## Health Systems in Transition

Vol. 11 No. 3 2009

# **Slovenia**

Health system review

Tit Albreht • Eva Turk • Martin Toth Jakob Ceglar • Stane Marn Radivoje Pribaković Brinovec Marco Schäfer



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# Slovenia:

Health System Review

2009

























The European Observatory on Health Systems and Policies is a partnership between the World Health Organization Regional Office for Europe, the Governments of Belgium, Finland, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the World Bank, 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
SLOVENIA

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Printed and bound in the United Kingdom

#### **Suggested citation:**

Albreht T, Turk E, Toth M, Ceglar J, Marn S, Pribaković Brinovec R, Schäfer M, Avdeeva O and van Ginneken E. Slovenia: Health system review. *Health Systems in Transition*. 2009; volume 11(3): 1-168.

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## **Preface**

he Health Systems in Transition (HiT) profiles are country-based reports 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 profile is produced by country experts in collaboration with the Observatory's staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a profile.

HiT profiles 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;
- to assist other researchers in more in-depth comparative health policy analysis.

Compiling the profiles 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 European Health for All database, national statistical offices, Eurostat, the

Organisation for Economic Co-operation and Development (OECD) Health Data, the International Monetary Fund (IMF), the World Bank, and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

A standardized profile has certain disadvantages because the financing and delivery of health care differs across countries. However, it also offers advantages, because it raises similar issues and questions. The HiT profiles 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.

HiT profiles and HiT summaries are available on the Observatory's web site at www.euro.who.int/observatory. A glossary of terms used in the profiles can be found at the following web site: www.euro.who.int/observatory/glossary/toppage.

## **Acknowledgements**

he Health Systems in Transition (HiT) profile on Slovenia was written by Tit Albreht (Institute of Public Health of the Republic of Slovenia (IPH-RS)), Eva Turk (IPH-RS), Martin Toth (Health Insurance Institute of Slovenia (HIIS)), Jakob Ceglar (Ministry of Health and HIIS), Stane Marn (Statistical Office of the Republic of Slovenia), Radivoje Pribaković Brinovec (IPH-RS) and Marco Schäfer (Technische Universität Berlin (TU-Berlin)). It was edited by Marco Schäfer (TU-Berlin), Olga Avdeeva (then European Observatory on Health Systems and Policies, Berlin hub) and Ewout van Ginneken (TU-Berlin). The research director responsible for overseeing the HiT was Reinhard Busse (European Observatory on Health Systems and Policies, Berlin), who also co-edited the profile.

The HiT draws upon an earlier edition (2002) which was written by Tit Albreht, Marjan Česen Don Hindle, Elke Jakubowski Boris Kramberger, Vesna Kerstin Petrič, Marjan Premik and Martin Toth. The authors would like to express special thanks to the contributors to parts of chapters, including Dorjan Marušič, Tanja Mate, Andreja Peternelj, Andrej Robida and Stanislav Primožič. The European Observatory on Health Systems and Policies is grateful to Guillermo Martinez for his work on assembling some of the general reference material and to Philipp Seibert and Britta Zander of TU-Berlin for their work on the standard figures.

The European Observatory on Health Systems and Policies also is grateful to Bozidar Voljc (former Minister of Health of the Republic of Slovenia and Representative of the Government of the Republic of Slovenia to the Executive Board of the World Health Organization (WHO)), Armin Fidler (World Bank) and Markus Schneider (BASYS Consulting Company for Applied System Research) for valuable comments and suggestions during the reviewing process.

The current series of HiT profiles has been prepared by the research directors and staff of the European Observatory on Health Systems and Policies. The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the governments of Belgium, Finland, Greece, Norway, Spain and Sweden, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team is led by Josep Figueras, Director, and Elias Mossialos, Co-director, along with Martin McKee, Richard Saltman and Reinhard Busse, heads of the research hubs.

Jonathan North managed the production of the profile, with the support of Nicole Satterley (copy-editing), Pat Hinsley (layout) and Elizabeth Hoile (proofreading).

Special thanks are extended to the WHO Regional Office for Europe 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. Thanks are also due to national statistical offices that have provided data.

The data used in this report are based on information available in January 2009.

## List of abbreviations

AA Alcoholics Anonymous

AIDS Acquired Immune Deficiency Syndrome
AR-DRG Australian Related-Diagnosis Related Group

ATC Anatomical, Therapeutic, Chemical (drug classification)

BTC Blood Transfusion Centre of Slovenia
CAM Complementary and alternative medicine

CEE Central and eastern Europe

CHCI Council for Health Care Informatics

CINDI Countrywide Integrated Noncommunicable Disease

Intervention Programme

CMI Case Mix Index

CIS Commonwealth of Independent States
CSEE Central and south-eastern Europe

CT Computerized tomography

DALE Disability Adjusted Life Expectancy

DDD Defined daily dose

DeSUS Democratic Party of Pensioners of Slovenia

DMFT Decayed, missing and filled teeth

DORA Screening programme for the early detection of breast cancer

DRG Diagnosis Related Group
DSA Digital subtraction angiography
EbM Evidence-based medicine
EMEA European Medicines Agency

EU European Union

EU12 The 12 Member States who joined the European Union in

May 2004 or January 2007

EU15 The 15 European Union Member States before May 2004

EU25 European Union Member States as of May 2004
FIDES The Slovene Union of Physicians and Dentists

GDP Gross domestic product
GP General practitioner

HIIS (ZZZS) Health Insurance Institute of Slovenia

HIT Health Systems in Transition
HIV Human Immunodeficiency Virus
IAEA International Atomic Energy Agency
IFC International Finance Corporation
IMF International Monetary Fund

INERHC Institute of Economic Research in Health Care

INN International non-proprietary name

IPH Institute of Public Health of the Republic of Slovenia

ISO International Organization for Standardization

IT Information technology
LCU Local Currency Units
LDS Liberal Democratic Party

LTC Long-term care

MAV Maximum attributed value

MIMP Mutually interchangeable medical products

MRI Magnetic resonance imaging

MRSA Methicillin-resistant Staphylococcus aureus

NATO North Atlantic Treaty Organization
NGO Nongovernmental organization
NIS Newly Independent States

NSi New Slovenia Christian People's Party

NSPP National Social Protection Programme for 2006–2010
OECD Organisation for Economic Co-operation And Development

OOP Out-of-pocket (payments)

OTC Over-the-counter (in reference to pharmaceuticals)
PACS Picture Archiving and Communication System

PC Palliative care

PET Positron emission tomography

PDII Pension and Disability Insurance Institute

PHARE Poland and Hungary Assistance for Restructuring of Economies

PPP Purchasing power parity
PPS Purchasing power standards
SCA Slovene Consumers' Association

SD Social Democratic Party
SDR Standard Death Rate
SDS Slovene Democratic Party

SLS	Slovene People's Party
SLS+SMS	Slovene People's Party and Youth Party of Slovenia
SNS	Slovenian National Party
SVIT	Screening programme for the early detection of colon cancer
TQM	Total Quality Management
UEMS	Union Européenne Des Médecins Specialisés
UNESCO	United Nations Educational, Scientific and Cultural Organization
VAT	Value-added tax
VHI	Voluntary Health Insurance
WHO	World Health Organization
WTO	World Trade Organization
ZORA	Screening programme for the early detection of cervical cancer

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### **Abstract**

The Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of a health system and of policy initiatives in progress or under development. HiTs examine different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems; describe the institutional framework, process, content and implementation of health and health care policies; and highlight challenges and areas that require more in-depth analysis.

Life expectancy in Slovenia has improved since 1993, reaching 78.5 years in 2007. This value is comparable to those of other European Union (EU) Member States (those belonging to the EU prior to 2004, plus those joining the EU on 1 May 2004 (EU25)), but slightly below the average of the EU Member States before the enlargement of May 2004 (EU15) and significantly above the respective average value of the countries that joined the EU in May 2004 and January 2007 (EU12). Health care services in Slovenia are financed mainly by contributions to compulsory health insurance, premiums for voluntary health insurance (VHI) and through taxes. Although entitlement to health care services is universal in Slovenia, access to some health care services is limited due to lack of providers (for example, dental care) or long waiting times (for example, for certain operations). Health care services at the primary level are provided mainly by state-owned primary health care institutions as well as by independent general practitioners (GPs). Providers of primary health care act as gatekeepers for specialist services.

Slovenia's health care system has undergone major changes since the country achieved independence in 1991 (Albreht et al. 2002). This momentum of constant change was retained during the period from 2002 to 2007 and was based on a White paper published by the Ministry of Health and on the World Bank project "A Management Model or Health Care". Reform policy during this period

included, inter alia, reform of health care financing (for example, payment for hospital services is now based on diagnosis-related groups (DRGs)); introduction of clinical guidelines by the Ministry of Health to increase quality of health care; cancellation of compulsory insurance (Health Insurance Institute of Slovenia (HIIS)) debts; and subsequent introduction of a convergence programme to limit HIIS expenditure. Furthermore, a risk-equalization scheme for VHI was introduced in 2005, which aims to reduce cream-skimming between voluntary health insurers and to equalize the variations in risk structure between private health insurance companies.

## **Executive summary**

lovenia is located between the Alps, the Pannonian Plain, the Mediterranean Sea and the Balkans. It is a democratic parliamentary republic and a member of the North Atlantic Treaty Organization (NATO) and the European Union (EU). Legislative power is executed by means of a bicameral system, in the form of the National Assembly (Državni zbor), the 90 deputies of which are elected for a period of four years; and the National Council (Državni svet), the 40 members of which are elected for a period of five years. Executive power is exercised by the Government, the most recent incarnation of which was formed in November 2008, following the general elections which took place on 21 September 2008. A new majority appeared, led by the Social Democratic Party (SD), which then formed a coalition with "Zares – new politics", the Democratic Party of Pensioners of Slovenia (DeSUS) and the Liberal Democratic Party of Slovenia (LDS). The second political tier consists of 210 local municipalities. In early 2009 there is no intermediary administration at the regional level, but this is expected to change with the introduction of regions with legislative powers. Since regaining independence in 1991, the political environment has been stable enough to implement various economic and social sector reforms which aim to further ensure stability.

Slovenia has enjoyed continuous annual economic growth since 1992, supporting the overall convergence process. Several positive trends are observed in the economic environment (for example, the unemployment rate decreased to 7.7% in 2007; gross domestic product (GDP) growth was 5.4% the same year). Slovenia entered the Euro zone on 1 January 2007, as the first of the new EU Member States, having fulfilled the conditions set forth by the Maastricht Treaty.

Slovenia has a population of 2.03 million (2008), approximately half of whom live in urban areas. Since the 1980s a decreasing birth rate has been observed,

which is slightly above the death rate at the time of writing. The life expectancy for women was 82.1 in 2007 and 74.8 years for men. This is comparable to those of other EU Member States (EU25). As in other European countries the population is ageing rapidly.

Morbidity and mortality data show that Slovenia experiences the same respective characteristics as other European countries in western and central Europe. Diseases of the circulatory system are the most common cause of death in the country, causing almost 38.8% of all deaths in 2007. Incidences of communicable diseases in Slovenia are quite low, which is – amongst other things – due to traditionally good immunization coverage. However, very high rates of suicide (18.4 per 100 000 in 2007, albeit down from 22 per 100 000 in 2005), especially among marginalized members of society, are a matter for concern.

## Organization and regulation

The steward of the health system in Slovenia is the Ministry of Health. The organizational structure within the health system is advanced and comprises numerous actors, including various agencies under the Ministry of Health (such as the Health Inspectorate); public independent bodies (such as the Health Insurance Institute of Slovenia (HIIS), Institute of Public Health of the Republic of Slovenia (IPH-RS)); (publicly owned) hospitals and primary care centres, as well as private providers of health services; and various nongovernmental organizations (NGOs) and professional associations. Experts from the Ministry of Health fulfil a role of supervision and control within the system, which has been gradually decentralized to different stakeholders. Fundamental reforms aiming to build up a modern health system were carried out in 1992. These consisted mainly of the introduction of compulsory health insurance; an approval process for private practice in the field of health care; introduction of co-payments for health care services; and a (re-)introduction of professional associations (such as the Medical Chamber and the Pharmaceutical Chamber). These major reforms were followed by a period of implementation and further adjustments of the health system. Recent reforms included, amongst others, the introduction of the diagnosis-related group (DRG) system for payment of hospital services; development and implementation of patient pathways to enhance quality of treatment; and introduction of a risk-equalization scheme for providers of complementary voluntary health insurance (VHI). Long waiting times, especially for dental services and some specialized services and surgeries remain a problem still to be solved within the Slovene health care system.

## **Financing**

Since 1992 Slovenia has had a Bismarckian type of a social insurance system, based on a single insurer for statutory health insurance, which is fully regulated by national legislation and administered by the HIIS. Health care expenditure of the HIIS represented 67.1% of total health expenditure and 92.9% of public health expenditure in 2006. The Ministry of Health is responsible for financing health infrastructure for hospitals and other health services and programmes at the national level, as well as covering health services of individuals without income. The role of local municipalities in health financing is relatively small and limited to the provision and maintenance of health infrastructure at the primary care level (that is, primary health care centres, public pharmacies and health stations).

VHI premiums and household out-of-pocket (OOP) spending represent private sources of funds and accounted for approximately 28% of the total health care funding in 2006. In the context of gradual reduction of health financing by public entities, voluntary complementary health insurance, which covers patients' co-payments, extended to approximately 85% of the population in 2006 (children under 18 years and students under 26 years are excluded from co-payments). To avoid cream-skimming by voluntary health insurers and to equalize the variations in risk structure between private health insurance companies, a risk-equalization scheme was introduced in 2005 that ensured equal premiums for all insured individuals, no matter what age group they fall into.

The core purchaser of health care services for insured individuals is the HIIS, which is an autonomous public body. The health insurance system is mandatory, providing universal coverage (98.5% of the population). Contributions are related to earnings from employment, although coverage is also provided for non-earning spouses and children of the contributing members. Since January 2002 the compulsory health insurance contributions of the employed are 13.45% of their gross income and are shared between the employer (6.56%) and the employee (6.36%). However, the employer pays an additional 0.53% to cover for workplace-related injuries and occupational diseases.

Primary health care services within the public health care network are paid for through a combination of capitation and fee-for-service payments, while outpatient specialized care is paid for by fee-for-service payments only. Payment for acute inpatient care is based on DRGs, whereas payment for non-acute inpatient care is calculated by number of bed days per stay. The volumes of these programmes of services is prospectively determined, hence the payment for the respective services is constrained by this.

### Physical and human resources

At the end of 2006 there were 29 hospitals in Slovenia, which are almost all publicly owned and have largely been refurbished since the late 1970s. Due to intensified treatment of acute patients and patients in planned care, as well as a planned shift to a more outpatient-oriented care, the overall number of hospital beds decreased gradually by approximately 33%; from 695 per 100 000 population in 1980 to 466 per 100 000 in 2007. A reduction in the average length of stay (from 10.4 days in 1995 to 6.8 days in 2007) due to the introduction of DRGs increased the turnover of patients and hence decreased the demand for hospital beds. The number of hospital beds is now considered adequate for the population, and their geographical distribution is regarded as even, although access to secondary care is not considered to be satisfactory in central Slovenia. The number of acute hospital beds was reduced substantially since the early 1990s and reached 377 beds per 100 000 inhabitants in 2007, which was slightly below the EU average of 395 per 100 000 inhabitants in the same year.

Slovenia has a developed infrastructure for primary care that builds on general practitioners (GPs) and nurses, who are mainly employed in publicly owned primary care facilities. By the end of 2004 there were 64 primary health care centres and 69 primary health stations. These are distributed evenly across the country, which means that a primary health care facility is accessible within a distance of 20 km from almost all locations in Slovenia. Commissions and inspectorates of the Ministry of Health are responsible for the development of structural standards for health care facilities and carry out inspections of newly established facilities. However, there is no existing official system of maintenance monitoring of health facilities at the time of writing.

Considering the specifics of the Slovene health care system in 2006, the level of human resources for health care provision in the country was considered to be adequate. However, based on prospective demography data and figures concerned with the development of the medical profession itself, shortages of physicians in certain regions are predicted for the near future. Nevertheless, due to an increase in the number of graduates from the Medical Faculty in Ljubljana, along with migration of health professionals from parts of former Yugoslavia, the numbers of physicians in Slovenia increased steadily from 199 per 100 000 in 1990 to 237 per 100 000 in 2006. However, Slovenia still has a significantly smaller number of physicians per capita than most EU and central and eastern European (CEE) countries.

Responsibility for planning of numbers of health care professionals rests with the Ministry of Health (that is, the Health Council proposes recommendations on the number of health professionals), while medical training for doctors is provided by the

Medical Faculties in Ljubljana and Maribor. Basic education leading to a university degree of medical doctors takes six years, followed by an obligatory 6-month internship. The main challenges are to adjust the number of qualified professionals in the health care sector to be able to manage future workforce demands.

In 1999 the health insurance card was introduced. This was an important technological step because, with its introduction almost all providers working under contract with the HIIS were joined in a network that is provided, sustained, managed and coordinated by the HIIS. This was followed by the "e-health 2010 strategy", which was prepared by the Ministry of Health in 2005 and describes the state of information technology (IT) in health care at that time, defines strategic goals (for example, to enable health professionals access to key information in electronic medical records and other databases, and so on) and proposes the activities required to reach these goals up to the year 2010.

#### **Provision of services**

Reforms which started in the early 1990s introduced the principles of a purchaser-provider split, strengthening primary care and free choice of one personal primary care provider. As a result, the Slovene health care system is built around countrywide family medicine-centred primary care, with specially trained doctors and nurses. Primary care is provided by public primary health care centres (including emergency medical aid and general practice), health stations and an increasing number of private GPs who participate in the public health care network and are reimbursed by the HIIS. The provision of primary care is based on the idea that health care should be brought to the local communities and that various types of care should be integrated and brought to specific target group populations. However, owing to the unsolved problem of availability of publicly owned premises for private providers of health care, some health care centres have ceased to exist in several parts of the country. Moreover, extension of primary care capacity is regulated by the health care legislation of 1992 and by the "National Programme of Health Care by the year 2004", which limit the capacity of the primary health care network to the level it was in 1992. In addition, in July 2008 the Government accepted the strategic and planning document "Resolution on the National Health Care Plan 2008–2013". The Resolution contains measures for the regulation of the public network of health care providers in Slovenia for the period 2008–2013.

With 6.6 outpatient contacts (at primary and secondary care levels) per person per year in 2006, Slovenia is a little below the EU average of 6.8 outpatient contacts per person per year (2005). Specialized outpatient services at the

secondary care level are provided by hospitals (or polyclinics), spas and private facilities, while 75% of specialist services are provided by hospitals either as inpatient or outpatient care. Access to secondary care requires referral by the patient's personal physician (GP or paediatrician). Cooperation between services at different levels leaves much to be desired and is mainly limited to referrals and exchange of test results.

Public health activities are mainly designed, implemented and monitored by the IPH-RS and its nine regional institutes. Health promotion as a standard function of the public health institutes was introduced gradually throughout the 1990s and institutionalized only recently by the health reform of 2003, which redefined and strengthened the role of public health. In recent years, screening programmes were introduced for early detection of cervical cancer (2001), along with risk factors for cardiovascular diseases (2002), breast cancer (2008) and colon cancer (2008).

#### **Conclusions**

The reforms of the 1990s and thereafter can be deemed to be successful in terms of transforming the old health system into a modern compulsory social health insurance-based system. This includes, amongst others, the successful introduction of primary health care provision by private practices. However, challenges remain in the areas of efficiency enhancement in order to match growing demands, and increasing costs for (innovative) treatments with limited resources. Lack of health care personnel, long waiting periods for some services, the introduction of home care services for long-term care patients (including respective changes in the insurance system) and the sustainability of the e-Health strategy are further areas in which challenges remain.

## 1. Introduction

## 1.1 Geography and sociodemography

Solution lovenia is located between the Alps, the Pannonian Plain, the Mediterranean Sea and the Balkans (see Fig. 1.1). It borders Austria and Hungary to the north, Italy to the west and Croatia to the south-east. Formerly a constituent part of the former Yugoslavia, it declared its independence on 25 June 1991.

Slovenia is a mountainous country, with heavily forested areas covering an area of 20 273 km<sup>2</sup>. The climate is mixed, consisting of a sub-Mediterranean climate on the coast, an alpine climate in the north-west and a continental climate with mild-to-hot summers and cold winters in the plateaus and valleys to the east. The population was estimated at 2.03 million in 2008; 51.2% of which live in urban centres. The capital of Slovenia is Ljubljana, with 269 146 inhabitants (Statistical Office of the Republic of Slovenia 2006b).

Table 1.1 shows key demographic and population indicators for the period 1970 to 2007.

Slovenes are a Slavic ethnic group, and make up approximately 83.1% of Slovenia's population. Hungarians and Italians are considered indigenous minorities, with rights protected under the Constitution. Other ethnic groups include Croats, Serbs, Bosniaks, Yugoslavs, Macedonians, Montenegrins and Albanians. Between 250 000 and 400 000 Slovenes (dependent on whether second and subsequent generations are counted) live outside the country, mostly on other continents and in European Union (EU) countries. There are Slovene indigenous minorities in Italy, Austria and Hungary.

After its full integration into the EU, Slovenia has not yet seen a substantial immigration from the other EU Member States. The most numerous immigrants



Fig. 1.1 Map of Slovenia

Source: UN DPKO 2008.

to Slovenia are still citizens of the area of the former Yugoslavia. In total, 88% of all immigrant workers come from this area, with approximately 60% of them from Bosnia and Herzegovina. The vast majority of the immigrant workers from EU Member States come from Slovakia, then from Austria and the Czech Republic (Statistical Office of the Republic of Slovenia 2006b). There were no important movements of health professionals, in spite of the efforts of several health care providers in Slovenia to recruit physicians and nurses from other EU Member States.

The official language in the country is Slovene. It is written in the Roman alphabet, and has many dialects. In nationally mixed areas, the official languages of all communications are also Italian and Hungarian, respectively. A total of 69.1% of the population are Roman Catholic; very few are Evangelical (1.1%), Muslim (0.6%) and Orthodox (0.6%) (Statistical Office of the Republic of Slovenia 2003).

Table 1.1 Population/demographic indicators, 1970–2007 (selected years)

Indicators	1970	1980	1990	2000	2005	2006	2007
Population (thousands) (total)	1727	1896	1998	1990	2001	2009	2019
Age 0-14 (% of total)	24.2	23.4	20.8	15.9	14.2	14.0	13.9
Age 15-64 (% of total)	6.99	65.2	68.5	70.1	70.3	70.2	70.1
Age 65+ (% of total)	8.6	11.4	10.7	14.0	15.5	15.8	16.0
Population growth (annual %)	6.0	1.0	-0.1	0.2	0.2	0.3	9.0
Population density (people per km²)	n/a	n/a	n/a	98.3	98.8	99.2	n/a
Fertility rate, total (births per woman)	2.2	2.1	1.7	1.3	1.3	1.3	4.1
Dependency ratio (dependants to working-age population)	0.5	0.5	9.4	6.0	4.0	9.0	9.0
Urban population (% total)	37.0	48.0	50.4	50.8	51.0	51.2	n/a
Population, female (% of total)	51.6	51.4	51.5	51.1	51.0	50.9	20.7
Birth rate, crude (per 1000 people)	15.9	15.7	11.2	9.1	0.6	9.6	8.6
Death rate, crude (per 1000 people)	10.1	6.6	9.3	9.3	9.4	9.1	9.2

Sources: World Bank 2007; WHO Regional Office for Europe 2009b. Note: n/a: Not available.

#### 1.2 Economic context

Table 1.2 shows key macroeconomic development indicators for the period 2000 to 2007.

In 2006 Slovenia's industry accounted for 34% of the country's gross domestic product (GDP), while agriculture contributed only 2% and services and others contributed 64% (World Bank 2007). Principal industries include electronics, electrical machinery, metal processing and metallurgy, and motor vehicles. The agricultural sector is dominated by dairy farming and stock breeding, and the principal crops are corn, barley and wheat. Slovenia's natural resources include brown coal and lignite in abundant quantities, along with lead, zinc, mercury, uranium, silver, natural gas and even some crude oil.

Following independence, Slovenia gradually adopted a number of economic reforms, including banking reform, market reform and privatization. The latter in particular has been marked by a very lengthy process, which is still ongoing at the time of writing. The issue of privatization has raised controversies over both its extent and pace. In order to adapt to demographic, economic and social circumstances and to be able to provide long-term social security, the pension system has also been reformed and is currently entering its main implementation phase at the time of writing.

Slovenia entered the Euro zone on 1 January 2007, having fulfilled the conditions set forth by the Maastricht Treaty.

Since 1992, domestic production has been increasing steadily in Slovenia, amounting to 4% of the country's GDP in 1999. In 2007 the GDP per capita was US\$ 26 576 (adjusted for purchasing power parity (PPP)). The unemployment rate has been increasing since the country regained independence in 1991, reaching a peak of 14.5% in 1998, after which it steadily fell to 7.7% of the labour force in 2007.

There is a notable imbalance in terms of economic and social status between Slovenia's regions. Indicators present a favourable picture for the Ljubljana urban region, which was above the national average according to nearly all indicators, while other regions of Slovenia fall significantly behind the EU average (Slovenia's GDP PPP per capita amounted to 82% of the EU25 average in 2005) (Statistical Office of the Republic of Slovenia 2007). This is also reflected in a wide variation in unemployment rates between regions, with the highest unemployment rate in the predominantly agricultural Pomurje region.

The Human Development Index for Slovenia in 2006 was 0.923 and the country ranked 26th in the world, placing it as the highest among the countries joining the EU in May 2004, ahead of Portugal (33rd) and the Czech Republic (35th) (UNDP 2008).

Table 1.2 Macroeconomic indicators, 2000-2007

Indicators	2000	2001	2002	2003	2004	2005	2006	2007
GDP (current US\$, million)	19 067	19 616	22 121	27 748	32 181	35 120	38 200	45 450
GDP, PPP (intl. \$, million)*	33 537	35 407	37 342	39 210	42 130	45 294	49 396	53 406
GDP per capita (current US\$)*	11 571	11 154	12 079	14 707	16 706	17 559	19 021	22 079
GDP per capita, PPP (current US\$)*	16 852	17 757	18 718	19 640	21 090	22 609	24 571	26 576
Annual GDP growth (%, constant prices)*	t. 1.	3.1	3.7	2.8	4.4	1.4	5.7	5.4
Agriculture, value added (% of GDP)	3.5	3.3	3.1	2.7	2.7	2.5	2.0	n/a
Industry, value added (% of GDP)	37.2	38.9	36.2	36.8	35.0	34.1	34.0	n/a
Services, etc., value added (% of GDP)	59.3	59.9	60.7	9.09	62.4	63.4	64.0	n/a
Current account balance (% of GDP)*	-2.7	0.2	1.0	-0.8	-2.7	6.1	-2.5	-3.4
Labour force (% of population)**	49.0	48.9	49.5	48.3	51.3	51.6	51.9	52.1
Unemployment (% of labour force)**	12.2	11.6	11.6	11.2	10.6	10.2	9.4	7.7

Notes: GDP: Gross domestic product; PPP: Purchasing power parity; intl: International; n/a: Not available. Sources: World Bank 2007; \* IMF, 2007, \*\* WHO Regional Office for Europe 2009b.

The percentage of the population "at risk of poverty" is 12%, which is at the lower end of the scale among EU Member States (European Commission 2009). The Gini coefficient is at 0.28, which is a favourable value when compared to most European countries (UNDP 2008). At the end of 2005, approximately 94 000 individuals (4.7% of the population) were receiving financial social assistance.

#### 1.3 Political context

Slovenia's political system is a parliamentary democracy which is based on the tripartite division of powers between legislature, executive and judiciary authority.

The 1991 Constitution guarantees universal suffrage for all Slovenes over 18 years of age; freedom of religion; freedom of the press; and other civil rights. Political parties are represented by a 90-member National Assembly, which adopts laws. The last election of the national assembly was held on 21 September 2008 and election results were (according to the percentage vote by party): the Social Democrats (SD) with 30.5%; the Slovene Democratic Party (SDS) with 29.3%; the "Zares – new politics" with 9.4%; the Democratic Party of Slovene pensioners (DeSUS) with 7.5%; the Slovenian National Party (SNS) with 5.5%, the Slovenian People's Party and Youth Party of Slovenia (SLS+SMS) with 5.2%; the Liberal Democratic Party of Slovenia (LDS) with 5.2%; and other parties with 7.5%. Eventually the Social Democrats formed a new Slovenian Government in a coalition with Zares, DeSUS and LDS.

For election purposes, the country is divided into 88 constituencies and proportional representation is applied. There is also one representative seat for each of the Hungarian and the Italian minorities. Assembly members serve 4-year terms and are directly elected by secret ballot. The Parliament is also composed of a 40-member National Council, which proposes laws or requests reconsiderations in the assembly. The National Council members are representatives from various social, economic, professional and local interest groups and are elected for a 5-year term by the elected representatives of special-interest organizations and local communities.

The Government of the Republic of Slovenia is the executive and supreme body of state administration. The executive function involves mainly preparation of legislation, proposal of the national budget and national programmes, and implementation of laws passed by the National Assembly. The Government consists of the Prime Minister, the head of government, who is elected by the National Assembly for a 4-year term, and a 17-member Cabinet of Ministers. The Government for the most part endorses all health care reforms and, within

its economic limits, is responsible for the health care services infrastructure (hospital, clinics and national research institutes).

Judicial authority is exercised by judges who are appointed for life. The Supreme Court is the highest court in the Slovene judicial system. There are district and circuit courts, and the high courts are appeal courts. Furthermore, there is a Constitutional Court, which has been strengthened since the introduction of the new Constitution in 1991.

The President of the Republic represents the Republic of Slovenia and is the supreme commander of its armed forces. The President is elected for a maximum of two 5-year terms by direct election. In October 2007, presidential elections were held which were won by Danio Türk, member of the SD Party.

The Human Rights Ombudsman is responsible for the protection of human rights and fundamental freedoms in relation to state bodies, local administrative bodies and all those with public jurisdiction. The Human Rights Ombudsman is proposed by the President and elected by the National Assembly for a period of six years.

When Slovenia gained independence in 1991, the new Constitution assigned municipalities a form of self-governance and anticipated the possibilities involved in integrating municipalities into wider, local self-governing communities. The Constitution explicitly transfers the mandate of taking on competence related to local matters to municipalities and, when all municipalities agree, some State competency may be transferred to them if the State provides the necessary financial means. Pursuant to the 1994 Act on the Establishment of Municipalities and Determination of their Territory, Slovenia was divided into 147 municipalities (previously 65). Urban municipality status was granted to 11 municipalities (Celje, Koper, Kranj, Ljubljana, Maribor, Murska Sobota, Nova Gorica, Novo Mesto, Ptuj, Slovenj Gradec and Velenje). In 1998 the number of municipalities increased to 192. After the referenda carried out in early 2006 (and later re-confirmed by the National Assembly) there are now 210 municipalities. The highest decision-making body in a municipality is the Municipal Council, the members of which are directly elected, as are Mayors. So far, Slovenia has no intermediate level between municipality and State; the Act on Provinces, which is still in its preparatory stages at the time of writing, is expected to define this intermediate level, the new province or region.

Slovenia formally joined NATO in 2002 and the EU in 2004. The country is also an active member of many multilateral organizations, including the United Nations, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), the World Trade Organization (WTO), the International Monetary Fund (IMF), the

International Atomic Energy Agency (IAEA) and the International Finance Corporation (IFC), among others. Slovenia has also signed many international treaties that have an impact on health, including the International Convention of Human Rights and the European Human Rights Convention, as well as the Convention on the Rights of the Child.

There are some important interest groups that have a strong influence on the development of health policy. This is especially the case with the professional chambers, of which the Medical Chamber and the Pharmaceutical Chamber are the two most significant. Both are involved in lobbying within the political arena to secure political solutions compatible with the most important proposals from the Medical Chamber. In addition, the pharmaceutical industry can also be identified as a strong influential stakeholder in health policy development; the industry is strongly represented in Slovenia as there are two large companies, which ventured in the production of generic pharmaceuticals. The pharmaceutical sector also contributes significantly to Slovenia's exports, since these companies export more than two thirds of their production. Furthermore, these companies are prominent employers of the well-educated and well-trained sections of Slovenia's workforce.

#### 1.4 Health status

As in other central and eastern European (CEE) countries, the main demographic characteristics in Slovenia are a low birth rate, a low fertility rate and a low rate of population growth. Hence, Slovenia's population is ageing. The crude birth rate decreased from 15.7 per 1000 population in 1980 to 9.0 in 2005 and has increased slightly since then to 9.8 in 2007 (Table 1.1). Slovenia had one of the lowest fertility rates of all EU Member States in 2006. The total fertility rate of 1.4 in 2007 was far below the replacement level. In 2007 Slovenia's crude death rate was 9.2 per 1000 population (WHO Regional Office for Europe 2009b). According to Eurostat future projections, in the baseline scenario the population is expected to decrease to 1.9 million by 2050, that is, by 4.8% (European Commission 2006a). Slovenia is therefore facing an advanced phase of demographic transition, which will relatively soon reflect itself in changing patterns of morbidity and mortality at the population level. Since the early 1990s the elderly population has increased by more than 50%, which raises concerns over the incidence of chronic diseases and their social implications. This is all the more relevant because the elderly population (aged 65 years and over) is estimated to increase by more than 67% from 300 000 in 2004 to 503 000 in 2030 (European Commission 2006b).

Table 1.3 Mortality and health indicators, 2000-2007

Indicators	2000	2001	2002	2003	2004	2005	2006	2007
Total life expectancy at birth (years)	76.3	76.5	76.7	76.5	77.3	77.6	78.4	78.5
Female life expectancy at birth (years)	80.0	80.5	80.7	80.4	80.9	80.9	82.0	82.1
Male life expectancy at birth (years)	72.3	72.3	72.7	72.6	73.6	74.0	74.6	74.8
SDR, adult, female (per 1000 female adults)	6.0	5.8	5.7	5.9	5.5	5.5	5.0	4.9
SDR, adult, male (per 1000 male adults)	10.9	10.9	10.7	10.9	10.0	9.8	9.2	9.1
Under-65 SDR, adult female (per 1000 female adults under age 65)	1.7	1.6	1.6	1.6	1.6	1.5	1.3	1.3
Under-65 SDR, adult male (per 1000 male adults under age 65)	4.0	4.0	3.9	3.8	3.5	3.3	3.4	3.3
Infant deaths per 1000 live births	4.9	4.2	3.8	4.0	3.7	4.2	3.4	2.8
Probability of dying under age 5 (years per 1000 live births)	5.5	4.7	4.9	4.8	4.7	5.3	3.9	3.8

Source: WHO Regional Office for Europe 2009b.

Note: SDR: Standardized death rate.

The main characteristics of the falling birth rate are a decreasing number of women with three or more children; an increase in the child-bearing age; and changes in the spacing of births during the fertile period of a woman's life. In 2004, women were 29 years old on average at childbirth and 27 years old on average at the time of their first childbirth. Slovenia is also among the countries with the highest number of live births outside marriage (43.5% of births) of the EU countries, only behind Estonia, Sweden, Denmark, France and Latvia (European Commission 2006b). The most significant drop in the number of childbirths is among women with primary school education. Table 1.3 shows mortality and health indicators for the period 2000–2007.

Life expectancy at birth in Slovenia in 2007 was 74.8 years for males and 82.1 years for females. In the same year the difference by comparison with the

EU average was -1.2 years for males and virtually no difference (+0.01) for females (WHO Regional Office for Europe 2009b).

Life expectancy in Slovenia decreased slightly during the transition period (1990–1993) for both males and females, due to an increasing probability of death at almost all ages except during childhood. Since 1993, however, life expectancy has been increasing; total life expectancy increased from a low of 73.6 years in 1993 to 78.4 years in 2006 (WHO Regional Office for Europe 2009b). Life expectancy in Slovenia is higher than the average for the countries that joined the EU after 2004 but slightly below the EU average of 78.7 years in 2006. In 2006, life expectancy in Slovenia was below Austria (80.2 years) but higher compared to that in the Czech Republic (76.2 years in 2005), as presented in Fig. 1.2.

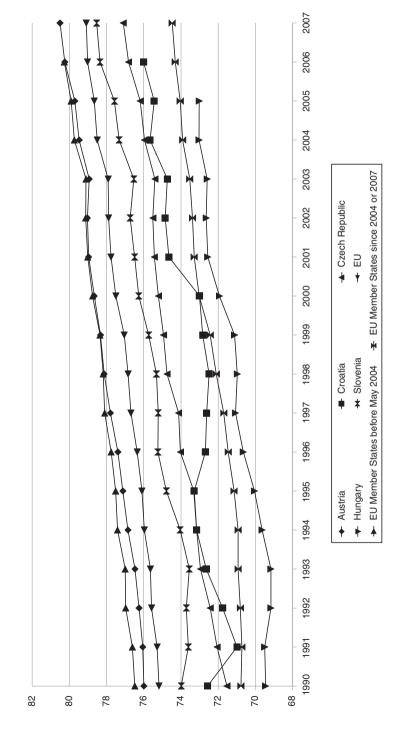
Life expectancy, morbidity and mortality data show disparities between regions, which corresponds well to indices in relative poverty. There are significant differences across regions in the crude indicators, but also in the more sensitive ones. Western and central regions are much better off than the eastern and north-eastern regions of Slovenia. Life expectancy differences of four years exist between the best-performing and the worst-performing regions (Statistical Office of the Republic of Slovenia 2006a).

