes”), which determine different access requirements in terms of medical approval and quantity control (see Fig. 2.3): the red box of the Codex contains all medications for which inclusion in the Codex has been requested, and they are listed there for a maximum of 90 (or 180) days. The red box functions as the entry level of the Reimbursement Codex. After entering via the red box, medications with a meaningful therapeutic function or which are innovative are then transferred to the green, yellow or light yellow boxes of the Codex. Medications which were previously included in the Register of Medicines and are therefore freely prescribable, and also generally compounded preparations are assigned to the green box. In addition, in accordance with Article 351c of the ASVG, there is a list of categories of medication (no box) which are generally inappropriate for treatment in the ambulatory care sector.

Medications in the red box of the Reimbursement Codex need approval from the chief physician to be used, which must be obtained by the prescribing physician. The yellow box is divided into the dark yellow box which requires prior approval from the chief physician and the light yellow box. Medications in the light yellow box can be freely prescribed for particular symptoms, however the prescription must be accompanied by written documentation. Retrospective checks by the chief physician are possible.

Medications provided by hospitals must be on an individual internal list of medications at the hospital (GÖG, 2010a). In some cases, hospital operating bodies coordinate medication lists across their hospitals. Compilation and updating of medication lists is the task of the hospital's Medications Commission, the establishment of which is a legal obligation. The Medications Commission must contain a representative of the relevant social security institution. Other members – according to regional legislation – are representatives of the hospital pharmacy, hospital management and specialist physicians. The Medications Commission makes its decisions on acceptance of medication in the medication list based on various criteria (therapeutic, medical or economic).

2.8.5 Regulation of medical devices

The regulation of medical devices in Austria orients itself in accordance with a series of European directives, including Directive 90/385/EEC on implantable medical devices, Directive 93/42/EEC on medical products, Directive 98/79/EC on In-Vitro Diagnostics (European Commission, 2010a), which were most recently amended by Directive 2007/47/EC.

The European medical devices directives and their corresponding national legislation, the Medical Devices Act, define requirements for safety of medical devices and rules for licensing (including clinical evidence), implementation, market monitoring and dealing with faulty devices. Only medical devices with an EU-wide CE mark may be used, as this mark means that the device meets the requirements of applicable European directives.

Legal requirements oblige Austria to operate a register of medical devices (GÖG & BMG, 2010). Registration in the medical devices register is obligatory for all Austria-based manufacturers and agents responsible for the first introduction of a medical device on the European market. Vendors and dealers of medical devices can register voluntarily.

A milestone at EU level is compulsory participation in the European Databank on Medical Devices, which national registers must report to since May 2011. The Databank is a secure web portal to improve quick information exchange between individual national authorities and the market monitors (above all in the case of problem incidents with medical devices). There is also the Medication Market Monitoring Agency (formerly AGES PharmMed), working in close cooperation with the Federal Office for Safety in Health Care, that carries out statutory tasks. These bodies (see section 2.3) are responsible for

market monitoring and supervision, clinical testing, inspection and free sales certificates. Procurement and reimbursement of medical devices depends on who is paying for the product.

In the ambulatory care sector outside of hospitals, regional health insurance funds are responsible for purchasing and payment for medical devices. There is no collective central contract for medical devices. Instead, reimbursable products are included in the various service catalogues published by health insurers. In the case of around 80% of medical aids and accessories, the Competence Centre for Medical Accessories and Therapeutic Aids, based in the Austrian Miners' and Railway Workers' Insurance Fund, negotiates reimbursable prices. Public purchasing of medical devices is relatively rare in independent clinics (e.g. to meet a requirement of the health insurance institutions). Reimbursement rates vary depending on the third party payer. For some devices, 100% of costs are covered; for others, patients must pay a contribution or even the full costs themselves (see section 3.4.1 *Cost-sharing and direct payments*).

In inpatient care, medical device costs are included in flat-rate payments under the system of performance-oriented hospital financing (section 3.7.1 *Financing of hospitals* and Table 3.18). The adoption of new, innovative medical devices or interventions in the so-called "MEL Catalogue", which includes services reimbursed under the hospital payment system, is increasingly subject to an evaluation in the form of an HTA (see section 2.7.2 *HTA*). In this context the Ludwig Boltzmann Institute for Health Technology Assessment has an important role to play (see section 2.3). The increasing importance of HTA in this field can also be seen in the growth in the proportion of flat-rate payments covering the MEL category. While in 1998 38% of all medical expenses payments were on this category, the proportion rose to 44% by 2010 (see Table 3.19). Purchase of medical devices is done directly by individual hospitals or by a central facility run by the owner of the hospital.

2.8.6 Regulation of capital investment and equipment provision

In 2009 around €1.7 billion, 5.7% of total health expenditure, was invested in infrastructure. Of that €945 million was spent on public sector investment, and €785 million in the private sector. Both sides have experienced very dynamic developments in investment in recent years (see Table 4.1). While regulation of financing for investment varies widely between Länder (see section 4.1.1 *Capital stock and investments*), the fundamental structure of investments for hospitals is determined by the Austrian Structural Plan for Health and the regional structural plans (see section 2.5). This is also true of investments

in major equipment, the location of which is also regulated by the plans. Investments in the ambulatory sector are somewhat determined by the location-based staffing plan (see section 2.8.2 *Regulation and governance of service providers*) which concerns, however, only contracted independently practising physicians. These two instruments of regulation ensure capital investment is largely geographically balanced across the health-care system. However information on the details of investment plans is lacking. While other public sector fields are managed by the Federal Procurement Agency, an outsourced company run by the Ministry of Finance, which prepares and agrees a range of investments, the health-care system has, with a few exceptions, no obligation to obtain favourable deals by employing bulk, structured purchasing methods (Beschaffung Austria, 2011).

2.9 Patient empowerment

2.9.1 Patient information

Almost 80% of Austrians regularly use the internet (Table 4.5). According to Statistics Austria, more than 50% of internet users search specifically for information on health questions (Statistics Austria, 2008, 2010a). According to a 2009 survey on information sources when answering health queries, the internet was the most important source of information at 29%, ahead of GPs (24%), specialist physicians (23%) or other mass media (16%). However only around 4% of respondents designated the internet as a trustworthy source of information, in contrast to general and specialist physicians who were assessed as 38% and 33% trustworthy respectively (BMG & ISA, 2009).

The Austrian Health Portal

The Health Portal was developed to offer an accessible service with quality-assured information on health matters and health-care provision, and went online at the start of 2010. Alongside its function of a free provider of quality-assured information, the Health Portal is the first building block in individual application of the ELGA (see section 4.1.4 *Information technology*). In its final form, the Health Portal will allow all Austrians individual access to their personal medical records.

The content of the Health Portal, which is currently only available in German, is owned by the Federal Ministry of Health and publication is handled by GÖG. There is information on healthy lifestyles and health promotion, prevention, diagnosis, treatment, aftercare, laboratory values, mother and child,

health-care institutions, etc. There is also advice on whether the social security system will pay for the treatment described, whether cost-sharing applies and how to go about applying for any necessary permissions. The Health Portal brings together many pre-existing sources of information and has a search function for pharmacies, physicians, hospitals or rehabilitation centres.

While the Health Portal and other information sources provide a comprehensive overview on health-care provision, information on the quality of processes and results of health-care services is still largely lacking (see section 6.2). The only available information, which can be found in the Health Portal or the Hospitals Directory, is on the minimum numbers of interventions in particular specialties or quality reports by individual hospital operators (e.g. quality reports by the Vizenz Hospitals Group). In the area of independent practitioners there are no systematically produced quality reports available to assist patients in their choice of physician.

Hospitals Directory

The Hospitals Directory is the first service to offer structured information on process quality in Austria and collects aggregate data on admission and treatment numbers for various symptoms, which can be viewed for Austria as a whole, by Land or by hospital. The Directory is an online service with information on Austrian hospitals and was made available to the public in the summer of 2011. The site can be found at www.spitalskompass.at. Alongside detailed information on services available in Austrian hospitals there is also a search function which enables site visitors to locate appropriate facilities. The search can be refined by symptom, medical service, specialism or Land. The Directory also offers information on outpatient clinics and institutions, as well as details of medical equipment provision. There is a particular focus on obstetrics.

Care hotline

A “care hotline” offers comprehensive, 24-hour advice for non-professional carers (see section 5.9). Central to the advice on offer are topics such as long-term care allowance, insuring carers in line with social security law and legal entitlements to leave from work if a family member is dying. The HANDYNET-Austria database (an internet-based information pooling service on medical aids) and a platform for non-professional carers is available for people affected to exchange information and experiences.

2.9.2 Patient safety and patient choice

Patient safety

The Health Care Quality Act lays out that quality in health-care services must be guaranteed, with a focus on assuring patient safety.

Various organizations in Austria work on the topic of patient safety. Alongside health-care providers themselves, this includes the Federal Ministry of Health, the regional health funds, patient representation bodies, the Federal Institute for Quality in the Health Service, the Austrian Chamber of Physicians' Quality Initiative and the patient safety platform (GÖG & BIQG, 2011). Austria is also a participant in the European Commission Joint Action project on patient safety and quality in health-care provision.

Targets on patient safety are also defined in the Austrian National Quality Strategy of June 2010 (see section 2.8.2 *Regulation and governance of service providers*). Risk management structures in Austrian hospitals, among other things, are collected in the quality platform and published in the report on quality systems in Austrian hospitals (see section 6.1). In order to simplify the introduction of reporting and learning systems in those health-care facilities which are still without such a system, the Federal Institute for Quality in the Health Service was commissioned by the Federal Ministry of Health to develop a series of guidelines on reporting and learning systems. In 2009 the CIRSmedical project was initiated by the Austrian Chamber of Physicians in partnership with the Federal Ministry of Health (see section 2.3). CIRSmedical is a web-based, nationwide error reporting and learning system, which is available to all health service providers (section 6.1).

Patient choice

In the social security system membership in a health insurance fund is determined automatically as a result of legislation. Individuals do not have the opportunity to choose their insurer (section 3.3). However patients benefit from the principle of free choice when selecting between different providers. They can freely choose their physician and even an important portion of care provided by non-contracted physicians is reimbursed by social health insurers (see section 3.4).

Patients can choose freely between public hospitals. However, only patients with supplementary private insurance can choose a particular physician at their chosen hospital. Patient transport by ambulance or car service to a particular public hospital is paid for by the social security institution when that hospital is the nearest suitable one. Social security patients in need of hospital treatment

can be turned away by a public hospital if the hospital is full or if it is not equipped to deal with the case. If the patient is in a state where admission cannot be refused (for individuals whose mental or physical state is such that their life is in danger, or there is danger of other damage to health that is unavoidable without immediate admission to hospital, or women who are imminently going to deliver a child) then their admission is compulsory.

2.9.3 Patient rights

The WHO Declaration of Patients' Rights was fully ratified in Austria through the introduction of the Patient Charter. This is a piece of legislation under Austrian law. As patient rights are a so-called "horizontal issue" (legislative responsibility lies with both the federal authorities and the Länder), a state contract (agreement in accordance with Article 15a of the Federal Constitutional Law) between the federal government and the Länder was agreed for their implementation. As a result of this state contract both the federal and regional authorities are obliged to conform to the patient rights laid out in the Patient Charter as a minimum. The Patient Charter contains fundamental rights of the patient, such as the right to be treated in accordance with current scientific standards, the right to self-determination, the right to information (explanations and informed consent), the right to view one's own medical history, the right to confidentiality and data protection, and the right to protection of dignity and personal integrity, etc. Special provisions and protections are included for children and young people.

The patient's right to self-determination ensures that no treatment is carried out against the wishes of the patient (exceptions exist in the fields of psychiatry and anti-epidemic measures). The right to self-determination is not a right that means that any variety of wish about treatment will be fulfilled. It is limited by necessary medical grounds (i.e. a specialist decision) and by the appropriateness of the treatment on the basis of regulations in social security legislation. In the field of medications, the matter of whether a medicine is suitable for reimbursement can be examined before a tribunal, and if necessary reimbursement can be legally enforced (patients have the right to receive notification of refusal to reimburse from the social security institution and if they object they may bring a case before a welfare tribunal).

In 2002, new strict liability compensation arrangements were established for patients who had suffered medical negligence. In 2005 the federal law on the quality of health-care services (Health Care Quality Act) came into force, and created a patient's right to transparency (in quality of structure, process

and result) in the provision of services. The federal law on advance health-care directives (Act on Advance Directives) came into force in 2006, and strengthened patients' right to self-determination (Hofmarcher & Röhring, 2006a). There are currently ongoing discussions regarding amending the Patient Charter in line with the new laws.

2.9.4 Complaints, errors and damages handling

The improvement of the legal standing of patients is a topic that has been discussed in the Austrian health-care system for decades. For complaints and for individual and collective patient representation various institutions have been established with different areas of responsibility. These include patient representative bodies from each Land, as well as arbitration divisions of the chambers of physicians and of dentists, different ombudsmen, residents' representatives (introduced as a result of the Nursing Home Residence Act), and independently practising solicitors.

Tribunal process

Patients can go through the civil courts to assert claims for compensation on the grounds of medical malpractice. A successful court action requires the presence of the elements of liability in causality, illegality or negligence, as well as the existence of damages. The burden of proof in civil cases is mainly with the person bringing the case (exception: reversal of burden of proof in the case of certain lacking documentation). Such cases can take a long time, and as the complainant the patient bears the risk of the costs. These were some of the reasons for the introduction of patient ombudsmen to provide free, out-of-court dispute settlement.

Out-of-court complaint management (ombudsmen)

The core focus of patient ombudsmen's activities lies in out-of-court complaint management. This means that conflicts between patients and physicians can be solved without involving the courts. Since 2002, patient ombudsmen have been involved in the new structures for a strict liability compensation system (Patient Compensation Fund). In 2009, 9561 complaints were handled nationwide by Austrian patient ombudsmen; of those, 5349 related hospitals, 917 to the Patient Compensation Fund and 800 to independently practising physicians.

In many public and private hospitals there is an ombudsman's office that deals with individual patient complaints. These offices are generally established as part of the hospital administrative staff and often fulfil the role of a quality manager. This means that experience from complaints and patient feedback can be fed directly into quality assurance management initiatives and activities.

Hospital ombudsman services work together with patient ombudsmen and focus particularly on patient complaints. Where there is a suspicion of medical malpractice, the relevant complaint is forwarded on to the patient ombudsman service. For psychiatric patients, the institution of patients' ombudsmen was introduced as a result of the Accommodation Act with the aim of assisting patients who are forcibly detained in psychiatric hospitals and to represent them in detention cases in court.

In recent years collective representation of patient interests has also developed, alongside this individual representation. Patient ombudsmen are included in many health-care policy initiatives (working groups, reform discussions, etc.) and represent patients in the regional health platforms and the Federal Health Commission (see section 2.3), and have voting rights in each.

Arbitration boards of the chambers of physicians and chambers of dentists

The common goal of these arbitration boards is the achievement of out-of-court settlements as the result of an arbitration process. The background for this was the desire to save patients and physicians lengthy and expensive legal proceedings. The chambers of physicians intend this form of dispute resolution to retain and strengthen trust in the profession. Arbitration boards in most Länder are either run directly by the Regional Chamber of Physicians or with their cooperation and involvement. Their main task is to bring about out-of-court agreements on disputes between patient and physician, in the case of accusations of medical negligence. The arbitration boards work closely together with patient ombudsmen. If necessary (sometimes because further, more specialist examination of a case is required) the patient ombudsman contacts the arbitration board, and accompanies and represents patients during examination by the arbitration boards. Similar procedures are carried out in the case of the chambers of dentists, although the Chambers of Dentists Act also provides an additional explicit legal basis for the process.

New strict liability compensation model

In 2002 new compensation arrangements were introduced for patients who have suffered damages as a result of a diagnosis or treatment in a public hospital. These patient compensation funds are an additional out-of-court compensation model, financed by patients themselves, who pay 73 cents per inpatient day into the funds. Compensation is provided from these funds in cases which would not necessarily fulfil requirements for conventional compensation under liability law. Advice and decision-making on payouts are carried out by completely independent, unbiased compensation commissions (composed

of informed experts from the health-care system), which are set up at regional level. There is no legal entitlement to receive compensation from one of the compensation funds.

The highest possible patient payout from a compensation fund is set at different levels in different Länder. In most Länder, compensation of up to €70 000 (per case) can be paid out.

2.9.5 Public participation

Participation by patients (citizens) in the decision-making structures of the public health-care system is not systematic. However a system of direct participation, is now being constructed. In addition a public consultation is planned on the preparation of federal quality guidelines. Online platforms for interested parties to participate in discussions on development of health-care goals were brought in for the first time as part of the Federal Health Conference 2011 (see section 6.2).

Until the early 1930s, collective participation by insured people was possible via direct election of their representatives in the relevant health insurance institutions. This was abolished with the establishment of the First Republic (Hofmarcher & Rack 2006), and converted into indirect representation from representative bodies (unions, chambers of commerce) and more recently via patient ombudsmen. Representatives are included in the evaluation stage of creating new federal and regional legislation, and they are members of regional health platforms and the Federal Health Commission (see section 2.3). Self-help groups and their umbrella organizations are often also included, but less systematically. Among other factors, this is down to the fact that these bodies do not have a continuous structure or sufficient resources to carry out such representative duties (University of Vienna, 2012).

2.9.6 Patients and cross-border health-care

In March 2011 the European Commission approved the Patient's Rights Directive (2011/24/EU) with the aim of facilitating cross-border health-care and encouraging all EU member states to work together on health provision. The Directive regulates the conditions under which Europeans can seek treatment in other EU countries, but respects national controls on finance for medical provision and access to national health-care systems. Austria criticized the lack of precision in cost calculations for patients from other EU countries and in the regulation of obligations to treat, and voted against the Directive along with Portugal, Poland and Romania (Kostera, 2011).

Individuals who are insured by social security in Austria receive treatment in EU member states, EEA countries and Switzerland in accordance with locally applicable regulations via the European Health Insurance Card (EHIC). The EHIC is shown on the back of Austrian e-cards (see section 4.1.4 *Information technology*). Contracted physicians and hospitals outside Austria are obliged to accept the EHIC and treat insured people as they would local patients. For physicians and hospitals that are not contracted to health insurance providers in the country where the treatment takes place, treatment must be paid for by the patient. In countries where the EHIC is not valid, a voucher covering treatment outside Austria must be used, which can be applied for through health insurance institutions or employers. If services cannot be paid for as the result of a social security agreement, medical treatment must be paid for by the patient. Reimbursement of costs is done in principle in accordance with Austrian tariffs (HVSV, 2010c).

Information on cross-border health-care provision and its costs is lacking and in many cases not completely sound. On the basis of a report published in 2011, it is estimated that in 2005 there were 154 639 invoices issued for patients from other EU member states who had received treatment in Austria (Wismar et al., 2011). The cost of these patients' care was estimated at a total of about €56 million. The greatest number of these invoices were settled with Germany, followed by the United Kingdom and France. In the same year, about 55 000 invoices with a total value of almost €22 million were issued for Austrians who were treated in other EU member states, mostly in Germany, Hungary and Slovakia. The total frequency of billing between countries rises between 2003 and 2005, although data for Italy, where many Austrians are also treated, is only available up until 2004. On the basis of data from the Administrative Commission of the European Communities, Austria owes €24 321 000 for treatment in other countries (2004). Outstanding fees for patients from other countries who were treated in Austria, on the other hand, stood at €72 255 000. Expenditure per head for Austrians receiving treatment in other countries rose from €0.48 in 1997 to €2.96 in 2004.

3. Financing

Total health expenditure in Austria in 2010 amounted to €31.4 billion or approximately €3750 per capita. It was greater than the EU15 (member states that joined the EU before 2004) average, at approximately 11% of GDP (EU15 average is 10.6%). The proportion of public health expenditure (taxes and social insurance contributions) within total expenditure was 77.5%, which is slightly above the EU15 average (77.3%).

In 2010, social insurance funds were the most important source of finance, accounting for approximately 52% (€13.3 billion) of current health expenditure and 0.7% (€28.9 million) of current long-term care expenditure. The Federation, Länder and local authorities covered approximately 24% (€6.1 billion) of expenditure on health and 81% (€3.6 billion) of expenditure on long-term care.

In 2011, 99.9% of the Austrian population had health insurance. Membership of a health insurance scheme is determined by place of residence (ASVG) and/or membership of a profession (CSVG/BSVG), so there is no competition between funds. Social insurance contributions are determined at a federal level by Parliament. In recent years, they have been at 7.65% of income for most of the population but individuals earning more than €4110 per month (or €4795 depending on the type of insurer) do not have to pay contributions for income exceeding this threshold. Any person insured by a social insurance fund has a legal entitlement to benefits in kind and in cash as legally required and defined by statute. The range of services is broad. However, use of services is often accompanied by user charges, with exceptions made for social reasons (e.g. exemption from charges for prescriptions). The guiding principle behind the system is that the provision of treatment must be sufficient and appropriate, but should not exceed what is necessary. Besides services required by law, health insurance funds provide varying amounts of voluntary services according to their capacity. The biggest differences between funds exists concerning exemptions from user charges.

Private health insurance funds financed approximately 4.7% of current expenditure in total, predominantly through supplementary insurance schemes, which principally cover services in hospitals (“hotel services” and freedom to choose a hospital physician). Private households contributed almost 17% of current expenditure through out-of-pocket payments. Low-income individuals, or individuals with chronic illnesses are exempted from prescription fees and other user charges.

Payment of providers differs depending on the source of financing and the type of provider. Public and non-profit-making hospitals providing statutory services receive a DRG-based budget (see section 3.7.1 *Financing of hospitals*). Most health insurance funds pay for ambulatory services provided to their members using a mixed payment system, combining flat-rate payments (per patient, per quarter – basic service compensation) and fee-for-service payments. According to OECD data, the annual gross income of GPs in Austria amounted to US\$ 108 000 (adjusted for variances in purchasing power) and was therefore around three times higher than the average income (see Table 3.22).

3.1 Health expenditure

3.1.1 Trends in total health expenditure

Table 3.1 illustrates the development of health expenditure according to calculations based on the standards of the OECD SHA (section 2.7.1 *Information systems*). Total health expenditure in 2010 was at €31.4 billion, with 76.2% being financed through public funds. Between 1995 and 2010, health expenditure as a proportion of GDP increased from 9.6% to 11.0%, almost entirely driven by a growth in public expenditures. The proportion of private expenditure fell from 26.5% in 1995 to 23.8% in 2010, which may largely be attributed to better data available for the private sector.

Between 1995 and 2010, the proportion of total public spending fell by 3.8 percentage points, while health-care spending as a proportion of total public spending increased by 1.6 percentage points: from 13.9% in 1995 to 15.5% in 2010 (see Table 3.1), indicating the increasing importance of the health sector in public spending.

Table 3.1

Development of total health expenditure in Austria, 1995–2010 (selected years)

	1995	2000	2005	2010
Health expenditure per capita, US\$ PPP	2 256	2 898	3 505	4 396
% change	–	28.4	20.9	25.4
Gross domestic product per capita, US\$ PPP	23 548	28 909	33 637	40 017
% change	–	22.8	16.4	19.0
Health expenditure as % of GDP	9.6	10.0	10.4	11.0
Public health expenditure as % of GDP	7.0	7.6	7.8	8.4
Total health expenditure, in € millions	16 748	20 898	25 551	31 438
Proportion of public health expenditure as % of total health expenditure	73.5	75.6	75.3	76.2
Proportion of private health expenditure as % of total health expenditure	26.5	24.4	24.7	23.8
Out-of-pocket payments as % of total health expenditure	15.2 ^a	15.3 ^a	16.8	15.9
AGR of total real health expenditure for each 5-year period	5.6	1.3	2.4	2.8
AGR of real GDP for each 5-year period	2.8	0.4	1.6	1.7
Memorandum item				
Total public expenditure as % of GDP	56.3	51.9	50.0	52.5
Proportion of public health expenditure within total public expenditure	13.9	16.1	15.3	15.5

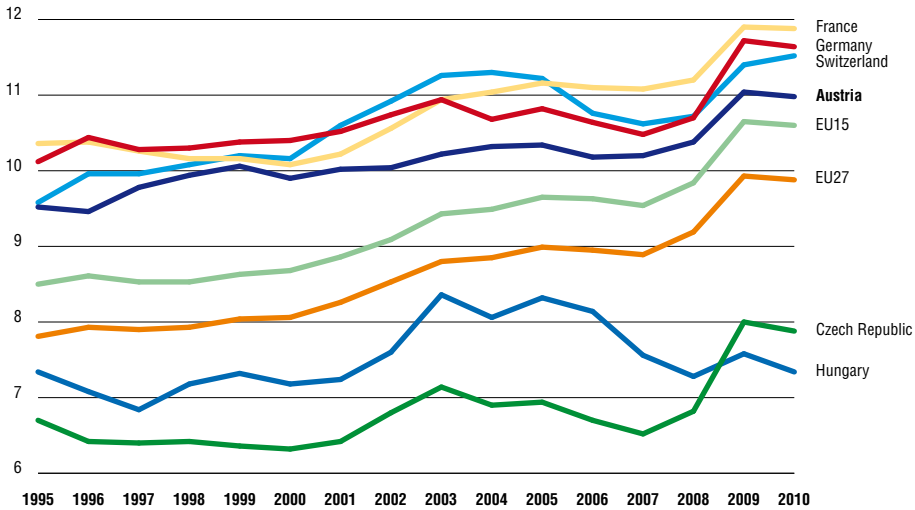
Note: ^a Values based on ESA95, from 2003 classification according to SHA; AGR = annual growth rate.
Sources: OECD (2012); Statistics Austria (2012a); own calculations.

Comparing rates of health expenditure is complex, particularly as the methods of calculation still vary between Länder, despite the fact that 23 of 34 OECD states have now fully implemented the international OECD standard SHA for calculation of health expenditure. Austrian data provided in the WHO database and used in the following charts for example differs occasionally from data reported in OECD databases.

In 2010, the proportion of GDP spent on health was almost 11%, considerably above the EU15 average (10.6%) but still below spending shares in France, Germany and Switzerland (Fig. 3.1). Rates of expenditure are increasing slightly in all countries, but tend to be higher in years of economic slowdown, or even recession (as was the case in 2009), particularly as cuts in this area are often only made at the low-point of an economic crisis, or shortly afterwards, and have delayed effects.

Fig. 3.1

Development of health expenditure as a % of GDP in selected countries, 1995–2010

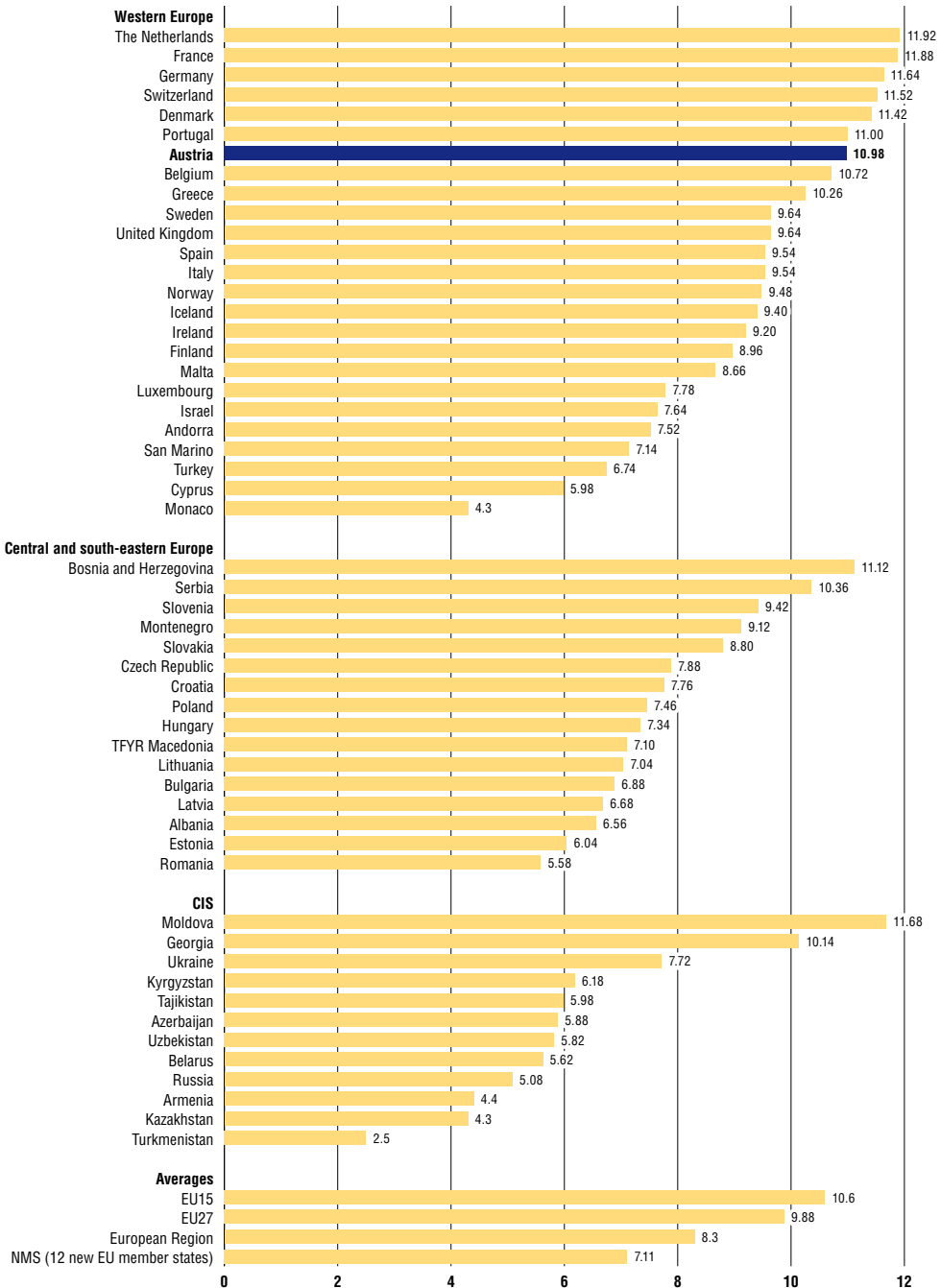


Source: WHO (2013).

Fig. 3.2 shows that health expenditures as a proportion of GDP in Austria are almost 1 percentage point below expenditure in France and the Netherlands (11.9% in both cases). However, on a per capita basis, adjusted for differences in purchasing power, Austria, at US\$ 4388, is above expenditure in France and is exceeded in the EU only by Luxembourg, the Netherlands and Denmark (US\$ 4021) (Fig. 3.3). This indicates that in Austria, health-care services are being consumed in large quantities.

When comparing the public proportion of total health spending in different countries, Austria achieves a middle ranking among western European nations with 77.5% (Fig. 3.4) just above the EU15 average (77.3%).

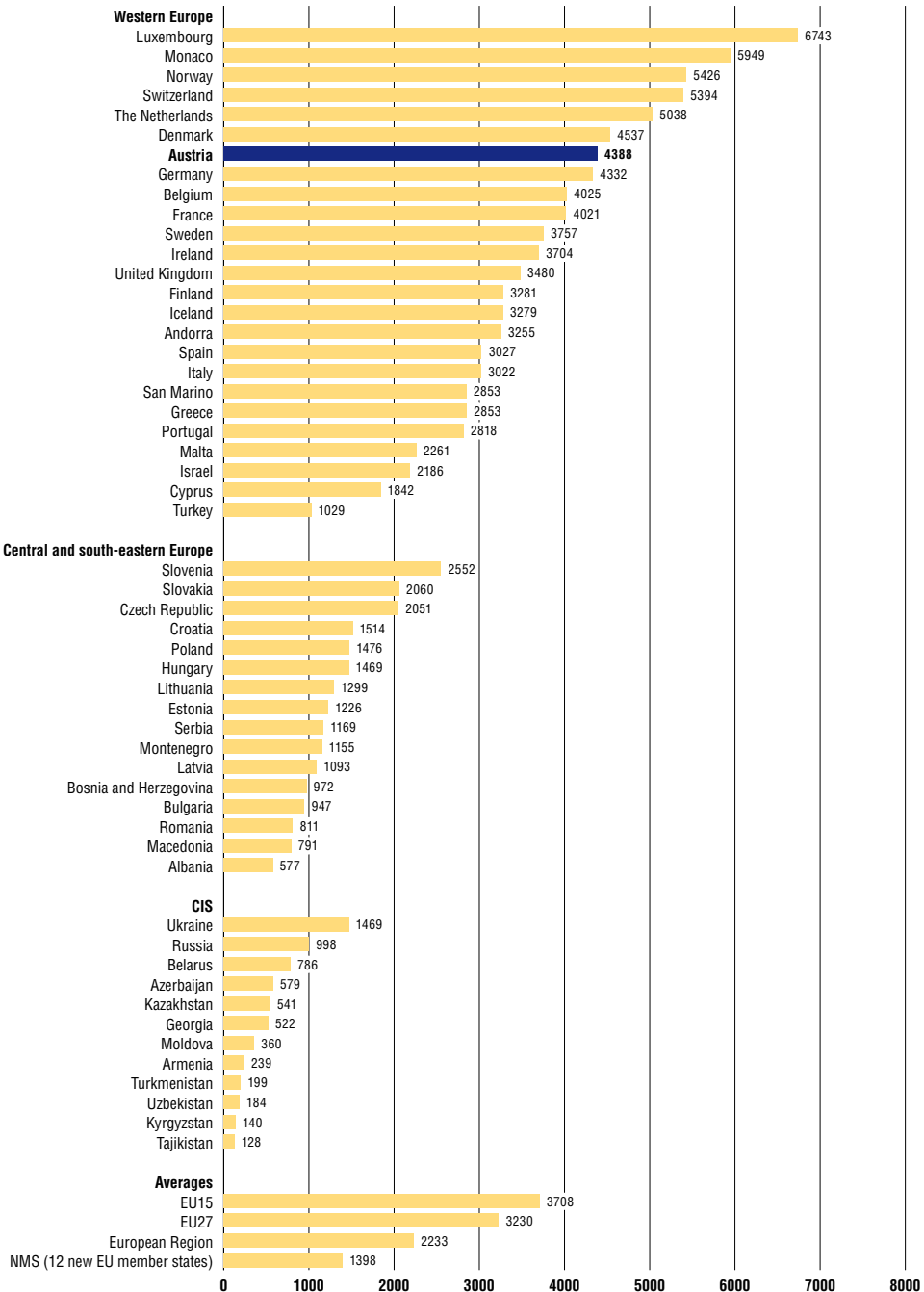
Fig. 3.2
Health expenditure as % of GDP, 2010



Source: WHO (2013).

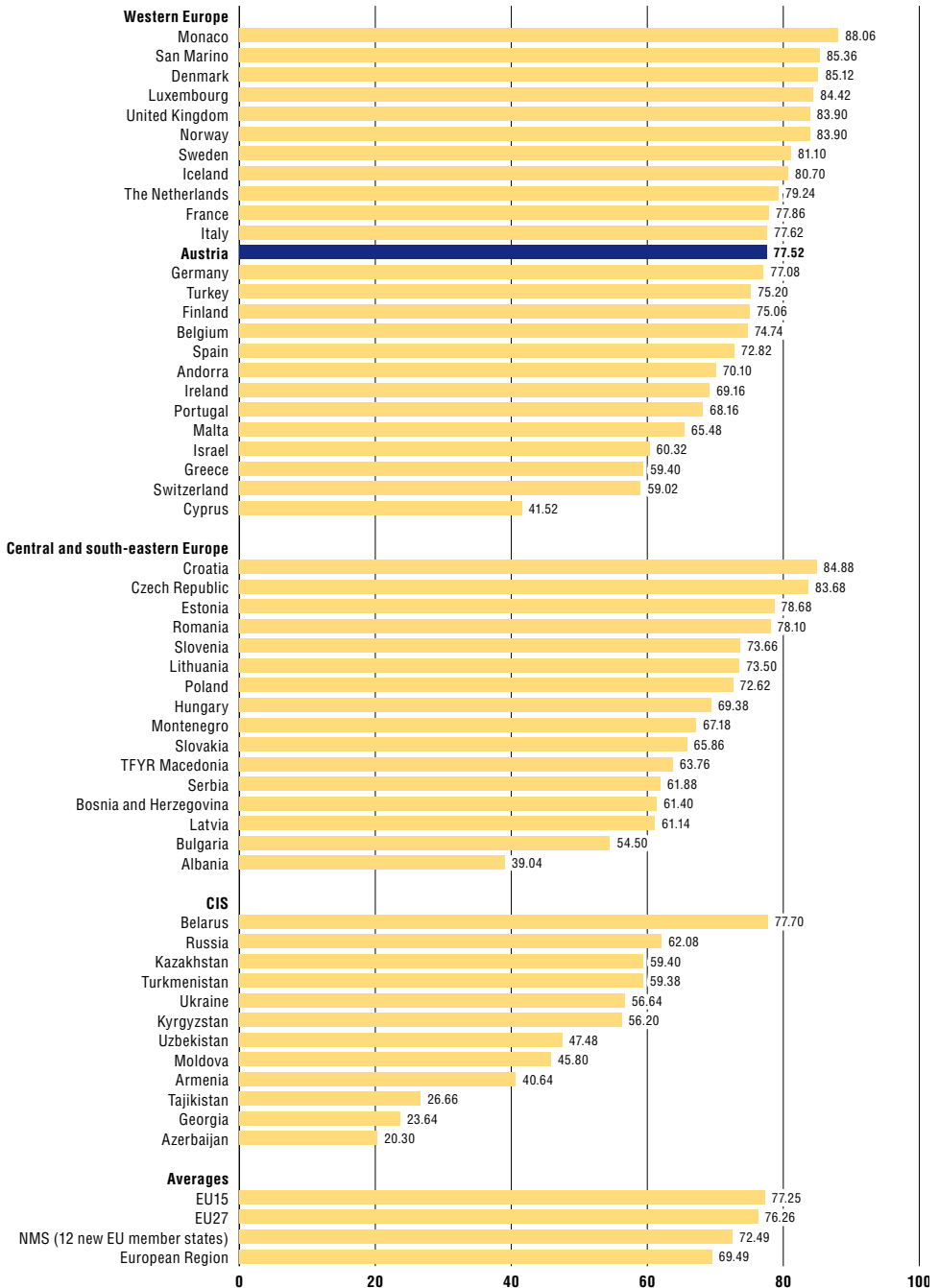
Fig. 3.3

Health expenditure in US\$ PPP per inhabitant, 2010



Source: WHO (2013).

Fig. 3.4
Public expenditure as % of total health expenditure, 2010



Source: WHO (2013).

3.1.2 Composition of total health expenditure

In 2010, spending on inpatient care accounted for just under 43% of total current health expenditure (see Table 3.2), which is considerably higher than on average in OECD countries (see section 7.5). These include inpatient (including day-clinic) costs for hospitals as well as inpatient costs for rehab clinics, care homes and spa facilities. Of total current health expenditure, 26% went towards ambulatory care and 17% was spent on pharmaceuticals and medical products. While the expenditure for inpatient care rose by 1.2 percentage points between 2000 and 2010, and there was a moderate reduction in the amount spent on pharmaceutical goods, spending on ambulatory care fell more significantly (-1.1 percentage points). And 1.5% went towards prevention – 0.3 percentage points more than in 2000.

Table 3.2

Composition of health expenditure, as % of current health expenditure

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Inpatient health-care ^{a*}	41.3	41.5	41.2	41.0	41.2	41.5	41.8	41.2	41.9	42.3	42.5
Ambulatory health care [*]	27.1	27.0	26.8	26.7	26.3	26.7	26.4	26.6	26.0	26.1	26.0
Pharmaceuticals and medical products [*]	17.3	17.4	18.0	18.3	18.1	17.6	17.7	18.0	18.0	17.1	16.9
Prevention and public health service ^{**}	1.3	1.5	1.4	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.5
Patient transport and rescue services ^{**}	1.1	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Long-term care at home ^{b**}	6.9	6.8	6.6	6.6	6.4	6.5	6.5	6.4	6.4	6.8	7.1
Administration of health care [*]	3.8	3.6	3.7	3.6	4.1	3.8	3.7	3.7	3.8	3.8	3.6
Private non-profit-making organization ^c	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.0	1.1	1.2
Occupational medicine services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Current health expenditure, million €	19 680	20 452	21 223	22 039	23 250	24 198	25 219	26 699	28 124	29 055	29 773
Total health expenditure, million €	20 898	21 621	22 323	23 183	24 476	25 551	26 467	28 119	29 659	30 766	31 438
of which, in %											
Current health expenditure	94.2	94.6	95.1	95.1	95.0	94.7	95.3	95.0	94.8	94.4	94.7
Investments	5.8	5.4	4.9	4.9	5.0	5.3	4.7	5.0	5.2	5.6	5.3

Notes: * Of public financiers, private households and private insurance funds; ** of public financiers.

^a Includes spending of private household for inpatient long-term care. In 2010, this was approximately €700 million.

^b Public expenditure for care in the home also includes federal and Land benefits.

^c Includes spending by private non-profit organizations for rescue services and other health-care services.

Source: Statistics Austria (2012a); own calculations.

Public spending on research was €3.4 billion in 2010; €573 million (16.7% of that total) was employed in the health-care system (see Table 3.3). This figure corresponds roughly to the clinical overheads that the Federation pays to the three university hospitals and also includes costs for the research staff working there. The annual rate of increase in total public research spending (+9.6%) was almost twice the increase in health sector research spending (+5.7%).

Table 3.3

Public expenditure on applied and experimental research, 2007–2010

	2007	2008	2009	2010	Annual Growth Rate (AGR)
(1) Total public research spending (€ millions)	2 605	2 923	3 280	3 431	9.6
(1) as a percentage of total public expenditure	2.0	2.1	2.3	2.3	–
(2) Total public health-care research spending (€ millions)	485	512	559	573	5.7
(2) as a percentage of (1)	18.6	17.5	17.0	16.7	–

Source: Statistics Austria (2012b); own calculations.

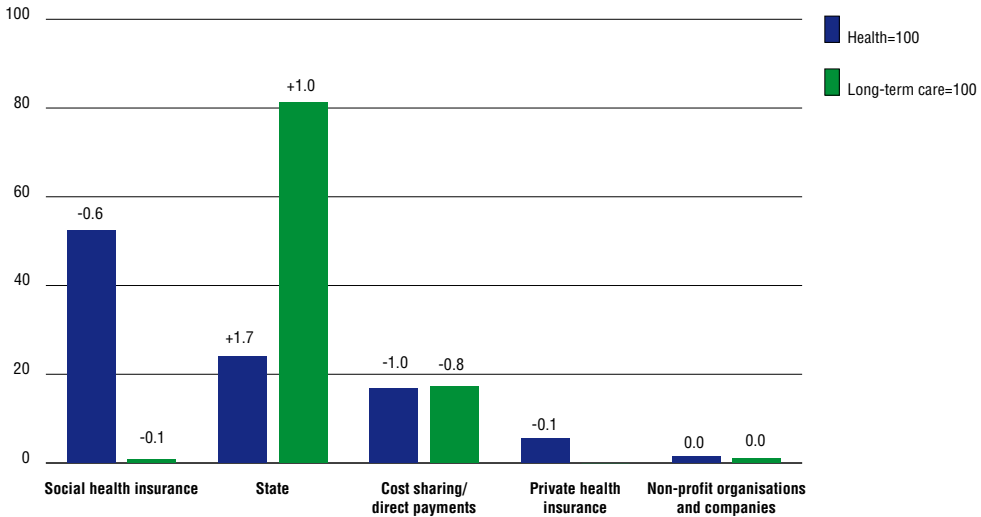
3.2 Sources of revenue and financial flows

3.2.1 Sources of revenue

In 2010, approximately 75% of the €31.4 billion spent on health came from public sources (see Fig. 3.5). The social insurance funds were the most important source, accounting for 52% of current health spending and 0.7% of current long-term care spending. Other public funds financed 24% of expenditures for acute medical care and 81.2% (Table 3.4) of long-term care costs, including benefits (section 3.7; section 5.8). The level of out-of-pocket payments (including cost-sharing and direct payments) was relatively high, when compared to other countries.

Fig. 3.5

Sources of financing in % for current health expenditure, 2010 and growth since 2005



Note: The number over each column shows the corresponding percentage point change since 2005.

Source: Statistics Austria (2012a); own calculations.

Between 2005 and 2010, expenditures from out-of-pocket payments and private health insurances have fallen slightly as a proportion of current health expenditure. By contrast, general government expenditures have grown relatively quickly (Fig. 3.5).

3.2.2 Health expenditure profile by age and sex

As in all developed nations, health expenditure is increasing as average age rises (EPC, 2001; European Commission & EPC, 2009; Hofmarcher & Riedel, 2002, 2005). For instance, the per capita costs of total expenditure for personal health-care services in the 75–84 age group for both men and women are around three times as high as those in the 45–64 age group. For both sexes, the 85+ age bracket in the inpatient sector dictates the shape of the age expenditure profile (approximately 50% of expenditure), followed by long-term care and pharmaceutical costs. In the 0–4, 5–14 and 65–74 brackets, significantly more

Table 3.4

Current health expenditure and growth by sources of finance

	2010 in € millions	Growth 2005–2010 in %	Growth rate per year	As a percentage of current costs	2010 as a percentage of GDP
Health expenditure	25 387	20.5	3.8	100.0	8.9
Social health insurance	13 306	19.2	3.6	52.4	4.6
General government	6 069	29.6	5.3	23.9	2.1
Private households out-of-pocket	4 257	13.9	2.6	16.8	1.5
Private health insurance	1 403	19.4	3.6	5.5	0.5
Non-profit-making organizations and companies ^a	351	17.5	3.3	1.4	0.1
Long-term care expenditure	4 386	39.8	6.9	100.0	1.5
Social health insurance	29	16.8	3.2	0.7	0.0
General government	3 560	41.6	7.2	81.2	1.2
Private households out-of-pocket	754	33.2	5.9	17.2	0.3
Private health insurance	0	–	–	–	–
Non-profit-making organizations	44	37.4	6.6	1.0	0.0
Total current expenditure	29 773	23.0	4.2	100.0	10.4
Social health insurance	13 335	19.1	3.6	44.8	4.7
General government	9 629	33.8	6.0	32.3	3.4
Private households out-of-pocket	5 011	16.5	3.1	16.8	1.8
Private health insurance	1 403	19.4	3.6	4.7	0.5
Non-profit-making organizations and companies	395	19.4	3.6	1.3	0.1
Total health expenditure (including investments) in € millions	31 438	23.0	4.2	–	11.0
Public	23 957	24.5	4.5	–	8.4
Private	7 482	18.6	3.5	–	2.6
Memorandum item					
Public health expenditure (COFOG)	23 314	24.7	4.5	–	8.1
Public expenditure (COFOG)	150 328	22.6	4.2	–	52.5
GDP	286 197	16.7	3.1	–	100.0

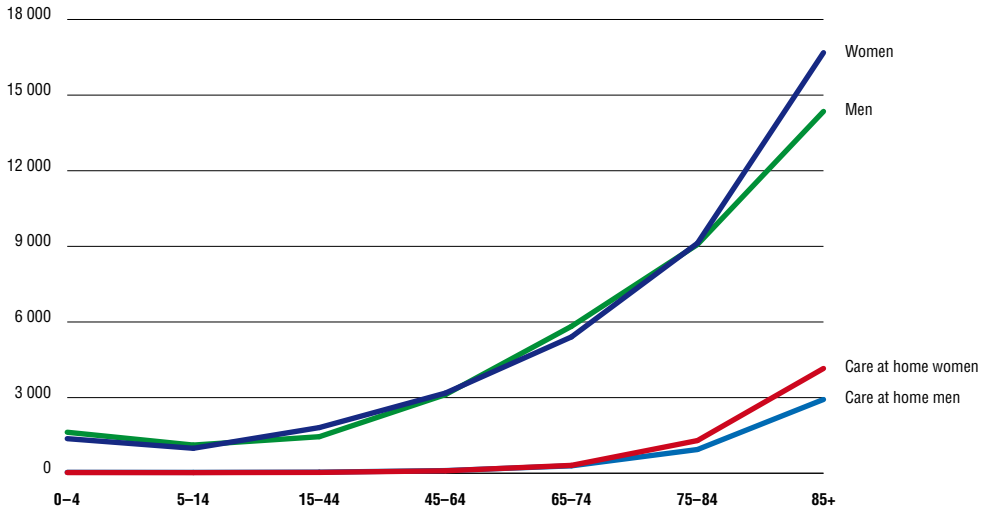
Note: ^a Non-profit organizations: €270 million; companies: €37 million.

Source: Statistics Austria (2012a); own calculations.

is spent on men than women. In the 15–44 and 85+ brackets, however, spending per head is higher for women. As far as expenditure for long-term care at home (cash benefits) is concerned, about 50% more is spent on women than on men (see Fig. 3.6). More is spent on women than on men in younger age brackets too (or at least as much). This suggests that women are considerably more dependent on support outside the family unit than men.

Fig. 3.6

Health expenditure in € per adult, by sex and age bracket, 2007



Note: Expenditure for personal health-care services according to the OECD SHA standards includes inpatient health provision (including long-term care), day-clinic services, ambulatory care provision, home care, auxiliary care, pharmaceuticals and therapeutic and auxiliary aids.

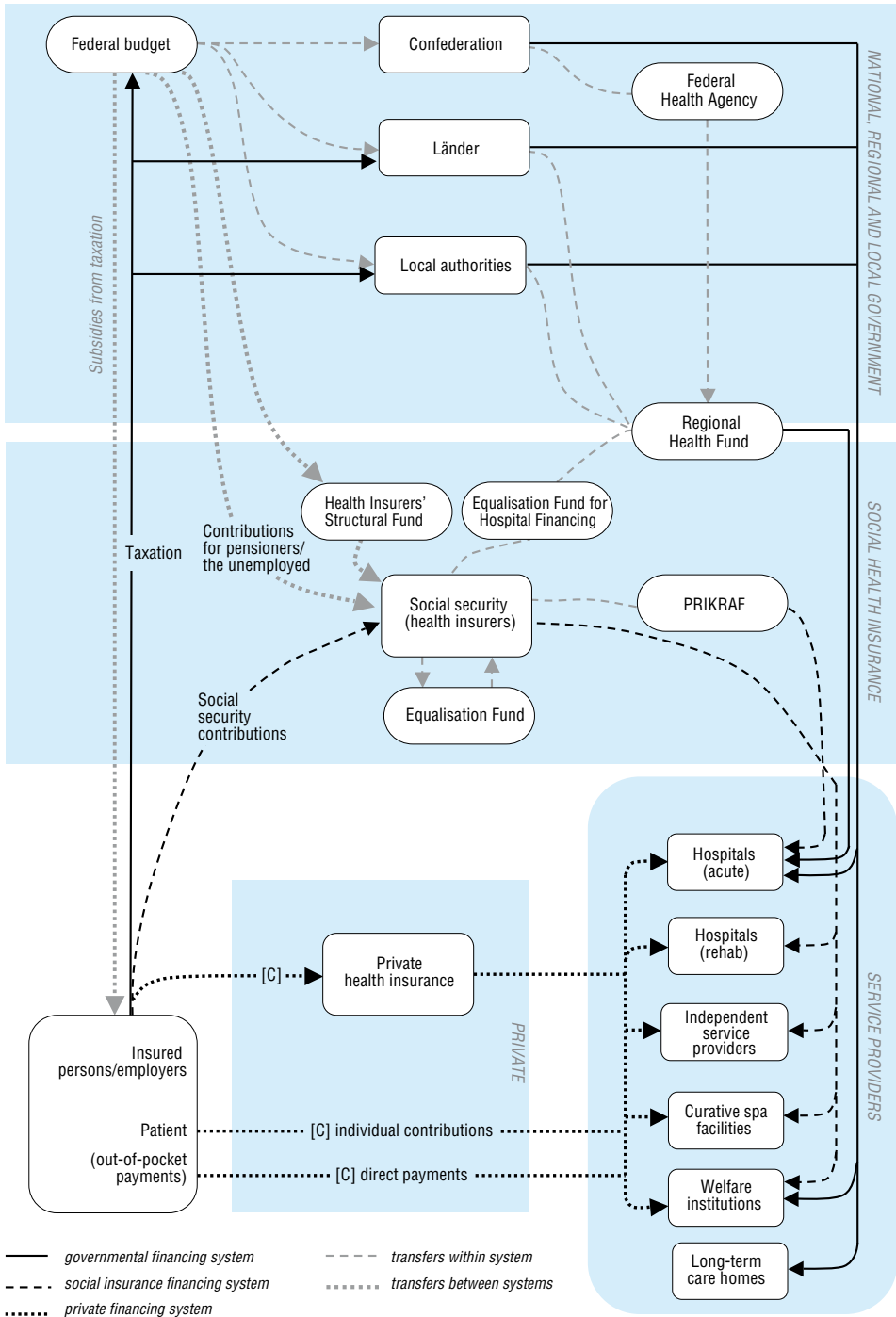
Source: Statistics Austria (2012a); own calculations.

3.2.3 Financial flows

Fig. 3.7 gives an overview of financial flows in the Austrian health-care system. It shows that revenues of social health insurance funds stem mainly from income-related insurance contributions but also from tax-financed federal budget contributions for pensioners and the uninsured. In addition, government funds go into the Health Insurers' Structural Fund, which is distributed to health insurers under certain conditions with the aim of reducing their structural deficits. Revenues raised by regional insurance funds differ depending on the income of their insured individuals. Therefore, an Interregional Equalization Fund is operated to ensure the availability of sufficient funding across all Länder.

Fig. 3.7 also shows that tax revenues flow through different levels of government, which are all involved in the financing of health-care provision, contributing to fragmentation of the system. Financing of the hospital inpatient sector is particularly complicated. Regional health funds play the most important role in hospital financing, pooling resources from social security institutions (distributed after equalization by another fund), states, local authorities and the federal government, which allocates its resources via the Federal Health Agency. However, in addition to the resources that different levels of government allocate to regional health funds, they also contribute directly to the financing of hospitals, which they do to varying degrees depending on the region (see section 3.7).

Fig. 3.7
Financial flows in the health-care system, 2010



Source: Author's own compilation on the basis of BMG.

Finally, Fig. 3.7 illustrates the characteristic fragmentation in the financing of different types of providers or sectors: (1) hospitals, which are financed by all relevant actors together; (2) independent ambulatory care providers, which are financed exclusively by social health insurers; and (3) long-term care institutions, which are financed exclusively by states and local authorities. In addition, patients almost always contribute through out-of-pocket payments (cost-sharing or direct payments).

3.3 Overview of the health insurance system

3.3.1 Coverage

The basis on which comprehensive insurance coverage is granted is the definition of illness under social insurance law. The law defines illness as an irregular state of body or mind necessitating medical treatment. However, any person who feels ill can seek medical assistance without there necessarily being a visible sign of illness.

Who is covered?

In 2011, 99.9% of the Austrian population had health insurance. In that year, there were 8.8 million insurance policies in place with 19 health insurance funds across Austria. Insurance coverage extends from the person paying contributions to co-insured dependants, particularly children below a certain age limit, as well as spouses and partners. The co-insurance rate is highest in the social insurance institution for civil servants, at 32% (Table 3.5). Multiple policies were held by 7.8% of the population. This is because one person can perform several tasks each of which requires insurance, and because children of people insured under professional schemes can also be covered by regional health insurance funds.

Table 3.5

Health insurance funds and insured persons (insurance relationships), 2011

		Number of health insurance funds	Eligible persons	Persons paying contributions	Co-insured dependants	Co-insured as percentage of members	Multiple-insurance holders 2011 ^b (as % of all eligible persons/ total population)
ASVG	Regional health insurance funds	9	6 697 567	4 929 655	1 767 912	26.4	–
	Company health insurance funds	6	52 569	38 074	14 495	27.6	–
Specialist insurance funds	Insurance Institution for Railways and Mining	1	241 871	172 170	69 701	28.8	21.8
	Civil servants' insurance corporation	1	765 385	517 724	247 661	32.4	27.7
	Social insurance institution for the self-employed	1	713 860	486 263	227 597	31.9	35.0
	Farmers Social Insurance Institution	1	377 524	269 998	107 526	28.5	35.9
Total		19	8 848 776	6 413 884	2 434 892	27.5	–
As % of the population ^a			105.1	76.2	28.9		7.8

Notes: ^a Population forecast for 2011. ^b Correct as of 30 April 2011.

Source: Request to HVSV, March 2012; own calculations.

A distinction can be made between people insured under the ASVG and people insured under specialist laws (GSVG, BSVG, B-KUVG). People insured under the ASVG are predominantly insured with regional health insurance funds. These are generally employees, freelancers, apprentices, or those receiving benefits (unemployment benefit, childcare benefit) or a pension under the ASVG. Approximately 80% of insured people are covered under the ASVG. Insurance coverage for self-employed people and the newly self-employed, such as artists, specialists and journalists, is provided under the GSVG. A particularity of the insurance for the self-employed is that a distinction is made between members eligible for benefits in kind, and those who are eligible for cash benefits. Members with insurable income under €57 540 (in 2010) are

eligible for benefits in kind. Members with insurable income exceeding that amount are eligible for cash benefits; that is, they can pay for care out of pocket and subsequently claim reimbursement for up to 80% of costs.

Farmers come under the BSVG, while officials and federal civil servants come under the B-KUVG.

In principle, insurance holders do not have a free choice of insurance fund, so there is no regulated competition between insurers. Part-time employees, such as students, are able to “opt in” to a voluntary self-insurance scheme with a statutory health insurer. Since 2000, physicians, pharmacists, lawyers, architects, public accountants, veterinarians and notaries have been able to “opt out” of statutory insurance (under Article 5 of the GSVG). However, their insurance coverage must be secured either through chamber regulations (particularly by mandatory membership in private health insurance via a group policy), or voluntary self-insurance under the ASVG or GSVG.

The introduction of the need-based minimum income, replacing the formerly existing social assistance system, brought recipients of the benefit into statutory health insurance. The e-card, which is distributed free to recipients, grants access to health services under the ASVG (see Table 6.1). Prisoners do not have access to health insurance services. Their health-care is covered by the justice administration. Anyone who is not covered by compulsory health insurance and has their permanent residence in Austria can apply to take out a voluntary self-insurance with a statutory health insurer, paying the corresponding contributions. Asylum-seekers are covered under statutory health insurance with contributions being paid either from federal funds or the responsible Land.

A particularity in the Austrian social security system is the health and welfare institutions for civil servants. The B-KUVG allows that public bodies can fulfil statutory insurance requirements directly through their administrative authorities. For this reason, 16 health (and accident) welfare institutions for civil servants exist (see Table 3.6) both at Land level and local authority level. These health welfare institutions are not social security institutions, are not members of the Federation of Austrian Social Security Institutions, and are not subject to federal oversight.

In 2010, the 16 health welfare institutions provided insurance cover to 240 878 people (2.9% of the population). From this total number of contractual relationships, about 156 000 people were contribution-paying members, while about 83 000 people were insured as dependants, paying no contributions. The biggest health welfare institution is the one for civil servants in Vienna, with

122 445 insured people (around 51% of the total health welfare institutions figure). The smallest health welfare institution was the one for civil servants of the Hallein local authority, with 52 insured people. The Vienna health welfare institution was the only one operating its own hospital (Sanatorium Hera), with an attached outpatient facility. The health welfare institution for civil servants in Vienna also operates a convalescent facility. At the end of 2010, the health welfare institution of Bregenz civil servants was closed.

Which services are covered?

Health insurance legislation defines that coverage has to be provided in the event of illness, pregnancy and incapacity for work. Social health insurance, regardless of the insurer, includes the following services:

- ambulatory general and specialist care, physiotherapy, occupational therapy, speech therapy and psychotherapy, as well as diagnostic services from clinical psychologists and the services of therapeutic masseurs;
- pharmaceutical products (medicines), therapeutic aids (Articles 136 and 137 of the ASVG);
- dentistry, false teeth (Article 153, ASVG);
- hospital care (Article 144ff, ASVG);
- medical nursing care at home (Article 151, ASVG);
- sickness benefit (Article 138ff, ASVG);
- maternity benefit (Article 157ff, ASVG);
- medical rehabilitation (Article 154a, ASVG);
- health promotion (Article 154b, ASVG);
- health consolidation and illness prevention (spa treatment) (Article 155f, ASVG);
- early identification of diseases, and other public health measures (Article 132a ff, ASVG);
- assistance in event of physical infirmity, therapeutic aids (Article 154, ASVG);
- travel (Article 135, paragraph 4, ASVG) and transportation expenses (Article 135, paragraph 5, ASVG).

