Health Systems in Transition
Vol. 18 No. 3 2016

NIJZ National Institute of Public Health

Slovenia

Health system review

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REPUBLIC OF SLOVENIA
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European Observatory on Health Systems and Policies
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Keywords:

DELIVERY OF HEALTH CARE

EVALUATION STUDIES

FINANCING HEALTH

HEALTH CARE REFORM

HEALTH SYSTEM PLANS – organization and administration

SLOVENIA

Printed and bound in the United Kingdom.

Suggested citation:
Albreht T, Pribaković Brinovec R, Jošar D, Poldrugovac M, Kostnapfel T, Zaletel M, Panteli D, Maresso A. Slovenia: Health system review. *Health Systems in Transition*, 2016; 18(3):1–207.

ISSN 1817-6119 Vol. 18 No. 3

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Preface

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

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

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

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

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

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

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

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

Acknowledgements

The HiT on Slovenia was produced by the European Observatory on Health Systems and Policies as part of a wider project in 2015 to review the performance of the Slovene health system. The Observatory cooperated with the National Institute of Public Health of Slovenia (NIPH), which is a member of the Health Systems and Policy Monitor (HSPM) network.

The HSPM is an international network that works with the Observatory on the Country Monitoring Programme. It is made up of national counterparts that are highly regarded at the national and international level and have particular strengths in the area of health systems, health services, public health and health management research. They draw on their own extensive networks in the health field and their track record of successful collaboration with the Observatory to develop and update the HiT.

The NIPH is Slovenia's central institution for public health. It is responsible for a number of public health functions, research and education and training in the areas of epidemiological and population health monitoring, statistical reporting, the prevention of disease, population screening, health promotion and preventive programmes. It also carries out analyses on health care and its resources and performance.

This edition was written by Tit Albreht (National Institute of Public Health of Slovenia), Radivoje Pribaković Brinovec (National Institute of Public Health of Slovenia), Dušan Jošar (Ministry of Health, Slovenia), Mircha Poldrugovac (National Institute of Public Health of Slovenia), Tatja Kostnapfel (National Institute of Public Health of Slovenia), Metka Zaletel (National Institute of Public Health of Slovenia), Dimitra Panteli (European Observatory on Health Systems and Policies) and Anna Maresso (European Observatory on Health Systems and Policies).

Contributions were also made (in alphabetical order) by Tatjana Buzeti (section 7.1 on stated objectives of the health system), Nadja Čobal (section 5.11 on

mental health care), Branko Gabrovec (section 5.10 on palliative care), Doroteja Novak Gosarič (sections 2.8.4 on regulation and governance of pharmaceuticals and 2.8.5 on regulation of medical devices and aids), Nuša Konec-Juričič (section 5.11on mental health care),Vlasta Kovačič Mežek (section 4.1.1 on capital stock and investments), Vesna Kerstin Petrič (review and revision of section 6.2 on future directions), Dušanka Petrič (section 5.5 on emergency care), Dalibor Stanimirović (section 4.1.4 on information technology); Barbara Steblovnik (section 5.13 on complementary and alternative medicine), Simona Zagorc (section 5.11 on mental health care) and Eva Zver (data and analysis in Chapter 3). The HiT was edited by Anna Maresso and Dimitra Panteli, working with the support of Ewout van Ginneken, HiT Co-ordinator and Head of the Observatory's Berlin Hub. The basis for this edition was the previous HiT on Slovenia, which was published in 2009, written by Tit Albreht (National Institute of Public Health of Slovenia), Eva Turk (National Institute of Public Health of Slovenia), Martin Toth (National Institute of Public Health of Slovenia), Jakob Ceglar (Ministry of Health and National Health Insurance Institute of Slovenia), Stane Marn (Statistical Office of the Republic of Slovenia), Radivoje Pribaković Brinovec (National Institute of Public Health of Slovenia) and Marco Schäfer (Berlin University of Technology), and edited by Marco Schäfer, Olga Avdeeva and Ewout van Ginneken.

The Observatory and the authors are extremely grateful to Armin Fidler (Management Centre Innsbruck and George Washington University, United States) and Valentina Rupel (Institute for Economic Research, Slovenia) for reviewing the report and providing valuable feedback. The authors would also like to thank Nick Fahy for his technical assistance in reviewing and reworking the Executive summary. Special thanks also go to everyone at the Ministry of Health for their assistance and support.