Indicators showing the most important causes of premature mortality further confirm these disparities, as suicide rates differ at a ratio of 1:3 at the county level. Similar differences are observed in alcohol-related liver diseases. At the same time, these disease and conditions cause a significant setback for Slovenia in comparison with EU15 countries.

Morbidity and mortality data show that Slovenia experiences the same respective characteristics as other European countries in western and central Europe. Diseases of the circulatory system are the most common cause of death in Slovenia, causing almost approximately 38.8% of all deaths in 2007. These are followed by neoplasms (30.3%), ischaemic heart disease (10.0%), deaths due to injuries and poisoning (9.9%) and deaths resulting from cerebrovascular diseases (8.4%) (WHO Regional Office for Europe 2009b).

For men, the most common type of cancer in 2007 was malignant neoplasm of trachea, bronchus and lung (73.3 deaths per 100 000 people), followed by cancer of the colon, rectum and anus (40.3 deaths per 100 000 people); prostate cancer (34.6 deaths per 100 000 people); and cancer of the stomach (20.1 deaths per 100 000 people). In women, the most common type of cancer was breast cancer (24.9 deaths per 100 000 people), followed by cancer of the colon, rectum and anus (19.5 deaths per 100 000 people); lung, trachea and bronchus cancer (19.1 deaths per 100 000 people); and cancer of the lymphoid and haematopoietic tissue (11.7 deaths per 100 000 people). The incidence of female breast cancer

Fig. 1.2 Life expectancy at birth, in years, for Slovenia and selected other, 1990-2007 (or latest available year)



Source: Authors' own compilation.

Fig. 1.3 Levels of immunization for measles in the WHO European Region, 2006 (or latest available year)



Source: WHO Regional Office for Europe 2009b.

Notes: \* 2005; \*\* 2004; EU: European Union; CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia; Countries without data not included.

rose by almost 30% within the period 1996–2005, from 82.2 to 106.0 per 100 000 women, while the SDR for breast cancer decreased from 29.2 deaths per 100 000 in 1996 to 24.9 per 100 000 in 2007 (WHO Regional Office for Europe 2009b).

Mortality by age and sex groups shows a pattern similar to the EU average. The infant mortality rate dropped to below 10 per 1000 live births in 1988 for the first time. In 2007, infant mortality was at its lowest with 2.8 infant deaths per 1000 live births (WHO Regional Office for Europe 2009b).

Communicable diseases in Slovenia are not a significant cause of morbidity. In recent years there have been no registered cases of diphtheria (since 1968), acute poliomyelitis (since 1978), neonatal tetanus or congenital rubella among people under 50 years of age. Due to traditionally good immunization coverage (see Fig. 1.3 for immunization levels for measles) the incidence of vaccine-preventable diseases, such as measles and mumps, has been low even prior to national independence at the end of 1991 and has decreased further since then.

Meticulous notification of communicable diseases and a widespread intervention system linking public health infrastructure and primary health care have been the major factors in these achievements. The incidence of syphilis in 2007 was 0.8 cases per 100 000 people (WHO Regional Office for Europe 2009b).

During the period from 1986 to 2008, the annual reported AIDS incidence rate varied from 0.5 to 12.6 per million population. A cumulative total of 124 AIDS cases – 108 male and 16 female – were reported by 30 November 2005. In addition to AIDS cases, a cumulative total of 153 cases of HIV infection, which had not yet developed AIDS – 122 males and 31 females – were reported by 31 December 2005 (IPH-RS 2005).

Since the second half of the 1980s, Slovenia has a rate of suicides that is amongst the highest in the world, at approximately 18.4 suicides per 100 000 inhabitants in 2007 (see Table 1.4) (WHO Regional Office for Europe 2009b), whereby the level of suicide committed by males (30.4 per 100 000) was more than three times that by females (7.9 per 100 000) in 2007 (WHO Regional Office for Europe 2009b). Slovene empirical data have shown for years that suicide is most common among marginalized members of society (workers with only primary-level education, (semi-) skilled workers, the unemployed and those addicted to alcohol).

External causes (injuries and poisonings) are also a major public health problem in Slovenia. Injury and poisoning are the leading causes of death between the ages of 1 and 45 years. Even though the number of deaths caused by injury or poisoning decreased slightly from 104.8 in 1986 to 83.2 in 1997

Table 1.4 Selected mortality in Slovenia and the European Union, 2007

	SDR	, all ages, per 10	0 000
Indicators	Slovenia	EÜ	EU12
Communicable diseases			
Infectious and parasitic diseases	5.7	8.8	6.9
ТВ	1.0	1.1	3.2
AIDS/HIV (as recorded by routine mortality statistics system) <sup>a</sup>	0.1	1.1	0.4
Noncommunicable diseases			
Circulatory diseases	259.2	252.0	467.9
Malignant neoplasms	202.5	175.6	200.1
Trachea/bronchus/lung cancers	42.5	37.8	44.6
Mental and behavioural disorders	11.7	28.7	14.3
Respiratory diseases	35.4	45.5	43.7
Digestive diseases	45.6	32.4	46.9
External causes			
Injury and poisoning	65.9	40.2	62.8
Suicide and self-inflicted injury	18.4	10.3	14.4
Selected alcohol-related causes	101.2	64.1	99.31
Selected smoking-related causes	191.2	224.8	372.9

Sources: WHO Regional Office for Europe 2009b; <sup>a</sup> WHO Regional Office for Europe 2009a. *Notes:* SDR: Standardized death rate; EU: European Union; EU12: Countries joining the EU in 2004 and 2007; TB: Tuberculosis

Table 1.5 Maternal and child health indicators, 1985–2007 (selected years)

Indicators	1985	1990	1995	2000	2005	2007
Teenage pregnancy rates (% of all live births to mothers aged under 20 years)	8.0	7.8	5.0	2.8	2.0	1.5
Neonatal deaths per 1000 live births	9.1	5.1	3.1	3.6	3.1	1.9
Post-neonatal deaths per 1000 live births	4.0	3.2	2.5	1.3	1.1	0.9
Maternal deaths per 100 000 live births	11.6	8.9	5.3	22.0	16.6	15.1
Abortions per 1000 live births	695.1	658.6	568.6	463.6	323.5	261.2

Source: WHO Regional Office for Europe 2009b.

and to 65.7 in 2007, Slovenia still has one of the highest rates of this kind of mortality in Europe, exceeding the European average by 63.4% (see Table 1.4) (WHO Regional Office for Europe 2009b).

In spite of a slight trend towards a decrease in the death rate caused by chronic liver diseases and cirrhosis in men and women, Slovenia is still among the European countries with the highest degree of mortality due to diseases caused by the abuse of alcohol (see Table 1.4). Slovenia had 26.6 deaths per 100 000 per year due to liver diseases, compared to an EU average of 14.1 deaths per 100 000 per year in 2007. While alcohol consumption decreased from 11.8 litres per capita in 1997 to 8.8 litres in 2005, levels of alcohol consumption in Slovenia are still considered among the highest in Europe (WHO Regional Office for Europe 2009b).

Oral health – as assessed by the average number of decayed, missing and filled teeth at the age of 12 years (DMFT index) – shows an improvement, with a decline from 5.1 in 1987 to 1.8 in 2000, which places Slovenia among the European countries with the lowest caries prevalence and just in line with the 2000 average of the EU countries (1.8 DMFT) (WHO Regional Office for Europe 2009b). There are no figures available at the time of writing to illustrate whether this trend has continued.

Trends in maternal and child health indicators (see Table 1.5) suggest that Slovenes are not only having children later in life but are also having fewer of them. Some of the reasons for these changes include the high participation of women in the labour market, an increase in marital age, and decreases in neonatal and post neonatal deaths. The decrease in abortions per 1000 live births suggests that women have better access to contraception and improved knowledge of reproductive health issues and rights.

Most activities related to improving prenatal, maternal and child health are reimbursed by the HIIS. Reimbursement is ensured for all preventative and curative treatments for children, teenagers and students. All preventive examinations and health care for pregnant women, as well as health care for women in terms of family planning counselling, birth control, pregnancy and childbirth are covered.

Furthermore, a comprehensive support system is offered for families with young children. This includes maternity benefits, parental benefits and assistance with the purchasing of clothing and equipment for neonates, as well as child benefits and benefits for those caring for a sick child.

# 2. Organizational structure

# 2.1 Overview of the health system

ince 1992 Slovenia has had a Bismarckian type of a social insurance system based on a single insurer for statutory health insurance, which is fully regulated by national legislation and administered by the HIIS. This insurance is universal and based on a clear employment status or on a legally defined dependency status (such as minors, unemployed spouses, registered unemployed people and individuals without source of income). Experts from the Ministry of Health have a supervisory and controlling role within a system, which has been gradually decentralized through a number of tasks being assigned to different stakeholders. Since 1992, the previously exclusively publicly financed system has been transformed into a mixed system where private sources of funding have become significant, reaching 27.8% in 2006 (Statistical Office of the Republic of Slovenia 2009). This has been achieved by financing some expenditure from co-payments and complementary insurance. Co-payments have never become fully effective incentives for lowering utilization, as most of the adult population took out complementary insurance, which accounted for a 13.8% share of total health expenditure in 2006 (Statistical Office of the Republic of Slovenia 2009).

Some of the previous tasks for which the State was responsible have been assigned to professional associations, called *zbornice* (professional chambers), which control qualifications, specialty training and continuous education. Another important feature of today's health system in Slovenia is the growing share of private providers, especially in primary and specialist health care. This has led to increasingly complex contracting arrangements, as privatization is associated with fragmentation in provision. Most of the care delivery is still carried out by state-owned (hospitals, most of outpatient specialist care and

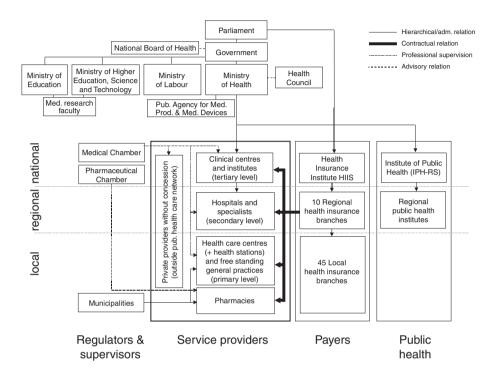


Fig. 2.1 Organizational chart of the Slovene health care system

Source: Authors' own compilation.

Notes: HIIS: Health Insurance Institute of Slovenia; IPH-RS: Institute of Public Health (of the Republic of Slovenia).

tertiary care) and municipality-owned providers (primary health care centres), who collectively employ more than 75% of the total health workforce (IPH-RS 2006b). Only for dental services does the share of private providers exceed 50%, with 12% of all providers working exclusively for out-of-pocket (OOP) payments (IPH-RS 2006b). The organizational structure of the health care system as of 2009 is depicted in Fig. 2.1.

# 2.2 Historical background

### The period from the 1800s to 1945

Prior to the First World War, Slovenia was a constituent part of the Austro-Hungarian Empire. The epidemiological situation, health care system and level of services were comparable to those of other parts of the Empire. During that time, medical care was delivered on the basis of private practice. The first developments towards a health insurance system occurred during the time of the adoption of the Miners Act at the end of the 19th century. In 1858, insurance covering illnesses was extended to railway workers, and in 1869 their insurance was enhanced through the addition of insurance against injury. Compulsory insurance against injury was enacted within the Austrian part of the Habsburg monarchy, through an act adopted in 1887, which followed the Bismarck model. In 1888, the insurance scheme was extended to incorporate health insurance. Two thirds of the health insurance funding was contributed by workers and one third by their employers.

The first actual sickness fund for compulsory health insurance, which was in line with the German social insurance model, was established in Ljubljana in 1889. This was followed by similar establishments in Slovene cities across the country. The sickness fund's role was to protect the worker's social rights during illness and the rights to health care services. Injury insurance was an autonomous element of this, insuring workers against work-related injuries, with contributions solely covered by employers. By the end of 1889, 65 district health insurance funds were established in the Upper Carniola and Lower Styria regions, insuring roughly 15 000 people. Health insurance funds continued to operate until the collapse of the Austro-Hungarian monarchy at the end of the First World War. Social insurance for workers was reinstated in 1918 and an Association of Health Insurance Funds on Slovene territory was founded in 1919.

From 1918 to 1945 Slovenia was part of the Kingdom of Slovenes, Croats and Serbs, later renamed the Kingdom of Yugoslavia (1929). During this period, steps were taken towards the development of social medicine through the establishment of a regional social hygiene institute for prevention, along with primary care centres and a central institute for hygiene and medicine. Both a Medical Chamber of Slovene physicians and a Medical Association were in existence at this time (the latter dating back to 1861). In 1937, pension and disability insurance programmes were established.

#### The period from 1945 to 1991

In 1945, Slovenia became a part of the Socialist Federal Republic of Yugoslavia. Until 1954, the model of social insurance prevailed as a system for health care funding. Workers and pensioners, together with their family members, were included in the compulsory social health insurance scheme, but coverage did not extend to farmers, the self-employed, craftsmen and some other (employment-related) categories of individuals.

Social insurance combined pension and disability insurance, health insurance, maternity insurance and some other social charges administered by regional social insurance branches, financed by the contributions of employers and employees; the state budget contributed only certain funds for soldiers and war veterans. Social insurance was administered by the State or by regional people's committees. Due to the economic and demographic differences between regions, re-insurance was introduced between regional social insurance institutes to cover above-average risks and was implemented at the national level.

The basic system of social health insurance also transformed gradually, due to several political changes. Health care facilities became state owned, private practice was outlawed and all physicians were considered salaried employees of the State. Primary health care was delivered through "health centres", which included services such as general practice, paediatrics, medicine for school children and adolescents, occupational medicine, pulmonary care, gynaecology, dentistry and other services. General practice declined, as all other specialties at the primary care level were considered superior.

Specialist outpatient and hospital activities were carried out in hospitals, which were all public. The post-war period was also one of construction, and hospitals that were underequipped or outdated were renovated. This lasted into the 1970s, with financing being provided partly by the state budget and partly (in later years) by the providers of health insurance.

At the regional level, an institution for social medicine and hygiene monitored the epidemiological situation. Large-scale prevention programmes were prepared and public health disease prevention measures were carried out by the IPH-RS in Ljubljana. Regional hospitals were established, together with other health-related services, such as medical physiotherapy in spas. The Medical Chamber was abolished in 1945.

Following reforms in 1954 and 1955, health insurance was separated from social security. Separate insurance schemes were established for workers and public employees, craftsmen and the self-employed. Health insurance coverage was then extended to farmers, who acquired some minimal rights (emergency treatment in hospitals, treatment of contagious diseases, preventive health care). Health insurance providers consisted of community health insurance institutes,

which were administered according to the Bismarckian model by representatives of employers and insured individuals. Contribution rates differed according to individual types of employment (for workers, for craftsmen, for farmers, and so on). There were 15 insurance institutes in Slovenia in 1965. In 1972, on the basis of a referendum, equal rights and benefits were introduced for farmers on the same basis as the workers' insurance, providing the conditions for comprehensive insurance of the whole population.

According to the federal Constitution of 1974, newly adopted health insurance legislation made "self-managing community of interest in health" the main source of funding. This involved local associations of people in one or more communities – totalling at least 150 000 people – handling all insurance funds. In addition, health centres were introduced at the regional level, encompassing hospitals, primary health centres, pharmacies and the respective regional institutes of public health. These centres were to provide the full range of preventive and curative services. Although this principle was appealing in theory, the health centres came to be associated with loss of cost control and an ever-growing bureaucratization of health care.

During the four decades of socialism, the country experienced periods of financial stability. However, due to a lack of sustainable economic policies, there were also periods of high inflation, economic fluctuations, losses and large budget deficits among health care providers. Health sector salaries were considerably lower than those in other European countries. There was also a general lack of managerial experience with regard to health care management, financing and administration. The development of the health care system in the 1970s and 1980s was accompanied by continuous financial difficulties and was characterized by a broad and expanding range of health care benefits, growing health provider capacity and promotion of access to health care services.

By 1990 the health care system in Slovenia was on the verge of financial collapse. Even today, there remains a conflict between public expectations and the economic capacity of the system; it remains a challenge for the public sector to continue to finance the provision of the benefits that Slovene citizens were entitled to under the previous health system.

# The period from 1991 onwards

In 1991 Slovenia became an independent state and introduced a process of economic transformation from a centrally planned economy towards a free market economy. The transition from one socioeconomic paradigm (dominated by a collectivistic social philosophy) to another (dominated by an individualistic social philosophy) placed great pressure on the organization and functioning

of the health care system. Socioeconomic relationships changed; the centres of power were distributed in a different way; and the ownership, financial resources, and the methods of administering the health care providers were redefined.

In the years preceding the Health Care and Health Insurance Act of 1992, Slovenia's health care system had certain weaknesses in terms of securing main resources, financing and efficiency. These problems were not merely a reflection of the accumulated, more general problems of the former State, but resulted from weaknesses in the system itself. In the early 1990s Slovenia experienced serious problems in securing funds for health care, which resulted in a lack of liquidity in the system. These problems, along with the immense positive energy involved in the processes of rapid modernization of the overall social structure, led to the adoption of the Health Care and Health Insurance Act in 1992 and opened the way for an integral overhaul of the health care system. This legislation introduced both a compulsory and a voluntary health insurance (VHI) system and private practice was reintroduced.

- Besides its legislative function, the Government (and its bodies) became responsible for planning a strategy for health care development; for defining the measures involved in designing a network of public health care service; monitoring health care services and health insurance; ensuring the education of personnel in health care; setting up measures for monitoring and preventing contagious and transmittable diseases; and other measures in the field of public health care. Furthermore, the Government took over the task of defining a network of public health care services at the secondary and tertiary levels. It became the owner or founder of health care institutions at the secondary and tertiary levels, whereby it also took over the task of ensuring funds for the necessary investments in buildings and advanced equipment.
- The municipalities became the owners and founders of health centres at the primary level within their respective regions. They became responsible for defining a network of public health care services within their region and ensuring appropriate investments for public providers at the primary level. The new task for the municipalities was to carry out programmes for improving the health of the population within the municipality and paying contributions for individuals without income.
- Employers became responsible for tasks relating to health and safety within the workplace, along with paying part of employee contributions and a special contribution for injuries at work and occupational illness.
- The service provider of compulsory health insurance (HIIS) was assigned the responsibility for implementing mandatory health insurance for the whole country; for the introduction and implementation of complementary health

insurance; and for collecting contributions and entering into contracts with health care service providers, pharmacies, medical equipment suppliers and some other public authorizations. The reintroduction of health insurance itself brought about many innovations and changes to the entire system.

- The state-owned health care institutions and their employees became responsible for achieving the goals of the health care plan for the Republic of Slovenia; for defining and realizing unified professional directives for dealing with individual medical conditions; and for the implementation of preventive and curative programmes, to which they had agreed formally with the health insurance providers. Their association and other organizations were given public authorization to negotiate on payment of health care services.
- Individuals became liable for making contribution payments, in accordance
  with their financial capabilities, and are also responsible for taking care
  of their own health, their family's health and for individuals in their close
  proximity.
- The right to choose a doctor at the primary care level was one of the rights regulated by the new Health Care and Health Insurance Act. This was nothing new in the Slovene context. The novelty was that a selected personal physician acquired certain competencies that other doctors no longer had. Besides the competencies regulated by the Health Services Act (1992), a personal physician was also given the authorization to provide prescriptions to patients that had selected them, to evaluate their temporary inability to perform work, refer them to a specialist or to a hospital and to gather and archive medical documentation about the patient. Other doctors were no longer allowed these competencies. The Act defined that a personal physician could transfer a part of these competencies to specialists, but only for a limited period of time. The novelty was in the fact that insured individuals could lose their right to health care services coverage if they did not realize their rights with a personal physician.
- According to the Act, a personal physician could be a general practitioner (GP), a specialist in child care/paediatrician who works at the primary level, or a specialist in women's health care/gynaecologist. The Act also introduced personal dentists. The introduction of a personal physician aimed to improve monitoring and become better acquainted with patients along with their health, social, family and working environments, as well as increasing mutual trust and cooperation and rationalizing implementation of health care.

The goal of Slovenia's health policy – as can be seen from the aforementioned issues – has been to draw from its previous experiences, specifically with the aim of maintaining and improving the effective components of the former system, while incrementally changing those which have been proven to be ineffective.

# 2.3 Organizational overview

The main organizational features of the Slovene health system, along with the key actors and their relationships are derived from the historical development of the health care system and are based on legislation. The Health Care and Health Care and Insurance Act of 1992 set out the basis for the system of compulsory health insurance and VHI in effect at the time of writing, as well as permitting privatization of health care services and transferring many administrative functions to the Medical and Pharmaceutical Chambers.

At the state level, the Government is responsible for assuring the necessary conditions for a healthy environment and healthy living, as well as for the implementation and functioning of preventive public health programmes and health promotion.

The State, via legislative and executive bodies (ministries, state agencies and offices) has administrative and regulatory functions. The State can pass laws and by-laws, as well as implementing standards and other mechanisms to assure the prevention of contagious diseases, a health-friendly environment, protection and health in the workplace. Other responsibilities include establishing special programmes on preventive activities, providing care and protection for the most vulnerable population groups, and generally determining the policy of health care. Important among these are public health care tasks, planning development in the field, and the establishment of priorities. Furthermore, the State is the owner and administrator of public health facilities at the secondary and tertiary care levels. The aforementioned tasks are implemented by the National Assembly, the Government and its individual ministries.

#### **National Board of Health**

The National Board of Health is an advisory body to the Government and is responsible for retaining health as an agenda matter of consideration in governmental and parliamentary procedures. As defined by the Health Care and Health Insurance Act of 1992, the Board's role is to support health policy by monitoring the effects of the social and physical environment on health; it evaluates the development of plans and legislative drafts from a population-based perspective. For this purpose, the Board cooperates with administrative bodies and coordinates work relating to health issues that need to be addressed. The function of the Board has come under review owing to the need to clarify its accountability. The Board is a coordinating body for multisectoral investment in health and it coordinates all governmental activities that affect public health, including determining tax policy, defence and food policy, as well as defining

sports and cultural programmes, introducing new technologies, road traffic safety and the protection of health at work. However, it only has an advisory role, that is, it can only point to problems, but has no decision-making power.

### **Parliamentary Committee on Health**

The Parliamentary Committee on Health prepares legislation proposals and other materials for parliamentary discussions. The Committee seeks to obtain a social consensus on all laws and legal matters undergoing parliamentary consideration.

### Ministry of Health

The task of the Ministry of Health is to prepare legislation for health care and health protection, and to ensure regulation and supervision of the implementation of legislation. The activities of the Ministry of Health relate to health and health financing matters at the primary, secondary and tertiary levels. Furthermore, the Ministry monitors public health, prepares and implements health promotion programmes and ensures conditions for people's health education. It also supervises the production, trade and supply of medicines and medicinal products, as well as the manufacture of and trade in illicit drugs.

The Ministry is also in charge of implementing international agreements concerning social safety and for developing the current strategic plan to develop of the health care system. Strategic plans are submitted to Parliament for approval. In the plans all major points of health policy, as well as priorities and short- and long-term strategies for development and implementation are specified. Particular strategies include:

- policy development of health insurance (both compulsory and voluntary);
- development of a public-private mix in health care finance with regulated competition;
- planning and management of public health care institutions;
- development of public health and quality of care, including consumer rights and the rational use of pharmaceuticals;
- education of physicians and other health care professionals.

The Ministry of Health is also responsible for establishing hospitals and public health institutions at the national level. Within this role, the Ministry approves the policies of an institution, provides financing for specific expenses such as capital investments in state-owned hospitals (housing as well as medical appliances, such as magnetic resonance imaging (MRI), computed tomography (CT), positron emission tomography (PET), and so on) and plays an active role in

the nomination of directors of health institutions. There are three offices within the Ministry of Health: the Health Inspectorate, the WHO Country Office and the National Chemicals Office.

The Health Inspectorate controls the implementation of legislation, other regulation and general acts regulating sanitation, hygiene and the ecological protection of the public, and monitors environmental health. The National Chemicals Office, established in 1999, follows the Chemicals Act and carries out the preparation and implementation of laws and regulations relating to chemicals. Its further activities are: maintaining a list of chemicals; regulating chemicals' manufacturing conditions, trade and use; regulating the classification, marking and packing of chemicals; and monitoring the implementation of the Convention on Chemical Weapons and the Chemical Weapons Act of the same year.

### **Public Agency for Medicinal Products and Medical Devices**

The new Public Agency for Medicinal Products and Medical Devices was formed on 1 January 2007, on the legal basis of the Decision on the Establishment of the Public Agency for Medicinal Products and Medical Devices of the Republic of Slovenia (Official Gazette of the Republic of Slovenia 115/2006). It is a merger of the former Agency for Medicinal Products and Medical Devices (operated under the Ministry of Health) and the National Institute for Pharmacy and Drug Research (official medical control laboratory) and assumed the rights and obligations of both institutions. The new Public Agency for Medicinal Products and Medical Devices is a public body and associated to the Ministry of Health. Its functions are determined by the Medicinal Products Act, the Rules on Medical Devices, the Blood Supply Act and the Act on Quality and Safety of Human Tissues and Cells. Amongst other things it performs administrative, expert and inspection tasks in the fields of medicinal products and medical devices and acts as the official control laboratory. It is the national regulatory body for pharmaceutical products and medical devices and performs tasks related to the pharmacovigilance and materiovigilance system.

#### **Health Council**

The Health Council is a special advisory body to the Ministry of Health that was set up following the 1992 Health Services Act, responsible for assisting the Ministry in its planning tasks. The Council is formed for a 4-year term; its members are nominated by the Minister of Health and confirmed by Parliament. Previously, the Council was nominated for terms independent of the term of the current Minister of Health. With amendments to the statutes of the Council

passed in 2006, the terms overlap. The Council consists of representatives of national specialty expert groups, including one representative of each of the following institutions: the Medical Faculty, the Ministry of Health, the Medical Chamber and the Pharmaceutical Chamber. The Health Council serves as the highest professional body with responsibility for reviewing proposals for the development of health policy, as well as questions regarding ethics and doctrine. The Council can call in expert advice through the national specialty expert groups. These are established within each medical specialty and are composed of recognized experts. Besides their participation within the Health Council, they also provide doctrines for each specialty, encourage the auditing of medical practice and participate in expert audits.

Specific duties of the Health Council include:

- monitoring health conditions in the country;
- proposing (preventive) health care programmes as well as health education and research initiatives;
- reviewing the public health programmes for hygiene, epidemiology and health ecology activities, which are carried out by the IPH-RS;
- monitoring the supply of pharmaceuticals and proposing relevant measures.

#### Other ministries

Apart from the Ministry of Health, other ministries with competence in health services are outlined here.

- The **Ministry of Finance** reviews and approves the budget of the Ministry of Health. The basic principles and the shares of the state budget, budgets of local authorities, mandatory health insurance and mandatory pension and disability insurance are approved though the "budget memorandum" by the Ministry of Finance and Parliament each year.
- The **Ministry of Education and Sport** is in charge of implementing education policy and enforcing the education legislation for the education of the population from pre-school age to adult education and higher vocational education and sport. The Ministry operates, funds and manages public educational institutions, along with human resources with regard to education, and determines the enrolment procedures for applicants, among other things. It also administers some health promotion programmes in Slovenia.
- The Ministry of Higher Education, Science and Technology supervises activities related to medical and health professional education and provides financial support for companies in the field of technological development.

It is also responsible for matters relating to sponsoring basic research and technological development and for university and postgraduate education of junior researchers.

- The **Ministry of Labour, Family and Social Affairs**, together with the Ministry of Health, coordinates the provision of nursing homes for elderly and handicapped individuals. It is also responsible for negotiating bilateral conventions on social security which are multisectoral in nature.
- The **Ministry of Environment and Spatial Planning** cooperates with the Ministry of Health in the areas of environment and health.
- The Ministry of Agriculture, Forestry and Food handles affairs relating to agriculture, forestry, food safety, veterinary medicine and integrated rural planning, among other functions. The Veterinary Administration, a body within the Ministry, is responsible for monitoring the situation regarding contagious animal diseases both nationally and internationally as well as its responsibility for adopting programmes, coordinating activities and defining measures to prevent and control the spread of contagious animal diseases and epidemics.
- Other relevant ministries: The ministries of internal affairs, defence, and justice provide payments for health care for police and military personnel while on active duty, and for prisoners.

#### The Health Insurance Institute of Slovenia

Following the Health Care and Health Insurance Act of 1992, the HIIS was created as a public non-profit-making entity rigorously supervised by the State and bound by statute to provide compulsory health insurance for the population.

The HIIS is governed by an Assembly, made up of representatives of employers and the insured population, who independently administer the activities of the Institute. The Director is nominated by the Assembly and appointed with the agreement of Parliament. The priorities of the HIIS must be coordinated with those of the State in representing the interests of insured individuals. The HIIS has 55 branch offices altogether; 10 at the regional level and 45 at the local level. The regional branches also have regional councils, yet their function is more of an advisory nature and they cannot decide on issues relating to health insurance. However, the 10 regional HIIS branches are responsible for contracting with providers.

The HIIS adopts autonomously the financial plan and the acts by which the rights and benefits of the insured are regulated in more detail and proposes to the National Assembly the level of contribution rates. This autonomy is not absolute, since the final decision regarding the level of contribution rates rests with the

Parliament and the statute of the HIIS is bound by approval by the Ministry of Health. Moreover, in its capacity as the HIIS founder, the Government has retained some key levers to steer operations, such as involvement in determining the scope of benefits, the financial plan and confirmation of the elected general manager.

The HIIS is the sole organization responsible for providing compulsory health insurance. Its tasks include: issuing compulsory insurance; concluding health contracts with providers of health care services and suppliers of technical aid; supervisory and administrative tasks; providing legal and other professional assistance to insured individuals; and managing a database and statistics in the field of health insurance in accordance with the law. The Institute has the task of representing the interests of insured people in the negotiations with the partners relating to the health services programmes and their implementation, along with the formulation of prices.

## Local governments

Local governments do not yet play an active role in decision-making in the health care system as was envisioned by the health care reform legislation of 1992. They are currently principally responsible for granting concessions to private health care providers who wish to work within the publicly operated primary health care system. In theory, local governments are also responsible for the planning, establishment and management of primary health care facilities, which is in part reflected in their responsibility for the capital investments of public primary health care facilities and pharmacies. However, despite the target population coverage of 8000 inhabitants, local communities often have less population coverage (to as few as 450 inhabitants), so that only approximately 30% of all local communities are self-sufficient in terms of their capital investments in primary health care facilities.

# Unions and professional associations

Both the Medical Chamber, responsible for medical doctors and dentists, and the Pharmaceutical Chamber were abolished in 1945 and then re-established in 1992. The chambers have supervisory and administrative functions; both are responsible for specialization, licensing, the development and issuing of a code of medical ethics, and supervision over professional practice. Membership of the chambers is compulsory for practising professionals. The Medical Chamber has become an influential body that has taken over responsibilities that were traditionally within the scope of the Ministry of Health. The Nursing Chamber was established in 1992. There are also proposals to establish other new health professional chambers.

There is some discussion about the scope and functions of health professional chambers in the publicly organized health care system. Some concerns relate to a lack of funds, as, in order to fulfil public functions that were previously the responsibility of the State, large sums of funding would be needed.

The Slovene Medical Association, a nongovernmental voluntary association of medical doctors, discusses professional issues and advises the Medical Chamber accordingly. The Association publishes a monthly medical scientific journal on medical issues in Slovenia (*Zdravniški Vestnik*).

Several trade unions represent health professionals' interests, namely: FIDES – the Slovene Union of Physicians and Dentists; the Slovene Health Service and Social Service Union; the Federation of Slovene Free Unions (Health Care and Social Care Union Department); and the Union of Health Care Workers of Slovenia.

Public health care providers are members of the Association of Public Providers of Health, which private providers are welcome to join. This Association is based on partnership; it represents the interests of those employed in these provider institutions and participates on their behalf during negotiations with the payers of health services.

### Other voluntary organizations

The role of nongovernmental organizations (NGOs) in the area of health care is beginning to emerge. Through NGOs, the role of public participation in proposing and carrying out changes (reforms) in the organization of the health care system can be implemented. In principle, an NGO can secure a small share of public financing from the state budget if it meets certain budgetary requirements. The 1995 Foundations Act introduced certain conditions for such public-interest organizations. The respective ministries are authorized to set the criteria that must be met by the organization if it is to obtain the status of a public-interest organization.

There are also a number of self-help groups in Slovenia. The most prominent are Alcoholics Anonymous (AA) and a self-help group for diabetes patients. The Slovene Consumers' Association (SCA) has several projects related to out-of-court reconciliation, including for health-related issues.

# 2.4 Decentralization of the health care system

The Slovene health care system remains relatively centralized and the responsibility of local communities is still limited. The Ministry of Health has the task of planning health care for the entire health field beholden to the State and for the entire health care system. All administrative and regulatory functions of the system take place at the national level; the subnational levels predominantly have executive duties. Compulsory health insurance is also centrally managed and administered, whereas the local levels conduct only those tasks and activities that were previously assigned to them from the central level. The professional chambers and organizations also operate at state level or through their regional branches.

Local governments are also said to make limited use of the autonomy they gained through planning health services. Thus, the de facto devolution in planning primary health services from the central Government to local communities cannot be qualified at the time of writing. Moreover, considering the size of the country, the economic benefits of further decentralization of the health care system are rather limited.

Privatization within the health care system has taken place gradually and at a constantly increasing pace. It is developing towards the termination of employment relationships for medical doctors and other medical workers in the public service sector by encouraging establishment of their own practices. For more information on decentralization and privatization, see Chapter 4 *Planning and regulation* and Chapter 5 *Physical and human resources*.

# 2.5 Patient empowerment

# Patient rights

Health care in Slovenia is oriented towards improved health and a better quality of life. Constant improvements in the quality of health care are in line with the interests and rights of patients. Patient rights are a topic which has been under discussion ever since the health care legislation in effect at the time of writing was adopted. This subject was not transparent, which led to many problems in managing patients' rights, in terms of procedures to be undertaken and orientation through the system.

In Slovenia there are three dimensions to the population's rights to receive health care. The first right is expressed in the constitutional responsibility of the State to develop economic, environmental and educational policies and appropriate social, fiscal and infrastructural measures, thereby establishing the necessary conditions and incentives for an individual to exercise responsibility for her or his own health.

The second involves mainly employers who are responsible for ensuring a safe working environment. According to the Health Care and Health Insurance Act of 1992, employers' responsibilities include the maintenance of health in the workplace; prevention of occupational diseases and injuries; provision of first aid; ensuring preventive, periodic and special preventive medical check-ups of employees; paying out benefits to employees in cases of sick leave of up to 30 days; and analysing technological processes with regard to their health impact.

The third dimension refers to compulsory health insurance. These rights and benefits are, in general, defined by the Health Care and Health Insurance Act of 1992. However, more specifically, they are described in special regulations on compulsory health insurance edited and accepted by the HIIS.

In 1994 the Office of the Ombudsman was established as a result of the Human Rights Ombudsman Act. In 2002 the Ombudsperson for patient rights was appointed for a period of six years. This person, however, is not appointed at the national level but is responsible only for the population of the eastern part of the country. An Ombudsperson is independent from the Government, but is obliged to investigate complaints and has certain duties with regard to information and advice.

The existing legislation regulates several pathways for the execution of complaints and rights, for example, with the provider, with the professional association most closely related to the problem (most commonly the Medical Chamber), with the HIIS, with the Ministry of Health or with the Ombudsperson.

Furthermore, the nongovernmental SCA is involved in the development of legislation relating to patient rights, patient satisfaction and quality of health care services.

#### Patient choice

Every Slovene citizen has the right to choose one personal physician without administrative and/or territorial constraints. Moreover, citizens also have the right to choose a personal gynaecologist and dentist. Patients can always choose to contact another health care professional for a second opinion and may change their choice of the health care professional.

#### Patient information

Regarding the provision of health information, patients have the right to receive all information necessary in order to gain insight into their state of health and have the right to request information confidentially. The right to give informed consent implies the prior consent of patients to any intervention by health care professionals. Sufficient patient information includes information on the aim of the intervention (for example, diagnostic or therapeutic), the nature of the intervention (for example, painful or not), degree of urgency, duration, frequency, contraindications relevant for the patient, side-effects and risks, after-care, possible alternatives, financial consequences and possible consequences in the case of refusal or withdrawal of consent.

### **Complaint procedures**

Access to personal health documentation is perceived to be difficult by patients and their relatives in Slovenia. Frequent complaints on the (inappropriate) attitude of health personnel cannot simply be ascribed to unjustified indignation of patients.

Public interest in the field of patient rights is growing continuously. Individuals are becoming increasingly aware of their rights as patients. One of the fundamental rights in the area of health is that of access to high-quality health care. The highest number of complaints received at the Ombudsman's Office concern unprofessional treatment or criticism of the long waiting time for patients. Often, complaints refer to cases where patients or their relatives are not permitted access to health care documentation. The Office of the Ombudsman is responsible for protecting human rights and freedom of individuals in relation to the State. During the preparation and adoption of modifications in the field of health care organization, the Ombudsperson intervened frequently in the discussions on the proposals for the improvement of consumer protection. In several cases the Ombudsman raised the issue of inappropriate attitudes towards patients. Furthermore, there is much room for improvement in terms of confidentiality within the doctor–patient relationship. These cases are regularly connected to complaints of malpractice.