Table 3.6
Health welfare institutions, 2010

Land	Number	Name of welfare institution	Persons paying contributions	Members	% total	Dependants as % of members
Burgenland	–	–	–	–	–	–
Carinthia	1	Civil servants of Villach	546 ^a	911 ^a	0.4	40.1
Lower Austria	1	Civil servants of the Baden metropolitan area	172	254	0.1	32.3
Upper Austria	6	Civil servants in the Land capital, Linz	2 685	3 595	1.5	25.3
		Upper Austrian districts	14 707	23 632	9.8	37.8
		Upper Austrian civil servants	15 170	25 114	10.4	39.6
		Upper Austrian teachers	20 405	33 413	13.9	38.9
		Civil servants of the Magistrate of Steyr	230	324	0.1	29.0
		Civil servants in Wels	314	488	0.2	35.7
Salzburg	2	Civil servants of the Hallein metropolitan area	–	52	0.0	–
		Magistrates of Salzburg	1 958	3 128	1.3	37.4
Styria	1	Civil servants of Graz	6 793	9 476	3.9	28.3
Tyrol	3	Teachers in Tyrol	7 430	12 215	5.1	39.2
		Land officials in Tyrol	2 798	4 625	1.9	39.5
		Local authority officials in Tyrol	–	1 905	0.8	–
Vorarlberg	1	Civil servants in Bregenz ^b	99	212	0.1	53.3
Vienna	1	Civil servants of Vienna	3 224	122 445	50.8	32.0
Austria	16	–	155 985	240 878	100.0	35.2

Note: ^a Average figures. ^b Disbanded on 31 December 2010; insurance holders are transferred to the Civil Servants Insurance Corporation.
Sources: Article 2, Act on Civil Servants' Health and Accident Insurance; information from health welfare institutions; own research and compilation, 2011.

Table 3.7

Social health insurance spending, nominal figures in € millions, 2005–2011

	Amount in millions euros			Growth rates in %		% of total SHI expenditure		
	2005	2010	2011	2005–2011	2010–2011	2005	2010	2011
Physician services and equivalent services	2 916	3 470	3 590	23.1	3.5	24.9	24.7	24.8
Pharmaceutical products	2 463	2 865	2 947	19.7	2.9	21.1	20.4	20.4
Medicines and therapeutic aids	217	235	240	10.5	2.1	1.9	1.7	1.7
Dental treatment	533	613	622	16.7	1.3	4.6	4.4	4.3
Dental prostheses	170	257	259	51.7	0.6	1.5	1.8	1.8
Accommodation costs and other services	309	380	384	24.1	0.8	2.6	2.7	2.7
Inpatient care (transfers to regional health funds)	3 110	3 698	3 859	24.1	4.4	26.6	26.4	26.7
Medical nursing care at home	12	15	16	31.9	2.8	0.1	0.1	0.1
Sickness benefits	371	531	561	51.1	5.6	3.2	3.8	3.9
Care provided by physician/midwife	29	37	37	29.3	1.3	0.2	0.3	0.3
Residential care/maternity hospital care	90	107	112	24.9	4.9	0.8	0.8	0.8
Maternity allowance	346	449	422	21.7	-6.1	3.0	3.2	2.9
Occupational care and part-time assistance	1	2	2	46.3	6.5	0.0	0.0	0.0
Medical rehabilitation	231	322	335	45.1	4.1	2.0	2.3	2.3
Health consolidation and illness prevention (e.g. spas)	57	78	80	41.1	3.2	0.5	0.6	0.6
Young person check-ups	3	3	3	-2.2	1.8	0.0	0.0	0.0
(Preventive) health checks	63	84	90	43.4	6.7	0.5	0.6	0.6
Health promotion and other measures	23	39	40	71.5	3.6	0.2	0.3	0.3
Funeral allowance	0	0	0	55.9	-13.4	0.0	0.0	0.0
Travel expenses	2	2	2	-27.6	-4.0	0.0	0.0	0.0
Transport costs	165	204	208	25.9	2.2	1.4	1.5	1.4
Medical examiner service and other care	62	74	74	20.2	0.2	0.5	0.5	0.5
Sum total of insurance benefits	11 174	13 465	13 883	24.2	3.1	95.6	96.0	96.0
Administrative and billing costs	346	409	418	20.7	2.2	3.0	2.9	2.9
Depreciation of fixed assets	38	38	38	-1.5	-0.7	0.3	0.3	0.3
Depreciation of current assets	49	49	50	2.6	3.1	0.4	0.3	0.3
Other operating costs	83	70	68	-17.6	-2.3	0.7	0.5	0.5
Total costs	11 690	14 031	14 457	23.7	3.0	100	100	100

Source: HVSV (2012a); own calculations.

The guiding principle behind the system is that the provision of treatment must be sufficient and appropriate, but should not exceed what is necessary. Except for pharmaceutical products (see section 2.8.2 *Regulation and governance of service providers*), there are no explicit positive lists, specifying which services or products have to be covered by insurance. Negative lists do not exist either. Decisions on which services are to be provided are often made by the Supreme Health Board (see section 2.3). Technology assessments are also increasingly employed to guide the decision-making process (see section 2.7.2 *HTA*), although there is some ground to be made up in this area (see section 7.5).

Table 3.7 shows spending by social health insurance on individual service areas. Between 2005 and 2011, the total value of insurance services rendered increased by a nominal 24%, from €11.2 billion to €13.9 billion, one percentage point above GDP over the same period (+23%). The three biggest expenditure blocks, together accounting for almost three-quarters of health insurance fund expenditures, were ambulatory care (24.8%), pharmaceutical products (20.4%) and hospitals (26.7%).

Approximately 91% of benefits rendered are benefits in kind. These are predominantly hospital care, treatment by physicians, dental care and prostheses, midwifery, medical nursing care at home and preventive health check-ups. Nursing care at home and psychotherapy by non-physician staff have been compulsory benefits since the early 1990s. Sickness benefits, maternity allowance and travel expenses are cash benefits. Sickness benefits are released following the period of continued pay, which is payable by employers for six weeks in the event of illness, and eight weeks in the event of a workplace accident. Sickness benefits are paid at a rate between 50% and 60% of the calculation base (gross salary under social insurance law).

Health insurance funds also provide voluntary services. These are services which they have no legal obligation to render, and are provided by the funds according to their ability to do so, for example certain preventive care services. Voluntary ASVG services include certain cosmetic treatments (Article 133, ASVG), health consolidation measures and illness prevention (Articles 155, 156, ASVG), or a funeral costs award (Article 116, paragraph 5, ASVG). Within their statutes, health insurance funds can also provide additional services such as reimbursing travel expenses for carers, extending eligibility for illness benefits, or increasing illness benefits in the event of obligation to pay alimony. However, the biggest differences between ASVG funds are found in statutory exemptions from user charges.

How much of benefit costs is covered?

The use of social health services is often accompanied by user charges, with exceptions made for social reasons (e.g. exemption from charges for prescriptions) (see section 3.4). In 2010, cost-sharing, for example prescription fees or co-payments to hospitals (Table 3.12), financed 12% of private expenditure (15% of all out-of-pocket payments) while direct payments contributed 67%; the remaining share concerns mainly private health insurance (Table 3.10).

3.3.2 Raising funds for health-care

The process of raising funds for the health-care system takes place both at the level of social insurance institutions and at the level of regional bodies.

Social insurance contributions

The contribution level is regulated by law and cannot be set by the health insurance funds. Any change to contribution rates must be agreed by Parliament. The contributions are collected and administered by each health insurance fund independently.

Health insurance contributions have been harmonized in recent years, and now amount to 7.65% of the contribution base income. For pensioners, a lower contribution rate is applied (Table 3.8), with the responsible pension insurance fund paying an additional percentage of the health insurance contribution. For employees, approximately 50% of contributions are paid by the employee, and around 50% are paid by the employer.

As contributions are linked to income level, the contribution rate is proportional to income, until the contribution cap is reached. The cap is specified in terms of a maximum contribution base. This means that individuals insured under the ASVG and earning more than €4110 per month in 2010 do not have to pay contributions for income exceeding this threshold. For individuals insured under the GSVG and BSVG the threshold is €4795.

In addition to revenues received from their members, health insurance funds also receive contributions for certain population groups from general tax revenue, for example, an “employer contribution” for pensioners, or contributions for the unemployed.

Tax revenues

Health care finances at the level of regional bodies are mostly collected on a decentralized basis, and distributed through a financial equalization mechanism (see sections 1.3 and 2.4). The following taxes go towards the health-care system:

- value added tax, principally for hospital financing;
- tobacco tax, of which two-thirds go to hospitals, and one-third goes towards preventive check-ups and health promotion;
- income tax, mainly to finance hospitals and care homes.

The Länder and local authorities generally have few taxation rights, but the Länder can impose levies on local authorities. Such payments between the decentralized levels are particularly relevant within the health-care system.

Table 3.8

Contribution rates in social insurance/health insurance, 2010

	Total	Employer share	Employee share	Maximum monthly contribution, base (€)	Legal basis
	as % of gross income	as %	as %		
Workers ^{a,b}	7.65	3.70	3.95	4 110.00	ASVG
Employees ^{a,b,c}	7.65	3.83	3.82	4 110.00	ASVG
Self-employed persons ^{a,b}	7.65	3.78	3.87	4 110.00	ASVG
Civil servants (active) ^{a,b}	7.65	3.55	4.10	4 110.00	B-KUVG
Self-employed and newly self-employed ^{a,b}	7.65	n.a.	n.a.	4 795.00	GSVG
Farmers ^{a,b}	7.65	n.a.	n.a.	4 795.00	BSVG
Pensioners ^b	5.10	n.a.	n.a.	4 110.00	ASVG, GSVG, BSVG
Apprentices	7.65	3.70	3.95	n.a.	ASVG
Self-insured students ^{a,b}	7.55	half contributed from federal funds		646.80	ASVG
Voluntarily insured persons/other self-insured persons ^{a,b}	7.55	n.a.	n.a.	4 637.40	ASVG; additionally insured persons under GSVG, BSVG

Note: n.a. = not applicable; does not include apprentices in agriculture, forestry and hunting.

^a Including 0.5% additional contribution for hospital financing; half of this amount is contributed by the employer, half by the employee.

^b Including 0.1% supplementary contribution to finance work-accident related services in health insurance; for employed persons and freelancers, this is paid by the employer.

^c Including 0.1% supplementary employer contribution to finance health insurance for apprentices.

Source: HVS handbook (2010); own compilation.

Table 3.9 summarizes the collection mechanism, based on the regional bodies' reported accounts, and compares this expenditure to public expenditure on health-care (COFOG) and spending figures derived using OECD standards

(SHA). Tax funds allocated to the health-care system have since 2009 been dependent on annual general tax revenue with certain percentages of tax revenues earmarked for hospitals (Table 3.9).

As the percentages are fixed, the decline in tax revenues in the wake of the recession meant that available funds in 2010 fell approximately €7 million between 2009 and 2010, out of a total of around €600 million, which the Federal Health Agency disburses to the regional health funds (see section 3.3.3 *Pooling of public funds* and Table 3.9). However, to compensate for the decline, it was decided that for this financial equalization period (2008–2013), public hospitals would receive an additional €100 million annually from general tax revenues (see Chapters 6 and 7).

Table 3.9
Raising and pooling of public health funds

	Taxes and contributions	Raising funds and pooling	Expenditure in 2010, in € millions	% of health expenditure
Local authorities	Yield share from general tax revenue, including 0.642% of VAT income before distribution of revenue shares to local authorities, towards financing of public hospitals (= targeted grant)	Centralized/ decentralized	1 109	4.7
Länder (including Vienna)	Yield share from general tax revenue, including 0.949% of VAT income before distribution of revenue shares to Länder.	Centralized/ decentralized	6 149 ^a	26.0
Federation	1.416% of VAT income plus general tax income, e.g. funds raised under the Health and Social Sector Contribution Act (GSBG)	Centralized	995 ^b	4.2
State, not including social insurance	–	–	8 253	–
Social insurance (spending on non-financial transactions)	On average, 7.65% of monthly gross income, up to contribution cap (approximately 50% in 2009) + contribution payments via the state, e.g. for pensioners and reimbursements for service costs (approx. 8%) + fees and cost-sharing (approx. 5%)	Centralized/ decentralized	15 436	65.2
Total public health expenditure	–	–	23 689	100.0
Memorandum item				
Public health expenditure (COFOG)	–	–	23 314	–
Public health expenditure (SHA)	–	–	22 964	–

Note: ^a These figures include funds for protection of the environment and health-care training.

^b Defined proportion of overall tax revenue; the amount given does not include all federal funds distributed via the Federal Health Agency.
Source: Statistics Austria (2011d); own compilation.

Prior to the distribution of funds to regional bodies (e.g. VAT), a certain amount is taken for health promotion, and allocated to the Healthy Austria Fund (see sections 2.3 and 5.1.3 *Health promotion and prevention*). Similarly, before tobacco tax revenue is distributed, a fixed amount is transferred to the Health Insurance Equalization Fund (see section 3.3.3 *Pooling of public funds*).

3.3.3 Pooling of public funds

Public health-care funds are pooled and distributed at several levels within the state, within the social insurance system, and in cross-stakeholder institutions. This results in a complex network of transfers between the tax system and the social insurance system, and within the social insurance system (see Fig. 3.7). These transfers are carried out via a variety of funds. The distribution mechanisms in place generally do not apply risk-equalization formulas when distributing funds, implying that age, morbidity, etc. are not taken into consideration during the allocation process. The Interregional Equalization Fund is an exception as it allocates resources to a certain degree on the basis of the population risk structure.

Pooling of tax funds

The financial relationship between the federal level, Länder and local authorities is characterized by a fragmentation of responsibilities for tax collection and decision-making. Länder and local authorities, for example, spend 30% of total tax funds, but have few powers to collect taxes themselves (OECD, 2011a).

The funding allocation process is guided by the Financial Equalization Act (section 1.3) and the National Growth and Stability Pact. While the latter defines deficit limits for regional bodies, the Financial Equalization Act regulates the allocation of tax income. Tax funds earmarked for the health-care system are generally channelled away prior to the general distribution, and are allocated to the relevant funds or to the relevant activity area.

Centrally collected tax revenue for the financing of hospitals (section 3.7.1 *Financing of hospitals*), public health (section 5.1), prevention and health promotion (section 5.1.3 *Health promotion and prevention*), as well as long-term care, is pooled at the regional level and distributed among the service areas. Within the hospital sector, the distribution ratios given in the agreement according to Article 15a of the Federal Constitutional Law play a particularly important role. Although the administration of the regional budgets is subject to nationally standardized regulations, the Länder have room for manoeuvre in the way they structure their reported accounts. As a result, it is often difficult to make a systematic and standardized comparison of expenditures across

Länder. Furthermore, some Länder make use of their ability to “call in” tax funds from the local authorities, in the event that Länder-level bodies take on the responsibilities of the local authorities. In recent years, the hospital sector in particular has seen increasing “centralization” at the regional level (see section 2.4). In Lower Austria, for example, almost all hospitals are the responsibility of the Land. Across all Länder, the local authorities’ share of funding for fund hospitals grew on average from 9.68% in 2005 to 10% in 2010 (Fig. 3.8).

Resources distributed by the Federal Health Agency

The Federal Health Agency’s resources are sourced from VAT income and from a flat-rate subsidy transferred from the contribution income of the Federation of Austrian Social Security Institutions. In 2010, this provided €600 million for the financing of hospitals, which was distributed according to fixed Länder quotas. The resources provide the opportunity for the Federal Health Agency to impose sanctions if Länder do not comply with federal regulations. This is intended to ensure that the stipulations of the Austrian Structural Plan for Health are implemented (see section 2.5) but so far sanctions have not been applied.

Health insurers’ structural fund

The Health Insurers’ Structural Fund was founded in 2010 and received €100 million from general tax revenue. The aim of the fund is to support regional health insurance funds in restructuring service provision and in reducing their structural deficits (Hofmarcher, 2009a). Resources are channelled to the Federation of Austrian Social Security Institutions, which is then responsible for distributing the money among the regional health insurance funds through its funding network. For the years 2011 to 2014, the resources distributed via the fund were reduced to €40 million annually as a result of general consolidation efforts, aimed at reducing public debt incurred during the economic crisis of 2008/2009 to Eurozone targets by 2013 (see Chapter 6).

Regional health fund for financing of public hospitals

Since 1997, funds for hospital care have been pooled within “regional funds”. The health reform of 2005 then led to the creation of “regional health funds”. Social insurance funds for hospital care are pooled in the regional health fund via a special fund, the Hospital Finance Equalization Fund (see next section *Pooling of social insurance resources*), while federal finances are consolidated via the Federal Health Agency (see section above *Resources distributed by the Federal Health Agency*). They are then distributed among

hospitals on a performance-oriented basis (section 3.7.1 *Financing of hospitals*). Regional finances (tax revenue) deployed in this area can also be sourced from these funds, as is increasingly the case.

Also in 2005 the “reform pool” was introduced under the responsibility of the regional health funds. The pool is intended to improve cooperation between all levels of inpatient and ambulatory care, building on the newly established health platforms (Hofmarcher & Rack, 2006; see also section 2.2). In particular, it should support the development of day clinics and outpatient care at inpatient facilities. The idea is that resources from the reform pool can be used to cover costs arising in the ambulatory sector as a result of shifting care away from the inpatient sector. Of all public health expenditure, 1–2% should go to the reform pool.

In spite of efforts to reform hospital financing, this area has continued to be characterized by a considerable lack of transparency (see Table 3.20, for instance). Compliance with auditing regulations varies, and regulatory leeway is exploited to conceal health-care spending by “outsourcing” it as debt to hospital operating companies. However, the 2012 Austrian Growth and Stability Pact (see section 1.3) now limits the ability of Länder to exploit such regulatory leeway. In this context, following implementation of Eurostat guidelines on the documentation of debt ratings, all externalized debts of hospital operating companies were included in the total national debt figure, which, consequently, rose by €2.9 billion, or 3% of GDP.

Pooling of social insurance resources

Health insurance contributions, as well as contributions for unemployment, accident and pension insurance are collected by social insurance funds. In fact, the functions of collecting contributions, pooling finances, and paying service providers are integrated at the level of the health insurance funds for most areas of care, except hospital care. In 2011, 85% of regional health insurance funds’ revenue came from contributions. Of total revenue, compulsorily insured people contributed approximately 56%. Compulsorily insured pensioners contribute 21%. Of the remainder, 10% of insurers’ revenue came from federal funds for reimbursement of service-related costs, including maternity allowance payments and payments for preventive services (Table 3.7); 4% of income came from cost-sharing; while the rest was divided between other sources, such as supplementary contributions for dependants and accrued interest.

In order to equalize the availability of financial resources for regional health insurance funds, several further funds are operated under the supervision of the Federation of Austrian Social Security Institutions. These include the

Interregional Equalization Fund and the **Hospital Finance Equalization Fund**. The reserves of all these funds' including also those of the **Health Insurers' Structural Fund** are administered separately from the Federation's other assets. In addition to these equalization funds, the PRIKRAF exists for the reimbursement of services provided by private hospitals.

Interregional Health Insurance Equalization Fund

The Interregional Health Insurance Equalization Fund has been installed within the Federation of Austrian Social Security Institutions since 1961. It is funded through contributions from its members and federal grants (6th amendment, ASVG, 1960). The 1968 amendment to the ASVG stipulated that contributing health insurance funds would receive resources from the Fund, if revenues per compulsorily insured person dropped below the average value for all contributing health insurance funds. While the 60th amendment of the ASVG led to the inclusion of more insurance funds (i.e. those of railway workers and civil servants), the Constitutional Court repealed central parts of this change in 2004, declaring the inclusion of the railway workers' and civil servants' funds unconstitutional. Although the social health insurance system came under considerable strain between 2000 and 2005 as a result of comprehensive restructuring, measures to broaden the Equalization Fund's membership to include specialist insurance providers were an important step to encourage "solidarity" between the health insurance funds (Hofmarcher, 2006).

The Health Insurance Equalization Fund now only includes the regional health insurance funds. They make an annual contribution of 2% of their revenue from policy-holders' contributions, which amounted to €293 million in 2011. Even though the mechanisms are not transparent, the Equalization Fund's resources are intended for equalization in the following areas:

- risk structure of policy-holders
- liquidity
- operation of a general hospital (e.g. the Hanusch-Krankenhaus – Viennese Regional Health Insurance Fund)
- meeting a special equalization requirement, such as catastrophic events.

Allocation guidelines drafted by the Federation of Austrian Social Security Institutions determine that 45% of funds are to be used to equalize different risk structures, 45% to address liquidity imbalances and 10% to meet a special equalization requirement. A pre-determined amount is also set aside for the

operation of a general hospital. The distribution of funds takes place annually. The proportion of funds going to each body is determined at the Federation's annual conference.

In addition to these functions, the Interregional Equalization Fund serves to channel around €12.3 million of tobacco tax income to other funds in the health system. Two-thirds of the €12.3 million are transferred to the Hospital Finance Equalization Fund and the remaining third goes to the Fund for Health Promotion and Health Check-ups (see section *Health promotion and prevention*).

Hospital Finance Equalization Fund

This Fund was established in 1978, and pools resources from the health insurance funds for the financing of public hospitals. In addition, the Fund receives resources raised through tobacco tax, which are channelled to the fund from the Interregional Health Insurance Equalization Fund (in 2011: approximately €8.3 million). These funds are subsequently distributed to the relevant regional health funds according to proportions determined by an agreement currently covering the period 2008–2014. Furthermore, a fixed amount of €83 million is transferred to the Federal Health Agency. In 2011, a total of €4.4 billion was channelled through this Fund. Monies from individual health insurers pooled into this fund depend on the level of hospital utilization and on insurance contributions they receive.

PRIKRAF

The PRIKRAF is the compensation fund for services offered by those private hospitals which are contracted to public social security institutions. The services offered by private hospitals are examined and then paid for by PRIKRAF under the rules of the Austrian DRG-based hospital payment system. PRIKRAF is financed by all social health insurance funds together. PRIKRAF was founded in 2002 and is formed of 44 private hospitals. The Federal Ministry of Health is the regulatory authority. The hospitals paid by PRIKRAF are subject to national documentation and quality regulations (see sections 2.8.2 *Regulation and governance of service providers* and 3.7.1 *Financing of hospitals*).

Fund for Health Promotion and Health Check-ups

In 2010, the Fund for Health Promotion and Health Check-ups contained approximately €4 million, which was used for health check-ups and health promotion initiatives within social insurance funds. Its main source of finance is tobacco taxation. Since mid 2011, finances from the pharmaceutical industry have also been pooled in this Fund. This money is earmarked for health promotion and preventive medicine under an agreement (Framework Pharma-contract) (see section 6.1).

3.3.4 Purchasing and purchaser–provider relations

There is an imbalance between relatively active purchasing in the ambulatory sector, limiting collective contracts only to selected physicians and passive purchasing in the inpatient sector, automatically allowing hospitals included in the hospital plan to provide unlimited services. There are three kinds of relationship between purchasers, that is health insurance funds, and service providers:

- *Integrated providers.* Some outpatient clinics are owned by health insurance funds, and service provision and payment are fully integrated. Social insurance providers also operate accident and emergency hospitals, as well as curative and rehabilitative facilities.
- *Collective contracts.* For inpatient services, all hospitals included in the hospital plan of a Land are automatically contracted to provide inpatient care and are reimbursed by the Regional Health Fund. This is the case for both public and private hospitals (see section 3.3.3 *Pooling of funds*). The contribution from social insurance funds to the regional health funds is made on the basis of agreements between the Länder and the federal authorities. Contributions are set annually in line with the increase in social insurance contribution income.
- *Collective (-selective) contracts.* In the ambulatory care sector, collective contracts are signed between social insurance funds (single buyer) and professional representative bodies (for example, the Physicians' Chamber as the single seller). However, these contracts do not extend to all physicians but only to a “selected” number of physicians, according to the staffing plan. For those physicians not included in the staffing plan, no contracts exist but patients can claim reimbursement for part of the costs.

To supervise service provision in the ambulatory sector, the social insurance funds stipulate that certain treatments must first be approved by the chief physicians or the monitoring service. The Federation of Austrian Social Security Institutions sets guidelines for treatments which can only, or only in certain circumstances (e.g. for certain illness groups), be used with the prior approval of the insurance funds' chief physician monitoring service. The approval requirement affects also the prescription of medicines (see section 2.8.4 *Regulation and governance of pharmaceuticals*), and the use of measures equivalent to medical assistance (e.g. psychotherapy). Medical nursing care at home is principally provided for a period of four weeks, but can be continued with the approval of the chief physician. The main role of chief physicians and monitoring physicians is to monitor norms. In the event

of serious deviations from norms, they can initiate inspections. This places the use of resources within the ambulatory sector principally under the oversight of the health insurance providers, which thereby resemble “managed care organizations”.

Collective (-selective) contracts in the ambulatory sector, specifying the service volume, fee schedules, and staffing plans, are determined by regular negotiations between the health insurers and the chambers of physicians (see sections 2.8.2 *Regulation and governance of service providers* and 3.3.4 *Purchasing and purchaser–provider relations*). Both health insurance institutions and chambers of physicians calculate the costs of new services and then negotiate over the amount of any adjustments. The time required and use of equipment are the most frequent causes of conflict in negotiations. If an agreement cannot be reached, the region concerned is threatened with a period without a contract (see section 6.1). Arbitration tribunals are employed in the case of disputes over application and interpretation of contracts. In recent years there has been a general trend towards payment for individual treatments in the remuneration of independently practising physicians.

Since 2011, group practices have been able to sign their own collective contracts. Such agreements are not subject to a needs test, if the collaborating physicians are already contracted physicians whose positions are guaranteed under staffing plans.

3.4 Private household spending

In 2010, private households financed 17.7% of total current health expenditure, via cost-sharing and direct payments (see Table 3.10). In 2004, their share was 18.9%. Of total private sector spending in 2010, an estimated 12%, or €770 million, consisted of cost-sharing payments, and €4.2 billion, or 67%, represented direct payments, while 21% of spending was financed by private health insurance and non-profits¹. Table 3.10 classifies any spending on non-contracted physicians which is not reimbursed by health insurance as direct payments. This is in line with Austrian convention, though according to international standards these payments would more likely be classified as cost-sharing. These payments to non-contracted physicians and equivalent service providers account for almost half of all private payments.

¹ Consequently, cost-sharing and direct payments amount to €4978 million. The €33 million discrepancy between this figure and the one given in Table 3.4 (€5011 million) is due to private prevention spending not being classified by financiers in Table 3.10.

Table 3.10

Structure of private sector expenditure in € millions, 2004 and 2010

	2004	Share (%)	2010	Share (%)	Change (%)
Inpatient services	1 633	100	1 890	100	16
Cost-sharing	208	13	252	13	21
Direct payments	648	40	791	42	22
Other ^a	777	48	847	45	9
Day clinic	1	100	1	100	-
Cost-sharing	0	0	0	0	-
Direct payments	1	100	1	100	-
Other ^a	0	0	0	0	-
Ambulatory services	1 732	100	2 122	100	23
Cost-sharing	131	8	148	7	13
Direct payments	1 457	84	1 797	85	23
Other ^a	144	8	177	8	23
Long-term care	67	100	91	100	36
Cost-sharing	0	0	0	0	-
Direct payments	32	48	47	52	45
Other ^a	35	52	44	48	27
Support services	245	100	285	100	16
Cost-sharing	0	0	0	0	-
Direct payments	104	43	107	37	2
Other ^a	141	57	178	63	27
Pharmaceutical products and other non-durable goods	1 023	100	1 245	100	22
Cost-sharing	335	33	371	30	11
Direct payments	677	66	855	69	26
Other ^a	11	1	19	1	73
Therapeutic aids	560	100	671	100	20
Cost-sharing	0	0	0	0	-
Direct payments	527	94	610	91	16
Other ^a	33	6	61	9	84
Benefits spending, total^b	5 261	100	6 305	100	20
Cost-sharing	674	13	770	12	14
Direct payments	3 446	66	4 208	67	22
Other ^a	1 141	22	1 327	21	16
Memorandum item					
<i>Out-of-pocket payments (cost-sharing and direct payments) as percentage of total current health expenditure^c</i>	18.9	-	17.7	-	-
<i>Current private health expenditure as % of total health expenditure^c</i>	24.1	-	22.4	-	-

Note: ^a Private health insurance, non-profit-making organizations.

^b Not including private spending on prevention and administration. In 2010, these came to €504 million.

^c Does not include private spending on prevention and administration.

Sources: Statistics Austria (2012a) (SHA Tables 3 and 4); HVSV (2012a); own calculations.

3.4.1 Cost-sharing and direct payments

Regulations on cost-sharing and exemptions vary between insurance funds, although the ASVG sets the legal standard in many cases. The way that individual cost-sharing payments are structured can be partly explained by the way that social insurance law developed historically. Since their introduction, the specialist insurance funds under the GSVG, BSVG and B-KUVG, unlike the ASVG, have made provisions for cost-sharing in all cases of medical assistance.

Exemptions exist for many different reasons, which also vary across insurance funds. In general, all patients with infectious diseases which must be reported to the authorities, dialysis or preventive health check-ups are exempted from user charges. Pensioners with a compensatory allowance (“minimum pension”), children covered under a parent’s policy, civil servants and – on application – “people requiring social protection” can also be exempted.

Social insurance legislation lays down guidelines for what constitutes “requiring social protection” for the purposes of exemption from prescription fees (see section 5.6). Exemption from prescription fees acts as a marker for a range of other exemptions. According to estimates by the Federation of Austrian Social Insurance Funds, approximately 490 000 people have an indefinite exemption from prescription fees (HVSF, 2010i). That includes, for instance, single people whose monthly net income in 2012 did not exceed €814.82 (for married couples: €1221.68). For individuals with a chronic illness who can demonstrate associated high costs, these income limits are raised to €937.04 for singles and €1404.93 for married couples. Furthermore, for every dependent child living in the household, the income limit increases by €125.72.

In addition, since 2008 a prescription fee cap has been in place. It is designed to relieve the burden on insured people requiring social protection who, while not eligible for exemption from prescription fees, are excessively burdened by these payments (see section 6.1). While a range of measures mitigates the negative effects of cost-sharing, there are indications that inequality in health status has increased over recent years (see section 7.3.2 *Equity of access is ensured but gaps in provision exist*). However, there is a lack of systematic studies on the relationship between cost-sharing and reduced access to care.

Ambulatory care by physicians and equivalent providers

Between 1997 and 2005, under the so-called health-voucher system, ASVG-insured people paid a fee of €3.63, and farmers paid a fee of €7.30 per health voucher. The voucher then gave free access to ambulatory physician care for three months. This was superseded in 2006 by a €10 annual “service fee” for

an “electronic health voucher” (e-card) (see Table 3.11). Children, pensioners and those requiring social protection are exempted from this charge. Individuals insured under the GSVG, BSVG, B-KUVG and the Austrian Miners’ and Railway Workers’ Insurance Fund do not pay the e-card service fee. However, they have to pay co-insurance – that is, a fixed percentage of the costs of care, for all physician visits (see Table 3.12).

Services provided in outpatient allergy clinics, or by speech and language therapists, physiotherapists, occupational therapists or clinical psychologists are considered equivalent to physician services and the same user charges and exemptions apply.

Table 3.11

Cost-sharing for ambulatory care, 2010

Cost-sharing	Introduction	Abolition
Prescription fee	1956	–
Therapeutic aids	1956	–
Health voucher fee (general practitioners, specialist physicians, dentists)	1997	2005 ^b
Outpatient clinics fee	2001	2003
Co-insurance (civil servants 20%)	1967	–
Co-insurance (self-employed 20%)	1966	–
Co-insurance (railway workers, miners 14%)	1971 ^a	–
Co-insurance (farmers, flat rate)	1979	–
Service fee (e-card) ^b	2006	–

Note: ^a This excess payment became applicable for insured mineworkers in 2005, when the two funds were merged.

^b In 2006, quarterly health voucher fees were replaced by an annual fee (€10) for an “electronic health voucher” (e-card) (in accordance with Article 31c, ASVG).

Inpatient sector

Patients admitted to hospital in the standard fee class pay a daily fee of €10, for a maximum of 28 days a year. From 2005, it has been possible to increase this fee, but not all Länder have taken advantage of this. Since 2006, the rate has been set annually. This fee is levied directly by the hospitals, and consists of a cost contribution of €8.60, another €1.45 for the Regional Health Fund, and €0.73 for the Patient Compensation Fund (see section 2.9.4 *Complaints, errors and damages handling*). The latter provides compensation in the event that a patient suffers harm in the course of treatment in a hospital, but the hospital cannot be conclusively shown to be liable. Those requiring social protection are exempted from this cost contribution. The co-insurance rate for co-insured people under the ASVG, as well as the co-insurance rate for insured and co-insured people hospitalized under the BSVG, amounts to 10% of a daily rate for up to a maximum of 28 days a year (Article 447f, paragraph 7,

ASVG). This cost contribution is waived in the event of hospitalization due to certain conditions (see Table 3.12). The general cost contribution for curative and rehabilitative hospital stays was harmonized in 2011, and is now levied on a means-tested basis, and set annually.

Pharmaceutical products

For every prescription in the Reimbursement Codex, a co-payment (prescription fee) has to be made of €5.15 in 2012 (Table 3.12). A prescription fee cap has been in place since 2008, limiting total spending on prescription fees to 2% of the annual net income (see section 6.1). In addition, exemptions exist for people with a monthly income below a certain threshold. The same eligibility threshold determines a compensatory allowance for pensioners.

Therapeutic aids

For therapeutic aids, a co-insurance rate of between 10% and 20% – depending on the insurance fund – is payable, but at least €28.20 for therapeutic aids and €84.60 for glasses and contact lenses (see Table 3.12). However, for patients who require medical accessories because of disfigurement, deformity or disability, these fees are absorbed by the health insurance fund, up to a statutory limit. If therapeutic aids are provided as part of medical rehabilitation, the health insurance fund absorbs all costs. Children under 15 (or those eligible for increased family support), and those exempted from prescription fees on the basis of requiring social protection are exempted from cost-sharing fees for therapeutic aids.

Psychotherapy

Psychotherapy, as defined in the Psychotherapy Act, is practised by individuals on the Federal Ministry of Health register of psychotherapists. Distinct from this are services rendered by physicians, which can be billed to health insurance funds as “psychotherapeutic service”. All insurance funds finance these services provided by physicians. To provide them, physicians must have completed the Austrian Chamber of Physicians diploma in psychotherapeutic medicine, a specialist training programme in psychiatry or neurology, a psychotherapy course approved under the Psychotherapy Act (ÖBIG, 2011).

Table 3.12
Cost-sharing regulations by provider level and insurance fund, 2012

Provider	Type of cost sharing	Regional health insurers and employer-based insurance (ASVG)	Insurance for the self-employed (GSVG)	Farmers' insurance (BSVG)	Insurance for Railways and Mining (VAEB)
Ambulatory care: Contracted and non-contracted physicians and equivalent services	General service fee	€10 annual e-card service fee ^a (can also be levied for funds other than ASVG, but is not applied)			
	Extra billing	Extra billing ^b for non-contracted providers	<ul style="list-style-type: none"> Co-insurance: 20%^c Extra billing^b: max. 80% reimbursement for enrollees with cost reimbursement. Co-payment in public hospital outpatient clinics at €21.20 per quarter and hospital. 	Co-payment: €8.27 per quarter (2010)	Co-insurance: 14%
	Co-insurance			Extra billing for non-contracted providers according to respective statutes	
Acute inpatient care	Co-payment	€10 per day ^c ; rates vary between "Länder"			
	Co-insurance ^d	10% for co-insured persons (dependants)	none	10% for co-insured persons (dependants)	none
Pharmaceutical products	Co-payment	Prescription fee: €5.15 per prescription ^e (2012)			
Medical rehabilitation	Co-payment	Means-tested, from €7.04 to €17.10 per day (2012) ^f			
Medical spas	Co-insurance	10%	20%	20%	10%
	Co-payment	minimum of €28.20; for visual aids: minimum of €84.60 (2012)			
Therapeutic aids ^g	Co-insurance				
	Co-payment	<ul style="list-style-type: none"> Extra billing^b for consultation of contracted physicians; Out-of-pocket payments exceeding subsidies for non-physician psychotherapy, usually at €21.80 for a single 60-minute session (Farmers' Social Insurance subsidy: €17.44) 			
Psychotherapy	Cost-sharing				

Notes: & Since 2008 insurances can opt for cost reimbursement, in 2013 about 4 % of enrollees in this fund have opted for cost reimbursement.

^a exemptions apply in line with exemption rules for the co-payment on pharmaceuticals except the cap, see ^e).

^b usually patients can claim reimbursement for 80% of maximum reimbursement levels as they apply.

^c €8.60 goes to the hospital, €1.45 to the regional health fund (chapter 3.3) and €0.73 to the Patient Compensation Fund (chapter 2.8)

^d applies usually for 28 days maximum, exemptions apply to expectant women, low income persons and organ donors.

^e capped at 2% of annual net income (chapter 6.1); exemptions: for individuals with net monthly income below €814.82 (€1,221.78 for married couples), lower thresholds for patients with chronic illness: net monthly income below €937.04 (€1404.93 married couples).

^f Capped at 28 calendar days, exemption: same as for pharmaceutical products in the area of Medical Rehabilitation except the cap, see ^e)

^g Exemption apply to children aged 15 and under; children of all ages with a serious disability who require care from family members; individuals given therapeutic aids as part of medical rehabilitation;

individuals particularly requiring social protection.

Sources: HVSU; GÖG; produced by author.

The range of services that are admissible under the category of “psychotherapeutic services” varies between insurance providers (see section 3.6). Reimbursement allowances for private psychotherapy are subject to standardized federal regulations. To be eligible for coverage, the psychotherapist must be on the list of Federal Ministry of Health-registered psychotherapists, the patient must have a mental illness, and written results of the mandatory physician examination must be presented before the second treatment session. The reimbursement allowance must be approved before the fifth session, and is awarded for a specific number of sessions within a set period. The cost contribution amounts to €21.80 per 1-hour session. Regulations on subsidies were introduced in light of the lack of a general contract, and subsidies have not been increased since 1992 (GÖG & ÖBIG, 2010b).

3.4.2 Informal payments

In Austria, informal payments are generally associated with the terms “two-tier medicine”, or “envelope medicine” (i.e. cash in an envelope). Informal payments can be made in the form of money, relationships and other media, such as goods (gifts), either before or after treatment. What the patient is “buying” is preferential, faster treatment from the service provider. The problem of patients making informal payments to physicians in order to shorten operation waiting times has received increased media attention in recent years (Transparency International, 2010b).

In anonymous surveys in Lower Austrian hospitals, 8% of respondents said that they had been offered shorter waiting times for elective operations in return for direct private payments. In a survey of 61 respondents 15% also said that someone had suggested to them that they visit a private clinic to secure an earlier operation date (Czypionka et al., 2007). Transparency International reports that patients’ ombudsmen’s offices have received cases in which patients were directed to hospital physicians’ private clinics, mainly for pre- and post-intervention care. In addition, patients with private health insurance get faster access although this is legally not permitted (Transparency International, 2010b; Czypionka et al., 2007; section 3.5). Compared to individuals with private supplementary insurance, those covered by statutory health insurance wait from three to four times as long for cataract operations and knee operations. For cardiac catheterization procedures, statutory insurance patients wait twice as long (Statistics Austria, 2007 in Thomson & Mossialos, 2009). While there is a lack of reliable information and data on informal payments to reduce waiting times, there are clearly considerable differences between the Länder, which has only added to the lack of transparency in this area (Czypionka et al., 2007).

Since 2008, anti-corruption legislation has aimed to increase transparency in the formation of waiting lists and to minimize the incentive to make and solicit informal payments but were relaxed slightly again in 2009 (Transparency International, 2010b). Some Länder are attempting to implement systems relying on objective criteria for drawing up waiting lists. In Styria, a grading scheme for prioritizing elective operations has been introduced. Grades are awarded based on the medical urgency of the procedure (Czypionka et al., 2007). In Vienna, a transparent waiting-list management system has been in place for some time (Kraus et al., 2010). In early July 2011, a law was passed which compels the Länder to introduce binding waiting-list regulations for planned operations in the fields of ophthalmology, neurosurgery and orthopaedics (see Table 6.1). It is hoped that this will reduce the incentive to shorten waiting times with informal payments (Parliament, 2011a, 2011b).

3.5 Private health insurance

3.5.1 Market role and size

The main function of private health insurance is that of supplementary insurance, in particular to purchase greater comfort (“hotel components”) in hospitals (“special fee class”). Most private insurance funds also allow patients to choose their physicians in hospitals. A private insurance policy can also be taken out in order to receive treatment from a physician without an insurance fund contract (“non-contracted physicians”) (see section 5.3). Furthermore, a private health insurance policy usually offers patients shorter waiting times for operations and general treatments (see sections 3.4.2 *Informal payments* and 7.3), although this is not a service to which policy-holders have a statutory entitlement. Furthermore, privately insured people make a significant contribution to physicians’ income, including those working in public facilities (see sections 3.7.2 *Remuneration of health-care staff* and 7.5).

In 2010, private health insurance financed 5.5% of total current health expenditure, or approximately €1.4 billion. If long-term care spending is included, private insurance expenditure accounted for 4.7% (see Tables 3.4 and 3.13). Private health insurance contributed 20.6% of total private health expenditure. Of total spending by private insurance funds, 56% (€790 million) was deployed in the hospital sector. As a proportion of total spending on hospitals, this amounts to 6.5% (see Table 3.17). Of private insurance funds’

current expenditure, €112 million, or 8% went towards ambulatory, curative and rehabilitative services. Approximately 6% was spent of pharmaceutical goods (see Table 3.13).

Table 3.13

Current expenditure of private health insurance funds in € millions, 2010

	Absolute	%
Inpatient services (including day cases)	788	56.1
Outpatient spa and rehabilitation services	112	8.0
Nursing care in patient's home	0	0.0
Ancillary nursing staff	0	0.0
Medicinal products for ambulatory patients	80	5.7
Prevention and public health services	0	0.0
Health administration and health insurance	424	30.2
Private insurance funds, total	1 403	100.0
Memorandum item		
Private health expenditure, total ^a	6 809	–
Private insurance funds as % of private health expenditure, total	–	20.6
Current health expenditure, total	29 773	–
Private insurance funds as % of current health expenditure, total	–	4.7

Note: ^a Health care spending of private households and insurance funds. This also includes spending by private non-commercial organizations and occupational medicine services.

Source: Statistics Austria (2012a); own calculations.

In principle, insurance protection does not extend to cosmetic procedures, addiction treatment or deliberately self-inflicted diseases or accidents. Since these contracts are negotiable, however, it is possible to agree on individual conditions.

In 2010, 2.85 million people, or approximately 34% of the population, were covered by some form of private health insurance. This proportion has remained fairly constant for several years (VVO, 2010). Of 2.85 million people, 13 662, or 5%, only had private insurance, under the “opt-out” scheme (see section 3.3.1 *Coverage*). Approximately half of those with private health insurance, or 18% of the Austrian population, approximately 1.5 million people, have supplementary insurance for hospital costs (see Table 3.14). This includes 1.03 million people who are insured to the extent of receiving full cost reimbursements, and 0.48 million people who are covered against hospital costs which private health insurance directly reimburses to hospitals. There is a great deal of variation in the extent of private health insurance coverage across Länder. In Salzburg, for example, one-quarter of the population has supplementary insurance, while in Burgenland, only one in ten people has this coverage.

Table 3.14

Individuals insured against hospital costs under private insurance policies, 2010
(in € millions)

	Austria	Burgenland	Carinthia	Lower Austria	Upper Austria	Salzburg	Styria	Tyrol	Vorarlberg	Vienna
Full-cost cover	1 026.1	17.0	85.1	85.3	160.7	92.4	191.3	102.9	44.0	247.3
Part cover	481.2	14.0	30.7	101.2	58.2	40.9	69.2	37.1	17.9	112.1
Total	1 504.4	31.0	115.8	186.5	218.9	133.4	260.5	140.0	62.0	359.3
Total coverage as % of the population*	18.0	10.9	20.7	11.6	15.5	25.1	21.6	19.8	16.8	21.1

Source: VVO (2010); own calculations.

A further 1.3 million individuals, approximately 16% of the population, have private supplementary insurance policies covering other service areas. This includes services such as complementary medicine (see section 5.13), dental care (section 5.12) and psychotherapy (section 5.11). Approximately 14% of private health insurance spending is within these sectors (see Table 3.13).

3.5.2 Market structure

Customer profile

While no systematic studies investigating the structure of demand are available, there are indications that people who take out private (supplementary) health insurance policies tend to have a relatively high level of income. Monthly premiums cost between €100 and €200 (Bratusch-Marrain, 2006). There is a positive correlation between demand for private insurance policies and education level, and demand is greater in cities than in rural areas. In Austria, the average age of someone taking out their first private insurance policy is between 30 and 40 years old (Spreitzer, 2012). Major companies sometimes offer their employees group policies with private preventive care. These group policies can either be organized by the employer, or by employee organizations (Fried et al., 2008).

Provider profile

There are eight insurance companies offering private health insurance policies (see Table 3.15). Of those, seven offer hospital cost insurance, all eight offer hospital day fee insurance, five offer sickness benefit insurance, five offer dental cost insurance, five offer day-care fee insurance, and three offer care costs insurance. Four private insurance companies share 96% of the market. Almost all private insurance companies that are members of the Association

of Austrian Insurance Companies (VVO, 2010), are profit-making, while only the MuKi (Mother–Child Insurance) is a cooperative. While the 1990s saw a concentration in the market, the number of private insurance funds has remained relatively stable over the last 10 years (Duller, 2005).

Table 3.15

Breakdown of private health insurance market, 2010

Position	Society	Market share in %
1	UNIQA Personenversicherung AG	47.98
2	VIENNA INSURANCE GROUP Wiener Städtische Versicherung AG	20.02
3	Merkur Versicherung AG	14.24
4	Generali Versicherung AG	13.54
5	Allianz Elementar Versicherungs-AG	2.83
6	MuKi Versicherungsverein auf Gegenseitigkeit	0.74
7	CALL DIRECT Versicherung AG	0.33
8	Wüstenrot Versicherungs-AG	0.31
9	Donau Versicherung AG VIG	0.02
Premiums (in € millions) 1 638		

Source: VVO, 2010.

In 2010, private insurance premiums totalled €1638 million, while the funds spent €1085 million on services. From 2000 to 2010, premiums rose from €1160 million to €1638 million. This amounts to an annual average growth rate of 3.5%.

3.5.3 Market conduct

In contrast to statutory social insurance, a private insurance policy begins with the signing of a private-law contract which is adapted in accordance with the preferences and risk profile of the customer. Premiums are calculated according to actuarial criteria, based on an individual's health risk ("risk-rated") and/or illness history ("experience-rated"). Age, gender, current health status and symptoms all affect the level of the premium. Furthermore, the insured person's address and underlying statutory social insurance are taken into consideration (Doppler, Hager & Riener, 2006).

Insured people receive benefits in kind from the contractual partners of their private insurance fund. Some private policy-holders are also eligible for cash benefits in the event of illness, for long-term care or special treatments. If, over a certain period, a policy-holder does not make a claim, most private insurance

providers offer a (partial) reimbursement of previously paid premiums. Private policy-holders are also able to elect to receive a form of compensatory daily allowance (“daily hospital allowance”) instead of receiving “special-class” services in public hospitals or private clinics.

In 2010, almost one-third of private health insurance spending went to administrative costs (see Table 3.13). The Association of Insurance Companies reports administrative costs of approximately 14% (VVO, 2010). By way of comparison, statutory health insurance providers incurred administrative costs equivalent to 3% of all expenditure (see Table 3.7).

Fees and reimbursement

All private insurance providers in Austria negotiate contractual relationships with hospitals and physicians through the Austrian Association of Insurance Companies. These contracts regulate the reimbursement of private patients’ treatment costs. The insured person receives a list of all the relevant insurance provider’s contractual partners. If the facilities outside the relevant contractual network are used, the services must be paid for directly, and can be claimed back subsequently. Most Austrian physicians work in both the public and private sector. Private health insurance is consequently an important source of income for them (see section 3.7.2 *Remuneration of health-care staff*). Physicians are typically paid on a single-service basis. Flat-rate fees and daily rates are also possible (Thomson & Mossialos, 2009).

3.5.4 Public policy

Market regulation

The private insurance market is regulated by the General Civil Code and the Consumer Protection Act. More specific market regulations are contained in the Insurance Contract Act and the Federal Hospitals Act. The Financial Market Authority serves as an independent monitoring authority (see section 2.3). All insurance companies must forward their business plans to the Financial Market Authority, including any potential changes to premiums or insurance cover.

Tax relief

Individuals and companies that have taken out a private insurance policy can write off private insurance premiums against tax as “special expenses” (Thomson & Mossialos, 2009). In accordance with the Income Tax Act (Article 18, paragraph 1, line 2), individuals can get a tax deduction of up to 25% of private insurance premiums in the form of tax credits (for single people, a maximum of €2920 per year; for single-earner households, a maximum of €5840 per year; for households with three children or more, a maximum of

€7300). However, to be eligible, an individual's annual taxable income must be below €36 400. Should their annual income exceed this amount, tax credits are reduced incrementally up to an annual income limit of €60 000 (Arbeitskammer, 2012). An employer can deduct up to €300 per employee for providing private health insurance. This amount is tax-free for the employer, if all employees in the business are covered by the private insurance policy.

3.6 Other sources of finance

3.6.1 The AUVA

With over 4 million members, the AUVA is the biggest accident insurance fund. In 2010, the AUVA provided accident cover for 3.22 million workers and 1.41 million schoolchildren and students (AUVA, 2011a). The AUVA is responsible for the provision of social insurance benefits in the event of an accident to those insured under the ASVG, as well as self-employed people insured by the Social Insurance Institution for the Self-Employed (GSVG). Other insurance providers (BSVG, B-KUVG, Austrian Miners' and Railway Workers' Insurance Fund) combine accident insurance and health insurance in a single policy (see Fig. 2.2). The AUVA finances treatment and rehabilitation in the seven emergency hospitals it operates (see section 3.6), as well as in other hospitals, and pays sickness benefits in case of accidents. Employers are obligated to pay contributions at a current rate of 1.4% of the contribution base (total wage). As of 2013, the monthly maximum contribution base is €4440. Self-employed people pay a fixed monthly contribution (in 2013: €8.48). Apprentices and individuals aged 60 and over pay no accident insurance contributions. Treatment costs of accidents financed by the AUVA reached a total of €365.3 million in 2010, of which around one-third (€134.7 million) was paid for inpatient treatment.

3.6.2 Financing of long-term care

Since the Federal Long-Term Care Act came into force in July 1993, a needs-oriented allowance has been granted for the "compensation of care-related costs" (see section 5.8). Statistics Austria (SHA) data shows that in 2010, Austria spent 0.8% of GDP on care allowances, and 0.7% of GDP on benefits in kind, particularly in the care home sector. Compared to other European countries, cash benefits (care allowance) are particularly important in the Austrian long-term care system (Kraus & Riedel, 2010). Public expenditure on long-term

care amounted to 1.2% of GDP, or €3.6 billion. An estimated €754 million was spent by private households (pensions) on inpatient long-term care and care in the home. Private health insurance funds made no contribution. Non-profit organizations financed €44 million (see Table 3.4).

Public long-term care services (care allowance and benefits in kind, e.g. institutional care and social services) are financed through general tax revenue (see Fig. 3.5). Strictly speaking, however, it is more accurate to say that they are financed through general levy income (taxes and social insurance contributions), as health insurance contribution rates were raised when the care allowance was introduced (Hofmarcher & Rack, 2006). The care allowance and benefits in kind have a strong redistributive effect and are of particular importance to people with low incomes (Mühlberger, Knittler & Guger, 2008). With the predicted growth of the population aged 65 and over, the demand for care is set to grow, along with the demand for funding in this area. Growing labour market participation of women (see Table 4.6), together with increasing cost pressures due to recruitment shortages in this field also contribute to this trend (Mühlberger, Knittler & Guger, 2008).

3.7 Payment mechanisms

Table 3.16 summarizes the payment mechanisms of service providers. It is intended to give an overview of the remuneration systems that are typically used. The weightings of individual components in the remuneration systems differ between Länder for almost all service providers, sometimes considerably. However, for the sake of clarity, these differences are omitted here. As far as is possible, Table 3.16 includes references to individual sections where more detailed and Länder-specific information can be found.

Table 3.16

Typical payment mechanisms of service providers, 2011

	Federal government/ Länder	Federation of Social Security	ASVG funds ^a	"Small" funds ^b	Private supplementary insurance	Cost-sharing (Table 3.12)	Direct payments (Table 3.12)
General practitioners (section 3.7.3)	-	-	FFS/CFR (30:70)	FFS/CFR (90:10)	Fee-for-service (FFS)	Percentage excesses in the "small" funds	For non-contracted physician services, and services outside compulsory coverage, e.g. complementary medicine
Specialist physicians (including dentists) (section 3.7.3)	-	-	FFS/CFR (70:30)	FFS/CFR (90:10)			For non-contracted physician services, and services outside compulsory coverage, e.g. dental crowns
Freestanding outpatient clinics (section 3.7.3)	-	-	FFS and/or salary, if outpatient clinic belongs to a health insurance fund				
Hospital outpatient clinic	Budget		Prospective budget				-
Fund hospitals (see section 3.7.1)	DRG-based budget (approx. 50% of costs) and funds from the Länder budgets; see Tables 3.17 and 3.18				Per diem	Co-payments and co-insurance	If a service is not covered under the policy, e.g. cosmetic operations
Private (PRIKRAF) hospitals (see section 3.3.3)	-	-	DRG-based payment for (30-60% of costs)		Per diem and FFS		
Rehabilitation	-	-	Per diem ^d		Costs are absorbed up to a fixed limit	Daily co-payment, adjusted for income	Supplementary fee for a single room
Long-term care institutions	Per diem	-	SS/CFR, if home visits in care home are made		Daily-rate, pension payment ^e or absorption of costs	-	Pensions, assets
Care at home	Individual budget based on needs-oriented money transfer (care allowance)	-	CFR/SS in the event of nursing care at home		Pension payment ^e or absorption of costs	-	
Pharmacies	-	-	Percentage mark-up (profit margin; see section 2.8.4)		Cost-absorption of certain supplementary medicines	Prescription fee	For medicines that are available without a prescription, or cost less than the prescription fee
Public health service staff	Salaries, and/or FFS for special activities, e.g. practising in schools				Not applicable		

Prevention and public health services

Civil servant physicians and other public health professions employed in regional district administrative authorities receive a salary (see section 5.1). In 2010, current expenditure for prevention and public health services amounted to €532 million or 1.7% of total health expenditure. Of this figure €283 million (45%) was financed by the federal authorities, Länder and local authorities. The social insurance funds' contribution towards financing the public health services and prevention, including accident insurance, is currently at €214 million (40%), and also includes funds for tertiary prevention (rehabilitation) and the Fund for Health Promotion and Health Check-ups (section 3.3.3 *Pooling of public funds*). Private sources accounted for €80 million, mostly co-payments of households and expenditures on occupational health.

By way of comparison, in 2009, occupational health protection costs made up 0.6% of French current health expenditure, while in the Netherlands, 1.4% of health expenditure went towards occupational preventive medicine (OECD, 2012).

Pharmacies

Pharmacies are financed through a percentage mark-up on every package they dispense. This mark-up is set in law and depends on the customer:

- For beneficiary customers (federal or local authorities, institutions, social insurance funds, etc.), the mark-up depends on the retail price (higher mark-up for lower prices) and ranges from 3.8% to 27%. For high-revenue pharmacies, the maximum mark-up is 25.1%.
- For private customers, the mark-up ranges from 11.1% to 35.5% depending on the retail price, and, on top of this, pharmacists can add a “private purchase charge” of 15%.

Notes to Table 3.16 (opposite):

^a ASVG funds: nine regional health insurance funds, six company health insurance funds.

^b Insurance Institution for Railways and Mining, Civil Servants Insurance Corporation, Social Insurance Institution for the Self-Employed, Farmers Social Insurance Institution.

^c See also Tables 3.10 and 3.12.

^d Daily rate is financed from various funding sources. In 2008, an average of 44% is funded by tax revenue (social assistance), 26% through benefits, 24% through pensions, and 5% through recovery of damages (Hofmarcher, Bittschi & Kraus, 2008); AUVA (in event of workplace accidents, occupational illnesses), pension insurance (in event of reduced capacity to work, incapacity to work).

^e Regular payouts (e.g. monthly) following activation of relevant clause in insurance policy.

HV – Federation of Social Insurance Institutions; FFS – fee for service; PPF – per-person flat rate; CFR – per-case flat rate; PRIKRAF – Private Hospitals Financing Fund.

As a result, prices for pharmaceutical products in pharmacies are standardized nationwide.

Employees in pharmacies which are not run by physicians (see section 5.6) are mostly employed on a permanent contract, and receive a salary. Pharmacists in public or hospital pharmacies receive their salary from the Pharmaceutical Salary Fund (see section 2.3). It pays pharmacists according to a 18-grade scale, on which salary is dependent on years served. Salaries are financed through a standard levy which all pharmacies have to pay to the Pharmaceutical Salary Fund for each of their employees. Through payment of this levy, long-serving pharmacists can receive higher salaries without incurring additional expenses for their employers. In addition, the Pharmaceutical Salary Fund runs a welfare and support fund, providing family subsidies, as well as supplements to pensions, and unemployment or sickness allowances (Pharmazeutische Gehaltskasse, 2012).

Health expenditure on pharmacies and retail grew from €4.2 billion in 2004 to around €5 billion in 2010, which represents a rise of 19.3%. However, as a proportion of current health expenditure, these costs fell from 18.1% in 2004 to 16.9% in 2010. About 61.4% of this spending was by social insurance funds, and 36.5% was by private households, with the remaining share financed by other public sources and private insurance companies.

Care at home

Care at home is not paid directly by state or social insurance. Instead, those who are eligible receive a form of personalized budget (care allowance), allowing people requiring care as much flexibility and freedom of choice in the management of their care requirements as possible (see sections 5.8 and 3.6). They can choose to keep the allowance and obtain care from family members or they can use it to purchase long-term care from professional providers or from untrained helpers. Expenditure on long-term care in the home amounted to approximately €2.2 billion in 2010, with the federal authority, Länder- and local authority-funded care allowance making up 95% of this figure, or €2.1 billion. The rest was financed by social insurance funds, private households and private non-commercial organizations. Between 2005 and 2010, spending on care in the home rose by 35%, from €1.6 billion in 2005 to €2.2 billion in 2010.

Long-term care institutions

Long-term care institutions are paid a per diem rate, which is financed from several different sources (see Table 3.16; Hofmarcher, 2008a). In 2008, an average of 44% was funded by tax revenue (social assistance), 26% through the long-term care allowance, 24% through pensions, and 5% through recovery

of damages (Hofmarcher et al., 2008). Statistics Austria's figures show not only the total current expenditure on care homes, but also include spa facilities in this category (Statistics Austria, 2011c). However, about €2.2 billion was spent on long-term care institutions in 2010, mostly financed by local authorities and private households.

Psychotherapy and clinical psychology

Insurance funds finance psychotherapeutic and psychological services in three different ways: direct payment, where the provider is paid directly by the insurance; cost reimbursement, where the patient has to pay first and is later reimbursed; and cost contribution, where social insurance provides a fixed subsidy (GÖG & ÖBIG, 2010b) with the rest having to be covered by the patients out of pocket. Ultimately, however, providers are always paid fee-for-service (either by insurers or patients). The establishment of a general contract regulating the financing of psychosocial treatments remains an elusive goal (Hofmarcher, Riedel & Schülein, 2006).