Thanks are extended to the WHO Regional Office for Europe for their European Health for All database from which data on health services were extracted, to the Organisation for Economic Co-operation and Development (OECD) for the data on health services in western Europe and to the World Bank for the data on health expenditure in central and eastern European countries. Thanks are also due to the NIPH, the Centre for Health Care at the NIPH and the National Insurance Institute of Slovenia, all of which provided data. The HiT reflects data available in December 2015, unless otherwise indicated.

The European Observatory on Health Systems and Policies is a partnership, hosted by the WHO Regional Office for Europe, which includes the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Sweden, the United Kingdom and the Veneto Region of Italy; the European Commission;

the World Bank; UNCAM (French National Union of Health Insurance Funds); the London School of Economics and Political Science (LSE); and the London School of Hygiene & Tropical Medicine (LSHTM). The European Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Technical University of Berlin.

The Observatory team working on HiTs is led by Josep Figueras, Director, Elias Mossialos, Martin McKee, Reinhard Busse, Richard Saltman, Ellen Nolte, Ewout van Ginneken and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Gabriele Pastorino. The production and copy-editing process of this HiT was coordinated by Jonathan North, with the support of Caroline White, Jane Ward (copy-editing) and Pat Hinsley (typesetting).

List of abbreviations

ARSZMP	Agency for Medicinal Products and Medical Devices of the Republic of Slovenia
ATC	Anatomical Therapeutic Chemical Classification
CAM	Complementary and alternative medicine
CEE	Central and eastern Europe
CT	Computed tomography
DRG	Diagnosis-related group
EU	European Union
EU15	European Union Member States before May 2004
EU13	European Union Member States that joined between 2004 and 2007
EU28	European Union Member States at July 2013
FFS	Fee for service
GDP	Gross domestic product
GP	General practitioner
HIIS	Health Insurance Institute of Slovenia
HTA	Health technology assessment
IMAD	Institute of Macroeconomic Analysis and Development
MAV	Maximum attributed value
MIMPs	Mutually interchangeable medicinal products
MMR	Measles, mumps and rubella (vaccine)
MRI	Magnetic resonance imaging
NGO	Nongovernmental organization
NIPH	National Institute of Public Health
NLHEF	National Laboratory for Health, Environment and Food
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket (payments)
PET	Positron emission tomography
PPP	Purchasing power parity
VHI	Voluntary health insurance
WHO	World Health Organization

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Abstract

This analysis of the Slovene health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance. The health of the population has improved over the last few decades. While life expectancy for both men and women is similar to EU averages, morbidity and mortality data show persistent disparities between regions, and mortality from external causes is particularly high. Satisfaction with health care delivery is high, but recently waiting times for some outpatient specialist services have increased. Greater focus on preventive measures is also needed as well as better care coordination, particularly for those with chronic conditions. Despite having relatively high levels of co-payments for many services covered by the universal compulsory health insurance system, these expenses are counterbalanced by voluntary health insurance, which covers 95% of the population liable for co-payments. However, Slovenia is somewhat unique among social health insurance countries in that it relies almost exclusively on payroll contributions to fund its compulsory health insurance system. This makes health sector revenues very susceptible to economic and labour market fluctuations. A future challenge will be to diversify the resource base for health system funding and thus bolster sustainability in the longer term, while preserving service delivery and quality of care. Given changing demographics and morbidity patterns, further challenges include restructuring the funding and provision of long-term care and enhancing health system efficiency through reform of purchasing and provider-payment systems.

Executive summary

Introduction

Slovenia is a country of just over 2 million inhabitants and economically is the most developed of the post-Communist countries to join the European Union (EU). A range of indicators shows that the health of the population has improved over the last few decades. Average life expectancy reached 77.2 years for men and 83.6 years for women in 2013 (almost the same as the EU averages of 77.5 years for men and 84.2 years for women). Slovenia continues to have one of the lowest fertility rates of all EU Member States; at 1.58 births per woman in 2014 it was far below the replacement level. Combined with increasing life expectancy, this means an ageing population with consequent impacts on the health system.