In principle, the complaining patient can choose between various institutions to file her or his complaint. The choice depends above all on what kind of right has been (perceived to have been) breached. The patient can file a complaint immediately to the health care provider, the HIIS, the Pension and Disability Insurance Institute of the Republic of Slovenia (PDII), the Medical Chamber, the Ministry of Health, the Market Inspectorate of the Republic of Slovenia, the courts and the Ombudsperson for human rights or the Ombudsperson for patient

rights. At the Ministry of Health, a board for complaints advises consumers on which institutions (for example, the Medical, Pharmaceutical or Nursing Chambers) they can approach to seek assistance. The Ministry of Health also deals with complaints regarding (lack of) legitimacy and regularity of the work of health care providers. In some cases consumers are also referred to the centres for social work and to other ministries. The patient can always file her or his complaint at the Medical Chamber, where special boards for professional-medical and legal-ethical matters exist. In cases of denial of treatment, the patient can appeal against the provider at the HIIS. Unsatisfied patients can always, according to the breached right, file for charges at the legal, social, civil or criminal courts. However, as seen in practice, most complaints are settled easiest and most quickly with the provider by which the patient was treated.

## Patient safety and compensation

A national coordinator for quality assurance within the health system observes whether regulations and activities are in line with WHO policies and procedures. Patient protection aims at improving the quality of health services, both through active involvement of patients as well as by increasing the responsibility of providers and other health care professionals. The system should become more accessible through the definition of patient time as one of the rights, which should contribute to the reduction of waiting lists (more information on patient safety issues can be found in Subsection *Regulating quality of care*, within Section 4.1 *Regulation*).

# Patient participation and involvement

Citizen participation in the planning and management of health care services is a new development in the Slovene health care system, but so far is limited to indirect channels. Citizens may participate directly in public debates held in Parliament on the health care plan and in regional-level committees of insured individuals. The latter have been established to provide an opportunity for citizens to actively participate in planning and management of the health insurance system. Citizens may also participate indirectly through their representatives in Parliament, in the HIIS Assembly, in the Council of the HIIS and in health-related associations and NGOs. There is a lack of a health forum as a neutral place for wider discussions on how to resolve health-related issues, which require at least relative social understanding and consensus prior to enactment.

The Slovene Public Opinion Poll of 2003 (Toš et al. 2004) included a section on health and health care, which showed that the majority of Slovenia's

population are satisfied with their GPs and their pharmacists, while they are slightly less satisfied with the specialist outpatient and dental services. Causes for dissatisfaction involved first waiting times and complicated administrative procedures, while those participants who have not visited one of the health professionals doubted that their personal physician would actually do everything possible for their health to be improved. There was a consensus among the respondents that the introduction of private practice would improve the quality of health care and those who underwent medical treatment by private practitioners demonstrated a higher level of satisfaction than those who had been treated by publicly employed physicians (Toš et al. 2004). However, the current organization of primary health care does not yet reflect fully the importance of this service within the national system of health care provision. The effective use of working hours, cost-awareness and management of health providers are areas which demand a special focus within health policy (for information on patient satisfaction see Subsection Regulating quality of care, within Section 4.1 Regulation).

# 3 Financing

lovenia's health system is funded by compulsory health insurance, state revenues, VHI and OOP spending (see Fig. 3.1).

The health insurance system of Slovenia is based on the Bismarckian social insurance model, which was first introduced for workers as an extension to the compulsory accident insurance system in 1888. The insurance system has experienced many changes over the years. The Health Care and Health Insurance Act of 1992 (Official Gazette of the Republic of Slovenia 1992) formed the legal basis for the current system and laid the foundations for the establishment of a centralized compulsory health insurance system, administered by the HIIS.

Compulsory health insurance contributions constitute the major source of health care financing in Slovenia with 67.1% of total health expenditure in 2006, which was almost €2.6 billion (Statistical Office of the Republic of Slovenia 2009). Virtually the entire population permanently living in Slovenia is covered under the sole compulsory insurance scheme, either as contributing members or as their dependants, who are subsidized by the compulsory health insurance. Compulsory health insurance coverage is also provided to citizens of almost all EU countries through arrangements governed by EC Regulation EEC No. 1408/71 and bilateral conventions. However, there are other sources of health funding besides compulsory health insurance contributions, which are pooled by the HIIS and primarily allocated to health care providers for payment of services.

General national- and municipal-level taxation represent another public source of funding (5.2% of total health expenditure in 2006). This primarily covers capital investments in hospital care and health centres, facilities owned by the Ministry of Health or municipalities (Statistical Office of the Republic of Slovenia 2009). The Ministry of Health funds capital investments of the

Municipalities Capital Ministry investments of Health Health Insurance Institute of Slovenia (HIIS) VHI (for Line item budget co-payment coverage) Institute of Public Health Providers of primary health Capitation, fee for service care (health care centres, concessionaires) Providers of outpatient Fee for service specialist care (hospitals ambulances, concessionaires) Providers of inpatient care (hospitals' clinics, DRG, bed day, case, fee for service concessionaires) Pharmacies (public, Fee for service Out-of-pocket payments concessionaires) Providers of dental Fee for service practices (health care centres, concessionaires) Fee for service, day of nursing care Social institutions Fee for service Health resorts, Spa Voluntary health Private providers insurance premiums without concession (e.g. for co-payments) Compulsory health insurance contributions Citizens

Fig. 3.1 Financial flow chart of the Slovene health care system

Source: Authors' own compilation.

*Notes:* HIIS: Health Insurance Institute of Slovenia; VHI: Voluntary health insurance; IPH-RS: Institute of Public Health (of the Republic of Slovenia); DRG: Diagnosis-related group(s).

Taxes

hospitals, specialized health institutions at national and regional levels, national health programmes and medical education and research. Municipalities raise their own revenue for health care and receive additional resources from the central Government. Municipalities fund capital investments of the public health centres and public pharmacies within their territory.

VHI contributions and household OOP spending represent private sources of funds and accounted in 2006 for 27.8% of total health care expenditure. In the context of gradual reduction of health financing by public entities, by the end of 2007 almost 1.5 million people took out voluntary complementary health insurance, to cover patient co-payments (Insurance Supervision Agency 2007). Hence, according to various sources, voluntary complementary health insurance extended to between 95% and 98% coverage of individuals who contribute to compulsory health insurance (95% according to Aris (2004) and 98% according to the Ministry of Health in 2008 [personal communication]). To avoid cream-skimming by voluntary health insurers and to equalize the variations in risk structure between private health insurance companies, a risk-equalization scheme was introduced in 2005 (Law on Changes and Amendments to the Health Care and Health Insurance Act, Official Gazette of the Republic of Slovenia 100/05) that ensured equal premiums for all insured individuals, irrespective of age.

# 3.1 Health expenditure

Slovenia spends a substantial amount of its resources on health care. In 2006, total health expenditure accounted for €2.6 billion or 8.3% of GDP, and per capita spending reached 1607 PPS (see Table 3.1). In 2006, Slovenia spent on health care almost as much as the EU countries on average in terms of their percentage of GDP (Fig. 3.2). Among the EU12 countries (that joined the EU in 2004 and 2007), Slovenia ranked first in terms of per capita spending and first in terms of their share of GDP spent on health in 2006 (see Fig. 3.2 and Fig. 3.3; note that Slovenia figures are for 2004). From 2000 to 2003, health expenditure increased from 8.2% of GDP to 8.8% and decreased to 8.3% of GDP by 2006 (Statistical Office of the Republic of Slovenia 2009). The total nominal increase of health expenditure was 68.7%, from €1.5 billion (€766 per capita) in 2000 to €2.6 billion (€1281 per capita) in 2006 (see Table 3.1).

Table 3.1 Trends in health expenditure, 2000-2006

Indicators	2000	2001	2002	2003	2004	2005	2006
Total health expenditure, current prices (billion €)	1.5	1.8	2.0	2.2	2.3	2.4	2.6
Total health expenditure, € per capita	766	892	992	1091	1139	1218	1281
Total health expenditure, PPS per capita	710	799	938	1231	1414	1513	1607
Total health expenditure as a % of GDP	8.2	8.6	8.6	8.8	8.4	8.5	8.3
Public expenditure on health as a % of GDP	6.1	6.3	6.3	6.3	6.2	6.1	6.0
Public expenditure on health as a % of total expenditure on health	74.0	73.5	73.4	71.8	73.3	71.9	72.2
Private expenditure on health as a % of GDP	2.2	2.3	2.3	2.5	2.2	2.4	2.3
Private expenditure on health as a % of total expenditure on health	26.0	26.5	26.6	28.2	26.7	28.1	27.8
Annual growth rate, total health expenditure as a % of GDP	n/a	4.3	0	3	-4.6	1	-2.2
Annual real growth rate, GDP (%, constant previous year prices)	4.4	2.8	4.0	2.8	4.3	4.3	5.9

Source: Statistical Office of the Republic of Slovenia 2009.

Notes: PPS: Purchasing power standards; GDP: Gross domestic product; n/a: Not available.

According to WHO data, the most significant rise in the proportion of GDP allocated to health was observed in 1991–2001, reaching similar or even higher shares than the EU average for the period 2000–2003 (WHO Regional Office for Europe 2009b). Since 2002 this figure has been falling slightly (Fig. 3.4).

There has been a notable increase in spending on health in absolute values. According to WHO Regional Office for Europe (2009b), spending in international dollars (PPP) per inhabitant (Fig. 3.5) gradually increased, reaching US\$ (PPP) 1800.8 in 2004, up from US\$ (PPP) 975 in 1995. Although Slovenia has the highest level of per capita spending among the EU Member States that joined the EU in 2004 and 2007, it still remained well below the total EU and the EU15 averages in terms of US\$ (PPP) per capita spending on health (Fig. 3.5).

Switzerland (2006) 11.3 France (2006) 11.1 Germany (2006) 10.6 Belgium (2006) 10.4 Portugal (2006) 10.2 Austria (2006) 10.1 Denmark (2006) 9.5 Netherlands (2006) 9.3 Iceland (2007) 9.2 9.2 Sweden (2006) 9.2 Spain (2006) Greece (2006) 9.1 Italy (2007) 8.7 Norway (2006) 8.7 Malta (2006) 8.6 United Kingdom (2006) 8 4 Finland (2006) 8.2 Israel (2006) 7.8 Ireland (2006) 75 Luxembourg (2006) 7.3 Cyprus (2005) 6.4 Turkey (2005) 5.7 Central and south-eastern Europe Croatia (1994) 9.0 Slovenia (2004) 8.6 Hungary (2006) 8.3 Slovakia (2005) 7.1 TFYR Macedonia (2006) 7.0 Czech Republic (2006) 7.0 Poland (2005) 6.2 Lithuania (2005) 5.7 Latvia (2005) 5.3 Estonia (2005) 5.1 Bulgaria (1994) 4.7 Romania (2006) 3.9 Bosnia and Herzegovina (1991) 3.5 Albania (2006) 2.0 Republic of Moldova (2006) 9.3 Belarus (2006) 5.9 Georgia (2000) 5.0 Turkmenistan (1996) 3.5 Ukraine (2006) 3.3 Russian Federation (2000) 2.9 Uzbekistan (2005) 2.4 Azerbaijan (2006) 2.4 Kyrgyzstan (2005) Kazakhstan (2006) 1.5 Tajikistan (2006) 1.1 **Averages** EU Member States before May 2004 (2006) 9.6 EU average (2006) 8.9 EU Member States since 2004 or 2007 (2006) 6.0 0 2 4 8 10 12 % of GDP

Fig. 3.2 Total health expenditure as share (%) of GDP, WHO European Region, latest available year

Western Europe

Source: WHO Regional Office for Europe 2009b.

*Notes:* GDP: Gross domestic product; EU: European Union; CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia; Countries for which data were not available have not been included.

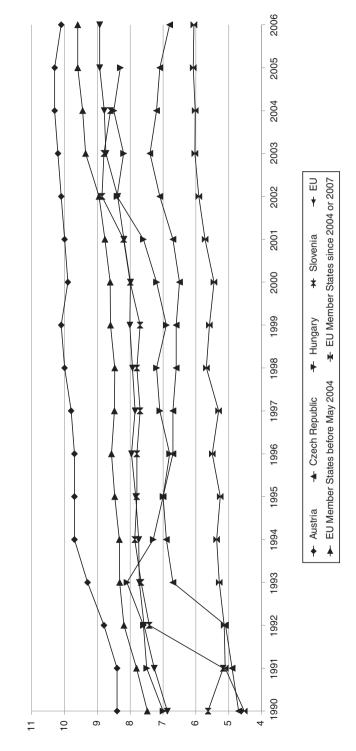
Western Europe Norway (2006) 4 520 Switzerland (2006) 4 311 Luxembourg (2006) 4 303 Austria (2006) 3 606 Belgium (2006) 3 488 France (2006) 3 449 Netherlands (2006) 3 391 Germany (2006) 3 371 Denmark (2006) 3 349 Iceland (2006) 3 340 Sweden (2006) 3 202 Ireland (2006) 3 082 United Kingdom (2006) 2 760 Finland (2006) 2 668 Italy (2006) 2 614 Greece (2006) 2 483 Spain (2006) 2 458 Portugal (2006) 2 120 2 017 Israel (2005) Malta (2005) 1 665 Cyprus (2005) 1 452 Turkey (2005) 591 Central and south-eastern Europe Slovenia (2004) 1 800 Hungary (2006) 1 504 Czech Republic (2006) 1 490 Slovakia (2005) 1 130 Poland (2006) 910 Lithuania (2005) 826 Estonia (2005) 789 Latvia (2005) 723 430 TFYR Macedonia (2005) Croatia (1994) 358 Romania (2005) 353 Bulgaria (1994) 214 Albania (2005) 164 CIS Belarus (2005) Ukraine (2005) 249 Russian Federation (2000) 243 Republic of Moldova (2005) 184 Kazakhstan (2005) 133 Georgia (2000) 133 Azerbaijan (2005) 125 Uzbekistan (2005) 49 Turkmenistan (1994) 48 Kyrgyzstan (2005) 44 Tajikistan (2005) 15 **Averages** EU Member States before May 2004 (2006) 3 003 2 619 EU average (2006) EU Member States since May 2004 or 2007 (2005) 1 000 2 000 3 000 4 000 5 000 **US\$ PPP** 

Fig. 3.3 Total health expenditure, \$ PPP per capita, WHO European Region, latest available year

Source: WHO Regional Office for Europe 2009b.

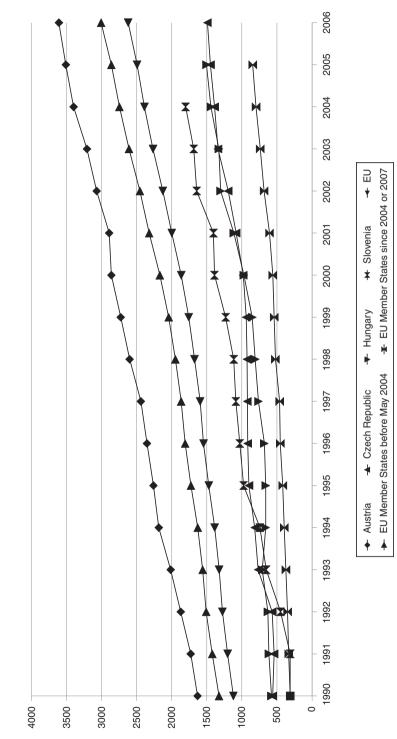
*Notes:* PPP: Purchasing power parity; EU: European Union; CIS: Commonwealth of Independent States; TFYR Macedonia; The former Yugoslav Republic of Macedonia; Countries for which data were not available have not been included.

Fig. 3.4 Trends in health expenditure as a share (%) of GDP in Slovenia and selected countries, 1990-2006 (or latest available year)



Source: WHO Regional Office for Europe 2009b. Notes: EU: European Union; GDP: Gross domestic product.

Fig. 3.5 Health expenditure in US\$ PPP per capita in Slovenia and selected countries, 1990–2006 (or latest available year)



Source: WHO Regional Office for Europe 2009b. Notes: PPP: Purchasing power parity; EU: European Union.

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### Health expenditure from public sources

In Slovenia, public expenditure on health consists of compulsory health insurance expenditure, accounting for the biggest share, along with national and local government expenditures. The public share of total health expenditure, including general revenue and compulsory health insurance sources, has decreased slightly from 74.0% in 2000 to 72.2% in 2006 (Table 3.1). In 2006, public expenditure on health amounted to almost €1.9 billion (€925.5 per capita), which represents a rise of 65.1% compared to €1.1 billion (€566 per capita) in 2000 (Table 3.2). The share of public funds has remained in the range between 6.3% of GDP in 2003 and 6.0% in 2006 (Table 3.1). As presented in Table 3.2, the period 2000–2006 was characterized by a downward trend in the share of public expenditure on health. The reason for this was that revenue from the main source of compulsory health insurance – which is based on wages of employees – rose less than the GDP. In 2006, HIIS compulsory health insurance expenditure accounted for €1.7 billion, which represented a rise of 92.9% in total public expenditure on health.

Slovenia's health care financing is based on a nationally pooled health insurance system, with compulsory health insurance controlling 92.9% of public expenditure on health (Table 3.2). This amounts to 67.1% of total health expenditure in 2006 (Statistical Office of the Republic of Slovenia 2009) (Fig. 3.7).

Expenditure of the Ministry of Health from the state budget and expenditure of the municipalities through community budgets account for a smaller share of public expenditure on health. In 2006, national government health expenditure accounted for 6.5% and of local government for 0.7% of public expenditure on health (Table 3.2). The national government share of total health expenditure was 4.7% and the local government share was 0.5% (Statistical Office of the Republic of Slovenia 2009; also see Fig. 3.7). The share of public health expenditure from the municipalities' budget decreased between 2000 and 2006 by 0.2%. In the period 2000–2006 the average annual growth rate was 15.7% in terms of state budget expenditure and -6.9% in terms of the municipalities' expenditure (Statistical Office of the Republic of Slovenia 2009).

Fig. 3.6 shows public health expenditure in Slovenia and other European countries as well as EU averages according to WHO estimates. In 2005 Slovenia's public spending as share of total health expenditure was less than the EU15 average, but slightly above the average for the countries that joined the EU in May 2004.

According to disaggregated data on funds by type of service (Table 3.2), throughout the period 2002–2006 most funds were used for curative care services (slightly over 50%) and for medical goods (approximately 23%). Long-term nursing care services accounted for 8.0% of total expenditure on health in 2006 (Statistical Office of the Republic of Slovenia 2009).

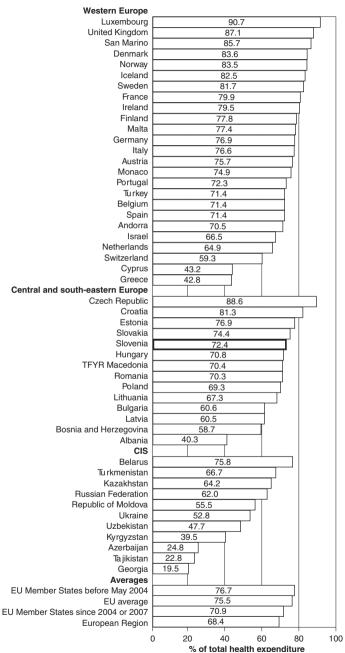
Table 3.2 Health expenditure by source of funding, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
PHE (million €)	1125.7	1305.5	1449.5	1564.0	1665.8	1751.7	1858.4
PHE per capita (€)	266.0	655.4	726.6	783.6	834.2	875.4	925.5
PHE as a % of THE	74.0	73.5	73.4	71.8	73.3	71.9	72.2
- Compulsory health insurance expenditure (% of total PHE)	94.5	93.5	93.3	92.9	93.1	93.7	92.9
<ul> <li>National government expenditure (% of total PHE)</li> </ul>	4.6	5.3	5.6	6.2	6.1	5.6	6.5
<ul><li>Local government expenditure (% of total PHE)</li></ul>	6.0	1.3	7:	0.8	6.0	0.7	0.7
Private HE (million €)	398.8	471.2	528.8	613.3	608.2	684.5	713.8
Private HE per capita (€)	200.5	236.5	265.1	307.3	304.5	342.1	355.5
Private HE as a % of THE	26.0	26.5	26.6	28.2	26.7	28.1	27.8
<ul><li>– VHI expenditure (% of private HE)</li></ul>	51.0	52.0	48.3	45.9	47.5	45.6	47.1
<ul><li>OOP expenditure (% of private HE)</li></ul>	44.1	39.5	43.5	42.0	43.8	44.1	42.5
THE by type of service (million €)	1524.4	1776.7	1978.3	2177.3	2274.0	2436.2	2572.2
- curative care services (% of total)	n/a	n/a	51.9	50.9	51.7	51.2	50.8
<ul><li>rehabilitative care services (% of total)</li></ul>	n/a	n/a	2.1	2.1	2.1	2.2	2.1
- long-term nursing care (% of total)	n/a	n/a	7.4	7.2	7.7	8.2	8.0
<ul><li>Ancillary health care services (% of total)</li></ul>	n/a	n/a	2.5	2.4	2.7	2.7	2.8
<ul> <li>Medical goods dispensed to outpatients (% of total)</li> </ul>	n/a	n/a	23.1	23.1	23.1	23.2	22.8
<ul> <li>Prevention and public health services (% of total)</li> </ul>	n/a	n/a	3.6	3.6	3.7	3.7	3.9
<ul> <li>Health administration and health insurance (% of total)</li> </ul>	n/a	n/a	4.4	4.5	4.1	4.1	4.2
<ul><li>Gross capital formation (% of total)</li></ul>	n/a	n/a	2.0	6.2	4.9	4.8	5.4

Source: Statistical Office of the Republic of Slovenia, 2009.

Notes: PHE: Public health expenditure; THE: Total health expenditure; HE: Health expenditure; VHI: Voluntary health insurance; OOP: Out-of-pocket; n/a: Not available.

Fig. 3.6 Health care expenditure from public sources as a share (%) of total health expenditure in the WHO European Region, 2005



Source: WHO Regional Office for Europe 2009b.

*Notes:* EU: European Union; CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

In order to promote the development of more effective mechanisms for the control of medication-related public expenses, several measures were adopted in the 2000s: a Decision on the Criteria for Classification of Medicines to Lists (positive and intermediate list), a Regulation on the Process of Classification of Medicines to Lists, a Medicinal Products Act and Rules on the Prices of Medicinal Products for Human Use. This last measure entered into force in January 2007 and aimed to substantially reduce public costs for medicinal products (by 7%). Furthermore, the possibility of generic prescribing and generic substitution was brought into effect. On the basis of new cost-containment measures, new innovative medicinal products and orphan drugs are now also reimbursable.

#### Private health expenditure

Private health expenditure reported here refers to VHI expenditure and OOP spending.

Private expenditure in 2006 reached €713.8 million (€355.5 per capita), which is a rise of 79.0% compared to 2000. In 2000–2006 the average annual growth rate of private health expenditure was 10.4%. In 2006 private expenditure represented approximately 27.8% of total health expenditure (Statistical Office of the Republic of Slovenia 2009), up from 26.0% in the year 2000.

The main share of private expenditure is VHI expenditure, accounting for €336.0 million in 2006 (€167.3 per capita), which was 65.2% higher than in 2000. In the period 2000–2006 the average annual growth rate of VHI expenditure was 8.9%. In 2006 it represented 47.1% of private health expenditure or 13.8% of total health expenditure (Statistical Office of the Republic of Slovenia 2009).

In 1993 voluntary complementary health insurance was introduced to cover co-payments for compulsory health insurance. Co-payments for most of the services covered by compulsory health insurance are quite high for the general population; however, the flat rate for VHI is relatively low. For this reason, more than 95% of people that pay compulsory health insurance contributions have also purchased voluntary complementary health insurance. This is a steady and secure source of revenue for the health sector.

OOP payments are the second most dominant private source of expenditure. In 2006 this type of payment represented 42.5% of private health expenditure and 12.8% (9.4% in 2000) of total health expenditure. In the same year OOP expenditure reached €303.1 million (€151 per capita), which represented a rise of 72.4% compared to the year 2000. During the period 2000–2006

the average annual growth rate of OOP was 9.8% (Statistical Office of the Republic of Slovenia 2009).

## 3.2 Population coverage and basis for entitlement

## Population coverage: compulsory health insurance

The centralized compulsory health insurance system, which is administered by the HIIS, is defined in the Health Care and Health Insurance Act of 1992. Virtually all individuals that are permanently resident in Slovenia are entitled to the health benefits covered under the sole compulsory insurance scheme implemented in 1992, either as contributing members or as dependants thereof. At the end of 2006 there were 1.985 million compulsorily insured individuals, comprising 99% of the total population (HIIS 2007a). Opting out of compulsory coverage is not permitted.

In Slovenia, there are 21 categories of insured people. The main categories are detailed here.

- Employees (also civil servants): contributions of employees are income based and coverage is also provided for non-earning spouses and children of the contributing members. Since January 2002, the compulsory health insurance contributions of the individuals in this category are 13.45% of their gross income and are split between the employer and the employee, with 6.56% contributed by employers and 6.36% by employees, plus an additional 0.53% by employers to cover for workplace-related injuries and occupational diseases.
- Unemployed: the National Institute for Employment pays a contribution for each unemployed registered person, which is 12.92% of unemployment substitution or subvention.
- Pensioners: this category of the population pays a contribution of 5.96% of their gross pension.
- Farmers and craftsmen: these categories of the population pay 18.78% of cadastral revenue or 6.89% of the gross basis for pension and disability insurance.
- Self-employed individuals: this group pays contributions of 13.45% of the gross basis for pension and disability insurance.
- Individuals without income, prisoners and war veterans: the State and municipalities pay contributions for these categories of the population.

Furthermore, according to the 1999 Amendment to Health Care and Health Insurance Act of 1992 (Official Gazette of the Republic of Slovenia No. 06/99), the Asylum Act (Official Gazette of the Republic of Slovenia No. 61/99) and the Aliens Act (Official Gazette of the Republic of Slovenia No. 14/99), the Republic of Slovenia provides the funds from the budget of the Republic of Slovenia for urgent health care for:

- individuals of unknown residence:
- foreign nationals from states with whom international agreements have not been concluded;
- citizens of the Republic of Slovenia with permanent residence abroad who are temporarily resident in Slovenia or who are in transit through the Republic of Slovenia and who are unable to ensure payment for health services.

The invoicing of contributions, terms of payment, collection of interest for overdue payments, writing off of bad debt (unlikely to be repaid), depreciation and penalties are subject to special regulations governing the settlement of taxes and contributions and are controlled by the HIIS. In practice, the HIIS has passed on these tasks to the Tax Administration of the Republic of Slovenia, which is a state agency. The HIIS also determines the criteria and conditions for the potential reduction or writing off of contributions.

## Population coverage: voluntary health insurance

At the inception of the formulation of VHI legislation, the estimated number of people who would enrol into the VHI scheme in 1993 was 40 000, or 2% of the total population. As of July 2007 approximately 1.466 million of Slovenia's inhabitants were enrolled in the VHI co-payment scheme. This accounts for approximately 98% of the coverage of individuals who contribute to compulsory health insurance and for approximately 85% of the whole population (children under 18 years and students under 26 years are excluded from co-payments).

VHI is provided by the Vzajemna, a non-profit-making public insurance company obliged by law to provide VHI for co-payments, along with Adriatic-Slovenica, Triglav and Merkur. These latter three are profit-making insurance companies.

Complementary VHI provides insurance to cover co-payments only, whereas supplementary VHI provides for a higher standard and a wider scope of benefits than the compulsory insurance.

The majority of the population is included in the complementary VHI scheme. Contrary to procedures in other European countries, complementary VHI insurance does not reimburse the patient, but the provider charges the respective

VHI companies directly. Voluntary supplementary insurance is contracted only by a small fraction of the population.

### Definition of benefits: compulsory health insurance

The compulsory health insurance regulations of the Health Care and Health Insurance Act of 1992 define a benefits package of health services to the insured population. The benefits package comprises the coverage of primary, secondary and tertiary services, pharmaceuticals, medical devices, sick leave exceeding 30 days and costs of travel to health facilities. Compulsory health insurance provides full coverage for the following health services:

- all health services provided for children and adolescents, including diagnosis, treatment and rehabilitation of diseases and injuries suffered by children, schoolchildren, minors with developmental impairments and students, for as long as they attend school;
- counselling in family planning, contraception, antenatal care and childbirth care to female patients;
- services as part of prevention programmes, diagnosis and treatment of infectious diseases, including HIV infection;
- treatment and rehabilitation of occupational diseases or injuries, malignant diseases, muscular or muscular nerve diseases, mental diseases, epilepsy, haemophilia, paraplegia, quadriplegia and cerebral palsy, as well as advanced diabetes, sclerosis multiplex and psoriasis;
- medical services related to the donation and transplantation of tissues and organs, emergency medical treatment, including emergency transportation, nursing care visits, and treatment and care in the home and in social institutions;
- long-term nursing care as home visits and provision of treatment and home nursing in social care institutions.

All other health care services involve cost sharing through co-payments. Depending on the specific area of treatment or activity, the shares covered by compulsory health insurance vary from 25% to 95%. The shares are as follows:

- a minimum of 95% of the cost of services in connection with organ transplantation and urgent surgery, treatment abroad, intensive therapy, radiotherapy, dialysis and other urgent interventions included in the basic benefits package;
- a minimum of 85% of the cost of treatment of reduced fertility, artificial insemination, sterilization and abortion; specialist surgery; nonmedical care

and spa treatment in continuation of hospital treatment with the exception of non-occupational injuries; dental care, orthopaedics, orthodontics, hearing and other aids and appliances;

- a minimum of 75% of the cost of medications from the positive list; and specialist, hospital and spa treatment of injuries which are not work related:
- a maximum of 60% of non-emergency ambulance transportation; and medical and spa treatment which is not a continuation of hospital treatment;
- a maximum of 50% of the cost of ophthalmology devices and orthodontic treatment of adults;
- a maximum of 25% of the cost of pharmaceuticals from the intermediate list determined by the HIIS. (Three different lists exist: positive, intermediate and negative. The share of costs covered by compulsory health insurance depends on the list to which the respective pharmaceutical product belongs.)

### Definition of benefits: voluntary health insurance

In Slovenia, co-payments can be covered by VHI and were introduced with the Health Care and Health Insurance Act in 1992, which determines the services and respective percentages of costs to be covered by compulsory health insurance. The co-payment rates with regard to the range quoted in the Health Care and Health Insurance Act are proposed by the HIIS and must be approved by the Government.

In Slovenia, VHI provides the following types of coverage:

- partial cover for services not fully covered by compulsory health insurance (co-payments);
- coverage of expensive, uninsurable long-term care (higher quality materials, more convenient procedures, more services in hospitals or health spas);
- coverage of services excluded from compulsory health insurance coverage;
- coverage for individuals who are not eligible for compulsory health insurance;
- coverage for faster access to medical treatment.

Since it is not possible to opt out of the compulsory scheme, there are no voluntary "full coverage" schemes. VHI covers co-payments for the benefits within the compulsory health insurance package, as well as complementary and supplementary benefits which are not covered at all by compulsory health insurance (for further information on VHI see Subsection *Voluntary health insurance*, within Section 3.3 *Revenue collection/sources of funds*).

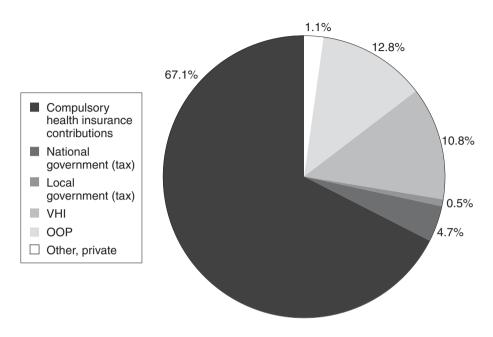


Fig. 3.7 Shares of total expenditure on health by source of revenue, 2006

Source: Authors' own compilation, drawn from Statistical Office of Slovenia 2009. Notes: VHI: Voluntary health insurance; OOP: Out-of-pocket (payment).

## 3.3 Revenue collection/sources of funds

Revenue flows to the health care system through social security (compulsory) health insurance contributions, general taxation, VHI premiums and household OOP spending. Funds raised through compulsory health insurance contributions represent the largest share of the total revenue for health from public sources. National and local budget revenues mainly cover costs for capital investment, national public health programmes, and so on. The majority of revenue from private sources flows from VHI premiums and OOP expenditure.

In 2007 the general taxes and social security contributions (including compulsory health insurance contributions) at national level reached almost €2.0 billion, which represented a rise of 74.6% compared to 2000. Fig. 3.7 presents shares of total expenditure on health according to source of revenue for 2006.

	2000–2001	2002–2008
Employees	6.36	6.36
Employers	6.89	7.09
Total	13.25	13.45

Table 3.3 Contribution rates for compulsory health insurance as a share (%) of gross income, 2000–2008

Sources: HIIS 2006b, HIIS 2007a.

### Compulsory sources of finance

#### **Compulsory health insurance contributions**

In Slovenia, compulsory health insurance contributions are the most substantial source of revenue for health system financing. In 2005 the HIIS generated total revenue of €1.8 billion, which represented a rise of 59.2% compared to the 2000 level. HIIS revenue from compulsory health insurance contributions and transfers represented 98.2% of total HIIS revenue in 2005, which was 0.5% more than in the year 2000 (97.8%). This increase was due to the rise of compulsory health insurance contributions and transfers compared to all other types of HIIS revenue in absolute terms. Since 2002 the employee contribution rates to compulsory health insurance have remained unchanged, as can be seen in Table 3.3.

In addition to compulsory health insurance contributions, there are also some other funds allocated to the HIIS, such as non-tax revenues, capital revenues and grants. The different types of revenue collected by the HIIS are presented in Table 3.4.

#### **General taxation**

General taxation is non-earmarked revenue, flowing to the Ministry of Health budget from central revenue sources or to the municipal budget(s) from local tax revenues. The central budget tax revenue includes revenue from income tax, corporate tax, value-added tax (VAT) and excise tax, which are collected by the Tax Administration of the Republic of Slovenia. Municipal budget tax revenue is accumulated from local taxes and is collected by the municipalities.

The amount of the tax revenue allocated for health is not fixed and is estimated annually. In 2005 approximately 0.95% of the total state expenditure was allocated to the health sector (Ministry of Finance 2005a). Similarly, municipalities themselves estimate the share of the municipal budget allocated to health, which is approximately 1.2% of municipalities' total expenditure (Ministry of Finance 2005b).

Table 3.4 Health Insurance Institute of Slovenia revenue by source as a share (%) of total HIIS revenue, 2000–2005

Revenue source	2000	2001	2002	2003	2004	2005
Compulsory health insurance contributions	79.8	80.4	79.7	79.9	79.5	78.8
- employee contributions	38.2	37.3	36.3	35.2	34.9	34.7
- employer contributions	36.6	37.0	37.5	38.8	38.9	38.7
- self-employed contributions	4.6	4.3	4.2	4.1	4.1	4.1
<ul> <li>other social security contributions</li> </ul>	0.4	1.8	1.7	1.8	1.6	1.3
Non-tax revenue	2.2	1.3	1.3	1.2	1.9	1.8
Capital revenue	0.0	0.0	0.0	0.0	0.1	0.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0
Transfers	18.1	18.4	19.0	18.8	18.4	19.3
- from the state budget	0.7	1.2	1.3	1.2	1.0	1.0
- from the local budgets	0.8	0.8	0.9	1.0	1.1	1.0
<ul> <li>from other social security funds (contributions for pensioners paid by National Pension Insurance Institute)</li> </ul>	16.6	16.4	16.8	16.6	16.3	17.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: HIIS 2000; HIIS 2001; HIIS 2002; HIIS 2003; HIIS 2004; HIIS 2005b.

## Voluntary health insurance

VHI was introduced in 1993 and was designed to gather resources for health care additional to those accumulated through compulsory health insurance. VHI gained popularity, acceptance and affirmation with the introduction of copayments into the system by the Health Care and Health Insurance Act of 1992. Initially there were two providers of VHI: the HIIS, which is a statutory body and responsible for providing a complementary co-payment insurance policy; and Adriatic, a profit-making commercial provider. In the introductory years (1993–1994), predominantly large companies purchased VHI collectively for their employees. However, this changed later, when VHI was considered to be a matter of individual choice. In view of the novelty factor of VHI in Slovenia, there were initial fears over the creation of a 2-tier medical system. However, arguments prevailed that the introduction of the VHI system would put an end to limitless claims and usage of the compulsory health insurance system by demanding additional resources from the consumers (for more information on this issue see Chapter 8 *Assessment of the health system*).

In 1998, according to amendments to the Health Care and Health Insurance Act, the HIIS was obliged to completely separate its compulsory insurance and VHI schemes. Hence, a new mutual non-profit-making insurance company, "Vzajemna", was founded, which is independent from the HIIS. Vzajemna subsequently became the largest provider of VHI.

Since 2005, VHI is offered by four main insurance providers: Vzajemna, Triglav, Adriatic-Slovenica, and Merkur. Vzajemna is still the provider with the most insured individuals; however, it lost part of its share (from 1.2 million in 1993 to 900 000 in 2005) due to the increased number of providers of VHI in the country (Vzajemna 2007). Furthermore, there are several other providers of VHI who offer policies for smaller segments of the VHI market, for example policies for travel health insurance.