In 2009, the total social insurance expenditure for psychotherapeutic treatments was €59.7 million (+12% increase between 2007 and 2009). Of that total, 56% (€33.5 million) was paid to associations and institutions for psychotherapy services rendered, 22% (€13 million), was granted to non-contracted physicians in the form of reimbursements, and 21% (€12.3 million) was awarded as cost contributions towards treatment by independently practising psychotherapists. The remaining 1% (€0.76 million) represents spending on fund-owned facilities (GÖG & ÖBIG, 2010b).

Clinical psychology, mostly inpatient treatment, is financed through the DRG-based hospital payment system (LKF system) (Kathschnig & Scherer, 2009). The collective contract "clinical psychological diagnostic services" between the Association of Austrian Psychologists and the Federation of Social Security Institutions has ensured financing since 1994. In 2011, not only diagnosis, but also treatment of mental illnesses was added to the social insurance service catalogue.

Payment for long-term care of mentally ill patients differs considerably from payment for psychotherapy and clinical psychology. Family members, or members of the local community acting as informal carers for mentally ill people can be eligible for cash benefits (Zechmeister & Österle, 2007). Pension funds are responsible for covering the costs of inpatient rehabilitation in psychiatric wards of general and psychiatric hospitals (Platz, 2009).

3.7.1 Financing of hospitals

In 2010, there were 268 hospitals in Austria, with a bed capacity of 64 008 beds (see Table 5.3). This total number of hospitals includes all public law institutions, all public law and limited private non-profit-making hospitals, and private hospitals partly financed by public funds, such as PRIKRAF hospitals.

In 2010, around €11.5 billion was spent on hospitals (see Table 3.17), approximately €9.8 billion on inpatient care, including curative and rehabilitative facilities, with the rest going to outpatient and day clinics (Statistics Austria, 2012a). Between 2004 and 2010, financial contributions from the federal government, Länder and local authorities for hospital care grew by almost 40% to €5.3 billion, while those of the social insurance funds grew by just under 30% to €5.2 billion. Consequently, social insurance funds are no longer the most important source of financing for hospitals.

Table 3.17

Sources of hospital funding, 2004 and 2010

	2004	2010	% change	
in € millions	Public	7 821	10 518	34.5
	Social insurance	3 996	5 179	29.6
	Federal authorities, Länder and local authorities	3 825	5 340	39.6
	Private	932	1 022	9.7
	Private insurance	699	755	7.9
	Out-of-pocket	208	252	21.1
	Non-profit-making organizations	24	16	-35.2
% breakdown	Public	89.4	91.1	-
	Social insurance	45.7	44.9	-
	Federal authorities, Länder and local authorities	43.7	46.3	-
	Private	10.6	8.9	-
	Private insurance	8.0	6.5	-
	Out-of-pocket	2.4	2.2	-
	Non-profit-making organizations	0.3	0.1	-

Source: Statistics Austria (2012a); own calculations.

In 2010, private spending provided an approximate total of €1 billion. This spending category has grown significantly more slowly than public funding since 2004, which has also led to a decline in the relative importance of private financing for hospitals over this period.

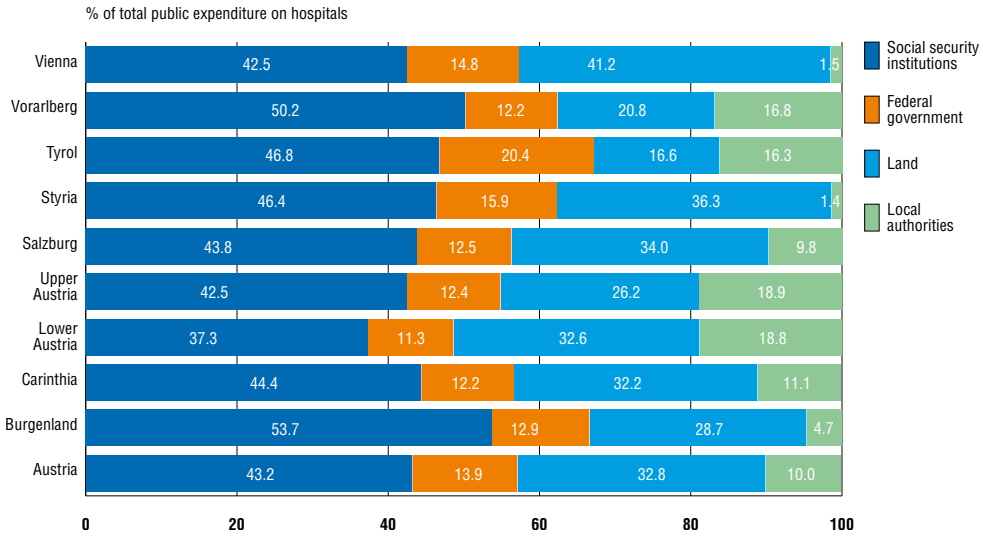
Public financing of fund hospitals

Of 178 hospitals providing acute care in 2010 (see section 4.1.2 *Infrastructure*), 131 or 74% were fund hospitals, that is, they were funded by regional health funds (section 2.3); €9.3 billion of public funds was spent on these hospitals. Fig. 3.8 gives a breakdown of financing burdens between relevant regional bodies and the social insurance funds. On average, social insurance provided 43%; federal funds made up 4%; Länder funds constituted 33%, and local authorities provided 10%. Since 2005, the funding breakdown has shifted slightly, with the Länder's share growing, and the local authorities' share remaining stable at 10% (see Fig. 3.8). This would indicate that these services have been centralized at regional level. There is, however, considerable variation between the Länder regarding the financing burden of regional bodies. For instance, Styrian local authorities pay the smallest share (1.4%), while their Upper Austrian equivalents pay the largest share (19%).

Debt has also been an important source of financing in Länder. These debts have often been “outsourced” from Länder (the owners of hospitals) to hospital management companies. Consequently, the National Growth and Stability Pact, which defines upper debt limits for Länder and local authorities (Austrian Stability Pact, 2012) has had an important influence on hospital financing as hospital debts now had to be included in regional accounts. In 2009, the total debt of hospitals or their owners to the capital markets was approximately €3.3 billion, and had doubled since 2006 (Hofmarcher & Gruber, 2011c). As a proportion of public health expenditure, it was 14.9% in 2009, while in 2006 it was 9%. Relative to GDP, total debt rose from 0.68% in 2006 to 1.21% in 2009 (Staatsschuldenausschuss, 2010; Statistics Austria, 2010b).

Fig. 3.8

Bodies financing inpatient and ambulatory care in fund hospitals, 2010



Source: Statistics Austria (2012a); own calculations.

Performance-related financing

Since 1997, fund hospitals have been financed on the basis of a national DRG-like budget allocation system (BMG, 2010a; Erlandsen, 2007). The LKF system, literally translated as the performance-oriented financing system, distinguishes between two funding areas: the nationally uniform LKF core area, and the LKF governance area, which allows Länder to determine Länder-specific allocation rules (Table 3.18).

Table 3.18

Performance-oriented hospital financing system (LKF), 2011

LKF core area (subject to national standards)	Points awarded for inpatient hospital stays, according to performance-oriented DRGs (LDF), including all special point-reward regulations
LKF governance area (amendable at Länder level)	Länder can determine the allocation criteria to promote special care structures and care tasks that are of particular significance in the Land. Resource allocation can take into account "special functions" of hospitals, such as: <ul style="list-style-type: none"> – tertiary hospitals with a central function for care provision ("central hospitals") – secondary hospitals with a full care spectrum – hospitals with a specialist area of expertise – hospitals with a special regional function

Note: As points calculated on the basis of average costs do not always cover the justifiable costs of more sophisticated hospitals (e.g. university clinics), these disparities can be balanced out in the governance area.
Source: BASYS and IMÖG (2010).

LKF core area

Within the LKF core area, hospital budgets are determined on the basis of the procedure- and diagnosis-related case groups (*Leistungsorientierte Diagnosefallgruppen*, LDF), a system which resembles DRG systems in other countries. Points are allocated for each inpatient stay on the basis of the LDF into which a particular patient is grouped. The total point-value is then determined for each hospital at the end of the financial year, and the budget of each hospital is calculated by dividing up the Regional Health Fund's budget for inpatient care according to the points earned by each hospital.

The performance-oriented DRG algorithm. The process of allocating treatment cases into LDFs consists of three steps.

First, patient cases are divided depending on whether certain selected procedures (MELs) were performed. Procedures that are taken into account include surgical interventions and a small number of nonsurgical services. If no such procedures are performed, cases are grouped on the basis of their main diagnosis (*Hauptdiagnose*, HDG).

Second, consideration is given to medical and economic homogeneity; that is, base-groups are formed consisting of patients with either similar diagnoses or similar procedures, and which must also have similar costs. In 2011, there were 209 MEL base-groups and 219 HDG base-groups.

Third, base-groups are further subdivided according to age, additional procedures and secondary diagnoses. This leads to a total number of 991 LDFs in 2011, including 438 MEL groups, and 553 HDG groups.

The LDF system is revised annually, and the number of LDFs has increased considerably over the years, particularly the MEL groups (see Table 3.19). Since 2009, the LKF model can also assign preliminary codes to innovative treatments and diagnostic procedures.

Table 3.19

Development of the LDF system, selected years

	1998		2000		2005		2010	
	Quantity	Share	Quantity	Share	Quantity	Share	Quantity	Share
Procedure related groups (MEL)	324	38%	346	40%	407	46%	438	44%
Main diagnosis-related groups (HDG)	524	62%	521	60%	476	54%	553	56%
Total groups (LDF groups)	848	100%	867	100%	883	100%	991	100%

Note: As points calculated on the basis of average costs do not always cover the justifiable costs of more sophisticated hospitals (e.g. university clinics), these disparities can be balanced out in the governance area.

Source: BASYS and IMÖG (2010).

LDF points for resource allocation. Every LDF has an associated point score, representing the average costs of all patients in that LDF. LDF points for the 1997–2001 LKF models were initially determined on the basis of around 500 000 inpatient stays and cost data from 20 reference hospitals. The points were updated in successive “LKF Recalculation” projects, leading to new LDF points in 2002 and 2009 (and minor revisions in between). The 2009 scores were calculated on the basis of reference hospitals’ cost data from 2005, with one LKF point being equal to €1 (in 2005). Scores in the 2011 LKF model are based on the same data (BMG, 2011c).

Every LDF rate consists of a procedural component and a day component. The service component of the LDF score is based on costs directly related to procedures performed on patients within that LDF. These include staffing expenses for the operating team, or costs of medical consumables, etc.

The day component of the LDF score comprises all costs that are not directly attributable to procedures. It is calculated at the department level by multiplying the costs for each bed day with the average length of stay of patients in this LDF.

The score per patient discharged by a hospital is determined by adding to the score of the applicable LDF a number of supplementary components. These include: (1) an additional procedural component if more than one significant procedure is performed; (2) surcharges per day of stay in intensive care units or intensive neonatal and paediatric units, as well as per day of stay in geriatrics, neurological rehabilitation etc; (3) surcharges or deductions per day exceeding the upper or lower length-of-stay threshold of the particular LDF.

In the 2011 LKF model, the upper length-of-stay outlier threshold for MEL groups was determined as the 80th per centile of the length of stay of all patients in that MEL, while for HDG groups, it was the 60th per centile. For main diagnosis groups within the category of psychiatry, a 30% interval is applied. In this way, length-of-stay outliers can be identified earlier in the case of patients not receiving surgical treatment, who have more widely spread lengths of stay than surgery patients. For patients who stay longer than the upper threshold, additional points are awarded for each extra day, on a declining scale.

The lower length-of-stay threshold for MEL groups was set at 30% of the median stay duration, while the threshold for HDG groups was set at 50% of the median length of stay. Should a patient’s stay not reach the lower threshold, a reduced score is calculated according to the actual number of days stayed.

For day cases (see section 5.4.1 *Day care*), the LDF score has been calculated since 2006 as the sum of the full procedural component and the day component for a single day.

Since 2011, these per diem surcharges and deductions are calculated in such a way that only one-off costs and additional variable costs are taken into consideration, while fixed costs are excluded. This change is supposed to encourage reductions in length of stay.

Since 2009, service providers have the opportunity to make recommendations online for changes and additions to the service catalogue through the system for the administration of recommendations for changes and additions to the Federal Ministry of Health service catalogue (BMG, 2011c).

Of all the MELs provided in all Austrian hospitals in 2009, 1 198 705 can be classified as operative MELs, and 3 225 988 can be classified as non-operative (diagnostic and therapeutic) MELs. In total, the number of MELs fell by 2.7% from 2008 to 2009, with operative services growing by 3% over this period. The majority of operative services were performed in the areas of musculoskeletal disorders and dermatology. However, obstetric services and gynaecological procedures were carried out with great frequency. This explains the over-representation of women, 57.7%, in operative interventions. Non-operative services are difficult to compare without taking the very different service units into account (Statistics Austria, 2011b).

LKF governance area

The LKF governance area is structured by each Land individually, and enables the inclusion of specific criteria in regional health-care planning (see Table 3.20). For instance, provision of staffing and equipment can vary between Länder, in line with differing care objectives, and the LKF governance area allows the Länder to structure the distribution of funds from the Regional Health Fund accordingly. Since 2006, the functions of different hospitals can be taken into consideration. The different care categories are as follows: central (eg. university) hospitals, secondary hospitals with a full care spectrum, hospitals with specialist area of expertise and hospitals with special regional care functions (BMG, 2011c; BASYS, IMÖG, 2010).

The distribution of funds between the governance area and the core area and the way funds are divided up between hospitals differs between Länder (see Table 3.20). In some Länder, the amount is tied to performance indicators (LKF points, bed days), while in others, fixed amounts are distributed. The last agreement under Article 15a of the Federal Constitutional Law represented

an attempt to counteract further divergence between the Länder. The Länder have begun to gradually standardize their payment mechanisms. One important control element is the weighting of LKF points according to type of hospital. Although the weightings have been adjusted in recent years, inequalities in compensation for services remain. This is principally attributable to differing regulations on the financing of costs that exceed the LKF budget (“waste”), or points or point-caps in excess of the LKF budget (BASYS, IMÖG, 2010; see also Table 3.20).

Development of costs in fund hospitals

Table 3.21 shows the development of costs for fund hospitals between 2000 and 2010 in relation to beds, patients, bed days and staff. Nationwide the costs per bed increased 5% in this timeframe. As the numbers of inpatients also increased considerably between 2000 and 2010, the cost per patient has grown at a relatively slow rate. However, there are significant differences in costs between Länder. For example the costs per available bed in Tyrol increased an average of 3.9%, while the increase in Upper Austria was 6%. In absolute terms Vienna has the greatest costs, with a cost in 2010 per bed of more than €300 000. This rank order between the Länder remains largely the same for other reference values.

Financing of private hospitals (PRIKRAF hospitals)

Private hospitals are also paid on the basis of the LKF system with resources in the Private Hospitals’ Finance Fund (see section 3.3.3 *Pooling of public funds*) being distributed according to LDF points to private hospitals. Hospitals receive a monthly budget and a corrective payment is made at the end of the year to account for the actual volume of services provided. Payments from PRIKRAF to hospitals amounted to about €90.72 million in 2009 and financed between 30% and 60% of costs at these institutions.

In some cases, patients can also receive treatment in private hospitals and claim reimbursement from PIKRAF for at least part of the costs. These reimbursements amounted to €2.13 million in 2009 (PRIKRAF, 2009).

Table 3.20

Distribution of budgeted funds by Länder, 2007

	Core-area share	Governance-area share	10-year period (1997–2007)	Particularities
Burgenland	100%	0%	70/30 core area and governance area	Points are calculated without weighting
Carinthia	Distribution according to LKF points	Weighting factor according to type of hospital and stipulated norms (LKF points per region + combined flat-rate fees) according to region.	Weighting factor according to type of hospital	Financial model by care region (grouped according to HDGs and MELs)
Lower Austria	Forecast hospital budgets (NÖGUS – Lower Austrian Health and Social Fund) determine the range of services. If the threshold is exceeded, the degressive points model is applied.	0%	Weighting factor according to type of hospital	Degression model
Upper Austria	100%	0%	–	No weighting factor in the inpatient sector
Salzburg	Distribution according to LKF points	Allocation of funds according rations defined in SAGES Act (financial need, provisions in budget)	Pre-2001, weighting factor according to type of hospital	Percentage breakdown in fund control area and equalization financing according to budget
Styria	Distribution according to LKF points	Normative standard model (adjustment factor for each hospital derived by comparison to Austria-wide benchmark) and weighting factor specific to hospital	Weighting factor according to type of hospital	Normative standard model
Tyrol	70%	30% (weighting factor)	Change in weighting factor	Weighting factor according to type of hospital
Vorarlberg	Hospital-related points cap and weighting factor		85/15 core area and governance area (pre-2004, weighted by staffing coefficient)	Hospital-oriented model with point cap
Vienna	Weighting factor specific to hospital		Change in factor calculation	Annual factor adjustment

Source: BASYS, IMÖG (2010).

Table 3.21
Development of costs in fund hospitals

	Per bed actually provided			Per inpatient			Per bed day			Per member of staff (full-time equivalent)						
	Austria = 100	2000 = 100	Annual growth rate	Austria = 100	2000 = 100	Annual growth rate	Austria = 100	2000 = 100	Annual growth rate	Austria = 100	2000 = 100	Annual growth rate				
	2010			2010			2010			2010						
Burgenland	173 082	75	171	5.5	2 743	62	114	1.3	717	89	176	5.8	88 232	93	140	3.4
Carinthia	210 226	91	170	5.5	4 476	102	146	3.9	718	89	170	5.5	94 141	99	138	3.2
Lower Austria	200 926	87	175	5.8	4 259	97	161	4.9	751	93	181	6.1	95 475	100	146	3.8
Upper Austria	213 921	93	179	6.0	3 718	85	132	2.8	736	91	174	5.7	94 468	99	145	3.8
Salzburg	201 084	87	163	5.0	3 760	86	120	1.8	756	94	163	5.0	95 614	101	141	3.5
Styria	215 085	94	162	4.9	4 586	104	131	2.8	747	92	162	4.9	86 712	91	137	3.2
Tyrol	207 107	90	147	3.9	3 558	81	123	2.1	725	90	148	4.0	86 175	91	136	3.1
Vorarlberg	189 001	82	160	4.8	3 470	79	122	2.0	684	85	155	4.5	97 749	103	139	3.3
Vienna	314 222	137	148	4.0	5 891	134	122	2.0	1 045	129	147	3.9	102 700	108	136	3.1
Austria	229 904	100	161	4.9	4 389	100	130	2.7	808	100	161	4.9	95 077	100	139	3.3

Source: GÖG survey, March and April 2012; own calculations.

Financing of hospitals owned by the AUVA

The seven hospitals run by the AUVA are acute care hospitals (see Table 4.3). They are paid on the basis of per diems. Treatment of workplace accidents is financed entirely by the AUVA. Accidents outside of the workplace which are treated in AUVA hospitals must be co-financed by other social health insurance funds. On average, they contribute 25% of the costs of treatment of such accidents in AUVA hospitals. In recent years the number of workplace accidents has fallen significantly (see section 5.1.3 *Health promotion and prevention*). The approximately 900 beds in AUVA hospitals are therefore largely used for treatment of “leisure-time accidents”. About 88.8% of funding of AUVA hospitals comes from social security institutions (AUVA and health insurers), while 8.7% is related to out-of-pocket payments (AUVA, 2009, 2011b).

3.7.2 Remuneration of health-care staff

Physicians and other health-care staff, who work in hospitals, long-term care institutions or rehabilitation facilities (see Tables 4.6 and 4.9) are generally salaried employees. In addition, many salary regulations anticipate various additional allowances, partially dependent on which Land the employee is working in, so that income comparisons not only between groups of employees but also between Länder are sometimes difficult. Some employees in the health-care system are civil servants, who have their own pay scales and regulations. The Association for Employers in Health and Social Care Professions provides all its employees with a collective wage agreement (BAGS, 2011). In March 2011 the Association’s collective contract was added to the statute books. As a result, it is now valid not only for the Association’s members but also the majority of providers of social or health-care services (BAGS, 2011). A similar collective wage agreement exists for employees of Austrian private hospitals, which also partly covers hospitals run by religious orders.

There is little information available on the incomes of various professions in the health-care system. One source is the employee survey from 2007, according to which hourly pay in the field of health and social care stood at some 12% lower than hourly rates in the economy as a whole (Eurostat, 2012). However the difference had decreased since 2003, when it stood at 16%. The costs per full-time member of the nursing staff in fund hospitals were some €50 000 per year on average across Austria, and for allied health professions the figure was around €52 000. Staffing costs per full-time nursing assistant ran to €41 000 per year and for administrative staff €44 000. There are sometimes significant differences between the Länder for all categories of staff. According to estimates by the Chamber of Physicians, the gross starting salary for junior

physicians is around €50 000 per year, and after ten years of practice the salary can be €75 000. Average costs per full-time physician in a fund hospital were €94 000 in 2009, though in Carinthia this cost reached €103 000. In Tyrol the figure was only €85 000 per year (DIAG Extranet).

Physicians have the possibility to gain extra income by treating privately insured patients in public hospitals (see section 3.5). As remuneration in the public sector is often perceived to be relatively low, this is seen as an incentive to keep highly qualified physicians in the public sector. Expressed differently, salaries in the public sector can be kept relatively low, as payments for private patients in public hospitals can form a significant part of income, and for leading physicians, in fact, frequently the majority of their pay. In 2010 private health insurers financed almost 7% or some €755 million (see Table 3.13) of total expenditure on hospitals. This contribution is divided between leading physicians and the hospitals (house proportion). The mode of division varies significantly across the Länder. In 1996 the audit office criticized the fact that income from private patients formed an incentive for more inpatient care (Court of Auditors, 1998). In an evaluation in 2006, the audit office repeated this criticism and suggested that legislation should be introduced to ensure transparent and fair distribution of resources among physicians and hospitals, as well as among physician teams (Court of Auditors, 2006).

3.7.3 Remuneration of independently practising physicians

In 2011 the social health insurance system spent a total of €3.6 million on services provided by independent ambulatory physicians, hospital outpatient clinics, non-contracted physicians, as well as “equivalent” providers, which include physiotherapy treatment, speech-language, phoniatric and audiological treatment, massage therapy, psychotherapeutic treatment and diagnostic services from clinical psychologists. In addition, this category of expenditure also includes flat-rate payments by health insurers for hospital outpatient clinics and uncontracted physicians. Between 2005 and 2011, expenditure on ambulatory care grew 23%, somewhat slower than total expenditure of social health insurance (see Table 3.7).

Most health insurers pay for services provided by ambulatory providers via a mixed system, including flat-rate payments per patient (payments for basic provision) alongside fee-for-service payments for specific services. The fees billed for by contracted physicians are paid quarterly by the nine regional health insurers, company health insurers and the Farmers’ Social Insurance Institution,

as well as by the Insurance Institution for the Self-Employed, and monthly by all other health insurers. However, each physician can provide services only up to a budgeted amount, which varies depending on the Land.

The ASVG specifies in Article 342, paragraph 2 that remuneration of contracted physicians is to be set according to individual services provided. In practice the proportion of payments made in the form of fee-for-service varies considerably depending on the specialty (see Table 3.16). Technical specialties, such as radiologists and pathologists receive almost all payments on the basis of fee-for-service (Hofmarcher & Rack, 2006). For GPs, the fee-for-service payments form only one-fifth to one-third of total payments. On average for all specialist physicians (excluding physiotherapy, radiology and pathology), around 70% of total turnover is from fee-for-service (see Table 3.16), and the average for all contracted physicians is around 50%.

For GPs, about 70% of revenue comes from the flat-rate payment for basic provision. The flat-rate payment is made for every three months of provision in the case of most insured people, independent of how frequently the individual uses the service. The amount of the flat rate varies between specialties and between Länder. In some Länder, the payment is reduced if the number of patients treated by a physician is very high. For some specialist health insurers (“small” insurers) physician services are almost exclusively paid on a fee-for-service basis (see Table 3.16).

Development and distribution of fees

Turnover and the number of cases treated by general practitioners and specialist physicians for regional health insurers, company health insurers and the farmers’ insurance differ considerably and have developed very diversely (see Table 3.22).

For example, the turnover per case in the field of dermatology is only just over €40, while turnover per case for specialists in surgery and internal medicine is over €100 per case. Physicians specialized in physical therapies even receive an average income of €181 per case.

Table 3.22

Remuneration structure and development in specialist and generalist physician care (§ 2 insurers^a), 2010

	Turnover		Cases		Turnover	Turnover	Cases	Turnover
	million €	%	(millions)	%	/case			
					€	Index 1998 = 100		
Total	1 716.37	100.0	34.1	100.0	50.38	144	118	122
General practitioners	743.98	43.3	16.0	47.1	46.38	131	103	127
Specialist physicians	708.13	41.3	11.5	33.6	61.79	162	124	131
- Pulmonology	40.23	2.3	0.5	1.5	80.91	170	141	121
- Ophthalmology	100.39	5.8	2.1	6.2	47.53	173	129	133
- Surgery	25.98	1.5	0.2	0.7	112.27	215	131	164
- Dermatology	56.18	3.3	1.4	4.1	40.42	155	122	127
- Gynaecology	81.57	4.8	1.7	5.0	48.00	121	96	127
- Internal medicine	123.68	7.2	1.2	3.6	100.81	177	132	134
- Paediatrics	58.04	3.4	1.1	3.2	52.80	149	119	125
- Otolaryngology	56.05	3.3	1.0	2.9	56.73	176	135	132
- Neurology, psychiatry	55.72	3.2	0.6	1.9	87.67	198	166	121
- Neurosurgery	0.33	0.0	0.0	0.0	71.17	126	-	-
- Orthopaedics	68.54	4.0	0.9	2.6	76.04	156	121	129
- Urology	39.14	2.3	0.6	1.9	61.42	167	149	112
- Emergency surgery	2.27	0.1	0.0	0.1	62.09	262	376	70
Particular specialist physicians	264.26	15.4	6.6	19.3	40.25	138	158	87
- Radiology	156.24	9.1	2.1	6.3	73.20	133	127	104
- Physiotherapy	12.83	0.7	0.1	0.2	180.88	139	109	126
- Laboratory medicine	95.20	5.5	4.4	12.8	21.83	145	180	80

Note: ^a Regional health insurance institutions, company health insurers and the Farmers' Social Insurance Institution (Tables 2.2 and 3.5).

Sources: HVSV (1998, 2010a).

The OECD estimated that the annual gross income for independently practising GPs in Austria was almost €92 800 in 2007 (the last year for which data is available), almost three times as high as the average income in the country (OECD, 2012). The annual income for independently practising specialist physicians amounted to more than €148 800 and was thus more than four times as high as average income. The relative income of GPs is in the middle of the range for OECD countries, while specialist physicians' income is at the top end, although it remains behind that of Germany and the Netherlands (OECD, 2011b). These orders of magnitude in physicians' income and their levels of diversion from average incomes are likely to have existed for some time and correspond to those from the data in the Income Report (Court of Auditors, 2002; Hofmarcher & Rack, 2006).

4. Physical and human resources

Infrastructure endowment in the Austrian health-care system is strong, due to considerable investment in recent years. Investment volume grew faster than current expenditure for health-care between 2004 and 2010. The level of investment is also high when compared internationally, however the amount invested varies between Länder. In the hospital sector, some Länder grant no investment subsidies, while in other Länder, up to 70% of investment costs are covered by the Regional Health Fund. Compared to other OECD countries, the Austrian population enjoys above-average access to major medical-technical equipment, particularly in the area of computed and magnetic resonance tomography.

There are around 270 hospitals in Austria, of which 178 provide acute inpatient care. One of the stated aims of Austrian health-care planning has been (and still is) to reduce the number of hospital beds. Between 2000 and 2010, the average reduction in bed numbers across Austria was 10% (with much variation between Länder). However, compared to the rest of the EU, bed numbers in Austria are still significantly higher than the average, though approximately level with Germany. Other countries have cut bed numbers more drastically over the same period.

At 4.8 physicians per 1000 residents, Austria has the second-highest physician-to-population ratio in the EU, after Greece. Austria trains an above-average number of medical students, which not only explains the consistently rising number of physicians, but also the fact that Austria is a net exporter of physicians, which is unusual for a west European country. The number of nurses per 1000 residents, however, is slightly below the EU27 average. This means that Switzerland, Germany and many north European nations have significantly higher total numbers of health-care staff (physicians and nurses combined).

4.1 Physical resources

4.1.1 Capital stock and investments

In 2010, just under €1.7 billion were invested, equivalent to 5.3% of total health expenditure. Of that amount, €992 million were invested into the public sector, while €673 million were invested into the private sector (Table 4.1).

Table 4.1

Health expenditure and investments, 2010

	€ millions	Growth rate (%) at current prices	As % of gross domestic product
Health expenditure, total	31 438	28.4	11.0
– Current health expenditure	29 773	28.1	10.4
– Investments	1 665	35.8	0.6
Total health expenditure excluding spending on long-term care	26 879	25.8	9.4
Public health expenditure, total	23 957	31.0	8.4
– Current public health expenditure	22 964	30.9	8.0
– Investments (public)	992	33.5	0.3
Private health expenditure, total	7 482	20.8	2.6
– Current private health expenditure	6 809	19.2	2.4
– Investments (private)	673	39.2	0.2
GDP	286 197	21.9	100.0

Source: Statistics Austria (2012a); own calculations.

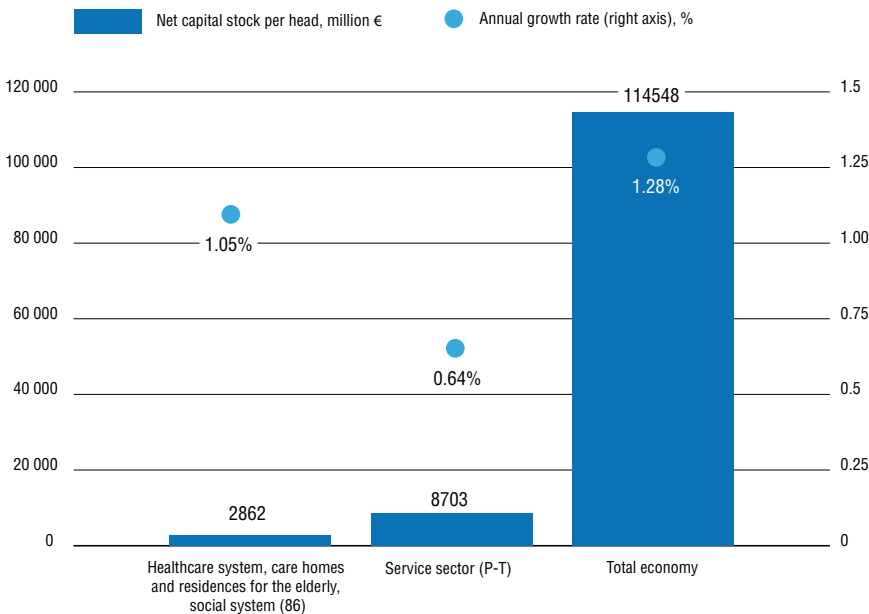
Disregarding the volatility typical of investment spending, there has been an observable upward trend within the health-care system since 1998. This is the case for both public and private investments (Hofmarcher & Gruber, 2011a).

Between 2004 and 2010 investments grew faster (+35.8%) than current expenditures (+28.1%) particularly in the private sector (+39.2%). While data on the public sector is generally based on cost centre reports from fund hospitals, private sector investment figures are projections based on the 1995 non-agricultural sector survey, and can tend to be overestimated as a result. However, investment in the health-care system has been considerable in recent years, and Austria's health-care infrastructure provision compares well to other countries. First, fund hospitals' capital costs (cost element group 08: imputed additional costs) grew significantly more quickly over the last ten years than other cost elements, faster even than staffing costs. Second, while the "staff

intensity” in the Austrian health-care system is relatively low (see section 4.2.1 *Health care workers*), the “capital intensity” is high. Employment in the health-care system in 2010 was significantly lower than that of comparable EU countries (see Table 4.6), while the level of investment per employee compared to other equivalent economies is high (Hofmarcher, 2010). Third, net capital stock (defined as investment capital minus depreciation) per capita (at 2005 constant prices) grew significantly faster in the health and social sector than in the service sector (+1.1% in the former, and +0.6% in the latter) (see Fig. 4.1). However, the level of capital stock in the health-care sector is still less than half that of the service sector.

Fig. 4.1

Level and development of per capita net capital stock in the health-care system^a, 2010



Note:^a Net capital stock at 2005 constant prices; AGR is the average yearly growth rate since the year 2000.
Source: Request to Statistics Austria, March 2010; own calculations.

Approximately 70% of gross investment in the health sector goes towards construction work (44% in 2006) and medical-technical equipment (25%), mostly in the hospital sector (Hofmarcher & Gruber, 2011a). As hospitals fall under the responsibility of the *Länder*, the legal basis of investment grants, the conditions for their approval, and the amount awarded varies between regions. For example, in Burgenland and Styria, no investment grants are awarded via the Regional Health Fund (see section 3.3.3 *Pooling of public funds*). In the remaining seven *Länder*, grants may be available for the entire investment

area (new hospital buildings, extensions and refurbishment, as well as major medical-technical equipment) or just a smaller area, and the amount awarded varies considerably. In most Länder, 40% of the total costs incurred in building projects is covered (Carinthia and Tyrol), but in Upper Austria, 70% of total costs is financed by the Regional Health Fund. Besides construction projects, there is also considerable variation between Länder in purchasing procedures for major medical equipment, which must be taken into account when performing a Land-by-Land analysis of investments (Hofmarcher & Gruber, 2011a).

Investments by independent ambulatory care physicians are financed exclusively by reimbursement (see section 3.7.2 *Remuneration of health-care staff*). However, if there is an unfilled practice in the staffing plan, local authorities often offer inducements such as real estate, or the renovation of buildings to attract physicians.

Reduction of beds and investment costs

Table 4.2 shows a clear reduction in bed capacity in fund hospitals (section 3.7.1 *Financing of hospitals*), around 9.5% between 2000 and 2010. There is significant variation in bed capacity and trends over time between Länder. Bed capacity fell significantly in Carinthia (-17%) and Vorarlberg (-14%), while in Tyrol capacity was only reduced by 5.2%.

The imputed investment capital costs also show considerable differences between individual Länder. In Vienna, in 2010, capital costs amounted to approximately €35 500 per bed (Table 4.2), while in the smaller Länder of Burgenland and Vorarlberg, the per-bed amount was €15 000. The average investment capital costs in Austria in 2010 were €26 078, with Vienna, Upper Austria and Tyrol coming in above the Austria-wide average. In Styria, per-bed capital costs were below the national average, despite Styria, like Tyrol and Vienna, operating a large university clinic.

Table 4.2

Ratio of beds to inhabitants and investments in fund hospitals by Land, 2000 and 2010

	Beds per 1 000 inhabitants		Index Austria = 100		Change 2000–2010 in %	Imputed investment capital costs per bed 2010, in €	Index Austria = 100 2010
	2000	2010	2000	2010			
Burgenland	5.3	4.7	81	80	-11.2	12 744	49
Carinthia	7.5	6.2	114	104	-17.2	25 726	99
Lower Austria	5.5	5.1	83	86	-6.6	20 578	79
Upper Austria	6.4	6.0	98	102	-6.5	29 900	115
Salzburg	7.3	6.5	111	110	-10.5	20 709	79
Styria	6.6	5.8	101	99	-11.6	19 516	75
Tyrol	6.3	6.0	96	101	-5.2	28 429	109
Vorarlberg	6.1	5.2	92	88	-13.9	14 785	57
Vienna	7.5	6.8	115	114	-10.4	35 521	136
Austria	6.6	5.9	100	100	-9.5	26 078	100

Source: Request to GÖG, March 2012; own calculations.

4.1.2 Infrastructure

Acute hospitals and long-term care facilities

Acute inpatient care is predominantly provided in general hospitals (Table 5.3). Of 268 hospitals, 178 (66%) are designated for acute care according to hospital statistics. These hospitals are fund hospitals (131), emergency hospitals (7) and sanatoriums under private ownership. In 2010, there were approximately 51 000 beds available, although the number of planned (approved) beds was higher (53 000). The number has declined in recent years (see Tables 4.2 and 4.3). There are no hospitals in Austria focused exclusively on psychiatric care. However, nine acute hospitals concentrate on care for psychiatric patients (see section 5.11).

Information on long-term care facilities (old people's homes and care homes) is somewhat less reliable. According to regular surveys, there are currently 69 000 beds in long-term care facilities – 17 000 more beds than in acute hospitals. Relative to the population, long-term care bed provision is falling (see Table 4.3).

Table 4.3Bed provision and use in acute hospitals^a and long-term care facilities, 1995–2010

Indicator	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Change 2000–2010 in %
Inhabitants (Austria, in millions)	7.9	8.0	8.0	8.1	8.1	8.1	8.2	8.3	8.3	8.3	8.4	8.4	4.7
Acute hospitals													
Number	214	201	196	195	190	189	187	183	185	182	179	178	-11.4
Planned beds (in thousands)	60.9	56.9	56.4	56.0	55.8	55.3	55.4	54.9	55.1	54.4	53.5	53.3	-6.3
Actual beds (in thousands)	58.9	54.9	54.3	54.0	53.3	53.2	53.0	52.9	53.1	52.6	51.9	51.4	-6.3
– per 1000 inhabitants	7.4	6.8	6.8	6.7	6.6	6.5	6.4	6.4	6.4	6.3	6.2	6.1	-10.5
Inpatient stays (including day cases), in millions of days	1.91	2.29	2.33	2.42	2.44	2.49	2.52	2.58	2.63	2.68	2.67	2.66	16.5
– per 1000 inhabitants, excluding day cases	226.7	251.3	255.3	259.2	260.7	262.7	261.9	264.2	266.1	267.0	263.9	260.5	3.7
Bed days (in millions)	16.4	15.3	15.2	15.2	15.0	15.0	15.0	15.0	15.0	15.0	14.7	14.4	-5.5
Average duration of stay, in days	8.6	6.7	6.5	6.3	6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.4	-18.9
Day cases (in thousands)	125.0	274.1	278.1	327.7	322.5	350.6	368.9	399.5	424.2	454.7	459.8	479.0	74.8
% proportion of day cases	6.5	12.0	11.9	13.6	13.2	14.1	14.7	15.5	16.1	17.0	17.2	18.0	–
Utilization of bed capacity in % (actual beds)	77.0	77.4	78.0	78.8	78.6	79.1	79.1	79.7	79.4	80.4	80.1	79.3	–
Long-term care hospitals													
Beds (in thousands) ^b	n.a.	n.a.	n.a.	n.a.	n.a.	68.5	67.7	66.9	66.1	65.4	68.8	n.a.	0.51 (2004– 09)
– per 1000 inhabitants	n.a.	n.a.	n.a.	n.a.	n.a.	8.4	8.2	8.1	8.0	7.8	8.2	n.a.	-1.82 (2004– 09)

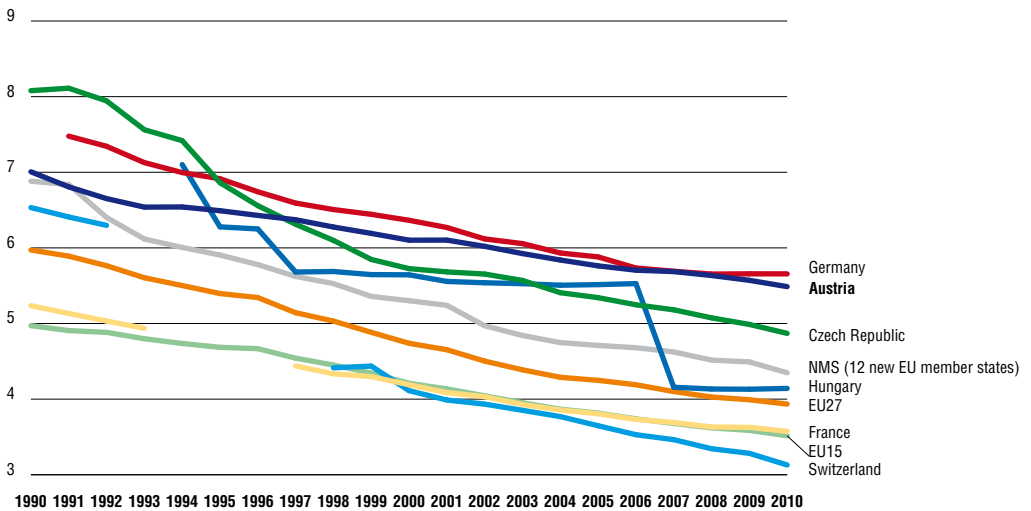
Note: ^a Public and non-profit-making general acute hospitals, specialist hospitals (incl. emergency hospitals), private short-term care sanatoriums, military and prison hospitals. ^b Long-term care facilities include old people's homes and care homes; values partly based on estimates.

Sources: Hospital statistics (Federal Ministry of Health), 1995–2010; register of old people's homes and care homes in Austria (Federal Ministry of Labour, Social Affairs and Consumer Protection), 2004–2009; surveys and calculations (GÖG & ÖBIG).

The reduction of numbers of beds was a stated goal of the 1997 Hospital and Major Equipment Plan (Hofmarcher & Rack, 2006) as well as of the Austrian Structural Plan for Health 2010, which replaced the Hospital and Major Equipment Plan in 2006 (see section 2.5). However, the reduction of beds has been relatively slow. Within the EU27, Austria still ranks high for acute bed capacity (see Fig. 4.2 and section 7.5).

The slight reduction in beds in long-term care facilities (old people’s homes and care homes) can be largely attributed to a new focus in the planning of these facilities, under which long-term care is delivered through a tailored mix of inpatient and semi-inpatient care, and care at home (see section 5.8).

Fig. 4.2
Acute beds per 1 000 inhabitants, 1990–2010



Source: WHO (2013).

4.1.3 Medical equipment

Compared to other OECD countries, the Austrian population enjoys above-average access to major medical-technical equipment, particularly in the area of computerized and magnetic resonance imaging (MRI) (OECD, 2010a). Table 4.4 gives numbers of major medical equipment units in the acute hospital sector, the ambulatory sector and in rehabilitation centres in the years 2002 and 2010. In total, there were 91 more units of major equipment than in 2002. The number of MRI scanners increased by 48 over the observed period.

Table 4.4
Major equipment numbers in Austria, 2002 and 2010

	2002			2010			Change over period 2002-2010 in %		
	Acute hospitals	Ambulatory sector and rehab	Total	Acute hospitals	Ambulatory sector and rehab	Total	Acute hospitals	Ambulatory sector and rehab	Total
CT scanners	136	83	219	162	88	250	19.1	6.0	14.2
MRI scanners	58	50	108	86	70	156	48.3	40.0	44.4
Coronary angiography units	32	5	37	40.5	3.5	44	26.6	-30.0	18.9
Supervoltage radiotherapy units	36	0	36	43	0	43	19.4	-	19.4
Emission CT scanners	80	28	108	76	26	102	-5.0	-7.1	-5.6
PET scanners	11	1	12	15	1	16	36.4	0.0	33.3
Total	353	167	520	422.5	188.5	611	19.7	12.9	17.5

Notes: CT: Computerized tomography; MRI Magnetic Resonance Tomography; PET Positron emission tomography; Rehabilitation centre
 Since the introduction of the OSG 2006, digital subtraction angiography units and shockwave lithotripters are no longer defined as major medical-technical equipment.
 * figures from 2009 in table
 Sources: Austrian Hospital and Major Equipment Plan, 2003* NIRT*; BMG and G6G (2010).

Investments in major equipment in hospitals are determined by the Länder, while investments in the ambulatory sector are financed by providers and later reimbursed as part of the fees for service provision (see section 4.1.1 *Capital stock and investments*).

4.1.4 Information technology

There has been a clear increase in the use of electronic media in Austria in recent years. In 2011, more than 75% of households had internet access (see Table 4.5), just above the EU27 average of 73%. Furthermore, 78.7% of all people in Austria are now able to use the internet. This development supports the implementation of e-health applications in the health-care system.

In recent years, efforts to use information technology in the health-care system have intensified. This has been happening on three levels:

- medical care (examinations, labs, operations);
- health information and preventive medicine (online services, web sites, school physicians, nutrition advice, etc.); and in
- administration (governance, documentation, evaluation and data exchange, etc.).

Table 4.5

Access to and use of computers and the internet, 2002–2011

	Households ^a with ...		Persons ^c with ...	
	Computer ^b	Internet access	Use of a computer ^d	Use of the internet ^d
	as % of all households		as % of all persons	
2002	49.2	33.5	48.5	36.6
2003	50.8	37.4	55.5	41.0
2004	58.6	44.6	60.2	51.9
2005	63.1	46.7	63.4	55.0
2006	66.8	52.3	68.2	61.1
2007	70.7	59.6	73.0	66.9
2008	75.9	68.9	76.2	71.2
2009	74.5	69.8	75.4	71.6
2010	76.2	72.9	76.9	74.2
2011	78.1	75.4	80.8	78.7

Note: Survey periods: June 2002, March 2003, second quarter 2004, February to April 2005, February and March 2006 to 2008, February to April 2009, May and June 2010, May and June 2011. ^a Only households with at least one member aged 16 to 74.

^b Desktop PCs, laptops and handheld devices are included in the category of “computer”. ^c Persons aged 16 to 74. ^d Persons who have used a computer and the internet in the three months prior to the time of the survey.

Source: Statistics Austria (2012b).

The agreement under Article 15a of the Federal Constitutional Law on the organization and financing of the health-care system establishes a framework for the further development of e-health between 2008 and 2013. Aims in this area include improving the use of information and communication technology (ICT) in the health-care system, ensuring that patients have the right to access their personal health data and general health information, improving integration of care, and better coordinating national activities with those at the level of the EU.

While the current level of ICT provision in the Austrian health-care system is generally good, there are individual areas that require improvement. In particular, the ambulatory sector is still marked by a high degree of heterogeneity in the use of ICT. In hospitals, the use of relatively standardized ICT systems is already standard practice. The hospital information system, the radiology information system, as well as the digital imaging archive are well established. However, the inter-sectoral integration of health-care IT systems is lagging behind (Stark, 2007). In recent years there have been significant advances in the area of administration. This includes the social insurance card (e-card) and the ELGA.

Social insurance e-card

The e-card was introduced throughout the country in 2005, replacing all previously used health vouchers (see Table 3.11) it can also be used as an ID card. Many services are available through the e-card, including a social insurance number enquiry service and the ability to register electronically with the social insurance provider as (un)able to work. The e-card system is designed with a “double-lock”. To access administrative data saved on the e-card, such as the cardholder’s name, insurance number or date of birth, the card must be inserted into a physician terminal (one “lock”). To retrieve the insurance status of a patient, or any data messages from the e-card central office, the physician’s card must also be inserted in the terminal. The physician’s card thus regulates access to the e-card system. Beginning in 2004, as part of the integration of European health-care systems, a European Health Insurance Card (EHIC) was introduced, which is combined with the e-card in Austria, printed on the opposite side (see section 2.9.6 *Patients and cross-border health-care*). There are currently approximately 12 000 e-card access points in Austria, including in all practices of contracted physicians, in most hospitals and some pharmacies. In March 2011, there were 8.7 million e-cards in active use (Statistics Austria, 2011b).

ELGA

The ELGA was developed following feasibility studies (IBM, 2006, 2007). The federal government, Länder and social insurance sector founded the Working Group on ELGAs in 2006. The preliminary task of this Working Group and the Federal Health Commission was to develop an architecture for electronic communication in the Austrian health-care system in line with international standards and the Integrating Health Care Enterprise framework to ensure interoperability. The successor organization, the ELGA GmbH, has coordinated development work in this area since 2010, working to accelerate the integration of ICT systems in the health-care system (Hofmarcher, 2008a). The establishment of the e-health infrastructure is financed by an investment of €30 million, provided in equal proportions of one-third each by the federal authorities, Länder and social insurance funds. This investment also covers ELGA GmbH's costs.

When creating networks to store and transmit sensitive data, ELGA GmbH is also tasked with meeting and further developing data protection and patient rights stipulated by law. For instance, individual patients have been guaranteed the right to opt out of the ELGA project. Patients can withdraw consent to participate in the system altogether, or revoke consent for their data to be recorded within specific areas (IBM, 2006). Patient rights legislation requires access to ELGA to be restricted. These restrictions are being implemented within the technology. The framework for ELGA and for e-health in general is regulated in several pieces of legislation: the Data Protection Act (2000), the Health Care Telematics Act, and the appended Health Care Telematics Regulations, the E-Government Act and the Signature Act. The Data Protection Act 2000 contains provisions on the transmission of personal data, but does not take sufficient account of the high sensitivity of health-care data; stricter guidelines were laid out in the Health Care Telematics Act (e.g. ensuring confidentiality and authenticity). The ELGA Act currently being drafted is to be integrated into the new version of the Health Care Telematics Act 2012, building on the legal framework with new requirements for data security and upholding patients' rights.

The ELGA's architecture is composed of two main parts: basic components and core applications (further services are a possibility). The basic components of the ELGA are indices (patient index, health service provider index) to allow accurate identification of patients (citizens) and health service providers. In addition to these are the authentication and logging system, a document register and storage space, as well as an access portal that allows patients to both access

their own health data and to view and change access permissions (see section 2.9.1 *Patient information*; IBM, 2007). The core applications use the base component infrastructure.

The core applications introduced in the first ELGA implementation phase are e-results, e-physician's letters (documents discharging the patient from hospital), living wills and the e-medication pilot project, which started as a pilot model for ELGA in three Länder in April 2011 (see section 6.1.2 *Information systems and quality of provision*). A precursor to the ELGA was introduced in several hospitals operated by religious orders (eGOR) potentially covering 254 000 inpatient and 562 000 ambulatory users across 13 hospitals (Vinzenzegruppe & Barmherzige Brüder, 2011).

National and international implementation of e-health

The e-Health Governance Initiative (from February 2011) strives to create greater consensus between member states in the area of e-health. The goal of the Initiative is to identify areas requiring legal, technical and political action, to draft recommendations for measures to be taken, and to drive and coordinate their implementation by responsible parties. Austria is taking on a coordinating role within the initiative. The e-Health Governance Initiative is financed through European Commission funds.

July 2008 saw the launch of Smart Open Services for European Patients), a technical implementation trial for cross-border electronically assisted health-care. The goal of Smart Open Services is to create and transmit patient dossiers and implement the e-Prescription system. Austria is represented within Smart Open Services for European Patients by the Federal Ministry of Health and ELGA GmbH, and it is intended that both bodies will take advantage of possible synergy effects.

4.2 Staff

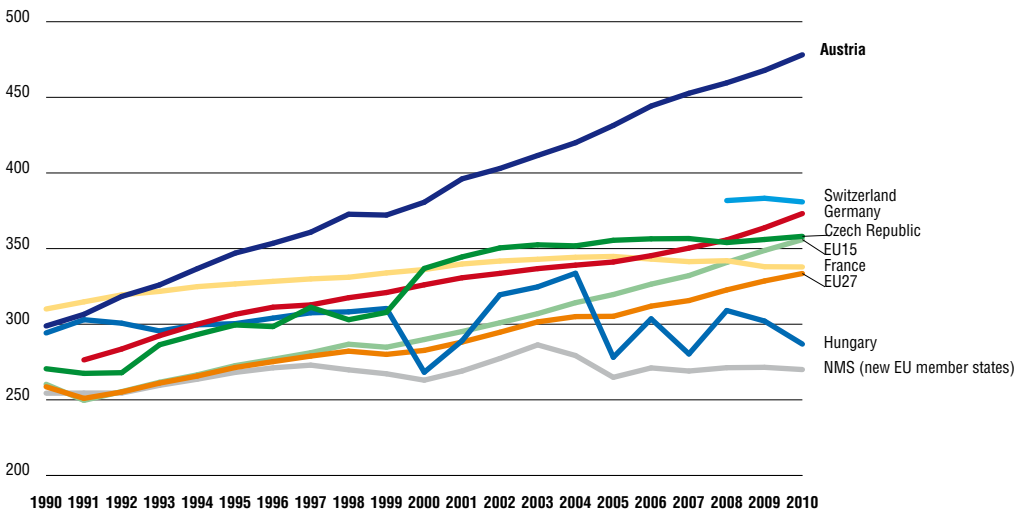
4.2.1 Health workforce trends

Between 1997 and 2010, the number of employed health care workers rose by 13% in total. In comparison, the number of employed workers in the health, veterinary and social care sector grew by almost 40% over the same period, to 390 000 individuals by 2010 (see Table 4.6). The health and social care sector employs almost 10% of all employed workers in Austria. Across the EU15, this figure is 11.4%. However, individuals working in health-care administration

and in social insurance are not included in the health and social care sector figures, meaning that the total number of health-care workers is underestimated. More than three-quarters of workers in the health-care sector are women, while of all employed workers, only 46.5% are female. However, the proportion of women in the workforce is continually increasing in both Austria and the EU15.

Table 4.7 gives an international comparison of the number of health-care professionals. In Austria, in 2010, there were 4.8 practising (licensed) physicians per 1000 inhabitants. The ratio of physicians to inhabitants has grown particularly quickly relative to other countries since the early 1990s (see Fig. 4.3). Consequently the number of physicians in Austria is among the highest in the EU (Fig. 4.4). By contrast, the number of nurses and other health-care professionals per 1000 inhabitants is below the EU27 average (Table 4.7).

Fig. 4.3
Number of physicians per 100 000 inhabitants, 1990–2010



Source: WHO (2013).

Table 4.6
Employment in the health-care system and in the whole economy 1997–2010

	Health, veterinary and social care						Whole economy						Proportion of health, vet. and soc. care in whole economy	
	Total (in millions)		Proportion of self-employed (as %)		Proportion of women (as %)		Total (in millions)		Proportion of self-employed (as %)		Proportion of women (as %)		Total (as %)	
	Austria	EU15	Austria	EU15	Austria	EU15	Austria	EU15	Austria	EU15	Austria	EU15	Austria	EU15
1997	0.28	14.08	7.1	8.2	74.9	76.2	3.57	148.76	10.5	14.4	43.6	41.9	7.9	9.5
1998	0.29	14.34	7.8	8.1	75.6	76.3	3.59	151.33	10.8	14.2	43.8	42.0	8.1	9.5
1999	0.29	14.73	6.8	8.2	74.7	76.5	3.64	153.84	10.6	14.1	43.9	42.5	8.0	9.6
2000	0.29	14.97	7.7	8.1	75.4	77.2	3.65	156.93	10.5	13.8	44.1	42.7	8.0	9.5
2001	0.30	15.37	8.2	8.0	75.7	76.9	3.66	159.53	10.7	13.6	44.2	43.0	8.2	9.6
2002	0.31	15.66	7.9	7.9	77.4	77.2	3.64	160.76	10.8	13.6	45.2	43.3	8.6	9.7
2003	0.32	16.40	7.0	7.8	76.3	77.4	3.72	162.38	10.8	13.8	45.0	43.6	8.6	10.1
2004	0.31	16.97	7.5	8.3	75.8	77.5	3.63	163.12	11.8	14.2	45.4	43.9	8.6	10.4
2005	0.35	17.54	7.6	8.2	74.9	77.5	3.79	166.37	11.6	14.1	45.3	44.1	9.2	10.5
2006	0.35	17.89	8.0	8.3	77.1	77.9	3.88	169.36	11.7	14.1	45.4	44.3	8.9	10.6
2007	0.34	18.15	9.0	8.4	76.8	78.1	3.96	172.22	11.7	14.1	45.3	44.5	8.7	10.5
2008	0.36	18.50	7.3	8.0	77.6	78.2	4.02	173.74	11.1	13.9	45.8	44.8	8.9	10.6
2009	0.39	19.04	7.4	8.1	78.7	78.1	4.00	170.52	10.9	13.9	46.6	45.4	9.6	11.2
2010	0.39	19.40	7.5	8.2	78.2	78.1	4.02	169.71	11.3	14.1	46.5	45.5	9.7	11.4
Index 1997=100	139	138					113	114						
Growth (%) 1997–2000	3.6	6.4					2.1	5.5						
Growth (%) 2000–2005	19.4	17.1					3.8	6.0						
Growth (%) 2005–2010	12.0	10.6					6.2	2.0						

Note: LFS series per NACE Rev. 1.1 to 2007, 2008 and onwards: NACE Rev. 2.

Source: Eurostat (2012); own calculations.

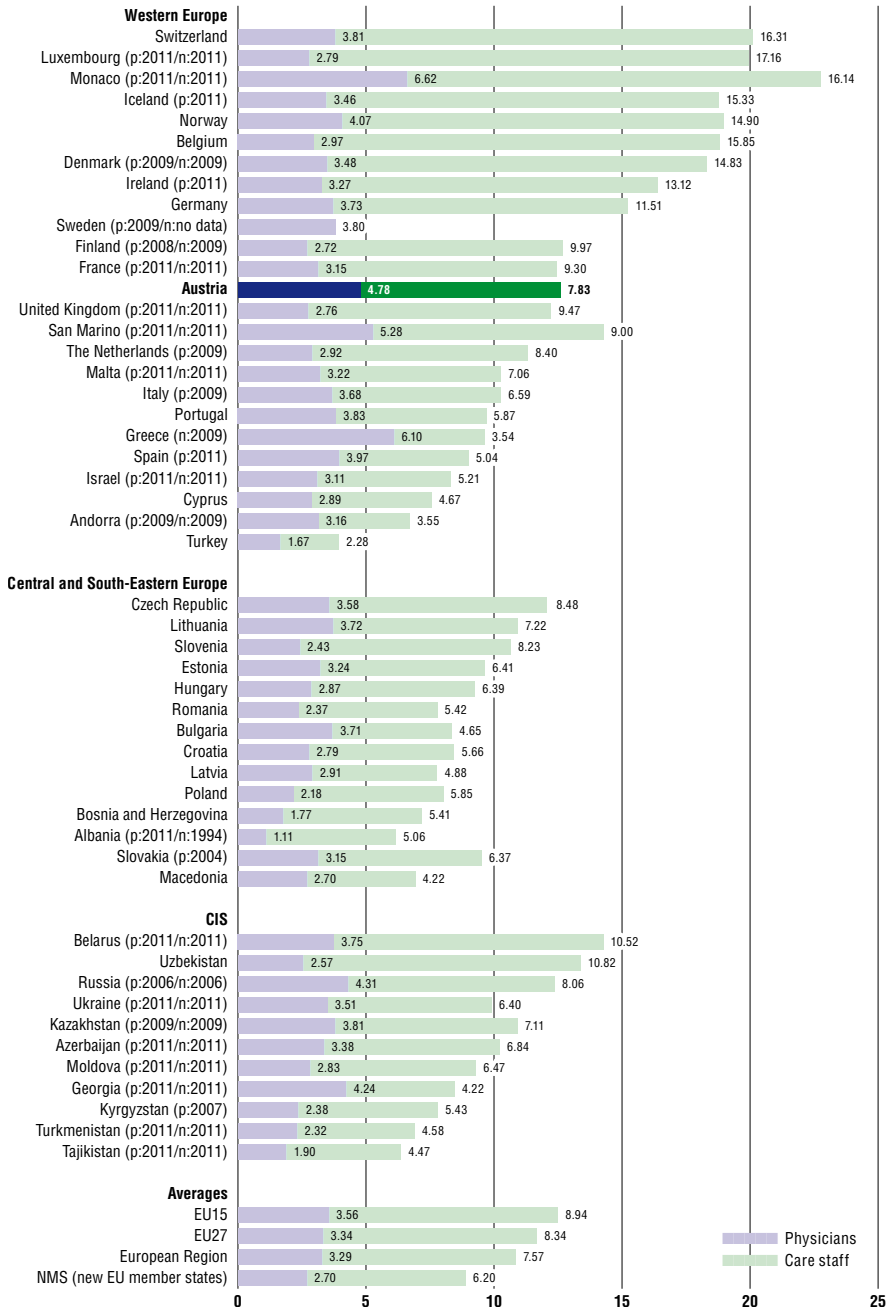
Table 4.7
Health professionals in EU member states, 2010, or most recent available figures

	Physicians		Dentists		Nurses		Pharmacists		Midwives	
	per 1000 inhabitants	Index EU27 = 100	per 1000 inhabitants	Index EU27 = 100	per 1000 inhabitants	Index EU27 = 100	per 1000 inhabitants	Index EU27 = 100	per 1000 inhabitants	Index EU27 = 100
Austria	4.77	144	0.56	84	7.61*	92	0.67	86	0.15*	48
Belgium	2.92*	89	0.71*	107	n.a.	n.a.	1.15*	149	0.53	163
Denmark**	3.43	104	0.80	122	14.83	180	0.45	59	0.27	84
Germany*	3.64	110	0.79	119	10.98	133	0.61	79	0.23	72
Estonia*	3.27	99	0.89	135	6.13	74	0.64	83	0.29	89
Finland**	2.72	82	0.75	114	9.63	117	1.10	142	0.39	120
France	3.38	102	0.67	101	n.a.	n.a.	1.17	151	0.30	93
Greece*	6.12	185	1.31	198	n.a.	n.a.	n.a.	n.a.	0.23	72
Ireland	3.14	95	0.61	92	12.72*	154	1.02	132	n.a.	n.a.
Italy*	3.37	102	0.52	78	n.a.	n.a.	0.88	114	0.28	87
Latvia*	2.99	91	0.67	101	4.65	56	0.59**	77	0.20	61
Lithuania*	3.65	111	0.70	106	6.97	85	n.a.	n.a.	0.27	84
Luxembourg*	2.71	82	0.81	123	n.a.	n.a.	0.71	92	0.36	110
Malta	3.07	93	0.44	67	6.46	78	0.72	94	0.37	113
Netherlands**	2.87	87	0.51	77	8.40	102	0.21*	27	0.15*	47
Poland*	2.17	66	0.32	48	5.25	64	0.64	82	0.59	182
Portugal	3.90	118	0.72*	109	n.a.	n.a.	0.70*	91	n.a.	n.a.
Sweden**	3.73	113	0.81	122	11.01	134	0.73	95	0.72	224
Slovakia***	3.00	91	0.50	76	n.a.	n.a.	0.47	61	0.33*	101
Slovenia*	2.41	73	0.61	91	8.02	97	0.52	68	0.04	14
Spain	3.78	114	0.58*	88	4.88	59	0.80	104	0.16*	50
Czech Republic*	3.56	108	0.68	102	8.06	98	0.56	73	0.42	129
Hungary*	3.02	91	0.49	74	6.21	75	0.57	74	0.17	53
United Kingdom*	2.26	68	0.58	88	9.54	116	0.64	83	0.53	163
Cyprus	2.87	87	0.94	142	4.68	57	0.21	27	n.a.	n.a.
EU27* ^a	3.30	100	0.66	100	8.24	100	0.77	100	0.32	100
EU15* ^b	3.46	105	0.69	104	9.06**	110	0.84	109	0.32	98

Note: ^aAll EU27 countries; ^bEU countries pre-May 2004; Belgium, Germany, France, Italy, Luxembourg, Netherlands, Great Britain, Ireland, Denmark, Greece, Portugal, Spain, Sweden, Finland and Austria. Data from * 2009, ** 2008, *** 2007.
Source: WHO (2012).