Life expectancy, morbidity and mortality data show inequalities between regions within the country, which reflect levels of poverty. Western and central regions are much better off than the eastern and north-eastern regions. Slovenia has broadly similar patterns of mortality and morbidity to other western and central European countries. However, mortality from external causes is particularly high; Slovenia has one of the highest suicide rates in the world (17.1 per 100 000; the European average is 11.7) and deaths from injuries and poisoning are over 50% higher than the EU average.

Organization and governance

Slovenia has a social health insurance system with a single public insurer, the Health Insurance Institute of Slovenia (HIIS), providing universal compulsory health insurance. The HIIS represents the interests of insured people in negotiations on health service programmes and their implementation, and as the main purchaser of services in the health system, it plays a primary role in the formulation of prices for such services. Three private companies provide voluntary health insurance (VHI), which is mainly used by patients to cover co-payments.

The key regulatory role rests with the Ministry of Health, which is also the owner of all public hospitals and national institutes, their key manager and investor as well as the granting authority of practice authorizations for specialists. The Ministry is supported by the Health Council, an advisory body that advises on policy, as well as health technology assessment (HTA) and the introduction of new therapeutic and diagnostic procedures.

Primary care is decentralized to municipal level. The regulated professions have their own professional associations known as chambers (*zbornice*), which administer and regulate their licensing, continuous education and training. They also exercise a role in planning, in particular the Medical Chamber, which is solely responsible for doctors' specialty training.

Several health-related nongovernmental organizations (NGOs) are active in the health system, including patient groups and those focused on issues such as promoting tobacco control or sober driving. Patient organizations are often invited to participate in the drafting of policies and regulations in their specific area. So far, attempts to establish an umbrella organization that represents the interests of all patients have failed. Patients participate in the process of purchasing health services only indirectly, voicing their concerns and suggestions to any one of the key negotiating partners (providers of health care services, the HIIS and the Ministry).

Financing

Slovenia's health system is mainly funded through compulsory health insurance, with the remainder coming from VHI and direct out-of-pocket (OOP) payments. In 2013, total health expenditure (including capital investments) as a share of gross domestic product (GDP) reached 9.2%, compared with an EU average of 9.5% and an average of 6.8% among the 13 EU Member States that joined after 2004 (EU13). While public financing remains the primary source of health system resources – 71.4% of the total in 2014 – the share of private funding was 28.6% of total health expenditure, which is slightly above the EU average of 27%.

Compulsory health insurance contributions accounted for 68.1% of current health expenditure in 2014. The benefits package from compulsory health insurance comprises primary, secondary and tertiary services; pharmaceuticals; medical devices; sick leave exceeding 30 days; and costs of travel to health facilities. For the majority of areas of care, co-payment levels for services are determined by the HIIS in agreement with the government

and range from no co-payment (e.g. for emergency care) to 90% for medicinal products considered less effective. General taxation at national and municipal levels represents another public source of funding (3.3% of current health expenditure in 2014). This mainly covers governance of the health system, specific public health and prevention programmes and co-payments for socially vulnerable groups.

VHI premiums (14.8% of total health expenditure) and OOP payments (12.7%) represent the main private sources of funding. Within the VHI component, complementary health insurance (which largely exists to finance public sector co-payments) takes the major share. It covers cost-sharing levied on health care services included in the benefits package, and is purchased by more than 95% of the population liable for co-payments. To balance uneven distribution of the risk portfolio and prevent cream-skimming among insurers, an equalization scheme was introduced in 2005.

Health services in Slovenia are purchased by the HIIS and VHI companies. The services reimbursed by the HIIS and the volume of services to be provided are defined by representatives of the various health system stakeholders in annual agreements.

Primary health care services provided in health centres are paid through a combined system of capitation and fee-for-service (FFS) payments. Outpatient specialist services provided by hospitals are remunerated on a FFS basis. Inpatient care uses a payment model based on diagnosis-related groups (DRGs).

Health care personnel in primary and secondary care may practise based on an employment contract (as salaried employees of a public provider), by means of a concession (as a private provider within the public health care network, payment depending on the contract) or as a private provider (outside the public health care network, paid directly by patients or by VHI). Combining employment in a public provider with purely private practice is not allowed.