Since VHI was introduced to the market, there have been clear signs of imbalances between different VHI companies. Problems of equity became obvious, since co-payment health insurance – because of its flat premiums (that is, not risk related) – introduced a regressive element into the system (for further discussion on this issue see Chapter 8 *Assessment of the health system*). At that time, premiums for complementary VHI were not risk related and both companies charged identical premiums. However, when in the period 2004–2005 two commercial VHI companies entered into the Slovene market, they launched an overt cream-skimming campaign for younger and healthier insured individuals by offering risk-related premiums. Vzajemna, the oldest and most significant provider of complementary insurance, had the highest number of insured individuals but a less favourable risk structure, because large numbers of retired or elderly people took out VHI coverage with Vzajemna.

After the change of government in 2004, the topic was brought to the forefront of the political agenda. Proposals to introduce a risk-equalization scheme and to establish an efficient model for long-term sustainability of the health care financing system were prepared by the Ministry of Health and included into the Law on Changes and Amendments to the Health Care and Health Insurance Act (2005). These proposals were adopted by Parliament in September 2005.

In order to prevent cream-skimming, VHI companies were obliged to participate in the risk-equalization scheme to level out differences among insurance companies in terms of the costs of health care. The Law stipulates a unified flat premium for all insured people, irrespective of sex, age or health condition, which by mid-2008 was in the range of €20.61–20.74 (Zveza potrošnikov Slovenije 2008). The Law ensured equality among various complementary insurance providers, as well as among insured people and insurance conditions of complementary health insurance, in terms of the duration and cancellation of complementary VHI contracts.

From an initial share of 1.5% of total health expenditure in 1992, the share of private funds flowing into the health care system through VHI has increased to approximately 13.8% in 2006 (Statistical Office of the Republic of Slovenia 2009).

### **Out-of-pocket payments**

OOP payments in Slovenia exist in the form of cost sharing and direct payments.

#### **Cost sharing**

Cost sharing in Slovenia occurs in the form of co-payments, through which patients are charged a flat rate for services. It was introduced by the Health Care and Health Insurance Act of 1992 as part of the compulsory health insurance system. It applies to most types of health care services and, since 2007, to all patients with the exception of some vulnerable groups such as children, unemployed individuals, those with income below a certain threshold and chronically ill people. The levels of co-payment are defined in the Health Care and Health Insurance Act of 1992 (article 23). As mentioned earlier, most of the complementary health insurance payers took out complementary VHI to cover co-payments. Hence, cost sharing rarely exists for co-payments in the form of OOP payments directly from patient to provider.

Co-payments apply for visits to GPs, specialists, hospitals and laboratories for the use of services covered by the HIIS. In accordance with article 23 of the Health Care and Health Insurance Act, these charges vary from 5% to 75% of services or pharmaceutical costs. In the (rare) event that the respective patient did not take out complementary VHI, the difference up to the full price of health services has to be paid directly by the patient. Otherwise (as in most cases), the provider charges the respective complementary VHI company directly.

#### **Direct payments**

Direct payments also exist in Slovenia, as payment for goods and services that are not covered by any form of insurance. These occur as OOP payments for visits to primary care physicians and private providers who do not have a contract with the HIIS, along with specialist services without GP referral, and private dentist services. In these cases the patient covers the cost of the service(s) out of pocket. Patients might also pay directly for the services, to avoid the waiting time, or to pay for services which are not included in the benefits package of the compulsory insurance system, such as special hospital

("hotel") services or better food. Services such as plastic surgery are not included in any health insurance packages and are paid for out of pocket.

#### Parallel health services

There are two different types of parallel health services in Slovenia: services provided through the Ministry of Defence and services that are owned by large enterprises. The Ministry of Defence owns and employs its own first aid health care facilities within its military premises, provided by a military physician and salaried by the Ministry of Defence. For more complex primary health services, a GP under contract with the HIIS is usually consulted. All services for individuals in the military services are paid for from the state budget.

The second type of parallel health services are owned by larger enterprises. These firms employ occupational physicians. The employer is obliged to ensure all services and measures of protection and health within the workplace (for example, previous and periodic medical check-ups for employees). If employees fall ill, the cost of their treatment is covered by compulsory health insurance.

#### External sources of finance

Since the beginning of the country's reform process, Slovenia has participated in many international technical programmes, including the WHO "Eurohealth" programme, the EU PHARE programme and the World Bank Health Systems Management project. Due to a relatively high per capita GDP compared to other CEE countries and a relatively equal income and expenditure balance in the compulsory health insurance system, external sources constitute only a very marginal share of income. Since 1993 some external financial activity has taken place in the context of co-financing legislative activities and building institutional capacity within the process of Slovenia's accession to the EU. In this regard, the EU has provided most significant resources, while financial contributions from WHO, the World Bank, the United Nations Development Programme (UNDP) and other United Nations organizations have been devoted to specific tasks (for example, the regulation of illicit drug control), but do not play a major role in the running of the country's health system, in financial terms.

## 3.4 Pooling of funds

In Slovenia there are two types of pooling mechanism. The first is represented by the HIIS, which collects and pools the compulsory health insurance contributions. As per the Health Care and Health Insurance Act of 1992, the HIIS is the sole provider of compulsory health insurance. In the second mechanism, the four main VHI companies collect and pool the VHI contributions in their respective pools, which are then re-allocated among the four companies using a risk-equalization scheme determined by the Ministry of Health, based on age and gender. According to the Law on Changes and Amendments to the Health Care and Health Insurance Act (2005), all insurance companies that offer complementary VHI must record the costs according to age group and sex. Based on these figures that are provided by the insurers quarterly, the Ministry of Health calculates the so called "Slovene Portfolio". It represents the hypothetical average of costs that would have occurred if VHI providers had identical portfolio structures. This figure is then compared with the actual costs incurred by each VHI provider during the respective quarter. In order to facilitate the re-allocation of resources, the Ministry of Health subsequently issues notifications to VHI providers regarding the amount they have to pay to, or are due to receive from, other providers in order to equalize differences in risk structures. For more information on the discussion of risk selection and risk equalization in terms of VHI, see Section 7.1 Analysis of recent reforms.

Within each annual financial plan the HIIS defines a maximum overall spend on health services by compulsory health insurance contributions for the upcoming year. The fact that the annual national health budget is capped is also incorporated into the contracts between each provider and the HIIS. Contrary to this, the budget for complementary health insurance is not capped, which means that the providers of complementary health insurance have to pay for all provided services covered by complementary health insurance.

The prospectively determined, capped annual HIIS budget for health services is defined according to current and future macroeconomic conditions, such as expected growth in GDP, rate of inflation, expected growth of wages and pensions and the rate of unemployment, that is, those indicators that influence the amount of contributions paid by insured individuals and other revenues of the HIIS. The overall budget is determined annually as a process of cooperation between the HIIS, the Ministry of Health and the Ministry of Finance. The proposal of the national health budget is then discussed at the board and at the assembly of the HIIS. After confirmation by the board and assembly, the financial plan is approved also by the Government. The national health budget is determined at the national level. There is no further allocation of the health budget on a geographical basis, aside from local tax revenue flowing to the municipal budget,

which would give local authorities the opportunity to distribute resources among local health care providers based on their own criteria.

The global budget for health services is then implemented in the process of partnership negotiations, as described in Section 3.5 *Purchasing and purchaser–provider relations*. The partnership negotiation process also resulted in defining allocation models via different kinds of payment mechanisms, as described in Section 3.6 *Payment mechanisms*.

## 3.5 Purchasing and purchaser-provider relations

Health services in Slovenia are purchased by the HIIS and health insurance companies which provide voluntary complementary health insurance. Purchasing health services starts with a process of partnership negotiations (for more information, see Section 4.1 *Regulation*). The services that are reimbursed by the HIIS and the volume of services to be provided are defined by key stakeholders in annual agreements. These clearly define budgets for the amount of services covered by public resources for compulsory health insurance. However, there are no pre-defined limits for private health expenditure. The general agreement and special agreements for different groups of health care providers are the key products of the first phase of contracting processes, which are then used in the direct contracting process between the HIIS and each provider to determine the final content of the contract. Neither Parliament, nor the Ministry of Health's Commission on Investment Financing, nor the Ministry of Finance play any role in the contracting/purchasing process with providers.

The second stage of purchasing of health services involves two parties, that is, the HIIS and the respective provider within the public health care network. After determining the general agreement and special agreements for various groups of health care providers, the contracts between the HIIS and each provider specify the type and volume of services that will be provided, along with the tariffs for these programmes and services, methods of payment, quality requirements, the supervision of the implementation of the contract and the individual rights and responsibilities of the contracting parties. Except for dialysis services and the transplantation programme, the payments for provided services are prospectively defined and capped, which means the provision of health care services above the prospectively determined amount is not paid for. If a provider produces fewer services than determined by the contract, then the HIIS does not reimburse the full price of the health programme (services). In this case, the reimbursement is determined according to the actual volume of services provided.

VHI companies do not participate in the negotiation process to define the general agreement and special agreements for different groups of health care providers. The insurance companies are obligated to pay the providers the total value of the provided health services covered by complementary health insurance. For supplementary VHI, insured individuals pay premiums to VHI providers and the full costs are directly paid from the VHI provider to the respective health care provider.

## 3.6 Payment mechanisms

This subsection discusses payment arrangements for health care services and health care personnel. Generally, payments mechanisms and levels are regulated based on contractual arrangements between the HIIS and health care providers.

### Paying for health services

Levels of payment for the health services provided are based on annually renewed contracts between the HIIS and the providers. Each contract consists of the volume and price of the respective programme. The programme in this case is defined as set of services related to a certain type of care (outpatient specialist care, acute inpatient care, non-acute inpatient care, and so on). The capped annual budget for health care programmes at national level results in capped payment amounts for providers determined in the contracts with the HIIS.

The payment mechanisms are the same for all providers in the public health care network (private and public). The payment mechanisms for health services, as well as provider payment schemes, are summarized in the Table 3.5 and described in detail in the subsections that follow.

#### Ambulatory care

Primary health care services provided by chosen personal physicians (GPs and primary-level paediatricians and gynaecologists) in health centres are paid through a combined system of capitation and fee-for-service payments, implemented in 2001. The volume of services payable by the HIIS is outlined in prospectively determined annual contracts. One half of the programme value in these activities is paid per capita for the patients on the GP's list, the other half is paid by fee-for-service payments in accordance with the volume of services provided.

Table 3.5 Payment mechanisms, 2007

Health service category	Payment mechanism (with regard to the basic payment unit)	Prospective determined limited payment; or Retrospective determined unlimited payment
Primary health care	Combination of capitation and fee for service	Prospective
Outpatient specialist care	Fee for service	Prospective
Acute inpatient care	DRG	Prospective
Non-acute inpatient care	Bed day of stay	Prospective
Psychiatric inpatient care	Case	Prospective
Rehabilitation inpatient care	Case	Prospective
Dialysis services	Fee for service	Retrospective
Transplantation programme	Case	Retrospective
Emergency care	Fee for service	Prospective
Dental practices	Fee for service	Prospective
Pharmaceutical care	Fee for service	Prospective
Health care in social institutions	Day of nursing care, fee for service	Prospective
Health care in spa	Fee for service	Prospective

Source: Authors' own compilation.

Note: DRG: Diagnosis-related groups.

In 2003, financial incentives were introduced to strengthen the provision of preventive services and to reduce the number of referrals to specialists. In order to be in line with eligibility criteria for HIIS payments, providers are forced to implement programmes of prospectively determined volumes of preventive services. Further regulations to obtain HIIS payments impact on the behaviour of providers in terms of their referrals to specialist services. These criteria include increased payment for the respective provider in the event that the number of referrals to specialists issued by her or him is below the national average. In the event that the provider's level of referrals to specialists is above the national average, the HIIS is authorized to reduce the payment by 2–4% of the total value of the specific programme.

Outpatient specialist services provided by hospitals are remunerated by fee-for-service payments according to an HIIS classification of services (the "Green Book"). The volume of services provided (as measured by the number of points), reimbursable by the HIIS, is outlined in the contracts. The financial

valuation of services takes into account calculation elements concerning the salaries, proportions and amounts of material expenses, technology depreciation and overall consumption funds.

#### **Inpatient care**

Since the year 2000, payment of inpatient hospital services (acute care) is based on a case-mix system. The introduction of the per-case payment model represented a shift to a system of payment for complete inpatient episodes as a unit of production. Before the year 2000, inpatient hospital services were paid according to the number of prospectively contracted bed days. New data made clear how many patients were treated according to a specific specialty, which then enabled the establishment of the basic grounds for the discussion of hospital capacity requirements. The hospitals were stimulated to reduce patients' lengths of stay, while the price of a case remained unchanged irrespective of the period of hospitalization. Except for the incentive for reducing the length of stay, which undoubtedly reduced the costs, this model retained most of the weaknesses of the previous model. No differentiations according to the severity of cases were applied because there were only 10 different price categories, thus allowing for manipulations in several ways: less severe cases were admitted, there was an administrative increase in the number of cases by interrupted hospitalization and re-admission and transfer of severe patients to tertiary establishments. Payment per case was not beneficial enough as an incentive for more efficient methods of care (for example, same-day care, same-day surgery and home care). As there was not enough backing for same-day care, the hospitals decided to hospitalize patients instead of providing them with outpatient care, since a hospitalized patient was more profitable.

With the intention of abolishing the weaknesses of the per-case model described earlier, a DRG payment model was introduced in 2003. This model determines the whole care procedure for a particular patient. Thus, for different cases, different payment is ensured that is proportional to the costs. Hence, the payment system is more appropriate for specific health problems and patient needs. The complexity of the case is determined by the clinical diagnosis, procedures undertaken and the length of treatment. This model classifies the patients in groups of cases which are comparable, according to the diagnoses or standard types of care. The payment model is administratively and operationally more demanding. The setup of the model depends on access to data on clinical procedures and costs. The method ensures fairness and provides comparability of resource allocation between different service providers. Individual providers are thus stimulated to make best use of the costs by maintaining the average costs within the range of payment for the specific case groups. The model must

be supervised against misuse (excessive recording of higher weights, unjustified diagnoses and procedures) intended to raise the payment per case.

The new payment model for acute inpatient health care was introduced gradually. In 2003 the payment model on the basis of DRGs served to allocate 10% of resources to acute inpatient health care providers. A more detailed classification of DRGs (in 2003 the system contained 661 DRGs) and a unified price list for all the providers were developed. Compared to the previous, much narrower classification of inpatient health care services and unequal prices across individual providers for the same services carried out, the new model enabled more detailed comparison of individual provider performance and more transparent evaluation.

Since 2005 the classification of DRGs contains 653 DRGs, since it excluded DRGs dealing with dialyses services and the transplantation programme, as these are reimbursed by a different model. The cost weights used in the payment model are borrowed from the Australian cost weights for the public sector from the National Hospital Cost Data Collection Round 6 for 2001–2002 (AR-DRG v4.2). The cost weight represents the relative price of each DRG in comparison to the average DRG price at national level (price of average treatment at national level). The model is also used to calculate the DRG budget for each provider, according to provided services and benchmarking between the current budgets of each provider of inpatient acute care services and the DRG budget(s). This resulted in the re-allocation of resources among providers, which is limited by the maximum possible loss with regard to the current budget for the acute inpatient health care. In 2005 and 2006 the maximum possible loss was 1%, while in 2007 and 2008 it amounted to 2%.

The HIIS payments to the providers of inpatient acute care services are based on the volume and value of programmes determined in the contract. The annual volume of services payable by the HIIS is prospectively limited. The volume of a programme for a specific year is determined by the volume of the respective programme of the previous year, additional programmes for improving access to health services (especially those with long waiting times) and additional programmes to improve the efficiency of providers. In 2005 the volume of the programme for acute care was increased by 2% without additional financial resources, in terms of the long-term savings enabled by the DRG payment model (for example, reduction of the length of stay). The volume of the programme within the contract is determined by the total number of cases and the total number of weighted cases (which reflect the complexity of cases). Specific DRGs for conditions with long waiting times are also determined prospectively in the programme.

Furthermore, there are separate payment mechanisms for certain types of inpatient services: for non-acute care, where payment is based on prospectively determined number of bed days; for psychiatric care and the rehabilitation programme, where payment is based on a prospectively determined number of cases; and for tertiary care, where payment is based on an annual report on hospital activities in teaching, education, research and development, as well as complexity of treatments.

#### **Dental practices and pharmacy services**

Within the public health care network, dental services provided by public or private providers and services provided by pharmacies are paid for by fee-for-service payments. The volume of services provided (as measured by the number of points) payable by the HIIS is outlined in the contract. The number of points for a specific service is recorded in a special book of services. The financial valuation of services takes into account calculation elements concerning the salaries, proportions and amounts of material expenses, depreciation and overall consumption funds.

#### Health care in social institutions

Health care services provided by social institutions within the public health care network are paid for according to days of nursing care and by fee-for-service payments. Social institutions are care institutions where residents are cared for on a long-term basis (mostly under the jurisdiction of the Ministry of Labour, Family and Social Affairs, but with health services funded by the HIIS), for example, nursing homes for elderly people, rehabilitation institutions for physically and/or mentally ill individuals, and so on (see also Section 6.8 *Long-term care*). The volume of days of nursing care (for four different categories determined by complexity of care) and services (as measured by the number of points) payable by the HIIS is outlined in the contract. Days of nursing care and number of points for specific services are recorded according to a special classification list determined by HIIS and providers. The financial valuation of days of nursing care and services takes into account calculation elements regarding the salaries, proportions and amounts of material expenses and depreciation.

#### Health care in spas

Health care services provided by spas within the public health care network are paid for according to days of nonmedical care and by fee-for-service payments. The volume of days of nonmedical care and services (as measured by the

number of points) payable by the HIIS is outlined in the contract. The number of points for specific services is recorded with regard to a special classification list determined by the HIIS and the providers. The financial valuation of days of nonmedical care and services takes into account calculation elements concerning the salaries, proportions and amounts of material expenses and depreciation.

Health care services are also paid through co-payments, whether or not they are covered by VHI (co-payments and VHI are more extensively discussed in Section 3.3 *Revenue collection/sources of funds*).

## Paying health care personnel

Health care personnel in primary and secondary care may practise based on an employment contract (as an employee of public provider), by means of a concession (as a private provider within the public health care network) or as a private provider (outside the public health care network).

Health care personnel of health care provider institutions in the public sector have "public servant" status and are salaried by payments from the HIIS and VHI companies for services provided. Those providers who practise by means of a concession are paid based on the type, volume and value of specific health care programmes, as determined in the contract with the HIIS. Standardization of programmes (aside from salaries) also includes standardized material costs, costs of services and depreciation. The payment mechanism depends on the content of the health care programme or service provided.

Private providers who do not operate within concessions and are not contracted by the HIIS are paid by their patients out of pocket or through supplementary VHI. According to the Health Services Act (1992), the Medical Chamber of Slovenia is responsible for setting the prices for services provided by private providers (outside the public health care network), which are then confirmed by the Minister of Health. However, their services are not covered by compulsory (or complementary) insurance and must be paid directly by the patient.

Salary levels are negotiated between the trade unions – which represent the health care personnel – and the Ministry of Health. The results of the new consensus are then also implemented in the general agreement and special agreements for different groups of health care providers via the partnership negotiation process.

# 4 Regulation and planning

## 4.1 Regulation

The Slovene health care system has characteristics of both the integrated and the contract model of health care systems. Services carried out are paid by the HIIS based on the contract between the HIIS and the public health care provider (for example, primary care centres). In addition, most private providers are contracted by the HIIS and are part of the public health care network.

## Regulation and governance of third-party payers

Third-party payers are regulated by the Government and Parliament, monitored by the Ministry of Health, the Health Council and the IPH-RS, and are administered by the HIIS and VHI companies.

Annual partnership negotiations result in specifying the national priorities in terms of health care programmes; volume and cost of health care programmes; capacities for providing health services; payment mechanisms; process of tenders and selection of providers; supervision processes and other rights and responsibilities of the health care partners in terms of services provision; data reporting; and services financing. The general agreement and special agreements for different groups of health care providers are the key products of the first phase of the contracting process, which are subsequently used directly in the individual contracting process between the HIIS and each provider, to determining the final content of the contract.

### Regulation and governance of providers

The provision of services is regulated by the general agreement and the special agreement signed between the HIIS and the provider. The agreements specify the type and volume of services to be provided, the cost and/or prices of the services, methods of payment, quality requirements and conditions for monitoring the contract implementation, and the individual rights and responsibilities of the contracting parties. Except in the case of dialysis services and the transplantation programme, the payments for provided health services are prospectively defined and capped, which means that health services provided above the prospectively determined plans are not reimbursed by the HIIS. If the HIIS and a provider do not reach agreement within the framework of the general agreement and the special agreement, both the purchaser (HIIS) and the provider are entitled to initiate the process of arbitration, after which the final decision is adopted by the HIIS, the provider and the Ministry of Health.

Health care providers can be categorized as providers, on an individual level (that is, medical doctors, nurses, dentists and pharmacists) and providers, on an institutional level (hospitals, rehabilitative centre and primary care centres). Individual providers are regulated by professional chambers and are financed by third-party payers. Institutional providers (such as hospitals) are regulated through legislation adopted according to the policies of the Ministry of Health and financed by third-party payers.

Local governments are responsible for regulating health services at the primary care level within their respective communities. It is the responsibility of the local community to grant concessions for private health care providers at the primary health care level (with the consent of the Ministry of Health). Such a concession is a public contract, which ensures inclusion into the network of publicly financed health care providers, agreed for an indefinite period and with each party having the right to withdraw (with certain limitations and restrictions). The concession is necessary only for those services and for those practitioners that wish to be reimbursed for their services by compulsory health insurance and/or VHI. Those who are not reimbursed from compulsory health insurance funds can only offer services to patients who pay out of pocket for care. Once a concession has been granted and the contract signed, providers approach the HIIS to define the terms of the contract with regard to the provision, extent and reimbursement of services. The contract with the HIIS puts the private provider of health care at the same level as any public provider, in terms of rights. The only difference lies in the fact that a private provider cannot apply for public funds for capital investments.

The Medical Chamber and the Pharmaceutical Chamber are empowered by law to a high level of self-regulation and autonomy. They have control over professional advancements, including professional auditing and licensing of physicians, dentists, pharmacists and nurses. Moreover, these chambers are responsible for supervising, monitoring and ensuring the quality of care as defined by the relevant legislation for each of the fields (such as the Medical Services Act and the Pharmacy Services Act). Other professional associations (such as the medical societies) also play an important role in organizing professional (postgraduate) training, in adopting professional instructions and monitoring their implementation.

Health care providers can be classified as integrated both at the secondary and tertiary care levels. Providers at both the clinical centre level and at the hospital level are directly employed or "owned" by third-party payers and have the status of public employees, although they are engaged in employment relationships with their employer and paid in accordance with the collective agreement.

The majority of providers at the primary care level are contracted by the HIIS and are still employed in health centres, while a smaller group of them work in private practices; however, this system is in transition at the time of writing. Privatization, which has developed in the direction of the termination of the employment relationship by medical doctors and other medical workers from public service and the opening of their own practices, is taking place gradually but to a constantly increasing extent (for more information on this issue see Section 2.4 *Decentralization of the health care system*).

At the end of 2006 only 190 doctors and dentists were practising outside the public system (that is, without a concession). While there is no information available as to the share of total expenditure contributed via direct payments made by patients, according to anecdotal evidence patients are increasingly making OOP payments for visits to physicians without concessions in private practices and for the purchase of services which are not included in their benefits package.

Of the 1279 physicians licensed for private practice since 1992, 1089 are contracted by one of the 10 regional social insurance funds (Medical Chamber 2006). These licensed professionals use public premises for their practices and their services are to a large extent reimbursable by insurance funds. Apart from private practices, private practitioners practising independently can also be found in homes for the elderly, other social institutions and pharmacies.

Health care provider institutions are governed by internal regulations of institutions according to the public health care network and by contracts between third-party payers and health care providers. Health care provider institutions include outpatient clinics and health centres at the primary level and specialist outpatient departments and hospitals at the secondary and tertiary levels. Hospitals and health centres are managed by the directors of the respective institutions, under supervision by the Ministry of Health for secondary and

tertiary care and by the local communities for primary care. The State is the owner and administrator of public health facilities at the secondary and tertiary levels. For more information on hospitals and health sector infrastructure, see Chapter 5 *Physical and human resources*.

## Regulating quality of care

Since publication of the document *The quality of the health care system in the Republic of Slovenia* (Kersnik 2001) and a chapter on quality in health care in the Health Care Reform White Paper (Ministry of Health 2003), much attention has been given to a systematically developed national system of quality and safety in health care. This was the main task of a newly established Department for Quality in Health Care at the Ministry of Health in 2004. The first tangible output of the department was the publication of generic accreditation standards for hospitals and an accompanying programme of accreditation, as well as a document for the implementation of self-assessment. However, due to (amongst other things) strong opposition by providers, the programme on accreditation has not yet been implemented at the time of writing (early 2009).

In 2002 a first set of data on clinical indicators became available. This was a joint project of the Medical Chamber of Slovenia, the HIIS and the Ministry of Health. The programme was voluntary and encompassed 48 clinical specialties as well as one single indicator on arterial hypertension at the primary care level.

The Slovene Manual on the Development of Clinical Practice Guidelines has been distributed to clinical guidelines groups and two national guidelines were developed in 2003. Guidelines are developed mainly by the Slovene Medical Association. In the same year, clinical pathways were established and implemented in four public hospitals. In 2004 approximately 15% of case types were managed with the use of clinical pathways (Hindle & Yazbeck 2005). There has been a constant increase in clinical pathway development and implementation. A survey conducted in 2006 showed that from 2004 to the end of 2006 half of the country's hospitals were using clinical pathways (Yazbeck & Robida 2006a). The development and implementation of clinical pathways will be further promoted with additional help of the policy document *Methodological recommendations for clinical pathways development* (Yazbeck & Robida 2006b).

The National Policy for the Development of Quality in Health Care was published by the Ministry of Health in 2006. Its purpose is to encourage health care providers, managers of health care organizations, health care insurance companies, educational health care organizations, health care professionals, patients and other stakeholders to improve the quality of care and patient safety.

A National Institute for Quality in Health Care was also proposed, with the main tasks of coordinating domains of continuous quality improvement, such as clinical guidelines and pathways, standards and indicators development, training and research and accreditation of health care providers.

Obligatory requirements regarding structure, processes, business, efficacy, continuing professional development indicators and clinical indicators were approved in the Hospital Agreement for the year 2007 (HIIS 2007b). Boards and quality commissions were established in all public hospitals. Hospitals are required to submit reports on the following clinical indicators: patient falls, pressure ulcers, re-admissions, incidence of Methicillin-resistant *Staphylococcus aureus* (MRSA), patient experience and staff satisfaction.

A national survey on patient experience was conducted in 2006 with more than 7000 participants across the country's hospitals. The following domains of patient experience were measured: timeliness of hospital admission, communication of health professionals with patients, information of patients on their health status and proposed treatment, patient participation in treatment decisions, pain management, and hospital environment. It showed that the average score on a scale from 0 to 100 was 86 points (0 denoting bad experiences, 100 points indicating excellent experiences). The main areas for improvement are the quality of doctor–patient communication (including appropriate information on patient rights), observation of patients' privacy, reduction of waiting times, improvement of hospital nutrition and observation of patients' night rest (Ministry of Health 2007a).

Since 2007, hospitals are required to further introduce quality and safety improvement processes: amongst other things, these include patient safety leadership walk rounds, patient safety talks, morbidity and mortality meetings, internal audits and management of clinical documentation. Moreover, some hospitals and primary health care centres were certified for ISO 9001:2000 (for example, the Centre for Blood Transfusion in 2004 and the Department for Immunohematology and Blood Transfusion Medicine of the University clinical centre in Maribor in 2006).

In 2002, the Ministry of Health introduced a sentinel events reporting system. However, due to its voluntary nature most of the providers ignore this reporting system. Patient safety has not yet become a priority in many health care organizations. An integrated reporting and learning system for patient safety incidents has not been systematically developed yet. Likewise, clinical risk management is not part of a quality management system.

The medical negligence legislation (Medical Services Act, 1999) is in place and there is an obligatory insurance scheme for providers of health care. Court decisions for patient safety incidents are increasing in number, but are still relatively rare and in most instances unsuccessful for patients as they can get financial compensation only if medical failure is proven by court decision.

Currently, there are no financial incentives for the implementation of quality and patient safety measures. However, during the last five years, some professional groups have taken up the idea of quality and safety in health care and implemented it into their daily practice; however, quality and safety is still not the top priority of many health care organizations and professionals.

Legislation on quality and safety and the establishment of a national coordinating institute for quality and safety is necessary to guarantee implementation, sustainability and further development of quality and safety in the Slovene health care system.

## 4.2 Planning and health information management

As already mentioned in Section 2.3 *Organizational overview*, the Ministry of Health is responsible for strategic planning, along with health policy development and implementation through the development of a planning framework. Furthermore, the Ministry is responsible for the planning of secondary and tertiary health care facilities and capital investments of hospitals. Capital investment planning of primary health care facilities was delegated to the local communities. However, the pace and extent to which local communities have taken up this task differs.

The Slovene health care system is characterized by being predominantly treatment oriented. Socio-political and socioeconomic changes, along with the expectations of people dictate changes in public health care activities in terms of quality improvement initiatives and health protection. Comprehensive and demanding new activities are difficult to carry out, due to deficient public health care professional capacities, which are most expressed in the fields of management, strategic planning, health care supervision (surveillance) and preventive health care. In order to set up suitable professional conditions in this field, it will be necessary to establish, according to the model of other European countries, an accessible study/research environment (Public Health School), which will enable postgraduate studies and the continuous training of qualified experts in the field of public health. In establishing the study environment it will be necessary to rely primarily on the already developed national infrastructure, while establishing broad-based international cooperation.

The planning framework of the Ministry of Health for the period from 2000 to 2004 was set out in the National Health Care Programme of the Republic of Slovenia, *Health for All* by 2004 (Ministry of Health 2000). The plan was

adopted by the Slovene Parliament in May 2000 and it integrated the WHO Health for All policy. However, the country remained without a valid health plan from end of 2004 to mid-2008. Since 2007 the *National Health Care Plan of Slovenia for the period from 2008–2013* (Ministry of Health 2007c) has been under preparation as the new planning strategy for the health sector. It was approved by Parliament in July 2008 (for more information see Section 7.1 *Analysis of recent health care reforms*).

The health care legislation of 1992 limited the capacity of the primary health care network to the 1992 level. This was further reaffirmed in the year 2000, when the National Programme of Health Care by the year 2004 was adopted. With this step, the expansion of the system was limited, and this is visible in the fact that the number of physicians has not grown by more than 0.5% a year since then. This policy constrained the possibilities and opportunities for private provision of health care in Slovenia. The concession system and the resulting contract(s) are means of controlling provision. Contracts can be granted only in cases in which it can be established with a great degree of certainty that the new provider will not represent an enlargement of the network in the field and the region.

One of the equity principles that are promoted by the National Programme deals with possible deviation from the national averages. In the case of human resources, those deviations are not supposed to exceed the 10% boundary on each side. Such an approach means that there is little flexibility and movement of manpower. Hence, potential private providers often simply remain in the area for which they had provided previously and take their patients along with them. Room for improvement in the geographical accessibility of services at the primary care level could be made by allowing new providers to establish their services in those areas where there is shortage of services and/or manpower.

## Health technology assessment

Health technology assessment (HTA) is performed at a very basic level. However, the development of medical and pharmaceutical technology, as well as rising public demand for new medical diagnostics, rehabilitation and therapy require financial means, which are limited. Hence, a critical continuous assessment of the introduction of new methods of medical treatment is urgently required.

A significant attempt to improve the situation was made through a programme for the standardization of equipment, as well as by the introduction of technical guidelines. The Ministry of Health is trying to implement standards of medical premises and equipment as well as measures for the assessment of new methods of treatment (for example, medical effectiveness, economic efficiency of the programme, social aspects, and so on).

The Government intends to implement the European Standards for Health Technology and is moving towards standardization and coordination of health technology. Moreover, a protocol for proposals of new diagnostics, treatments, procedures and therapies has been adopted by the Government. This protocol is used to standardize proposals submitted to the Health Council, which grants consent to programmes to be financed by public funding sources. At the beginning of 2008 the protocol had moved beyond the initial phase and has been implemented fully for all procedures.

### Information systems

Health information systems in Slovenia have seen intense development since the early 1990s. Its basic development was related to national projects and programmes, developed within the framework of national priorities and sponsored by the Ministry of Health. The last phase of the project "Elements of Uniformity of the Health Information System" ended in 1994. Based on the outcomes of this project, a series of development projects were implemented, mainly dealing with the consolidation of the reporting systems. The IPH-RS developed a common reporting system for hospital statistics as well as a joint reporting system encompassing all levels of outpatient care. In the same period the National Health Care Providers Database was also restructured in order to be compatible with the aforementioned reporting systems. Its codes and classifications are cross-referenced across all reporting systems.

In 1999–2000, the Health Sector Management Project was launched, financed through a development loan from the World Bank. One of its goals was to produce a common dataset and data dictionary as a basis for the development of a National Health Information Clearinghouse. This was supposed to become the main broker of health care information, serving all the key stakeholders and integrating certain tasks, which are currently the responsibility of the HIIS and of the IPH-RS. This goal was not reached; instead, a different approach was taken. Although the aim of developing joint codes and classifications remains, the framework of the common infrastructure is yet to be defined.

An important step in the development of a national health information system was the launch of the health insurance card in 1999. For more specific information on this, as well as on information technology (IT) in health care and the e-Health 2010 Strategy, see Subsection *Information technology*, within Section 5.1 *Physical resources*.

# 5 Physical and human resources

## 5.1 Physical resources

#### Infrastructure

Imost all hospitals in Slovenia are state owned and the State is also responsible for their administration, by appointing directors. Apart from the state-owned hospitals, there are three smaller private hospitals which provide health services in exchange for direct payments, but an increasing proportion of their services is contracted by the HIIS. In 2003–2006, there were initiatives in place to introduce foreign investments in private facilities for hospital care, either as shares in otherwise public hospitals or as private non-profit-making hospitals based on private or public-private partnership. However, none of these initiatives resulted in a new hospital.

In 2006 there were 29 hospitals in Slovenia (see Table 5.1): 18 general and clinical hospitals, 2 maternity hospitals, 4 hospitals for mental diseases, 2 hospitals for pulmonary diseases, 2 orthopaedic hospitals and 1 rehabilitation centre. Moreover, there are several private sanatoria – clinics for cardiovascular surgery – as well as a surgical sanatorium, a clinic for plastic surgery, a clinic for abdominal surgery and a diagnostic centre.

The Health Care and Health Insurance Act (1992, with subsequent amendments) defines terms and conditions for licensing and accreditation of providers of health care. According to the Act, the Ministry of Health is responsible for licensing and accreditation of public and private hospitals, providers of outpatient secondary care and public primary health care centres. All providers need to prove their professional competency, which means only those health care workers who are licensed by professional chambers are employed.

Table 5.1 Hospitals and maternity hospital indicators, 2006

Type of public hospital	Number	Beds	Admitted patients	Hospitalization days (1000)	Physicians	Nurses
General and clinical hospitals	18	8 022	330 103	2 149	2 925*	1 698
Maternity hospitals	2	126	8 077	25	23	22
Hospitals for pulmonary diseases	Ø	202	5 278	65	25	17
Hospitals for mental diseases	***	757	5 144	211	61	38
Rehabilitation hospitals	-	200	2 032	61	31	15
Orthopaedic hospitals	2	260	6 200	61	38	29
Total	29	9 567	357 143	2 572	3 103	1 819

Source: Statistical Office of the Republic of Slovenia 2008.

Notes: \* Includes physicians, dentists and trainees;

\*\* According to information from the Ministry of Health (Ministry of Health 2008) there are six psychiatric

hospitals.

Structural standards for the health care facilities are established by a special commission, which belongs to the Ministry of Health. Together with the Health Inspectorate, they conduct inspections of newly established facilities. However, there are no existing systems of routine monitoring of health facilities in Slovenia. Fire safety, heating and similar requirements are monitored by the respective provider institutions.

During the first transition period in the 1990s there were no changes in the number of public hospitals. No hospitals were closed or transformed. However, two private sanatoria were reorganized: one dedicated primarily to outpatient and diagnostic services of the gastrointestinal and urogenital tracts; the other a surgical sanatorium, performing several general surgical procedures. They both started as provider institutions open exclusively for OOP payment, but their services were gradually contracted by the HIIS. The increase in the number of hospitals since the late 1990s is simply due to the establishment of new private facilities.

The number of hospital beds has been decreasing since the 1980s in all hospitals. This was a consequence of a process intended to intensify treatment of acute patients and of patients in planned care, as well as of a planned shift to more outpatient-oriented care. As a result of this policy, the overall number of hospital beds decreased gradually by approximately 33% - from 695 per 100 000 population in 1980 to 466 per 100 000 in 2007 (IPH-RS 2006b; WHO Regional Office for Europe 2009b). This process was also assisted by significant changes in the hospital reimbursement systems, including the shift from bed-day payments to case-based payments, as well as the introduction of DRGs. This change resulted in a shortening in the average length of stay (from 10.4 days in 1995 to 6.8 days in 2007) (IPH-RS 2006b; WHO Regional Office for Europe 2009b) and, consequently, a larger turnover of patients, which has led to less demand for hospital beds. The number of hospital beds in Slovenia is considered adequate and their geographical distribution is regarded as even across all territories and regions of the country. As Fig. 5.1 and Fig. 5.2 illustrate, the number of acute care hospital beds has been reduced substantially since 1990, to reached 377 per 100 000 inhabitants in 2007, which was below the EU average of 395 per 100 000 in the same year (WHO Regional Office for Europe 2009b).