Fig. 4.4

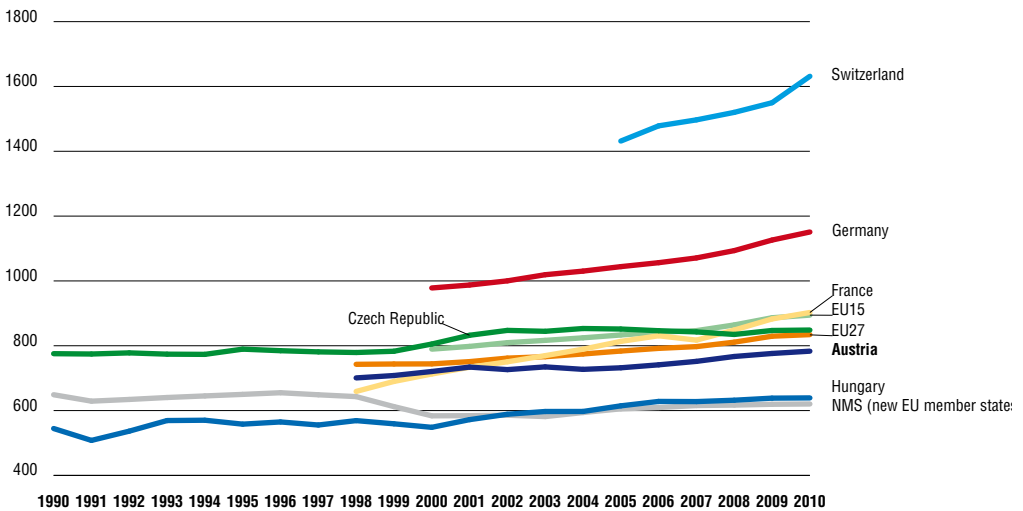
Number of physicians and nursing staff per 1 000 inhabitants, 2010 or latest available year



Source: WHO (2013).

Countries, such as Switzerland and Germany have significantly more nurses (see Fig. 4.4). However, international comparisons are complicated by a lack of data, particularly on nursing staff. While Austria typically only reports the number of nursing staff working in hospitals (see Table 4.9) to international organizations, other countries have a more comprehensive documentation system in this area, and are also able to report employment figures outside hospitals. Furthermore, headcounts and full-time equivalents are used inconsistently in the data.

Fig. 4.5
Nursing staff numbers per 100 000 inhabitants, 1990–2010



Source: WHO (2013).

Practising physicians

In 2010, approximately 45 000 physicians were licensed to practise. This is around 12% of all health-care employees (see Table 4.6). Of those, just under 30% were GPs, 44% were specialist physicians, 16% were in training, and 11% worked in dentistry (see Table 4.8). The level of provision has risen in all areas, with the number of specialists per 1000 inhabitants rising most steeply, by 32%.

Table 4.8
Practising physicians, 2000–2010

	Total (incl. dentists)	Physicians (excl. dentists)	General practitioners ^a	Specialist physicians ^b	Physicians in training ^c	Dentists	Physicians (excl. dentists)	General practitioners ^a	Specialist physicians ^b	Physicians in training ^c	Dentists
			in thousands				per 1000 inhabitants				
2000	34.6	30.9	10.9	14.3	5.6	3.7	3.85	1.37	1.79	0.70	0.46
2001	35.7	31.9	11.2	15.0	5.6	3.9	3.97	1.40	1.87	0.70	0.48
2002	36.5	32.6	11.3	15.4	5.9	4.0	4.04	1.41	1.91	0.73	0.49
2003	37.4	33.4	11.5	15.9	6.0	4.0	4.12	1.42	1.96	0.74	0.50
2004	38.4	34.3	11.8	16.5	6.1	4.1	4.20	1.44	2.01	0.75	0.50
2005	39.8	35.5	12.1	17.1	6.4	4.2	4.31	1.47	2.08	0.77	0.51
2006	41.3	36.8	12.5	17.8	6.5	4.5	4.44	1.51	2.15	0.78	0.54
2007	42.1	37.6	12.7	18.5	6.5	4.5	4.53	1.53	2.22	0.78	0.54
2008	42.9	38.3	12.7	18.8	6.7	4.5	4.60	1.53	2.26	0.81	0.55
2009	43.7	39.1	13.0	19.2	6.9	4.6	4.68	1.55	2.30	0.83	0.55
2010	44.8	40.1	13.2	19.8	7.1	4.7	4.78	1.58	2.36	0.84	0.56
As % of total 2010	100.0	89.5	29.5	44.3	15.8	10.5	-	-	-	-	-
Change in % 2000–2010	29.5	29.9	20.8	38.2	26.4	25.8	24.1	15.4	32.0	20.8	20.1

Notes: ^a Current as of December in year of survey. From the review year of 2002, licensed physicians and GPs are included.

^b Prior to 2001, GPs with a specialism are included, while from 2002 only specialist physicians are included.

^c Interns.

Sources: Austrian Physicians' Chamber (published: 01/12/2009); Austrian Dentists' Chamber (Zahnärztekammer) published: 1.12.2009); Austrian Dentists' Chamber (Dentistenkammer); Statistics Austria (2011b).

Among the fastest-growing specializations since 2000 are radiotherapy-radio-oncology, plastic surgery and neurosurgery, as well as – although still relatively rare in absolute terms – mouth, jaw and facial surgery and paediatric surgery. In 2011, the majority of practising specialist physicians worked in internal medicine, anaesthesiology and intensive medicine, as well as in gynaecology and obstetrics (Statistics Austria, 2011b). Although women form the majority of those employed in the health-care sector (see Table 4.6), they are seriously under-represented in medical decision-making roles. While 61.6% of graduates are women, only 32.4% of specialist physicians are women. Prestigious specializations with high earning potential, such as surgical disciplines, have a low proportion of women (10% in trauma surgery, 15% in surgery), while less prestigious disciplines and those with a greater emotional or psychosocial component such as psychiatry and paediatrics have a higher proportion of female employees.

Staff in hospitals

In 2010, more than 106 000 individuals worked in hospitals, representing over 25% of all those employed in the health-care system (see Tables 4.6 and 4.9). Of those, about 22 400 or 21% were physicians, corresponding to about half of all practising physicians (see Table 4.8). Around half of hospital physicians are specialist physicians, making them one of the largest professional groups working in hospitals after nurses (see Table 4.9). The proportion of women is largest in the area of qualified nursing staff, at 87%.

Table 4.9
Staff in Austrian hospitals, 2000–2010

Occupational groups	2000	2005	2006	2007	2008	2009	2010	% change 2000 to 2010	2000 in % of total staff	2010 in % of total staff
Total non-physician staff	74 734	77 187	79 123	79 822	81 261	82 795	83 815	12.2	81.1	78.9
Higher health-care and nursing services ^a	46 330	49 294	50 808	51 524	52 924	54 018	54 601	17.9	50.3	51.4
Nursing assistants	11 132	9 773	9 335	9 721	9 733	9 725	9 784	-12.1	12.1	9.2
Higher medical-technical staff and masseurs	8 911	10 704	11 205	11 315	11 457	11 623	11 959	34.2	9.7	11.3
Specialist medical-technical staff	1 920	2 109	1 896	1 869	1 821	1 883	1 864	-2.9	2.1	1.8
Paramedical services	5 362	4 109	4 642	4 122	4 053	4 258	4 294	-19.9	5.8	4.0
Midwives	1 079	1 198	1 237	1 271	1 273	1 288	1 313	21.7	1.2	1.2
Physicians	17 445	19 295	19 759	20 318	21 103	21 752	22 406	28.4	19.0	21.1
Specialist physicians	n.a.	10 453	10 799	11 075	11 393	11 610	11 946	n.a.	n.a.	11.2
General practitioners	n.a.	1 448	1 554	1 602	1 679	1 768	1 857	n.a.	n.a.	1.7
Specialist physicians in training	n.a.	4 244	4 137	4 316	4 575	4 774	4 961	n.a.	n.a.	4.7
General practitioners in training	n.a.	3 150	3 269	3 325	3 456	3 600	3 642	n.a.	n.a.	3.4
Total	92 179	96 482	98 882	100 140	102 364	104 547	106 221	15.2	100	100
Memorandum item										
Inpatient stays, total (all hospitals) in millions ^b	2.369	2.619	2.584	2.743	2.797	2.791	2.793	17.9	-	-
Inpatient stays per employee	25.7	27.1	26.1	27.4	27.3	26.7	26.3	2.3	-	-

Note: ^a From 2004, includes cardiotechnical services. ^b Inpatient stays in the reporting year (1/1 to 31/12), includes 0-day cases and deaths. Calculation formula: (admissions + discharges + deaths)/2. Sources: BMG (2011); Statistics Austria (2011b); own calculations.

From the year 2000 onwards, the number of higher qualified personnel (physicians, nursing staff, medical-technical staff) has been growing, while the number of less qualified personnel (nursing assistants and paramedical assistants) decreased, indicating an increasing trend towards professionalization and specialization. While the total number of workers in hospitals grew by 15% between 2000 and 2010, the number of inpatient stays grew by 18%. In 2010, approximately 26 patients were treated per worker. This means that the “productivity” of hospital staff rose by 2.3% over the last ten years.

Psychological and psychotherapeutic staff

Over 50% of psychotherapists practise as freelancers only, around a tenth work on a full-time contract only (predominantly within health and social care institutions) and more than a third work both as a freelancer and within an institution. In 2009, 2067 psychotherapists were available to provide insurance-funded psychotherapy through care associations. Psychotherapists in institutions of this kind represented around one-quarter of all psychotherapists practising in Austria at this time (approximately 8300) (GÖG & ÖBIG, 2010b). More than two-thirds are female. Within clinical psychology, the proportion of women is 80%. The occupational groups of health psychology and clinical psychology almost completely overlap.

Public health service staff

The total number of physicians with civil servant status has remained relatively unchanged for years, at 300–350. That figure is around 1% of all practising physicians. The majority of physicians with civil servant status work in district administrative authorities, regional, district or local administrative authorities. Only a minority work for federal bodies. In the past, this area of the public health service has been dominated by physicians. However, other occupational groups are increasingly working in this area, such as specialist care workers, technicians, chemists, legal experts, biologists, psychologists, food safety authorities, hygiene inspectors, sanitary auditors, disinfection assistants, social workers, speech therapists, etc. Yet, for many nurses in particular, tertiary education institutions are not easily accessible (Ladurner et al., 2011), although efforts have intensified in recent years to reform the training system and open it up to other occupational groups (see section 4.2.3 *Training of health-care staff*).

4.2.2 Work mobility of health workers

Physicians and dentists

Since a European Court ruling on university admissions, delivered on 7 July 2005, the number of foreign students studying human medicine and dentistry in Austria has increased sharply. In the winter semester of the 2005–2006 academic year, there were 1480 foreign students starting courses (of which 1299 were from Germany), and 1725 domestic students. It is often feared that many of these foreign students will return to their country of origin after graduation, potentially creating a shortage of physicians in the long term in various areas. For this reason, access to medical study was restricted, and a quota system was introduced in the distribution of university places. Since then, 75% of the 1500 places available to new students have been reserved for students with Austrian high-school diplomas. A case brought by the EU against Austria for infringement of equality laws has been postponed for five years under the 2006 resolution (the “safeguard clause”), following negotiations. Austria must use these five years to present empirical data and studies to support its argument. In recent years, more and more attention has been paid to the issue of physicians emigrating (during or after training). It is not possible at this time to reach definite conclusions about potential emigration rates over the coming years, as the university cohorts concerned are still studying.

The annual number of newly registered physicians in Austria has mostly been between 1100 and 1200 in recent years. The proportion of newly registered foreign-degree holders has been falling since 2004, and in 2008 was just 4% (40 of a total 1132 physicians). The foremost country of origin is Germany but figures include Austrians who have completed their studies in Germany. Conversely, Germany and Switzerland are the most common destinations for Austrian physicians emigrating to work abroad, particularly in the hospital sector.

In total, Austria can be characterized as a “net exporter” in the field of human medicine, that is, more physicians are trained than are retained in the country (Czasny et al., 2012). Within dentistry, Austria is generally a “net importer”, with the majority of foreign dentists also coming from Germany or Hungary. In recent years, over 40% of newly registered dentists have held foreign diplomas. Approximately 28% of “imported” physicians come from those EU member states that joined the EU in 2004 (OECD, 2007).

As in other OECD countries, migration trends in Austria are determined by common language and geographical proximity (OECD, 2008). In those Länder that directly border Germany and/or Switzerland, in-depth analysis is

under way into which specializations and regions show potential shortages of physicians, and how these locations can be made more attractive for domestic and foreign physicians. In contrast to other European countries, who quite consciously rely on “importing” already qualified physicians from abroad (as Switzerland does, for example), and actively encourage this (OECD, 2008), the current school of thought in Austria is to keep students who have graduated in Austria in the country. Consequently, the goal is to make both training and practice in Austria attractive.

Nursing staff

Austria has long been a net importer of nurses, an issue which has become more controversial in the context of 24-hour long-term care (see sections 5.8 and 6.1). While between 2004 and 2011 the Austrian labour market was largely protected from high migration following the EU expansion, the care profession was one of several exceptions. This may have encouraged an influx of carers from these countries. When the restrictions were lifted across the board in May 2011, another spike in immigration was anticipated (EIRO, 2011), as, unlike for medical staff, there is an apparent shortage of care staff, particularly in the long-term care sector.

4.2.3 Training of health-care staff

In Austria, training for health-care professions is regulated by federal law. EU laws, such as the Directive on the Recognition of Professional Qualifications (Directive 2005/36/EC) have been translated into national law. Non-academic training is regulated by the Federal Minister for Health. Higher education is regulated by the Federal Minister for Science and Research, with the Federal Minister for Health also establishing guidelines for the training of health-care professionals at higher education institutions. For health-care professions with a legal representative body, part of the responsibility for regulating post-university training also lies with the representative bodies (see Table 2.4). The following is a description of the conditions of training for pharmacists, physicians, dentists and several key non-physician health-care professions.

Physicians

Training to become a physician (Physicians Act 1998) requires a candidate to complete a degree in human medicine of at least 12 semesters' duration at a medical university. A further requirement is a postgraduate clinical training period of at least three years for GPs and at least six years for specialist physicians, followed by examinations (see section 4.2.4 *Doctors' career paths*). This post-qualification course is partly regulated by the Federal Ministry of

Health (Örzteausbildungsordnung 2006) and partly by the Austrian Physicians' Chamber, according to their respective areas of competence. Specialist physicians are only allowed to practise within their specialist field. Physicians are obligated to undertake continuing medical education. The Austrian Chamber of Physicians issues non-binding guidelines on how much of this is required. The Austrian Physicians' Chamber also offers special diplomas, certificates and further training.

One example is training in the field of alternative medicine (see section 5.13). The list of diploma courses available includes training in acupuncture, homeopathy, manual therapy, neural therapy, F.X. Mayr, anthroposophic medicine, applied kinesiology and Chinese diagnostic medicine, as well as pharmacotherapy. Courses last between two and three years (140 to 350 hours). In 2010, there were 6973 active, registered physicians with a diploma in one of the eight subjects listed above (ÖÄK, 2010). Neural therapy and chiropractic medicine are also taught at universities (WHO, 2001). Furthermore, Austria has an Academy of Holistic Medicine (WHO, 2001), which founded a Centre for Integrative Medicine in collaboration with Therme Wien Med in August 2011.

There are two paths to becoming an occupational physician (see section 5.1.3 *Health promotion and prevention*). After three years of GP clinical training, a student can take a 12-week programme (360 hours) at the Academy of Occupational Medicine. Alternatively, a medical student can train as an occupational safety specialist. This takes six years. At present, approximately 1600 of around 40 000 physicians in Austria (see Table 4.8) work as occupational medics, of whom 300 are full-time. There are approximately 110 occupational safety specialists, of whom around 50 work full-time.

Dentists

Following the separation of the professions of dentistry and medicine in 2005 (Dentists Act – *Zahnärztegesetz*), the dentistry profession has been composed of dentists trained in accordance with the Dentists Act, and specialist physicians trained in accordance with the provisions of the Physicians Act. In accordance with the Dentists Act, training takes place at a medical university, and lasts at least 12 semesters. The university course includes clinical training. Candidates gain the right to practise upon graduation (stipulations contained in Directive 2005/36/EG).

Nursing professionals

The group of nursing professionals includes general nursing staff and nursing assistants. Training is regulated by the Nursing Act (GuKG), which was passed in 2007, and has already been amended several times. In the academic year

2009/2010, there was a total of 68 general nursing schools, 7 schools for child and young person care, and 11 schools for psychiatric nursing care. Nursing assistant courses were available at 112 schools.

The group of so-called **Higher Nursing Professionals** includes general nursing, psychiatric nursing and child and young person nursing care. Training is regulated by the Nursing Act and related regulations. Training takes place in nursing schools, which are run by, or in conjunction with hospitals. The course takes three years (minimum 4600 hours). Training in general nursing is also offered in three Bachelor's courses at a technical university, and lasts six semesters (180 points in the European Credit Transfer and Accumulation System [ECTS]). Courses lead either to a diploma or to a Bachelor of Science in Health Studies, and confer the right to practise on a freelance basis. Courses in general nursing meet the criteria of professional Directive 2005/36/EG, both at nursing schools and at technical universities, and so confer automatic professional recognition within the EEA and Switzerland. To gain entry to courses at nursing schools, candidates must demonstrate an aptitude for the profession and must have successfully completed 10 years of schooling. This puts the minimum entry age at 16. For courses at technical universities, candidates must have a general university-entrance qualification.

It is also possible to receive nursing training through a part-time course at a nursing school. Besides this, various collaborations are in place between universities and nursing schools, under which courses are offered that allow students to simultaneously earn a university degree and complete a training course at a nursing school.

Post-qualification training is divided into three categories: continuing development, further training and specialist training. Specialist training in psychiatric nursing, or child and young person nursing can be completed in a one-year course, following completion of a general nursing course. Completion of mandatory continuing development courses is the responsibility of both the professional and his or her employer. Attendance at these courses is not recorded by the authorities. In Austria, there are four professorships in care sciences (University of Vienna, University of Graz, Paracelsus Private Medical University of Salzburg, Private University for Health Sciences, Medical Informatics and Technology, Innsbruck – based in Hall).

Nursing assistant training is a full-time course of one year (1600 hours of theoretical and practical training in accordance with nursing assistant training guidelines). In the case of on-the-job training, the duration of the course can be increased. To gain entry to the nursing assistant course, applicants must be at

least 17 years old and have completed compulsory school education. Students can also earn the right to work as nursing assistants by completing two or three years of training in a social care profession. Such courses, unlike courses for health-care professions, are regulated by Länder law rather than federal law. These social-care-oriented professions are divided into care for the elderly, care for the disabled and family work. Continuing development and further training is also prescribed for nursing assistants. Attendance of such courses is not recorded by the authorities. On the whole, the importance of the nursing assistant profession within hospitals is waning (see Table 4.9).

Midwives

From 2006, training in midwifery was gradually transferred from post-secondary dedicated midwifery academies to technical universities. From the 2010/2011 winter semester onwards, all midwifery courses in Austria were taught as Bachelor's courses at technical universities. Training takes three years (180 ECTS) and leads to a Bachelor of Science in Health Studies. The course is open equally to men and women. Midwives are required to complete at least 40 hours of professional development in five years. Professional development courses must be recognized by the Austrian Midwives' Committee (continuing development record book). Failure to fulfil professional development requirements can lead to revocation of a midwife's licence to practise.

Medical-technical professionals

Training for the seven higher medical-technical professionals (physiotherapist, biomedical analyst, radiology technician, dietician, occupational therapist, speech therapist and orthoptist) was reformed following an amendment to the Medical-Technical Services Act in 2005. In 2008, the first students graduated from Bachelor of Science courses at technical universities in Austria. Previously, the majority of staff in this occupational group had been trained in specially designated academies. Starting in the winter semester of 2010/2011, all medical-technical training courses have taken the form of Bachelor's degrees at technical universities, with two exceptions. Like the former courses at post-secondary medical-technical academies, training in each of the professions lasts three years, or six semesters (180 ECTS), leading to a Bachelor of Science in Health Studies. After completion of training, professionals are permitted to work as employees or as freelancers. Higher medical-technical services staff have a general requirement to undertake continuing education. Master's degrees are also increasingly available at tertiary institutions.

Medical-technical assistants complete a training course of 30 months, or 3670 hours, at a medical-technical assistant school. To gain admission to these courses, candidates must be at least 17 years of age and have completed their compulsory education. The training course leads to a diploma and permits the qualified specialist to work in an employed context only. The relevant professional legislation does not explicitly require medical-technical assistants to undertake professional development, but, like all health-care professionals, they have a general obligation to undergo continuing training.

Paramedical assistants

The category of paramedical assistants consists of seven professions, with approximately 70% of this group made up of surgical assistants. They receive their qualification through a course lasting 130–135 hours (*Ausbildungs- und Prüfungsordnung für die Sanitätshilfsdienste*). Paramedical staff can only practise their profession in an employed context. These professions are learned “on the job”, which means that candidates can start working before completing their course. The candidate must show that they have completed the course within two years of starting work in a relevant role. In 2010, 4294 people were employed in paramedic service in hospitals (see Table 4.9). On the whole, the importance of this profession is declining sharply.

Public health service staff (civil servant physicians)

In the past, civil servant physicians have performed most of the tasks of the public health service (see section 5.1). Training is delivered via a course in public health. Since 2002, this course has been a postgraduate qualification available at medical universities ending in a Master’s degree. The course covers hygiene, forensic psychiatry, court medicine, health-care law, epidemic hygiene, social hygiene and social epidemiology, toxicology and veterinary regulations, including animal epidemiology. A new training framework for physicians wishing to enter the field of public health is currently being drafted. Licensed physicians can specialize in the field of “social medicine” or complete a course in occupational medicine. Non-physician staff can, following completion of a university degree, begin one of the public health training programmes. This is also available to those who can show that they have already acquired comprehensive work experience (Ladurner et al., 2011).

Psychotherapists and psychologists

Since early 1991, the professions of psychotherapy, clinical psychology and health psychology have been regulated by the Psychotherapy Act and the Psychologist Act. Since 2008 the Music Therapy Act has regulated the music therapy profession. These laws contain provisions on training frameworks,

prerequisites for practising and the protection of the professional title. Following completion of the relevant training course, graduates are added to the list of registered psychotherapists, clinical psychologists and health psychologists, or music therapists. Once registered, an individual is obligated to report any change to his or her details to the ministry immediately.

Training to become a **psychotherapist** consists of two parts, a preparatory psychotherapy course, and a specialist psychotherapy course (Psychotherapy Act). To graduate from the preparatory course, students must have attained general university-entrance qualifications, as well as having completed a course in higher nursing or medical-technical services, or a qualification approved by the Council of Psychotherapists within the Federal Ministry of Health. Subsequently, they can take the specialist course, if they are at least 24 years of age. Psychotherapists can practise their profession in both an employed and freelance context. They are required to undertake continuing professional education but there are no external controls. In 2010, there were 38 training centres offering one or several of the psychotherapy methods recognized by the Federal Ministry of Health, resulting in a total of 263 graduates each year (ÖBIG, 2011).

Health and clinical psychologists are trained after obtaining a university degree in psychology. They have to follow a specialist course consisting of 160 hours theoretical training and 1480 hours of practical experience. At least 150 of these hours in a given year must be completed in a health-care institution accompanied by 120 hours of clinical supervision. Once qualified, psychologists are entitled to practise in an employed context or as freelancers. Health and clinical psychologists are required to undertake continuing professional education but there are no external controls. Every year, 500 people complete training in clinical psychology and health psychology at one of the six recognized training providers.

Pharmacists

To qualify as a pharmacist, a candidate must complete a pharmacy degree lasting nine semesters, followed by a year of work experience in a pharmacy (Pharmacists Act). On completion, the candidate is permitted to work as an employed pharmacist. After a minimum of five years in an employed role, a pharmacist can work independently, and take on a licence to run a pharmacy. The Pharmacists Association, as the legal representative body, can impose directives on the amount of continuing professional training required (Article 25 of the Pharmacists Association Act 2001). Once a pharmacist has qualified, he or she is chiefly responsible for undertaking continuing professional education.

4.2.4 Doctors' career paths

Following completion of a medical degree, physicians acquire practical experience by working as interns in a hospital approved by the Physicians' Chamber for the training of interns. The internship consists of compulsory rotations in different specialties (e.g. internal medicine, gynaecology, surgery) and leads either to the qualification as a GP (minimum three years) or it can form part of a specialist training course (duration varies by course, maximum six years). The compulsory six months' rotation in family medicine (general medicine) can also be completed in an independent GP practice (teaching practice). In order to gain the right to work as a GP (*jus practicandi*), in addition to successfully completing a full internship, a written examination is also required. There is then the option in some hospitals to work as a ward physician in a department.

Specialist training can be begun without, during, or after GP training and also consists of a set of specified rotations and other training. Rotations completed during GP training can be credited to the specialist training. Physicians may have to complete rotations in different hospitals if one hospital is unable to offer all required rotations. At the end of specialist training, physicians must take a final exam to gain the right to practise as specialist physicians.

Hospital owners can decide which GP interns to train, as well as how many interns to employ. Depending on the criteria used to make these decisions, waiting times for an intern position can vary greatly between regions.

In contrast to this, the number of training places for specialist interns in a department must be approved by the Austrian Physicians' Chamber. However, it is up to the hospital owner to decide how many of these approved specialist training places will be filled, and which selection criteria to use for recruitment (e.g. completion of GP training). The owners also decide who is to carry out the selection process (generally the head of department) who can then add additional selection criteria. As a result, the allocation of training places for specialist physicians is inconsistent and opaque. Not all hospitals are able to fully cover the costs of training interns, especially small hospitals with few departments. To make up the shortfall, interns are often required to complete further training courses in another hospital.

Contracts of physicians in training are usually limited to the duration of their training course. Specialist physicians working in hospitals may become "senior physicians". The way in which this title is awarded is, however, not regulated by law. It falls within the remit of the hospital owner. A specialist physician

employed within a department is subject to the supervision of the department chair (chief physician). This position is advertised publicly and filled by the hospital owner, with the relevant state health board involved in the selection process. Department heads are able to supplement their income by treating patients with private supplementary insurance (“special class”). Regulations are in place in all Länder for the distribution of “special-class income” to the relevant physicians and teams. These regulations vary greatly in form, however (see sections 3.5 and 3.7.2 *Remuneration of health-care staff*).

In the ambulatory sector, both GPs and specialist physicians can run an independent practice as either a non-contracted physician or a physician under contract with a social insurance fund (see sections 2.8.2 *Regulation and governance of service providers* and 5.3).

4.2.5 Career progression of other health-care professions

Career opportunities for health-care professionals can be divided into careers as an expert in a particular specialist field of the relevant discipline, leadership or management careers, and further training and access to another health-care profession.

A higher qualification granting access to another health-care profession is explicitly envisioned in the case of progression from nursing assistant to higher nursing roles through a shortened training course. A higher qualification or access course can also be taken to progress from medical masseur to massage therapist. Similar pathways allow for progression from higher nursing staff, radiology technician or medical-technical laboratory staff to qualified cardiotechnical staff.

Most expert careers begin with the completion of further training, building upon basic training. In the nursing sector there are various further training courses on offer (e.g. diabetes counselling, palliative care, etc.), and special training courses for specialist roles (intensive care, anaesthetic care, surgical care, etc.) as well as teaching and leadership functions. Further qualifications in nursing are increasingly being offered in tertiary education institutions (Bachelor’s or Master’s degrees, for example, Advanced Nursing Practice, Health and Care Management). As well as working in hospitals, care homes and domestic care roles, nursing experts are invited to testify in court as expert witnesses and to serve in advisory roles in health-care organizations. From 2012, in addition to physicians, higher nursing staff are allowed to assess the level of patients’ care needs (see sections 5.8 and 6.1).

Careers in leadership and management are also often preceded by a degree in a relevant subject, allowing the qualification-holder to take on management tasks within organizational subdivisions, right up to leadership of an entire organization (e.g. managing nursing staff in a hospital, managing a care home, managing a pharmacy). Large institutions such as hospitals with several departments, wards or specialist areas also have intermediary leadership responsibilities (ward management, lower and middle management) which are carried out by various health-care professions, particularly higher nursing staff and higher medical-technical staff.

Within certain health-care disciplines, it is also possible to practise independently. This option is available to pharmacists, health psychologists and clinical psychologists, psychotherapists, midwives, higher medical-technical staff, higher nursing staff and therapeutic masseurs. Under some circumstance, services from the above-mentioned professions are billable to health insurance funds as “services equivalent to physician services” (see Table 3.7), on the basis of general contracts, under single contracts with individual professionals, or through a non-contract billing procedure (see section 3.7.2 *Remuneration of health-care staff*). Since 2010, physicians and dentists have been able to band together as limited liability companies (section 2.8.2 *Regulation and governance of service providers*). Management of a pharmacy is conditional on holding a licence (see sections 2.8.4 *Regulation and governance of pharmaceuticals* and 5.6).

5. Provision of services

Preventive work in Austria is strongly focused on medical prevention, although efforts have been made in recent years to include social and environmental aspects. By the age of 2, one-fifth of children have not had their standard vaccinations. Compared across the OECD, Austria's vaccination rate is very low at 74% for measles and 83% for pertussis (whooping cough).

A fundamental characteristic of the Austrian health-care system is that all members of the population have relatively unrestricted access to all levels of care (GPs, specialists and hospitals). This advantage is, however, counterbalanced by the fact that it is often difficult for patients to find the most appropriate care for their particular needs in this maze of options. Although attempts are made to improve care for chronically ill patients with the help of structured disease management programmes, most patients are still confronted with high “search costs”.

In the ambulatory sector, patients can choose between single-person practices, hospital outpatient clinics, free-standing outpatient clinics and, since 2010, group practices. An exact division between primary care and secondary care is not possible, as hospital outpatient clinics also play an important role in primary care provision. Treatment by specialist physicians is available at individual practices as well as at free-standing and hospital-based outpatient clinics.

In 2011, patients consulted a GP, specialist physician or other social security contracted service provider an average of 14 times. However, about 44% of independently practising physicians were not contracted by social security. If patients go to one of these physicians, they have to pay the fee directly themselves but will be reimbursed up to 80% of the fee that would be paid by social security to contracted physicians for equivalent services.

For inpatient care “standard” (basic secondary care services) and specialist (eg. orthopaedic surgery) hospitals as well as highly developed “central” (full secondary and tertiary services, eg. university) hospitals are available. Attempts have been made over many years to replace inpatient with ambulatory care, where appropriate. The main point of conflict in this process is how to compensate social security institutions for an increase in ambulatory care costs if inpatient care is scaled down. In general, the coordination of primary and secondary care, as well as of acute and long-term care suffers from fragmented responsibilities.

All insured patients in Austria have free access to any physician prescribed medication listed in the Reimbursement Codex upon payment of a prescription fee of €5.15 in 2012. In 2011, prescriptions with a total cost of €2.95 billion (including the prescription fee) were made.

The long-term care system is relatively well developed. Austria reacted comparatively early to the approaching demographic challenge with the passing of the 1993 Federal Long-Term Care Act. Patients have a right to claim the long-term care allowance irrespective of their income if care is expected to be needed for at least six months. At the end of 2010 a total of around 5% of the Austrian population (443 395) received long-term care allowances.

5.1 Public health service

The public health service is generally coordinated and supervised at federal level although implementation is usually delegated to Länder and local authorities, as well as social security institutions (see section 5.1.3 *Health promotion and prevention*), as part of the system of indirect administration (see section 1.3). Tasks of the public health service include the safeguarding and improvement of the population’s health, supra-regional crisis management, structural policy, health reporting, health promotion and provision, vaccination programmes, combating infectious diseases, inspections and food safety (see section 2.3). In addition, the public health service is responsible for radiation protection and training of medical officers.

As part of the health-care reforms of 2005 (Hofmarcher & Rack, 2006), a process was started with the intention of redefining the responsibilities of the Austrian public health service. The results of this process were published in the

Public Health Service Manual in 2010 (BMG, 2010c), which intends to help prepare medical officers for cross-sector activities within the framework of “Health in All Policies” (see section 2.6).

On average, medical officers who work in district administration are responsible for between 30 000 and 60 000 inhabitants. They are usually supported at the level of the district administrative authorities by one or two non-academic specialists (in most cases health attendants or disinfection officers). For special problems (disinfection, the issue of Legionnaires’ disease, X-ray examinations) they receive support from non-academic specialists from the Länder. For special tasks, such as appraisals of quality and hygiene in hospitals, residential homes for the elderly and homes for long-term care, highly qualified nurses are available as non-physician experts.

5.1.1 Epidemic and infection protection

An important role of the Federal Ministry of Health is to monitor infectious diseases, which are documented using a reporting system. Since the introduction of the **Epidemiological Reporting System** in 2009, all cases of reportable infectious diseases are collated through electronic reporting of each case. This reporting system is being further developed, along with action and alert plans, in partnership with the European Centre for Disease Prevention and Control, with the aim of improving infection monitoring and outbreak management. Special attention is given to food-borne diseases, where health, food monitoring and veterinary authorities combine to stem outbreaks. In 2012 a specialist centre was established at AGES (see section 2.3) to combat outbreaks of food-borne disease.

The **Pandemic Plan** published in 2006 was revised in light of experiences with the H1N1 pandemic in 2009 in order to better coordinate responsibilities and responsible stakeholders (Ladurner et al., 2010). The revision was due to be finished at the end of 2012. Combat of zoonotic diseases is specifically regulated by an EU Directive, which found national expression in the Zoonotic Diseases and Carriers Act. There have also been zoonotic disease commissions established at federal and Land level.

Supervision of resistance to antimicrobials has been carried out since 2005 via the annual publication of the **Austrian Report on Antimicrobial Resistance**, and via the nationwide surveillance of antibiotic use by non-hospital providers and by collection of usage statistics in hospitals. Parallel measures have also been implemented in the veterinary sector (carefully directed use of antibiotics in animal treatment, concentration analysis).

PROHYG (Organization and Strategy for Hospital Hygiene) is the nationwide Austrian technical standard for hospital hygiene. In 2010 the PROHYG of 2002 was revised to include the latest approach by an interdisciplinary team of experts. This was published in 2011 as PROHYG 2.0 by the Federal Ministry of Health. Monitoring of nosocomial infections has been carried out since 2012 via the Austrian Nosocomial Infections Surveillance System.

5.1.2 Vaccination

It is not compulsory for social security health insurance institutions to provide vaccinations. Exceptions are vaccinations against tick-borne encephalitis and nationwide vaccinations against influenza for the whole duration of a pandemic if the WHO has declared an influenza pandemic. The Supreme Health Board (see section 2.3) publishes an annual vaccination plan and recommends which vaccination programmes should be carried out. At the moment two-thirds of vaccination costs are paid out of federal finances, with the remaining third split equally between the Länder and social security institutions. This largely ensures that injections for children up to 15 years of age are free. In 2012, the vaccination plan for children included a hexavalent vaccine (against six diseases: diphtheria, tetanus, pertussis (whooping cough), poliomyelitis (infantile paralysis), haemophilus, hepatitis B, a triple vaccine against measles, mumps, rubella (MMR), and vaccines against pneumococcal bacteria rotavirus and meningococci. Vaccination costs for adults are not reimbursed although the vaccination plan makes recommendations also for this group (BMG, 2011f).

The possible introduction of a vaccine against human papilloma virus to protect against cervical cancer led to a national and international debate (Haas et al., 2009). Compared across Europe, the cervical cancer rate in Austria is relatively high: over 10 women in every 100 000 suffer from this illness, and the mortality rate is 4 in 100 000. There was particular conflict over the question of the cost-effectiveness of introducing this vaccination. Although up to a third of the costs of implementation would be balanced by the reduction in treatment for cervical cancer, the additional costs were seen as excessive. Improvement in the quality of early stage detection would be a more cost-effective way of reducing cervical cancer rates, according to the Ludwig Boltzmann Institute (LBI-HTA, 2007). Ultimately the human papilloma virus vaccination was introduced as part of the 2011 vaccination plan, but costs have to be paid out of pocket.

Compared internationally, vaccination rates in Austria are very low. At the age of 2, only four out of five children on average have had their standard vaccinations. The vaccination rate for measles is the lowest across the OECD at 74% (OECD average: 91.5%). The pertussis (whooping cough) vaccination

rate is also relatively low, at 83% (OECD average: 93.8%) (OECD, 2009b). Vaccination rates and status are not systematically documented and analysed in Austria. Parents refuse, sometimes forcefully, to have their children vaccinated. This may be the reason why there are frequent infectious disease outbreaks. In 2008 there was a measles epidemic in Salzburg, which spread to Upper Austria and Bavaria. In 2009 there was an outbreak of rubella, which largely remained confined to Styria. At the moment, work is being carried out on a national measles and rubella elimination plan based on a WHO strategy.

Flu injections are also not fully embraced, although public information campaigns on the issue have been strengthened. In 2007, around 12% of the population were vaccinated, including 37% of over-65s. The vaccination plan for 2012 recommended influenza vaccines for certain groups of children and for adults over the age of 50 (Ladurner et al., 2011).

5.1.3 Health promotion and prevention

The Austrian approach to health promotion and prevention is in line with the WHO model, which aims to promote health through enabling a high level of self-determination for every individual in health matters and thus empowering them to improve their own health. Health promotion and prevention have been developed increasingly in recent years in the context of “Health in All Policies” (see section 2.6) and share an increased focus on interventions specific to target groups. Social factors were also looked at in more depth in the Health Survey of 2006/2007 (see section 2.7.1 *Information systems*) (Statistics Austria, 2007). Many measures and activities in the field of health promotion and prevention are carried out at local and regional level, for example, family counselling centres and specialist regional institutes for health promotion. The following description focuses on federal-level activities.

Health promotion

The most important stakeholders in health promotion are the Federal Ministry of Health, the Healthy Austria Fund, social security institutions, AGES, civil society organizations, church bodies, the Austrian Network on Workplace Health Promotion and research institutes such as the Ludwig Boltzmann Institute for Health Promotion Research, founded in 2008.

From 2006 to 2008, 440 projects were submitted to the Healthy Austria Fund, of which 291 were approved or passed to the Board of Trustees for approval. The topics (exercise, nourishment and psychological health) and target groups (children and young people in their extracurricular hours, working people in small and medium-sized businesses, older people) of the Healthy Austria Fund were extended from 2007 onwards around the topic of cardiovascular health.

Interventions in specific settings play an important role in health promotion measures. The Austrian “Health Promoting School” network was replaced by the “Healthy Schools” project, a cooperative undertaking between the Federal Ministry of Health, the Federal Ministry for Education, the Arts and Culture and the Federation of Austrian Social Security Institutions. A series of measures has been introduced to improve health promotion in schools, such as the development of an organizational structure to manage it and the development and testing of quality assurance instruments (www.gesundeschule.at). In future activities related to the “Healthy Schools” project will be further integrated with other school development measures. In 2009 the report on the “Healthy Schools” project was published. Among its recommendations were the integration of economically oriented quality management in schools, improved teacher training in health promotion and an increase in awareness raising via appropriate communication channels and information provision (Dür et al., 2009).

Social security institutions are also increasingly active in promoting health via their health check-ups, structured treatment programmes (see section 5.2) and programmes to reduce tobacco consumption (“Smoker Hotline”). There has also been a focus on health promotion for older people and on long-term care (HVSV, 2009). In 2010, they spent €130 million, or 0.94% of their budget on early detection and health promotion. Of the total spent, €415 million or 3% was spent on measures to preserve health and on rehabilitation (see Table 3.7 and section 5.7).

With regard to **target-group-specific health promotion**, federal-level measures for women, children and socially disadvantaged groups have been undertaken in recent years. The Women’s Health Report, published in 2005, was followed by a dialogue on women’s health. These activities created a focal point for health policy during the Austrian presidency of the EU in 2006. For children as a target group the health and environment departments cooperated to create the 2007 “Children–Environment–Health Action Plan for Austria”. Alarming data and information on risky behaviour of children and young people, at a high rate when compared internationally (see section 1.4), led the Federal Ministry of Health to start a consultation on children’s health in spring 2010 (see section 2.6 and Chapter 6). A catalogue of measures was developed, emphasizing the health promotion aspect of nutrition (“Eat Right from the Start”). In 2010, the National Nutrition Action Plan was enacted (see section 2.6 and Chapter 6), providing for the introduction of a National Nutrition Commission. Between 2011 and 2013 the Federal Health Agency made €10 million available to promote nutrition. A national action plan for exercise is currently under development.

Alongside increasing obesity among both sexes, alcohol consumption in Austria is also high when compared internationally (see section 1.4). In 2007, the Austrian Forum on Alcohol was introduced as a standing body to tackle questions regarding national alcohol policy on an advisory basis. Working groups were set up to develop recommendations, ultimately coming up with 37 different recommendations, including coordination and standardization of alcohol prevention measures throughout the various Länder (Eisenbach-Stangl et al., 2008).

Although Austria has experienced a considerable reduction in smokers in recent years, the figure still remains relatively high, especially among women and young people (see section 1.4). Development of a comprehensive policy on the **protection of non-smokers** started relatively late compared to other countries. The Tobacco Act of 1995 was amended to include a general ban on smoking “indoors in public places” (Tobacco Act Amendment 2004), as well as a far-reaching ban on advertising tobacco products and a requirement to display no-smoking signs. Austria ratified the WHO convention on tobacco control and tobacco tax was increased in order to set up a Fund for Health Promotion and Health Check-ups (see section 3.3.3 *Pooling of public funds*). In 2006, minimum pricing regulations for cigarettes were introduced, but these were lifted in 2010 for violating EU law. At the end of 2008 an amendment to the Tobacco Act extended the general ban on smoking indoors in public places to include the hospitality sector, which had previously been exempt. Smoking is now allowed only in rooms which are completely separate constructions. Violations of the Tobacco Act can result in sanctions by the administrative authorities. Application of this Act is frequently subject to criticism (Reichmann & Sommersguter-Reichmann, 2012).

Resources from the Fund for Health Promotion have been used to finance, among other things, a “**Smoker Hotline**”, set up in 2006 by the federal authorities and social security institutions in cooperation. The hotline makes professional advice quickly available to people who want to cut down their smoking. This advice forms part of the European Network of Quitlines, in which 27 countries participate (WHO, 2007). Up to 2011, 8500 people had used the telephone advice service, of whom, a survey suggested, one-third had given up smoking and another third had reduced their level of consumption (Rauchertelefon, 2011).

Prevention

Preventive work in Austria is strongly focused on medical prevention, although there have been greater efforts made in recent years to include work on social and environmental aspects. Preventive measures are carried out throughout the life cycle. However, activities are not well coordinated and both implementation and financing remain heavily fragmented.

The **mother–child medical card programme** is an Austrian screening programme that monitors and promotes the health of pregnant women and children up to the age of 5. The programme was started in 1974. Pregnant women have the right to five screening cycles during their pregnancy. The programme also provides for nine screening sessions for participating children. Taking part in this screening programme was initially a condition for receipt of the childbirth grant. After this grant was abolished, participation in the mother–child medical card programme significantly reduced, so much so that in 1997 a mother–child medical card bonus of around €140 was introduced. Since 2002, failure to attend the first 10 appointments in the programme leads to a reduction by half in child care benefit payments after the 20th month.

All examinations and their results are detailed in the mother–child medical card. All women resident in Austria, including those who do not have social security insurance, are entitled to have these examinations free of charge. Since the programme started in 1974, child mortality has reduced dramatically to 4 per 1000 (see Table 1.8) and is at one of the lowest levels in Europe (Waldhör et al., 2005). However there has not been an Austria-wide study to date that isolates the connection between the mother–child medical card and child mortality rates. There is also a lack of exact data on uptake of the programme by pregnant women. It is assumed that the majority take advantage of the mother–child medical card examination programme, although the number of prenatal screenings has declined in recent years (LBI, 2009a).

In July 2011, additional services were added to the mother–child medical card programme. In addition, there has been a focus on breastfeeding in recent years. A Breastfeeding Commission, established in 2004, published breastfeeding recommendations. In 2011, the National Commission for Nutrition published the first nationally agreed upon, evidence-based recommendations on dietary supplements.

School medical examinations are carried out annually in accordance with legislation. School physicians test pupils' hearing, sight and dental health. The **Young Person's Health Check** is offered to young people aged 15 to 18 who are already in work. This consists of a physical examination, a urine test and a

health counselling session. In 2007, 68.2% of the target group of 15–18-year-olds underwent the health check. The highest rate of participation was 88.1% in Tyrol and the lowest was in Lower Austria (49.7%). Costs are borne by health insurance providers, and 50% of those costs are reimbursed by federal finances.

In 2005 the **“new preventive examination” (health check-up)** was introduced (Hofmarcher, 2005b). The focus is above all on providing advice for a healthy lifestyle. In addition, screening for bowel cancer has increased and greater attention is being paid to hearing and sight tests for over-65s, as well as periodontal disease in that age group. Annual preventive examinations are available for everyone over the age of 18. Those without social security insurance can apply to have costs paid by the federal authorities. In 2010, 854 413 such examinations were carried out in Austria, 53.6% of which were conducted on women (see Table 5.1). From 2000 to 2010 the uptake of these appointments increased across Austria by 31% to 102 per 1000 inhabitants, with significant disparities in uptake between individual Länder. While in Lower Austria in 2010 only 50 examinations were carried out per 1000 inhabitants, in Burgenland the figure was over 170.

Between 2005 and 2007 medical cards for various groups of the population (e.g. children aged 6 and over, young people, people over the age of 60 or 75) were developed (Hofmarcher & Rack, 2006). They were designed to increase systematic preventive testing and to increase awareness of health and healthy living. However, these cards are no longer distributed at the federal level as population uptake was low and because physicians rarely recommended them. Recently, medical cards were also introduced at the Länder level. It is unclear, however, how much they are being adopted.

Screening programme

Screening programmes are still relatively new in Austria. Since the introduction of the “New Preventive Examination” in 2005, mammography, colonoscopy (enteroscopy) and smear tests are all available, financed by social security. For patients under the age of 40 screening for melanoma, glaucoma and dental disease, as well as counselling on physical health management are included. Since 2005, screenings for patients over 65 include tests for hearing and sight difficulties (Ladurner et al., 2011). Innovations in screening include the introduction of an email-based call-recall system that is intended to identify disadvantaged patients and at-risk groups. Data on preventive screenings is being evaluated by the Federation of Austrian Social Security Institutions and the Austrian Chamber of Physicians (Ladurner et al., 2011). The results of this evaluation are not yet available.

Table 5.1
Uptake of preventive examinations, number of appointments 2000–2010

	2000				2010				% Change 2000–2010			Proportion of women, %	
	Men		Women		Men		Women		Men	Women	Total	2000	2010
	302 860	350 612	653 472	81.6	396 279	458 134	854 413	101.9	30.8	30.7	30.7	53.7	53.6
Austria	15 884	19 287	35 171	127.4	22 303	26 657	48 960	172.2	40.4	38.2	39.2	54.8	54.4
Burgenland	27 216	37 721	64 937	115.9	33 175	44 318	77 493	138.6	21.9	17.5	19.3	58.1	57.2
Carinthia	30 295	29 960	60 255	39.2	40 030	39 496	79 526	49.4	32.1	31.8	32.0	49.7	49.7
Lower Austria	50 106	57 768	107 874	78.6	68 727	71 082	139 809	99.0	37.2	23.0	29.6	53.6	50.8
Upper Austria	21 627	27 183	48 810	95.0	25 648	29 978	55 626	104.8	18.6	10.3	14.0	55.7	53.9
Salzburg	50 545	62 485	113 030	95.6	57 205	67 414	124 619	103.1	13.2	7.9	10.3	55.3	54.1
Styria	43 432	39 367	82 799	123.7	48 153	59 237	107 390	151.8	10.9	50.5	29.7	47.5	55.2
Tyrol	16 752	21 695	38 447	110.1	21 413	25 891	47 304	128.0	27.8	19.3	23.0	56.4	54.7
Vorarlberg	47 003	55 146	102 149	65.9	79 625	94 061	173 686	101.8	69.4	70.6	70.0	54.0	54.2
Vienna													

Note: Population taken according to the average for the year.

Sources: HVSU; Statistics Austria (2011b).

Quality-assured mammography screening pilot projects have been carried out in Austria since 2006 in the following Länder: Vienna, Vorarlberg, Tyrol, Salzburg and Burgenland. In parallel, a national framework and implementation programme for early detection of breast cancer has been developed, which is scheduled to have been completely rolled out during 2013. The national programme is based on quality standards developed by the Federal Health Commission (see Table 6.1), which are based on European and international guidelines, and cover management of invitations to participate, training, technical quality assurance and documentation by federal, regional authorities and social security. All women between the ages of 45 and 69 are sent a letter inviting them to participate every two years. Younger and older women from the age of 40 to 75 can voluntarily sign up for the programme (BMG, 2011g).

Prevention in occupational health

The number of workplace accidents and work-related illnesses declined between 1990 and 1998 by approximately one-third, remained relatively steady until around 2008, when it increased slightly before dropping back to about the same level (Statistics Austria, 2011b). The system for occupational health-care services is well developed.

The Employee Protection Act defines the extent of safety measures in the workplace and preventive occupational health provision in Austrian firms. This includes such measures as the nomination of a dedicated health and safety representative who is responsible for all safety measures within the organization, as well as the deployment of medical personnel. These requirements can be met in various ways depending on the size of the business. In firms of up to 50 people, medical provision can be taken care of by visiting health professionals. The AUVA (see sections 3.3.1 *Coverage* and 3.6) offers free visits by occupational health physicians and safety personnel for small businesses with up to 50 employees (53, if the firm has apprentices or disabled employees, or 250 if there are no more than 50 employees in any of the firm's locations) to help comply with legal obligations.

For employers employing more than 50 people, the employers themselves are responsible for adhering to the necessary standards, and must also bear the costs of doing so. These firms can either implement their own health centres or contract with independent physicians. Since 1973, large firms in Austria have been obliged to employ company physicians.

5.2 Patient pathways

A characteristic of the Austrian health-care system is that all members of the population have relatively unrestricted access to all levels of care (see section 7.3.2 *Equity of access is ensured but gaps in provision exist*). Austrians' sustained levels of satisfaction with health-care provision may be due in large part to this freedom of choice (Statistics Austria, 2007) (see also section 2.9.2 *Patient safety and patient choice*). This advantage is counterbalanced, however, by the fact that the maze of different care options often makes it difficult for patients to find the right one. In connection with attempts to improve care for chronically ill patients with structured disease management programmes, the first steps are being taken to improve coordination and integration of care across sectors. Yet, the majority of people who need care are still confronted with high “search costs”. Box 5.1 presents a typical patient pathway of a patient with a non-acute illness.

Box 5.1

A typical patient pathway

Mr Need, a 70-year-old married man with compulsory social security coverage and no fee exemption or additional private insurance, has been having pains in his hip for some time. He can hardly walk any more and fears that he will need a hip replacement.

- Mr Need goes to his GP and tells him about his complaint. The doctor prescribes painkillers and refers him to the specialist orthopaedic physician who is contracted to his social security provider (see section 5.3). His electronic medical pass (e-card) registers his visit and the GP's services are paid for directly by the social health insurer (see section 4.1.4 *Information technology*).
- The orthopaedic physician examines Mr Need and refers him for an X-ray or CT scan. She gives him a list of independently practising radiologists who are contracted by the social security provider to choose from. His visits to the orthopaedic physician and radiologist are recorded on his e-card and their services are paid for by the social health insurer (see Table 3.5).
- Mr Need returns to the orthopaedic physician with his results, and she advises him to have an operation. As he has no means of accessing information from the Health Portal or the Hospitals Directory (section 2.9.1 *Patient information*), he asks the orthopaedic physician where he can go to have the operation. The physician recommends the nearest hospital to him, where she did her training as a resident. This hospital is a mid-sized “standard hospital” that also performs hip operations (see section 5.4). Again the e-card is used to pay for the orthopaedic consultation.
- Mr Need decides to seek a second opinion and finds a non-contracted orthopaedic physician. He also recommends surgery. The independent physician presents Mr Need with a bill, which he pays on the spot. He sends this bill to his social security institution for reimbursement and receives 80% of the tariff for contracted orthopaedic physicians (see section 3.4).

Box 5.1 – continued

A typical patient pathway

- The non-contracted physician recommends a different hospital where hip operations are frequently performed, and informs him that he will have to wait around three months for the operation.
- Mr Need decides that he doesn't want to wait that long and takes his referral and test results to the hospital his original orthopaedic physician recommended. His e-card is again used to record his visit. After surgery, rehabilitation is begun while he is still in hospital. A request for medical inpatient rehabilitation is prepared (see section 5.7). The hospital is reimbursed by the Regional Health Fund according to a fixed number of points for the DRG "hip operation" (see sections 3.3.3 *Pooling of public funds*, 3.7.1 *Financing of hospitals* and Table 3.19).
- When he is discharged, Mr Need receives all of his results on paper, which he hands over to his GP. The GP helps him to complete the request for rehabilitation and tells him that he needs to hand this in to his health insurer. The hospital sends Mr Need a bill for his share of the cost of his stay (Table 3.12).
- Mr Need is admitted to a clinic that specializes in rehabilitation. His social security institution pays for his stay, and the clinic produces a bill for charges incurred to him under the cost-sharing principle (see Table 3.12). Crutches and other medical aids required by Mr Need are provided by the health insurer.
- After his rehabilitation Mr Need realizes that he can no longer run his household without support, particularly as he and his wife have been receiving help with day-to-day activities from their daughter for some time. The GP recommends that Mr Need apply for long-term care allowance (see sections 5.8 and 5.9). Mr Need and his wife ask their daughter what else they have to do.

For several years, better coordination of care between different sectors of the health-care system and between the health-care system and long-term care providers has been an explicit goal of health policy in all OECD countries (Hofmarcher, Oxley & Rusticelli, 2007; OECD, 2009a) (see also Chapter 7). Although there are some significant initiatives towards this in Austria, such as the "reform pool" cooperation funds and group practices (Hofmarcher & Hawel, 2010), fragmented responsibility for service provision and financing mean that the potential for securing patient-oriented continuity of care, particularly for non-acute cases and for the chronically ill, has not yet been fully reached in any of the Länder.

Against a background of relatively high mortality and morbidity rates (see section 1.4), activities were introduced on the back of the 2005 **Austrian Diabetes Plan** to improve care for diabetics. Along with women's health, diabetes mellitus was one of the health policy focal points of the Austrian EU

presidency in spring 2006. Since then, federal quality guidelines on diabetes (see section 2.8.2 *Regulation and governance of service providers*) have been established and the “Active Therapy” structured treatment programme has begun.

5.2.1 Structured treatment programme: “Active Therapy Diabetes”

The “Active Therapy” programme for type 2 diabetes patients was started in 2007 and developed from projects funded by the reform pool from 2006 and 2007 (see section 6.1). The programme has been introduced in six of the nine Länder to date. In Burgenland, programmes that can be integrated with “Active Therapy” are planned, and there is also coordination in this field in Carinthia. Currently around 29 000 of approximately 400 000 (some 7%) type 2 diabetes sufferers in Austria are receiving treatment through the “Active Therapy” programme (HVSV, 2010b). The goal is to include around two-thirds of diabetics who handle their condition with medication in the programme by 2015. The programme sets out a multidisciplinary approach following the federal quality guidelines. The idea is that one physician is responsible for the patient throughout the entire treatment process, across various types of provision and functions, from prevention to therapy to aftercare (Nolte et al., 2012). Participating physicians must complete a training course of up to 10 days (minimum 4 days) and must also provide an annual report based on standardized documentation requirements (HVSV, 2011a).

For the care of patients in this programme, physicians receive €53 per patient per year, and an additional €100 for complying with documentation requirements. If GPs offer supplementary group training sessions for patients, they are remunerated between €1000 and €6000 per training session (HVSV, 2011a). Empowering patients to become guardians of their own health is an explicit goal of the programme. Patients enter into a “treatment contract” and physicians commit to evaluating mutually agreed upon goals. The programme has the potential to strengthen the development of care structures outside of hospitals (see section 6.1). It is also the first time that a performance bonus has been paid to physicians in Austria for optimizing their care provision (see section 7.4.2 *Measured quality of care must become even more transparent*).

5.3 Ambulatory care

An exact division between primary and secondary care is difficult to establish because outpatient clinics both at hospitals and as free-standing institutions not only provide specialist physician care but also play an important role in primary care provision. They are very popular during non-office hours, on weekends and on public holidays, in particular because the office hours of independently practising physicians are often not very “customer-friendly”. The introduction of group practices is intended to make accessing ambulatory care outside hospitals more attractive by offering more flexible provision and opening times (Hofmarcher & Hawel, 2010) (see sections 2.8.2 *Regulation and governance of service providers* and 6.1).

The ambulatory care sector in Austria consists of four pillars:

- independently practising physicians – contracted and non-contracted physicians who usually work in single practices (section 5.3.1 *Independently practising physicians*);
- outpatient clinics of hospitals (section 5.3.2 *Hospital outpatient clinics*);
- free-standing outpatient clinics which are run as separate health-care institutions by social security institutions or private individuals (section 5.3.3 *Free-standing outpatient clinics*); and
- group practices introduced as an added pillar of the system in 2010 (see section 6.1).