Physical and human resources

The Ministry of Health is responsible for capital investment in hospitals and other secondary care infrastructure at the national and regional levels while local governments at municipal level finance such investments in public primary health care facilities and public pharmacies. In terms of hospital sector infrastructure, in 2013 Slovenia had 455 beds per 100 000, 79% of which were dedicated to acute care (higher than the EU average of 69%).

The number of acute care beds (359 per 100 000 population) is slightly above the EU average (356). The number of magnetic resonance imaging (MRI), computed tomography (CT) and positron emission tomography (PET) scanners has risen since the mid-2000s, although there is no national needs assessment or plan for such items of major medical equipment.

Initiatives for ehealth are promoted by the government, particularly through an ambitious national programme of development known as eHealth, which includes e-prescriptions, e-referrals and a system of electronic patient records. The aim is to integrate the disparate health information systems currently in operation across individual health care organizations by the end of 2016.

Although the number of physicians has been rising since the mid-1990s, the number in 2013 (2.63 physicians per 1000 people) was still well below the EU average of 3.5 physicians per 1000. The number of nursing professionals (which includes registered nurses as well as nursing technicians) was 8.38 per 1000 population, which was similar to the EU average of 8.49 per 1000 and higher than the average of the EU13 (6.22 per 1000 people). Current policy goals are directed towards maintaining present staffing levels within the health system, although the Nursing Chamber argues that more registered nurses are needed. There are also some challenges with respect to the geographical distribution of medical doctors across the country. As a relatively small country with historical links to the rest of the former Republic of Yugoslavia, substantial cross-border mobility of health professionals was expected after joining the EU, but this did not materialize.

Provision of services

Following major restructuring in 2012, all public health services are now provided by two national bodies: the National Institute of Public Health (NIPH) and the National Laboratory for Health, Environment and Food (NLHEF).

Primary care is provided mostly by a network of community-level primary health care centres, owned and managed by municipalities; this covers around 76% of physicians and 42% of dentists working in primary care. They provide general practice/family medicine services; emergency medical aid; health care for women, children and teenagers; community nursing; laboratory and other diagnostic facilities; preventive and curative dental care for children and adults; and physiotherapy. There are also contracted office-based physicians in private practice, many of whom have contracts (concessions) with the HIIS to deliver publicly funded primary care services.

Patients are entitled to choose their own personal physician operating at the primary care level. Since 2011, a system of family medicine "model practices" have been in operation via public health care centres and contracted group practices, with a focus on prevention and care coordination for patients with stable chronic diseases. It is the government's intention that all practices adopt this model within the next few years.

Slovenia operates a gatekeeping system whereby patients require a referral from their primary care doctor in order to access specialist care. Specialist outpatient activities at the secondary care level are performed in public and private hospitals, primary health care centres, private specialist practices and spas. Clinics and specialized institutes provide more complex health services at the tertiary care level. Despite past efforts, long waiting times for some specialist services persist.

Inpatient hospital care is provided through a total of 30 mainly public and some private hospitals: 10 general hospitals, 2 university hospitals, 5 mental health hospitals and 13 specialized hospitals (3 of them private). Of these, some highly specialized institutions provide tertiary care, such as the university hospitals in Ljubljana and Maribor, the Institute of Oncology, the University Clinic of Respiratory and Allergic Diseases Golnik, the Psychiatric Clinic Ljubljana and the University Rehabilitation Institute.

Since 2010, financial incentives have been in place to replace inpatient care with day care or ambulatory care. This has accelerated the steady rise in the proportion of day-care cases, from 11.1% of all hospital cases in 2005 to 30% in 2013 (with approximately 25% of all cases in acute care being day cases).

There is no single, overarching regulation concerning long-term care specifically. Such care (for the elderly, the chronically ill, the disabled and other individuals with special needs) is provided through different routes across the health, social care and pension and disability sectors, with different entry points and different procedures concerning the assessment of entitlements for supplements to support long-term care needs. As a consequence, some service users might end up benefiting more from current arrangements in place than others, or their needs might remain unrecognized altogether.

Principal health reforms

There have been several attempts to reform the health care system in Slovenia since the mid-2000s. The approaches have varied from attempts to implement substantial structural changes, such as redefining the structure of hospitals and

granting autonomy to public health care providers by declaring them the legal owners of their facilities (in contrast to state ownership), to renewed attempts to remodel or abolish VHI.