When compared to selected countries, it should be noted that even before the process of reducing bed capacity in Slovenia, the number of acute care hospital beds in the country was substantially lower than number of acute care hospital beds per 100 000 population in Austria, Croatia, the Czech Republic and Hungary as well as the average for the countries that joined the EU in 2004 and 2007 (Fig. 5.2). Compared to the EU15 average, Slovenia's acute care hospital bed capacity per 100 000 inhabitants was slightly above the EU15 average (WHO Regional Office for Europe 2009b).

Western Europe Monaco (1995) 1553.6 638.7 Austria (2006) Germany (2006) 619.6 Luxembourg (2004) 508.9 Belgium (2007) 470.2 Greece (2005) 386.2 Iceland (1996) 368.2 France (2005) 367.6 Switzerland (2005) 364.8 Cyprus (2005) 351.1 Italy (2005) 344.1 Denmark (2004) 310.7 Netherlands (2006) 304.1 Portugal (2005) 300.0 Norway (2006) 298.7 Ireland (2005) 292.8 Malta (2006) 287.3 Sweden (2005) 282.3 Spain (2005) 270.8 Turkey (2006) 254.1 Finland (2006) 241.7 United Kingdom (1998) 241.6 Israel (2006) 206.7 Andorra (2006) 195.3 Central and south-eastern Europe Bulgaria (1996) 755.4 Slovakia (2005) 618.7 Czech Republic (2006) 613.3 Hungary (2006) 552.8 Latvia (2006) 527.4 Lithuania (2006) 510.1 Romania (2006) 505.2 Poland (2002) 465.8 Estonia (2006) 393.5 Slovenia (2006) 383.4 Croatia (2006) 360.3 Bosnia and Herzegovina (1998) 327.5 TFYR Macedonia (2006) 326.4 Albania (2006) 259.7 Russian Federation (2006) 931.3 Azerbaijan (2006) 738.2 Ukraine (2006) 711.9 Tajikistan (2006) 546.9 Republic of Moldova (2006) 506.3 490.5 Kazakhstan (2006) Uzbekistan (2005) 430.7

Fig. 5.1 Beds in acute hospitals per 100 000 population, WHO European Region, latest available year

Source: WHO Regional Office for Europe 2009b.

EU Member States since 2004 or 2007 (2006)

EU Member States before May 2004 (2005)

Kyrgyzstan (2006)

Turkmenistan (2006)

EU average (2006)

Georgia (2006)

Averages

0

*Notes:* CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia; EU: European Union.

390.3

507.0

400

600

800

**Beds** 

1000

1200

1400

1600

410.1

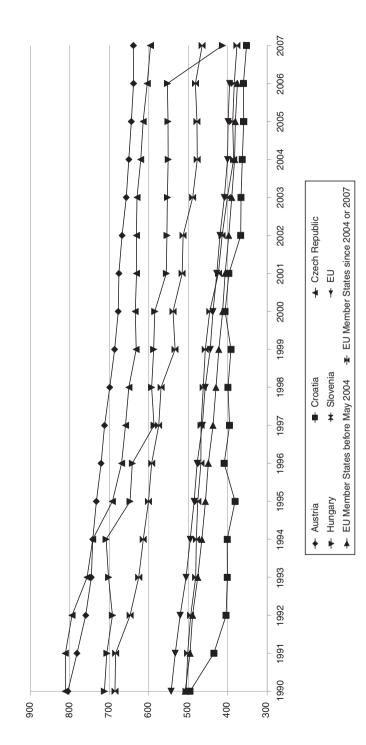
391.2

200

343.6

328.1

Fig. 5.2 Beds in acute hospitals per 100 000 population in Slovenia and selected other countries, 1990-2007 (or latest available year)



Source: WHO Regional Office for Europe 2009. Note: EU: European Union.

Table 5.2 Public health care institutions, 2006

Public health Institutions	Number of institutions	Number employed
Health centres	64	7 861
Hospitals	26	10 974
Clinical centres, Institute of Oncology, Institute for Rehabilitation	3	7 868
Other public health institutions	12	990
Total	105	27 693

Source: IPH-RS 2006b.

### Capital stock and investments

#### **Current capital stock**

Alongside the 29 hospitals (26 public, 3 private), there are also 64 primary health centres and 12 other public health care institutions in Slovenia. The total number of employees in public health care institutions was 27 693 in 2006 (approximately 1% less than in 2001), with over 40% of the employees being employed in hospitals (see Table 5.2).

The largest hospital in the country is the Clinical Centre Ljubljana which has approximately 2700 beds (in 2006), while the second largest hospital is the University Clinical Centre in Maribor (the teaching base of the new Medical Faculty in Maribor), with 1700 beds. Most of the hospitals have between 300 and 500 beds, while the three smallest local hospitals have 120 beds each. The number of hospitals differs per region, with a higher number of hospitals in the north-eastern and eastern parts of the country. An ongoing process of investing in the development of facilities is under way, particularly with regard to buildings. Most of the existing general hospital buildings date back to the 1970s. Investments of this type are provided for by the national budget, since all public hospitals are owned by the State. Other national health institutes, such as the National Institute for Transfusion Medicine, are also owned by the State. With regard to capital investments, the situation is the same as that of the hospitals. However, these have been designated as a priority for capital investment for the Ministry of Health, as suggested by an expert group of the Ministry of Health and the Health Council on investments.

#### **Investment funding**

Capital investment in public health care institutions is carried out exclusively through a special allocation in the budget and managed by the Ministry of Health. Priorities for allocations are set by the Commission on Investments of the Ministry of Health and are approved by the Health Council. The volume of the government budget on capital investments is also based on suggestions from the directors and managers of the public provider institutions. The Ministry of Health invests in hospitals and other secondary care infrastructure at the national and regional levels, while local governments at municipal level are responsible for capital investments in public primary health facilities and pharmacies. In both cases, capital investments are (co-)financed by the respective budget (national or municipal).

Municipalities raise their own revenue for capital investments. However, financially disadvantaged municipalities, which are unable to meet all expenditure requirements in the performance of their duties and functions receive additional financial assistance for capital infrastructure from the national budget. Approximately 30% of municipalities are financially sustainable with regard to capital investments in primary health facilities, while the capital investments of the other 70% of public municipal providers are (co-)financed from the national budget.

The national budget for 2006 contained €2.26 billion allocated to cofinancing primary health facilities (which are predominantly financed by municipalities) and €47 million for investments in the hospital infrastructure (as per the state budget for 2006). There are several ongoing investments, one of which is the new paediatric and neurology clinic in Ljubljana. However, neither the Ministry of Health nor the HIIS are liable to compensate for the deficits of hospitals; these are generally the responsibility of the respective provider.

Capital investments of private practices are self-funded. Irrespective of whether they are in a contractual relationship with the HIIS (and thus effectively part of the public network of health care providers), private providers cannot participate in tenders for public funds for capital investments. At the time of writing, the Government is considering two different additional options – one, to give additional benefits to donors of substantial donations for health care facilities and equipment; the other, to develop public–private partnerships, which would facilitate investments at different levels and secure adequate long-term interests of their investors. But the final decision on this is yet to be made, either within the framework of a national approach to promote public–private partnerships in the public sector or, alternatively, to find particular legal solutions for it in the health care setting.

Irrespective of the large share of capital that the State invests in its facilities, providers themselves are responsible for the depreciation costs of health facility buildings, as well as for equipment, which is usually approximately 5% of capital costs paid annually. Depreciation costs are also reimbursed for donated equipment or are purchased through loans. The actual utilization period for equipment in health facilities could be longer than its normal lifespan. However, in this case it is not possible to add more to the depreciation fund.

#### **Capital investment controls**

The disbursement of Governmental capital investments are strictly controlled by the Ministry of Health as the allocation of government financing is approved during the complex process described earlier. The entire process of preparing a proposal is carried out by the Department of Investments of the Ministry of Health. After their approval, a public tender is held for the execution of the work. The tender is reviewed by the National Court of Accounts, which carries out routine controls in all public institutions every three years. Finally, the funds provided for by the budget are scrutinized in detail by the Ministry of Finance, along with their services, subject to the supervision of the internal commission on budgetary supervision. In summary, capital investments for public health care providers depend on the authority of the administrator, which is the State in the case of national health care institutions (for example, all public hospitals). Decisions on capital investments of private health providers are not the responsibility of the Ministry of Health, with the exception of the prior approval of the premises, in view of their conforming to spatial and construction standards. This approval is provided by a commission appointed by the Ministry of Health. Equity in investments is ensured through a complex process of their approval, which also takes into account the geographical distribution of the funds, as well as ensuring equitable access for all citizens.

There are national standards for physical infrastructure (that is, premises) and these are rather elaborate. However, there are fewer standards regarding equipment and types of appliances to be used by various clinical and hospital departments. These are predominantly based on empirical and practical experience, and partly also on foreign approved standards.

Private providers argue that they do not have sufficient access to public funds for capital investments. They would like to see a commitment on behalf of the State to sponsor all providers equally. A positive aspect of the centralized capital and facilities tendering process lies in the rather important role that professionals play in the decision-making process.

### Information technology

Looking at the general population and the results of the last regular national survey on Internet usage of people between 12 and 65 years in 2006, people identify IT as a developmental factor, which should become an important strategic priority. Approximately 13% of Internet users visit the pages of the eAdministration at least once per month (approximately 100 000 individuals). The most visited web pages related to the state administration are the pages of the municipalities, followed by the pages of the ministries and those of the EU. One fifth of the population has already sent an e-mail to a state administration official. There is a constant increase in the use of these services. Only 36% of Internet users hold a qualified digital certificate; most of them link to online banking services. Approximately half expected better services by the administration, especially online (48%) (Vehovar & Zupanič 2006).

Usage of IT has reached similar levels in health care as in the general population. There is still some reserve against it being used in all practices, on a regular basis, and for all activities. Furthermore, procurement of IT systems lies primarily with health care providers themselves and with their strategic developmental policies. However, the situation is quickly changing. Since 1993, computers have been used in all practices in primary care but in approximately half of these cases their use is limited to administrative purposes. In such cases, they are used primarily by nurses and are located in offices and not in the GPs' treatment room or offices. Since 2003 the Ministry of Health has been trying to create an environment to stimulate health care providers' adoption of IT and thus improve quality of health care, improve resource usage and enable long-term financial sustainability of the health care system. As a matter of national regulations, primary data and information are always stored locally at the point of entry. Based on the Health Care Data Collections Act of 2000, data are reported to the IPH-RS.

Despite the above-mentioned technical advances, the development and introduction of IT in health care remains a difficult task and for a long time the penetration of IT in this sector has been low. Especially in hospitals, the level of IT development was found to be insufficient, through various analytical consultancies (World Bank Mission of 1997, the Health Sector Management Project 1999–2004, Expert Panel for IT at the Clinical Centre in Ljubljana in 2004) as the investments dedicated to IT were often below 0.5% (final accounting reports by the Association of Public Providers of Health Care). There was a lack of a clear national strategy on IT development in health care and, consequently, the process has significantly increased differences among individual providers. In addition, there was little coordination of the activities related to software development, except in those applications related to health insurance.

#### Health insurance card

The health insurance card was introduced in 1999. Alongside it and facilitating its introduction, a health insurance number was introduced, partly as a result of controversies over the use of the uniform citizen's number in health care. Health insurance numbers are assigned to every citizen at birth and are given to foreign nationals with temporary residence and/or employment in Slovenia. However, the health insurance number is not a precondition for access to health care in emergency cases. The health insurance card was an important technological step, as with its introduction almost all providers working under contract with the HIIS (and even some who do not) were joined in a network provided, sustained, managed and coordinated by the HIIS.

#### Future developments and the eHealth 2010 Strategy

In 2005 the Ministry prepared the eHealth 2010 Strategy, which describes the state of IT in health care at that time, defines strategic goals and proposes the activities required to reach these goals by 2010. The vision is to increase the active role and responsibility of citizens in preserving their health; to provide health professionals with safe and reliable access to key information in electronic medical records and other databases required in their daily work; to facilitate the planning and management of health care organizations and systems on the basis of high-quality and trustworthy data; and to improve accessibility of health care services to underserved groups of patients.

In 2006 several initial tasks were performed, for example: national-level bodies for planning, coordination, management and control (enforcement) of the development and application of health care informatics have been established, along with the Council for Health Care Informatics (CHCI), the Committee for Health Care Informatics Standards and the Committee for Tele-radiology.

The CHCI has been evaluating project proposals from various stakeholders and has devised a methodology to choose key projects and allocate funds to support them. Standard technological requirements have been defined by one of the CHCI workgroups and proposed to health care providers. Funds for buying hardware, software and ensuring Internet access have been allocated specifically to providers for the purpose of catching up with the requirements. Several projects have been initiated and early results are already available in the field of public health (that is, IT-supported flu sentinel surveillance) and tele-radiology (exchange of digital radiology pictures between hospitals), as well as the national network for tele-consultancy in blood transfusion medicine. Furthermore, a National Health Information and Statistical Centre and Health Portal were planed. The Ministry of Health is also planning to continue investments in hardware by providing computers for surgery and by

providing software applications for hospitals up to the mid-2010s at an annual level of  $\leq 4-8$  million.

The major goals to be achieved by introducing IT within health care systems are as follows:

- 1. the establishment of the information infrastructure:
- 2. the linkage of health and social information systems in an integrated system at national level, with the establishment of a comprehensive information portal;
- 3. the introduction of eBusiness as common practice within Slovene health care.

The planned activities are in process, that is, the necessary legislative changes, setting up the Centre for Health Care Informatics, and defining safety and technological standards. Furthermore, due to efforts of the Ministry of Health, the eHealth strategy has been incorporated into the Slovene National Development Framework 2008–2013.

In 2007 the following IT development projects were also under way, with the support of the Ministry of Health:

- 1. eBirth and eDeath regulating electronic registration of births and deaths within a shorter time frame and providing exclusively electronic data, thus replacing the present paper documents;
- 2. eDRG further development of a unified system of reporting DRGs from hospitals into a central database managed by the IPH-RS;
- 3. introduction of a Picture Archiving and Communication System (PACS);
- 4. introduction of additional applications to the health insurance card (for example, organ donor data and medication) later, HIIS also plans to introduce a paperless prescription system ("ePrescription");
- 5. development of a national waiting list in order to structure the procedure of managing these lists, which are now maintained by each provider.

# Medical equipment, devices and aids

Investments in medical equipment are the responsibility of the owner of the particular health care provider. Since most of the providers are state or municipality owned, it is either the Ministry of Health or the municipality that decides on funding according to the investment plans of providers. In the event of investments in new technology, the Health Council at the Ministry of Health approves eligibility of costs, based on national priorities, scientific justification and economic sustainability of the proposed programme. In 2003 the Ministry of Health and the HIIS introduced a centralized procedure for purchasing medical equipment, devices and aids. This measure aimed at increasing transparency in terms of spending public money, as well as at reducing prices. Consequently, the

Table 5.3 High-tech equipment available in public hospitals, 2004

CT scanner units	18
Gamma cameras	12
DSA units	8
PET scanner units	1
RAD units	9

Source: Slovene Radiation Protection Administration 2006.

Notes: CT: Computerized tomography; DSA: Digital subtraction angiography;

PET: Positron emission tomography; RAD: Radiation therapy.

Ministry of Health assured equitable geographical distribution of equipment. There is no estimation of national needs regarding medical equipment, nor has there been any activity in terms of preparing a national plan on investments in health care.

All public tenders for major pieces of medical technology are prepared and conducted by the Ministry of Health itself. There are funds within the Ministry of Health budget which are kept for these investments. For example, in 2005 and 2006 the Ministry of Health purchased PET, MRI and CT scanning equipment using this procedure. Minor investments are funded by providers themselves. Primary health care offers basic diagnostic and imaging tools, such as X-ray and ultrasound devices. More specialized procedures are available at secondary care level. A registry of radiation sources in medicine and veterinary services is being developed at the Slovene Radiation Protection Administration, which sets standards for and supervises radiation safety in medical provider institutions. However, this institution is not competent to supervise nonionizing techniques, such as MRI scanning. The registry is the only relevant source of data on available radiation devices in the country (see Table 5.3).

#### **Pharmaceuticals**

### Regulations

The Medicinal Products Act, the Rules on Medical Devices Act and the Pharmacies Act lay the foundations for regulation of the pharmaceutical sector in Slovenia. The Ministry of Health is in charge of determining the process of prescribing and dispensing pharmaceuticals.

The new Public Agency for Medical Products and Medical Devices – established as a public body in January 2007 – performs regulatory, professional

and inspection activities and is in charge of carrying out evaluations of medicinal products by commissioning clinical trials. Approximately 100 clinical trials are performed annually in Slovenia. The majority of these are multi-centre, international clinical trials. The clinical testing of a pharmaceutical requires approval of the Ministry of Health, which is granted on the basis of an examination of the documents relating to the test.

The procedures for granting market authorizations are set out in the Medicinal Products and Medical Devices Act (1999). Once a market authorization is issued, products are published in the *Official Gazette of the Republic of Slovenia*. A pharmaceutical product may be marketed either on the basis of a marketing authorization approval issued by the European Medicines Agency (EMEA) (centralized approval procedure), on the basis of a decentralized procedure for products which have already been granted marketing approvals in other EU countries, or by means of the national approval procedure. Legal entities may manufacture pharmaceutical products only after they have been granted a manufacturing authorization, which usually runs for five years. Authorizations for the import of serums, vaccines, blood products and radio-pharmaceuticals are subject to particular procedures.

The Medicinal Products Act was adopted in March 2006 and was implemented in full in 2007. The main changes are linked to transposition of the Pharma Review that had to be implemented in the EU by 31 October 2005. The Law brings about legislative modifications necessary both to clarify certain existing national requirements and to provide a legal basis for planned initiatives. General objectives are to improve health protection and to improve the competitiveness of the pharmaceutical industry. The Law contains all the provisions of the new EU pharmaceutical legislation, such as the consolidation of pharmaceutical authorization procedures and strengthening of pharmacovigilance.

## **Pricing and reimbursement**

The national market turnover for pharmaceuticals is approximately €400 million (approximately €200 per capita), of which the value of the innovative pharmaceuticals has an approximate 35% share and that of the generics a 65% share (HIIS 2006a).

The pricing of pharmaceuticals is based on the ex-factory level, with the use of three reference EU Member States (Germany, France and Austria). Provisions for parallel trade and parallel distribution of pharmaceuticals have recently been introduced in the national legislation as by-laws. A national list of substitutable pharmaceuticals was adopted in 2006, as well as an updated list of criteria for the pharmaceutical reimbursement group (positive, intermediate and negative list). The original list had been adopted for the first time in 1990.

Slovenia has a national system of reference prices for mutually interchangeable products. Reference pricing represents a principal tool for moderating the growth of public and private expenditure on pharmaceuticals. It is seen as a mechanism that establishes immediate and long-term systemic conditions for price competition as well as for reducing and rationalizing the use of pharmaceuticals.

The reference pricing system was designed and implemented in November 2003. It is based on the generic substitution of pharmaceutical products officially recognized as mutually interchangeable by the Public Agency for Medicinal Products and Medical Devices, based on their essential similarity. The mutually interchangeable medical products (MIMPs) comprise a list of essentially similar pharmaceutical products, which – within the frame of the same active ingredient(s), same strength, same or comparable pharmaceutical form and same or comparable packaging – can be mutually interchanged according to the rules. The definition of essential similarity and the technical requirements for the recognition of bioequivalence of the products follows that of the 2002 "Note for guidance on the investigation of bioavailability and bioequivalence" of the EMEA. The Public Agency for Medicinal Products and Medical Devices of the Republic of Slovenia publishes an official list of MIMPs in the Official Gazette every six months. This list includes virtually all pharmaceutical products that pass the requirements of essential similarity and are therapeutically acceptable for substitution, encompassing approximately 500 products (at the time of writing) with 60 chemical entities, representing one sixth of the number of the products on the market and a quarter of the prescription market value.

The HIIS takes the Public Agency for Medicinal Products and Medical Device's list and publishes a derivative list of MIMPs, along with their maximum attributed values (MAVs) for each cluster of MIMPs. MAVs have been assigned by the HIIS based on the wholesale prices of pharmaceutical products, which is updated every six months. The model in place at the time of writing attributes the MAV equal to the wholesale price (+VAT) of the lowest-priced product in a given set of MIMPs. While the pricing by-law only sets a ceiling price for pharmaceutical products, the applicants can offer price reductions for any upcoming 6-month period, during which prices of the MIMPs remain fixed.

Prior to the adoption in 2006 of a new and revised Medicinal Products Act, several by-laws were passed in the period 2003–2005, forming the legal basis for the system. The concept of "interchangeability" was also introduced in the Medicinal Products Act. According to these changes, the "positive" (reimbursable up to 75% of the price) and the "intermediate" (reimbursable up to 25% of the price) lists of pharmaceuticals are – along with the regulations of the HIIS on dispensing the cheapest product – the legal basis of the

grouping system for pharmaceuticals on the basis of their international non-proprietary names (INNs), along with INN-prescribing by physicians and generic substitution by pharmacists.

As a result, physicians may choose to prescribe pharmaceutical products either by their trade names or, more recently, by their INNs. Pharmacists are permitted to dispense a cheaper product from the list in place of a more expensive one (if prescribed by a trade name), and the patient – to whom a product with a price higher than the pertaining MAV has been prescribed (with a proprietary name) – is able to choose either to co-pay the difference between the price and the MAV, or to receive a generic product without co-payment.

For all chemical entities there is at least one medical product available, without additional co-payment, for the price difference above the reference price. The pharmacist is required by the regulations to offer the patient a choice among the pharmaceuticals that are available to be substituted for prescribed preparations. As the pharmacy retail added value of pharmaceutical products is based on the fee-for-service system, it does not directly influence co-payment values. Physicians and pharmacists are required to inform the patient appropriately about generic prescribing and substitution. Pharmacists are required to keep a record of the cases with substitute preparations, as appropriate, in order to ensure tracking is possible with respect to the prescribers, the payers and the regulators.

The two mechanisms preventing such pharmacy-level substitution are a patient's willingness to co-pay the difference, or a prescriber's explicit and signed note "Not to be substituted" on the prescription. In the latter case, the prescriber must be able to present a documented justification for such an intervention.

After the first three years of its operation, this system was evaluated to be effective and efficient. It brought into effect incentives for cost-containment, increased responsibility and choice in the pharmaceutical sector. In 2007 the system was in its 6th phase, in stable operation and yielding expected results in annual savings of approximately 3–5% of the total market value (HIIS 2006a).

According to the Rules on Nomination of Prices of Medicinal Products for Human Use (2008), new medicines entering the market are automatically placed into the intermediate list (reimbursed up to 25% of their registered price), until a pharmacoeconomic analysis has been carried out. There is also a negative pharmaceutical list, with products completely excluded from any kind of public reimbursement scheme. These products have to be paid in full and out of pocket by patients. The reference pricing system is an addition to the existing reimbursement system of pharmaceuticals (for more information, see Section 6.6 *Pharmaceutical care* and Section 7.1 *Analysis of recent health care reforms*).

## 5.2 Human resources

# Trends in health care personnel

The level of human resources in health care is well monitored and deemed appropriate. Current policy goals are directed towards maintaining this trend. However, there are signs, based on prospective analysis of data (both the demography of the medical profession itself and that of the general population) that there will be shortages of physicians in certain regions. In 2006, unemployment of physicians was extremely low, and there are already serious problems in ensuring access to physicians for certain areas. In mid-2005 there were 30 unemployed physicians registered at the Employment Service of Slovenia. Since 2005 the rate of unemployment of physicians has remained relatively stable. At the same time there were 165 foreign physicians with an active work permit in the country. A total of 133 out of those 165 physicians came from parts of the former Yugoslavia and only 10 were citizens of the EU. The rest were mainly from the countries belonging to the Commonwealth of Independent States (CIS). There is no evidence available to assess how Slovenia's accession to the EU changed cross-border movement of physicians.

Fig. 5.3 presents trends in the number of physicians in Slovenia and some selected countries. The health policy since the late 1990s has translated into a steady increased growth in numbers of physicians in Slovenia, accounting for 237 per 100 000 population in 2006 compared to 199 per 100 000 in 1990 (WHO Regional Office for Europe 2009b). Two major factors influenced this change: the Medical Faculty in Ljubljana has increased its numbers of admissions and graduates, and there was also a higher level of migration from parts of former Yugoslavia. Slovenia still has a significantly lower number of physicians per capita than most EU and CEE countries at the time of writing.

Fig. 5.4 shows trends in the number of nurses in Slovenia and selected countries. The problem of the number of nurses has two important facets. On the one hand the Nursing Chamber does not agree with the current inclusion of nursing assistants (called "health technicians") among the number of nursing professionals. According to the Chamber, the number should include only those nursing professionals who have successfully completed at least a 2-year study (degree) in a post-secondary education. Even without accepting this important limitation, there is a net deficit of nurses with university and college degrees, which reaches approximately 15% of the current workforce (Albreht 2005a). That deficit is particularly challenging for the biggest hospitals and social care institutions, which all have problems in finding adequate numbers of nurses willing to seek employment there. This is still the case in spite of the recent

400 350 250 150 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 ■ Croatia ▲ Czech Republic Austria → Hungary → Slovenia **→** EU ➤ EU Member States before May 2004 ■ EU Member States since 2004 or 2007

Fig. 5.3 Physicians per 100 000 population in Slovenia and selected countries, 1990–2007 (or latest available year)

Source: WHO Regional Office for Europe 2009b.

Note: EU: European Union.

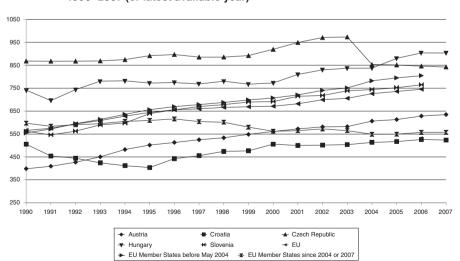


Fig. 5.4 Nurses per 100 000 population in Slovenia and selected countries, 1990–2007 (or latest available year)

Source: WHO Regional Office for Europe 2009b.

Note: EU: European Union.

establishment of a third nursing school in Izola (in 2003). Such a situation and trend led to the development of practical plans to establish a fourth nursing school in Jesenice (first students admitted in 2008). The situation with nurses is somewhat different than with physicians. Not taking into account the abovementioned dissonance about the number of nurses, Slovenia shows a high number of nursing professionals when compared to Austria or Croatia, or to Member States that joined the EU in May 2004. Nurses are considered to be key members of a health care team in the outpatient setting, particularly at the primary care level. In Slovenia, about one third of all nurses work in outpatient settings. Comparatively, the number of nurses working in hospitals is somewhat lower than in some, more hospital-oriented systems (IPH-RS 2006b).

In Fig. 5.5, the number of physicians and nurses per 100 000 population is compared to other countries within and outside of the EU. There were 237 physicians per 100 000 population in Slovenia in 2006, which was well below the EU15 average of 338 and the EU27 average of 322 (2007). In 2006 Slovenia had 765 nurses per 100 000 population, which was below the EU15 average of 805 per 100 000 and slightly above than the EU27 average of 746 per 100 000.

The number of dentists in Slovenia has been increasing constantly over recent years, but at a slower pace than the number of physicians. The reason for this is that the number of students admitted to dental studies remained much more stable, with only minor increases in the period 1997–2007. A single raise of 12% was noted in 2003. There are no plans to increase the number of students of dental medicine, neither through an additional faculty nor through an increase in the number of admissions at the Medical Faculty in Ljubljana. As Fig. 5.6 shows, in 2006 the number of dentists in Slovenia was 60 per 100 000 population which was exactly the same as the EU average. Workforce policies regarding the number of dentists are cautious because the final decision on how dental services for adults are to be reimbursed in the future is yet to be made.

The number of pharmacists in Slovenia has been increasing steadily since the late 1990s. However, as Fig. 5.7 shows for the year 2006, the number of pharmacists per 100 000 population (47 per 100 000) in Slovenia was significantly below the EU average of 71 per 100 000 population. This could primarily be a result of a rather conservative approach to planning and controlling pharmacists' posts in pharmacies, which were all public institutions in 1992, owned by the municipalities. On the other hand, the number of pharmacists working in pharmacies was difficult to sustain as there is a well-developed national pharmaceutical industry, supplemented by a relatively dense network of representations of foreign pharmaceutical companies. Career preferences for many students and graduates of pharmacy were therefore linked to the industry and its representative offices, rather than to the pharmacies. The industry

Western Europe Monaco (1995) 664.3 1621 4 Norway 1571.3 292.3 Ireland 1542.9 Netherlands\* 370.8 1452.1 Belgium\*\* 418.4 1341.3 Denmark\*\* 357.1 977.6 Sweden (2002) 1016.9 315.9 Iceland\*\* 360.9 943.3 Luxembourg\*\* 276.9 946.0 Finland 856.0 329.9 Switzerland (2000) 351.0 832.8 Germany 340.2 780.0 France 341.4 772.4 322.1 750.4 Spain (2003) Italy 364.8 683.7 Austria 363.1 628.4 Malta 388.1 565.8 Israel 586.3 356.4 Greece 337.7 Portugal\* 344.3 458.8 San Marino (1990) 251.7 507.7 United Kingdom (2002,1989) 498.6 212.6 436.0 Cyprus 252.9 Andorra 310.4 Turkey 159.0 239.0 Central and south-eastern Europe Czech Republic 859 6 362.0 Physicians 895.8 Hungary 303.6 □ Nurses Lithuania 398.1 741.6 Slovenia\* 236.0 Estonia 328.5 655.2 Slovakia\*\* 313.3 663.8 Latvia 541.9 314.7 Croatia 253.4 526.0 Bulgaria 366.5 411.9 Poland\* 199.3 468.5 TFYR Macedonia 254.2 369.8 Romania 192.1 397.4 Bosnia and Herzegovina\* 141.8 437.2 Albania 405.0 CIS Belarus 476.3 1195.4 Uzbekistan\* 1023.8 269.7 Russian Federation 430.9 805.9 Ukraine 308.4 783.4 Azerbaijan 362.6 725.8 Kazakhstan 375.7 681.6 Republic of Moldova 311.1 702.7 Georgia 468.3 379.1 Kyrgyzstan 246.1 556.8 Turkmenistan 249.2 448.5 Ta jikistan 201.3 446.6 **Averages** EU Member States before May 2004\* 795.1 331.8 EU average 315.0 741.6 EU Member States since 2004 or 2007 254.9 556.6 500 1000 1500 2000 2500

Fig. 5.5 Number of physicians and nurses per 100 000 population, WHO European Region, latest available year

Source: WHO Regional Office for Europe 2009b.

*Notes:* \* 2005; \*\* 2004; TFYR Macedonia: The former Yugoslav Republic of Macedonia; CIS: Commonwealth of Independent States; EU: European Union; Countries for which data were not available were not included.

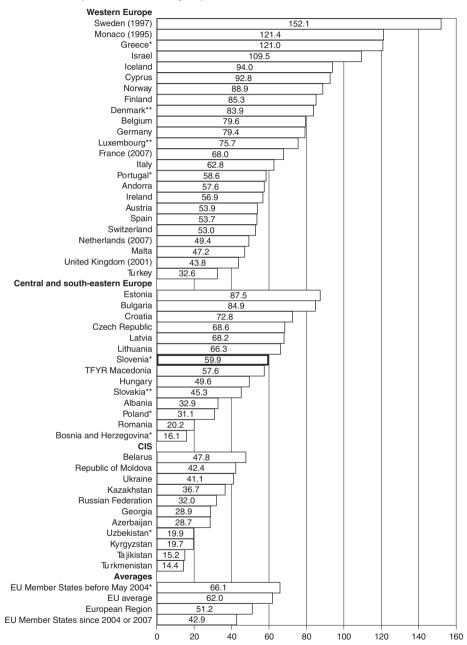


Fig. 5.6 Number of dentists per 100 000 population, WHO European Region, 2007 (or latest available year)

Source: WHO Regional Office for Europe 2009b.

*Notes:* \* 2005; \*\* 2004; TFYR Macedonia: The former Yugoslav Republic of Macedonia; CIS: Commonwealth of Independent States; EU: European Union; Countries for which data were not available were not included.

continues to employ about one third of all professionally active pharmacists in Slovenia. In 2000, with the adoption of the National Health Plan, a more generous set of criteria and standards for the geographical distribution of pharmacies and pharmacists was adopted. This led to a gradual and slow – but sustained – increase in the number of pharmacists working in pharmacies. In 2001 there were 643 pharmacists employed in public and private pharmacies, while in 2004 there were already 705 (a growth of almost 10% in three years). Slovenia has only one faculty of pharmacy in Ljubljana, established in 1961. Contrary to the situations described with physicians and dentists, planning of pharmacy students' numbers was more efficient, in terms of a timely increase in the number of students, which managed to prevent shortages of pharmacists. The number of pharmacists, even if lower than in other countries (see Fig. 5.7), is well balanced and fulfils the expectations of the population (Toš et al. 2004).

## Planning of health personnel

The role of the Ministry of Health in the planning of health professionals has always been very important and, at some stages in the recent history, also crucial. Traditionally, this process was driven by simple physician-/dentist-/ nurse-/pharmacist-to-population ratios. They were based on empirical evidence and grounded in retrospective data. Since the early 1990s the same standards and ratios were used, based on a planning document (Annexes to the National Health Plan) prepared by the Ministry of Health in 1991 and updated in 1993. These ratios were also the basis for reimbursement schemes – especially at the primary care level – used by the HIIS. This process was then harmonized with the Ministry of Higher Education and the different representative professional chambers (in particular the Medical Chamber, the Pharmaceutical Chamber and the Nursing Chamber). As in many other countries, there was heightened awareness of the importance of controlling the number of students for health professions in Slovenia, in order to maintain acceptable numbers of health professionals. Prior to 1992, the Medical Faculty in particular insisted on rigorous admission criteria, which included entry exams at the Medical Faculty and grading baccalaureate marks and other high school performance data in order to rank all candidates. Entry exams to the only Medical Faculty at the time (in Ljubljana) were abolished through changes of the admission criteria for university studies in 1992. Prior to 1995, the Medical Faculty in particular insisted on rigorous admission criteria, which included entering exams at the Medical Faculty and grading baccalaureate marks and other high school performance data in order to rank all candidates. Entrance exams to the only medical faculty at the time (in Ljubljana) were abolished through changes to

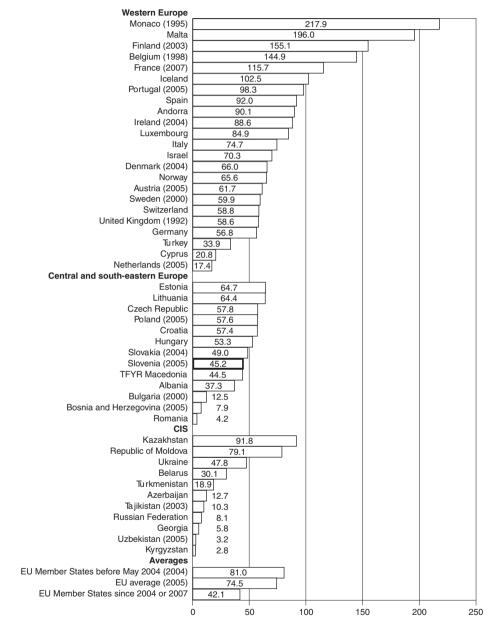


Fig. 5.7 Number of pharmacists per 100 000 population, WHO European Region, latest available year

Source: WHO Regional Office for Europe 2009b.

*Notes:* TFYR Macedonia: The former Yugoslav Republic of Macedonia; CIS: Commonwealth of Independent States; EU: European Union; Countries for which data were not available, or latest available data was older than 1995, were not included.

the admission criteria for university studies in 1995. Universities then adopted the national matura examination, t.i. qualification required to enter university. In any case, the *numerus clausus* (a fixed number of admitted students, set in advance, usually by the authority regulating university studies) remains the main limitation to entering studies for any category of health professionals. The proposed level has to be acknowledged annually by the National Assembly. Before Slovenia's independence, the interplay of the limited admissions and unapparent "imports" of health professionals from the territory of former Yugoslavia (which were then citizens of the same country) resulted in a relatively well-balanced situation. Slovenia's independence and the resulting end to the free flow of health professionals within the former Yugoslavia revealed deficits, which Slovenia is still trying to cope with.

The Health Council of the Ministry of Health, in cooperation with the Medical Faculty, professional colleges and other institutions, proposes and monitors the implementation of health-related professional education. The Health Council proposes recommendations on the number of health professionals and the decisions to adjust enrolment figures are made by the relevant medical and health-related faculties at various universities across the country. Through these mechanisms, the State exerts rather tight control and containment of educational posts.

The situation is a bit different when looking at the authorities that are responsible for postgraduate training of medical and dental specialists. The number of posts is proposed by the Medical Chamber, which is responsible for the postgraduate training programmes of the two professional groups. Based on its defined workforce estimates and projections, it prepares an annual plan of the number of new posts to be offered to the junior medical and dental doctors. This is then acknowledged and confirmed by the Ministry of Health and financed through a special fund created and maintained by the HIIS (see also Subsection *Training of health personnel* and Subsection *Career paths* in the remainder of this section).

Since the mid-1990s Slovenia has experienced moderate shortages of the health professional workforce, in particular with physicians and nurses and, to a lesser degree, also with dentists and pharmacists. In the latter case, the deficit was only a transient situation. The above-mentioned measures are expected to resolve most of the deficits over the period from the time of writing until the late 2010s. In the meantime, it will be inevitable to continue to import a certain number of these professionals to resolve some deficits which have become chronic and sometimes even critical at the local level.