5.3.1 Independently practising physicians

In 2009, about 19 000 physicians, just under half of all active physicians in Austria, worked in independent practice. About half of these (10 695) were in a contractual relationship with one or several health insurance funds (see section 3.3.2 *Raising funds for health-care*). Contracted physicians (GPs and specialists) can be accessed by patients free of charge without needing a referral. Referral is required only to receive radiological examination or laboratory diagnosis. About 40% of contracted physicians in independent practice work as GPs. One-quarter work as dentists, and the remainder are specialist physicians.

The first entry point for patients into the health-care system is usually the GP, who offers a broad range of services, including in an advisory capacity. According to the results of the 2006/2007 Austrian Health Survey, 75.6% of men and 81.8% of women – extrapolated to 5.5 million people – sought out the services of a GP at least once in the year prior to being surveyed. Gynaecological

practices are also very frequently visited: around 83.6% of women surveyed had consulted a gynaecologist at least once in the preceding year. Dentists and optometrists are likewise highly frequented.

Outside the network of contracted physicians, non-contracted physicians in independent practice are increasingly important. While the absolute number of contracted physicians, has remained stable in recent years, the number of non-contracted physicians has increased considerably. Consequently, the proportion of contracted physicians has dropped from about 66% in the year 2000 to 56% in 2009. Non-contracted physicians largely account for the relatively high density of physicians in Austria (see Figs 4.3 and 4.5). Patients can use the services of non-contracted physicians upon direct payment of the requisite fee. Subsequently, they can claim reimbursement from their health insurer for 80% of the fee that would have been paid for a contracted physician performing the same service. Non-contracted physicians are particularly numerous in general practice, internal medicine, gynaecology and obstetrics. In internal medicine as well as in gynaecology and obstetrics, 6 out of every 10 independently practising physicians do not have a contract with a health insurer. Austrians' willingness to use and to pay for non-contracted physicians is evident from household expenditure figures. In 2010, direct payments for ambulatory treatment reached almost €1.8 billion (see Table 3.10), corresponding to about 36% of household out-of-pocket spending on health.

While the density of active physicians is very high when compared internationally (see Fig. 4.4), they are not equally distributed across Austria. Although an important function of the networks of contracted physicians is that of ensuring the geographical balance of access to care, there are considerable regional differences, in particular concerning the density of contracted specialists. For example, Vienna has 0.7 contracted specialists per 1000 inhabitants, more than twice as many as Lower Austria, Burgenland or Upper Austria, which have only 0.3 specialists per 1000 inhabitants. For contracted GPs however, Burgenland leads with 0.5 per 1000 inhabitants. The lowest level of provision of this type is in Vorarlberg, where the rate is 0.4 per 1000. These regional differences have existed for some time and are pronounced compared to the situation internationally (Felderer et al., 2002).

In contrast to the inpatient sector (see section 5.4), the development of systematic quality assurance programmes for the networks of contracted physicians is slow. In 2006, the Austrian Chamber of Physicians founded a company dedicated to quality assurance (ÖQMed). The company inspects physician practices based on the Physician Care Act (see section 2.3). The

company's first report was published in 2009. Physician participation in the inspections was voluntary in principle and the implementation of changes was not attached to any incentives, although non-participants could be reported to the legal disciplinary officers of the Austrian Chamber of Physicians. An amendment in legislation ensured that the federal authorities now have more influence over this area (see section 6.1.1 *Provision of services and employment in the health-care system*).

5.3.2 Hospital outpatient clinics

Hospital outpatient clinics play an important role in provision of specialist ambulatory care. All public acute care hospitals have outpatient clinics, which are legally obliged to offer emergency treatment, as well as testing and treatment methods that are not sufficiently covered by the networks of independently practising physicians. There are different sources of data on the number of patients who visited hospital outpatient clinics. According to the Austrian Health Survey 2006/2007, hospital outpatient departments were visited at least once in the previous year by around 19% of the adult population (650 000 people). By contrast, according to supra-regional analyses of data from public hospitals, around 7.7 million outpatient "cases" were registered in 2008. Several cases required multiple visits, leading to a total of around 16.8 million outpatient visits to hospital outpatient clinics. Both the number of cases and the number of visits to hospital outpatient clinics has risen over time. Simultaneously, the number of cases seen by those contracted specialists who are intended to replace certain areas of hospital outpatient service provision (e.g. radiologists and pathologists) also increased at an above average rate between 2004 and 2008. However, the quality of records on numbers of cases and visits to hospital outpatient clinics is limited, complicating comparisons with the development in the number of case in other ambulatory settings.

This is related to the fact that hospital outpatient clinics and the independently practising sector work with vastly different documentation systems. At federal level, a project has been started in accordance with the agreement based on Article 15a of the Federal Constitutional Law, which aims to establish a common basis for data collection for service documentation in the ambulatory sector (section 2.7.1 *Information systems*). The development of a new payment system for ambulatory care is planned, which will be based on a common catalogue of ambulatory care services, applicable to specialist care provided by both hospital outpatient clinics and other ambulatory care providers (BMG, 2010b) (see also section 6.1).

5.3.3 Free-standing outpatient clinics

Free-standing outpatient clinics are legally defined as hospitals that only provide outpatient care. They are run by a broad range of providers, from individuals (e.g. a physician) to social security institutions (health insurers). For the establishment and operation of a free-standing outpatient clinic, a permit from the government of the relevant Land is necessary (see section 2.8.2 *Regulation and governance of service providers*). In 2008 there were some 790 free-standing outpatient clinics in Austria, most of which were located in Vienna (199) and Styria (150). Almost one-third of these clinics were active in the field of physical medicine, 15% were in the category of medical imaging, 12% provided dental care and almost 5% provided psychiatric care.

In 2008, a total of 10 790 people were working in outpatient clinics, of which around a quarter were physicians. Of a total of 2545 physicians, around half were specialists, a third were GPs, 14% were dentists, and the remainder were interns. In a quarter of outpatient clinics, care was provided by one physician, while in another quarter clinics have two physicians; 17% of outpatient clinics were staffed by five physicians or more. In 2008, 45% of employees in outpatient clinics worked in higher medical services, with 7% made up of higher nursing staff, nursing assistants and paramedics. Almost three-quarters of all employees were women. When it comes to physicians, however, only just under a half are women, with the proportion of women markedly higher in GPs than in specialist physicians. In other words, almost every other male employee is a physician, while just one in seven women working in free-standing outpatient clinics is a physician.

Use of services provided by free-standing outpatient clinics is not well documented. Although these outpatient clinics are classified as hospitals, they do not have to comply with the same documentation requirements that apply to fund hospitals. Consequently, the most important source of information on service use is the social security providers' financial data. In 2011, outpatient clinics were visited just under 20 times per 100 insured people (see Table 5.2).

Table 5.2
E-card ambulatory consultations per insured person, 2011

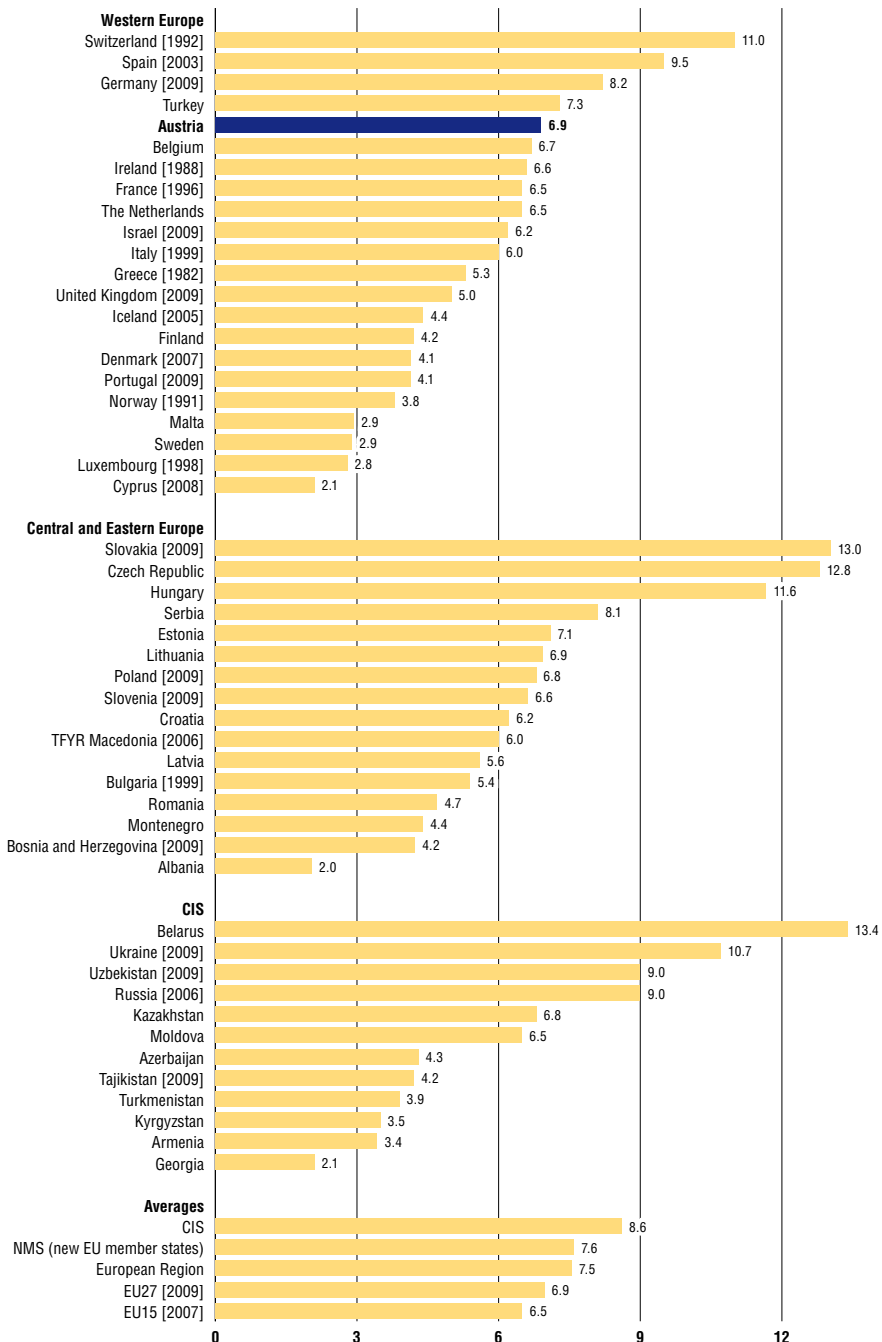
	Number of insured individuals (2011)	Per insured person										Change in number of people entitled, 2009-2011	
		All consultations	Curative physicians	GPs	Specialists	Dentists	Dentist clinics	Outpatient Clinics	CT, MRI	contracted partners	Other		
Social security institution	8 208 011	13.7	11.7	8.2	3.5	1.3	0.2	0.2	0.1	0.2	0.1	0.2	1.5
Regional health insurers	6 697 567	13.3	11.4	7.9	3.5	1.2	0.2	0.2	0.1	0.2	0.1	0.2	1.7
Company health insurers	52 569	17.6	15.3	11.0	4.3	1.2	0.3	0.2	0.1	0.4	0.1	0.4	-1.3
Insurance Fund for Railway Workers and Miners	241 871	15.6	13.8	10.1	3.7	1.1	0.3	0.1	0.1	0.1	0.1	0.1	-3.8
Civil Servants' Insurance Fund	765 385	11.5	9.6	6.1	3.5	1.3	0.1	0.2	0.1	0.1	0.1	0.1	2.5
Insurance Institution for the Self-Employed	713 860	7.5	6.3	4.3	2.0	0.9	0.1	0.1	0.1	0.1	0.1	0.1	5.6
Farmers' Social Insurance Institution	377 524	11.0	9.9	8.1	1.7	0.9	0.1	0.1	0.1	0.1	0.1	0.0	-1.8

Source: HVSU survey, March 2012; own calculations.

5.3.4 Use of ambulatory services

The first systematic analysis of e-card consultations (see section 4.1.4 *Information technology*) in the outpatient sector (excluding hospital outpatient clinics) took place in 2011. Across all care settings, eligible people consulted service providers an average of 14 times (see Table 5.2). As analyses of the Health Survey had already shown (see Table 5.2), GPs are consulted most frequently, followed by specialists. For radiology, the rate of consultation is fairly steady across all social health insurers. Members of company health insurers were the most frequent users, while members of the insurance for the self-employed had the fewest visits per member. One reason for this difference could be that members of the insurance for the self-employed are always exposed to cost-sharing when using services (see Table 3.12). Another reason could be that a lot of the individuals insured by the insurance for the self-employed are also covered by other insurers (see Table 3.5) Consequently, a part of their demand might be registered (and covered) by the regional health insurers instead.

To date, physician contact statistics from the e-card programme have not been entered into any international databases. Fig. 5.1 shows numbers of physician visits per capita, compared internationally. Austria is in the top third of western European countries at 6.9 visits per head. If the number of visits recorded by the e-system were used as the comparator, the value would be around twice as high (see Table 5.2), and Austria would lead the list of western European countries, above Switzerland, and would be level in the table with the Czech Republic and Slovakia. The value recorded in international databases up to now is mainly based on the number of cases dealt with by contracted physicians. Cases treated by non-contracted physicians are only included when their cost of provision is reimbursed by health insurance.

Fig. 5.1Ambulatory contacts with physicians^a per adult, 2010 (or last available year)

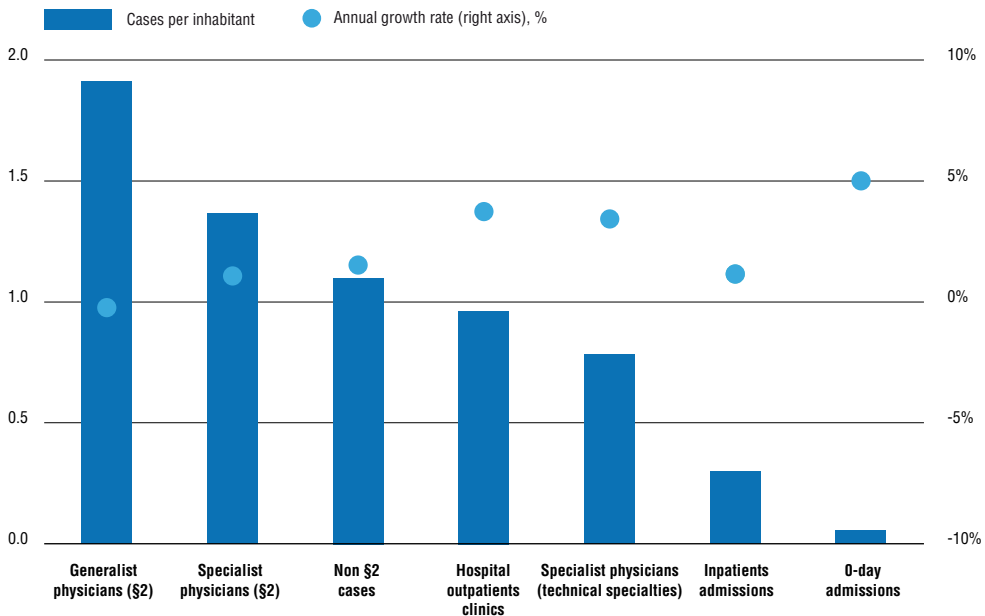
Note: ^a Outpatient contacts with physicians include examinations and consultations with physicians or in the absence of a physician a nurse, either at their surgery or at the patient's home. Outpatient contacts with physicians also include treatment at day clinics and treatment in ambulances.

Source: WHO (2013).

For the measurement of “cases”, time series data are available, but are not very reliable. Fig. 5.2 shows the development in numbers of cases per capita in ambulatory care facilities and fund hospitals (see sections 5.4 and 3.7.1 *Financing of hospitals*). While the proportion of cases remains highest for GPs, there has been a slight reduction in the number of cases between 2000 and 2010. By contrast, the development in numbers of cases in specialties which are intended to replace hospital care, such as radiologists and pathologists was very dynamic (see section 5.4.1 *Day care*). Also, the number of 0-day admissions per capita grew at an annual rate of 5%, starting from a very low level. The number of cases at hospital outpatient clinics grew by 3.7% on average (see Fig. 5.2). Therefore, despite the data quality problems, this development indicates a slight shift away from inpatient care and towards increased use of ambulatory care (section 7.5.1 *The provision landscape is marked by imbalances*) even though this was not accompanied by a reduction in costs (see section 3.7.1 *Financing of hospitals*).

Fig. 5.2

Cases per capita in selected areas of provision, 2010 and average annual growth rate (AAGR) since 2000



Note: Inpatient stays and 0-day stays refer only to admissions to fund hospitals.

§ 2 cases: persons insured by regional and company health insurers, as well as by the Farmers' Social Insurance Institution.

Sources: GÖG Survey, March 2012; Statistics Austria (2011a); own calculations.

5.4 Inpatient care

Inpatient care in Austria is predominantly publicly organized or organized with the aid of private non-profit-making owners who sometimes also operate according to public law. A hospital which is subject to public law is obliged to admit and provide services to all patients, whereas private, profit-oriented owners also have the option of refusing to admit patients. Hospitals subject to public law are also entitled to receive legally prescribed state subsidies for their day-to-day operations. The agreement in accordance with Article 15a of the Federal Constitutional Law lays out three sectors of health-care provision without making reference to primary, secondary or tertiary care:

- the *inpatient sector* (see section 5.4), which refers to inpatient sections of acute care hospitals, and provides mostly secondary care but also tertiary care, depending on the type of hospital;
- the *ambulatory sector* with its four different types of providers (see section 5.3); and
- the *rehabilitation sector* (see section 5.7), which includes both inpatient and outpatient rehabilitation centres, and which provide mainly secondary care.

Primary care, including that provided by independently practising specialist physicians is essentially the responsibility of social security institutions. By contrast, secondary care (including ambulatory and inpatient care) as well as tertiary care are mostly the responsibility of the Länder (see section 2.8.3 *Registration and planning of health-care professionals*).

In 2010, there was a total of 268 hospitals in Austria, providing a total of 64 000 beds (see Table 5.3). Of these, 178 or 66% were acute care hospitals (see Table 4.3). Länder and their hospital management companies were the most important hospital owners, controlling about 35% of all hospitals and more than 55% of beds. Church organizations (holy orders and faith groups) owned about 15% of hospitals and 17% of beds. About 10% of beds were owned by private individuals and companies (private, profit-making).

Acute care hospitals are categorized according to federal and regional legislation as either standard hospitals, specialized hospitals or central hospitals. Standard hospitals provide a limited spectrum of basic secondary care services. Specialized hospitals are specialized in a particular medical or surgical area (e.g. orthopaedic surgery hospitals) and mostly provide standard secondary care

services but sometimes also certain tertiary care services. Central hospitals include the large university hospitals and always provide both secondary care and tertiary care.

Hospitals are well distributed across Austria. Consequently, they are easily accessible by private and public transport. However, high bed capacities in hospitals means that hospitals are under pressure to generate sufficient revenue if they want to ensure their financial viability.

Table 5.3

Hospitals and available beds by responsible body, 2010

Distribution of hospitals	Number of hospitals		% of total hospitals	
	With public status	Total	With public status	Total
Total	127	268	100.0	100.0
Confederation	0	7	0.0	2.6
Länder, Länder-owned management companies	90	93	70.9	34.7
Local authority organizations, local authorities and their companies	11	13	8.7	4.9
Social security institutions and care organizations	1	9	0.8	3.4
Accident and pension insurance institutions	0	32	0.0	11.9
Holy orders and faith groups	18	39	14.2	14.6
Charitable bodies and foundations	3	12	2.4	4.5
Private individuals and companies	4	63	3.1	23.5

Distribution of beds	Number of available beds		% of total beds	
	With public status	Total	With public status	Total
Total	46 290	64 008	100.0	100.0
Confederation	0	432	0.0	0.7
Länder, Länder-owned management companies	35 113	35 507	75.9	55.5
Local authority organizations, local authorities and their companies	3 418	3 445	7.4	5.4
Social security institutions and care organizations	445	1 245	1.0	1.9
Accident and pension insurance institutions	0	4 738	0.0	7.4
Holy orders and faith groups	6 410	10 829	13.8	16.9
Charitable bodies and foundations	395	1 124	0.9	1.8
Private individuals and companies	509	6 688	1.1	10.4

Note: Public law status only applies to hospitals designated as such by the regional government. This designation requires that the hospital be run as a non-profit-making institution, among other things.

Source: Statistics Austria (2011b).

The 2010 Austrian Structural Plan for Health aims to support specialization of the large number of small hospitals in order to ensure that they are meaningfully integrated into the provision system. It allows more flexibility by clarifying that small standard hospitals do not necessarily have to offer the full range of services. However, incentives for hospitals to specialize and to scale down bed numbers are currently limited, although there is some evidence that such specialization would be more cost-effective. It would also be likely to improve the quality of care provided, at least up to a certain size (Ahgren, 2008; Dranove, 1998).

For years, a series of government programmes and their resulting legislative initiatives have been trying to enact the principle of more ambulatory and less inpatient care (Hofmarcher & Rack, 2006). However, the number of inpatient stays increased strongly between 1995 and 2007, and reduced only marginally in recent years (see Table 4.3), even when excluding the strong increase in day-care activity (+75% since 2000). The number of stays per 1000 inhabitants also increased, albeit at a lower rate.

The most important obstacle preventing a shift in service provision towards increased use of ambulatory care is the fragmentation of responsibility between, on the one hand, social health insurers and, on the other, Länder or regional health funds (see section 2.3). The main area of conflict here concerns the question of who should pay for the intended increase of service use in the ambulatory sector resulting from a shift away from inpatient care.

Although there are some indications that there has been a slight shift in the pattern of demand in recent years (see Fig. 5.2), the effects of this change, particularly on the cost-effectiveness of provision, remain uncertain. While the potential for substitutions here is probably considerable, there is little incentive for social security institutions to invest in these areas, as the services are fundamentally supposed to be financed by the regional health funds (section 3.7.1 *Financing of hospitals*). The availability of financial resources from the state budget for additional services is also limited by national efforts to limit spending (see section 6.2).

Fragmentation of responsibilities between Länder and social health insurers is also the main problem for coordination of care across sectors, complicating efforts to better integrate ambulatory and inpatient care. Similarly, coordination between acute inpatient and social care is complicated because of the fragmentation of responsibility between Länder and local authorities.

These coordination problems have persisted for years, although significant efforts have been made to improve integration of care provision across sectoral boundaries in recent years (see Chapter 6).

Unanswered questions regarding quality of care are recurring themes in current public health policy debates. They are one of the reasons that systematic health-care quality reporting has been introduced (section 2.8.2 *Regulation and governance of service providers*). Renewed efforts are also being undertaken to make the quality of service provision in hospitals measurable so that it can be systematically improved (section 6.1.2 *Information systems and quality of provision*). An important change in relation to this is the change from planning based on the number of beds to planning based on anticipated need, including defining quality criteria for each type of provision (Hofmarcher, 2010), establishment of systematic integrated health-care planning, including agreement on long-term care facilities and the introduction of systematic quality assurance across structures, processes and results, in all sectors of the health and social care system (section 2.5).

5.4.1 Day care

The term “day care” in Austria refers to inpatient treatment in an acute care hospital that does not require an overnight stay (staying past midnight). At the same time, expenditure on anaesthesia (during operations) and for nursing provision is greater than that necessary for patients who are treated in an outpatient clinic. In the Austrian Structural Plan for Health, these stays are referred to as 0-day admissions, and are financed under the DRG-based hospital payment system (see section 3.7.1 *Financing of hospitals*). The number of 0-day admissions has grown rapidly since the year 2000 (Fig. 5.2). The proportion of procedures, which are called MELs in the DRG system, provided in day-care settings at inpatient facilities increased from around 10% in 1998 to almost 14% in 2010.

However, the variation between Länder is high: the highest figure for MELs provided in day clinics as a proportion of all inpatient procedures is 19%, in Burgenland, and the lowest is in Salzburg at 6%. In 2010 the most frequent reasons for day-care admissions were eye problems, cataracts, gynaecological symptoms, orthopaedic pain relief and oncological therapies, above all chemotherapy (BMG, 2011j). Day care is fundamentally cheaper than inpatient care. This is recognized by the DRG-based hospital payment system, which

reimburses hospitals for day cases at a reduced rate, equal to the full procedural component of DRGs but including only the day component for one day (see section 3.7.1 *Financing of hospitals*).

5.5 Emergency care

Austria has a comprehensive structure of emergency ambulance services spanning the entire country. Assistance from emergency services should arrive within 15 minutes. According to Article 10, paragraph 2 of the Emergency Care Act, emergency patients are defined as those patients whose life or vital functions are in danger, might be in danger, or if it cannot be ruled out that they will be in danger as a result of an acute illness, poisoning or trauma.

The majority of emergency care is coordinated by five emergency services: the Red Cross, the Johanniter Unfall Hilfe, the Malteser Hospitaldienst Austria, the Arbeitersamariter Bund Österreichs and Viennese Municipal Department 70 (the emergency service of the Vienna municipal area). The Red Cross is the largest emergency care organization, providing ambulance and emergency services for €285 million in 2010. Emergency care is increasingly offered immediately at the location of the emergency, in order to take the appropriate life-saving measures (BMG & GÖG, 2010). Emergency care can also be provided directly by a public hospital if the patient admits him- or herself to an outpatient clinic.

Box 5.2

Typical emergency care provision: example Vienna

- The emergency patient or a person who arrives first at the site of the emergency calls the emergency call centre number 144 (run by the Viennese Ambulance Service across the whole city). Emergency numbers are usually toll-free from a landline or mobile phone. If the patient reaches the police (133) or fire service (122) or another wrong branch of the service, he or she is connected to the nearest ambulance call centre. The European emergency number can also be used, and the police call centre reached will direct the call to the ambulance call centre.
- At the ambulance operation centre, questioning of the patient or person attending the patient establishes the emergency care required (the Viennese Ambulance Service or another allied organization, depending on which is nearer) and potentially also specialist services (fire service, police, mountain rescue, psychologist/s, specialist units). In Vienna there are 16 emergency physician cars and 40 ambulances without a physician in operation daily. On average, emergency assistance takes around 12 minutes to arrive. If necessary, first aid instructions are given out over the phone. Further directions as to the location of the patient may also be requested. The case is summarized afterwards in written documentation.

Box 5.2 – continued

Typical emergency care provision: example Vienna

- While the paramedics or emergency physicians are on site they provide emergency care and, where necessary, take the patient to a hospital emergency department. The Viennese Ambulance Service has access to available bed capacity at the various hospitals and can therefore allocate patients in accordance with need.
- Decisions on subsequent treatment are made at the hospital, based on the seriousness of the case and the speed of treatment required, and the patient is treated in the appropriate department.

5.6 Pharmaceutical care

According to industry information, there are around 220 pharmaceutical manufacturers and retailers operating in Austria. There are 24 companies active in pharmaceutical manufacturing in Austria (GÖG, 2008), the largest of which are generally subsidiaries of international firms. The nine largest pharmaceutical companies in Austria account for more than 80% of turnover in the Austrian market.

In 2008 the output value of Austrian manufacturers was around €2.1 billion (EFPIA, 2009), which corresponds to around 41% of total expenditure on pharmaceuticals (see section 3.7). The Austrian pharmaceutical market includes only private companies, in both production and sales (WHO, 2010). Key players include the pharmaceutical companies, acting as either manufacturers or distributors, as well as wholesalers, general pharmacies (those available for use by the general public) and physicians running in-house pharmacies.

Direct delivery from pharmaceutical firms (which are licensed wholesalers) is possible, but does not play a significant role. In general, pharmacies source medication from wholesalers, who deliver on average three times per day. Of around 35 firms active in pharmaceutical wholesaling, eight are equipped with the complete range of products (Leopold et al., 2008). The three largest of these comprehensive providers are Herba-Chemosan Apotheker-AG, Phoenix Arzneiwarengroßhandlung GmbH and Kwizda GmbH, which, combined, have more than three-quarters of the market share.

In 2009, 1252 pharmacies were open to the public in Austria (ÖAK, 2010; section 2.8.4 *Regulation and governance of pharmaceuticals*). Medication provision to patients is enhanced (particularly in the countryside) by 950 physicians who run their own in-practice pharmacy (section 6.1.3 *Medication*

and medical devices). In the inpatient sector medication is provided mainly by 46 hospital pharmacies or through medication depots, which are supplied by hospital or general pharmacies. In general, hospital pharmacies mainly serve the internal requirements of hospitals; however 5 of the 46 hospital pharmacies also operate a pharmacy for the public.

Access and affordability

All those insured have free access to medications listed in the Reimbursement Codex as long as they are prescribed to them by a physician. Physicians can freely prescribe medications in the green section of the Codex, while for other medications in the Codex permission must be obtained from a second physician or the prescription must be documented in order for retrospective checks to take place (see section 2.8.4 *Regulation and governance of pharmaceuticals*). Insured people must pay a prescription fee which is adjusted annually in line with inflation and in 2012 was €5.15 per item (see Table 3.12). Medications prescribed from the Reimbursement Codex can be collected without payment of any additional fee. In order to alleviate the burden of prescription costs for private individuals, exceptions from prescription fees can be made on the basis of income level. There was also a prescription fee cap established in 2008. This becomes relevant when spending on prescriptions exceeds 2% of annual income (see sections 3.4.1 *Cost-sharing and direct payments* and 6.1.2 *Information systems and quality of provision*). Patients admitted for inpatient treatment are not required to pay any additional costs for prescriptions.

Medication consumption

Medication consumption is measured in packets. Figures in defined daily doses are not available, except for antibiotics in hospitals (GÖG, 2009). In 2008 227.56 million packets were given out, which is a rise of 22% on 2000. Medication consumption in 2008 was largely accounted for by the independently practising health-care providers, with 202.9 million packets (89%) (Pharmig, 2010). In 2009, 117.63 million prescriptions, with a total cost of €2.533 billion, were issued. In 2011, expenditure for prescription pharmaceuticals by social insurance funds (including the prescription fee) was €2.9 billion (see Table 3.7). This equates to expenditure of €21.5 per prescription (HVSV, various years). Since 2000, prescriptions have increased a lot more by cost (up 121%) than by quantity (up 24%), which can be attributed to expensive new medications, among other things. There are on average 14 prescriptions issued per insured person per year. In 2009, VAT on prescriptions was decreased from 20% to 10%. The reduction in VAT, combined with efforts to change physicians'

prescription habits toward prescribing generic drugs, led to a significant drop in the growth of medication expenditure in 2010 (see section 6.1.3 *Medication and medical devices*).

5.7 Rehabilitation

In contrast to acute care (see section 5.4), where emphasis is on cure and elimination of illnesses, medical rehabilitation follows a holistic model that defines its patients as an active part of society (bio-psychosocial model). The general goal of rehabilitation is to enable patients as far as possible to lead an independent life without outside help, to participate in professional life or to complete their education. The attempt is made to avoid or at least put off retirements and requests for care due to ill-health. For a patient to be eligible for medical rehabilitation, he must have the following:

- **need for rehabilitation** – which means that the existence of a non-temporary reduction in a person's capability, limiting normal activity, makes it necessary to receive supplementary measures (beyond curative care) in order to improve capabilities and to overcome functional restrictions;
- **suitability for rehabilitation** – which means that a patient must have the physical and psychological ability to participate in rehabilitation measures (motivation and ability to withstand the measures);
- **rehabilitation prognosis** – which means that it must be possible to achieve a rehabilitation goal within a specific time frame.

Medical rehabilitation measures are in principle only paid for by a social security institution if this has been applied for in advance. The application is made by the patients themselves. The GP or a specialist explains the medical need for rehabilitation and its goal. Rehabilitation services are paid for by either accident insurance insurers (in the case of a reported accident at work or work-related illness) (see section 3.6) by the pension fund responsible, or by the relevant health insurance (in the case of co-insured dependants of insured people or pensioners).

The goals and tasks of rehabilitation are defined differently in social security legislation, depending on the branch of social security responsible for covering its costs. While social health insurance requires comprehensive restoration to health, pension insurance requires the avoidance of early retirement due to impaired health (part of the compulsory benefits package of pension insurance)

or the avoidance of the need for long-term care (a non-compulsory benefit but covered as a health promotion service). Services provided by accident insurance are focused on restoration to health after workplace accidents and work-related illnesses. To achieve these goals the following measures are available:

- medical rehabilitation measures (for health, pension and accident insurance),
- measures to secure health, such as spas (for health insurance),
- measures to promote health (for pension insurance),
- professional and social measures (for pension and accident insurance).

In 2010, around one-third of all expenditure on rehabilitation, across all insurance providers, was spent on medical rehabilitation (see Table 3.7). For both rehabilitation and spas, all insurance funds require means-tested patient co-payments per day (see Table 3.12). Cost-sharing is also required for medical aids such as crutches, although exemptions exist (see section 3.4).

Context and developments of provision

The different rehabilitation measures are provided in two major types of settings: inpatient rehabilitation and ambulatory rehabilitation.

Inpatient rehabilitation provides accommodation and rehabilitation treatment in dedicated rehabilitation centres (special hospitals in the sense of Article 2, paragraph 1 Z 2 of the Federal Hospitals Act). Measures to promote health (for pension insurance) are not restricted at all in terms of the type and set-up of the facilities employed for treatment. On the contrary, measures to secure health (for health insurance) are restricted to stays in convalescent and recovery centres, or spa treatment centres.

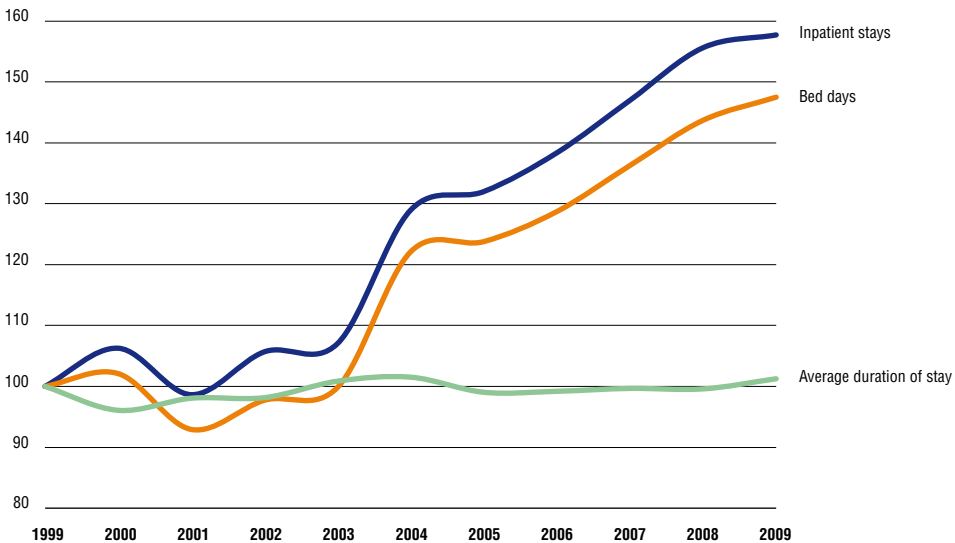
Ambulatory rehabilitation is provided to patients on the basis of medical requirements and their having the necessary mobility. In addition, home-based care must be guaranteed. Outpatient provision of services of a rehabilitative nature is largely provided in hospital outpatient clinics, free-standing outpatient clinics and independently practising physicians and therapists (see section 5.3). It is also offered by two facilities directly owned by social security.

Ambulatory rehabilitation capacity is still limited and is currently being scaled-up. A problem is that ambulatory rehabilitation is not explicitly regulated by social security legislation so far. It is largely dealt with by the sections on physician care (under health insurance) and health promotion (under pension insurance). Due to the hesitant expansion of ambulatory rehabilitation measures to date, services for medical rehabilitation are largely carried out in inpatient

facilities. In 2008, there were 56 rehabilitation centres in total, in which around 8000 beds were available. In parallel to the increasing demand for these facilities, the number of beds available has grown continually since 1999, when there were around 5000. Fig. 5.3 shows the dynamic growth in the number of inpatient stays and total number of bed days provided, which was fed by the construction of new facilities and the expansion of existing ones. The average length of stay has hardly changed from 1999 to 2009.

Fig. 5.3

Indicators of care provision in specialist inpatient rehabilitation centres, 1999–2009



Note: Indexed, 1999 = 100.
Source: BMGF (2010).

The growing demand for rehabilitation seems to be largely financed by health insurers, and the services are accessed by dependants of the insured person/pensioner, because the number of recorded workplace accidents and work-related illnesses, with some variations, noticeably reduced between 1990 and 2010 (Statistics Austria, 2011b). This development demonstrates the importance of rehabilitation as an integral part of provision for older population cohorts that aims to provide tertiary prevention.

5.8 Long-term care

Long-term care policy is rooted in the goals and values of the current social welfare model, where family responsibility for care of dependants comes before that of the state (principle of subsidiarity). As in other continental European states (Esping-Andersen, 1990; Biffl, 2007), the formal welfare sector is chiefly financed through income-related taxation and individual contributions (see section 3.6.2 *Financing of long-term care*). The Austrian model of long-term care is a mixed system, on the one hand, needs-oriented and, on the other, depending on the economic situation (availability of income and assets) of those requiring care. In case of need, two types of support systems are available:

- long-term care allowance according to need, assessed by specialist physicians and qualified care staff, which is provided on one of seven levels, depending on the severity of need (Table 5.4);
- social security benefit, measured in accordance with income and assets of the person requiring care, and until recently also of their wider family including children.

Austria reacted relatively quickly to the approaching demographic challenge and accompanying increases in need for care provision by passing the Federal Long-Term Care Act in 1993. Among other things, the law introduced the needs-oriented long-term care allowance to allow people in need of care to organize and direct their own care provision as required. Legislation stipulates that preferences of people in organizing their own care as required must be taken into account. This includes needs-based care and guaranteed provision, as well as quality assurance, professionalism, efficiency, choice and support from informal sources (BMASK, 2009). According to the principle of subsidiarity, the majority of long-term care beneficiaries are cared for “informally” by relatives who are able to carry out care work (see section 5.9). Those who need care and their relatives are, however, supported at all levels by the public sector. In accordance with the Care Fund Act, the federal authorities support the Länder in securing care provision, as well as establishing and expanding it with mobile, inpatient and semi-inpatient services, short-term care in inpatient facilities, case and care management, as well as alternative living arrangements.

Care need

According to the Austrian Health Survey 2006/2007 by Statistics Austria, 471 000 people (174 000 men and 297 000 women) have problems with basic activities in daily life such as eating, washing and getting dressed. One man in four and one woman in three aged over 75 has problems with at least one

activity in daily life. Men are mainly cared for by their wives or partners: while three-quarters of men over the age of 60 are looked after by their significant other, only one-third of women in this age group are cared for by theirs. For women it is more likely that their daughters, other relatives or the social services take on caring responsibilities.

Need-based long-term care allowance

The need-oriented long-term care allowance was originally introduced by the Federal Long-Term Care Act and the nine largely similar Regional Long-Term Care Acts. Subsequently, the Federal Long-Term Care Reform Act 2012 (see Table 6.1) unified the legal basis for responsibilities and combined them at the federal level. Patients are legally entitled to claim the allowance independently of their age (from birth), income level or the availability of assets as long as care is expected to be needed for at least six months. The allowance is paid 12 times a year to anyone of any age from birth on, at one of seven levels, ranging from €154 per month to €1656, depending on the need for care (see Table 5.4).

Table 5.4

Rates of long-term care allowance, from January 2011

	Allowance per month, in €	Average care need per month, in hours
Level 1	154.20	>60
Level 2	284.30	>85
Level 3	442.90	>120
Level 4	664.30	>160
Level 5	902.30	>180, where there is an exceptional need for care
Level 6	1 260.00	>180, when care measures are required that cannot be coordinated to happen at the same time and that must be carried out regularly during the day and night, or when continual presence of a member of care staff is necessary throughout the day and night
Level 7	1 655.80	>180, when no deliberate movement of limbs to perform a specific function is possible

Source: BMASK (2011b).

In 2010, a total of approximately 5% of the Austrian population (440 000) received the long-term care allowance (see Table 5.5). Compared to the year 2000 this is an increase of around 105 670 people (up 31.4%) (Statistics Austria, 2011b; BMASK, 2011c). Two-thirds (66.7%) of those receiving the allowance are women as they are a greater proportion of the population in the upper age groups. People receiving the federal long-term care allowance were significantly older than those receiving the regional equivalent, which can be explained by the fact that regional long-term care allowance is aimed at those who have no recourse to social security funded pensions, for example disabled people and children who require care (BMASK, 2011c).

The majority of recipients of long-term care allowances receive the lower levels of benefit: in 2010, levels 1–3 accounted for 71.2% of federal long-term care allowances and 71.0% of its regional equivalent. The rate of the allowance is updated irregularly. After its introduction in 1993, it was increased in 1994 (2.5%) and 1995 (2.8%), before being increased again only in 2005 (2.0%) and 2009 (between 4% and 6%, depending on the level).

Table 5.5

Number and level of care of long-term care allowance recipients, 2010

	Regional long-term care allowance	Federal long-term care allowance	Total				
			Total	Men	Women	Proportion of women, %	Proportion of total, %
Total	69 615	372 763	442 378	147 518	294 860	66.7	100.0
Level of benefit							
1	15 151	78 901	94 052	28 031	66 021	70.2	21.3
2	21 643	124 522	146 165	49 906	96 259	65.9	33.0
3	12 611	62 118	74 729	25 757	48 972	65.5	16.9
4	8 273	53 750	62 023	21 587	40 436	65.2	14.0
5	5 586	34 092	39 678	12 820	26 858	67.7	9.0
6	4 026	12 820	16 846	6 403	10 443	62.0	3.8
7	2 325	6 560	8 885	3 014	5 871	66.1	2.0
Age groups							
up to 20 years old	13 197	511	13 708	8 186	5 522	40.3	3.1
21 to 40 years old	12 922	6 753	19 675	11 043	8 632	43.9	4.4
41 to 60 years old	11 369	36 967	48 336	24 735	23 601	48.8	10.9
61 to 80 years old	16 353	132 084	148 437	56 025	92 412	62.3	33.6
81 years old and above	15 774	196 448	212 222	47 529	164 693	77.6	48.0
61 years old and above, %	46.1	88.1	81.5	70.2	87.2	–	–
Memorandum Item							
Recipients of long-term care allowance, % of population 65 and over			29.9				
Recipients of long-term care allowance, % of total population			5.3				

Source: BMASK (2011c).

Other recent changes were that the number of hours of care needed in order to have access to levels 1 and 2 was increased in 2011. Simultaneously, the allowance for level 6 was increased from €1242 per month to €1260 per month (see Table 5.4). Also, the assessment criteria for severely mentally impaired

patients, particularly those with dementia, and severely disabled children and young people, was improved. These conditions are now recognized as needing additional hours of care.

For 24-hour care at home, support was increased from the end of 2008 onwards, asset testing was abolished and the income limit was raised (see section 6.1.1 *Provision of services and employment in the health-care system*). The monthly income ceiling for those who apply for support for 24-hour care is €2500 net.

One important initiative, aiming to improve quality of care for patients at home is the **Quality Assurance in Home Care** initiative of the Federal Ministry of Labour, Social Affairs and Consumer Protection, which was established in 2001. The initiative is carried out by the Farmers' Social Insurance Institution. Up to the end of 2011, more than 100 000 individuals in need of care were visited in their homes by qualified care staff who provided specialist knowledge on care at home.

Structure of provision

Long-term care is provided in four different settings, although the boundaries are blurred: (1) informal care provided by families (mostly wives and daughters); (2) mobile services; (3) care homes; and (4) 24-hour home care (Hofmarcher, 2008c).

An estimated 59% of beneficiaries are mainly cared for by family members, according to current Federal Ministry of Labour, Social Affairs and Consumer Protection figures. These are mostly people who need regular, personalized care and support with largely household related tasks (care levels 1 and 2; see Table 5.4). Of those who are looked after at home, however, 10–15% may need a higher level of care. Relatives and mobile services look after 23% of recipients of long-term care benefit. In 2010 there were 11 500 full-time employees active in Austrian mobile care services, according to care provision statistics, which corresponds to around 16 carers per 1000 inhabitants. Since the end of 2006 the number of full-time employees in this field has increased by 17%.

Because of increasing labour force participation of women (see Table 4.6), an informal market for care at home has grown up alongside the informal care provided by families. While earlier estimates assumed that between 15 000 and 20 000 households, or 5% of long-term care allowance recipients in Austria, were in receipt of informal support from migrant workers coming in from neighbouring new EU member states (Marschitz, 2006), Federal Ministry of Labour, Social Affairs and Consumer Protection figures point to a level of

around 2%. The majority of these migrant workers seem to come from Slovakia, according to surveys (Rupp & Schmid, 2008) and mostly work in shifts with one other person per family, per month. With the adoption of the legislation on 24-hour care (Home Care Act), some informal home care was formalized, thereby creating a certain amount of legal security for carers and care recipients (Hofmarcher, 2007). From the introduction of the new law to the end of 2008, 13 400 independent 24-hour carers registered and some 300 registered as personal assistants (Leichsenring et al., 2009). In May 2012, according to the Austrian Chamber of Commerce there were almost 46 000 valid trading licences registered for the free practice of the profession of “personal carer”, of which around 35 500 were held by those actively practising (section 6.1.1 *Provision of services and employment in the health-care system*).

An estimated 16% of recipients of long-term care allowance live in care homes or residences for older people. This group accounts for around half of total expenditure on long-term care. Some 75% of people living in such care homes or residences receive social welfare benefits (Hofmarcher, Bittschi & Kraus, 2008) alongside their long-term care allowance, which is included in the total expenditure for care (see Table 3.4).

In 2010 there were around 75 038 places in long-term care homes in Austria, which corresponds to a ratio of 112 beds per 1000 inhabitants aged 75 and over. In most Länder there is no longer a division between accommodation places and care places, and there has been a reduction and conversion of accommodation places in exchange for an expansion in the number of care places. This points to the fact that there are more and more people being cared for at home, and they only move to institutional facilities if their increased need for care means that care at home is no longer possible. In addition, in every Land only individuals needing at least level 3 care are eligible to enter a care home or residence for older people. The equivalent of around 21 250 full-time employees work in such facilities (BMASK, 2009). In total, the Federal Ministry of Labour, Social Affairs and Consumer Protection estimates that around 75 000 employees are active in the field of care for the elderly and disabled (Statistics Austria, 2011b). This corresponds to a proportion of around 20% of the total number of employees in the health and social care sector of the economy (see Table 4.6).

Long-term care is also available to all disabled people irrespective of age. According to the results of the annual EU-wide EU Statistics on Income and Living Conditions, carried out in Austria by Statistics Austria, the number of people with a disability according to the narrow definition of the word (that their disability will affect them for longer than six months) is 633 000 people

in Austria; that is 9% of the population aged over 16. The proportion of women among these disabled people is 54%. Almost two-thirds of disabled women (but only 38% of disabled men) are aged 65 or over.

In 2002 there were some 13 550 places in daytime care facilities available for people with mental and multiple disabilities in Austria (17 places per 10 000 inhabitants). This is one-third more places than were available in the mid 1990s. For more recent years there are no nationwide statistics available. In six Länder in 2008 there were around 10 800 fully and partially cared-for accommodation places available; the number doubled between 2002 and 2008 in Burgenland, Upper Austria, Styria, Vorarlberg and Vienna.

5.9 Services for carers

In total, up to three-quarters of all older people who require care are cared for chiefly by family members. Of these family carers, 80% are women (Kraus & Riedel, 2010). Over 36% of informal carers care for a spouse or partner and 35% care for a parent (OECD, 2011c). A microcensus carried out in 2002–2003 found that 425 900 people aged 18 and over are informal carers and 464 800 are informally cared for by relatives (Leichsenring et al., 2009). Of informal carers, 70% believe that the burden of care is too high sometimes or even most of the time (Pochobradsky et al., 2005). The proportion of informal carers who also engage in paid work is between 30% and 40% and will probably increase further due to increased rates of employment among women (see Table 4.6) (Hoffman & Rodrigues, 2010).

According to estimates the economic value of informal care is between €2 billion and €3 billion per year, or around 3% of GDP (Schneider, 2008). The following measures to assist informal carers have been established in recent years:

Carers are entitled to reduced rates of **personal liability/supplementary insurance** (pension and social insurance), with the rate determined by the long-term care allowance category of the person being cared for. Since 2009 pension insurance contributions for informal full-time carers for individuals rated at care level 3 and above have been paid by the state (Österle & Bauer, 2011).

If the main carer is ill or goes on holiday, **financial support** is provided in accordance with Article 21a of the Federal Long-Term Care Act (Kraus et al., 2010). Such allowances can be drawn for a maximum of 28 days per calendar year and total a maximum of €1200–2200 per year. A prerequisite for eligibility

is that the person being cared for is rated at care level 3 or above. For minors or individuals with dementia this requirement is reduced to care level 1. Up to the end of 2011 a total of 34 653 of these allowances were paid out (Österle & Bauer, 2011), for a total of around €40 million.

Short-term inpatient care is offered to informal carers throughout Austria. Some Länder have special places for this type of short-term care, and others use unoccupied long-term care beds for the purpose. Financial support for short-term care (respite care) is available in the form of an additional allowance. In Austria there is a legal entitlement to an annual four weeks of holiday from caring (OECD, 2011c).

Family sickness leave makes it possible for carers to take time off work, or to change their place of work or working hours, in order to look after unwell children or dying relatives (Hofmarcher, 2003b). Time off to spend time with dying relatives can be taken for a maximum of three months. If needed, an extension of up to six months is possible in each case. Taking the time to care for severely ill children is possible for up to five months in the first instance, though an extension up to a maximum of nine months is permitted. The latest reforms aim to improve the payment system and the possibilities for payment in advance (Kraus & Riedel, 2010).

The **care vouchers e-pilot project** (quality assurance in care at home) began in October 2004. Those entitled to receive the long-term care allowance can obtain information, advice and practical tips on the care system and different possibilities from a home visit by a specialist care professional (Leichsenring et al., 2009). In the first few years 63% of those who received this service reviewed the professional visit as “very good” and 35% said it was “good”. Around another 18 225 home visits were carried out in 2009.

5.10 Hospice and palliative care

The target group for hospice and palliative care are those who are terminally ill and dying, in an advanced stage of their illness and suffering severe pain, psychological difficulties and/or other symptoms that affect quality of life. Relatives are also involved in this care model. Basic medical and care provision for this group is carried out in Austria in existing facilities provided by the health and social care systems. On top of that there are also specialist, graded care measures which are designed for various types of need and accommodation (Baumgartner, 2006; Fig. 5.4).

Fig. 5.4

Elements of graded hospice and palliative care

	Hospice and palliative care			
	Basic provision	Specialist hospice and palliative care		
	Traditional service providers	Supplementary measures		Care facilities
Acute sector	Hospitals	Hospice teams	Palliative consultancy services	Palliative departments in hospitals
Long-term sector	Care homes and residences for the elderly		Mobile palliative teams	Inpatient hospices
Family/at home	Independent physicians, mobile services, therapists, etc.			Daycare hospices

Sources: Hospices Austria (2009); BMG & GÖG (2010).

According to estimates, 10–20% of all patients dying in hospital (77 381 in 2009) have a need for supplementary palliative care, which should either be provided by palliative facilities within the hospital or multi-professional consultation teams, or by additional volunteer hospice teams.

Outside of the clinical field, calculations for 2010 cite a need for one multi-professional mobile palliative care team per 140 000 inhabitants in order to ensure sufficient provision in Austria (ÖBIG, 2004). In fact, by 2010, 36 mobile palliative teams had been established across Austria. These teams looked after a total of 7757 clients in their homes or at long-term care facilities in 2010 (Pelttari, Pissarek & Zottele, 2011).

In total, the model of graded hospice and palliative care in the Austrian system of provision is not adjusted to the level of need (Kratschmar & Teuschl, 2008). Hospice and palliative care forms part of integrated structural health-care planning (see section 2.5), but also interfaces with social provision that falls outside the remit of the Federal Ministry of Health (BMG & GÖG, 2010). Requirements on infrastructure and the services available, as well as regulations on financing, have to date only been introduced for in-hospital palliative care facilities. Both the current programme of government and the agreement in accordance with Article 15a of the Federal Constitutional Law between the federal government and the Länder contain requirements for the development of hospice and palliative care. A fixed regulation framework for financing the whole field of provision is still lacking, however.

According to data collected by Hospices Austria, there was a total of 247 hospice and palliative care facilities in Austria at the end of 2009: 27 hospital palliative departments, 8 inpatient hospices, 3 day-care hospices, 34 palliative consultant services, 35 mobile palliative teams and 140 hospice teams (Hospices Austria, 2009).

Volunteers work in palliative care in Austria, primarily in hospice teams but also in mobile palliative teams. Volunteer helpers are trained for the task by taking a qualifying course in hospice care recognized by Hospices Austria (<http://www.hospiz.at/>) (70 hours theory, 40 hours practical) and in addition have a regular meeting for reflection and supervision (every 4–6 weeks) and ongoing further training sessions (a minimum of 8 hours per year). According to the latest criteria for structural quality (ÖBIG, 2004), hospice teams of 10–12 people or more should have a coordinator, working at minimum the equivalent of half a full-time post.

5.11 Mental health-care

Psychiatric and psychosocial care provision is marked by a mixed system of various providers in the health-care and social sectors. The variety of provision across different Länder is large. Psychiatric and psychosocial care are provided by independently practising psychiatrists, psychotherapists and clinical and health psychologists. Access to specialist services, particularly for children and young people, is insufficient (GÖG & ÖBIG, 2010b; see also Chapter 7).

Psychotherapy, as defined in the Psychotherapy Act, is practised usually by those (mostly non-physicians) with a higher nursing or medical-technical education who have completed additional psychotherapy training and who are registered in the Federal Ministry of Health register of psychotherapists (see section 4.2.3 *Training of health-care staff*). Social health insurers provide a fixed amount (€21.80) per one-hour session as a subsidy to patients requiring psychotherapy. The difference between the subsidy and the costs of the session has to be covered by patients out of pocket (see section 3.4.1 *Cost-sharing and direct payments*). To be eligible for the subsidy, patients must have a psychiatric illness, and written results of the mandatory physician examination must be presented to the insurer before the second treatment session. The subsidy must then be approved by the insurer before the fifth session, and is awarded for a specific number of sessions within a set period.

Distinct from this are services rendered by physicians, which can be billed to health insurance funds as “psychotherapeutic services”. All insurance funds finance these services provided by physicians, usually covering 80% of the costs, but there are differences concerning the qualification requirements for physicians, depending on the insurers. Insurers may require physicians to be psychiatrists, having obtained a diploma in psychotherapy, or to have completed an education according to the Psychotherapy Act.

Complex provision for severely and chronically mentally ill patients is usually available in inpatient settings and, increasingly, also in ambulatory settings, with care provided by multidisciplinary teams consisting of specialists from multiple areas, for example psychiatry, nursing, psychotherapy, psychology and social work. At the moment, demand for multidisciplinary teams heavily outstrips supply (GÖG & ÖBIG, 2008a). There is also specialist provision for individuals with addictive disorders, which offers a graded selection of treatment measures, ranging from early intervention to damage limitation, and from inpatient treatment to social reintegration (cf. <http://suchthilfekompass.oebig.at>). It is particularly difficult to estimate the level of ambulatory provision, due to the poor quality of data available. In addition, an increasing number of people with dementia-related illnesses (who therefore have access to long-term care benefit) are informally cared for by family members (see section 5.8). As a result, services for family carers are also being expanded (see section 5.9).

Measures to support the de-institutionalization of psychiatric care (moving provision away from inpatient care towards care provided in the community) have now been implemented across the majority of regions, or are on the agenda of Länder structural health plans (see section 2.5). In every region, psychosocial services, daily planning and supervised living arrangements are now available (see Table 5.6). However, it is difficult to estimate the number of people using ambulatory services due to the poor quality of data available.

Table 5.6
Outpatient psychiatric care, 2007

Facilities	Number	Number per 100 000
Psychosocial services	190	2.29
Emergency and crisis services	12	0.14
Assisted day planning	139	1.67
Supervised living arrangements	256	3.08
Clubs	148	1.78

Source: GÖG & ÖBIG (2008b).

Since the start of de-institutionalization and the accompanying reduction in beds in large psychiatric institutions in the 1970s, a generally stable level of inpatient provision has been reached. In 2010 there were almost 4800 beds available for psychiatric care (see Table 5.7). The majority of these were in psychiatric hospitals (0.24 beds per 1000 inhabitants) but almost one-third of psychiatric beds are now to be found in psychiatric departments that are integrated into general hospitals. For children and young people there were 0.05 beds available per 1000 inhabitants in 2010. The total number of hospital stays as a result of psychiatric primary diagnoses has remained largely stable in recent years at around 1370 per 100 000 inhabitants.

Table 5.7

Acute inpatient psychiatric provision, 2010

Facilities	Number of facilities	Number of beds	Beds per 1 000
Psychiatric hospitals	8	2 017	0.24
Psychiatric departments of general hospitals ^a	23	1 418	0.17
Specialist dependency care ^b	13	962	0.12
Child and youth psychiatric departments	12	394	0.05
Total	56	4 791	0.58

Notes: ^a Of which three were university clinics providing a total of 286 beds; including the psychiatric department of the Barmherzige Brüder Hospital Graz-Eggenberg (30 beds) and the private Graz Kastanienhof Clinic (10 beds).

^b In the Austrian Structural Plan for Health, beds for psychiatric departments and addiction treatment are included together, as the definition for addiction-related illnesses is not yet fixed.

Source: GÖG – Psychiatric Planning 2010 (unpublished).

For psychosomatic medicine, a total of 379 beds was available for adults (0.047 beds per 1000 inhabitants) and 96 for children and young people (0.012 per 1000 inhabitants). Half of the beds for adults are concentrated in two psychosomatic clinics (GÖG & ÖBIG, 2008a).

The interface between the inpatient and ambulatory sectors and with the social services sector need further development. In particular, need and requirement-oriented provision for vulnerable groups (e.g. children and young people, or older people) is necessary (see Chapter 7).

5.12 Dental care

Dental treatment is mainly provided as a benefit in kind by social security, which spent 6.1% of total expenditures on dental treatments in 2011 (see Table 3.7). Implants are only paid for by social security in exceptional cases.

However, since 1998, dental implants have been offered by dental clinics run by health insurers. At these clinics, the costs are usually lower than for the same services at an independently practising dentist. The majority of free-standing outpatient clinics owned by social security institutions are now dental clinics (see section 5.3).

Patients frequently travel to neighbouring countries for dental care. There is relatively inexpensive dental care offered in Hungary, which competes with services available in Austrian facilities. As a result, in recent years there has been an increase in the frequency of applications for reimbursement of services provided in other countries (see section 2.9.6 *Patients and cross-border health-care*).

In 2011, some 11% (4683) of all practising medical professionals were dentists, of whom 3500 had their own practices (see Table 4.8) (Bachner et al., 2012). Almost 2600 dentists (73%) were contracted to one or more social security institutions. Dentists account for around a quarter of all those working as contracted physicians (Bachner et al., 2012). In 2010 there was one contracted dentist per 3100 inhabitants, although there was considerable variation across Länder. Density of dentists is highest in Vienna, with 4.3 contracted dentists per 10 000 inhabitants, and lowest in Burgenland, Carinthia and Upper Austria, with around 2.6 per 10 000. Across all health insurers, the e-card system registered 1.3 dentist visits per insured person in 2011 (see Table 5.2).

The Länder are fundamentally responsible for prevention and health promotion measures in dental medicine. Almost all have their own health promotion programmes that are active in nurseries and primary schools. Health education programmes cover topics such as correct brushing of teeth, eating to protect teeth, etc. Some programmes also include dental screening. Prophylactic measures to prevent tooth decay are now available for nursery and primary school children across the country. In 2009 the Supreme Health Board (see section 2.3) developed recommendations on fluoride supplements and interdental cleaning, as well as standards for group prophylactics (ÖBIG, 2010).

5.13 Complementary and alternative medicine

In principle, complementary and alternative medicine (CAM) is only permitted to be practised by qualified physicians (see section 4.2.3 *Training of health-care staff*) although there have been several attempts to open up homeopathic practice and other forms of CAM to non-physicians (Peinbauer, 2011).

Physicians are implicitly permitted to use CAM if they consider it appropriate and the patient's consent is obtained (WHO, 2001). Under certain circumstances, complementary treatment methods may also be applied by other health-care professions (e.g. nurses).

According to the Federation of Holistic Medicine, around 80% of Austrians use at least one method of CAM per year. Highly educated middle-aged women with a high income level are especially likely to use these methods. The most frequent methods used are phytotherapy, homeopathy, chiropractor, massage, relaxation and vitamin therapies. The reasons for using CAM are generally pain, sleep disorders, depression and gastrointestinal problems.

The number of physicians offering CAM is increasing. While in 2000, 3543 physicians in Austria (10% of all practising physicians) were certified by the Chamber of Physicians as offering one or more CAM treatments, in 2007 the figure was 5873 (16% of all practising physicians). In German-speaking countries a total of 12% of all physicians have supplementary qualifications in CAM (GAMED, 2009). 2999 physicians offered acupuncture, 1874 offered chiropractic treatment, 593 homeopathy and 252 neural therapy (Federation of Holistic Medicine, 2011). Practice of CAM is regulated by the Physicians Act 1998 and in the Medications Act. According to the law, products or aids used in complementary medicine do not qualify as medication, except for homeopathic medicines (see section 2.8.4).

Homeopathy is widely established in Austria. Completion of a three-year course in homeopathy run by the Austrian Chamber of Physicians entitles a physician to the "Complementary Medicine: Homeopathy" diploma. Homeopathic consultations are offered in five hospitals in Vienna and one in Klagenfurt. Four homeopathic associations also offer training programmes for medical students, physicians, vets and pharmacists: the Austrian Society for Homeopathic Medicine, Homeopathy for Malignant Diseases, Student Initiative for Homeopathy and Austrian Society for Veterinary Homeopathy (LMHI, 2009).

Social security does not usually cover complementary or alternative treatments. Exceptions are made however for homeopathy and for pain alleviation measures. Thus massage, balneotherapy and electrotherapy can sometimes be provided by social security. Acupuncture is valid for some symptoms as a scientifically recognized treatment method and is recognized by the Supreme Health Board (see section 2.3). When these symptoms are present, costs of acupuncture treatment are covered by the social security institutions. The Upper Austrian Regional Health Insurance Fund partially

funds acupuncture on the basis of a contractual agreement with service providers. In Upper Austria there is also a negative list detailing all therapies not recognized as alternative medical therapies, such as Bach flower remedies and reiki. Upper Austria is an innovator in this field and uses its ability to offer non-compulsory supplementary provision for insured individuals (see section 3.3). In addition, some private health insurers increasingly cover CAM methods, as there is a high demand (IVAA, 2010). The International Academy for Holistic Medicine is currently examining the effects of holistic methods on therapy costs in the health-care system, in partnership with the Viennese Regional Health Insurance Fund. The results of this study may point the way in future for financing possibilities for holistic medicine in Austria.

5.14 Transplant system

Provision of transplant services for the Austrian population is at a strong position in the middle of the field when compared internationally (GÖG & ÖBIG, 2010a). In Austria there is an opt-out system of organ donation which is helpful for the total availability of organs. This system means that it is legal to remove organs from a potential donor if this person did not opt out of organ donation while alive. In practice, however, relatives are usually consulted before any necessary removal of organs.

In 1991 a coordination bureau for the transplant system was established with the aim of encouraging both organ and stem cell donation, and taking responsibility for data transfer to the “Eurotransplant International Foundation”, of which Austria is a member, as well as documenting Austrian transplant procedures, carrying out analysis and planning, administering the register of opt-outs for organ and tissue donation, and ensuring good public relations and transparency in the field.

The offices of the coordination bureau are managed by GÖG (see section 2.3), including project management and the transplant committee. This interdisciplinary body is formed of experts and representatives of interest groups from within the transplant and health-care systems. The transplant committee is fundamentally responsible for the final draft of the annual report of transplants, which is published and distributed to health-care system decision-makers and Austrian hospitals.

In 2009 and 2011 local transplant representatives were introduced in selected hospitals in order to encourage organ donation. As this measure was successful, 25 local transplant representatives are due to be introduced across Austria by the end of 2013, focusing on hospitals where organ donors have been registered in the past 10 years, or those where a high potential for donation is estimated to exist.

6. Principal health reforms

Health reforms between 2005 and 2012 can be ordered into the following broad thematic areas:

(1) *Improvement in coordination and governance of the health-care system.* Since the health-care reform of 2005 and the establishment of the Federal Health Agency and the Federal Health Commission, all main stakeholders in the health-care system are included in the development of the main planning instrument, the Austrian Structural Plan for Health. Consequently, national planning and governance now extends to the whole provision structure (inpatient, ambulatory and rehabilitation). At the same time, national planning has been reduced to defining only the care provision framework, while detailed planning is decentralized and carried out by regional health funds and health platforms. As the newly introduced health platforms bring together Länder, municipalities and social security institutions for joint regional planning, coordination between inpatient and ambulatory provision was thought to be improved. In addition, the introduction of “reform pool” funding at regional level was intended to provide financial incentives for shifting care provision from the inpatient towards the ambulatory sector. However, the implementation of joint planning is difficult as responsibilities remain fragmented in the health-care system. Decision rules of regional health platforms give veto power to Länder and social security for their areas of responsibility, and thus prevent reorganization of care across sectors.

(2) *Improving financial viability of the health insurance system and securing financing for long-term care.* In order to reduce the level of indebtedness of the health insurance institutions, the federal authorities created a Structural Health Fund for Health Insurers in 2010 that was funded until 2014 with a total of €260 million of general tax revenue. Via this fund the federal government has obtained a strong lever on health insurers as it can link the disbursement of funds to the achievement of agreed targets, particularly concerning financial

consolidation. For the financing of long-term care, the Nationalrat decided in 2011 to establish a long-term care fund, which is intended to cover the increases in costs experienced by Länder and local authorities from 2011 to 2014. In total €685 million will be paid into the fund, two-thirds of which comes from the federal level and one-third from the Länder and local authorities.

(3) *Expansion of health insurance coverage and limitation of financial burden.* The introduction of the needs-based minimum income in September 2010 included the recipients of this benefit (previously social benefit) in the general statutory health system. Recipients of the needs-based minimum income receive a social security chip card (e-card) and obtain access to all statutory benefits. In addition, the 2008 introduction of a cap on prescription fees for all insured individuals has limited the sometimes considerable financial burden caused by the prescription fee. Individuals for whom expenditure on prescription fees reaches more than 2% of their annual net income are exempt from paying the fee for the rest of the calendar year.

(4) *Unification of responsibilities for medications and medical devices, opening up of the pharmaceutical market, slowing of growth in costs.* In January 2006 AGES PharmMed was founded as the national licensing authority for medications in Austria. Subsequently, PharmMed was integrated into the Federal Office for Safety in Health Care and renamed the Medicines and Medical Devices Agency. Since 2006 there have also been less stringent restrictions in force for licensing of pharmacies, in an attempt to encourage more competition. Pharmacies can now also open in areas where physicians run their own in-house pharmacies. To slow the increase in medication costs, the first Framework Contract for pharmaceuticals was agreed in 2008. The 2011 follow-up Contract stipulates that the pharmaceutical industry and wholesalers have to refund some €82 million of their profits earned during the period until 2015 to the Federation of Social Security Institutions. However, in exchange, the Federation has refrained from introducing measures that would allow more price competition or that might lead to an increased use of generic drugs. In addition, an agreement with pharmacies was recently renewed, specifying that pharmacies will have to pay €6 million annually to the Federation of Social Security Institutions.

(5) Other principal reforms have affected the new scheme of group practices, promotion of care at home, the planned introduction of ELGAs, which have been used only in pilot projects until now, the expansion of quality assurance in hospitals, linking the amount of taxation subsidy to hospitals to levels of

taxation income, expansion of prevention through screening measures, a National Nutrition Action Plan, a Children's Health Strategy and framework health goals.

6.1 Analysis of reforms since 2005

Table 6.1 summarizes milestones in policy development in the field of health-care and long-term care since 2005. Details of reforms up to 2005 can be found in the HiT Austria report 2006 (Hofmarcher & Rack, 2006), and are dealt with in summary in section 2.2. The focus of this section is on the analysis of federal-level initiatives and reforms introduced between 2005 and the first half of 2012. Where appropriate, developments in the Länder are included. Almost all significant reforms are implemented at the level of the Länder or the social security institutions (see section 2.4). Therefore, the assessment of the degree of implementation in Table 6.1 includes these levels. Table 6.1 also points to individual sections where further details are provided on reforms.

Reform initiatives in the Austrian health-care system since 2005 can be classified into the following areas:

- provision of services and employment in the health-care system (6.1.1)
- information systems and quality of care (6.1.2)
- medication and medical devices (6.1.3)
- financing of the health-care system and payment of service providers (6.1.4)
- governance of the health-care system (6.1.5).

Where possible the description of future developments in section 6.2 follows the same structure and evaluates current debates in the light of the latest programme of government (Federal Chancellery, 2008) and of the Austrian Reform Programme 2011 for Europea 202011 (Federal Chancellery, 2011).

With some exceptions, reforms or initiatives aiming to improve the population's health or to secure or expand access to provision, are dealt with in Chapter 7.

Table 6.1
Main reforms and policy initiatives since 2005

Political Background	Milestones and debates	Instruments and institutions	Degree of implementation (*-**** completely implemented, nationwide)	Details in chapters
ÖVP-FPÖ or -BZÖ coalition	<p>Strengthening of decision-making structures through firm establishment of collective responsibility of local bodies and social security institutions</p> <p>Efforts to better coordinate development of care at regional level through stakeholder cooperation</p> <p>Strengthen governance of provision via changing to performance planning and planning of every sector of provision (including interfaces with the long-term care sector)</p> <p>Expansion of e-Health: introduction of the electronic health-care entitlement card (e-card)</p> <p>Start of the implementation of a nationwide, cross-sector quality assurance system</p> <p>Improvement of preventive measures with help of "new screenings", telephone quitline</p>	<p>Federal Health Agency and agreement in accordance with Article 15a of the B-VG^a</p> <p>Platforms/"reform pool" funding</p> <p>Austrian Structural Plan for Health (OSG), regional health plans (RSG)</p> <p>Health Care Telematics Act, founding of the ELGA working group (ARGE ELGA)</p> <p>Health Care Quality Act</p>	<p>****</p> <p>** , varied implementation</p> <p>*** , varied implementation of RSGs</p> <p>****</p> <p>**</p>	<p>2.3, 2.4, 3.3.3</p> <p>2.6, 3.3.3</p> <p>2.5, 2.8.2</p> <p>4.1.4</p> <p>2.2, 2.8.2</p> <p>3.3.3, 5.1</p>
2006	<p>Increase in transparency by applying the international standard OECD SHA to national health expenditure data</p> <p>Strengthening of patient rights with the ability to stop life-extending measures and medical devices</p>	<p>Statistics Austria commissioned by BMG</p> <p>Act on Advance Directives</p> <p>Medicines and Medical Devices Agency and Federal Office for Safety in the Health Care System</p>	<p>****</p> <p>****</p> <p>****</p>	<p>2.7.1</p> <p>2.9.2</p> <p>2.3, 2.8.4</p>
SFPÖ-ÖVP coalition	<p>Structured Treatment Programme: "Active Therapy Diabetes" developed from a reform pool project</p> <p>Expansion of long-term care at home via legalization of the working status of migrants providing 24-hour care of patients in their homes</p>	<p>HVSV, health insurers, BMG: Federal Quality Guidelines for Disease Management Programme Diabetes Mellitus Type 2 (2009)</p> <p>Home Care Act</p>	<p>**</p> <p>****</p>	<p>5.2</p> <p>5.8</p>

Political Background	Milestones and debates	Instruments and institutions	Degree of implementation (*... completely implemented, nationwide)	Details in chapters
SPÖ-ÖVP coalition	<ul style="list-style-type: none"> 2011–2012: Securing finance for long-term care, particularly care homes Simplification of administration for award of long-term care allowance 	<ul style="list-style-type: none"> 2011–2014: care funds, Care Funds Act 2012: Long-Term Care Allowance Reform Act 	****, care funds expire in 2014	3.6, 6.1
	<ul style="list-style-type: none"> Establishment of an annual discount from the pharmaceutical industry to the HVSV for medications paid for by health insurers (€82 million, gross) Earmarking a part of the discount (€6.7 million or 8%) for children's health and prevention 	<ul style="list-style-type: none"> Agreement on changes to the "Framework Pharmaceutical Contract" of 2008 as part of its extension until the end of 2015 	****, valid from July 2011 to December 2015	2.8.4, 5.6
	<ul style="list-style-type: none"> Improvement in transparency through binding regulations on waiting lists for planned operations More flexibility in organizational forms and consolidation of inpatient services 	<ul style="list-style-type: none"> Amendments to the Federal Hospitals Act (KAKUG) OSG 2010 	---	3.4.2, 2.5
	Measures to increase patient safety: federal quality guidelines on integrated care for pre-operative diagnostics for elective surgery (BOLL PRAOP)	Health Care Quality Act	****	2.8.2, 6.2
	Framework health goals	Federal Health Commission	---	6.2
	Consolidation of activities related to rare diseases for better coordination with relevant EU-level platforms	Gesundheit Österreich GmbH, commissioned by BMG	***, National Action Plan end of 2013	--

Notes:

- ^a Agreement in accordance with Article 15a of the Federal Constitutional Law on organization and finance of the health-care system, valid 2008–2013.
^b Federal legislation to write-off outstanding debts of regional health insurers to the federal government, valid 2010–2012.
^c Agreement in accordance with Article 15a of the Federal Constitutional Law on nationwide need-based minimum income.
^d Federal legislation on improving public ambulatory health-care provision.

6.1.1 Provision of services and employment in the health-care system

Significant steps in the field of service provision and innovative approaches to improving care were made through the health reform of 2005 and through the Federal Act to Strengthen Public Ambulatory Health Care Provision (new regulations on group practices), which came into effect in 2010. The 2010 reform was preceded by debates in the context of the reform initiatives of 2008 with plans for reforming the legislation concerning contracting partners. However, the initiative was not carried out due to wide-ranging resistance from the chambers of physicians, among other factors (Box 6.1).

Box 6.1

Contents and debates of the health reform 2008

In a context of growing indebtedness of the regional health insurance institutions and as a result of general disappointment with the weak impact of reforms since 1997 on organization and cost reduction, significant legislative initiatives were introduced in spring 2008 by the centre-left coalition of SPÖ and ÖVP, in office since 2007. While reform attempts by the centre-right coalition – in office between 2000 and 2007 – met substantial resistance from social partners and the unions in particular (Hofmarcher, 2006), the grand coalition of the SPÖ and ÖVP brought the social partners back to take an active part in the debate. The result was the production of a paper which focused on the goal of securing the financial sustainability of the health-care system at the level of the health insurance institutions (Hofmarcher, 2008b).

Alongside securing the income of health insurers, the suggested measures were intended to increase flexibility in contract negotiations and to strengthen the role of health insurers as purchasers of generalist and specialist physicians' services, for example by allowing them to terminate contracts if quality assurance requirements were not met or to conclude selective contracts with individuals, in the case of failing to agree on a collective contract (see section 2.8.2 *Regulation and governance of service providers*). Regional health insurers were intended to have more autonomy in awarding contracts with service providers, but only within a contract framework that was to be defined by the Federation of Social Security Institutions. The governance function of the Federation of Social Security Institutions was to be strengthened by transforming it into a holding company with the right to enforce necessary measures at the level of the social security institutions. In addition, far-reaching suggestions were introduced to renew regulations on the dispensation of medication by pharmacies (“*aut idem* substitution”). Hospital provision remained largely untouched by the reform agenda, which reflects the fragmented responsibilities in the health-care system (see sections 1.3, 2.2 and 2.4).

The proposals reflected a new direction in health policy as the focus of reforms at least since 2000 had been on giving Länder the responsibility for improving coordination and ensuring cost control (key word: health platforms). In contrast to this, the reform suggestions brought forward in 2008 aimed to strengthen the power of health insurance institutions as regional purchasers of services.

Box 6.1 – continued**Contents and debates of the health reform 2008**

The reform ultimately failed, on the one hand, because of wide-ranging resistance by the chambers of physicians to more flexibility in contract legislation and to *aut idem* substitution of active ingredients, and, on the other hand, because the regional health insurance institutions rejected measures to strengthen the Federation of Social Security Institutions. While these reform debates reflect a typical tension in Austria between central influence and decentralized autonomy, the failure of this reform in broader context mirrors the declining significance of the social partner model since 1945, which was largely a product of a culture of cooperation and consensus. The debates on health reforms always demonstrate that numerous stakeholders attempt to play a leading role in policy development. This is evident both in conflicts between various jurisdictions and alongside ideological conflicts between “labour” and “capital”.

Improved cooperation between ambulatory and inpatient care is developing tentatively with the help of reform pool projects

Through the implementation of health platforms in 2005, the conditions were created for the first time to encourage cooperation between service providers with the help of reform pool project funding in the field of inpatient and ambulatory provision (see sections 2.2 and 2.6). Reform pools contain 1 or 2% of all public spending in a given year and should ensure that both, “Länder” and health insurers can benefit from cost savings resulting from changing delivery patterns. Regional health platforms can provide funding from reform pools for three different kinds of projects: (1) projects that better coordinate care for chronic patients; (2) projects that shift service provision to the ambulatory care sector; and (3) pilot projects that attempt the introduction of cross-sectoral financing models. However, the implementation had no federal prerequisites in terms of balancing capacity, reducing inpatient capacity and increasing ambulatory care capacity to overcome underprovision in rural areas. In addition, there was a lack of nationally unified standards for project funding, complicating comparisons of projects’ results across Länder.

Another problem was a lack of suitable applications for project funding. In 2009 only 16% of the funds allocated for projects was used (Czypionka & Röhrling, 2009; Czypionka et al., 2009). Furthermore, in order to transfer projects to regular financing, additional resources are often required. Incentives and appropriate legislation for this are currently lacking (Hofmarcher & Röhrling, 2006b; Hofmarcher et al., 2007b). However numerous projects aim to improve care provision for the chronically ill, showing the innovative strength of reform pool funded projects. The most developed project of this nature is

a disease management programme for diabetes (“Active Therapy Diabetes”) which was originally developed in Styria and which has become the model for a national disease management programme (see section 5.2).

Reform pool funded projects have innovative potential

The structured treatment programme “Active Therapy Diabetes” (<http://diabetes.therapie-aktiv.at>) started in 2007 and is aimed at sustainably improving the states of health and quality of life of diabetic patients. The focus is on prevention and health promotion, high quality of care including monitoring of cardiovascular risk, and active participation by patients. The programme expects participating physicians to be trained and to collaborate with patients on producing mutually agreed targets for improvement regarding certain parameters (see section 5.2). Based on the “Active Therapy Diabetes” programme, the Federal Minister for Health recommended adoption of federal guidelines on a disease management programme for diabetes mellitus type 2 (see section 2.8.2 *Regulation and governance of service providers*).

“Active Therapy Diabetes” is currently in place in Upper Austria, in Lower Austria, in Vienna, in Salzburg, in Vorarlberg and in Styria. At the end of October 2011, some 27 000 diabetes sufferers (7% of all recorded diabetes patients) were participating in the programme. Nine hundred physicians or 8% of all contracted physicians (see section 4.2) take part in the programme. Roll-out of the programme across federal states remains diverse (OECD, 2009a). The Federation of Social Security Institutions is planning to have “Active Therapy Diabetes” implemented nationwide by the end of 2015. The target is to care for two-thirds of all diabetics using medication via the programme (HVSV, 2011a).

The introduction of “Active Therapy Diabetes” was accompanied by evaluation projects in most Länder. In Salzburg for example, a randomized study accompanied the roll-out in which 98 physicians (48 in the programme and 50 in the control group) and 1494 patients (654 in the programme and 840 in the control group) participated. The study observed reductions in blood pressure and increased participation in education programmes (Sönnichsen et al., 2010). Statistically significant improvements were also found in adherence to guidelines concerning medication use, and regular check-ups (foot, eye and HbA1C examinations). There were also clear improvements seen in areas such as weight loss and cholesterol levels. The reductions in blood sugar and blood pressure, however, were not statistically significant (Sönnichsen et al., 2010).

While in Lower Austria the number of hospital admissions for programme participants was reduced, there are to date no reliable results on the programme's effects on costs (Ruh et al., 2009). Study results from Germany indicate cost reductions in the inpatient sector, although provision in structured treatment programmes generally was associated with higher costs in provision outside hospital (OECD, 2009a).

Important steps are being made to encourage care at home

While the disease management programme “Active Therapy Diabetes” was established relatively unobserved by the public, between 2006 and 2007 the debates surrounding long-term care, particularly in connection with an expansion in services for **24-hour care at home**, were heated. Since the end of the 1990s, a black market had developed as the fourth pillar of care provision at home (see sections 5.8 and 5.9). In the first place, care was largely provided by migrants who commuted between Austria and neighbouring countries at agreed time intervals and did not have work permits (Bachinger, 2009). Work permits were necessary because in Austria (as in Germany) the EU Directive on free movement of labour was only implemented in May 2011. The working status of migrants providing 24-hour in-home care, was legalized in 2007. In addition, incentives were introduced to households that employed 24-hour help at home.

Individuals needing care at levels 3 to 7 (see Table 5.7) are now legally entitled to financial support with 24-hour care. Individuals with particular illnesses, such as dementia, can obtain this support, even if they only require care at levels 1 or 2. At the moment everyone who earns up to €2500 per month (not including the long-term care allowance) can benefit from this support. If someone fulfils this criterion, he/she can receive a maximum of between €550 and €1100 per month, depending on whether the carer is employed (€1100) or a freelance worker (€550). Funding for this is made available by the federal and regional authorities from general taxation. By mid 2010, €19.6 million had been spent on supporting 24-hour care (BMASK, 2010), which was a proportion of 0.5% of total long-term care spending (2010) (see Table 3.4).

According to estimates, 15 000 households were attended by 24-hour carers in 2007. On the basis of a 14-day shift pattern, it is assumed that around 30 000 people, largely from Slovakia, offer this provision (Prochazkova & Schmid, 2009). By the end of June 2010, a total of 10 969 applications for financial support to help with 24-hour care had been submitted. This care was done almost entirely (97%) by freelance carers and 6058 individuals received this kind of financial support (BMASK, 2010). This corresponds to a proportion of 1.4% of all recipients of long-term care allowances, or 3% of those receiving

benefit levels 3 to 7 (see Table 5.5). Thus, financial support for 24-hour care is only taken up by around one-third of the estimated 15 000 households that receive 24-hour care. The main reason for not taking up the support may be due to the social situation of the carers, who often receive social benefits in their home countries (unemployment benefits or early retirement pension) and fear the loss of these benefits if the countries share this information (Prochazkova & Schmid, 2009). An evaluation of the model of financial support was planned for 2010; however, the results are still not available.

First measures for building multidisciplinary ambulatory care capacity have been taken

With the introduction of group practices as “**Ärzte-GmbHs**” at the start of 2011, efforts to improve service provision outside hospitals were renewed and strengthened (see Table 6.1 and section 2.8.2 *Regulation and governance of service providers*). The starting point for this legislation was EU-level decisions, which required Austria to harmonize market entry in the ambulatory sector (Hofmarcher & Hawel, 2010). The legislation states that only physicians may run group practices and that owners of group practices may not employ physicians. While this legislation means that market entry of **Ärzte-GmbHs** and outpatient clinics is from now on largely harmonized, the criteria for market entry for contracted physicians in individual practices and for hospital outpatient clinics remain variable between regions (see Table 2.3). For licensing of **Ärzte-GmbHs**, the existence of a collective contract is necessary (see section 2.8.2 *Regulation and governance of service providers*). In January 2011 Vienna was the first Land to agree such a collective contract. In contrast to the intentions of the legislation, this collective contract anticipates that group practices will only be established by multiple physicians of the same specialty, for example, only in the field of internal medicine.

In principle, it is expected that group practices will relieve the hospital sector and offer care by multidisciplinary physician teams and other medical personnel. However, the establishment of **Ärzte-GmbHs** has been relatively slow. The foundation and licensing of a group practice must be carried out in accordance with the relevant regional health plan, which should in principle encourage strategically oriented, innovative development of provision. While contracted physicians can join a group practice relatively easily, there are significant hurdles for non-contracted physicians (see section 5.2). This means that the possibilities for expansion of ambulatory capacity outside of hospitals remain relatively restricted for the time being (Hofmarcher & Hawel, 2010). Possibly, in

the future, the introduction of new payment models based on the new Catalogue of Ambulatory Services (see section 5.3) and new contracts with physicians in group practices might lead to shifts from inpatient to ambulatory care.

6.1.2 Information systems and quality of provision

Important steps to reform and improve transparency and the availability of information have been introduced over the past few years (see Table 6.1), often influenced by regulatory developments and recommendations at EU level concerning patient safety and e-health. Measures in Austria aimed to:

- simplify billing and access to care (keyword: e-card);
- to improve the availability and quality of financial and service provision data (keyword: SHA) as well as data on morbidity (keyword: Austrian Health Survey);
- to increase safety, transparency and comparability of health-care with the help of a national quality strategy, including recommendations on federal quality guidelines, through the strengthening of patient representative bodies and an error reporting system (keywords: CIRSMedical, quality platform);
- to manage service provision cost effectively through creation of legal and organizational requirements for electronic transmission of data relevant to health (keyword: e-medication, ELGA);
- to strengthen the role of those covered by health insurance/the patient as “co-producer” of their own health (keywords: ELGA, Austrian Health Portal, Hospitals Directory and Act on Advance Directives, patient surveys).

The overall regulatory framework for these changes is formed by the Health Care Quality Act and the Health Care Telematics Act. Both acts were passed as a result of the health reform of 2005. The development of information systems and measures relating to quality assurance is a long-term feature of public discourse. This mainly relates to the fact that both the field of quality assurance and the field of e-health subject physicians providing services to wide-ranging requirements on the openness of their practices. The chambers of physicians are often criticized for being anti-reform in connection with this (Pilz, 2011).

While there are significant controversies currently over amendments to the Health Care Telematics Act, legislation that would ease the way for implementation of electronic health files (see section 4.1.4 *Information technology*), the public response to the first report on the Austrian error

reporting and learning system (CIRSmedical), published in autumn 2011, and on quality systems in Austrian hospitals, was relatively small. This might be related to the fact that the large majority of the Austrian population considers the safety and quality of care excellent (European Commission, 2010b).

Capacity for quality assurance has been set up and is bringing its first results

The report on quality systems in hospitals (Domittner, Geißüler & Knauer, 2011) describes the current state of quality assurance structures and work in the large majority of Austrian acute care hospitals (Table 4.3). Evaluations are carried out on the basis of a single agreed questionnaire, where hospitals evaluate the degree of implementation of quality assurance work along different dimensions. The results, in summary, showed that quality assurance work has strong strategic foundations in most hospitals, for example, in their basic principles, and that quality assurance is largely carried out using specific instruments such as patient surveys. In relation to comprehensive quality models or in the field of risk management, the report establishes some potential for development (Domittner, Geißüler & Knauer, 2011).

The goal of the evaluation of the pilot project on error reporting and learning (CIRSmedical) was to assess the practicality of this instrument for risk management and the usefulness of further development of the platform (Geißüler et al., 2011). The report recommends the continuation of the project and emphasizes the usefulness of error reporting systems, including for ambulatory provision outside of hospitals. While the management of CIRSmedical.at was originally strongly influenced by the chambers of physicians (Hofmarcher, 2009b), the implementation of the Act to Strengthen Public Ambulatory Health Care Provision in 2011 increased the role of the federal authorities in this area. The accompanying changes in the bodies of ÖQMed, an organization that forms part of the Austrian Chamber of Physicians (see section 2.3), mean that federal influence on development of quality assurance programmes for generalist and specialist physician care also increased.

Between November 2009 and January 2011 the web site CIRSmedical.at was accessed a little over 14 000 times. During this time there were 156 reports made, of which 113 were published. In reports where specifics could be ascertained (around 90), errors were largely reported by physicians (66%) as well as care staff and staff at physician surgeries (21%). One-third of undesirable outcomes were reported by physicians' practices, and 55% by hospitals. Undesirable results were most frequently seen in the area of organization/interface communication (23%), followed by invasive measures (22%) and non-invasive measures in both

diagnostics and treatment (21%). Misunderstandings in communications were seen as the most frequent contributory factor leading to undesirable results or errors. Only 15% of undesirable outcomes were seen in emergency cases, with the remaining 85% as part of routine care, the vast majority of which happened during the week. Errors in treatment largely happened with people with over five years of professional experience. The greatest numbers of treatment errors were experienced by patients in the 51–60 (20%) and 61–70 (17%) age groups. Undesirable outcomes led to lasting damage or uncertainty in the patient in 12% of cases. Minimal damage was recorded for 33% of patients, and severe lasting damage for 6%.

E-medication as a pilot model for electronic health files has started

In April 2011 a test phase for e-medication began in three Länder, with the aim of testing its effect on patient safety and avoiding possible undesirable drug interactions. Patients in selected districts in Vienna, Upper Austria and Tyrol could register medication they had been prescribed by physicians, as well as that bought over the counter in an electronic database. The e-card functioned as the key to a web-based database, where physicians and pharmacists could save and access information on medication. It was necessary to obtain consent in advance from the patients involved. The project was run by the federal and regional authorities in partnership with social security institutions, the Austrian Chamber of Physicians and the Austrian Federal Board of Pharmacy, and is the first application of ELGAs (see section 4.1.4 *Information technology*).

Since May 2012 the evaluation of this pilot project has been available. Around 5400 patients participated in the test phase, along with 85 physicians, 50 pharmacies and 4 hospitals. In total 18 300 prescriptions and around 14 000 medication purchases were electronically registered and checked. One in every two visits flagged up a contraindication, and one in every nine flagged up a double prescription. An improvement in patient safety thanks to the e-medication scheme was seen by 70% of participating physicians and 90% of participating pharmacists. Similarly, 85% of participating patients felt safer using physicians and pharmacists who were part of the pilot scheme (Medizinische Universität Wien, 2012).

Although the current evaluation recommends nationwide introduction of e-medication, which is planned for 2013, it also points to a need for improvements, both in the user-friendliness of the software and the administrative burden on physicians and pharmacists. It also emphasizes the need for support to the project from all stakeholders. Physicians, in particular, repeatedly called for a stop to the project because the e-medication was not fit for purpose (Pharmig,

2011a). Resistance by physicians continues after the presentation of the results of the evaluation. In addition there are still some questions regarding data protection in the application of ELGAs which still have not been cleared up. If e-medication should be rolled out, the ELGA Act being discussed at the moment is expected to contain an opt-out clause for patients (HVSV, 2010e).

6.1.3 Medication and medical devices

As in the fields of quality assurance and information systems, the development of regulation of medication and medical devices in Austria was significantly influenced by developments at EU level. Tasks in the fields of medication licensing and medical devices were combined within newly created organizations (see Table 6.1). The following section provides more detail on changes to medication sales and the introduction of a limit to the burden caused by cost-sharing for medications (the prescription fee cap).

Regulation in the pharmacy market remains confusing

In the course of adaptation of the **Medication Trade** to EU law, there were tough negotiation battles between the Federal Board of Pharmacy, the Austrian Chamber of Physicians and the supervisory authorities involved. Pharmacies in Austria are seen to be highly regulated (Berger et al., 2007). A little less than half of all general pharmacies are run by GPs within their practices (see section 5.6). Liberalization of the pharmacy market is a challenge for these physicians, as they need to absorb significant losses of earnings as a result. In 2005 the European Commission led proceedings against the Austrian Republic as a result of restrictions to the establishment of pharmacies (“local area protection”), forms of company allowed and the ban on pharmacy chains (European Commission, 2006). It did not come to court. However verdicts by the European Court of Justice in cases involving other member states indicate that national bans on owning multiple pharmacies do not contravene EU law (verdicts of 19 May 2008 on Germany and Italy) and that need-oriented establishment of pharmacies is permitted (verdict of 1 June 2010 on criteria for establishment of pharmacies in Spain).

The EU proceedings led in 2006 to an eventual relaxation of conditions for establishment of new pharmacies. This relaxation encouraged competition between pharmacy owners. Now, general pharmacies can also be set up in areas where physicians run in-house pharmacies, which generally has the effect of shutting down these in-house pharmacies. If the contract comes to an end for a physician running an in-house pharmacy, their licence can also be withdrawn. While this new regulation appears to shift business away from

physicians running in-house pharmacies (ÖÄK, 2009), the degree of complexity in regulations means the situation remains opaque. The legislation attempts to liberalize access to the market on the basis of EU guidelines while also preserving territory protection.

A newly introduced prescription fee ceiling provides financial relief for low-income people

The **cap on prescription fees** introduced in 2008 was an important step towards reducing the financial burden on individuals with low incomes (see section 3.4.1 *Cost-sharing and direct payments*). Almost half of all user charges in the health-care system are made for prescription pharmaceuticals (see Table 3.10). The cap on prescription fees means that individuals who spend more than 2% of their annual net income on prescription fees are exempt from paying the fee for the rest of the calendar year.

The administration of the cap on prescription fees is carried out electronically with the help of the e-card infrastructure (see section 4.1.4 *Information technology*) and illustrates the potential of e-health to usefully combine an expansion in social protection with electronic administration systems. Social security establishes an individual prescription fees account for every insured person. One side lists the individual's net income, and the other totals up the prescription fees paid in the current calendar year. As soon as this side reaches the sum of 2% of net income, this is shown when the e-card is used. The net income of the insured is known to social security because insurance contributions are also based on income (wage or pensions).

Income of co-insured people such as spouses or children is not taken into account in calculation of net income. By contrast, prescription fees paid by insured individuals on their behalf are counted towards the 2% cap, implying that the cap is reached more quickly. For annual net income, a minimum sum is set at the level of the legal minimum income for single individuals. Those who were at this boundary in 2009 paid an average of €185 per year or fees for 37 prescriptions until exemption based on the cap came into effect (HVSV, 2011b).

Estimates suggest that the introduction of the prescription fee cap reduced cost-sharing for around 300 000 people leading to a reduction in revenues for social health insurance between an estimated €45 and €50 million per year (Czypionka et al., 2010). According to health insurance accounting data income from prescription fees decreased 5.6% or €21.6 million in 2009 compared to 2008. Thus far, it is unclear whether or not the government will compensate health insurance for these shortfalls.

6.1.4 Financing of the health-care system and payment of service providers

Financing reforms concentrated on securing the income base of the nine regional health insurance funds (see Table 3.5) and ensuring sufficient funding is available for long-term care (see Table 6.1). The most significant innovation, which eventually will lead to changes in the field of payment, was the development of the Catalogue of Ambulatory Services (see Table 3.16). In the following section the first results of the creation of the “Health Insurers Structural Fund” are described and the conditions under which the planned long-term care fund will operate are elaborated. In addition, some important technical changes in the reimbursement model for hospitals are detailed and the “Framework Pharmaceutical Contract” is commented on.

Political conditions

The regional health insurance funds had built up debts over a number of years, which stood at €1.2 billion in 2008 (Hofmarcher, 2008b). The growing indebtedness of the health insurance funds was, among other things, the result of renewed efforts by the centre-right coalition that was in office between 2000 and 2006, to bring the national budget in line with the requirements for Austria’s participation in the single European currency (Hofmarcher & Rack, 2006). This meant that federal funding such as subsidies for particular groups of insured individuals was reduced or eliminated altogether. However this was partly compensated for by an increase in contributions from both employed people and pensioners (Hofmarcher, 2003a, 2009c). In 2012, taxation and contribution income is above the expected rate, and it is expected that the health insurers’ income will stabilize (BMF, 2012).

Consolidation of health insurers’ deficits has started, but structural issues remain

After futile reform attempts in 2008 (Box 6.1), the newly formed coalition of the major parties introduced a packet of measures in 2010 targeted at forgiving debts built up by the regional health insurers and reducing their structural deficits. The Health Insurers’ Structural Fund was established in relation to this aim (Hofmarcher, 2009a). With the Fund being based at the Federal Ministry of Health, federal authorities have for the first time obtained governance responsibilities relating to health insurers, and are entitled to withhold funds in the case of non-fulfilment of agreed financial targets.

The **Health Insurers’ Structural Fund** (see section 3.3) disburses federal tax money to health insurers if insurers achieve the targets of their consolidation plan, which anticipated savings of €1.7 billion by 2013 (Hofmarcher, 2009d).

The saving goals were already exceeded in the first year of the existence of the Health Insurer's Structural Fund (BMG, 2010e; HVSV, 2010d). As a result, health insurers had a surplus of €175 million in 2010. Without the debt relief measures and the effects of consolidation, a deficit of €376 million was forecast (HVSV, 2010g). Savings could be achieved above all in the area of medication. Falling prices – caused by the expiry of major patents and a shift in prescription practices towards the prescription of generic drugs – meant that more than a third (€132 million) of the total volume of savings could be found in this spending category.

The consolidation programme for health insurers is mostly focused on the pharmaceutical sector and the conditions for distribution of funds conserve structures already in place (Hofmarcher, 2009d). Funds are distributed according to set population-based quotas for each Land. Consequently, there is no “best-practice competition” between regional health insurers to develop innovative models to reach their savings targets. In addition, the funding distribution model does not take into account any differences in the level of risk of those insured. Such differences are supposed to be balanced out by the Interregional Equalization Fund (see section 3.3.3 *Pooling of public funds*) but it might be useful to combine both funds.

Health-promoting behaviour is rewarded for the first time

In mid 2010 the Insurance Institution for the Self-Employed, which insures 700 000 people (see Table 3.5), or 7% of all insured people, and the Chamber of Physicians failed to conclude a contract for ambulatory care provision. Ultimately, the conflict was resolved in favour of the physicians and the intended tariff reductions were largely warded off. It was agreed, however, that a new preventive care model would be developed, including financial incentives targeted at improving parameters such as blood pressure, exercise, weight, and alcohol and nicotine consumption (Neumann & Müller, 2012). This development is an innovation in the Austrian context, because it is the first time social health insurance has sought to manage healthy behaviour through financial incentives.

Under the incentive model patient cost-sharing per physician visit is halved for those insured by one of the participating health insurance institutions, in return for complying with the goals of the programme. However, to date it remains largely unclear how compliance with agreed health goals will be examined and documented between patient and physician.

A new Framework Pharmaceutical Contract is intended to contribute to both financial consolidation and health

Since 2008 agreements have been made between the pharmaceutical industry and the Federation of Social Security Institutions on discounts. The goal is to stem the growth of medication costs for health insurers. In exchange the Federation has agreed to a number of moratoria with regard to legislative efforts to reform price and reimbursement regulations (Pharmig, 2011b).

The contract was extended in July 2011 to run until 2015, and the pharmaceutical industry and wholesalers are expected to pay some €82 million of their profits to the Federation of Social Security Institutions by 2015. In 2009 this corresponded to 3.4% of expenditure on medication (see Table 3.7). A new element of the contract is that a gross sum of €6.75 million of the total is reserved for “health goals” concerning children’s health and prevention.

While the Framework Contract has a number of innovative elements, and makes a certain level of planning and legal security available for both the pharmaceutical industry and the Federation of Social Security Institutions, it also has some important disadvantages. First, the Federation blocked its own ability to manage medication spending through price and reimbursement reform. Complementary measures such as a strengthening of price competition through increased use of generic drugs could improve efficiency in the use of pharmaceuticals. Concerning the development of health goals, a problem is that measures are not coordinated with the federal authorities, which have also begun developing framework health goals (see Table 6.1 and section 6.2). An increase in efforts is necessary in order to develop a national strategy for health promotion and prevention (Chapter 7).

Hospital financing continues along old lines but is further refined

When the financial equalization agreement in place since 2008 was extended until 2014, it was determined that from 2009 onwards the amount of taxation reserved for **public hospital finance** will be proportionate to total taxation income. This change led in 2010 to a reduction in the amount of federal funding for hospitals of around €7 million (out of a total funding volume of around €600 million; see Table 3.9). However, the current financial equalization agreement also allocates an extra income of €100 million annually to hospitals, which dwarfs the €7 million funding reduction.

The DRG-based hospital payment system was comprehensively updated in 2009 (see section 3.7.1 *Financing of hospitals*). The new Catalogue of Inpatient Services uses the same schema as the Catalogue of Ambulatory Services (see section 5.3), which enables combination of the two catalogues.

Long-term care financing may become a lever for simplification of administration

For the financing of long-term care, the Nationalrat decided in 2011 to establish a **long-term care fund**, which is intended to cover the increases in costs in this area experienced by Länder and local authorities from 2011 to 2014 (see section 3.6). In total, €685 million is paid into the fund between 2011 and 2014, with two-thirds of the funding coming from the federal level and one-third from the Länder and local authorities. After this period, there is a plan to make this interim solution a part of the next financial equalization agreement.

In addition the Long-Term Care Allowance Reform Act of 2012 reforms responsibility for awarding and disbursing long-term care allowances. Since 1 January 2012 both legislation and implementation in the field of long-term care are federal responsibilities. The Pension Insurance Fund is now responsible for the majority of those who were previously entitled to regional long-term care allowance (see Table 5.5). The reorganization of administrative responsibility for the awarding of long-term care allowance is expected to lead to a simplification of administration in the social care sector.

6.1.5 Governance of the health-care system

Within the 2005 health-care reform, decision-making structures were combined (see Table 6.1). However the constitutionally determined divisions of responsibility between regional bodies and sectors, which are at the root of the problem of fragmentation in Austrian health-care, remained untouched. Nevertheless, the reform brought important changes: the newly established Federal Health Agency (see section 2.3) now unites all relevant actors in the health sector in its Federal Health Commission, comprising representatives of the federal government, the Länder and local municipalities, the Federation of Social Insurance Institutions, the Austrian Chamber of Physicians, the Austrian Federal Board of Pharmacy, patients' representatives, and many more. The Federal Health Agency develops the Austrian Structural Plan for Health (see section 2.5), and distributes federal resources to regional health funds. It may link the disbursement of funds to compliance with federal requirements for inpatient care, in particular concerning interregional cooperation.

Through the involvement of all relevant actors in the development of the Austrian Structural Plan for Health, the most important planning instrument in Austria, coordination of framework planning has considerably improved.

Furthermore, as the disbursement of funds can, in theory, be linked to compliance with federal requirements, the federal level has obtained a new lever to better govern the development of the health system.

In contrast to other OECD countries such as Switzerland and Germany, where regulated competition has gradually been introduced in the health insurance market since the 1990s, with the aim of ultimately changing delivery structures, Austria has taken a different approach. Efforts to change the delivery system focus on improved planning of provision and regulated competition remains limited to the supply side (Hofmarcher & Rack, 2006).

Planning has expanded across the whole range of provision; implementation is trailing behind

In contrast to the pre-2005 hospital plans, the Austrian Structural Plan for Health defines only the provision framework, leaving the Länder, hospital operating bodies and social security institutions with a far greater range of possibilities for arranging detailed planning at regional level (see section 2.5). The efforts of the federal authorities have concentrated in recent years on expanding planning to all sectors of the health-care system (see section 2.5). Since 2008, health-care planning includes rehabilitation, and ambulatory care, as well as long-term care interfaces with health-care provision. The Austrian Structural Plan for Health now defines only the amount of services that will be necessary to fulfil population needs (instead of prescribing the necessary infrastructure), specifying the expected number of inpatient admissions per DRG. Planning is no longer restricted to within Länder borders and recommendations are made on combining complex specialized areas of service provision (reference centres).

However, implementation of planning remains problematic because the fragmentation of responsibilities between the inpatient and ambulatory sector remain at the regional level. Länder continue to have veto power on issues concerning the inpatient sector, while health insurers can block decisions concerning ambulatory care. Audit office examinations point to the fact that the targets for numbers of day-clinic admissions remain clearly unmet (Court of Auditors, 2011b), although there were significant improvements in this area (see Fig. 5.2). Structural imbalances with an oversized hospital sector and underdeveloped ambulatory care sector remain (see section 7.5; Hofmarcher, 2010).

6.2 Future developments

The range and direction of future developments and reform plans for the health-care system in the next 10 years will be largely determined by the expected level of economic growth. As in all eurozone countries, consolidation of state budgets and implementation of associated necessary savings are pushed to the fore. In addition, a series of activities is likely to be continued that both aim to improve the health of the population and to develop the quality of provision and infrastructure.

Political dialogue is focused on “Health in All Policies”

The National Nutrition Action Plan (BMG, 2011e), and the Children’s Health Strategy (BMG, 2011a) were designed to embed health promotion and prevention more strongly in the “Health in All Policies” strategy (see Table 6.1). The establishment of a coordination body for children’s and young people’s health is anticipated (BMG, 2011g).

A newly developed manual of the public health service (see Table 6.1) is due to be introduced, in order to evaluate the influence of policies in different sectors on health (Health Impact Assessment). At the local level, for example in Linz, attempts have already been made to introduce Health Impact Assessments (Birgmann, Peböck & Reif, 2008).

The future challenge in the field of health promotion and prevention lies above all in coordinating the various activities better. Currently, there is no formal coordination of activities of the federal authorities’ Healthy Austria Fund and the health insurers’ Fund for Health Promotion and Health Check-ups (see section 3.3.3 *Pooling of public funds*).

Health goals are intended to form the strategic framework for health-care provision

Improvements concerning coordination of health promotion and prevention may possibly arise from the current discourse concerning the development of a strategic framework for the health-care system, which will encompass health goals, quality, prevention and health promotion. The creation of national framework health goals is also rooted in the current programme of government, particularly in relation to heart attacks, strokes, cancer, dementia, diabetes, obesity, exercise, nutrition and mental health (Federal Chancellery, 2008). The Austrian reform programme of 2011 in the context of the EU strategy for Europe 2020 refers to the importance of measures to reduce child poverty, as well as prevention as part of working life and improvements in job prospects for disabled people (Federal Chancellery, 2011).

The process of agreeing to national health goals for the next 20 years began in May 2011 with the first federal conference on health. Alongside experts and representatives from all relevant sectors of health-care, interested individuals could also submit their ideas via an online platform. This type of participation is new for the Austrian health-care system (see section 2.9.5 *Public participation*). Preliminary health goals for Austria have been available since spring 2012. These should help to manage future provision in the direction of need and in a more patient-oriented fashion.

Quality of outcomes is becoming more transparent, starting with the inpatient sector

Alongside patient surveys (see sections 2.7.1 *Information systems* and 7.4.2 *Measured quality of care must become even more transparent*), measurement of the quality of outcomes in hospitals is carried out in all areas of the health-care system as a central plank of the future quality strategy (see section 2.8.1 *Regulation and governance of third party payers* and Table 6.1). As a result of the Federal Health Commission's April 2011 decision, measurement of outcome quality was introduced nationwide. The forerunner to this was a project developed by the Lower Austrian Regional Clinic Holding Company in partnership with the German clinic owners HELIOS and the Swiss Federal Office of Public Health. The indicators used (currently 96) are based on the Minimum Basic Data Set records for the DRG-based hospital payment system (see section 3.7.1 *Financing of hospitals*). The Austrian inpatient quality indicators include indicators such as mortality and complication rates, readmission rates, frequency of intensive care. In a first step, statistical analyses will identify hospitals, which exhibit statistically significant deviation from reference values (Türk, 2011). In a second step, specially trained physicians (peer reviewers) are sent to the identified hospitals to analyse individual patients' histories, in order to validate deviations from reference values. Finally, quality improvement measures are developed in tandem between peer reviewers and those responsible for each hospital. The results of the quality assessment are made available to all health-care funds and hospital owners. At the end of 2013 the first results and key figures will be published in a report.

More flexibility and consolidation of the hospitals sector becomes law

Developments in planning (see sections 2.5 and 6.1) that anticipate tiered care provision in acute care hospitals, defining packages of services which are each allocated to different provision tiers (including basic provision), suggest new organization and operating patterns, and this has led to changes in legislation (Federal Hospitals Act Amendment; see Table 6.1). The basic provision duties of general hospitals have now been legally defined. In addition to providing

comprehensive primary care and coordination of the treatment path, they must operate a department for internal medicine. Further specializations are not required.

These general hospitals can function as hubs or as a kind of gatekeeper in order to manage demand, enabling an easier transition to long-term care for patients, if necessary. The Austrian Chamber of Physicians wholly rejected the draft as “patient-unfriendly” (Stärker, 2011). Health insurers have also made public their thoughts and fear high costs induced by a greater need for transport, if geographically distant facilities were to work together more closely (Sanofi and Aventis GmbH Österreich, 2011).

Health reform focusing on the hospital sector is beginning

Since the start of 2011 both the federal and regional level have started to prepare reforms in the hospital sector. The current programme of government determines that the potential for increased efficiency resulting from a possible reform of the hospital payment system should be analysed and that certain measures should be taken by 2011.

The Federal Health Commission formed a Working Group on the topic of “paying for health”, including subgroups on the topics of “accounting and cost trends” and “provision processes and structures”. In March 2011 the Länder agreed on a collective position (Länderpositionspapier, 2011). The Federation of Health Insurers also presented cornerstones of health reform in November 2010. All stakeholders have the aim of improving the health of the Austrian population, aligning health-care provision with need and securing financial sustainability. Table 6.2 gives an overview of the positions as available in January 2012.

Although the positions of participating stakeholders with regard to changes of governance responsibilities are substantially different and reflect their different interests, some agreement can be found in the detail of their approaches. For example, all stakeholders have requested financial planning that is manageable in the medium term, and both Länder and social security want to transform care provision towards more integrated care models.

Table 6.2**Positions and debates on health-care system reform and hospital reform**

	Main stakeholders	Main issues and positions	Measures already in place and ongoing
Federal Health Commission	Federal government	<ul style="list-style-type: none"> • Combining responsibilities with the help of federal legislation* and a central governance fund • Increasing economic efficiency through linking expenditure to GDP growth and distribution of funding according to specific key performance indicators • Defining minimum requirements for service availability and provision structures in the Austrian Structural Plan for Health • Increasing transparency of performance** 	<ul style="list-style-type: none"> *KAKuG Amendment (Table 6.1) **A-IQI (Table 6.1)
	Social security (“Masterplan”)	<ul style="list-style-type: none"> • Combining responsibilities for health and long-term care at Länder level • Developing a new common basis for planning at federal and regional level, and by social security institutions (replacing the current ÖSG) • Aligning framework planning along health goals • Compulsory planning in provision zones, combining financial planning for the health-care system including agreed consolidation measures* in all sectors in parallel to four-year federal financial framework • Agreement on medium-term cost trends until 2020 as part of the next Financial Equalization Agreement 	<ul style="list-style-type: none"> *Health Insurers’ Structural Fund (sections 3.3.3 and 6.1)
	Länder (“Position paper”)	<ul style="list-style-type: none"> • Introducing a decentralized governance fund at the level of regional health platforms, financed from the federal authorities and social security • Harmonization of documentation of diagnoses and procedures in the ambulatory sector* • Establishing a common database for measurement of process and outcome quality** • Establishing integrated provision models • Redefining the role of GPs • Developing medium-term financial plans for all sectors, taking into account agreed consolidation measures*** 	<ul style="list-style-type: none"> *Pilot project: Catalogue of Ambulatory Services (KAL) (section 5.3) **A-IQI (Table 6.1) ***Health Insurers’ Structural Fund (sections 3.3.3 and 6.1)

Source: Author’s own compilation.

Reforms relating to the governance and financing of the health-care system are not easy to implement in the short term (see sections 1.3 and 2.4). In spite of the need for budget consolidation across the whole country, the health-care system has been largely exempt until now. A political agreement on spending caps, which was signed by the Federal Minister for Health, the Minister for Finance, top-level social security representatives and representatives of the Länder in June 2012, closes this gap. A “Federal Target Management and Health Planning Act” is being prepared to define the framework of a new governance and financing model from 2014. This, combined with the National Growth and Stability Pact agreed in 2012 between regional bodies, as well as the parallel Federal Finance Framework Act, will further restrict the ability of regional bodies and social insurers to accumulate debt, and will have a significant influence on options available for financing hospitals for both the Länder and social security institutions.

Parallel to development of strategies on a future “Federal Target Management and Health Planning Act”, the Länder of Vienna, Upper Austria, Styria and Salzburg have agreed concrete measures on changes to the health-care system and hospitals. Thus the plan for Vienna includes restructuring and transfer of departments to ensure that by 2030 the number of hospitals will be significantly reduced and services will be provided with a focus on increased specialization. Similar consolidation of locations is planned in Upper Austria, including abolition of 760 inpatient beds. In Styria it was also decided as part of the approval process for the Regional Health Plan (see section 2.5.2 *Regional health plans*) to close or merge a series of hospitals, which will bring with it the abolition of some 700 beds. The Regional Health Plan 2020 in Styria is innovative and conforms well to the Austrian Structural Plan for Health, as it also includes planning for the entire ambulatory sector. In Salzburg there are plans to limit hospital subsidies from the regional government (Sanofi and Aventis GmbH Österreich, 2011).

7. Assessment of the health system

Austrian health policy follows the principle of ensuring equal access to high-quality care for all, irrespective of income, age and gender. In many respects, the Austrian health-care system comes very close to achieving this aim: universal health insurance coverage guarantees access to a wide range of services. Although the level of user charges and direct payments is relatively high compared to other countries, access to health-care is ensured by numerous exemptions, such as the prescription fee cap. Besides social health insurance, the progressive tax system also makes a significant contribution to the financing of the Austrian health-care system. As a result, the health-care system is funded in a way that is comparatively fair.

Only around 2% of the population complain of difficulty accessing services, with only a very small proportion making reference to barriers resulting from costs. According to OECD comparative studies, income-related inequality in access to GPs is very low. In public satisfaction surveys, the health-care system regularly performs very well (see for example the Eurobarometer): more than 90% of people surveyed think that the Austrian health-care system is good or quite good.

Nevertheless, the Austrian health-care system has many areas that require improvement. First, there are obvious imbalances in the structure of care: the inpatient care sector is particularly dominant (36% of all health-care spending) while proportionately less funding than in other countries is available for ambulatory care (including hospital outpatient departments) and for preventive medicine. At the same time, there are stark regional differences in care, both in curative services (hospital beds and specialist physicians) and preventive services such as preventive health check-ups, outpatient rehabilitation, psychosocial and psychotherapeutic care and nursing. There are clear social

inequalities in the use of medical services, such as preventive health check-ups, immunization or dentistry. Income-related inequality in health has increased since 2005, although it is still relatively low compared to other countries.

The costs of the health-care system are high. Both in absolute terms and as a percentage of GDP, they are well above the EU15 average. However, the number of healthy life years in Austria was almost three years below the EU average in 2010. Studies indicate that there is much room for improvement regarding the efficiency of the health-care system. One fundamental cause of inefficiency is the fragmentation of responsibilities and the concomitant fragmentation of financing. The variety of different payment systems in individual sectors clearly contributes to imbalances in provision. Although a concerted effort is now being made to shift service provision away from the inpatient sector, the development of the ambulatory sector is lagging behind. Coordination of care is often poor. This applies not only to inpatient and ambulatory care but also to coordination between different levels of ambulatory care, between acute inpatient care and long-term care, and between physicians and other health-care professionals.

The areas of health promotion and preventive medicine also require significant improvement. The current discussion around national health goals places a greater emphasis on health promotion and prevention. Such a focus might not only contribute to improved health, especially for disadvantaged groups, but may also help avoid the high costs associated with illness.

7.1 Stated objectives of the health system

As in all welfare states, health policy in Austria has the objective of ensuring the provision of comprehensive, efficient, high-quality care, in accordance with the needs of the public. There is a political consensus that a predominantly market-driven provision of health services is incompatible with the aims of a welfare state. The financing and performance of services is largely governed by supply-regulations (see section 2.4) that are based on the planned distribution of services.

Both manifestos of the centre-right governments of 2000 and 2003 (Federal Chancellery, 2000, 2003) share the theme of “equal access to care for all, independent of income, age and gender” (Federal Chancellery, 2000) must be safeguarded, and that “quality medical care for all citizens independent of income” must be guaranteed (Federal Chancellery, 2003; Hofmarcher & Rack,

2006; section 2.2). In the current policy programme for 2008–2013, very similar goals are expressed, making a commitment to a strong public health-care system and to the safeguarding of high-quality medical care for all people in Austria, regardless of income, age, origin, religion or gender. This programme explicitly reaffirms that at the heart of health policy is need, and that “two-tier medicine” must be avoided (see sections 3.4 and 3.7.1 *Financing of hospitals*). Alongside the aim of fully supporting the health-care system through financing, the self-government system (see section 2.3) is described as a cornerstone of the health-care system. On ensuring efficiency, the policy programme states that this must be achieved via one common strategy jointly developed by all stakeholders, who should all be involved in planning and governance of the health-care system (see section 6.2).

7.2 Financial protection and equity in financing

In Austria, approaches to financial protection and fairness in financial contribution differs between the health-care system (see section 3.2) and the long-term care sector (see section 3.6). While public financing of long-term care is universal, it is fundamentally based around the principle of subsidiarity (see section 5.8). The financing of the health-care system, meanwhile, is largely based on ensuring that people pay contributions according to their ability (“vertical equity”) in exchange for a universal benefit package. Yet officially reported costs for long-term care paid by private households are only slightly higher than private co-payments in the health-care sector (see Fig. 3.5). Differences in the price of long-term care services and significant variability in the definition of “social vulnerability” between the Länder (Hofmarcher et al., 2008) mean that the rule of horizontal equity is not as well enforced in the long-term care sector as in the health-care system (see section 7.3.2 *Equity of access is ensured but gaps in provision exist*).

7.2.1 Financial protection is comprehensive, despite considerable private payments

While almost the entire population is covered by comprehensive health insurance (see Table 3.5), Austria’s level of out-of-pocket payments is high when compared to Denmark, Sweden or the Netherlands for example (see Fig. 3.4). Overall, direct payments for services that are not included in the statutory benefit package, including services from non-contracted physicians (see section 5.2) are of greater significance than cost-sharing (see section 3.4).

To sustain and enhance insurance coverage, a cap on prescription fees – the most important user charge – was introduced in 2008 (see section 6.1). According to a Eurobarometer survey conducted in 2007, almost 90% of the public said that hospital care was affordable for them (Eurobarometer, 2007). This also gives Austria a high ranking internationally.

Private health insurance does not play a significant role in providing financial protection, as it only substitutes statutory health insurance coverage for 0.5% of the population (see section 3.3.1 *Coverage*). For long-term care as well, private health insurance is negligible (see Fig. 3.5).

7.2.2 Equity in financing is supported by progressive taxation

Social health insurance in Austria offers comprehensive cover, with wide-ranging support for disadvantaged groups. According to estimates, 1% of those with very poor health receive approximately 30% of insurance benefits, and 5% of individuals receive 60% of services, while 50% of the healthiest group consumes a total of just 3% of total costs (Gönenç, Hofmarcher & Wörgötter, 2011). This steep distribution of health expenditure is also observable in other countries, and is an important argument for public financing, or subsidization of the health-care system (Hsiao & Heller, 2002). Furthermore, as elsewhere, care costs increase with age (see Fig. 3.6).

An important step in increasing equity of financing was made in 2003/2004 with the alignment of contribution rates for blue- and white-collar workers (Hofmarcher, 2003a). This was necessarily accompanied by an increase in contribution rates for white-collar workers to the level set for blue-collar workers. Health care insurance contributions are now standardized (see Table 3.8). Pensioners' contributions have also been increased several times.