## Training of health personnel

## **Physicians**

Basic education leading to a university degree conferring the title of Medical Doctor takes six years. After graduation from the Medical Faculty there is an obligatory 6-month internship, which has then traditionally been extended into an obligatory semi-structured 18-month postgraduate training programme called "secundariate". Since January 2007 the "secundariate" has been abolished and young physicians enter the postgraduate training for medical specialists directly after their internship.

Since 2000, the entire area of postgraduate specialist training has been reformed. Some new specialties have been introduced, while the older core curricula have been thoroughly revised and harmonized according to the guidelines of the UEMS (Union Européenne des Médecins Specialisés) for each respective specialty. This process was completed for the majority of medical specialties in spring 2002.

Competency for preparing and implementing the programme of medical specializations was given to the Medical Chamber. The Chamber prepares lists of qualified tutors, health care providers and institutions with which training can take place. Alongside this, there are also coordinators for each of the specialties who supervise both the tutors and the registered training institutions. During the course of the training, tutors should monitor the candidates. The examination commission at the Medical Chamber performs the final exam and issues certificates. Twice per year there are tenders, as part of which specialist training posts are offered to junior doctors. Posts are offered by specialty and by region. Candidates may apply for different specialties, but can eventually only qualify for one post. Ranking is based on previous work, references and points obtained, based on additional activities (research, recommendation by tutors, additional courses, and so on).

### Nurses

Training in nursing is provided at post-secondary courses, offered as 3-year and 4-year programmes. Additional training is required for community nurses. There are four higher education institutions for health professionals, which provide university- or college-level training for nurses: the University of Ljubljana, the University of Maribor, the University of Primorska and the newly established College of Nursing in Jesenice. The new curriculum for nurses, which started in 1993 at the University of Ljubljana, is based on the principles of primary health care, with strong emphasis on health promotion and prevention, and includes

health education as a course of instruction. There are several study pathways (beyond the nursing profession), namely: general nursing, health education, midwifery, physiotherapy, occupational therapy, sanitary engineering, and orthotics and prosthetics. Graduates become Bachelors of Nursing, of Midwifery, of Physiotherapy, of Occupational Therapy or of Sanitary Engineering. Currently, nursing professionals in Slovenia are taking Master's and Doctoral degrees with the support of their colleagues in other European countries.

Educational standards are set by universities. In 2007, qualifications are still revalidated by the Ministry of Health. It is on the Government's agenda that the Nursing Chamber of Slovenia is given competencies for registration, licensing and auditing in nursing. Nursing is also one of the regulated professions within the EU.

#### **Dentists**

Basic education leading to a university degree conferring the title of Doctor of Dental Medicine takes six years. After graduation from the Medical Faculty there is an obligatory 12-month internship, which also serves to complete the obligatory postgraduate training period.

In the period 2000–2005 a process of restructuring of postgraduate specialist training was carried out. Since 2005 there are six dental specialties available to Doctors of Dental Medicine.

It is the role of the Medical Chamber to set standards for postgraduate training and continuous medical education. The competency of preparing and implementing the programme of dental specializations was also given to the Medical Chamber, as described earlier. Doctors of Dental Medicine have to undergo similar procedures as Medical Doctors, in order to obtain their dental specialty training.

#### **Pharmacists**

The basic education leading to a university degree takes five and a half years. Pharmacists have two distinct pathways after graduation (for more details on this and on postgraduate training for pharmacists, see Subsection *Registration/licensing*, within Section 5.2 *Human resources*).

### **Public health specialists**

Undergraduate training in public health is limited to the modest introduction received by medical, pharmaceutical and nursing students. An exemption is the Programme for Public Health for health inspectors.

The Medical Faculty at the University of Ljubljana has a Department of Public Health. This department offers (in collaboration with the IPH-RS) various programmes for professional and research training.

In 2002 a medical specialty of public health was introduced, which replaced the former medical specialty training in epidemiology, hygiene and social medicine. Specialization in public health takes four years of training. There are also training programmes (of 2 semesters; 400 hours of postgraduate courses) in social medicine; occupational medicine; health care of children, youth and women; and dental public health. The graduates can continue their studies at the Public Health School in Zagreb.

# Registration/licensing

## **Physicians**

All physicians who work in health care, irrespective of the whether they work in daily practice with patients or not, have to become members of the Medical Chamber and must be in possession of a valid licence. This process is mandatorily required in accordance with both the Health Care and Health Insurance Act (1992, with subsequent amendments) and the Medical Services Act (1999). After graduation from the Medical Faculty, a physician would normally have entered a process of a semi-structured postgraduate training, lasting for two years; however, this was suspended in 2007. Formerly, after the completion of the 2-year postgraduate training and successful passing of the licensing exam, junior physicians would obtain a licence to practise as GPs. In 2007, a compulsory general practice training for all physicians who wish to practise came into force. Currently, six months' internship in intensive care and emergency medicine are requested, after which a state registration exam has to be passed (composed of a practical part, a theoretical part and a segment on the administration of the health care system). After this, all junior doctors are required to apply for specialty training; otherwise they will not be able to practise as medical practitioners. Once a physician has completed her or his specialty training, including a final specialty exam, she or he receives the first licence for independent work. Thereafter, the licence must be renewed every seven years. This renewal depends on various types of scoring (points based), obtained through participation in additional training, courses, or conferences, congresses, seminars and workshops. All of these are rated by a special committee, nominated by the Professional Council of the Slovene Medical Society. In cases in which the candidate does not reach the required number of points, she or he must sit a re-certification examination. After reaching the age of 70, a physician is assigned a lifetime licence.

#### Nurses

According to the registration regulations set up by the Ministry of Health, nurses obtain their registration after graduation and successful completion of an internship, which ends with the compulsory state registration exam. Under the same provision, a licence for nursing professionals to practise is not yet required. However, it is envisaged that the Nursing Chamber will be granted public authorization to carry out the entire process of registration, licensing and re-certification. If this is realized, the process will be identical to that for physicians, described earlier.

#### **Dentists**

Dentists obtain their registration after the registration exam, which is taken after a 1-year internship. They do not have additional training requirements in order to obtain a licence for general dentistry, which then has to be renewed every seven years, similarly to the licence for medical specialists. For those dentists who decide which type of dental specialty training to follow, the process is the same as for physicians.

#### **Pharmacists**

Pharmacists have two distinct pathways after graduation. One is to continue working in health care, either in a public pharmacy or in a pharmacy attached to a hospital or laboratory; the other is to opt for a career in industry. In the former case they have to pass a state registration exam after completion of a 1-year internship. This exam entitles them to work anywhere in the health care sector, according to their professional background. In this case, they also need to register with the Pharmaceutical Chamber to regulate their status as a pharmacist. Membership in such a case is mandatory.

For pharmacists who continue their careers in industry, the state exam is optional and they may work without passing the exam. A few pharmacists – mostly those who work in pharmacies and laboratories – decide to opt for specialty training. The programme and the process leading to the exam and its organization are all managed and administered by the Pharmaceutical Chamber.

## Other allied health professionals

All other recognized health professionals who graduated in faculties and schools in post-secondary education are required to pass a state registration exam. This is the case for physiotherapists, occupational and speech therapists, radiological engineers, engineers in orthotics and prosthetics, and so on. Health professionals graduating from secondary health schools (such as health technicians or dental technicians) must pass a qualification exam in front of a commission appointed by approved teaching institutions.

# Doctors' career paths

Medical doctors start their career paths by entering into a 6-month internship. This is organized as a work placement in intensive medicine, with three rotations in internal medicine, general surgery and traumatology and anaesthesiology. The internship is financed by the state budget and at the same level for all interns. After this, they are required to take the state registration exam.

Since spring 2007, running an independent medical practice requires a successfully completed period of specialty training. This training ends with practical, written and oral exams, which are taken in front of commission of three members, pertinent to the specialty. Successful completion of the specialty training leads to the doctors' first licence, which entitles the physician to practise independently, without supervision. In public provider institutions, further career advances are from then on regulated by the Civil Servants Act (2002), and in particular by one section describing a special category of physicians and dentists, which allocates all employed professionals of this type a position within a number of ranked classes. By mid-2008 this Law is not fully implemented in Slovenia and the previous career advance setup is in force, based on 3-yearly evaluations and consecutive promotions. In a primary health care setting, a physician can become chief of a service (for example, a GP) or a director. In hospitals, a physician can advance in positions from junior specialist to senior specialist, head of ward, head of department and director. The supervising superior is the responsible person to define and evaluate the completion of a 3-yearly period and can propose a regular promotion (one class) or extraordinary promotion (two classes). Promotions depend on the evaluation by the direct superior, but in public health care institutions these always depend on the approval of the director. In terms of this decision, directors are independent. Overall, most doctors usually stay within the institution at which their careers started. This used to be a mandatory requirement, since it was the employer who financed the period of specialty training and physicians were expected (with contractual binding) to remain employed there at least for the period of the training after their exams. This is now bound to change as there is a central budget for the financing of specialty training, with funds provided by the HIIS and managed by the Medical Chamber.

Academic careers start with the post of teaching assistant, through to assistant professor ("Docent") and associate professor and then to a full-time professorship. An academic assistant must complete her or his Master of Science degree in three years and his PhD in nine years in order to continue to be eligible for the post.

# 6 Provision of services

# 6.1 Public health

In 1992 there were two divergent concepts proposed in the preparation of the reforms to the organization and delivery of health care and of other health services. Public health, on the one hand, was seen as too extensive a service, and should be completely restructured. In practical terms this would mean a complete dismantling of the IPH-RS and merging its various services with other institutions – health statistics and reporting to be incorporated into the Statistical Office; medical microbiology laboratories into the Medical Faculty in Ljubljana; sanitary chemistry and sanitary microbiology into the Health Inspectorate; imports and distribution of vaccines would be made a commercial service; and the rest would become a department of the Ministry of Health.

The other option, which defended the classical setting of public health, prevailed. This meant that the public health infrastructure would not be changed—the IPH-RS, as well as the nine regional institutes of public health, were maintained. The terminology was standardized by law, as were the services that the regional institutes were to deliver. This implied that a more structured reform of the public health infrastructure would be postponed.

There were two processes, which then ran in parallel.

 Public health was supposed to have and maintain a prominent role in developing health promotion nationally, regionally and locally. At the beginning of the 1990s these activities were carried out intensely, but the Ministry of Health failed to embrace these efforts to reform the system. Introduction of health promotion as a regular activity into the organizational structure of public health institutes took place only much later, in 2003. 2. The other process was the lengthy preparation and the adoption of the National Health Plan by Parliament. This was supposed to represent a strong push for the future development of public health, both in terms of defining its future scope of activities as well as defining the workforce required. The latter was defined very broadly and would require significant investment in human resources. The State did not invest in human resource development for public health from the national budget. However, the regional institutes of public health found their own methods of developing their services further, by attracting private funding. These include primarily laboratory services supporting the screening and diagnostics of regular check-ups of certain professionals, along with the screening of drinking and bathing water, as well as foodstuff. It is important to highlight that regional public health institutes had an exclusive right, a sort of "monopoly", in terms of delivering these services. Due to the changed approaches developed in the late 1990s, these functions were gradually reduced or transferred to commercial institutions or to owners of water distribution systems and caterers. Apart from the process of introducing health promotion as a regular function into public health institutes, the Health Reform of 2003 was supposed to bring about a new incentive to redefine the role of the public health infrastructure and to strengthen it.

The Health Care and Health Insurance Act was to change the philosophy of health care from being disease oriented towards having a more health promotion-based focus. In the course of the 1990s, the Ministry of Health entered into a trade-off where it consented to a large swathe of services being delivered by the public health institutes, in exchange for relatively modest increases in financing of the services rendered by these institutes to the State. From 2001 onwards, a more consistent policy became evident when a significant investment was made in the public health infrastructure. This was to support the goals of a strong co-coordinative role in the field of health promotion at the IPH-RS, while the regional institutes were supposed to provide educational and developmental assistance to the primary health care centres in terms of early detection programmes for risk factors for cardiovascular diseases and programmes promoting lifestyle change.

The Health Council of the Ministry of Health – in cooperation with the Medical Faculty, clinics, broader professional colleges and other institutions – proposes and monitors the implementation of the programme of preventive health care and health education of the population. Part of those efforts include the national programmes of social medicine, hygiene, epidemiological and environmental health services, which are implemented by the IPH-RS and regional institutes. The IPH-RS is responsible for national health statistics and

reporting, analyses of the population health status, health services, and health system and health policy research, while the environmental and communicable disease control functions are developed in cooperation with the relevant health care providers, ministries and other health care institutions.

The role of the IPH-RS is rather broadly defined in the Health Services Act of 1992. It is an institution combining research, education and postgraduate training functions, covering all areas of public health. Traditionally, public health in Slovenia has had three main branches: social medicine, hygiene and epidemiology (of communicable diseases). Since the late 1980s, rapid development and integration of several fields led to the development of environmental health. Important components of all these fields (except for social medicine) are well-equipped public health laboratories, some of them serving as reference laboratories.

There are three important areas, covered by the IPH-RS through a set of small professional teams: health care organization, health economics and health informatics. The latter two are also built upon in several other institutions – especially at the HIIS, but also in some recently developed private institutes, such as the Institute of Economic Research in Health Care (INERHC). A very important function of the IPH-RS is to maintain several important national health statistics databases, including the national death register, a hospital statistics database, an outpatient statistics database, a database of national health care providers and a database of health professionals. In 2000 a new legal framework was adopted, which appoints the IPH-RS and the other institutes with health registers, for their work. It is also the first time that a legal basis has been set up to allow the linking of different health data through some common personal identifiers. Since 2007 a process of a complete reform of this legislation has been started, scheduled to be completed within the next government's term.

Health promotion is an area in which several institutions are involved. There is a national coordinator for health promotion, responsible for health promotion at the national level. As of 2009 there are several initiatives, most notably those by the Ministry of Health and the IPH-RS, intended to strengthen this field. A special department will be established at the IPH-RS and an extensive survey will be coordinated by the Ministry of Health to obtain improved data on the prevalence of chronic diseases and lifestyles, in order to allow for more appropriate input into the planning of health promotion over the coming years.

Health promotion and education programmes are also implemented at the primary health care level by nurses and other health care professionals working in health care centres. Programmes that have been established since the 1990s in cooperation with WHO – such as the Countrywide Integrated

Noncommunicable Disease Intervention (CINDI) Programme and the Healthy Schools project – have become nationwide initiatives, although they operate at the level of local communities, cities and schools.

Several screening programmes have been launched since the year 2000, including: early detection of risk factors for cardiovascular diseases (2002), early detection of precancerous lesions of cervical cancer (ZORA) (2001), early detection of breast cancer (DORA) (2008) and a screening programme for colon cancer (SVIT) (2008).

The main problem encountered in terms of health promotion, as in other countries, is convincing politicians and political decision-makers of the importance of health promotion in the future development of the health system. In July 2008, Parliament adopted the new Resolution on the National Health Plan, which is to serve as the basis for future action. An outline for the further development of public health, both at the conceptual as well as the organizational level is elaborated in this document.

# 6.2 Patient pathways

The idea of clinical pathways arose in the course of the work carried out as part of the World Bank Health Sector Management Project, which sought to establish the framework for the introduction of DRGs. The introduction was strongly promoted from a top-down perspective and was led by the Ministry of Health. The main objectives of clinical pathways introduction were presented and proposed to the hospital managers as an option facilitating the introduction of the DRGs. The managers could be convinced and thus became one of the main promoters for the introduction of clinical pathways, as they have identified positive challenges and advantages of its introduction (Albreht 2005b).

According to a survey conducted by the Ministry of Health in 2005 (Ministry of Health 2005), 14 hospitals decided to use clinical pathways, of which 13 general and mono-specialist hospitals and one psychiatric hospital. The process of the introduction of clinical pathways is at about the half way mark, as approximately half of all hospitals in Slovenia decided to introduce at least parts of the process. Article 29 of the Regional Agreement on Hospitals for the year 2006 defines that hospitals will have to introduce at least two new clinical pathways per year (HIIS 2006a). As an example, Box 6.1 contains the patient pathway for an inguinal hernia surgical procedure, as used since 2006.

#### Box 6.1 Patient pathway for inguinal hernia surgical procedure

The patient presents to the general practitioner (GP) with whom she or he is registered with pain and/or swelling in the groin.

After history has been assessed and the patient examined, the GP refers her or him to a hospital general surgery or abdominal surgery department.

The patient has free access to any public hospital in the country (including private hospitals which provide publicly funded services). Information on waiting times is available on the web sites of the IPH-RS and the Ministry of Health.

In private hospitals the procedure is also provided for out-of-pocket (OOP) payment or private insurance. A patient who does not want to wait can choose between three smaller private providers (situation as of 2006).

After referral, the patient is usually briefly examined by a specialist at an outpatient hospital department, within one week. On the basis of this examination she or he is either appointed for further examination or for a surgical procedure. Those further steps depend on waiting times in both cases.

In the meantime, the patient and her or his GP follow the instructions of a specialist regarding necessary medication and pre-operative examinations.

Inguinal hernia surgery may be provided as an outpatient (day case) or inpatient service.

Following surgery, the patient goes home (average length of stay in 2006 was three days). In the event that home care is needed, the GP can prescribe (a) visit(s) by a community nurse. Community nurses are in most cases affiliated to primary health care centres and they can provide nursing care (that is, wound dressing, application of medication, and so on). Regarding assistance for daily activities there are a few services available, provided by municipalities in major towns. Home care outside these areas depends mainly on families or relatives of patients.

When discharged, the patient and GP receive a discharge summary from the hospital. The GP is responsible for any further follow-up.

It is most likely that (a) follow-up visit(s) to hospital will also take place in order to check the outcome of the treatment.

Sources: IPH-RS 2006c; NHS Scotland 2006.

Notes: GP: General practitioner; IPH-RS: Institute of Public Health of the Republic of Slovenia.

# 6.3. Primary/ambulatory care

Both public and private providers of care deliver primary health care. Among public providers there are health care centres and health stations. The locations of health care centres correspond to the seats of former local communities (from prior to 1995) and the locations of health stations correspond to important local centres (that is, small towns, hamlets or villages). In 2004 there were 64 health care centres and 69 health stations. Health care centres were first introduced in 1926 and are based on the ideas of Andrija Stampar. The original idea – that primary health care delivery should be brought to the local communities, and various types of care should be integrated and target specific population groups – has survived till today. According to law and practice, a health care centre is

a public institution, which provides as a minimum, preventive and curative primary health care for different target groups of inhabitants, notably many of those who are at higher risk from a public health point of view.

The types of care provided at health centres include:

- · emergency medical aid
- · general practice/family medicine
- health care for women, children and youths
- home nursing
- laboratory and other diagnostic facilities
- preventive and curative dental care for children and adults
- medical aids and appliances
- pharmacy services
- physiotherapy
- ambulance service(s).

In the past, the provision of the above-mentioned types of care was facilitated by dispensaries. To a certain extent this is still the case at the time of writing, especially in the case of children and youths. In addition to the services listed earlier, control dispensaries also existed for anti-TB and venereal diseases. Simultaneously to the decline of the incidence of this type of disease, the provision of respective services was reduced. Some of these services are still offered, but as pure additional outpatient specialist services. A health station provides at least the following services: emergency medical assistance, general practice/family medicine and health care for children and youths, as well as basic diagnostic services. Health stations are linked to the nearest health care centre for provision of other services, as established by law.

Health care centres are established and owned by one or more local communities, which are responsible for management of the day-to-day functioning of the centre, as well as for administration and provision of adequate funds for the maintenance of premises. All the employees are salaried according to the terms of the general contract for employees in the non-industrial sector, although some professional come under a special contract for health care. Physicians and dentists have obtained the right to have a special contract, which gives them a separate negotiating position and introduces special supplements to their salaries.

Apart from public provision of health care there is also private provision, which is carried out by either individual health professionals acting as providers, or by group practices with various combinations of services and specialties. The presence of three factors marks the initial phase of the introduction of private provision of care:

- an unclear policy with respect to the further development and equal distribution of health care centres;
- fragmentation of local communities;
- the lack of a clear national strategy on private provision of health care and the goals, which should be reached in achieving the "adequate" or "acceptable" mix of public and private provision of care.

Some health care centres have actually collapsed and functionally ceased to exist in several parts of Slovenia. As a result of this, geographical access to primary health care provider institutions was limited for people in various parts of Slovenia. Part of this problem was also the issue of publicly owned premises and their availability for (potential) private providers of health care, which has long been unresolved. As no guidelines were prepared for this problem at the national level for a long time, many private providers left the publicly owned premises and started developing their own. Two main problems arose from this, linked to each other: one, parts of the infrastructure lost their main purpose; and, simultaneously, maintaining such structures as health care centres became very demanding, since many profitable services left the publicly owned premises. The central issue was the question of rent.

Health care personnel involved in delivering primary health care include: GPs/family physicians, dentists, nurses, pharmacists, physical therapists, speech therapists, occupational therapists, psychologists or psychiatrists, midwives and other health professionals necessary to carry out the work of the health centre. Social workers are not based in health centres. Community nurses are independent, but are based physically in health care centres.

The GP and the nurse comprise the health team, which provides the initial contact with the patient for curative and preventive care. The GP is the team leader and responsible for medical decisions concerning the patient. GPs provide care primarily to adult patients. Paediatricians and school medicine specialists are involved with child and youth health care and are responsible for immunization for young children, pre-school and schoolchildren and youths. Maternity care and preventive gynaecological services are provided by primary health care gynaecologists. Occupational specialists provide general practice and prevention to workers in factories.

The average number of patients per GP is approximately 1800 (which normally includes only up to 10% children, since care for them is usually organized through primary care paediatricians). GPs provide general medical care, minor surgery, and home visits when necessary. Rehabilitation is provided by physical, occupational and speech therapists. Family planning, prenatal care and postnatal care are provided by gynaecologists. Emergency services are available around the clock.

The community nurse supports the recipient of nursing care through health promotion, prevention, treatment and palliative activities. The nurse provides services in connection with the health care of various groups including adolescents, healthy elderly people, the chronically ill and disabled, pregnant women, infants, as well as carrying out prenatal and postnatal home visits for mothers. Pharmacists supply OTC and prescription pharmaceuticals and may provide related patient education.

The patient is entitled according to the compulsory health insurance to select her or his own physician from among the physicians at primary health care level, that is, in the health care centre or in private practice, provided she or he has a contract with the HIIS. The personal physician is in principle a GP, but in urban areas and in some small towns children would have a paediatrician or a school medicine specialist as their personal physician. This selection is made for a period of at least a year. In 2000, approximately 95% of insured individuals had selected a personal physician. A similar situation applies to dentists.

The 1992 legislation offers women the opportunity to choose a personal gynaecologist. Generally speaking, the gynaecologist must either work in a (public) health centre or as a private gynaecologist in a hospital or clinic, with a concession and a contract with the HIIS. Children are also required to have a personal physician and a dentist, selected for them by their parents or legal guardians.

The personal physician – not GPs in general – is supposed to be the entrance point to the system (gatekeeper). She or he tracks the health status of her or his patients, as well as treating them and prescribing medicines, and maintaining files and records. She or he may certify up to 30 days' leave of absence due to temporary incapacity to work. Under certain circumstances, the personal physician of a sick child can certify and therefore legitimate a parent's absence from work in order to care for her or his child.

Where special treatment is needed, the "gatekeeper" function of the personal physician should be respected. The personal physician may refer the patient to a particular outpatient specialist or to hospital diagnostics and treatment. The physician may also advise the patient as to which specialist or which institution she or he would recommend, but the patient ultimately makes the final decision as to which provider she or he chooses. If the patient selects a private provider who does not have a contract with the HIIS, she or he is obliged to cover the cost of services rendered by such a provider in full and out of pocket.

Referrals by the personal physician to specialists can include consultation and/or diagnostic procedures and/or treatment. When treatment is included in the referral, the specialist must provide the patient with all services that are needed, including the relevant prescriptions and follow-up visits. Slovenia has

established a typical gatekeeper system, which means that the patient has the right to be treated by a specialist only in cases in which her or his personal physician has determined the necessity. The only exceptions are cases in which chronic diseases are present and there is a need for long-term treatment by certain specialists. In such cases, the personal physician can transfer some of her or his authority to other consulting specialists or to hospitals. At such times, the relevant specialist or hospital has to report back to the personal physician about the patient's progress on a regular basis.

The personal physician concept was introduced with the intention of improving the quality of relations between a patient and her or his physician and to ensure continuity of care. This system stimulates confidentiality, which is obligatory on both sides of the doctor–patient relationship, and encourages mutual respect of rights and duties. The personal physician concept contributes to the appropriate treatment of patients, since she or he follows the patient's progress over a longer period of time and is familiar with her or his medical records. Furthermore, this system can be used as a basis for preventive activities, since there is a close relationship between the personal physician and her or his patients.

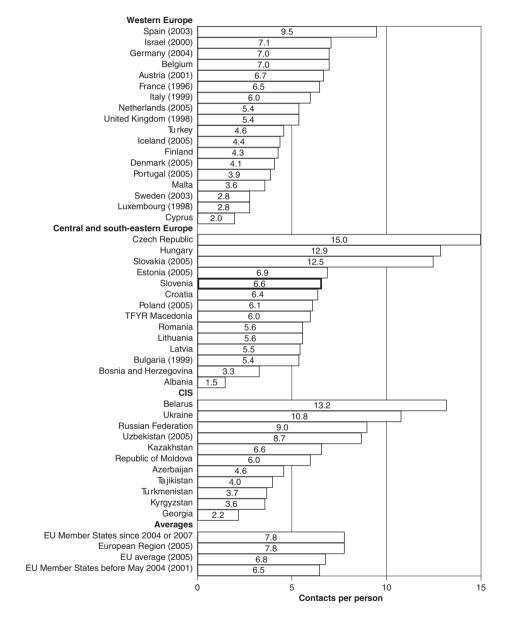
The introduction of provision of care through independent private practices has been accelerated over the years. There is particular interest in a shift to private provision of care in primary health care. The situation is different for outpatient specialists and hospital care, where the nature and the extent of private provision of care remain unclear.

Challenges for primary health care services include:

- reducing differences in professional development within the medical profession throughout all regions of Slovenia and supporting high-quality education for all types of health professionals;
- preserving and further improving the current organizational structures, services and all aspects of the health care system which have proved effective;
- developing and implementing an equitable solution for the integration of public and private sectors;
- placing emphasis on health promotion as the major health priority.

Fig. 6.1 shows physician contacts per person per year for 2006 (or the latest available year) within the WHO European Region. With 6.6 outpatient contacts per person per year in 2006, Slovenia is well below the 7.8 average for countries that joined the EU in 2004 and 2007, and slightly above the EU27 average of 6.8 per person per year.

Fig. 6.1 Outpatient contacts per person, WHO European Region, 2006 (or latest available year)



Source: WHO Regional Office for Europe 2009b.

Notes: Notes: TFYR Macedonia: The former Yugoslav Republic of Macedonia; CIS: Commonwealth of Independent States; EU: European Union; Countries for which data were not available, or most recent data are older than 1995, have not been included.

# 6.4 Specialized ambulatory care/inpatient care

Specialist outpatient activities at the secondary care level are performed in hospitals, spas or in private health facilities. Approximately 75% of secondary care is provided by hospitals, either as inpatient or outpatient care. Clinics and specialized institutes provide more complex health services at the tertiary care level. The personal physician directly (or sometimes in cooperation with a specialist) refers patients for these services.

Specialized ambulatory medical services are provided at the polyclinics affiliated with hospitals, or in community health centres that have a contract with a clinical specialist or consultant. Since the introduction of private provision of care in Slovenia, these services are also carried out at private offices where specialists practise either based on a contract with the HIIS or without a contract.

Specialists generally practise part time in health centres, based on a contract with the respective health care centre. They may be employed full time, according to need. Specialists who hold a concession have the right and responsibility to bid for contracts as part of the public tenders announced annually by the HIIS. In the contract with the HIIS, the scope of the contractual work, its financial value and the price of specific services are clearly specified.

There are also a few purely private health care providers, offering specialist care and diagnostic services, but most have a contract with the HIIS. These polyclinics also organize outpatient consultations for patients paying out of pocket under regulations certified by the Ministry of Health. These polyclinics offer a higher standard of services in terms of time and staffing. The fees paid by the patients are divided between the physicians – who perform the services outside of standard working hours – and the employing institution. As of 2008 there are no combined public/private polyclinics in Slovenia, but it is an aspiration of the medical and dental professions to move future trends in that direction.

The overwhelming majority of hospitals are state owned, but three smaller private hospitals exist and there are further initiatives under consideration for private provision of hospital care. It is possible to establish private hospitals out of the network of publicly financed providers. There is also the opportunity for private investment in new hospitals, although this had not taken place by the time of writing (early 2009).

Over the years, cooperation between the primary and secondary levels of care has left much to be desired. In recent years an increasing amount of resources have been devoted to primary health care services in order to cover the implementation of all the mandatory preventive programmes. There are plans to develop home care in close cooperation with hospital health services and primary health care services.

Collaboration between primary health care services and hospitals essentially takes place in the form of referrals and the exchange of test results. Hospitals also provide postgraduate training courses for physicians working in primary health care services.

Clinics and specialized institutes at the tertiary level provide the most complex services, which cannot be provided by other health care providers. These clinics and institutes provide services, which for cost–effectiveness purposes have been centralized in a single locality. Patient referral to such an institute can be carried out by the personal physician or by a specialist who has treated the patient upon referral from the personal physician.

The HIIS provides certain incentives to reduce the duration of hospital stays, such as payment for empty beds up to one day less than the average length of stay. Average length of stay (for all hospitals) has been falling steadily in recent years, dropping from 11.4 days in 1990 to 7.1 in 2006, which is well below the EU average (9 days) for that year (WHO Regional Office for Europe 2009b). The inpatient admission rate per 1000 population was 16.2 in 1997 and shows a gradual but slow increase over the observed period, reaching 17.8 per 1000 in 2006 (WHO Regional Office for Europe 2009b).

# Day care

In terms of the specific situation in Slovenia, it is necessary to distinguish between day care and long-term day care.

Day care lasts less than 24 hours, without overnight hospitalization (with the exception of cases in which diagnosis of sleeping problems is carried out – this is considered to be day care, even though the person stays in hospital overnight). In these cases either special beds (for example, for recuperation, beds for a specific purpose) or regular hospital beds are occupied. This is not considered to be hospitalization per se, and the bed usage time is not included in the number of days of hospital-based care.

Long-term day care lasts for an extended period of time – with intermissions – with each attendance spanning a continuous period of less than 24 hours, without overnight stay. A person may receive day care in a hospital for several consecutive days or, with intermissions, once or several times a week, but spend every night at home. The highest number of such cases occurs in psychiatry.

In recent years, cases incorporating hospital day care are constantly increasing. All cases in the year 2004 amounted to 66 777, which represents an increase of 2.3 times the figure for the year 2001 (IPH-RS 2006b; Statistical Office of the Republic of Slovenia 2008). The most common examples of hospital day care in 2004 were, among others, pregnancy, childbirth and postnatal care

(in the puerperium period) (8093), factors influencing health status and contact with health services (5666), along with medical abortion (5083).

#### **Blood Transfusion Service in Slovenia**

In 1955 the Blood Transfusion Centre of Slovenia (BTC) was established as a central institute in Ljubljana and in 1958 it moved into premises that it still occupies at the time of writing. Until 2007, BTC and 10 transfusion departments affiliated to regional hospitals represented the national blood transfusion network.

Medical doctors (that is, specialists in transfusion medicine) in cooperation with experts in other sciences (pharmacy, biology and biochemistry) and highly qualified nonmedical personnel provide not only a safe and high-quality supply of blood and blood preparations, but also therapeutic services, transplantation, evolving cell therapies and bio-banking. In close cooperation with the Slovene Red Cross, the national blood transfusion service manages almost 90.000 non-remunerated donations of blood and blood components each year.

The new Blood Supply Act was approved at the end of 2006 and was followed by several regulations. This legislation is harmonized with the European Directive 2002/98/EC and is the basis for reorganization of the national transfusion service in terms of establishing a centralized network and unified blood and blood component supply. The administrations of several regional hospitals have already decided to pass the organization and jurisdiction of their blood transfusion departments either to the BTC in Ljubljana or the Blood Transfusion Centre operating within the University Clinical Centre in Maribor. The process of reorganization of the Slovene transfusion service is ongoing since 2008 and is coordinated and monitored by the Ministry of Health.

Total quality management (TQM) is applied to assure safe and up-to-date vein-to-vein procedures. The core professional activities are ISO 9001 accredited. Additionally, the BTC – as the leading national institute – is also a holder of European Federation for Immunogenetics accreditation since the year 2000. Slovenia became a member of Eurotransplant in 1999 and joined the European Blood Alliance in 2004. Since December 2006 the BTC is an official WHO Collaborating Centre for Quality Management in Transfusion Medicine.

In addition, the BTC carries out the following activities: management of the national unrelated bone marrow donor registry, Slovenija-Donor (established in 1991); development and maintenance of the national blood transfusion information system; as well as national and international research and development projects.

# 6.5 Emergency care

Emergency medical care in Slovenia is defined as provision of emergency services to a person in a life-threatening condition or to a person who may develop such a condition in a short time, caused by disease or injury. Emergency medical care is provided by emergency teams that include physicians and other health professionals.

Emergency medical services are integrated within the public health care services aimed at providing continuous medical care to patients in need. There are three organizational levels of emergency care: first-level emergency care (so called 1A and 1B units) includes 45 primary health care centres in smaller towns outside regional centres; second-level emergency care (so called Pre-Hospital units) includes 15 primary health care centres (in 2006) in regional capitals; and third-level emergency care includes hospital emergency services in acute hospitals. First-level teams provide emergency care during the opening hours of their practices and within the scope of the availability of primary care physicians (that is, GPs and primary care paediatricians). Second- and third-level teams provide 24-hour emergency care. Second-level teams are organized as special health care services within primary health care centres and are often located next-door to emergency departments of regional hospitals.

An emergency team of a 1A unit includes a physician (usually a GP) and a nurse, without an ambulance. In addition to this, a 1B unit has ambulance with driver/nurse. Pre-Hospital units have specially equipped emergency ambulances and their staff are additionally trained in emergency medicine. There is also an established hierarchy of cooperation between 1A, 1B and Pre-Hospital units. In case of serious emergencies the nearest Pre-Hospital team helps a 1A and/or 1B team and the nearest 1B team helps a 1A team. Pre-Hospital and 1B teams also provide transport of emergency patients managed by 1A teams. Organizational criteria for the distribution of resources include the number of inhabitants and geographical characteristics of the respective area, road network conditions and the proximity of the nearest hospital.

A patient in an emergency situation can call 112. An operator will redirect this call to the nearest emergency unit, where the patient can speak with an emergency physician or, in the case of Pre-Hospital units, with an emergency nurse. On the basis of this conversation, a physician or emergency nurse will assess the need for intervention and an emergency team sets off immediately after that. Vital assessment and life-saving interventions are provided on site, followed by transportation to the nearest acute hospital or to the hospital which can provide the relevant specialist services (for example, coronarography or neurosurgery). An emergency physician, who is also the team leader, decides on the hospital to which the patient should be transported.

Transportation services for emergency care are usually organized within primary health care centres. In some cases, acute care hospitals organize emergency transportation services by providing an ambulance with a driver and an emergency nurse to the Pre-Hospital emergency unit at the primary health care centre.

# 6.6 Pharmaceutical care

At the end of 2005 there were 273 pharmacies in Slovenia, 84 of which were privately owned. Over 1600 employees were employed in the public pharmacy network. Every pharmacist provided on average 2562 inhabitants with pharmaceuticals (IPH-RS 2006a). Some pharmaceuticals can be issued at "drugstores", with adequately educated employees, although dispensing pharmaceuticals outside of pharmacies still remains controversial, especially due to cases of serious abuse of pharmaceuticals reported in other countries. There have also been some arguments regarding the quality of advice on intake of pharmaceuticals at such stores.

Distribution of pharmaceuticals takes place through wholesalers, who obtain the pharmaceuticals from domestic production or through imports and sell them to public or private pharmacies. There used to be two firms representing Slovenia's pharmaceutical industry, Lek in Ljubljana and Krka in Novo Mesto, both privately owned. Lek was taken over by the multinational pharmaceutical company Novartis. The majority of domestic pharmaceutical manufacturing is export oriented. There are no restrictions regarding private ownership.

Members of the special committee, formed of experts from various health care fields, decide on the different levels of reimbursement. The decisions of the committee members are based on cost-benefit analyses and on the available financial resources. As already mentioned in Subsection Pharmaceuticals (within Section 5.1 Physical resources), 75% of pharmaceuticals that are put on the positive list are reimbursed by compulsory insurance, while the remaining 25% are either reimbursed by voluntary complementary health insurance or are paid for out of pocket. Pharmaceuticals put on the intermediate list are reimbursed at the level of 25% of their cost. A negative drug list contains pharmaceutical products which are not reimbursable by compulsory health insurance. Children, youths and people with certain diseases are exempted from paying out of pocket and costs for their medication are fully covered by compulsory health insurance. In practice, co-payments for pharmaceuticals are mainly covered by VHI. During the pharmaceutical registration procedure, the pharmaceutical companies' representatives must apply the price in accordance with the average of three comparable countries' pharmaceutical prices.

Slovenia also introduced a referencing pricing system in 2003 to help control pharmaceutical costs and avoid the erosion of the benefits catalogue (for more information on pricing and reimbursement, see Subsection *Pharmaceuticals*, within Section 5.1 *Physical resources*).