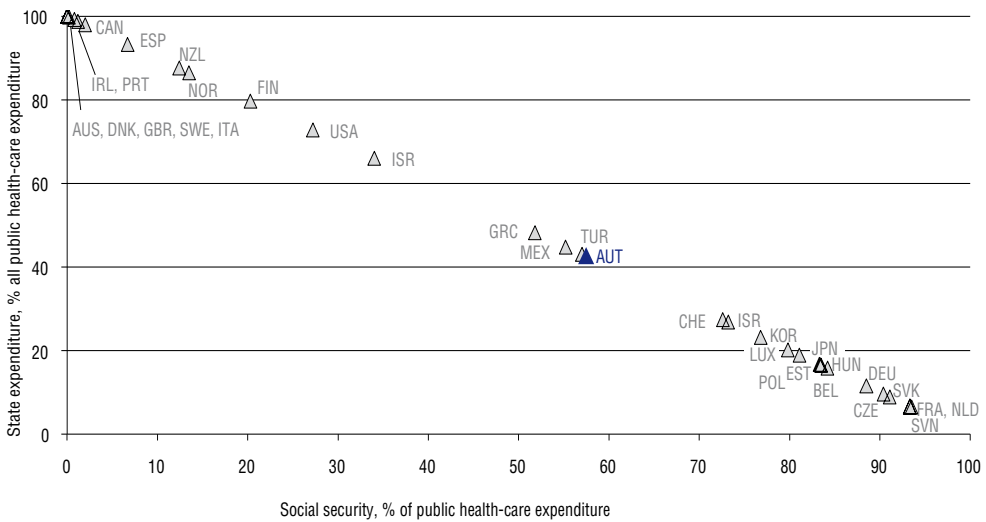
Social health insurance expenditures have been growing at a higher rate than revenues since the 1980s. The maximum health insurance contribution basis, which determines the maximum income on which proportionate health insurance contributions have to be paid, was increased several times in the past to improve the financial situation of health insurers. This has contributed to improving vertical equity (Guger, Marterbauer & Walterskirchen, 2005) as maximum health insurance contributions are per se regressive, reducing the proportion of their income that higher-income people contribute to health.

The mixed financing structure set out in Austrian law is much more prominent than in most countries (Fig. 7.1). It has important advantages. First, the relatively large share of tax financing helps reduce the burden on labour

costs created by health insurance contributions, which has a positive impact on the competitiveness of the Austrian economy. Second, tax-financed health expenditure, which has seen the strongest growth relative to other sources (Fig. 3.5), mitigates the negative effect of the maximum contribution base on progressivity (and thus equity) of financing. On the whole, the design of the financing scheme is relatively fair.

Fig. 7.1

The health expenditure system is marked by a mixed financing system



Sources: Gönenç, Hofmarcher & Wörgötter (2011); own illustration.

7.3 Patients' experiences and equity of access to health-care

7.3.1 Patient experiences with the health-care system are positive throughout

The health-care system enjoys widespread approval

In recent years, all national and international public surveys on satisfaction with the health-care system have given the health-care system an excellent approval rating. In most respects, Austria is one of the leading EU nations in this area. About 95% of those surveyed in Austria said that the Austrian health-care system was good or very good (putting Austria in second place on this

measure) (Eurobarometer, 2010). The average proportion of respondents saying the same across EU27 nations is 70%. The easy access to care is particularly appreciated. In fact, Austria ranks first for this indicator (Eurobarometer, 2007; section 2.9.2 *Patient safety and patient choice*). Previously, Austria also ranked first in the “Euro Health Consumer Index”, but fell behind the Netherlands, Denmark and Ireland to fourth place in 2009. Austria’s fall in the ranking was attributed to the lack of a unified service catalogue (Sanofi and Aventis Austria GmbH, 2009). In the 2012 Index, Austria fell further through the rankings, to 14th place (HCP, 2012). This edition of the index drew on more than just survey data. Austria’s drop in rankings could be a result of the inclusion of certain quality indicators in which Austria performs comparatively poorly (see section 7.4). Perceptions of the quality of long-term care are generally positive. However public approval here is more muted compared to perceptions of the health-care system, particularly with respect to the availability and affordability of long-term care (see section 7.3.2 *Equity of access is ensured but gaps in provision exist*).

Across national surveys, these results are reflected in almost all areas, for example that of GfK Austria (2011), a survey commissioned by the Federal Ministry of Health in which the hospital sector performs particularly well (BMG, 2010k). While 63% of those surveyed were “very satisfied” with the system as a whole, 77% gave the same rating to their experiences of hospital stays. Developments in provision also receive overwhelming approval, but most of all the health-care system is perceived as better than that of other EU states: 73% think that the Austrian health-care system is better than that of other EU states.

Physicians are well-respected, but better coordination is desired

Both Eurobarometer and national surveys show that GPs and specialist physicians are well-respected (Eurobarometer, 2007; BMG, 2010k; GfK Austria, 2011). Furthermore, they are by far the most trusted source of information, much more than the internet or mass media, although the internet in particular is also a very important source of information (see section 2.9). Of those surveyed in the Eurobarometer poll, 93% rated the quality of GPs and specialist physicians as good (putting Austria in fourth place overall), and see few barriers in access and affordability (Eurobarometer, 2007). In the current “cross-sectional patient survey”, problems around transfers and intersectoral interfaces within the system were identified with particular frequency, as well as issues surrounding the way different health service providers collaborate (GÖG & BIQG, 2011). Around 15% of patients referred by a physician stated

in this survey that their referring physician did not prepare them sufficiently, or at all, for their admission to hospital. Of those, 47% said that tests performed just before their hospital stay were repeated in hospital.

Hospital care is high quality and competent, but lacks coordination.

In the “cross-sectional patient survey”, commissioned by the Federal Ministry of Health, patients were asked how satisfied they were (GÖG & BIQG, 2011). Experiences with the processes within inpatient areas of provision were examined, although there was a focus on recording experiences at crossovers and interfaces. Around 99 000 questionnaires were distributed across 7 Länder, in 49 hospitals (approximately 25% of all hospitals; see Table 5.3). The return rate was around 22% (margin: 4.7–42.6%).

Overall, there was a high level of satisfaction with inpatient care, with the rate of patients who were very satisfied with their last hospital stay ranging from 63% to 95%. Between 85% and 99% were very satisfied or quite satisfied with the hospital discharge process. More than 17% of patients reported that they were only informed of their discharge date directly before being discharged. Furthermore, only half of patients surveyed who required support post-hospital (e.g. therapeutic aids, social services) reported that they had a contact person responsible for the organization of after care. A fifth of those surveyed reported that they received contradictory information from different health-care providers. Only 2% of patients surveyed received no discharge notice or were not sure whether a discharge notice had been delivered or sent.

Patients feel that the care they are receiving is safe.

The overwhelming majority of the Austrian public rates the safety and quality of care as excellent (Eurobarometer, 2010). While on average across the EU half of those surveyed (exactly 50%) think that it is likely that one suffers harm while receiving treatment in hospital, only 19% in Austria believe this is a risk. This puts Austria at the top of the EU ranking. Women and those in lower income and education categories think that suffering harm in the course of medical treatment is more likely. Hospital-acquired infections and false diagnoses are most often feared by respondents.

In Austria, just 12% of individuals surveyed reported that they had experienced (themselves, or a family member) a “negative medical incident” (putting Austria in first place within Europe). Across the EU, 26% of survey respondents reported that they had had such an experience. An area in which Austria has one of its lowest placements in the rankings is “gaining consent before a surgical intervention”. While in Germany consent was gained from 90% of patients, Austria’s 81% puts it in sixth place.

The effective training of medical staff is seen as the most important criterion when assessing the quality of the Austrian health-care system. However, as yet there is no internationally comparable and systematically collected data on patient safety, meaning that it is impossible to judge conclusively whether safety provisions are adequate in key areas such as gynaecology or post-operative complications. For many relevant highly developed countries this data is now available. Although some important measures have been taken in the area of patient security (see section 6.1.2 *Information systems and quality of provision*), there is room for improvement in Austria in terms of reporting.

7.3.2 Equity of access is ensured but gaps in provision exist

A series of international indicators confirm that the Austrian health-care system ensures relatively equal access to health-care. First, only 2% of the population report difficulty accessing services, with only a very small proportion of those making reference to barriers resulting from costs (Allin & Masseria, 2009). Second, the ratio of contracted physicians to inhabitants (see section 5.3) is well balanced across the whole Federation. Furthermore, income-related inequality in access to GPs is very low in OECD comparisons (OECD, 2011b), as is confirmed by a recent study (Devaux & de Looper, 2012). Finally, variation in uptake of preventive care (see section 5.1) in women in different income groups is negligible (Gönenç, Hofmarcher & Wörgötter, 2011). It has been possible to reach and maintain this high level of equity in access in spite of the fact that user charges and direct payments constitute a considerable proportion of health expenditure (see Table 3.10). Equal access to services is broadly ensured by many payment exemptions (see section 3.4). A current initiative in this area is the cap on prescription fees (see section 6.1). The extensive use of the e-card (see section 4.1.4 *Information technology*) has an equally important role in guaranteeing access, because since 2010 this has also given those receiving the need-based minimum income (formerly welfare) comprehensive insurance coverage (section 3.3.1 *Coverage*).

However, in recent years, some indicators seem to point towards growing inequity in access, resulting from imbalances in the provision system. A recent survey showed that waiting times and a general lack of time on the part of the service providers and the perception of a two-tier health system are considered to be the most important problems in the health-care system, along with pharmaceutical costs and the bureaucracy of health insurance funds (BMG, 2010k). Studies also show that disadvantaged groups either do not use services at all, or do so only once it is too late. This is particularly the case for certain preventive services, such as immunization and dentistry (Ladurner et al., 2011).

According to a recent study, patients in the highest income decile are 40% more likely to visit a dentist than those in the lowest income decile (Devaux & de Looper, 2012). This placed Austria near the top of the EU rankings for inequality in this area, after Poland and Spain (Listl, 2011).

Concerning waiting times for certain publicly financed treatments, there are indications that private payments to physicians (Sanofi and Aventis GmbH Österreich, 2010) and/or private insurance policies are allowing patients to significantly shorten waiting times, or avoid them altogether (section 3.4.2 *Informal payments*) (Goebel & Lettner, 2010). However, currently available data shows that, since 2009, waiting times have fallen for elective interventions (HCP, 2012). This might indicate that the introduction of a waiting-list management system within the inpatient sector in some Länder has had a positive effect on waiting times. The use of these tools is now enshrined in statute at the federal level (see Table 6.1).

An international study found a link between the speed of access to care and membership of a private health insurance scheme (van Doorslaer, Koolman & Puffer, 2002). As in Ireland, Portugal and the United Kingdom, this was found to be the case in Austria as physicians are allowed to work both in the public and private sectors. Private health insurance fees are a key source of income for these physicians (see section 3.7.2 *Remuneration of health-care staff*).

When taking out private health insurance, the service user expects to avoid waiting times. Inequities, or a two-tier health-care system, are often observable as a result (see section 3.4.2 *Informal payments*). A survey shows that more than 90% of respondents have the impression that higher-earning and wealthier individuals enjoy better medical care (Oekonsult, 2010). It has also been established that individuals with private (supplementary) insurance coverage sometimes receive too many services, such as lab tests, or have comparatively long hospital stays (Url, 2006), which has already been criticized by the Court of Auditors on several occasions (Court of Auditors, 2006). Finally, international studies confirm that higher-income groups receive preferential treatment in Austria as in several other countries (van Doorslaer, Masseria & Koolman, 2006; Mossialos, Allin & Ladurner, 2006a).

This practice is frowned upon in Austria, as one of the key aims of the health-care system is to ensure access to care on the basis of need only. Current government policy also makes explicit reference to this goal for the health-care system (see section 7.1). For this reason, binding regulations were introduced in 2011 governing waiting times for planned operations (see Table 6.1). A recent

study shows that private health insurance providers openly claim to offer shortened waiting times for treatments in internet and print media, which was criticized as being in breach of the law (*Konsument*, 2012).

Some service areas, such as ambulatory rehabilitation (see section 5.7) particularly ambulatory neurorehabilitation, but also palliative care (see section 5.10), are not equally well developed across all Länder. The psychosocial care and psychotherapy sector (see section 5.11), which is faced with the rapidly growing prevalence of mental illness (HVSV, 2011c; OECD, 2011d) is characterized by considerable regional variation in access and affordability. This particularly affects children and young people (ÖBVP, 2012). Wide-ranging efforts have been made in all Länder to bolster psychiatric and psychosocial care provision by increasing ambulatory provision. However, in several Länder, for example, in Lower Austria, a combination of financial incentives and regional peculiarities has led to a situation where provision continues to be concentrated in the inpatient sector (Gutiérrez-Lobos & Trappl, 2006; Zechmeister et al., 2002). Regional variation also exists in the availability of the basic range of services. In Vienna and Upper Austria, for instance, the availability of services is much higher than in Länder with lower per capita incomes. Similarly, there is considerable variation concerning the range of “voluntary services” (see section 3.3.1 *Coverage*) offered by different regional health insurance funds.

Regional variation in the availability of services is likely to be particularly prominent also in the long-term care sector (see section 5.8), where the provision system is in general less able to satisfy demand. In the 2007 Eurobarometer, 41% of individuals surveyed said that care services were not always fully available, and 56% believed that they could not afford care services.

7.4 Health outcomes, health service outcomes and quality of care

7.4.1 Austria has ground to make up in the area of healthy life expectancy

In contrast to life expectancy, which is rising markedly, and is slightly above the European and OECD average (Gönenç, Hofmarcher & Wörgötter, 2011: Table 1.4), the prospects for healthy, problem-free life years are below average in Austria, although a slight rise in healthy life years was observed between

2005 and 2010, in both men and women (see Table 1.6)¹. Average “health expectancy” in Austria is at 58.8 life years, almost three years below the EU average (61.5 years), putting Austria in 20th place among the EU27. Thirteen countries have lower life expectancy at birth, but still have more healthy life years. In Malta, Sweden and Great Britain, healthy life expectancy is at 68 years – 10 years more than in Austria (Aiginger, 2011).

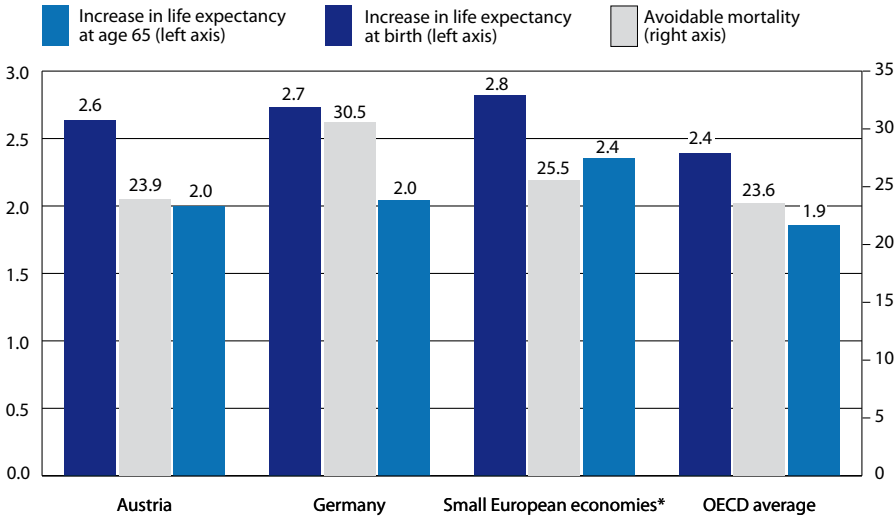
A recent OECD study examined the relationship between life expectancy and key inputs, such as per capita health-care spending, real inputs and socioeconomic factors. In this way, it was possible to identify countries that achieved the highest life expectancy with the lowest investment of resources (OECD, 2010b). The results showed that life expectancy could be increased by 2.5 years if Austria used its available resources as efficiently as those countries identified as “benchmarks”. This lost gain corresponds to roughly half the additional years gained over the last 40 years. In other words, the current life expectancy level could have been achieved with significantly fewer resources. Specifically, the same life expectancy could have been achieved with current health expenditure at approximately 25% below the current level. These results put Austria at the bottom end of the OECD rankings.

Similar calculations were also applied to the Länder in the last OECD economic policy report (Gönenç, Hofmarcher & Wörgötter, 2011). Lost gains in life expectancy, relative to resources used are less in Tyrol, Salzburg and Vorarlberg than in Lower Austria and Vienna. However, these calculations do not take into account Vienna’s central role in providing highly specialized services for the entire Austrian population.

¹ Three criteria are used to evaluate health status: self-assessed (subjective) health status, the prevalence of chronic illness, and functional impairment. The health status evaluation data comes from a regular EU-SILC study. Despite increasing efforts to standardize procedures, the results are only comparable to a certain extent (Habl & Bachner, 2010).

Fig. 7.2

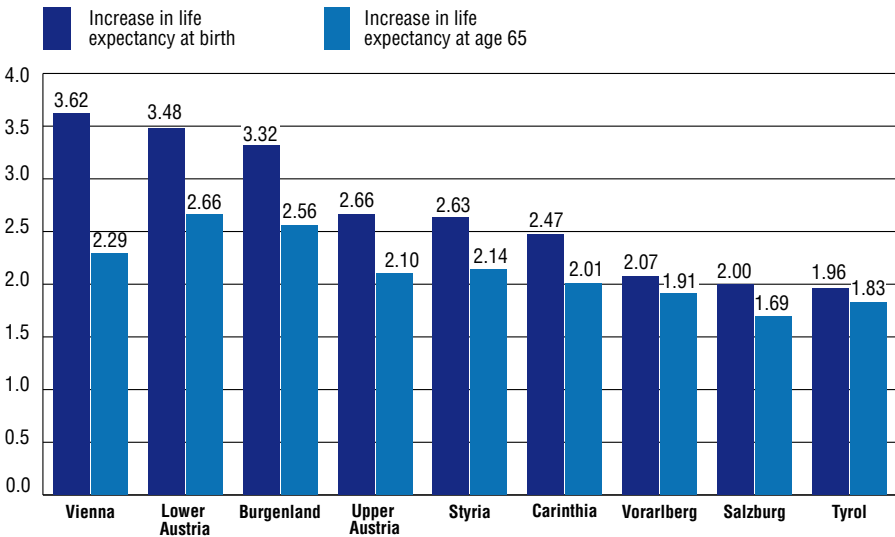
Higher life expectancy could be achieved with the money invested



Note: *Arithmetic mean of other small high-income European economies: the Netherlands, Denmark and Sweden.
 Source: Joumard et al. (2010); own image.

Fig. 7.3

Potential life expectancy gains (in years) in Länder



Source: Gönenç, Hofmarcher & Wörgötter (2011).

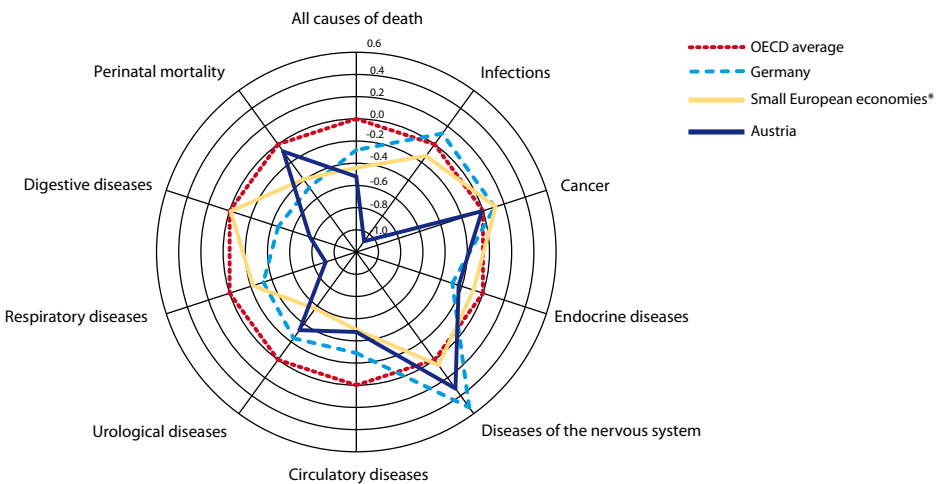
7.4.2 Measured quality of care must become even more transparent

An OECD study from 2010 shows that care quality reporting in Austria is patchy (Paris, Devaux & Wei, 2010). However, some important initiatives have been introduced in recent years (see Table 6.1 and section 6.1.2 *Information systems and quality of provision*).

Some indicators are available that enable an international comparison of quality of outcomes across health-care systems (OECD, 2010b). These indicators show a mixed picture in Austria. Infant mortality in Austria is at 3.9 per 1000 live births (see Table 1.8), just above the EU15 average (3.6 per 1000 live births), and significantly poorer than that of Finland, Slovenia and Sweden (all below 2.6 per 1000 live births).

Overall, mortality rates for common diseases have fallen significantly in recent years (see Table 1.5 and Fig. 7.4). In some cases, they are also noticeably below the OECD average, and even below the rates of other wealthy European countries such as Sweden, Denmark and the Netherlands, particularly for infectious diseases, digestive diseases and respiratory diseases. Fig. 7.4 shows the combined mortality rate for some key illnesses that would have been preventable with effective and timely treatment.

Fig. 7.4
Deviation of avoidable mortality rate per 100 000 inhabitants from OECD average



Note: This figure shows the standard deviation of countries' rates from the OECD average. * Arithmetic mean of other small high-income European economies: The Netherlands, Denmark and Sweden.
Source: Gönenç, Hofmarcher & Wörgötter (2011).

OECD quality indicators also show that the age-standardized five-year survival rate for breast cancer was below the OECD(17) average over the period 2004–2009, which is related to the fact that other countries, such as Sweden and the Netherlands were able to reduce mortality rates more strongly than Austria in recent years. The implementation of the breast cancer screening programme, planned for 2013 is thought to be an important step towards improving survival rates (see section 6.2; BMG, 2011k). In contrast to breast cancer, the probability of surviving bowel cancer for five years in Austria is significantly higher than the OECD average.

The cardiac mortality rate in the 30-day period following hospitalization was cut in half between 2000 and 2009, when it was at 5.7%. However, it remained above the average of 16 OECD countries, for which comparable data was available (see Table 7.1). The 30-day-in-hospital mortality rate from ischaemic stroke was already significantly below the OECD(16) average in 2000 and has continued to fall. In 2009, it was at 3.1%.

Table 7.1

Standardized^a five-year breast cancer mortality and 30-day-in-hospital mortality rate for heart attack and stroke

	Breast cancer		Heart attack			Stroke			
	five-year mortality rate		30-day-in-hospital mortality rate			Ischaemic		Haemorrhagic	
						30-day-in-hospital mortality rate			
	1997–2002	2004–2009	2000	2005	2009	2000	2005	2009	2009
Austria	20.7	18.8	11.1	6.8	5.7	3.9	3.7	3.1	12.1
Confidence interval	18.9–22.5	17.0–20.6	10.3–11.8	6.3–7.3	5.2–6.1	3.6–4.2	3.4–4.0	2.9–3.4	11.0–13.3
Germany	25.5	16.7	–	–	–	–	–	–	13.8
Confidence interval	21.7–29.6	15.9–17.5	–	–	–	–	–	–	12.2–15.3
Small European economies ^b	20.4	15.9	7.2	4.5	3.5	5.8	4.2	4.0	17.2
Confidence interval	18.9–21.8	14.5–17.2	6.7–7.6	4.1–4.9	3.2–3.8	5.4–6.2	3.8–4.6	3.7–4.4	15.7–18.7
OECD average	21.3	16.3	8.1	5.2	4.3	6.2	5.1	4.6	19.0
Confidence interval	18.8–23.3	14.3–18.0	7.4–8.8	4.8–5.7	3.7–4.8	5.6–6.7	4.6–5.7	4.0–5.2	17.1–20.9

Source: OECD (2012); own compilation.

Note: ^a Calculation of age and gender-standardized rate based on OECD over-45 population in 2005.

^b Arithmetic mean of other small high-income European economies: the Netherlands, Denmark and Sweden.

Vaccination rates among the Austrian public are relatively low compared to other countries (OECD, 2010b). Although the 2012 vaccination concept took important steps to broaden vaccination cover, particularly for children and elderly people (see section 5.1), the incidence of certain complex infectious diseases, such as hepatitis B is comparatively high (Gönenç, Hofmarcher &

Wörgötter, 2011). Since no standardized records are available on vaccinations performed, however, it is likely that the vaccination rates reported to international databases are incomplete.

7.4.3 Inequity in outcomes is on the rise

Although several studies have found little variation in rates of satisfaction with the health-care system between sociodemographic and regional population groups (BMG, 2010k), available data show clear differences in health-related lifestyle and behaviour.

Under the Europe 2020 strategy for social inclusion of disadvantaged groups, EU-SILC surveys and administrative sources were drawn upon to define national indicators to track self-reported health issues and social background-related differences in life expectancy (BMASK, 2011a). In 2010, a total of 9% of the population of over 16-year-olds had a health impairment. For those at risk of poverty (14%), the incidence of such an impairment was almost twice as high as for those not at risk of poverty (8%). Since 2005, the incidence of health impairment has risen for those at risk of poverty, and the gap between the two groups has grown with it (BMASK, 2011a).

Obesity rates have risen in socially disadvantaged groups (OECD, 2010b). Males aged 15 years in Austria, together with their peers in Poland and Lithuania, showed the highest increase in obesity. In particular, individuals with a low level of education are at a markedly higher risk of being obese and overweight (Sassi, 2010). Although education levels across all sections of the population have risen noticeably in recent years, and a larger proportion of people are falling into lower-risk groups, the gap between the healthy life expectancy of women with little education and those with mid-level education has increased significantly (Klotz, 2010). Overall, current EU-SILC figures show that those who did not continue past compulsory education report four times as many impairments due to disability or health problems (at a rate of 13%) than those who have completed an apprenticeship or gained a secondary school diploma. A similar gradient is visible when comparing professional titles (BMASK, 2011a). While further life expectancy (at age 35) has risen considerably since 1980 for both higher and lower educational attainment groups, there are still considerable differences, especially for men. Further life expectancy for men with a university degree in 2006/2007 was six years higher than for men with compulsory school education only. The difference in women is 2.3 years (BMASK, 2011a: graph 31). In 2010, the rate of risk of poverty in

over 64-year-olds was 16%, while among individuals within this group who receive benefit payments, it was 12% (BMASK, 2011a). This highlights the importance of benefit payments as a social transfer (see section 5.8).

There is also considerable and persisting variation between Länder in the utilization of preventive care services: per capita utilization in Tyrol and Vorarlberg is approximately four times higher than in Lower Austria, and around twice as high as in Vienna and Upper Austria (see Table 5.1). In the 2007 Health Survey, clear differences are apparent between individuals of Austrian origin and individuals of non-Austrian origin regarding vaccination, usage of screening services and smoking prevalence (Gönenç, Hofmarcher & Wörgötter, 2011: Fig. 16).

More recent research into aspects of health inequality between population groups indicate that income-related health inequality has increased since 2005, though it is still at a relatively low level compared to other countries (Eurostat, 2010). Recent EU-SILC data shows that individuals with poor health status are more commonly affected by deprivation than individuals with good health status. Only in the case of individuals with high income does the risk of deprivation approach zero, even in the event of poor health status (BMASK, 2011a). The increasingly unequal distribution of risk of illness has important implications for efficiency of the health-care system. Disregarding vulnerable groups contributes to higher rates of disease, which also results in high subsequent costs for treatment and care. According to current European Commission forecasts, public expenditure (not including care) in Austria will be at 8% in the 2020 reference scenario (European Commission, 2012b). In the “better health” scenario, public expenditure is expected to be lower (7.7%). This indicates that the future spending burden could be considerably lower if all potential gains in healthy life expectancy are achieved. Through a stronger emphasis on health promotion and prevention, particularly for disadvantaged groups, the potential for greater efficiency might arise.

7.5 Efficiency of the health-care system

The costs of the Austrian health-care system are high. In 2010, Austria spent almost 11% of its GDP on health, considerably more than the EU average (9.9%) (see Fig. 3.2), although less than countries such as the Netherlands, France and Germany. Per capita expenditure in Austria was at US\$ 4388, which was significantly higher than the EU15 average (US\$ 3708) and was exceeded in the EU only by Denmark, Luxembourg and the Netherlands (Fig. 3.3).

High subsequent costs are forecast to (potentially) result from Austria's below-OECD-average healthy life expectancy, and increasing inequality in risk of illness (see section 7.4.3 Inequity in outcomes is on the rise). Alongside this, the division of competences (see Table 2.1) and related fragmentation of financing within the health-care system (see Fig. 7.1 and Table 3.4) is another key source of inefficiency in the health-care system. Attempts to improve the efficiency of the health-care system (see sections 6.1.5 *Governance of the health-care system* and 7.6) first started in 1997 (see section 2.2) and were intensified in 2005. However, they backfired. While the cost-effectiveness and productivity of health-care professionals (see Table 4.9) rose in many areas (section 7.5.2 *Technical efficiency is largely given but also uneven*), there were increasing imbalances in the allocation of scarce resources throughout areas of provision.

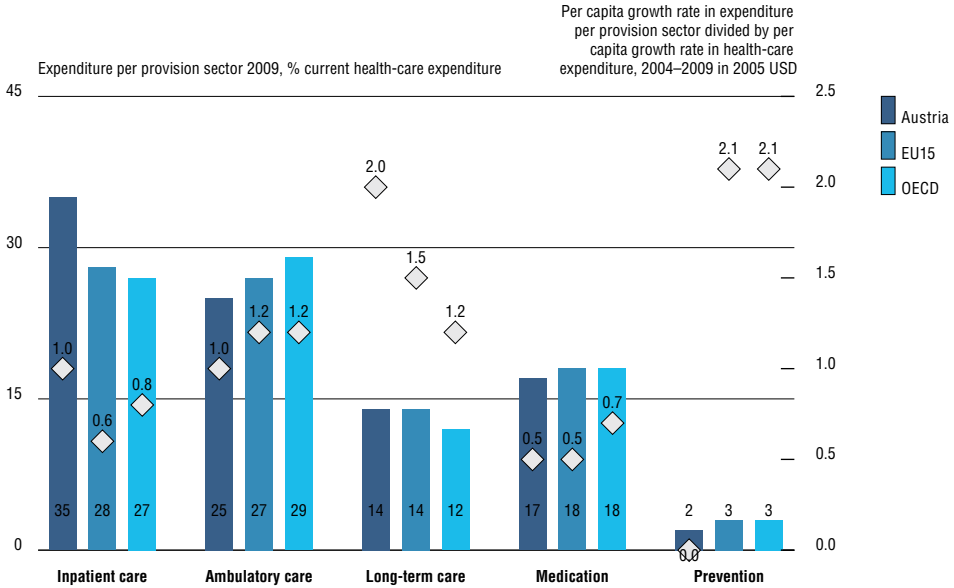
7.5.1 The provision landscape is marked by imbalances

Fig. 7.5 shows that inpatient care uses the most resources in international comparisons (35%), and that significantly fewer resources are expended on ambulatory care, including hospital outpatient clinics (see Table 3.2 and section 5.2). However, there are important indications that hospital admissions are avoidable for many diseases (see Fig. 7.4), and that Austria has considerable ground to make up in this area (Gönenç, Hofmarcher & Wörgötter, 2011). Even though the number of day-clinic cases is rising sharply (see Fig. 5.2), the proportion of such cases is low in Austria (in 2006: 14.8%) compared to other countries (Eurozone, 2006: 25%) (European Commission, 2010c: Table 31; section 5.4.1 *Day care*). The number of these cases is growing rapidly, however.

Furthermore, per capita spending on inpatient care is growing at as fast a rate as current health expenditure, by 12% in real terms between 2004 and 2009. In EU15 and OECD countries, spending on the inpatient sector is, on average, growing more slowly than health expenditure. The long-term care sector is especially responsible for the rise in spending in Austria. However, long-term care is at a level comparable with that in EU15 and OECD countries. At 17% of total current expenditure, pharmaceuticals make up a significant part of total health expenditure, and they have been growing relatively slowly. While real spending on prevention displayed above-average growth in both OECD and EU averages, in Austria it barely rose between 2004 and 2009.

Fig. 7.5

Expenditure per care area (as percentage) and growth rate (GR) relative to health expenditure (elasticity)



Note: The areas of provision displayed above represent the most important spending blocks, but do not cover 100% of spending. The underlying per capita data are given in USD purchasing power parities at 2005 prices. Within the EU15 group, data was only available for 10 countries. Within the OECD group, data was available on 25 countries.
Source: OECD (2012); own calculations.

Planning continues to have little influence on the balance of activities in the health-care sectors, which is usually attributed to the fragmentation of responsibilities for planning and financing. The difficulty of restructuring care towards more efficient models of provision is also apparent in the psychiatry sector, where current planning is also geared towards more patient-oriented care close to patients’ place of residence (see section 5.11). However, Austria continues to have a high number of psychiatric inpatient beds (above the EU15 average) and initiatives to restructure care are often blocked or delayed.

In parallel with the increased centralization of health-care planning, renewed initiatives have been launched to improve resource allocation using technology assessment for new services (see sections 2.3 and 2.7.2 *HTA*). Increasing specialization in all areas is creating pressure to integrate new services, methods and drugs (see sections 2.8.4 *Regulation and governance of pharmaceuticals* and 5.6) into the cost reimbursement and payment systems (see Tables 3.16 and 3.19). This reflects the challenge of coordinating and implementing technology assessments in a way that is at once patient-oriented and enables cost-effective technological advances.

One key reason for the persistently high level of acute care bed capacity is that chief physicians in hospitals are allowed to treat patients covered by private supplementary insurance in public hospitals (see section 3.6). The Länder's hospital statutes stipulate that up to 25% of bed capacity can be designated as "special-class beds". This leads to an increase in capacity, as cutting beds in the "standard class" automatically results in cuts to the number of special-class beds, causing both loss of revenue for hospitals (see Table 3.17) and loss of income for physicians (see section 3.7.2 *Remuneration of health-care staff*)².

Finally, the sheer variety of payment systems in different sectors contributes to imbalances in provision (see Table 3.16), although in recent years increased efforts have been made to create structures that improve coordination of billing in the inpatient and ambulatory sectors (see section 6.1.4 *Financing of the health-care system and payment of service providers* and Table 6.1). Better cross-sectional management would help to address the distortion in the way funds are allocated, and could also help reduce costs. This is relevant to efforts to improve not only the coordination of inpatient and ambulatory care (see section 5.4)³, but also between different levels of ambulatory care (see section 5.3), between acute inpatient care and aftercare (see sections 5.4 to 5.11), between traditional and alternative treatments (see section 5.13), and between physicians and other health-care professions (see section 4.2).

Imbalances in the provision landscape and related inefficiencies have serious consequences for society as a whole. Public health-care spending is financed to a large degree by additional wage costs and general taxation. The total cost burden (taxes plus social insurance spending) is 3 percentage points above the average for western Europe (Aiginger, 2011; Aiginger et al., 2010). With an ageing population, the state is required to spend more (see Fig. 1.2), not only on health-care services but also on social care, age-appropriate employment and building accommodation. At the same time, child care requires investment, and innovation must be fostered through education, research and environmental investments. In recent years, however, health expenditure, as a percentage of state expenditure, has grown at a markedly faster rate than education spending (Hofmarcher, 2011).

² However, this form of public-private mix also has its advantages. First, without the "special-class" category, income of chief physicians would presumably have to be increased. Second, this scheme may be an incentive for physicians to ensure a high level of quality care for all patients, not just special-class patients. However this group is also at risk of "over-treatment" (Url, 2006).

³ Of significance here is the prevalence of duplicated examinations, as well as measures to prevent them, for example by employing e-health procedures (see section 4.1.4 *Information technology*). Although there is no official data on duplicated examinations, 50% of patients in a nationwide survey said that examinations performed shortly before their hospitalization were repeated in the hospital (section 7.3.1 *Patient experiences with the health-care system are positive throughout*).

According to current forecasts, public spending on health-care and care will have grown to almost 10% by 2020 (reference scenario). This growth rate is slightly higher than that of the whole Eurozone (European Commission, 2012b) and other developed economies (IMF, 2010). According to the IMF, demography-related costs represent just one-third of the predicted rise in costs by 2030. Two-thirds will be the result of technological advances, income effects and inefficiencies.

International organizations investigating potential savings or efficiency gains (section 7.4.1 *Austria has ground to make up in the area of healthy life expectancy*) (OECD, 2010b; IMF, 2010) have arrived at roughly the same figures as those given in domestic calculations and literature (Sommersguter-Reichmann, 2000; Hofmarcher, Lietz & Schnabl, 2005; Court of Auditors, 2006; Czypionka et al., 2008; Aiginger et al., 2010). The potential efficiency reserves have generally been located within inpatient care, and are of a magnitude of between €2 and €3 billion, which represents 17–26% of spending on inpatient care (section 7.4.1 *Austria has ground to make up in the area of healthy life expectancy*). However, most of these calculations do not take into account that a reduction in bed numbers across the board must be accompanied by an increase in capacity in other sectors in order to guarantee provision outside hospitals. Although the hospital sector is very large compared to other sectors (see Fig. 7.5), in certain organizational aspects (keywords: human resources planning, individual practices, compensation for MELs) the concentration of provision in hospitals has also brought about significant improvements in technical efficiency within this sector over recent years.

7.5.2 Technical efficiency is largely given but also uneven

While capacity utilization in hospitals has increased faster than in other countries due to above-average hospitalization rates and a concurrent sharp reduction in the average length of stay (see Table 4.3), there is considerable regional variation in bed capacity (see Table 4.2). For instance, Carinthia and Salzburg, despite significant reductions in bed numbers, have still had above-average bed capacity over the last decade.

Staffing costs are the largest cost area within health expenditure. According to estimates, in most EU nations, 60–80% of health expenditure goes towards staffing, that is, wages (Buchan, 2000). In 2009, approximately 53% of total (unadjusted) fund hospital expenditure (see Table 3.17) was staffing costs.

However, the high level and rapid growth of health expenditure in Austria is only partially attributable to staffing and wages in this area (see section 7.5.1 *The provision landscape is marked by imbalances*).

First, staffing density in Austria is relatively low, as compared with other EU countries (Hofmarcher & Tarver, 2012).

Second, per-hour staffing costs for employed workers are relatively low in this sector compared with not only the economy as a whole, but also the service sector (Eurostat, 2012)⁴.

Third, although the income level of GPs is relatively high compared to other countries (see section 3.7.2 *Remuneration of health-care staff*), this group is comparatively small (see section 4.2.1 *Health care workers*), and is growing at a below-average rate in the contracted physician group (see section 5.2).

Finally, administrative costs of the public health-care system were at 0.2% of GDP in 2009. That places Austria below the figure for the Eurozone as a whole (0.3%) (European Commission, 2010c). Public health-care administration costs are also far below those of the private health-care sector (see Tables 3.7 and 3.13). However, there is considerable variation in administrative expenditure within social health insurance. Out of total administrative costs of €400 million in 2010 (see Table 3.7), 28% were incurred by specialist insurance funds (see Table 3.5), which, excluding prescription fees, account for 55% of all other patient cost-sharing (see Tables 3.10 and 3.12). Among these funds, per capita administrative and billing costs (around €100) are twice as high as those of regional health insurance funds (around €50). The Insurance Institution for Railways and Mining has the highest administration costs, at €170 per capita.

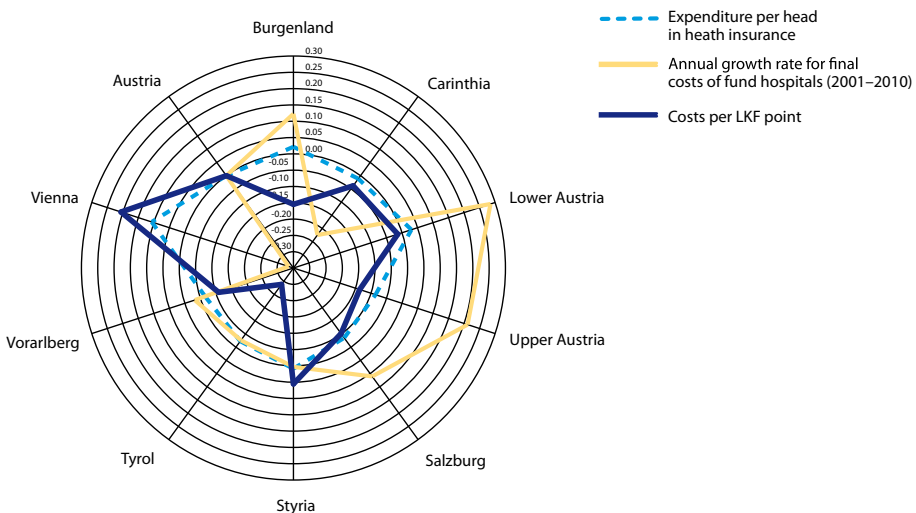
This suggests that management procedures are sub-optimal and that there is potential for greater efficiency in certain health insurance funds. In fact, it is remarkable that relative to the population of Austria, the number of health insurance funds is quite high. Alongside nine regional health funds and six company health insurance funds, there are four professional funds (see Fig. 2.2 and Table 3.5). In addition, there are 16 health welfare institutions, which collectively insured approximately 241 000 individuals in 2010.

⁴ However this gap narrowed between 2003 and 2008. While in 2003, employment costs per hour in the health and social sector were at 86.4% of the figure for the wider economy, by 2008 this had risen to 97.3%. A similarly strong convergence trend is apparent between health and social employment costs and the service sector. This also indicates that the qualification level of health-care workers may have risen considerably (see Table 4.9).

Fig. 7.6 compares costs per Austrian DRG point (LKF point) in the inpatient sector (as a proxy for inpatient efficiency), and costs per head in health insurance (as a proxy for ambulatory efficiency) across Länder. In general, higher efficiency in the ambulatory sector seems to be accompanied by higher efficiency in the inpatient sector. In other words, there doesn't seem to be a substitution effect, where higher costs in the ambulatory sector would be accompanied by lower costs in the inpatient sector. While Vienna has a below-average efficiency rating, the region's average yearly increase in total costs in the hospital sector is, on the other hand, significantly below average. The greatest cost increase for hospitals is found in Lower Austria, which is primarily caused by high levels of investment.

Fig. 7.6

Comparison of individual health-care system expenses by Land, 2010



Notes: The graphic shows the standard deviations of the Länder values from the Austrian average. The indicator "costs per LKF point" measures the resource consumption (inputs) in relation to services provided (outputs) measured in DRG (LKF) points, the billing unit for hospital services since 1997.

* Spending, including all insurance services provided, for a Regional Health Insurance (excluding costs for residential care).

Sources: HVS, 2012b; GÖG-survey, May 2012; own calculations.

A series of studies confirms that differences exist in efficiency between different types of hospital ownership groups (Hofmarcher, Lietz and Schnabl, 2005; Czypionka et al., 2008). Hospitals owned by Länder (or their operating companies) are on average less efficient than those of other owners. This difference can mean as much as 20% of inputs employed, or in other words approximately €2 billion. Non-profit-making hospitals, and particularly those run by religious orders, are much more efficient. However, the differences

between hospitals within the same ownership group are consistently larger than those between groups. This shows that there are considerable reserves of efficiency in all groups. However, results have to be interpreted with care because hospitals owned by Länder are obliged to maintain capacity, particularly for ambulatory provision, and the results are not adjusted for the quality of care and the difference in the complexity of treatment procedures.

Due to the decentralized and fragmented nature of planning (see sections 2.4, 2.5 and 2.8.2 *Regulation and governance of service providers*), technical specialization and efficient means of work distribution in the health-care and hospital landscape is blocked. Simulated results show, for instance, that carrying out breast cancer operations at 35 sites would be enough to meet quality standards. Currently around 110 sites (over three times as many) perform these operations (Gönenç, Hofmarcher & Wörgötter, 2011). Specializations caused by an increased number of cases also improve the quality of results in this area.

Besides these measures to improve quality through concentrating activities, new calculations show that specialized hospital facilities with over 300 beds could make savings (up to €280 million), but that smaller hospitals (with fewer than 300 beds) have significantly more potential efficiency savings and could save as much as €420 million (Hofmarcher & Gruber, 2011a). The high levels of estimated savings for smaller hospitals result from a considerable variation in cost efficiency. In contrast, there are significantly more larger hospitals that are cost-efficient. As such, the savings for these clearly more specialized institutions are significantly lower.

These results show that the construction and expansion of specialized units should be made a strategic priority. This is already under way in some Länder and is currently under negotiation at the federal level (see section 6.2 and Table 6.2). The cost efficiency of “smaller” hospitals could be increased by improving management practices regarding input. A recently published study also pointed to the potential for “economies of scale” of “smaller” hospitals by combining their services with provision of nearby ambulatory facilities or other institutions. This requires the expansion of integrated care across hospitals and rehabilitation/care homes (Czypionka et al., 2012).

7.6 Transparency and accountability

Both the quantity and quality of information on the health-care system has increased dramatically in recent years. This includes patient access to quality-assured information on health and the health-care system (see section 2.9) as well as the setting up and expansion of information systems for improved management of service providers and financing sources (see sections 2.7 and 4.1.4 *Information technology*). Additionally, on the basis of the National Quality Strategy (see section 2.8.2 *Regulation and governance of service providers*), there have been comprehensive efforts made to establish a reporting system, including documentation of quality of outcomes, particularly in the hospital sector (see section 6.1.2 *Information systems and quality of provision* and Table 6.1).

While all these measures contribute to the transparency of health-care provision and although Austria, compared to other countries, is very advanced in such areas as e-health architecture (Stöger, 2011), the definition of roles and responsibilities for decisions on financing and service provision are insufficiently developed, contributing to a considerable lack of transparency.

First, while DRG-based hospital payment has significantly improved the transparency in the provision of services and costs in practically all hospitals (BASYS & IMÖG, 2010; Kobel & Pfeiffer, 2011), the processing of payments to hospitals is consistently not transparent. The reason for this is the differing reporting systems used by the Länder when combining funds from different sources of finance (Fig. 3.8) and when paying hospitals.

Second, this level of opacity is intensified by the interplay between financiers (Länder funds), regional administrative units and the corporatization of operating companies in all existing Länder (excluding Vienna). The organizations have accrued significant financial burdens by taking on debt. This in turn makes it more difficult to merge roles and responsibilities. However, in order to ensure overall sustainability of the public finances, it is essential that roles and responsibilities are combined at local authority level. Therefore, the Länder budgets are taking on increasing amounts of debt to finance their hospitals (see sections 2.4 and 3.3.3 *Pooling of public funds*), but this varies depending on the Land. While the liabilities and debts for Carinthia in 2008 amounted to 200% of the spending for fund hospitals, this figure was only 2.3% in Vorarlberg. Taking into account all Länder, the financial burden of borrowing, as a proportion of spending on fund hospitals, stood at 25.7% in 2008 (Hofmarcher & Gruber, 2011c).

Third, this development is highly fiscally volatile. While the process of financial equalization is fundamentally opaque and is considered to be particularly inefficient within the health-care system (European Commission, 2012a), the Länder's scope to top up income for hospitals could increase between 2008 and 2013, because there are currently more free transfers available than was previously the case (Schratzstaller, 2008). There has been too little systematic evaluation of the measures taken by the Länder, which in the case of the 2005 health reform (see sections 2.2 and 6.1) were required to fulfil the cost reduction targets by 2008. Although there are now some qualitative studies, for example Herber (2007), there has been no quantitative overview of the measures taken. Moreover, the Länder received an additional €100 million per year between 2008 and 2013 (see Table 6.1) without any obligation to justify how these funds are used.

Finally, transparency in the provision of GPs and medical specialists is not guaranteed due to the fragmentation of responsibilities in this area (see sections 2.8.2 *Regulation and governance of service providers*, 5.2 and 6.1). This particularly affects the areas of public health promotion and preventive medicine (see section 5.1) in which, aside from a lack of national strategy (see sections 6.1 and 6.2), a lack of future-oriented scientific research capacity has been identified (Noack, 2011).

In terms of the overall national consolidation efforts, it is essential to implement a monitoring system so that operations of Länder and the hospital operating bodies are better monitored. Moreover, precautions must be taken so that future funds necessary for hospitals are more often used as a parameter for the internal stability pact.

A comprehensive OECD study (OECD, 2010b) compares Austria to the OECD as a whole and to a defined group of countries, classified as being similar to the Austrian health-care system. The study identifies a series of weaknesses in Austria present in the executive and management levels. The Austrian system is marked by coexisting decentralization, relatively weak regulation and little budget control with limited "gatekeeping". The combination of the structural weaknesses, inefficiencies, and the growing need for care provision, which, due to demographic changes, is set to increase in the future, means Austrian health policy is facing great challenges. Although the population continues to be satisfied with health-care provision and has great confidence in the health-care system (see section 7.3.1 *Patient experiences with the health-care system are positive throughout*) there are some signs that people are compensating for gaps or bottlenecks in provision either through private health insurance protection

(see section 3.5) and/or private payments (see Table 3.10), including informal payment (see section 3.4.2 *Informal payments*). Furthermore, these failings are overwhelmingly more discriminatory for socially vulnerable groups (see section 7.4.3 *Inequity in outcomes is on the rise*). Especially for these individuals, the progressive development of care provision is particularly important in bringing about increased “health expectancy” that would also increase their opportunities in education and on the job market.

8. Conclusions

The history and structure of the Austrian health-care system has been shaped by both the federal structure of the state and a tradition of delegating responsibilities to self-governing stakeholders. This coexists on the one hand with a decentralized planning and governance, adjusted to local norms and preferences. On the other hand, this leads to the fragmentation of responsibilities and frequently results in inadequate coordination. For this reason, efforts have been made for several years (particularly following the 2005 health-care reform) to achieve more joint planning, governance and financing of the health-care system at the federal and regional level.

Almost the entire Austrian population (99.9% in 2011) is covered by social health insurance, which grants access to a wide range of services. The social health insurance system that has been in place since the turn of the twentieth century was last expanded in 2010 to include recipients of need-based minimum income (previously known as social assistance). In contrast to Germany and Switzerland, where insurance holders have gradually been offered more choice of insurance funds since the 1990s, membership of a social insurance fund in Austria is principally determined by occupation, but can also be determined by place of work or residence. This means that insurance funds do not compete for members.

Together with health insurance, the tax system makes a considerable contribution to the financing of the Austrian health-care system. This mixed financing model ensures on the one hand that the health-care system is financed in a way that is relatively fair through progressive taxation. Another advantage is that the labour cost burden of health insurance contributions is relatively small. However, these advantages are balanced out by the costs of coordinating the nexus between health insurance-funded primary and specialist care, and tax-funded inpatient care. This is increasingly the case also at the interface between acute care and long-term care.

One aspect that is a source of great public pride is the unrestricted access to comprehensive care at all levels (GPs, specialist physicians and hospitals) to all insured people. The level of out-of-pocket payments is relatively high in Austria when compared internationally. However, the many exemption criteria – such as the prescription fee cap – ensure comprehensive access to health-care.

The quality of care is high, and is becoming increasingly transparent. Since 2007, Austria has reacted to the increasing number of elderly people by expanding the benefit payment system put in place in 1993 with extra funds for 24-hour care in private households. This programme also has a well-established quality management system. In national and international user satisfaction surveys, the health-care system regularly performs very well (see for example the Eurobarometer): more than 90% of people surveyed think that the Austrian health-care system is very good or quite good.

However, when compared internationally, there is room for improvement throughout the Austrian health-care system. In contrast to life expectancy, which has risen continually, the number of healthy life years in Austria was more than two years below the EU average in 2010. One disadvantage of open access to all levels of care is that it is often difficult for patients to find the care most appropriate to their condition, illness profile and personal requirements within the maze of options. The balance between inpatient and ambulatory care is poor, as is the balance between various levels of ambulatory care and preventive measures, acute inpatient care and aftercare, and between physicians and other health-care professions.

The inpatient sector is over-represented in comparison to the ambulatory sector. This is also apparent when compared to other countries. Furthermore, spending on preventive medicine is relatively low. At the same time, there is strong regional variation in the way that care is structured, in provision of hospital beds and specialist physicians, as well as in the use and availability of certain services, such as preventive health check-ups, ambulatory rehabilitation, psychosocial treatment and psychotherapy, and long-term care. There is also clear variation along sociodemographic lines in the use of preventive services. Income-related inequality in health has increased since 2005, although it is still relatively low compared to other countries.

The costs of the health-care system in Austria are high. Both in absolute terms, and as a percentage of GDP, they are above the EU15 average. International and Austrian studies indicate that there is a great deal of room for improvement regarding the efficiency of the Austrian health-care system. Large efficiency reserves were observed in the inpatient sector and in insufficient

continuity of care, particularly regarding non-acute episodes of illness and the chronically ill. For this reason, for several years, key goals within Austrian health-care policy have been the reduction of capacity in the inpatient sector, better coordination between different levels of care, and balancing the health-care system and long-term care provision.

The 2005 health-care reform and the establishment of inter-stakeholder structures at the federal level (Federal Health Commission) and at the regional level (health platforms) represent an attempt to improve intersectoral and intra-sectoral coordination. At the same time, a fund with reserves equivalent to 1–2% of total health expenditure has been established to finance the reallocation of services away from the tax-revenue-financed inpatient sector to the insurance-financed ambulatory sector (the “reform pool”). Since 2006, many projects have been financed through these funds – for example the disease management programme “Active Therapy Diabetes” – which have helped to improve chronic illness care.

At the same time, there are no incentives or regulations encouraging decision-makers to take projects from the reform pool and transfer them to the regular provision system, which means that these efforts have so far had little effect on the structural imbalances in health-care. The root cause of inefficiency in care provision is still present: the fragmentation of responsibilities and the concomitant fragmentation of funding. Far-reaching measures to consolidate responsibilities and financing would be necessary to move closer to the goal of integrated, patient-centred and efficient care. Current reform efforts are expressly moving in this direction.

The application of e-health infrastructure holds great potential for greater continuity between service providers. This is a field in which Austria is relatively advanced compared to other countries. April 2011 saw the launch of the e-medication project, the first trial implementation of electronic health files (ELGA). Under this programme, patients in Vienna, Upper Austria and Tyrol can keep a record of their medication on an electronic database using a social insurance chipcard (e-card). The e-card simplifies the administration of the prescription fee cap significantly, as it contains data on both the net income of the insured person, as well as any prescription fees already paid. The core applications available immediately after the ELGA launch, planned for 2013, are e-results, e-physician’s letters (hospital discharge notices) and living wills.

One of the Austrian health-care system’s key weaknesses is in prevention of illness. Health insurance funds are investing in prevention, but only after they have met their statutory requirements for curative medicine. With some

exceptions (e.g. health check-ups) there is insufficient statutory groundwork for health insurance funds to work in health promotion and prevention. Spending on preventive medicine, at 2%, is significantly lower than the EU15 and OECD average (both 3%), and is also showing a below-average rate of growth. Efforts in recent years to establish health promotion and prevention more strongly within a “Health in All Policies” strategy could be effective in the long term. The current discussion around national “framework health goals” places great emphasis on health promotion and prevention. Hopefully these goals can be translated into concrete measures, responsibilities for implementation can be assigned, and sufficient funding made available to improve the health of the Austrian population, avoiding the costs associated with preventable diseases.

9. Appendices

9.1 References

- Ahgren B (2008). Is it better to be big? The reconfiguration of 21st-century hospitals: Responses to a hospital merger in Sweden. *Health Policy*, 87(1):92–99.
- Aiginger K (2011). *Herausforderungen einer alternden Gesellschaft: Schwerpunkt Reformbedarf im österreichischen Gesundheitssystem*. Vienna, Österreichisches Institut für Wirtschaftsforschung (WIFO) (WIFO-Vorträge, 111/2011).
- Aiginger K et al. (2010). *Optionen zur Konsolidierung der öffentlichen Haushalte in Österreich*. Vienna, Österreichisches Institut für Wirtschaftsforschung (WIFO) (WIFO-Monographien, 2/2010).
- Allin S, Masseria C (2009). *Unmet need as an indicator of access to health-care in Europe*. Research Note for the European Commission, Directorate-General Employment, Social Affairs and Equal Opportunities. London: London School of Economics.
- Arbeiterkammer (2012) [web site]. *Sonderausgaben*. Vienna, Kammer für Arbeiter und Angestellte Wien (<http://www.arbeiterkammer.at/online/sonderausgaben-2548.html>, accessed August 2013).
- Austrian Generics Association (2010) [web site] (<http://www.generikaverband.at/>, accessed April 2011).
- Austrian Stability Pact (2012). Vereinbarung zwischen dem Bund, den Ländern und den Gemeinden über einen Österreichischen Stabilitätspakt 2012 – ÖStP 2012. *Federal Law Gazette*, I Nr. 30/2013 (<http://www.ris.bka.gv.at/Dokument.wxe?Abfrage=Bundesnormen&Dokumentnummer=NOR40147265>, accessed 4 September 2013).
- AUVA (2009). *Jahresbericht 2009*. Vienna, Allgemeine Unfallversicherungsanstalt (AUVA) (http://www.auva.at/portal27/portal/auvaportal/channel_content/cmsWindow?action=2&p_menuid=2027&p_tabid=6, accessed 29 March 2012).
- AUVA (2011a). Auszug aus der Statistik 2010. Vienna, Allgemeine Unfallversicherungsanstalt (AUVA) (http://www.auva.at/mediaDB/815879_Auszug%20Statistik%202010.pdf, accessed 29 March 2012).
- AUVA (2011b). *Jahresbericht 2010*. Vienna, Allgemeine Unfallversicherungsanstalt (AUVA) (http://www.auva.at/mediaDB/848527_JB%202010.pdf, accessed April 2012).
- Bachinger A (2009). *Der irreguläre Pflegearbeitsmarkt. Zum Transformationsprozess von unbezahlter in bezahlte Arbeit durch die 24h Pflege*. Dissertation, University of Vienna.
- Bachner F et al. (2012). *Das österreichische Gesundheitswesen im internationalen Vergleich. Studie im Auftrag des BMG*. Vienna, Gesundheit Österreich GmbH (GÖG).

- BAGS (2011). *Kollektivvertrag für ArbeitnehmerInnen, die bei Mitgliedern der Berufsvereinigung von Arbeitgebern für Gesundheits- und Sozialberufe (BAGS) beschäftigt sind*. Vienna, Berufsvereinigung von Arbeitgebern für Gesundheits- und Sozialberufe (BAGS) (<http://www.bags-kv.at/2073,,2.html>, accessed August 2011).
- BASYS, IMÖG (2010). *Evaluierung des Systems der Leistungsorientierten Krankenanstaltenfinanzierung "10 Jahre LKF"*. Ausgburg, Beratungsgesellschaft für angewandte Systemforschung (BASYS) (http://www.bmg.gv.at/cms/home/attachments/2/1/5/CH1164/CMS1295949208661/abschlussbericht_lkf-evaluierung_end.pdf, accessed 4 September 2013).
- Baumgartner J (2006). Hospiz- und Palliativversorgung in Österreich. Entwicklungen und aktueller Stand. Salzburg, 2. Österreichischer interdisziplinärer Palliativkongress (http://www.palliativ-medizin.at/PP_Vortraege/baumgartner.pdf, accessed 4 September 2013).
- Berger J et al. (2007). *Evaluation of the Austrian National Reform Programme: an update with a special focus on employment, liberal professions and international competition*. Studie im Auftrag des Bundesministeriums für wirtschaftliche Entwicklung. Vienna, Institut für Höhere Studien (IHS) (http://www.ihs.ac.at/publications/eco/recent_publ/npr_09-2007.pdf, accessed 4 September 2013).
- Beschaffung Austria* (2011). Wenn der Arbeitsplatz zum Lebensraum wird (http://www.bbg.gv.at/fileadmin/daten/Downloads/ba/ba_14_1103_buero.pdf, accessed 4 September 2013).
- Biffel G (2007). *The employment of women in the European Union*. Vienna, Österreichisches Institut für Wirtschaftsforschung (WIFO) (WIFO Working Papers 297).
- Birgmann R, Peböck M, Reif M (2008). *Gesundheitsbericht Linz 2008*. Linz, Institut für Gesundheitsplanung.
- BMASK (2009). *Österreichischer Pflegevorsorgebericht 2009*. Vienna, Bundesministerium für Arbeit, Soziales und Konsumentenschutz (BMASK).
- BMASK (2010). *Sozialbericht 2009–10: Ressortaktivitäten und sozialpolitische Analysen*. Vienna, Bundesministerium für Arbeit, Soziales und Konsumentenschutz (BMASK) (http://www.bmask.gv.at/cms/site/attachments/3/2/3/CH2171/CMS1289832560842/sozialbericht_2010_web.pdf, accessed 3 September 2013).
- BMASK (2011a). *Armut und Ausgrenzungsgefährdung in Österreich. Ergebnisse aus EU-SILC 2010. Studie der Statistik Austria im Auftrag des BMASK*. Vienna, Bundesministerium für Arbeit, Soziales und Konsumentenschutz (BMASK) (http://www.bmask.gv.at/cms/site/attachments/5/8/4/CH2170/CMS1218527491861/studienreihe_band8_eu-silc.pdf, accessed 3 September 2013).
- BMASK (2011b) [web site] *Pflegegeld*. Vienna, Bundesministerium für Arbeit, Soziales und Konsumentenschutz (<http://www.bundessozialamt.gv.at/basb/Pflege/Pflegegeld>, accessed 3 September 2013).
- BMASK (2011c). *Österreichischer Pflegevorsorgebericht 2010*. Vienna, Bundesministerium für Arbeit, Soziales und Konsumentenschutz (BMASK).
- BMF (2010). *Strategiebericht zum Bundesfinanzrahmengesetz 2009–2013*. Vienna, Bundesministerium für Finanzen (BMF).
- BMF (2012). Press release, 29 March (http://english.bmf.gv.at/Press/releases_2012/March/EBEBFF3C8DC24D299CAD793C06D14661.htm, accessed May 2013).
- BMG (2010a). *Das österreichische LKF-System*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2010b). *Dokumentation im ambulanten Bereich. Bericht zum Projekt "Dokumentation im ambulanten Bereich"*. Vienna, Bundesministerium für Gesundheit (BMG).