Controls are in place on the volume of pharmaceuticals prescribed in Slovenia. Each physician has a prescribing number and the type and volume of the pharmaceuticals prescribed by each provider is recorded. In 1996 a bar-coding system was introduced to monitor the number of prescriptions. Medical doctors in Slovenia can prescribe courses of pharmaceuticals for 10 days, when treating acute diseases. With regard to chronic diseases or a medical status where long-term treatment of the same person is necessary, the smallest required quantity of pharmaceuticals can be prescribed for a maximum of 30 days. Exceptionally, pharmaceuticals can be prescribed for a period of up to three months in cases in which the indication for the use of the respective pharmaceutical product conforms with the relevant doctrine of that particular medical field. Physicians included in the public health system use so-called "green prescriptions" issued by the health insurance company when prescribing pharmaceuticals classified as part of the positive or the intermediate list. When prescribing pharmaceuticals on the negative list, so-called "white prescriptions" – issued by the IPH-RS – are used. Private medical doctors without a concession are only allowed to prescribe white prescriptions, which are payable by the patient, regardless of the classification of the specific pharmaceutical.

The HIIS is authorized to monitor the activities of the medical doctors with whom they have a contractual relationship. In case of irregularities with regard to financial operations or violation of patients' rights (including in terms of prescription of pharmaceuticals), the regulations on health insurance determine the appropriate penalties.

In Slovenia the ATC (Anatomical, Therapeutic, Chemical) pharmaceuticals classification system, recognized by WHO, has been used since 1996. Monitoring of pharmaceutical prescriptions started in 1974, when the automatic processing of prescriptions was launched. Since then several improvements have taken place. Doctors are informed periodically on the volume of pharmaceuticals they have prescribed.

In the period 1997–2007, the numbers of prescriptions as well as the prices for pharmaceuticals have been rising, despite the introduction of some measures to contain rising costs. The overall costs are not known precisely, because the consumption of pharmaceuticals in hospitals and those dispensed over the counter (that is, without a medical prescription) in pharmacies are not recorded at national level. Plans are in place to gather data on the use of pharmaceuticals in hospitals, as soon as adequate new legislation is in effect. At the time of writing,

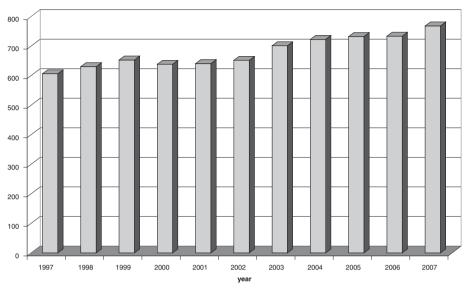


Fig. 6.2 Number of prescriptions per 100 inhabitants, 1997–2007

Source: IPH-RS 2009.

it is expected that several other measures aimed at stricter pharmaceutical price controls and rationalization of the usage of pharmaceuticals will be introduced in the near future.

Data on prescriptions are collected from the pharmacies. The IPH-RS has been obliged by law to publish data on pharmaceutical usage for national purposes. Green prescriptions (those that are predominantly reimbursed from the compulsory health insurance) formed 98% of all prescriptions in 2005 and 98% of the total value. The share of the prescriptions classified on the positive list was 74% in 2007, alongside 24% on the intermediate list in the same year. The remaining 2% of prescriptions were for those pharmaceuticals that are not reimbursed by any type of health insurance. The total number of prescriptions in 2007 was 15.5 million, which was 23% more than in 1995 (12.6 million). Defined daily doses (DDDs) have been used to determine the usage of pharmaceuticals.

Fig. 6.2 shows the number of prescriptions per 100 inhabitants between 1997 and 2007. This rate was higher in 2007 than in 1997, although it oscillated during that 10-year period.

Since the 1990s the HIIS has faced increasing pharmaceutical costs, partly as a result of increasing consumption levels and partly due to a rapid and uncontrolled increase in the price of pharmaceuticals. In 1995 the Government

intervened under special legislation to control pharmaceutical prices in the wholesale and retail sectors by taking over the regulation of pricing itself. As a result, the increase in prices for pharmaceuticals slowed substantially. According to the MIMP system, only the pharmaceuticals with prices below the value set by the HIIS are reimbursed; more expensive pharmaceuticals with the same bioequivalence must be – except in special cases – co-paid by the patient.

In the period from 1997 to 2007 the average price of the pharmaceuticals on the positive list increased less than the average price of those from the intermediate list.

Fig. 6.3 represents the costs of prescriptions per capita from 1997 to 2007. The graph shows two periods of costs per prescription – the first period, in which the costs were rising sharply and then, gradually, the slowing down of the growth and even a slight decline in 2007 compared to 2006.

The difference in the number of prescriptions issued in 2007 for patients belonging to different age and sex groups is shown in Fig. 6.4. As expected from the epidemiological data and health services utilization patterns, the number of prescriptions is highest in older patient groups, but the youngest age group also accounts for a significant share of the prescriptions.

In 2007 the shares of the number of prescriptions relating to pharmaceuticals from different first-level ATC groups were as follows: cardiovascular system pharmaceutical group, 25.4%; nervous system-related pharmaceuticals, 18.1%; alimentary tract and metabolism pharmaceutical group, 10.6%; anti-infective pharmaceuticals for systemic use, 8.8%; musculoskeletal system-related pharmaceuticals, 8.6%; respiratory system pharmaceutical group, 6.4%. Other pharmaceutical groups represented smaller shares of the total number of prescriptions in 2007 (IPH-RS 2009).

The shares of the individual ATC pharmaceutical groups according to the number of the DDDs prescribed to 1000 inhabitants per day in 2007 differ considerably from the shares of the number of prescriptions mentioned earlier. Aside from pharmaceuticals for the cardiovascular system (46%), nervous system (10%), alimentary tract and metabolism (9.8%), musculoskeletal system (5.7%), respiratory system (5.2%) and anti-infectives for systemic use (1.8%), other pharmaceutical groups also prescribed included those for genitor-urinary system and sex hormones (8.7%), blood and blood forming organs (6%) and dermatologicals (3.9%) (IPH-RS 2009).

The introduction of the electronic health insurance card will result in more (and more reliable) patient-level information on the (volume of) dispensed pharmaceuticals, as well as on differences in medical doctors' prescribing behaviour, resulting in an advanced level of pharmaceutical safety for patients.

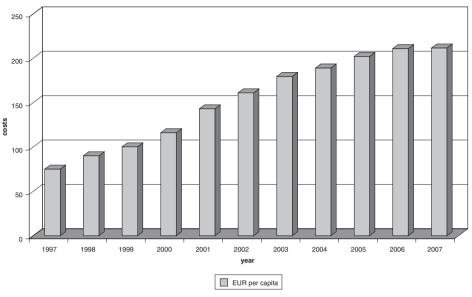


Fig. 6.3 Cost of prescriptions per capita per year, 1997-2007

Source: IPH-RS 2009.

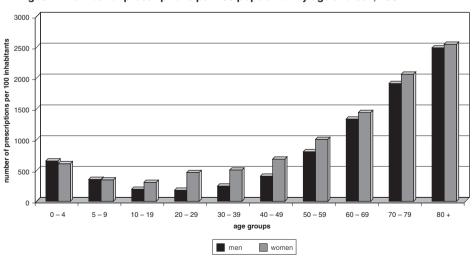


Fig. 6.4 Number of prescriptions per 100 population by age and sex, 2007

Source: IPH-RS 2009.

Progress has also been made towards enhancing the education of medical doctors in terms of pharmaceuticals. The Central Drugs Database provides medical doctors with information on pharmaceutical codes, registered names, non-proprietary names, ingredients, indications, side-effects, doses, prices, and so on, and will be upgraded further in future. Together with the Ministry of Health, the Pharmaceutical Chamber and the Medical Chamber, the HIIS is preparing comprehensive and easily accessible information, through public appearances on radio or television, as well as written communication (leaflets, and so on) regarding proper use of pharmaceuticals and harmful consequences of their use without professional medical advice (for further information on this issue see Section 7.2 Future developments).

### 6.7 Rehabilitation/intermediate care

Rehabilitation is provided at all three levels of health care, that is, the primary, secondary and tertiary levels. Rehabilitation can be generally divided into three types: medical, professional and social. Rehabilitative teams are composed differently at the different levels. The basic composition of a team is as follows: a specialist in physical and rehabilitative medicine, a team leader, a physiotherapist, an occupational therapist, a logotherapist, a clinical psychologist and a social worker.

Rehabilitation at the primary care level is provided through the country's physiotherapeutic services, which are coordinated and led by specialists in physical and rehabilitative medicine. The provision of physiotherapy in Slovenia is organized in primary health care centres or in private practices, where physiotherapists work as private health workers with a concession. Community care plays an important role in rehabilitation at the primary care level, where physiotherapists are included in home care and in occupational care.

Rehabilitation at the secondary care level includes, above all, programmes of medical rehabilitation provided in hospitals, spas or special rehabilitation centres. In hospitals, departments for physical medicine and rehabilitation encompass the whole range of rehabilitative care at the hospital secondary level. These include methods of early rehabilitation before, and immediately after surgical interventions, injuries, diseases and other changes in heath status. The majority of hospital departments for physical medicine and rehabilitation do not have their own beds, but treat patients from all other departments. Rehabilitation in spas is set up with a view to striving to enable the injured and sick individuals' integration into their normal life. Rehabilitation at the secondary care level is also provided in special hospitals, such as orthopaedic hospitals, children's special hospitals and specific institutions for people with special needs. In hospitals and

other health care institutions, rehabilitation constitutes an integral part of the health programme at all levels, both, for professional and social reintegration.

At the tertiary care level, comprehensive rehabilitation is provided in clinical institutions, with highly specialized rehabilitative teams, modern diagnostic and therapeutic devices and hospital beds. Patients are referred to these specialized institutions from the secondary care level for further treatment or when tertiary-level, top-specialist medical treatment is needed. Importantly, special medical devices, which are not provided at the secondary care level, are prescribed and administered at this level. Institutes at the tertiary level enable scientific and research work in the field of rehabilitation.

Generally, rehabilitation institutions are concentrated in bigger cities and spas, which poses problems in terms of access for people from rural areas.

In Slovenia, intermediate care is underdeveloped for most types of diseases. Once discharged from hospital, there are few options available for disabled individuals: one option is receiving point-of-service care at primary care institutions; otherwise, social assistance can be provided at home, financed by social care. However, such services are not provided on a full-time basis and are mainly provided in cities. The lack of services for intermediate care in Slovenia is a problem, particularly for senior citizens who have undergone hip replacements, for example.

## 6.8 Long-term care

Slovenia does not have a uniform system of long-term care for the elderly, chronically ill, the disabled and other individuals with special needs, requiring partial or full help in performing the basic activities of life and other daily chores. However, various services and benefits are provided within the scope of the existing social protection systems (that is, health, social security, pension and disability insurance) (Ministry of Labour, Family and Social Affairs 2006).

Long-term care is provided in different ways, as detailed here.

- Part of these services is provided in the form of institutional health care, as
  non-acute hospitalization treatment comprising mainly intermediate care,
  provided at nursing departments, and as prolonged hospitalization. At the
  primary level, long-term care is provided within the scope of community
  nursing care and home health care.
- The remainder of these services is provided within the scope of the social security system. Examples include daily (and full-day) forms of institutional protection, (social) domestic help services, the right to home care assistance,

- care within sheltered housing and various social protection programmes including personal assistance for disabled people.
- Individuals who were found to be in need of assistance from others can be awarded cash benefits to be used for informal forms of help or to (co-)pay for the aforementioned services. Cash benefits for long-term care limited to beneficiaries of old-age and disability pensions, beneficiaries of cash social assistance, individuals who are unemployed due to extreme disability, people disabled by war and war veterans.

The above-mentioned services and benefits are partly financed from taxes (from national and municipal budgets), and partly from social security contributions (provided from compulsory health insurance and compulsory pension and disability insurance). Social security services are covered from public funds only if the user or her or his relatives are unable to pay on their behalf.

The following characteristics of the current organization of long-term care are either barriers to access to services or reduce their quality:

- the provided services and benefits are not integrated into a uniform system;
- in practice, due to the lack of experts and information, the coordination between services providing long-term care could be improved;
- services in living environments (that is, home care) are still relatively underdeveloped, which results in additional pressure on (costly) hospitalizations and the expansion of institutional forms of care, which in some cases translates into (in)equity problems (that is, inaccessibility of long-term care on financial grounds for underprivileged individuals);
- beneficiaries, who remain in their home environment are disadvantaged compared to those who receive institutional care, since the former are not provided with integrated health and social care;
- insufficient supervision of and the passive role of the user (or the user's family);
- in local environments, the transitional help (such as day centres, transitional accommodation and domestic help), is insufficient in order to enable the user to continue living in their home environment.

In 2003, 32 978 individuals over than 60 years of age benefited from health visiting services and home care, which represents 83.1% of people who received health visits for the first time. Existing capacities available in the health and social security system do not cover actual needs. Despite the fact that health and social services are provided to 29 000 people per year on average, the waiting periods for admission into institutional care are still long (up to 12 months).

### Improving the accessibility of long-term care services

In order to close the gap between the demand for and the actual capacities of long-term care within the public health and social security networks, steps have been taken on two levels to increase long-term care capacities.

- 1. In March 2006 the National Assembly adopted the Resolution on the National Social Protection Programme (NSPP) 2006–2010, which sets out several goals to increase provision of long-term care, including: increasing provision of domestic help and mobile help services for beneficiaries in their home environment; increasing capacities of institutional care services for elderly people; and increasing care capacities in sheltered housing for the elderly. Under this programme, priority and additional investments in the provision of social security services are given to those regions of the country in which the development of service provision, or accessibility of services by users, are below the national average.
- 2. Within the annual agreement between service providers and purchasers of health services, the following goals have been set: supplementing the community nursing care network; improving the coordination of long-term care provision (in relation to the regional and local coordination bodies), including ensuring users have easy and fast access to services; changing the structure of health visiting teams; and establishing non-acute hospitalization departments as an intermediate form of treatment in all hospitals.

Preventive activities are expected to reduce costs and the extent of long-term care services needed. Therefore, plans for public media and prevention programmes for pensioners' societies are being developed to promote – amongst others – encouraging healthy lifestyles, breaking harmful habits, engaging in physical activities, involving elderly people in problem-solving processes, and encouraging suitable social contacts.

To tackle the long-term care elements within the social security system, national quality standards in line with the NSPP goals have been introduced, including the model of prompt evaluation of providers and evaluation of providers' work according to excellence model criteria. The implementation of the latter goal is in progress, with some providers of institutional care joining the European project "E-Qualin".

For information regarding the Long-term Care and Long-term Care Insurance Act Proposal, see Section 7.2 *Future developments*.

### 6.9 Palliative care

Palliative care is defined as an active and integral source of help for patients with a progressive incurable disease and their families during the course of the disease and throughout the mourning process. Its purpose is to improve the quality of life of patients and their families by preventing and alleviating suffering caused by incurable diseases. In addition to physical pain, suffering also includes psychosocial problems and spiritual distress. Palliative care ensures that all currently valid ethical and legal norms are respected (for example, human and patients' rights) (Ministry of Health 2007b). In Slovenia, palliative care is still in its initial developmental stages and is maturing to become an urgent and indispensable integral part of health care. However, palliative care is still a fairly unknown discipline; its activities are not formally defined and organized, and the approaches used at the time of writing are somewhat non-systematic.

According to the EAPC Task Force on the Development of Palliative Care in Europe (EAPC 2006), the number of palliative care experts willing to work in palliative care as providers and teachers is insufficient. Furthermore, the Task Force discovered a lack of well-established financing and classification of palliative care standards at the national level, and sees room for improvement in teamwork and collaboration in multidisciplinary teams. The focus of palliative care planning is more on institutions, and then on home care, at the time of writing, and GPs' prescription practice for effective pain control is deemed to be insufficient. Prejudices regarding the use of narcotics are common amongst physicians, patients and families in Slovenia. Moreover, there is no specialist accreditation for palliative care professionals in the country as of 2008 (EAPC 2006).

However, regular education on various topics related to palliative care has been organized and has become part of the curriculum for family medicine, public health and oncology offered by the Medical Faculty in Ljubljana. Courses and seminars are also organized for health care professionals of all disciplines involved in the emergence of palliative care in Slovenia. Two experiential weekend workshops on palliative care communication have been specially developed and health care professionals, particularly physicians, are often sent to study palliative care in Austria, Sweden, the United Kingdom and Poland (EAPC 2006).

Palliative care is provided by the Palliative Care Unit at the University Clinic for Respiratory and Allergic Diseases Golnik (four beds) and by the hospices in Ljubljana, Maribor and Celje (the latter only on an outpatient basis), which are run by an NGO. There is a hospital palliative care team in Golnik and one in the Institute of Oncology in Ljubljana. In the latter, 20–30 hospital beds are used for

palliative care patients in various departments of the Institute. In addition, there are 12 outpatient pain clinics in acute hospitals in Slovenia (EAPC 2006).

No official structures exist for paediatric palliative care in Slovenia. However, the majority of children with palliative care needs are cared for at the oncology department of the relevant paediatric clinic, and in the intensive care unit at the University Clinical Centre. There are no paediatric home care teams (EAPC 2006).

Bereavement services are provided in different hospices in the country by both professional teams and support groups; there is also a traditional children's group bereavement holiday every summer. Bereavement counselling is available at the University Clinic for Respiratory and Allergic Diseases Golnik, the Institute of Oncology, and the psychiatric, paediatric and gynaecology clinics. Throughout Slovenia, bereavement support groups are organized by social workers at the Centres for Social Care.

Philanthropic NGOs also have support groups in several cities throughout Slovenia (EAPC 2006).

Along with many other countries, Slovenia is bound by a number of palliative care-related recommendations implemented by the Council of Europe and WHO. The necessity to develop palliative care is also a consequence of demographic trends and the rise of the number of patients with chronic conditions. Against this background, the challenges and activities detailed here are of particular relevance (Ministry of Health 2007b).

- A national programme on the development of palliative care has already been drawn up. Its main policies are based on a systematic interdisciplinary approach, which will be ensured by general and specialist palliative care teams and the stimulation of patients and their families to participate actively in the treatment whilst respecting the patients' rights and autonomy. The suggested strategy enables patients to live and die at home more than is the case at the time of writing.
- The Health Services Act (1992) should include all palliative care activities, thus providing the legal basis for the implementation and development of palliative care programmes. Such improvement would ensure the equality of palliative care within the health care system as well as sufficient financing of the programmes.
- Educational programmes in palliative care are being implemented in underand postgraduate studies in order to develop palliative care professionals who will be able to educate experts in palliative care and offer professional support to palliative care teams.
- The practice of prescribing opioids is inappropriate, despite well-organized pain management services. Guidelines on pain control are to be used

more frequently (on a daily basis). Appropriate prescribing of opioids by health workers is intended to decrease the fear of patients and their families of overdosing.

Palliative care is an inalienable element of the human right to health protection. This is why the Ministry of Health adopted the above-mentioned policy, which will enable access to palliative care for everyone who needs or desires it. This implementation of palliative care principles will need to be adjusted to the respective contexts in which they are applied. The *Proposal of the national programme of palliative care in the Republic of Slovenia* (Ministry of Health 2007b) is the basis for the implementation of integrally organized palliative care throughout Slovenia, and this requires a legal basis, financial means, development of a palliative care network and adequately educated providers who are specialists in palliative care.

### 6.10 Mental health care

### Delivery of mental health care

According to the Ministry of Health (Ministry of Health 2008), mental health care in Slovenia was provided by six psychiatric hospitals in 2008. These are located in Ljubljana (University Psychiatric Hospital), Maribor, Vojnik, Begunje, Ormož and Idrija. Other residential facilities for people with mental health problems can be classified as facilities for adults with special needs (5 facilities), homes for elderly (the number is still growing) and mixed facilities, that is, homes for elderly people and for adults with special needs (7 facilities). People with mental health problems can also live in special communities, which can take the form of supported living or sharing a flat/house with others.

The number of beds in psychiatric hospitals is slowly decreasing, as can be seen in Table 6.1.

However, it is worth noting that the number of psychiatric care inpatient episodes has slightly increased, as Table 6.2 shows. This may be due both to an increased number of admissions and decreased lengths of stay. In addition, the "revolving door" phenomenon is sometimes seen. The number of long-stay patients (staying for more than one year in psychiatric care) has decreased significantly.

The above-mentioned five facilities for adults with special needs provide services for patients with the following main diagnoses: mental disorders (34%), dementia (10%), chronic irreversible alcohol-related disorders (7%), moderate

Table 6.1	Number of beds in	psychiatric facilities,	1990-2007 (	selected v	ears)

Year	1990	1995	2000	2005	2006	2007
Number of psychiatric beds	1614	1594	1525	1472	1430	1369
Number of psychiatric beds	90.9	90.0	76.6	70.6	71 2	67.0
(per 100 000)	80.8	80.2	76.6	73.6	/1.2	67.8

Source: WHO Regional Office for Europe 2009b.

Table 6.2 Admissions to psychiatric facilities, 1990–2006 (selected years)

	1990	1995	2000	2005	2006
Hospital discharges, mental and behavioural disorders (per 100 000)	548.8	518.8	559.2	541.9	557.8
Inpatient episodes	10 966	10 311	11 301	*11 239	n/a
Long-stay patients (365+ days) (per 100 000)	4.8	5.0	4.6	3.8	2.5

Sources: WHO Regional Office for Europe 2008; IPH-RS 2006b, Statistical Office of the Republic of Slovenia 2006b.

Notes: \* 2003; n/a: Not available.

learning disability (10%), moderately severe and severe learning disability (4%), moderately severe and severe learning disability with co-morbidity (17%), or several mental health problems at the same time (14%). In the same year, 2003, the seven above-mentioned mixed residential institutions for adults with special needs and homes for the elderly provided services for patients with the following diagnoses: mental disorders (28%), dementia (25%), chronic irreversible alcohol-related disorders (10%), moderate learning disability (12%), moderately severe and severe learning disability (3%), moderately severe and severe learning disability with co-morbidity (3%) and other mental health problems (Ministry of Labour, Family and Social Affairs 2004).

No special assessment studies exist on availability and access to mental care in Slovenia. However, in some regions there are longer waiting lists for outpatient care as compared to other types of care, and there are longer waiting lists for psychotherapy. Outpatient care is not adequate in some regions; however, quality of services in general is considered to be "fair", especially due to availability of modern psycho-pharmacotherapy, which is covered by the compulsory health insurance system. There are no adequate community services in Slovenia.

Due to lack of a legal basis, which is a precondition for any national strategy or programme, for a long time there was no national programme on mental health in Slovenia. However, the Mental Health Act was adopted in 2008 and the National Mental Health Plan is under preparation. The latter is the first plan containing relevant figures regarding capacities and funding. One strategy is called "Developing and introducing new models of community care". All well-known community care services are mentioned. For example, community care will be provided for one quarter of residents (those who were admitted before 2006) in facilities for adults with special needs (Ministry of Labour, Family and Social Affairs 2005).

Most facilities for adults with special needs have changed their policies from a highly institutionalized setting towards more independent living for their residents (although by 2008 there was no initiative under way to close down psychiatric hospitals completely). For example, the largest of them (Zavod Hrastovec) has closed down one of their units and moved patients to other forms of care; mostly supported homes and other forms of supported living. Other institutions followed this example by establishing other forms of supported living. However, for predominantly financial reasons there is still undersupply of facilities for people with mental health problems in need of supported living.

A psychiatrist may admit a patient to a psychiatric hospital involuntarily. However, according to the Mental Health Act of 2008, a final court decision on any involuntary placement and treatment has to be made within 24 hours of admission. Available data show that the rate of involuntary admissions decreased slightly from 22.6% in 1998 to 20.1% in 2005 (Novak 2005; Tavčar, Pregelj & Kocmur 2005).

### 6.11 Dental care

Dental care in Slovenia is traditionally part of the basic benefits package, albeit with significant co-payments, which were introduced in the 1970s. Therefore, patients have been used to having to pay out of pocket for most dental services, regardless of the provider type or ownership. Following this approach, dental care is also facing sustainability problems with regard to services under the public financing scheme. In part, this is a consequence of an outdated list of services, established in the 1980s (the so-called "Green Book"), which in its core form still serves as the basis for the definition of the (basic) services rendered to patients. However, in all general surveys the right to dental care is seen as being equally as important as other types of health care, which indicates that the population's expectations in terms of solidarity on this issue are still high.

The basic benefits package includes all dental services for children up to the age of 19 years, without co-payment. For the adult population, dental services require co-payments in all cases, except in rare emergency cases (for example, emergency treatment of acute pain or emergency tooth extraction). The co-payments range in volume from 10% to 60% depending on the relevant definition in the Health Care and Health Insurance Act. The framework provides ample opportunity for offering additional services and for the establishment of private practice. In fact, the highest share of purely private providers (not working according to a contract with the HIIS) is visible in dental services, reaching approximately 15% of all active dentists. In addition, more than 40% are also private providers but working according to a contract with the HIIS. This means that more than half (almost 60%) of all dental care providers are private practitioners. Private practice works as a supplement to the publicly provided services in practice and – especially for those dentists working for OOP payers – also provides commercial dental services for foreign patients. This is also evidenced by the concentrations of private dentists along the country's borders with Italy and Austria.

Dentistry is organized as a service that is principally available at the primary care level, whether in a public institution setting (such as in a primary health care centre) or with a private provider (working with or without a concession). When using dental services offered by a provider working under a contract with the HIIS, the patient is required to sign up with a particular dentist and in principle the same rules apply for the patient when using a personal physician or primary care paediatrician. This means that a patient listed with a particular selected dentist is required to remain with her or him for at least one year, unless there are other circumstances preventing this. Contrary to the situation with personal physicians, dentists are not (yet) paid by capitation but – according to the predetermined budget – by means of an estimated mix of services. In practice this causes various problems, given that the more costly services are those that have less allocation within the budget. As a consequence, and in reaction to the practices of dentists, the HIIS introduced statutory limits on waiting times, which are negotiated between a particular provider and the HIIS. Still, in practice, close to the end of the calendar year the more expensive services, such as prosthetics, are difficult to obtain and are usually shifted to the next year.

As mentioned earlier, private providers, who do not have a concession and are therefore not contracted by the HIIS, work as private entrepreneurs. In the absence of commercial insurance for dental care, they operate on the basis of an OOP payment principle. Their tariffs vary as they are free to form their own price lists. The vast majority of these practices are located in the bigger cities, such as Ljubljana, Maribor, Celje and Koper, in the areas that border Italy and Austria and in some tourist resorts, such as Portorož and Bled. These practices

are often visited by foreigners, some of them as casual patients; however, most often they are true dental care "tourists", who travel from the neighbouring regions to benefit from the lower prices in these practices.

It is likely that some key decisions regarding dentistry in Slovenia will be made in the future. One option is to strengthen preventive services for different population groups, not only children. Another is to clearly define the insurance package provided by the compulsory health insurance and to limit the effects of OOP expenditure in dental care. Another option would be to follow the example of some other countries, which would mean excluding dental care for adults from the compulsory health insurance system, thus providing more room for VHI. In such a case, dental care for children and youths and preventive services would still remain part of the compulsory health insurance package.

# 6.12 Alternative/complementary medicine

Complementary medicine includes acupuncture, manual therapy, magnetic therapy and massage. Alternative medicine methods include herbal medicine, homeopathy, music therapy, body—mind medicine (meditation), aromatherapy, reflexotherapy and bioenergetic healing.

In 2007 the Alternative Medicine Act (Official Gazette of the Republic of Slovenia 94/07) was adopted, which separates biomedicine and Complementary and Alternative Medicine (CAM) into two distinct areas with no formal overlap. The biggest problem in terms of CAM is the lack of evidence-based data. Before 2007, most CAM was executed in a non-regulated environment and was not monitored by any professional surveillance. Alternative practitioners bring their diplomas to Slovenia from all over the world (Russia, Italy, China, India, Myanmar, Sri Lanka, and so on) in order to show their professional competency. However, as there is no formal education of CAM in Slovenia, their diplomas cannot be accredited and do not provide the formal right to practise. Most alternative practitioners in Slovenia are registered as sole proprietors or do not have any kind of registration.

However, CAM methods acknowledged and reimbursed by the HIIS include acupuncture, manual medicine and spa treatment (balneology) as supplements to rehabilitation programmes. All these methods can be provided by a medical doctor and can be performed in medical institutions.

According to the Alternative Medicine Act, individuals who wish to practise these types of CAM must obtain at least secondary school (high school)-level education. A university programme for obtaining higher education in CAM according to the Bologna process is under preparation. In this programme, the

first three years are to be dedicated to general CAM. Two years of additional education will be required in order to obtain a valid licence to practise any specialty within CAM (such as chiropractics, homeopathy, herbal medicine, and so on).

# 6.13 Health care for specific populations

There are inequalities in health in Slovenia between the poor and those sections of the population that are better off. Health inequalities have been defined as differences in several aspects of health (mortality, morbidity, lifestyle, access to health care, and so on) across subgroups of the population, which may be based on biological, social, economic or geographical characteristics. These differences may refer to both interregional as intraregional health inequalities.

Interregional health inequalities refer to differences in values of health status indicators for the populations in different regions of the country. The Pomurje region is the least economically developed region of Slovenia and is also marked by poor health indicators. Its population can be considered as less healthy when compared to the population in central Slovenia. Examples of groups at risk of low health status are less-educated people, unemployed individuals, the elderly, and ethnic minorities.

Reducing health inequalities between different regions in Slovenia and between different social and ethnic groups was set up as the priority task of the National Health Plan "Health for all by 2004" (Ministry of Health 2000). In 2001 the Ministry of Health launched the pilot project "Investment in Health and Development in Pomurje – Mura". The project tackled poor health through health promotion, involving sectors such as agriculture, tourism, employment, environment, culture and education. It tackled health inequalities by:

- identifying national or regional health inequality targets;
- networking for the integration of health determinants in other policy areas;
- supporting community development approaches;
- increasing access to health care and preventive services;
- developing indicators and health monitoring systems;
- carrying out health impact assessments;
- evaluating interventions;
- disseminating effective practices and methods.

In order to effectively reduce inequalities in health, initiatives such as the "Investment in Health and Development in Pomurje – Mura" project should be integrated within a broader strategy. To that effect, a strategic plan is required, which (a) identifies the main aims and objectives for the Government and other stakeholders to contribute to reducing health inequalities, and (b) provides strategies to reach these objectives and indicators to monitor progress (Institute of Public Health Murska Sobota 2004).

In 2004 a sector for vulnerable groups was established at the Ministry of Health. This sector works according to an EU Recommendation of the Committee of Ministers (to Member States on the adaptation of health care services to the special demands of marginalized people). The sector is responsible – amongst others – for the coordination and support of NGOs that support vulnerable groups on health issues; monitoring and coordination of the implementation of international classifications of disability and health; preparation of legislation; and development of strategies and national programmes.

Moreover, the sector for vulnerable groups provides expertise and assistance to NGOs in the preparation and implementation of their programmes and participates in international programmes. In 2006 the National Council made a decision to ensure appropriate programmes for protection and strengthening of health and reducing differences in health across regions and population groups. The programmes needed in terms of protection and strengthening of health include nutritional advice, regular physical activity, cessation of smoking, reduction of alcohol consumption, sexual health education, reduction of psychosocial stress and depression in children and adolescents, and so on. In the field of health care for vulnerable groups, various organizations carry out prevention programmes, health education, strengthening of health, professional training and publishing.

# 7 Principal health care reforms

## 7.1 Analysis of recent reforms

**B** ox 7.1 lists major health care reforms in Slovenia since 2002. For health care-related reforms before 2002, refer to the previous Health Systems in Transition (HiT) profile on Slovenia (Albreht 2002).

In 2002 the Ministry of Health prepared a health care reform. For this purpose it developed a "White Paper" (Keber et al. 2003), a document that indicated which areas needed reforming and the kind of reforms that would be needed. Furthermore, it listed ideas and suggestions related to health care reforms. There were many ideas in the document on how to upgrade or amend certain legal provisions. The main ideas for the suggested reforms included:

- fairness in allocating funds for health care;
- distributing the collected funds according to the needs of the citizens;
- improving access to health care services;
- developing a TQM system;
- improving effectiveness in regulating and managing the system;
- strengthening public health care.

A proposal for the realization of each aim was developed, which also assessed the impact of the changes and benefits for end users, health care service providers and for the primary payer (the HIIS). A list of changes was prepared, including a new restructure of the whole health care system. It targeted in particular the health insurance system, the management of public health care provision and the quality of their work. This meant that the current public health care institutions would be transformed into parastatal companies, whereby the former councils of these institutions would be transformed into to supervisory bodies similar to those of private companies.

#### Box 7.1 Major health care-related acts, laws and resolutions since 2002

### 2003 Act Restricting the Use of Alcohol

The Act defines measures for the restriction of alcohol consumption and aims to prevent harmful consequences of alcohol misuse.

#### 2004 Health Services Act

The Act defines more clearly the process of granting concessions for health care providers, along with the limitations and validity of the concessions, and introduces the concept of free specialists.

# 2005 Law on Changes and Amendments to the Health Care and Health Insurance Act

The Law aims to put an end to "cream-skimming", which started after general insurance companies entered the VHI market. The main objective of this new concept is to equalize the financial risks that citizens incur when opting for voluntary supplementary health insurance (requiring co-payment).

### 2007 Smoking Prevention Act

The Act introduces a total ban on smoking in public places.

### 2007 Complementary and Alternative Medicine Act

The Act separates "official" biomedicine and complementary and alternative medicine (CAM) into two distinct areas with no formal overlap. Furthermore, the Act establishes a public authority, the Alternative Medicine Chamber, responsible for licensing CAM professionals and maintaining their register.

### 2008 Patients' Rights Act

The Act identifies categories of patient rights and the means of their execution.

#### 2008 Mental Health Act

Amongst others, the Act defines the legal basis for the National Programme on Mental Health, the establishment of a network of mental health providers and the rights of patients in cases such as involuntary treatment.

### 2008 Resolution of the National Health Plan 2008-2013

The Resolution is the strategic planning document for the further development of the health sector in the period 2008–2013. Amongst others, it addresses the issues of health care expenditure, health workforce planning, privatization of health care services and demographic change.

### 2008 Amendment to the Health Care and Health Insurance Act

The Act mainly stipulates exemptions from co-payments for low-income groups and introduces liability of income from various forms of contract work for contributions to compulsory health insurance.

Source: Authors' own compilation.

The financing mechanisms for health care services experienced extensive changes, especially in terms of payment for hospital services. The Ministry of Health introduced a DRG system for payments to hospitals, in order to arrange payments according to need. The Ministry placed special emphasis on increasing the quality of services. The proposed reforms also envisaged improved access to services by reducing waiting periods within the same framework of funds and resources.

Furthermore, the aforementioned White Paper placed particular emphasis on the providers of public health tasks and their activities. In this respect, the document merely provided a vision of possible future directions, which – after serious and extensive debate – were to be followed by amendments to the relevant respective acts and legal provisions.

The White Paper made a strong distinction between experts and the general public regarding some of its proposals, and discussions regarding its content lasted for a long time. There was a general acceptance in terms of the goals mentioned, but little agreement on how to achieve them. The proposed reform was based on the presumption that all the goals could be reached with the same amount of funds, using a reformed method of financing insurance, rationalization of resources and improved quality of work on the part of health care providers.

### An attempt to abolish complementary voluntary health insurance

The most contested issue arising from the above-mentioned White Paper was the proposal to abolish complementary VHI to cover co-payments. The discussions on this topic almost overshadowed all other proposals of the White Paper. The main areas of conflict were between the views of the general public and those of economists.

The Ministry of Health's standpoint was that complementary insurance was inappropriate and unfair. From this viewpoint, compulsory health insurance and complementary insurance are inseparable and for some income groups it may be not possible to receive services from compulsory insurance if they do not have complementary VHI, unless they pay the price difference. This was judged to be a barrier to accessing compulsory health insurance benefits for those who would not be able to pay the premium for complementary VHI. The fact is that complementary insurance in essence is not voluntary and prevents in particular those in lower income groups from accessing necessary health care services (see also Chapter 8 Assessment of the health system). Furthermore, the Ministry of Health considered complementary insurance as being unfair with regard to the premium level and in terms of the cumulative financial burden for individuals resulting from health-related insurance. The Ministry of Health demonstrated this by comparing the amount of contributions and premiums for complementary insurance paid by households with low incomes and those with high incomes. The Ministry established that those with lower incomes pay comparatively more for health insurance than those with higher incomes, which evidently would not be fair and would be contrary to the principle of equity. From the point of view of the Ministry of Health, both arguments were sufficient to propose the abolishment of complementary health insurance.

The proposal to abolish voluntary complementary insurance was intended to be realized by increasing the contribution rate and coverage for compulsory health insurance. The abolishment of complementary payments towards the costs of health care services would be substituted with a new contribution to compulsory health insurance and the revenue level of this additional contribution would amount to as much as the funds realized from the old complementary insurance. This would not constitute a new contribution rate, but rather an increase in contributions paid by both employees and other insured individuals, as well as by the employers. The increase would be approximately 0.6 % of gross pay. Some minor complementary payments would be preserved, for which an insured individual would pay privately. The idea was attractive for a large majority of the public, who were immediately prepared to support it.

However, the question of how to implement this idea was challenged especially by economists. They argued that the eventual transfer of private funds into the public funds (budget) is not only a simple mathematical operation but it is followed by some serious consequences for the entire public finances sector in Slovenia. The complementary insurance funds had already been reaching 1% of GDP. Thus, the public expenditure for social transfers would have to increase. The Ministry of Health argued that it would be possible to decrease this amount, since the administrative costs of VHI companies would be abolished with the proposed reform. Furthermore, it would no longer be necessary to ensure financial reserves, which insurance companies are obligated to calculate into their budgets. As a result, compulsory health insurance would increase by 0.6–0.7%.

The employers first opposed this system of public spending and contribution rates because they maintained that this would increase the price and costs of the labour force and, by doing so, reduce their competitiveness in foreign markets. Another line of argument, which opposed the abolishment of complementary insurance, was based on the idea that this concept would be in contrast to the trends witnessed elsewhere in Europe, where private contributions to health care financing are gradually increasing and where governments are gradually withdrawing from the principle of absolute solidarity. Some observers even judged the proposal as a regression to the previous system that existed before 1992.

The Government was susceptible to these arguments. The most important decision in terms of the rejection of the proposal to abolish voluntary complementary insurance was the Government's conclusion that by implementing the proposal the weak balance of public finances would be further destabilized and that it would increase public expenditure. Furthermore,

the Government came to the conclusion that a change in the contribution rate would increase the pressure of trade unions to increase gross pay, which would additionally have a disadvantageous effect on competitiveness and the possibilities for further economic development. Therefore, the Ministry of Finance – particularly taking into account the preparations for accession to the EU – opposed the proposed reform to abolish complementary health insurance. Since the majority of other proposals and goals from the White Paper would also result in increasing public spending, other reform activities were also halted. Little was implemented, in practice, from what was written in the White Paper.

# Clinical guidelines and directives and the introduction of the diagnosis-related groups system for hospital financing

Parallel to the proposed reforms in the White Paper, a special project was implemented in Slovenia from 1999–2000 to 2004, supported by a loan from the World Bank accompanying the Sector Management project. Many issues which were addressed in the White Paper were implemented within the framework of this project. This framework was very ambitious, as it set up goals regarding in particular the improvement of the management of the entire system, as well as the health care provider level. More specifically, it aimed at the reorganization of workflows, as well as simultaneously to improve treatment of patients and the quality of services.

One of the areas of activity concerned the preparation of clinical guidelines and protocols. Special workgroups and certain hospitals that participated on a voluntary basis in the project prepared pilot guidelines. Within this context it was of particular significance to raise the awareness of health care workers of the need to base decisions for treating individual conditions on professional protocols, which are supposed to be based on principles of evidence-based medicine. At the end of the project the Ministry of Health published a manual for clinical guidelines and protocols (Fras et al. 2003) and established a service unit to monitor and stimulate the increase in quality of health care services. However, due to a lack of personnel, this service is regarded as too weak to perform the extensive tasks in this area.

Another result of the World Bank project was the implementation of the DRG model for financing hospital services (see Subsection *Paying for health services*, within Section 3.6 *Payment mechanisms*). At the time of writing (early 2009), it is still too early for a substantial evaluation of the overall impact of the new model.

# Cancellation of Health Insurance Institute of Slovenia debts in preparation for accession to the Economic and Monetary Union (2004)

The financial situation of the HIIS was stable and balanced throughout the period from 1992 to 2000. There were minor deficits in 1994 and 1995, but these were covered by HIIS surpluses from 1992 and 1993 and through saving measures. However, the HIIS ran into debts during the period 2000–2004. As a result of increased wages for health care personnel, which the national Government agreed to during negotiations with trade unions, and also because of the introduction of VAT, the expenditure of the compulsory health insurance system increased considerably. As a consequence of the higher expenditure and the unchanged contribution rate for compulsory health insurance, the accumulated financial deficit of the HIIS increased year on year until 2004. In accordance with the national Government, the HIIS took out loans from the public treasury in the year 2004 in order to overcome the difficulties in liquidity and to assure uninterrupted payment for health care services.

This was an incentive for the management of the HIIS to adjust its ratio of expenditure to revenue through the adoption of a series of measures for managing the costs of medicines, medical devices and health care service programmes. Against this background it was problematic to simultaneously improve conditions for better access to health care services and to increase health care capacities and the working conditions of health care personnel in a manner giving rise to tangible results.

When the Slovene Government prepared for accession to the EMU and, hence, to convert the national currency (Tolar) to the Euro in 2006, it was required to fulfil accession criteria, particularly with regard to external and internal debts. The total deficit of the HIIS ranked as the third largest among other public funds, which at the end of 2004 amounted to €118.9 million or 7.1% of the total HIIS revenue generated that year (HIIS 2004; HIIS 2005a). As mentioned earlier, the HIIS took out loans from the public treasury in the year 2004 − in accordance with the national Government − in order to overcome the difficulties in liquidity and to assure uninterrupted payment for health care services.

As a consequence of this incident, the Government adopted a programme, which ruled out the future possibility of taking out loans to bolster the everyday running of the compulsory health insurance system. Therefore, the HIIS was forced to perform its future operations exclusively within the framework of its funds at its disposal, which consist of contributions from insured individuals for compulsory health insurance (Ministry of Finance 2004).

This solution – because of its compulsive character – provided a strong incentive for the management bodies of the HIIS, along with health care

providers, to operate within the financial framework of the usual HIIS revenue. As a result, the financial framework for further development of health insurance for the years that followed was redefined. This framework will be determined by the growth of GDP, employment and the economic development of the country as a whole. The implementation of this framework took place in 2005 and 2006. Since then, the HIIS has operated without running into deficit and has even accumulated moderate surpluses, which it intended to use to reduce waiting times for operations.

# Amendments to the acts on complementary health insurance (2005)

The situation illustrated in Subsection *Voluntary health insurance* (within Section 3.3 *Revenue collection/sources of funds*) regarding imbalances and cream-skimming in the VHI market which emerged in 2004 and 2005 resulted in the adoption of the Law on Changes and Amendments to the Health Care and Health Insurance Amendment Act in 2005 (Official Gazette of the Republic of Slovenia 100/05). The notion that complementary VHI is inseparably linked to compulsory health insurance led to the decision that complementary VHI was to be defined under the Act as a public government interest. As a result the Government took on special tasks and competencies for regulating VHI.

By means of the above-mentioned amendment, the national Government also acquired the competency formerly held by the Insurance Supervision Agency to supervise the operations of insurance companies that offer this type of insurance. Amongst other competencies, the Government is entitled to grant and/or withdraw from insurance companies the permission to offer VHI within the Slovenian insurance market. Furthermore, the Ministry of Health organizes and supervises the risk-equalization scheme (see Section 3.4 *Pooling of Funds* for more information on the VHI risk-equalization scheme). Moreover, the Act states that each insurance company is obligated to accept any client who wishes to be insured, regardless of her or his age, sex or health status. The premiums are required to be equal for all who take out voluntary complementary health insurance.

The Act also limits private health insurance companies' disbursement of revenue surpluses (dividends) to a maximum of 50% of the accumulated surplus, while the other 50% has to be put back into the complementary insurance fund in order to facilitate reducing the premiums. Moreover, each insurance company is obligated to manage their revenue and expenditure from complementary health insurance separately from other insurance businesses, and is not allowed to offer voluntary complementary health insurance to clients in combination with other types of VHI.

The Act levelled the playing field for insurance companies planning to enter the health insurance market. Their business results no longer depend on their risk structure but rather, for the most part, on their ability to carry out rational business operations. The introduction of this type of re-allocation payments assured clients essentially the same insurance policy terms and conditions with all insurance companies. The first re-allocation of funds between health insurance companies took place in 2007.

Further amendments to the provisions of the Health Care and Health Insurance Act regulating complementary health insurance were introduced in 2007. These were related to the restructuring of the Vzajemna mutual insurance company into a stockholding company. However, the general public were opposed to this decision. Just as Vzajemna was about to complete its restructuring activities to become a stockholding company, the Ministry of Health submitted an act proposal on "Reorganization of the Status of Vzajemna health insurance", to regulate the standards and conditions for such actions (Official Gazette of the Republic of Slovenia 60/2007). The act proposal consisted of a procedure, which would define the insured individuals as members and owners of the mutual insurance company. Hence, the responsibility to decide on the alteration of the status of Vzajemna would lie with its insured members. The underlying message of the act proposal, which was adopted by Parliament in April 2007, was that the Government wishes to preserve the only mutual insurance company in order to assure social security for its people.

### The Complementary and Alternative Medicine Act (2007)

The Complementary and Alternative Medicine Act was adopted in 2007 (Official Gazette of the Republic of Slovenia 94/07) and stipulates the status and role of CAM practitioners, although CAM services are still not covered by compulsory health insurance. Previously, however, CAM was not legally defined at all. The Act introduced requirements relating to how to qualify to become a CAM practitioner, including the content and coverage of activities, and it clarified responsibilities vis-à-vis standard medicine providers and public health care services.

This Act was heavily debated between alternative medicine practitioners and representatives of conventional medicine. The Medical Chamber represented the interests of evidence-based medicine (EbM) and called for the limited scope of CAM.

### Amendment to the Health Care and Health Insurance Act (2008)

The Amendment to the Health Care and Health Insurance Act has been one of the longest in preparation and was finally adopted by the Slovene Parliament in July 2008. The main amendments to this include exemptions from copayments for individuals with low incomes, increasing contribution rates for certain groups of individuals (such as tradesmen, farmers), as well as liability of income from various forms of contract work, for contributions to compulsory health insurance.

The Act is to limit the principle of solidarity for financing health care expenditure with regard to injuries of compulsorily insured individuals which occur either due to their engagement in extreme sports (such as extreme skiing, extreme climbing and hang-gliding), or due to alcohol consumption. The Act also aims to decrease compensation for a temporary leave of absence from work and limits compensation in case of sickness that exceeds one month. The country's trade unions were opposed to these proposals. The Act also introduces novelties regarding partnership negotiation procedures (see Section 3.5 *Purchasing and purchaser–provider relations*), which are supposed to cover the field of pharmaceuticals and medical devices. Further amendments are concerned with strengthening the role of the Ministry of Health and the national Government within the health care system, while limiting the competencies and autonomy of the HIIS.

### The Patient's Rights Act (2008)

The Patient's Rights Act, adopted by Parliament in 2008, aims at protecting the patient's integrity and clearly specifies procedures in the case of breaches of rights. A special feature of the Act is the patient's right to respect of her or his time, which provides the legal basis to intervene in the issue of waiting lists (Albreht 2007a). The Act is a result of a decade and a half of experience gained in this field. Public expectations have been high for quite some time, looking for a more decided step forward in this field. In addition, providers – including professional associations – clearly felt the need for the adoption of such an instrument. More specifically, the Act aims to: help patients to act according to their needs in cases when their rights are breached, in cases in which they face problems in using health care services, or in choosing their doctor or health care provider; assure the execution of basic human rights in health care; protect individuals who are incapable of making their own informed decisions; contribute to effective use and processing of patient data; and regulate issues regarding waiting lists.

# 7.2 Future developments

### National Health Care Plan 2008–2013 (2008)

After a long period of preparation, the "National Health Care Plan of Slovenia for the period from 2008–2013" (Ministry of Health 2007c) was finally adopted in July 2008. It is a strategic planning document, which is supposed to provide guidance for the development of health care delivery in Slovenia over the period 2008–2013. As detailed here, the plan (Albreht 2008b):

- deals with elements of the financial framework, which will determine health care expenditure from 2008 to 2013;
- describes the main public health problems and challenges to be addressed through a comprehensive approach based on public health methodologies;
- determines the pace of the development of primary health care and strengthens the present structure of health care delivery at the secondary care level;
- identifies the need to develop an IT infrastructure in health care in order to support the improvement of care and to help in better managing the process of patient care;
- reaffirms the EU's strategic principles in health care and presents a set of ethical guiding principles to be maintained at the national level;
- ensures the sustainability of the predominantly publicly financed health care;
- highlights the aim to improve the management of all aspects of patient care;
- sets out plans to ensure a prompt termination of existing national investments in health care and secure an easy transfer of the key tasks to the regional level.

The opinions and viewpoints regarding this document are particularly heterogeneous. One of these viewpoints is that the plan does not contain a development strategy and does not show how the public health care services network is supposed to develop. Furthermore, the document is criticized because of its vagueness and lack of concrete responses to issues such as future developments in terms of (privatization of) health care centres, health care services networks, and the ageing population.

### **Long-term Care and Long-term Care Insurance Act Proposal**

The proposal for a Long-term Care and Long-term Care Insurance Act has been under preparation since 2005. It is based on the notion that the Slovene population is ageing and that there are increasingly more people who need the help of

others when performing everyday activities. This group of the population is underserved at the time of writing. For some long-term care needs – in particular the most urgent needs – the health care services provide health care at home or extended treatment in hospitals, which is considered to be highly inefficient. Other needs are taken care of in nursing homes, in which case people must pay for the services themselves or their relatives must pay on their behalf, because compulsory health insurance only covers expenditure for health care services. In any case, resources for needs related to supporting people in performing everyday activities are considered to be scarce and discussion on long-term care organization and financing is underdeveloped. Therefore, the Ministry of Health is preparing a proposal for an act which aims at rearranging the basic principles of long-term care. Based on the proposal, a special type of compulsory insurance for long-term care would be introduced which would cover the entire population. It would be analogous to other branches of social insurance and financed by contributions. Simultaneously, a new administrative public body with its own budget would be established. The act proposal anticipates that the HIIS would carry out the professional and administrative tasks for this new legal body. The introduction of long-term care insurance was part of the coalition contract of the 2004–2008 ruling Government. However, the issue proved to be contentious with regard to how to finance coverage of the new insurance.

### **The Concessions Act Proposal**

The proposal defines and standardizes the procedures for granting concessions to health care workers. It clarifies the respective roles of the municipalities, the HIIS, the Medical Chamber and provider institutions with regard to decisions about concessions and the responsibilities between the party granting the concession and the one receiving it. The act proposal also outlines the introduction of the freelance doctor profession. The announcement of the act proposal triggered sharp responses from those who wish to retain the status quo in terms of the public health care provider situation in Slovenia. It is therefore anticipated that it will take a great deal of effort in order for it to be adopted.

In addition, the Contagious Diseases Act (1995), as well as the Health Services Act (2008), are under discussion at the time of writing, with future amendments in mind.

# 8 Assessment of the health system

# 8.1 General assessment of the Slovene health system

lovenia has a modern health care system, which is comparable to those of the economically developed countries of Europe. This statement can be supported by the status of the overall structure of the health system; the level of assured patient rights, and health safety and security; the health status of the population; and the organization of health care services, as well as the method and sources of financing the system and its management. The achievements in this area are the result of a long tradition of implementing public health care, the appropriateness of the health insurance system and the dedication of the people of Slovenia to the concept of solidarity in case of illness or injury. The Slovene health system has some particularities. These are the result of certain historical structures and reflect the different developmental paths of the country's health care and health care insurance systems. These particularities can be seen in the extent of voluntary complementary insurance and through the fact that the majority of specialized health care providers are still under public ownership. Furthermore, the Slovene health care system – as compared to other EU Member States - is marked by relatively limited health care capacity, as measured by human resources or number of hospital beds. Furthermore, Slovenia chose to operate one single compulsory health insurance institution, which implements a rational approach to the organization of insurance in the country.

# 8.2 Coverage of health care costs and access to health care services

Slovenia has a comprehensive universal health care system, which assures coverage for health care services for every citizen, to the amount defined by the Health Care and Health Insurance Act and other regulations. There are no differences in benefits between different social groups of the Slovene society. However, a very small group of people (approximately 30 000) who do not have citizenship or residence in Slovenia are not covered by compulsory health insurance. Free access to health care services at the primary level is assured to all citizens. However, access is limited at the secondary and tertiary levels, whereby patients are only guaranteed care on the basis of a referral issued by their personal physician. Limitations in terms of coverage by compulsory health insurance for expenditure on medicines are regulated by means of a positive list. The same applies for services that exceed certain regulated standards. These limitations apply to all insured individuals, without exception or other distinctions.

An important issue is the actual accessibility of health care services and the possibilities related to receiving benefits under the provisions of the abovementioned Act. Access to GPs and other doctors (paediatricians, gynaecologists) at the primary care level is almost universal, except in some remote rural areas, where there is occasionally a lack of doctors. Access to dental services for adults is more difficult because of a lack of dentists. This is also the only health care field with waiting lists at the primary care level in Slovenia and it is marked by extensive waiting periods ranging from one to three years.

All insured individuals are assured access to health care at the secondary care level in the case of an emergency or in the event that doctors decide that putting off the treatment would cause irreversible damage to the patient's health. Waiting lists and waiting periods exist, especially in the area of orthopaedics (hip and knee replacement), open heart surgery, coronary angiography and balloon dilation, for cataract and thyroid gland surgery, as well as for some more demanding diagnostic tests (for example, MRI scanning). Since this involves patients with chronic pain as well as elderly patients, these groups encounter waiting periods, which constitute a barrier to their access to health care services. It is interesting to note that supplemental insurance or even direct payments are offered for those procedures for which extensive waiting periods occur. Various measures, including increased funding for health care providers in areas in which waiting periods occur, have been adopted by the Ministry of Health and

the HIIS in order to abolish or reduce waiting periods. As a result, long waiting lists have been partially reduced but the problem is far from being solved. The data regarding these lists are based on approximations, as national registers on waiting lists have not yet been introduced, and no analysis has been carried out of the causes of waiting periods. The HIIS also attempts to regulate the issue of waiting periods within contracts with providers. At the time of writing, this approach has not produced the desired results thus far. Therefore, many issues in this area are still to be resolved by the Ministry of Health, the HIIS and the management of health service providers, especially hospitals.

There are various opinions as to why waiting periods are increasing. Health care providers claim that it is because of insufficient funds, while some hospitals claim that it is due to a lack of human resources, space and equipment. Each of these factors has an influence on access to health care services, but at the time of writing there is no concrete evidence in favour of any of them as the single root cause of long waiting periods. Among hospitals with fairly similar working conditions, the waiting periods are quite long in some, while in others they are negligible. Another important factor is the organization of work and the productivity of employees at individual health care provider institutions. This is connected to the enthusiasm and effectiveness of management and their influence on health care workers to achieve higher quality in their work and to take on a greater workload. As a result of these factors, there are variations in access to health care services at the secondary care level in different areas. In 2007 a web-based approach to finding a solution was developed and introduced at pilot stage, which should give an insight into the situation regarding waiting times for the most common diagnostic and therapeutic procedures (Albreht 2007b).

The ratios of invested funds at primary, secondary and tertiary care levels in Slovenia are comparable to those of the majority of other Member States in the EU. Moreover, the share of expenses for medicines and medical devices constituted 23.5 % of the total health care expenditure in 2005, which was approximately comparable to the EU15 level (Statistical Office Slovenia 2008a). In terms of funding, there are minor disparities between certain services, mainly resulting from differences in the levels of human resources available in certain areas (for example, anaesthesiologists and radiologists) and not from the decision on how to finance health care providers. Differences between regions are minor in terms of supply of primary health care services. However, at the secondary care level, is difficult to measure whether there is actually oversupply or undersupply of certain services because insured individuals do not only use the health services within their respective region but also make use of health services in other regions. The capacities of a given region are not only intended to be sufficient for the population of the respective region.

The disparities in access to health care services amongst the regions could be solved systematically and with long-term effect, if the solution were to be based on a strategy or a plan for health care development including the key stakeholders and decision-makers. Since the Government does not have such a plan, these issues are only solved on a short-term basis by means of annual negotiations between health care providers and the payers (the respective municipality or the HIIS). In accordance with financial capabilities, certain quantities of funds are allocated to increase health care capacities in those areas in which access to services is found to be most problematic.

It is difficult to answer the question of whether the funds for health care and their distribution are based on needs for specific health care services, since planning is not based on scientific evidence at the time of writing. Health care services planning rests on anticipating developments and the growth of health care capacities. The exception to this is represented by programmes that strengthen population health and preventive services, which build on the recognition of the most serious and most frequent illnesses, the possibility of controlling them, and changing lifestyle habits.

# 8.3 Access to long-term care services

Similarly to the majority of other European countries, Slovenia is concerned with the challenges of an ageing population. The need is increasing for long-term care services, which are supposed to ensure help for people who cannot perform activities of daily living due to their weakness, illness, disability or because of old age. Population projections show that the need for such long-term care services will increase faster than long-term care services are made available. Therefore, more funds and attention to this issue will be necessary.

Compulsory health care insurance is the most significant – but not the sole – payer of long-term care. However, there is no clear distinction between health care services which are supposed to be covered by compulsory health care insurance and other services in the long-term care setting which are not considered a benefit under health care insurance. As a consequence of this confusion, financial burdens are shifted from social security to compulsory health insurance. Another problem concerning long-term care is the underdevelopment of provisions for home care. This, in turn, exacerbates the gap between the supply of institutional long-term care and the demand for this kind of care (see Section 6.8 Long-term care).

A new proposal is being prepared at the time of writing, which will define services for long-term care. This new service would be set up in such a way that services for home care would be offered, in the first instance. In due course, when home care is no longer feasible, institutional long-term care would be offered. In addition, the financial risks associated with the need to carry out long-term care will be covered by a new, special long-term care insurance, which would be based on the same financing principles as the other branches of social insurance (see Section 7.2 *Future developments*).

# 8.4 The influence of co-payments on access to health care services

As already mentioned in Section 3.2 *Population coverage and basis for entitlement*, the Slovene health care insurance system is based on cost sharing between public (that is, HIIS) and private funds (consisting of co-payments). A co-payment is defined for the majority of services and is paid by the insured individual, unless she/he takes out VHI to cover the risk. Although the individual co-payments are not high, the total amounts for patients with chronic illnesses and those who require more intense medical treatment are comparatively high. This is actually the main reason for which vast proportions of the population participate in the complementary VHI programme.

Serious discussions regarding the extent of co-payments took place during the attempted reforms (White Paper) in 2003. It was argued that extensive copayments would reduce the demand for health services. The fact that virtually the entire population takes out complementary health insurance undermines this argument. Hence, co-payments do not reduce the utilization of health services. Furthermore, insured individuals very rarely use the opportunities - provided by means of the legislation - for weak social groups to assert their right to health care services without co-payment. This applies to the following social groups: individuals who receive social welfare; those who need the help of another person to carry out everyday activities; people with disabilities; individuals over 75 years of age; and insured individuals, who have already paid an amount exceeding the limit defined by the HIIS. Despite the controversies, there is no evidence at the time of writing that the system of co-payments actually influences access to health care services or results in discrimination in terms of health care utilization on the basis of the financial position of the individual.

# 8.5 Effects of health care financing on health care services and quality

The methods of payment for health care providers (see Section 3.6 *Payment mechanisms*) affect the relations between the primary payer (the HIIS) and public providers, as well as private providers who have a contract with HIIS. Capitation is used at the primary care level, combined with payment for specialist services in outpatient clinics. A DRG system is operated at the secondary and tertiary care levels. Hence, the payment methods of Slovenia's health system are in line with those of many other European countries. Primarily, the remuneration of health care providers is supposed to depend on the work completed or the number of individuals treated. Private practitioners are paid according to this method and work for the HIIS by contract, whereas the situation is different in public health services.

The income of employees in public provider institutions does not depend directly on the method described earlier. Employees of these institutions are paid via the same method as all other civil servants, that is, in accordance with the provisions in the collective agreement, negotiated between trade unions and the Government. Although these agreements provide incentives to increase the quantity and quality of work, there is no evidence that these incentives actually translate into increased productivity. The employer has the opportunity to allocate a maximum of 2% of the total for salaries, to stimulate productivity of work. Some see this limitation as the reason for relatively poor access to health care services in certain areas. Hence, the income of a physician in a public institution at the primary level does not depend on the number of patients treated, nor on the volume of services she or he provides.

The introduction of a DRG model for hospital payments affects the productivity of hospital activities. For this payment method, the hospital calculates the number of DRGs and their weighting. However, there are no available data or analysis to measure how much the individual doctor or health care worker participated in or contributed to the treatment of the respective DRG. As a consequence, the difference between more productive employees and those that are less productive is hard to assess.

Quality and outcomes are not included in the current DRG system. There have been some attempts at measurement and monitoring of quality in some hospitals, which are competing against each other to achieve recognition in business excellence and to be evaluated for high-quality care (see Chapter 4 *Planning and regulation*). However, efforts to increase the quality of care are (as of early 2009) still not an integral part of the system. Quality criteria are

not included in the evaluation of the work of health care providers in achieving certain health and economic outcomes. Health care services at the primary level partially represent an exception, since the capitation rate is connected to provision and performance of screening tests against certain risk factors (high blood pressure, lipids, cholesterol and blood sugar). If a private physician or public health care provider does not perform these tests with the respective patients who have reached a certain age, they do not receive from the HIIS the entire amount specified in the contract. However, the current method of financing health services does not stimulate or recognize competition between private and public health care providers. This could be viewed as a limitation of this system. In addition, virtually all health care capacities are required to carry out the compulsory health care services programme and the HIIS is obligated to sign a contract with almost all health care providers, as described earlier.

## 8.6 Efficiency of medicine consumption

It has been observed that certain regulations in health system financing have an impact on the consumption of and expenditure on pharmaceutical products. Despite considerable increases in prices of pharmaceuticals in Europe, the level of growth in the HIIS expenditure on medicines decreased from 5.0% in 2000 to 3.1% in 2006 (HIIS 2007a). These results are noteworthy, taking into consideration the fact that the number of pharmaceutical products which – if prescribed by a physician – are covered by compulsory health insurance (with the appropriate co-payment), is increasing each year. This reduction in the growth of expenditure on medicines is most likely a consequence of the measures described here.

- The model of remunerating pharmacies, whereby the retail price of medicines is calculated by taking the wholesale price of the respective medicine and adding a fixed dispensing fee based on labour costs. As a result, pharmacies have no interest in producing or dispensing more expensive medicines.
- With the introduction of generic substitution, the HIIS is obliged to cover only the cheapest off-patent generic pharmaceutical which is as effective as its on-patent counterparts. A physician can also prescribe a more expensive medicine, provided that the less-expensive generic is not appropriate for the particular needs of the respective patient. In this case, the HIIS covers the costs.
- The HIIS conducts regular monthly monitoring and evaluation of prescriptions issued by health care providers and GPs, and provides feedback

- on prescribing behaviour. Moreover, the HIIS organizes conferences for physicians on how to enhance efficiency with regard to usage and rational prescribing of pharmaceutical products.
- A special project, conducted by the HIIS since 2006 supported by the Ministry of Health, the Medical Chamber and Pharmaceutical Chamber, and other professional associations – aims to increase the appropriateness of medicine consumption by informing the general public about rational use of pharmaceuticals (for example, how to avoid overconsumption and the importance of compliance with prescriptions regarding intake).

### 8.7 Effects of health care services on health

With regard to health status indicators, Slovenia's infant mortality rate stands at a positive level; according to the WHO Health for All database, the country has one of the lowest levels among the countries that joined the EU in 2004 and 2007. Although this is difficult to measure, health care services play a significant role in achieving this low infant mortality rate. In Slovenia, special preventive health care programmes for family planning, pregnancy and child care have been offered for many years. Virtually all pregnant women and children under five years of age are covered by health care services (mostly at the primary care level). These programmes provide special care during pregnancy, prenatal, neonatal and postnatal periods and ensure a healthy environment for neonates and infants.

However, other health indicators show less favourable results. This is especially the case with regard to chronic diseases and injuries, although these could be prevented by choosing suitable measures for prevention and control of risks. This is the case despite the fact that health care services perform screening tests for early detection of cervical cancer and breast cancer for women, as well as detecting risk factors related to cardiovascular diseases for people over 45 years of age. Furthermore, health promotion activities which aim at changing lifestyles are considered to be of increasing importance in Slovenia. The effect of health care services on improving the health status of the population is most obvious with regard to infectious diseases. Due to the high rate of vaccination, Slovenia enjoys low incidences of these diseases (Kraigher et al. 2007).

# 8.8 Disparities in obligations of health care insurance

The principles of solidarity and equal contributions to social health insurance in Slovenia apply to individuals who have a regular income or receive payments from pensions and disability insurance. All employees pay the same contribution rate. However, an element of potential inequity results from the fact that some groups of insured individuals (for example, tradesmen and entrepreneurs) are free to determine of their own accord the basis upon which they will pay for contributions to the social security system. They are entitled to do so according to the regulations regarding pension and disability insurance, which also apply to compulsory health insurance in order to establish a more simplified procedure for collecting contributions. The option to self-determine a basis for pension and disability insurance is understandable, since the individuals themselves also decide on the amount of entitlements they will obtain once they retire. With regard to compulsory health insurance, this regulation is prone to produce inequalities, since the benefits are equal for all insured individuals. However, in some cases self-employed insured individuals are able to completely avoid payment obligations. This demonstrates that there are inconsistencies in realizing the principles of solidarity, equality and fairness.

Furthermore, there are difficulties in realizing solidarity with regard to insurance against injury at work and occupational diseases. The responsibility for health and safety in the workplace lies with employers. Therefore, the financial responsibility for preventive and rehabilitative measures in this area could be expected to lie with the employers as well (for example, in terms of treatment and rehabilitation of individuals who were injured in the workplace or become ill because of an occupational disease). However, there is currently no special insurance for this type of risk, contrary to the situation in many other European countries. The HIIS covers all costs (without any co-payments) for health care services and rehabilitation for those injured in the workplace or who suffer from an occupational disease. In addition, sick pay for temporary absence from work for more than 30 days is guaranteed by the compulsory health insurance. Thus, all insured individuals cover part of the financial risks of injuries and illnesses which occur due to unsafe and unhealthy workplaces. However, employers pay a special contribution to the HIIS to cover for workplace-related health risks. This is the same rate for all insured individuals, regardless of how consistent health and safety procedures are implemented in the workplace by the employers and what costs accrue for employees due to unsafe workplace environments. Employers therefore have no incentive to improve working conditions as everyone pays the same rate.

# 9 Conclusions

The overall structure of the health system, the level of guaranteed health care benefits has improved significantly, along with health safety and security, the current health status of the population, organization of health care services, as well as method and sources of financing the health system and its management. It is therefore possible to conclude that the steps that have been taken in the past to reform the pre-1992 health system have been proven to be largely successful.

For example, the privatization of parts of health care services at the primary level is considered to be a measure that has contributed to improving efficiency, as the private providers compete with each other and with the public system for contracts with the HIIS. Controversies remain, however, regarding the means of monitoring and adequately allocating financial resources through these processes. However, only partial privatization of health care delivery took place, while reform of other aspects, on a larger scale, has not yet even been started at the time of writing. Privatization of primary care infrastructure and allowing more space to be allocated to private initiatives may become the key areas receiving more attention in health policy in the future. The Ministry of Health will seek ways to rationally approach the issue of privatization of primary health care, while simultaneously considering options for the privatization of hospitals, which will mainly apply to some of the smaller general hospitals. Some of these decisions will depend heavily on the priorities of the incoming government (November 2008), which is likely to be more reserved with respect to the privatization process.

There still remain challenges to be resolved. Slovenia's spending on health as share of GDP is as much as the EU average at the time of writing. The public proportion of health expenditure has been reduced over recent years, causing some concern over the sustainability of such an approach. Nevertheless, the main

challenge for the future will be to improve the efficiency of the health system. Evolution of medical technology and pharmaceutical innovations, increasing population expectations for new treatments and an ageing population require not only skilled human resources, appropriate premises and modern equipment, but also additional financial resources. The discrepancy between the needs and demands of new technologies and resources for their funding is constantly growing. Therefore, a critical and continuous assessment of the introduction of new methods of medical treatment is required. New technologies should include impact assessments of the health status of the population, and efficiency and effectiveness of the utilization of current and future investments in health care (Turk & Albreht 2008).

Moreover, the Slovene health care system is faced with a lack of physicians and certified nurses, which is a relevant risk factor in implementing and maintaining quality in health care. Hence, the challenge for the future is to ensure continuous development of human resources. Education and training in the areas of quality and patient safety should become an integral part of the curricula of all health education institutions and programmes, as well as of internal education programmes in each health care organization, and requirements related to quality and patient safety should be included in the education and training of health care providers. Continuous development of individuals also needs to be ensured through acquisition of new knowledge in the areas of quality and patient safety, and development of social and personal skills and behaviours (such as doctor–patient communication).

Waiting lists for some health care services have become a significant political issue. An active approach to the resolution of this challenge has resulted in important improvements in waiting times for cataract, hernia and open heart surgery. Problem areas, such as hip and knee replacements, remain an important focus. More incentives for a move into outpatient and day surgery are needed. Very different data have arisen concerning effective waiting periods in various hospitals; a decision was therefore made to establish a national waiting list for a number of the most common conditions. A newly developed web-based solution provides information on waiting times for common diagnostic and therapeutic procedures.

Due to the rapid ageing of the Slovene population the need for long-term care services outpaces their supply. This situation demands more funds and attention. The new proposal on long-term care defines services that assure social care and health care to individuals in need of long-term care. In the first instance, home care services will be provided and subsequently, when this is no longer feasible, institutional long-term care will be offered. The associated financial risks will be covered by a new, special long-term care insurance, which will be based on

the same financing principles as the other branches of social insurance (see Section 8.3 *Access to long-term care services*).

In the first half of 2008, Slovenia held the EU Presidency. The Government decided to present cancer as the main public health topic, considering its increasing importance in terms of incidence and survival rates, the challenges it represents in terms of organization of health care, including delivery and financing, as well as the need for international collaboration and to ensure the basis for long-term care and sustainable and publicly funded research. After a period characterized by lack of commitment regarding this issue, both the political will and the professional determination to provide for a more stable and organized framework for cancer control have emerged at the time of writing. This is to be based on four pillars, as proposed by the Slovene EU Presidency: primary prevention, screening, integrated care and research. For the latter, it is important that significant resources are earmarked for the funding of the different EU initiatives, programmes and projects (Albreht 2008a). The Council of the European Union adopted binding conclusions on cancer issues, which will pave the way for the future adoption of an Action Plan on Cancer for the EU. The second health topic of the Presidency was alcohol control policies; a structured process was introduced, aiming to prepare an adequate framework for comprehensive control of alcohol consumption. This topic is especially important for the newer EU Member States.

### 10 Appendices

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### 10.2 Further reading

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### 10.3 Principal legislation

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### 10.4 Useful web sites

http://www.inerhc.si

http://www.mz.gov.si

http://www.stat.si/

http://www.zdravniskazbornica.si

http://www.zzzs.si

### 10.5 HiT methodology and production process

The Health Systems in Transition (HiT) profiles are produced by country experts in collaboration with the Observatory's research directors and staff. The profiles are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources, and examples needed to compile HiTs. 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/observatory/Hits/20020525\_1.

Authors draw on multiple data sources for the compilation of HiT profiles, ranging from national statistics, national and regional policy documents, and published literature. Furthermore, international data sources may be incorporated, such as those of the Organisation for Economic Co-operation and Development (OECD) and the World Bank. OECD Health Data contain over 1200 indicators for the 30 OECD countries. Data are drawn from information collected by national statistical bureaus 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 World Health Organization (WHO) Regional Office for Europe for the purpose of monitoring Health for 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 July 2008 edition, the Health for All database started to take account of the enlarged European Union (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 profile consists of 10 chapters.

- Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.
- 2 Organizational structure: provides an overview of how the health system in the country is organized and outlines the main actors and their decision-

- making powers; discusses the historical background for the system; and describes the level of patient empowerment in the areas of information, rights, choice, complaints procedures, safety and involvement.
- Financing: provides information on the level of expenditure, who is covered, what benefits are covered, the sources of health care finance, how resources are pooled and allocated, the main areas of expenditure, and how providers are paid.
- Regulation and planning: addresses the process of policy development, establishing goals and priorities; deals with questions about relationships between institutional actors, with specific emphasis on their role in regulation and what aspects are subject to regulation; and describes the process of health technology assessment (HTA) and research and development.
- Physical and human resources: deals with the planning and distribution of infrastructure and capital stock; the context in which information technology (IT) systems operate; and human resource input into the health system, including information on registration, training, trends and career paths.
- Provision of services: concentrates on patient flows, organization and delivery of services, addressing public health, primary and secondary health care, emergency and day care, rehabilitation, pharmaceutical care, long-term care, services for informal carers, palliative care, mental health care, dental care, complementary and alternative medicine, and health care for specific populations.
- Principal health care reforms: reviews reforms, policies and organizational changes that have had a substantial impact on health care.
- Assessment of the health system: provides an assessment based on the stated objectives of the health system, the distribution of costs and benefits across the population, efficiency of resource allocation, technical efficiency in health care production, quality of care and contribution of health care to health improvement.
- 9 Conclusions: highlights the lessons learned from health system changes; summarizes remaining challenges and future prospects.
- 10 Appendices: includes references, useful web sites and legislation.

Producing a HiT is a complex process. It involves:

- writing and editing the report, often in multiple iterations;
- external review by (inter)national experts and the country's Ministry of Health the authors are supposed to consider comments provided by the Ministry of Health, but not necessarily include them in the final version;
- external review by the editors and international multidisciplinary editorial board;
- finalizing the profile, including the stages of copy-editing and typesetting;
- dissemination (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.

# The Health Systems in Transition profiles

## A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country profiles 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;
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#### Key

All HiTs are available in English. When noted, they are also available in other languages:

- <sup>a</sup> Albanian
- <sup>b</sup> Bulgarian
- <sup>c</sup> French
- d Georgian
- e German
- <sup>f</sup> Romanian
- <sup>g</sup> Russian
- <sup>h</sup> Spanish
- <sup>i</sup> Turkish
- Estonian

  Report Polish









































The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europea, the Governments of Belgium, Finland, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the World Bank, the London School of Economics and Political Science and the London School of Hygiene & Tropical

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.

ISSN 1817-6127