- BMG (2010c). *Handbuch ÖGD – Handbuch für den Öffentlichen Gesundheitsdienst in Österreich*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2010e). Nachhaltige Konsolidierung des Gesundheitsbudgets ohne Leistungseinschränkungen für Patient/innen. Press release, 23 October.
- BMG (2010f). *RSG Monitoring 2010*. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.bmg.gv.at/home/Schwerpunkte/Gesundheitssystem_Qualitaetssicherung/Planung/Regionale_Strukturplaene_Gesundheit_RSG_Monitoring, accessed 3 September 2013).
- BMG (2010g) [web site]. *Die Österreichische Ernährungspyramide*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2010h) [web site]. *Kindergesundheit stärken*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2010i) [web site]. *Zahngesundheit: Empfehlungen des Obersten Sanitätsrates*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2010j) [web site]. Vienna, Bundesministerium für Gesundheit (BMG) (http://bmg.gv.at/home/Ministerium_Minister/Geschaefteinteilung/, accessed May 2013).
- BMG (2010k). Österreichischer Gesundheitsbarometer. Was die ÖsterreicherInnen über die heimische Gesundheitsversorgung denken. Pressekonferenz am 7. Jänner 2010 in Wien mit Gesundheitsminister Alois Stöger. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.bmg.gv.at/cms/home/attachments/5/8/6/CH1212/CMS1287055124905/pk_unterlage_gesundheitsbarometer.pdf, accessed 3 September 2013).
- BMG (2011a). *Kindergesundheitsstrategie*. Vienna, Bundesministerium für Gesundheit (BMG) (<http://www.bmg.gv.at/home/Schwerpunkte/Praevention/Kindergesundheitsstrategie>, accessed 3 September 2013).
- BMG (2011b). *Leistungsorientierte Krankenanstaltenfinanzierung, LKF – Medizinische Dokumentation*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2011c). *Leistungsorientierte Krankenanstaltenfinanzierung, LKF – Modell 2011*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2011d). *LKF – Leistungskatalog 2011*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2011e). *Nationaler Aktionsplan Ernährung*. Vienna, Bundesministerium für Gesundheit (BMG) (<http://www.bmg.gv.at/home/Schwerpunkte/Ernaehrung/>, accessed 3 September 2013).
- BMG (2011f). *Umsetzung des kostenlosen öffentlichen Impfkonzepts 2012*. Vienna, Bundesministerium für Gesundheit (BMG).
- BMG (2011g). *Was ist neu im Jahr 2012? Neuregelungen, Daten & Fakten*. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.bmg.gv.at/cms/home/attachments/8/6/8/CH1004/CMS1323872018309/wasistneu2012final_19122011_gesamt.pdf, accessed April 2012).
- BMG (2011h) [web site]. *Krankenanstalten – selbstständige Ambulatorien – Leistungsorientierte Krankenanstaltenfinanzierung (LKF)*. Vienna, Bundesministerium für Gesundheit (BMG) (<http://bmg.gv.at/home/Schwerpunkte/Krankenanstalten/>, accessed 3 September 2013).

- BMG (2011i). *Stationäre Aufenthalte (KJ) 2001–2010*. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.kaz.bmg.gv.at/fileadmin/user_upload/Aufenthalte/1_T_Aufenthalte_stat.pdf, accessed March 2012).
- BMG (2011j). *Krankenanstalten in Zahlen. Überregionale Auswertung der Dokumentation der landesgesundheitsfondsfinanzierten Krankenanstalten. Österreich 2010*. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.kaz.bmg.gv.at/fileadmin/user_upload/Publikationen/uereg_oesterreich_2010.pdf, accessed April 2012).
- BMG (2011k). *Österreichischer Frauengesundheitsbericht 2010/2011*. Vienna, Bundesministerium für Gesundheit (BMG) (<http://bmg.gv.at/cms/home/attachments/5/3/5/CH1102/CMS1329822770089/frauengesundheitsbericht.pdf>, accessed 3 September 2013).
- BMG (2011l). *Gesundheit und Gesundheitsverhalten von österreichischen Schülern und Schülerinnen. Ergebnisse des WHO-HBSC-Survey 2010*. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.bmg.gv.at/cms/home/attachments/0/2/3/CH1105/CMS1327919019042/hbhc_schuelerbericht2010_barrierefrei.pdf, accessed 3 September 2013).
- BMGF (2004). *The Austrian Health Reform 2005. The improvement of the efficiency of the health-care system and ensuring sustainable financing*. Vienna, Bundesministerium für Gesundheit und Frauen (BMGF).
- BMGF (2010). *Diagnosen- und Leistungsdokumentation der österreichischen Krankenanstalten 1999–2009*. Vienna, Bundesministerium für Gesundheit und Frauen (BMGF).
- BMGFJ (2008). *Vierter Bericht der Gentechnikkommission*. Vienna, Bundesministerium für Gesundheit, Familie und Jugend (BMGFJ).
- BMG, GÖG (2010). *Österreichischer Strukturplan Gesundheit 2010 (ÖSG 2010 inkl. Großgeräteplan) gemäß Beschluss der Bundesgesundheitskommission. Studie im Auftrag der Bundesgesundheitsagentur*. Vienna, Bundesministerium für Gesundheit (BMG) (http://www.bmg.gv.at/home/Schwerpunkte/Gesundheitssystem_Qualitaetssicherung/Planung/Oesterreichischer_Strukturplan_Gesundheit_OeSG_2010, accessed 3 September 2013).
- BMG, ISA (2009). *Gesundheitsbarometer 2009*. Vienna, Bundesministerium für Gesundheit (BMG).
- BOEP (2011). *Die Bedeutung psychologischer Leistungen aus Sicht der Sozialversicherung. Vienna, Berufsverband Österreichischer PsychologInnen* (<http://www.boep.or.at/Aufnahme-der-klinisch-psy.511.0.html>, accessed July 2011).
- Bratusch-Marrain C (2006). *A comparison of the private health insurance in Austria, Germany and the United States* [thesis]. Vienna.
- Buchan J (2000). Health sector reform and human resources: lessons from the United Kingdom. *Health Policy and Planning*, 15(3):319–325.
- Court of Auditors (1998). *Nachtrag zum Tätigkeitsbericht des Rechnungshofes, Verwaltungsjahr 1996*. Vienna, Court of Auditors.
- Court of Auditors (2002). *Einkommen 2002/2001*. Vienna, Court of Auditors.
- Court of Auditors (2006). *Allgemeines Krankenhaus der Stadt Wien-Universitätskliniken, Landeskrankenhaus, Graz-Universitätsklinikum, Landeskrankenhaus-Universitätskliniken Innsbruck, Sondergebühren und Arzthonorare*. Vienna, Court of Auditors.

- Court of Auditors (2011a). *Finanzierung und Kosten von Leistungen in Spitalsambulanzen und Ordinationen*. Vienna, Court of Auditors.
- Court of Auditors (2011b). *Tagesklinische Leistungserbringung am Beispiel des Landes Steiermark*. Vienna, Court of Auditors.
- Czasny I et al. (2012). *Ärztinnen und Ärzte: Bedarf und Ausbildungsstellen 2010 bis 2030*. Vienna, Gesundheit Österreich GmbH im Auftrag von BMG, BMWF und ÖAK.
- Czypionka T, Röhring G (2009). Analysis of the 'reformpool'-activity in Austria: is the challenge met? *International Journal of Integrated Care* (<http://www.ijic.org/index.php/ijic/article/viewArticle/397/792>, accessed 3 September 2013).
- Czypionka T et al. (2007). *Warten auf Elektivoperationen in Österreich: eine Frage der Transparenz*. Health System Watch. Vienna, Insitut für Höhere Studien (<http://www.ihs.ac.at/vienna/IHS-Departments-2/Economics-and-Finance-2/Applied-Research-3/Publications-6/Health-System-Watch/Health-System-Watch-German/publication-page:2.htm>, accessed 3 September 2013).
- Czypionka T et al. (2008). *Fondsspitäler in Österreich: ein Leistungs- und Finanzierungsvergleich*. Vienna, Institut für Höhere Studien (IHS).
- Czypionka T et al. (2010). *Mengenkontrolle im Arzneimittelbereich: internationale Evidenz für Österreich*. Health System Watch. Vienna, Institut für Höhere Studien (IHS) (http://www.hauptverband.at/mediaDB/738548_HSW%20II%202010_Mengenkontrolle%20im%20Arzneimittelbereich.pdf, accessed 3 September 2013).
- Czypionka T et al. (2012). *Health Cooperation, Kostendämpfung durch Kooperation im Gesundheitswesen*. Vienna, Institut für Höhere Studien (IHS).
- Devaux M, de Looper M (2012). *Income-related Inequalities in Health Services Utilisation in 19 OECD Countries, 2008–2009*. Paris, Organisation for Economic Co-operation and Development (OECD Health Working Papers, 58).
- Domittner B, Geißler W, Knauer C (2011). *Qualitätssysteme in österreichischen Krankenanstalten Bericht über die praktische Qualitätsarbeit. Studie im Auftrag der Bundesgesundheitskommission*. Vienna, Bundesinstitut für Qualität im Gesundheitswesen.
- Doppler S, Hager W, Riemer G (2006). *Study on Private Supplementary Health Insurance. Studie im Auftrag der Arbeiterkammer Wien*. Vienna.
- Dranove D (1998). Economies of scale in non-revenue producing cost centers: implications for hospital mergers. *Journal of Economics*, 17:69–83.
- Duller C (2005). Austrian private health insurance – a monopoly? *Austrian Journal of Statistics*, 34(4):345–359.
- Dür W et al. (2009). *Endbericht Projekt Gesunde Schule*. Vienna, Hauptverband der Österreichischen Sozialversicherungsträger (HVSF), Bundesministerium für Unterricht, Kunst und Kultur (BMUKK), Bundesministerium für Gesundheit (BMG).
- EFPIA (2009). *The pharmaceutical industry in figures*. Brussels, European Federation of Pharmaceutical Industries and Associations (EFPIA).
- EIRO (2011) [web site] (<http://www.eurofound.europa.eu/eiro/2010/06/articles/at1006011i.htm>, accessed August 2011).
- Eisenbach-Stangl I et al. (2008). *Jugendliche Alkoholszenen. Konsumkontexte, Trinkmotive, Prävention*. Vienna, Europäisches Zentrum für Wohlfahrtspolitik und Sozialforschung.

- EPC (2001). *Budgetary challenges posed by ageing populations*. Bericht EPC/ECFIN/630-EN-final gemäß Beschluss des Rats der Europäischen Union. Brussels, Economic Policy Committee (EPC).
- Erlandsen E (2007). *Improving the efficiency of health-care spending: selected evidence on hospital performance*. Paris, Organisation for Economic Co-operation and Development (Economics Department Working Papers, 555).
- Esping-Andersen G (1990). *The three worlds of welfare capitalism*. Cambridge, Polity Press.
- Eurobarometer (2007). *Health and long-term care in the European Union*. Brussels, European Commission (Special Eurobarometer, 283).
- Eurobarometer (2010). *Perceptions regarding quality of health-care*. Brussels, European Commission (Special Eurobarometer, 327).
- Eurofound (2009). *Second European Quality of Life Survey*. Luxembourg, European Foundation for the Improvement of Living and Working Conditions (<http://www.eurofound.europa.eu/pubdocs/2009/02/en/2/EF0902EN.pdf>, accessed 3 September 2013).
- European Commission (2006). *Vertragsverletzungsverfahren gegen Italien, Österreich und Spanien – Vorschriften für Apotheken sind unvereinbar mit dem Binnenmarkt*. Brussels, European Commission.
- European Commission (2008). *Vorschlag für eine Richtlinie des Europäischen Parlaments und des Rates über die Ausübung der Patientenrechte in der grenzüberschreitenden Gesundheitsversorgung*. Brussels, European Commission.
- European Commission, EPC (2009). *The 2009 ageing report: economic and budgetary projections for the EU-27 Member States (2008–2060)*. Brussels, European Commission and Economic Policy Committee (EPC).
- European Commission (2010a). Consumer affairs: medical devices reference documents (http://ec.europa.eu/health/medical-devices/documents/index_en.htm, accessed 3 September 2013).
- European Commission (2010b). *Patient safety and quality of health-care*. Brussels, Eurobarometer.
- European Commission (2010c). *Joint Economic Policy Committee, European Commission Report on Health Systems*. Brussels, European Commission.
- European Commission (2012a). *Fiscal frameworks across Member States: Commission services country fiches from the 2011 EPC peer review*. Brussels, European Commission (Occasional Papers 91).
- European Commission (2012b). *The 2012 ageing report: economic and budgetary projections for the EU27 Member States (2010–2060)*. Joint report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG). Brussels, European Commission.
- Eurostat (2010). *Analysing the socioeconomic determinants of health in Europe: new evidence from EU-SILC*. Luxembourg, Publications Office of the European Union.
- Eurostat (2012) [web site] (http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database, accessed May 2013).
- Eurostat (2013) [web site] (<http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>, accessed May 2013).
- Federal Chancellery (2000). *Regierungsprogramm für die XXI. Gesetzgebungsperiode. Österreich Neu Regieren*. Vienna, Federal Chancellery (<http://www.bka.gv.at/2004/4/7/Regprogr.pdf>, accessed 3 September 2013).

- Federal Chancellery (2003). *Regierungsprogramm der Österreichischen Bundesregierung für die XXII. Gesetzgebungsperiode*. Vienna, Federal Chancellery (<http://www.bka.gv.at/2004/4/7/Regierprogr28.2.03.pdf>), accessed 3 September 2013.
- Federal Chancellery (2008). *Regierungsprogramm für die XXIV. Gesetzgebungsperiode, 2008–2013. Gemeinsam für Österreich*. Vienna, Federal Chancellery (<http://www.bka.gv.at/DocView.axd?CobId=32965>), accessed 3 September 2013).
- Federal Chancellery (2009). *Tätigkeitsbericht der Bioethikkommission an den Bundeskanzler. Oktober 2008 – September 2009*. Vienna, Federal Chancellery (<http://www.bundeskanzleramt.at/DocView.axd?CobId=36643>), accessed 3 September 2013).
- Federal Chancellery (2011). *EUROPA 2020: Österreichisches Reformprogramm*. Vienna, Federal Chancellery (<http://www.bka.gv.at/DocView.axd?CobId=43425>), accessed 3 September 2013).
- Felderer B et al. (2002). *Ärztedichte im urbanen Umfeld. Studie im Auftrag der Ärztekammer für Wien*. Vienna, Institut für Höhere Studien.
- Fried H, Wendt S, Taut D (2008). *Private health insurance in Austria. Training manual*. Vienna, Wiener Städtische Allgemeine Versicherung Aktiengesellschaft.
- Fuentes A, Wurzel E, Wörgötter A (2006). *Reforming federal fiscal relations in Austria*. Paris, Organisation for Economic Co-operation and Development (Economics Department Working Paper 474) (<http://search.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP%282006%292&docLanguage=En>), accessed 3 September 2013).
- GAMED (2009). *Internationaler Kongress: 20 Jahre Dachverband für Ganzheitsmedizin*. Vienna, Wiener internationale Akademie für Ganzheitsmedizin (GAMED) (www.gamed.or.at/ademailbilder/dvkkongress_zusammenfassung_0709.pdf), accessed 3 September 2013).
- Geißler W et al. (2011). *Österreichweites Fehlermelde- und Lernsystem CIRSmedical.at, Evaluation*. Studie im Auftrag der Bundesgesundheitskommission. Vienna, Bundesinstitut für Qualität im Gesundheitswesen.
- GfK Austria (2011). *Hauptverband: Eine Studie von GfK Austria*. Vienna, Federation of Austrian Social Security Institutions (http://www.hauptverband.at/mediaDB/849547_Presseunterlage_gesamt_GfK-20120112.pdf), accessed 3 September 2013).
- Goebel T, Lettner M (2010). Die Gesundheitsversorgung in Österreich ist teuer und extrem ungerecht. Vienna (<http://www.profil.at/articles/1047/560/282963/die-gesundheitsversorgung-oesterreich>), accessed 3 September 2013).
- GÖG (2008). *PRI pharma profile*. Vienna, Gesundheit Österreich (GÖG).
- GÖG (2009). *PHIS hospital pharma report Austria*. Vienna, Gesundheit Österreich (GÖG).
- GÖG (2010a). *PHIS-Krankenhaus-Pharma-Bericht Österreich 2010*. Vienna, Gesundheit Österreich (GÖG).
- GÖG (2010b). *Qualitätsstrategie für das österreichische Gesundheitswesen. Version 1.0*. Vienna, Gesundheit Österreich (<http://www.goeg.at/cxdata/media/download/Qualitaetsstrategie.pdf>), accessed 3 September 2013).
- GÖG, BIQG (2011). *Sektorenübergreifende Patientebefragung. Ergebnisse der Befragung 2010/2011*. Vienna, Gesundheit Österreich (GÖG).
- GÖG, BMG (2010). *Das Österreichische Register für Medizinprodukte*. Vienna, Gesundheit Österreich (GÖG) (<http://medizinprodukte.goeg.at>), accessed 3 September 2013).

- GÖG, ÖBIG (2008a). *Planung Psychiatrie 2008. Evaluierung der außerstationären psychiatrischen Versorgung*. Studie im Auftrag der Bundesgesundheitsagentur. Vienna, Gesundheit Österreich (GÖG).
- GÖG, ÖBIG (2008b). *Psychotherapie, Klinische Psychologie, Gesundheitspsychologie. Berufsgruppen 1991–2007*. Vienna, Gesundheit Österreich (GÖG).
- GÖG, ÖBIG (2010a). *Koordinationsbüro für das Transplantationswesen: Transplant-Jahresbericht 2009*. Vienna, Gesundheit Österreich (GÖG).
- GÖG, ÖBIG (2010b). *Versorgung mit Psychotherapie 2009 – Eine Iststand-Erhebung mit einem Sonderkapitel zu Psychopharmaka*. Studie im Auftrag des Bundesministeriums für Gesundheit. Vienna, Gesundheit Österreich (GÖG) (<http://www.psychotherapie.at/sites/default/files/files/studien/Studie-OEBIG-Versorgung-Psychotherapie-2009.pdf>, accessed 3 September 2013).
- Gönenç R, Hofmarcher MM, Wörgötter A (2011). *Reforming Austria's highly regarded but costly health system*. Paris, Organisation for Economic Co-operation and Development (Economics Department Working Paper 895).
- Guger A, Marterbauer M, Walterskirchen E (2005). *Finanzierung des öffentlichen Gesundheitswesens*. Vienna, Österreichisches Institut für Wirtschaftsforschung (WIFO).
- Gutiérrez-Lobos K, Trapp E (2006). *Benachteiligung von Menschen mit psychischen Krankheiten im österreichischen Rechtssystem – Ein Beitrag zu Entstigmatisierung und Entdiskriminierung*. Vienna, Fonds Gesundes Österreich/ÖGPP.
- Haas MR et al. (2009). Drugs, sex, money and power: an HPV vaccine case study. *Health Policy*, 92(2–3):288–295.
- Handler H (2007). *Wer anschafft, der zahlt: Die Finanzierung der öffentlichen Aufgaben*. Vienna, Manzsche Verlags- und Universitätsbuchhandlung (www.gemeindebund.at/rcms/upload/downloads/Handler_Endbericht.pdf, accessed 3 September 2013).
- HCP (2012). *Euro Health Consumer Index 2012 Report*. Brussels, Health Consumer Powerhouse (HCP).
- Herber C (2007). *Beurteilungsansatz der Umsetzung der Gesundheitsreform 2005 Einrichtung der "Bundesgesundheitsagentur" bzw. der neun "Landesgesundheitsfonds"*. Linz, Institut für Gesellschafts- und Sozialpolitik, Johannes Kepler Universität Linz in Zusammenarbeit mit der Oberösterreichischen Gebietskrankenkasse (Gesundheitswissenschaften Dokumente 14).
- Hoffmann F, Rodrigues R (2010). *Informal carers: who takes care of them?* Vienna, European Centre for Social Welfare Policy and Research.
- Hofmarcher MM (2003a). Adjustment of SHI contribution rates. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/01/Adjustment_of_SHI_Contribution_Rates.html, accessed 3 September 2013).
- Hofmarcher MM (2003b). Family hospice sabbatical. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/02/Family_Hospice_Sabbatical.html, accessed 3 September 2013).
- Hofmarcher MM (2004). Austrian health reform 2005: agreement reached. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/04/The_Austrian_Health_Reform_2005.html, accessed 3 September 2013).
- Hofmarcher MM (2005a). Health Telematics Law (GTelG). *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/06/Health_Telematics_Law_%28GTelG%29.html, accessed 3 September 2013).

- Hofmarcher MM (2005b). New rules for preventive health check-ups. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/06/New_rules_for_preventive_health_check-ups.html, accessed 3 September 2013).
- Hofmarcher MM (2006). Gesundheitspolitik seit 2000: Konsolidierung gelungen – Umbau tot? In: Talos E, ed. *Schwarz-Blau. Eine Bilanz des "Neu-Regierens"*. Vienna, LIT Verlag GmbH.
- Hofmarcher MM (2007). Making 24h care at home more accessible. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/10/Making_24h_care_at_home_more_accessible.html, accessed 3 September 2013).
- Hofmarcher MM (2008a). Ensuring financial sustainability for health-care. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/11/Ensuring_financial_sustainability_for_health_care.html, accessed 3 September 2013).
- Hofmarcher MM (2008b). Electronic health record: developments and debates. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/12/Electronic_Health_Record_developments_and_debates.html, accessed 3 September 2013).
- Hofmarcher MM (2008c). Pharmaceutical safety belt: e-health kicks in. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/12/Pharmaceutical_Safety_Belt_e-health_kicks_in.html, accessed 3 September 2013).
- Hofmarcher MM (2009a). Austrian Health Fund born. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/14/Austrian_Health_Fund_born.html, accessed 3 September 2013).
- Hofmarcher MM (2009b). Patient safety on the rise? *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/14/Patient_safety_on_the_rise.html, accessed 3 September 2013).
- Hofmarcher MM (2009c). Yet to come: health policy response to the crisis. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/13/Yet_to_come_health_policy_response_to_the_crisis.html, accessed 3 September 2013).
- Hofmarcher MM (2009d) [unpublished]. *Übersetzung des SV-Kostendämpfungspfades in verbindliche Finanzziele des Geschäftsjahres 2010*. Vienna, mimeo.
- Hofmarcher MM (2010). Excess capacity and planning: Cain tortures Abel. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/GOEG_-_Austria/15/Excess_Capacity_and_Planning_Kain_tortures_Abel.html, accessed 3 September 2013).
- Hofmarcher MM (2011). Perspektiven und Herausforderungen der Gesundheitspolitik in Österreich. Vortrag im Rahmen des Neujahrseminars: Neue Herausforderungen für die Wirtschaftspolitik. Bad Leonfelden, Arbeitskreis Dr. Benedikt Kautsky.
- Hofmarcher MM, Gruber N (2011a) [unpublished]. Kosteneffizienz in Österreich's Spitalswesen: Spezialisierung nützt. Vienna, mimeo.
- Hofmarcher MM, Gruber N (2011b) [unpublished]. Optimale Betriebsgrößen bei Krankenanstalten – gibt es die? Vienna, mimeo.
- Hofmarcher MM, Gruber N (2011c) [unpublished]. Schuldenstand im Krankenanstaltenbereich gegenüber dem Kapitalmarkt. Vienna, mimeo.
- Hofmarcher MM, Hawel B (2010). Ambulatory care reforms fail to face the facts? *Health Policy Monitor* (http://www.hpm.org/en/Surveys/GOEG_-_Austria/15/Ambulatory_care_reforms_fail_to_face_the_facts.html, accessed 3 September 2013).

- Hofmarcher MM, Rack HM (2001). *Gesundheitssysteme im Wandel: Österreich*. Brussels, European Observatory on Health Care Systems (http://www.euro.who.int/__data/assets/pdf_file/0004/96439/E72072G.pdf, accessed 3 September 2013).
- Hofmarcher MM, Rack HM (2006). *Gesundheitssysteme im Wandel: Österreich*. Brussels, European Observatory on Health Care Systems.
- Hofmarcher MM, Riedel M (2002). *Nachfragemodell Gesundheitswesen. Endbericht Teil 1*. IHS Projektbericht. Vienna, Institut für Höhere Studien (IHS).
- Hofmarcher MM, Riedel M (2005). *Berechnungen zum Update-Nachfragemodell Gesundheitswesen 2005*. Vienna, Institut für Höhere Studien (IHS).
- Hofmarcher MM, Röhrling G (2006a). Living will law. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/07/Living_Will_Law.html, accessed 3 September 2013).
- Hofmarcher MM, Röhrling G (2006b). Review: Integration of care after the 2005 health reform. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/07/Integration_of_care_after_the_2005_health_reform.html, accessed 3 September 2013).
- Hofmarcher MM, Tarver L (2012). Building a sustainable health sector in times of crisis: containing costs and promoting job growth. Eingereicht bei: *Health Economics, Policy and Law*.
- Hofmarcher MM, Lietz C, Schnabl A (2005). Inefficiency in Austrian inpatient care: an attempt to identify ailing providers based on DEA results. *Central European Journal of Operations Research* 13(4):341–363.
- Hofmarcher MM, Oxley H, Rusticelli E (2007). *Improved health system performance through better care coordination*. Paris, Organisation for Economic Co-operation and Development (Health Working Papers) (http://www.oecd-ilibrary.org/social-issues-migration-health/improved-health-system-performance-through-better-care-coordination_246446201766, accessed May 2013).
- Hofmarcher MM, Röhrling G, Walch D (2007b). Integration of care – follow-up. *Health Policy Monitor* (http://www.hpm.org/en/Surveys/IHS_-_Austria/09/Integration_of_care_-_follow_up.html, accessed 3 September 2013).
- Hofmarcher MM, Bittschi B, Kraus M (2008). *Pflegeversorgung in Österreich. Die Bedeutung von Unterhaltspflicht und Vermögen am Beispiel der Finanzierung von Pflegeheimen*. IHS Projektbericht. Studie im Auftrag des Bundesministeriums für Wirtschaft und Arbeit. Vienna, Institut für Höhere Studien (IHS).
- Hofmarcher MM, Hawel B, Tarver LB (2010). Let's talk kids: a dialogue for children's health. *Health Policy Monitor* (http://hpm.org/en/Surveys/GOEG_-_Austria/16/Let_s_talk_Kids__A_Dialogue_for_Children_s_Health.html, accessed May 2013).
- Hospices Austria (2009). *Datenerhebung 2009*. Vienna, Hospiz Österreich.
- Hsiao W, Heller PS (2002). *What should macroeconomists know about health-care policy?* Washington, DC, International Monetary Fund (IMF Working Paper, 07/13) (<http://www.imf.org/external/pubs/ft/wp/2007/wp0713.pdf>, accessed 3 September 2013).
- HVSV (various years). *Statistisches Handbuch der österreichischen Sozialversicherung*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (1998). *Ärztelkostenstatistik 1998*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).

- HVSV (2009). *Sozialversicherung setzt in den kommenden 5 Jahren Schwerpunkte im Bereich Gesundheitsförderung und Prävention*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (2010a). *Ärztelkostenstatistik 2010*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (2010b). Gemeinsam "Diabetes im Griff" haben: Sozialversicherung und Ärztekammer wollen die Krankenbehandlung von Diabetiker/innen optimieren. Press release, November. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (2010c). *Gesund unterwegs: Mit der Europäischen Krankenversicherungskarte im Ausland*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV) (http://www.hauptverband.at/mediaDB/556196_EKVK_Folder_mit_Sprachen.pdf, accessed 3 September 2013).
- HVSV (2010d). Hauptverband drängt auf Dotierung des Kassenstrukturfonds. Press release, 20 October. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (2010e). [web site] Hauptverband startet Testbetrieb für e-Medikation- Wechselwirkungen einfach, sicher und schnell vermeiden. Sozialversicherung aktuell, 22. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV) (http://www.hauptverband.at/portal27/portal/hvbportal/channel_content/cmsWindow?p_tabid=1&p_menuid=58215&action=2&p_pubid=641809, accessed 3 September 2013).
- HVSV (2010f). Krankenkassen befinden sich auf Konsolidierungskurs. Press release, 17 May.
- HVSV (2010g). Krankenkassen: Positives Finanzergebnis bestätigt Konsolidierungskurs. Press release, 16 November. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (2010h). *Masterplan Gesundheit, Einladung zum Dialog: Strategische Handlungsoptionen zur Weiterentwicklung des österreichischen Gesundheitswesens aus Sicht der Sozialversicherung*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV) (http://www.hauptverband.at/portal27/portal/hvbportal/channel_content/cmsWindow?p_pubid=87945&action=2&p_menuid=59847&p_tabid=2#pd941992).
- HVSV (2010i). Press release, 11 March.
- HVSV (2010j). [web site]. Organization. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV) (http://www.sozialversicherung.at/portal27/portal/esvportal/channel_content/cmsWindow?action=2&p_menuid=951&p_tabid=6, accessed 3 September 2013).
- HVSV (2011a). Email from Veronika Gruber. Main Association of Austrian Social Security Institutions Department for Health Promotion and Prevention. Vienna, November.
- HVSV (2011b). *Obergrenze für Rezeptgebühren*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV) (http://www.sozialversicherung.at/portal27/portal/esvportal/channel_content/cmsWindow?action=2&p_menuid=66829&p_tabid=2, accessed 30 March 2011).
- HVSV (2011c). [web site] *Psychische Erkrankungen: Hohe Wachstumsdynamik in Österreich*. Sozialversicherung aktuell. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV) (http://www.hauptverband.at/portal27/portal/hvbportal/channel_content/cmsWindow?action=2&p_menuid=73011&p_tabid=2&p_pubid=648931, accessed 3 September 2013).

- HVSV (2012a). *Statistische Daten aus der Sozialversicherung. Vorläufige Gebarungsergebnisse 2011*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- HVSV (2012b). *Statistische Daten aus der Sozialversicherung*. Vienna, Hauptverband der österreichischen Sozialversicherungsträger (HVSV).
- IBM (2006). *Machbarkeitsstudie betreffend Einführung der elektronischen Gesundheitsakte (ELGA) im österreichischen Gesundheitswesen*. Studie im Auftrag der Bundesgesundheitsagentur. Vienna, IBM Österreich GmbH.
- IBM (2007). *ELGA Systemkomponenten und Masterplan. Konkretisierung der Systemkomponenten und Masterplan als Beitrag zur Programmplanung für die Arge ELGA*. Vienna, IBM Österreich GmbH.
- IMF (2010). *Macro fiscal implications of health-care reform in advanced and emerging economies – case studies*. Fiscal Affairs Department. Washington DC, International Monetary Fund (IMF).
- IMF (2011). *Austria: 2011 Article IV consultation – preliminary conclusions*. Washington, DC, International Monetary Fund (IMF) (<http://www.imf.org/external/np/ms/2011/061411.htm>, accessed July 2011).
- IVAA (2010). *The regulatory status of complementary and alternative medicine for medical doctors in Europe*. CAMDOC Alliance. Brussels, Internationale Vereinigung Anthroposophischer Ärztegesellschaften (IVAA).
- Joumard I, André C, Nicq C (2010). Health care systems: efficiency and institutions. Paris, Organisation for Economic Co-operation and Development (Economics Department Working Paper, 769).
- Kathschnig H, Scherer M (2009). *Stationäre Behandlungsepisoden mit der Diagnose Schizophrenie in österreichischen Krankenanstalten. Österreichischer Schizophreniebericht 2008*. Vienna, Bundesministerium für Gesundheit (BMG) (<http://www.goeg.at/de/Bereich/GB-Archiv.html>, accessed 3 September 2013).
- Klimont J (2011). *ECHI-Europäische Gesundheitsindikatoren. Statistische Nachrichten 6/2011*. Vienna, Statistics Austria.
- Klotz J (2010). Convergence or divergence of educational disparities in mortality and morbidity? The evolution of life expectancy and health expectancy by educational attainment in Austria in 1981–2006. *Vienna Yearbook of Population Research*, 8:139–174.
- Kobel C, Pfeiffer KP (2011). Austria: Inpatient care and the LKF framework. In: Busse R et al., eds. *Diagnosis-related groups in Europe: moving towards transparency, efficiency and quality in hospitals*. Maidenhead, Open University Press and WHO Regional Office for Europe.
- Konsument* (2012). Zusatzkrankenversicherungen – Versicherer versprechen zu viel. *Konsument*, February.
- Kornai J, Maskin E, Roland G (2003). Understanding the soft budget constraint. *Journal of Economic Literature*, 41:1095–1136.
- Kostera, T (2011). EU patient mobility and the Austrian health-care system: path-dependent conditions for the usages of Europe. Presentation at the Congrès AFSP, Strasbourg.
- Kratschmar A, Teuschl H (2008). *Hospiz- und Palliativführer Österreich*. Vienna, Bundespressdienst.

- Kraus M, Riedel M (2010). The long-term care system for the elderly in Austria. *European Network of Economic Policy Research Institutes (ENEPRI) Research Report*, 69:1–41 (<http://www.ceps.eu/book/long-term-care-system-elderly-austria>, accessed 3 September 2013).
- Kraus M et al. (2010). *Wartezeiten unter mangelnder Transparenz – Ein Verteilungsproblem*. WISO, 2. Linz, Institut für Sozial- und Wirtschaftswissenschaften.
- Ladurner J et al. (2011). *Public health in Austria. An analysis of the status of public health*. Copenhagen, World Health Organization (WHO), Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.
- Länderpositionspapier (2011). *Vorschläge der Länder Zur Reform des österreichischen Gesundheitswesens* (<http://www.land-oberoesterreich.gv.at/cps/rde/xbct/oeo/Laenderpositionspapier4.3.pdf>, accessed 3 September 2013).
- LBI (2009a). *Mutter-Kind-Pass. Ein internationaler Vergleich zu den Untersuchungen an schwangeren Frauen*. Vienna, Ludwig Boltzmann Institute.
- LBI (2009b). *Österreichweite Repräsentativerhebung zu Substanzgebrauch*. Band 1 *Forschungsbericht*. Ludwig-Boltzmann-Institut für Suchtforschung (LBISucht) in Kooperation mit market – Institut für Markt-, Meinungs- und Mediaforschung. Gefördert durch das Bundesministerium für Gesundheit (BMG). Vienna.
- LBI-HTA (2007). *Ökonomische Evaluation der Impfung gegen humane Papillomaviren in Österreich*. Vienna, Ludwig Boltzmann Institute for Health Technology Assessment (LBI-HTA) (<http://eprints.hta.lbg.ac.at/760/>, accessed 3 September 2013).
- Leichsenring K et al. (2009). *Long-term care and social services in Austria*. Vienna, Europäisches Zentrum für Wohlfahrtspolitik und Sozialforschung.
- Leopold C et al. (2008). *PPRI Pharma Profile Austria 2008. Pharmaceutical Pricing and Reimbursement Information (PPRI)*. Vienna, Gesundheit Österreich GmbH.
- Listl S (2011). Income-related inequalities in dental service utilization by Europeans aged 50+. *Journal of Dental Research*, 90(6):717–723.
- LMHI (2009). *Austrian LMHI Report 2009*. Liga Medicorum Homoeopathica Internationalis (LMHI) (<http://liga.iwmh.net/index.php?menuid=1&reporeid=33&phpMyAdmin=e9CXBgFqzn018iimIEv-0GJCG59>, accessed 3 September 2013).
- Marschitz W (2006). *24-Stunden-Betreuung in Privathaushalten: mögliche legale Antworten auf die illegale Herausforderung*. Vienna, Arbeitskreis “Zukunft denken”. Pflege und Altenbetreuung (http://www.forschungsnetzwerk.at/downloadpub/abschlussbericht_klasnic_pflege_neu-denken.pdf, accessed 3 September 2013).
- Medizinische Universität Wien (2012). *Pilotprojekt e-Medikation: Abschlussbericht der Evaluierung*. Vienna, Medizinische Universität Wien with UMIT – Private Universität für Gesundheitswissenschaften, Medizinische Informatik und Technik (http://www.elga.gv.at/fileadmin/user_upload/uploads/download_Papers/PR/Langfassung_Pilot_e-Med_Evaluierung.pdf, accessed 3 September 2013).
- Mossialos E, Allin S, Ladurner J (2006a). *Framework performance assessment*. Report for the Federation of Austrian Social Security Institutions (http://www.hauptverband.at/mediaDB/MMDB136425_Performance_Assessment_Report.pdf, accessed 3 September 2013).
- Mossialos E, Merkur S, Ladurner J (2006b). *Incentives payment systems*. Project Report for the Main Association of Austrian Social Security Institutions. Kapitel 2: Österreichischer Teil. London, LSE Health and Social Care.

- Mühlberger U, Knittler K, Guger A (2008). *Mittel- und langfristige Finanzierung der Pflegevorsorge*. Vienna, Österreichisches Institut für Wirtschaftsforschung (WIFO).
- Neumann T, Müller M (2012). Eine Initiative zur Förderung des Patient Empowerments – Selbständig Gesund. *Soziale Sicherheit*, 3:130–136.
- Noack H (2011). Governance and capacity building in German and Austrian public health since the 1950s. *Public Health Reviews*, 33:264–276.
- Nolte E et al. (2012). Overcoming fragmentation in health-care: chronic care in Austria, Germany and the Netherlands. *Health Economics, Policy and Law*, 7(1):125–146. doi: 10.1017/S1744133111000338.
- Oekonsult (2010). *Gesundheit 2010: Forderungen, Erwartungen und Ängste der ÖsterreicherInnen zur Gesundheitsreform* Baden, Oekonsult (<http://www.oekonsult.eu/gesundheits2010.pdf>, accessed 3 September 2013).
- ÖÄK (2010) [web site] (<http://www.apotheker.or.at>, accessed 3 September 2013).
- ÖÄK (2009). Aufschrift der Landärzte: Hausapotheken-Sterben und Nachfolgesorgen. Press release, October. Vienna, Österreichische Ärztekammer.
- ÖÄK (2010). Email von Herrn Dr. Sinabell der österreichischen Ärztekammer: Statistik der aktiven Diplomhabender von ÖÄK-Diplomen 2010. Vienna, Österreichische Ärztekammer.
- ÖBIG (2004). *Abgestufte Hospiz und Palliativversorgung in Österreich*. Vienna, Österreichisches Bundesinstitut für Gesundheitswesen (ÖBIG).
- ÖBIG (2010). *Kariesprophylaxe im Teenageralter*. Dokumentation der Tagung vom 12. November 2009. Vienna, Österreichisches Bundesinstitut für Gesundheitswesen (ÖBIG).
- ÖBIG (2011). *Ausbildungsstatistik 2011. Psychotherapie, Klinische Psychologie, Gesundheitspsychologie*. Vienna, Österreichisches Bundesinstitut für Gesundheitswesen (ÖBIG) (http://www.goeg.at/cxdata/media/download/berichte/ausbildungsstatistik_2011.pdf, accessed 3 September 2013).
- ÖBVP (2012). 20 Jahre Gesetzesverweigerung für psychotherapeutische Krankenbehandlung. Press breakfast. Österreichischer Bundesverband für Psychotherapie (ÖBVP).
- OECD (2007). *International migration outlook. Part III: Immigrant health workers in OECD countries in the broader context of highly skilled migration*. Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2008). *The looming crisis in the health workforce: how can OECD countries respond?* Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2009a). *Achieving better value for money in health-care*. Paris, Organisation for Economic Co-operation and Development (OECD) (OECD Health Policy Studies).
- OECD (2009b). *Doing better for children*. Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2010a). *Health at a glance: Europe 2010*. Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2010b). *Health care systems: efficiency and policy settings*. Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2011a). *Economic survey: Austria*. Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2011b). *Health at a glance 2011*. Paris, Organisation for Economic Co-operation and Development (OECD) (<http://www.oecd.org/health/health-systems/49105858.pdf>, accessed 3 September 2013).

- OECD (2011c). *Help wanted? Providing and paying for long-term care*. Paris, Organisation for Economic Co-operation and Development (OECD) (www.oecd.org/health/longtermcare, accessed July 2011).
- OECD (2011d). *Sick on the job? Myths and realities about mental health and work*. Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2012) [web site] OECD.Stat Extracts. Paris, Organisation for Economic Co-operation and Development (OECD) (<http://stats.oecd.org/>, accessed March 2012).
- Öhlinger T (2004). Geschichte, Struktur und Zukunftsperspektiven des kooperativen Bundesstaates in Österreich. In: Bußjäger P, Larch D, eds. *Die Neugestaltung des föderalen Systems vor dem Hintergrund des Österreich-Konvents*. Innsbruck, Institut für Föderalismus (Föderalismusdokumente Band 20).
- Österle A, Bauer G (2011). Home care in Austria. In: SFI. Livindhome, *Living independently at home: reforms in home care in 9 European countries*. Copenhagen, Danish National Centre for Social Research (SFI):49–69 (<http://www.sfi.dk/Default.aspx?ID=7284>, accessed 3 September 2013).
- Österreich-Konvent (2005). *Länderpositionen zum Österreich-Konvent: Kompetenzverteilung*. Vienna, Österreich-Konvent.
- Paris V, Devaux M, Wei L (2010). *Health systems' institutional characteristics: a survey of 29 OECD countries*. Paris, Organisation for Economic Co-operation and Development (OECD) (OECD Health Working Papers 50).
- Parliament (2011a). Keiner soll bei Operationen gleicher sein. Parlamentskorrespondenz No. 718 of 8 July. Vienna (http://www.parlament.gv.at/PAKT/PR/JAHR_2011/PK0718/index.shtml, accessed 3 September 2013).
- Parliament (2011b). Gesundheitsausschuss ebnet Weg für transparentere Wartelisten. Parlamentskorrespondenz No. 677 of 30 June. Vienna (http://www.parlament.gv.at/PAKT/PR/JAHR_2011/PK0677/index.shtml, accessed 3 September 2013).
- Peinbauer T (2011). Homeopathy in Austria. International Homeopathy Day, Zagreb (<http://liga.iwmh.net/index.php?menuid=93&downloadid=65&reporeid=212>, accessed 3 September 2013).
- Pelttari L, Pissarek AH, Zottele P (2011). *Datenerhebung 2010 Hospiz Österreich*. Vienna, Dachverband Hospiz Österreich.
- Pharmazeutische Gehaltskasse (2012) [web site]. Vienna, Die pharmazeutische Gehaltskasse für Österreich (<http://www.gehaltskasse.at>, accessed 3 April 2012).
- Pharmig (2010). *Daten und Fakten 2009*. Vienna, Pharmig.
- Pharmig (2011a). *E-Medikation Evaluierung gestartet*. Vienna, Pharmig (http://www.pharmig.at/uploads/PHARMIGinfo_2_2011_WEB_6999_DE.pdf, accessed 3 September 2013).
- Pharmig (2011b). *Vereinbarung über die Änderung des "Rahmen-Pharmavertrag" 2008 im Rahmen der Verlängerung bis Ende 2015*. Vienna, Pharmig (<http://www.pharmig.at/DE/Der%20Verband/Fachbereiche/Rahmen-Pharmavertrag/Pharma-Rahmenvertrag.aspx>, accessed 3 September 2013).
- Pilz S (2011). Grüner Beistand für Alois Stögers Kritik an der Reformunwilligkeit der Ärztfunktionäre – und ein Plädoyer für mehr Gelassenheit in der Debatte um elektronische Patientendaten und den Sparkurs im AKH. *Der Standard* (Kommentar der Anderen) 23 November.

- Platz T (2009). *Stationäre Rehabilitation. Österreichischer Schizophreniebericht 2008*. Vienna, Bundesministerium für Gesundheit (<http://www.goeg.at/de/Bereich/GB-Archiv.html>, accessed 3 September 2013).
- Pochobradsky E et al. (2005). *Situation pflegender Angehöriger*. Studie im Auftrag des Bundesministeriums für soziale Sicherheit, Generationen und Konsumentenschutz. Vienna, Österreichisches Institut für Gesundheitswesen (ÖBIG).
- PRIKRAF (2009). *Jahresbericht 2009*. Vienna, Privatkrankeanstalten-Finanzierungsfonds.
- Prochazkova L, Schmid T (2009). Homecare aid: a challenge for social policy research. In: Ramon S, Završek D, eds. *Critical edge: issues in social work and social policy*. Ljubljana, Faculty of Social Work, University of Ljubljana.
- Rauchertelefon (2011). *Evaluierung 2011: 5 Jahre Rauchertelefon*. St Pölten: Rauchertelefon.
- Reichmann G, Sommersguter-Reichmann M (2012). The Austrian Tobacco Act in practice – analysing the effectiveness of partial smoking bans in Austrian restaurants and bars. *Health Policy*, 104(3):304–311.
- Ruh C et al. (2009). Evaluation des Reformpool-Projektes “Disease-Management-Programm Diabetes mellitus Typ 2 –Therapie Aktiv” in der Region Waldviertel. *Soziale Sicherheit*, 267–277.
- Rupp B, Schmid T (2008). *Die Förderung nach § 21b Bundespflegegeldgesetz, Ergebnisse einer ersten Evaluierung*. Vienna, Sozialökonomische Forschungsstelle.
- Sanofi and Aventis GmbH Österreich (2009). *Gesundheitspolitik und Gesundheitswirtschaft in Österreich 2009. Das Jahr im Rückblick*. Vienna, Sanofi-Aventis.
- Sanofi and Aventis GmbH Österreich (2010). *Gesundheitspolitik und Gesundheitswirtschaft in Österreich 2010. Das Jahr im Rückblick*. Vienna, Sanofi-Aventis.
- Sanofi and Aventis GmbH Österreich (2011). *Gesundheitspolitik und Gesundheitswirtschaft in Österreich*. Vienna, Sanofi-Aventis.
- Sassi F (2010). *Obesity and the economics of prevention: fit not fat*. Paris, Organisation for Economic Co-operation and Development (OECD).
- Schneider U (2008). *Changing long-term care needs in ageing societies: Austria's policy responses*. Vienna, Wirtschaftsuniversität Wien, Institut für Sozialpolitik.
- Schatzenstaller M (2008). The new Revenue Sharing Act 2008 to 2013: fundamental reform again postponed. *Austrian Economic Quarterly*, 1:13–21.
- Sommersguter-Reichmann M (2000). The impact of the hospital financing reform on hospital productivity: empirical evidence on efficiency and technology changes using a non-parametric input-based Malmquist approach. *Health Care Management Science*, 3(4):309–321.
- Sönnichsen A et al. (2010). The effectiveness of the Austrian disease management programme for type 2 diabetes: a cluster-randomised controlled trial. *BMC Family Practice* 11:86.
- Spreitzer S (2012) “Gut versichert” *Alles klar im Polizzen-Dschungel; Prämien, Leistungen, Schadensfälle; die Tricks der Vertreter*. Vienna, Verein für Konsumenteninformation.
- Staatsschuldenausschuss (2010). *Bericht über die öffentlichen Finanzen 2009*. Vienna.
- Stark C (2007). *Systematische Analyse und Bewertung transmuraler Schnittstellen der Tiroler e-Health-Aktivitäten anhand des IHE IT-I-Frameworks*. Hall in Tirol, Institut für Informationssysteme des Gesundheitswesens (http://iig.umat.at/dokumente/msc_stark.pdf, accessed 3 September 2013).
- Stärker L (2011). Spital muss Spital bleiben! *Österreichische Ärztezeitung*, 18.

- Statistics Austria (2007). *Gesundheitsbefragung 2006/2007*. Vienna, Statistics Austria.
- Statistics Austria (2008). *Computer- und Internetnutzung: Ergebnisse 2008*. Vienna, Statistics Austria.
- Statistics Austria (2010a). *Europäische Erhebung über den IKT-Einsatz in Haushalten 2010*. Vienna, Statistics Austria.
- Statistics Austria (2010b). *2009 Geburten und Sektor Staat Teil II*. Vienna, Statistics Austria.
- Statistics Austria (2010c). *Jahrbuch der Gesundheitsstatistik 2009*. Vienna, Statistics Austria.
- Statistics Austria (2010d). *Standard-Dokumentation Metainformationen (Definitionen, Erläuterungen, Methoden, Qualität) zu den Gesundheitsausgaben nach "System of Health Accounts" für Österreich*. Vienna, Statistics Austria.
- Statistics Austria (2011a). *Erfassung der Gesundheitsausgaben nach System of Health Account. Bericht an den wissenschaftlichen Beirat*. Vienna, Statistics Austria.
- Statistics Austria (2011b). *Jahrbuch der Gesundheitsstatistik 2010*. Vienna, Statistics Austria.
- Statistics Austria (2011c) [web site]. *Gesundheitsausgaben in Österreich*. Vienna, Statistics Austria (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html, accessed May 2013).
- Statistics Austria (2011d). *2010 Geburten und Sektor Staat Teil II*. Vienna, Statistics Austria.
- Statistics Austria (2011e). *Österreich innerhalb der EU*. Vienna, Statistics Austria (http://www.statistik.at/web_de/services/wirtschaftsatlas_oesterreich/oesterreich_innenhalb_der_eu/index.html accessed May 2013).
- Statistics Austria (2012a). *Gesundheitsausgaben in Österreich laut "System of Health Accounts"*. Vienna, Statistics Austria.
- Statistics Austria (2012b) [web site]. Vienna, Statistics Austria (<http://www.statistik.at/>, accessed March 2012).
- Stöger A (2011). Österreich braucht nicht in jedem Bundesland ein eigenes System. *Republik – das unabhängige Magazin für Führungskräfte im öffentlichen Bereich*, June.
- Talos E (1981). *Staatliche Sozialpolitik in Österreich. Rekonstruktion und Analyse*. Vienna, Verlag für Gesellschaftskritik.
- Thomson S, Mossialos E (2009). *Private health insurance in the European Union*. Brussels, European Commission.
- Transparency International (2010a). *Corruption perceptions index 2010*. Berlin, Transparency International (http://www.transparency.org/policy_research/surveys_indices/cpi/2010, accessed July 2011).
- Transparency International (2010b). *Transparenzmängel im Gesundheitswesen: Einfallstore zur Korruption*. Vienna, Transparency International Austrian Chapter – Verein zur Korruptionsbekämpfung.
- Türk S (2011). Qualitätsstrategie des Bundes in Österreich – Qualitätsstrategie – bundesweite Ergebnisqualitätsmessung. *Deutsche Medizinische Wochenschrift*, 136:S46.
- Uhl A et al. (2011). *Handbuch Alkohol – Österreich, Band 1: Statistiken und Berechnungsgrundlagen 2011*. Vienna, Bundesministerium für Gesundheit.
- University of Vienna (2012) [web site]. *PatientInnen- und Angehörigenorganisationen in Österreich (PAO)*. Vienna, University of Vienna (<http://www.univie.ac.at/pao/>).
- Url T (2006). *Impact of changes in the field of social health insurance on private health insurance*. Vienna, Österreichisches Institut für Wirtschaftsforschung (WIFO).

- VAEB (2010). *VAEB aktuell: Eine Übersicht über Leistungen und Beiträge*. Vienna, Versicherungsanstalt für Eisenbahnen und Bergbau (VAEB).
- van Doorslaer E, Koolman X, Puffer F (2002). Equity in the use of physician visits in OECD countries: has equal treatment for equal need been achieved? In: OECD, eds. *Measuring up: improving health systems performance in OECD countries*. Paris, Organisation for Economic Co-operation and Development (OECD).
- van Doorslaer E, Masseria C, Koolman X (2006). Inequalities in access to medical care by income in developed countries. *Canadian Medical Association Journal*, 174(2):177–183.
- Verfassungsgerichtshof (2004). VfGH zu Krankenkassen-Finanzierung G 279/02.
- Vogler S, Leopold C (2010). *WHO Pharmaceutical Country Profile – Austria*. Vienna, Gesundheit Österreich GmbH.
- VVO (2010). *Jahresbericht 2010*. Vienna, Versicherungsverband Österreich (VVO) (<http://www.vvo.at/jahresbericht/index.php>, accessed 3 September 2013).
- Vinzenzgruppe und Barmherzige Brüder (2011). ELGA-Vorreiter: Ordensspitäler vernetzen Patientendaten. Press release, 20 July. Vienna, Vinzenzgruppe und Barmherzige Brüder.
- Waldhör T et al. (2005). Trends in infant mortality in Austria between 1984 and 2002. *Wiener Klinische Wochenschrift*, 117(15–16):548–553.
- Weltkarte (2012) [web site]. Landkarten von Oesterreich (<http://www.weltkarte.com/europa/oesterreich.htm>, accessed 2011).
- WHO (2001). *Legal status of traditional medicine and complementary/alternative medicine: a worldwide review*. Geneva, World Health Organization (WHO).
- WHO (2006). *Inequalities in young people's health. Health behaviour in school-aged children (HBSC)*. International Report from the 2005/2006 Survey. Copenhagen, World Health Organization (WHO), Regional Office for Europe.
- WHO (2007). *European Tobacco Report 2007*. Copenhagen, World Health Organization (WHO) (http://www.euro.who.int/__data/assets/pdf_file/0005/68117/E89842.pdf, accessed 3 September 2013).
- WHO (2010). *Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies*. Geneva, World Health Organization (WHO) (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf).
- WHO (2012). European Health for All Database (HFA-DB) [offline database]. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfadbf/>, accessed March 2012).
- WHO (2013) European Health for All Database (HFA-DB) [offline database]. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfadbf/>, accessed January 2013).
- Wismar M et al. (2011). *Cross-border health-care in the European Union. Mapping and analysing practices and policies*. Copenhagen, World Health Organization (WHO), European Observatory on Health Systems and Policies.
- World Bank (2012) [web site]. Data (<http://data.worldbank.org/>, accessed March 2012).
- Zechmeister I, Österle A (2007). Informelle Betreuung psychisch erkrankter Menschen: Schafft das österreichische Pflegevorsorgesystem adäquate Voraussetzungen? *Neuropsychiatrie*, 21(1):29–36 (http://www.i-med.ac.at/psychiatry/allgemeine_psychiatrie/forschung/heft_21_1.pdf#page=34, accessed 3 September 2013).
- Zechmeister I et al. (2002). Incentives in financing mental health-care in Austria. *Journal of Mental Health Policy and Economics*, 5:121–129.

9.2 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: <http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits/hit-template-2010>.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in All Policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments. With its summer 2007 edition, the Health for All database started to take account of the enlarged EU of 27 Member States.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights, complaints procedures, public participation and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which IT systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health-care, dental care, complementary and alternative medicine, and health services for specific populations.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment based on the stated objectives of the health system, financial protection and equity in financing; user experience and equity of access to health-care; health outcomes, health service outcomes and quality of care; health system efficiency; and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references, useful web sites and legislation.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following.

- A rigorous review process (see the following section).
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches). The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

9.3 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

9.4 About the authors

Maria M. Hofmarcher-Holzhacker is Economist and Public Health Expert at the European Centre for Social Welfare Policy and Research with a research focus on economics of health and social care, public finance, health and long-term care supply, efficiency, comparative health and social care research, and coordination of health and social care. Maria is a distinguished expert of the Austrian health-care system, and this is her third edition of a HiT about Austria.

Wilm Quentin (HiT editor) is a Senior Researcher in the Department of Health Care Management at the Berlin University of Technology and the Berlin hub of the European Observatory on Health Systems and Policies. He is a medical

doctor and holds a Master's Degree in Health Policy, Planning & Financing from the London School of Hygiene & Tropical Medicine and the London School of Economics.

The Health Systems in Transition reviews

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country reviews provide an analytical description of each health-care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond. The HiT profiles are building blocks that can be used:

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

How to obtain a HiT

All HiTs are available as PDF files at www.healthobservatory.eu, where you can also join our listserve for monthly updates of the activities of the European Observatory on Health Systems and Policies, including new HiTs, books in our co-published series with Open University Press, Policy briefs, Policy summaries, and the *Eurohealth* journal.

If you would like to order a paper copy of a HiT, please write to:

info@obs.euro.who.int

The
publications of the
European Observatory on
Health Systems and Policies
are available at
www.healthobservatory.eu



HiT country profiles published to date:

Albania (1999, 2002^a)
Andorra (2004)
Armenia (2001^g, 2006, 2013)
Australia (2002, 2006)
Austria (2001^e, 2006^e, 2013)
Azerbaijan (2004^g, 2010^g, 2013)
Belarus (2008^g, 2013)
Belgium (2000, 2007, 2010)
Bosnia and Herzegovina (2002^g)
Bulgaria (1999, 2003^b, 2007^g, 2012^b)
Canada (2005, 2013^c)
Croatia (1999, 2006)
Cyprus (2004, 2012)
Czech Republic (2000, 2005^g, 2009)
Denmark (2001, 2007^g, 2012)
Estonia (2000, 2004^g, 2008, 2013)
Finland (2002, 2008)
France (2004^c, 2010)
Georgia (2002^d, 2009)
Germany (2000^e, 2004^{eg})
Greece (2010)
Hungary (1999, 2004, 2011)
Iceland (2003)
Ireland (2009)
Israel (2003, 2009)
Italy (2001, 2009)
Japan (2009)
Kazakhstan (1999^g, 2007^g, 2012^g)
Kyrgyzstan (2000^g, 2005^g, 2011^g)
Latvia (2001, 2008, 2012)
Lithuania (2000, 2013)
Luxembourg (1999)
Malta (1999)
Mongolia (2007)
Netherlands (2004^g, 2010)
New Zealand (2001)
Norway (2000, 2006)
Poland (1999, 2005^k, 2012)
Portugal (1999, 2004, 2007, 2011)

Republic of Korea (2009)
Republic of Moldova (2002^g, 2008^g, 2012^b)
Romania (2000^f, 2008)
Russian Federation (2003^g, 2011^g)
Slovakia (2000, 2004, 2011)
Slovenia (2002, 2009)
Spain (2000^h, 2006, 2010)
Sweden (2001, 2005, 2012)
Switzerland (2000)
Tajikistan (2000, 2010^g)
The former Yugoslav Republic of
Macedonia (2000, 2006)
Turkey (2002^g, 2011)
Turkmenistan (2000)
Ukraine (2004^g, 2010^g)
United Kingdom of Great Britain and
Northern Ireland (1999^g)
United Kingdom (England) (2011)
United Kingdom (Northern Ireland) (2012)
United Kingdom (Scotland) (2012)
United Kingdom (Wales) (2012)
United States of America (2013)
Uzbekistan (2001^g, 2007^g)
Veneto Region, Italy (2012)

Key

All HiTs are available in English.
When noted, they are also available in other languages:

^a Albanian

^b Bulgarian

^c French

^d Georgian

^e German

^f Romanian

^g Russian

^h Spanish

ⁱ Turkish

^j Estonian

^k Polish

^l Tajik



The European Observatory on Health Systems and Policies is a partnership, hosted by the WHO Regional Office for Europe, which includes the Governments of Austria, Belgium, Finland, Ireland, the Netherlands, Norway, Slovenia, Spain, Sweden, the United Kingdom and the Veneto Region of Italy; the European Commission; the European Investment Bank; the World Bank; UNCAM (French National Union of Health Insurance Funds); the London School of Economics and Political Science; and the London School of Hygiene & Tropical Medicine.

HiTs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.