Up to 2008, achievements include legislation to restrict the use of alcohol, ban smoking in public places, regulate complementary and alternative medicine (CAM), restructure mental health services and consolidate patient rights. Since 2009, the failure of major structural reform attempts has been mostly linked to political instability (successive changes of government), lack of consensus among stakeholders and a lack of political support for health ministers. An exception to this trend is the restructuring and merger of the former national and nine regional institutes of public health into two organizations, the NIPH, and the NLHEF, in 2012.

Future reforms are likely to focus on ensuring the sustainability of health system funding, fundamentally restructuring the funding and provision of long-term care, enhancing health system efficiency through reform of purchasing and provider-payment systems, and strengthening primary care with the continued evolution of coordination mechanisms and integration of care, particularly for patients living with chronic diseases.

Assessment of the health system

The Slovene health care system is based on solidarity. The economically active population (employees) and their employers carry the highest financial burden (almost 76%). While public financing through the HIIS is mainly progressive, VHI funding is regressive as it is based on a flat payment.

Despite having relatively high levels of cost-sharing, these expenses are counterbalanced by VHI, which is purchased by 95% of the population liable to pay co-payments. Furthermore, the government pays certain VHI claims on behalf of poorer households. Slovene households are largely protected from the costs of health care. Only 1.0% of households experienced catastrophic spending in 2012, more than half of which was for dental services not covered by the HIIS.

According to EU-SILC data, Slovenia consistently has had one of the lowest reported levels of unmet health care needs in Europe for all income groups. However, since 2013, waiting times have been increasing, which is likely to have a more severe effect on poorer households. Nevertheless, satisfaction with health care provision is high.

Regarding access to health care services, there are geographic variations in hospitalizations, possibly attributable to regional variations in supply and morbidity. Acknowledging regional shortages in primary care, the number of publicly financed residency places in family medicine was increased and the concept of a health care network in family medicine and paediatrics was initiated. At the secondary care level, proposals to restructure the hospital sector and reduce capacity in various areas in the country have met strong public opposition from local communities.

Although Slovenia has a comparatively low level of income inequality, there are gradients of increasing morbidity and mortality at different income or education levels. Furthermore, marginalized population groups (e.g. undocumented migrants, Roma) exist without health insurance coverage. The goal of reducing inequalities in health is a key future aim.

Cancer, cardiovascular diseases and injuries are the main causes of premature mortality and contribute to 75% of the difference in life expectancy between Slovenia and the 15 EU Member States before May 2004 (EU15). For breast and colorectal cancer, survival rates have improved considerably since 1985; but they have more recently started to deteriorate for cervical cancer. Tobacco and alcohol consumption rates have been declining but binge-drinking remains an issue. Vaccination rates are high, with the exception of influenza, for which rates are among the lowest in countries of the Organisation for Economic Co-operation and Development (OECD).

On the one hand, many elements that could improve efficiency – such as a clear methodology for budget allocation, a strategic purchasing process or the use of HTA to support decisions on coverage – are missing. On the other hand, changes in hospital reimbursement, new health technologies and a shift from inpatient to day care have had a major impact on reducing both average length of stay in hospital and the number of hospital beds for acute care. However, the DRG system is considered to have several shortcomings that impede its proper functioning. Capped hospital budgets provide few incentives for efficiency and the billing of services in specialized outpatient care is inadequate, which together lead to further inefficiencies.

1. Introduction

Slovenia is a country of just over 2 million inhabitants and economically is the most developed of the post-Communist countries to join the European Union (EU). A range of indicators shows that the health of the population has improved over the last few decades. Average life expectancy reached 77.2 years for men and 83.6 years for women in 2013 (almost the same as the EU averages of 77.5 years for men and 84.2 years for women). Slovenia continues to have one of the lowest fertility rates of all EU Member States; at 1.58 births per woman in 2014 it was far below the replacement level. Combined with increasing life expectancy, this means an ageing population with consequent impacts on the health system.

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1.1 Geography and sociodemography

Slovenia is located between the Alps, the Pannonian Plain, the Mediterranean Sea and the Balkans (Fig. 1.1). It borders Austria and Hungary to the north, Italy to the west and Croatia to the southeast. Previously a constituent part of the Socialist Federal Republic of Yugoslavia, it declared its independence on 25 June 1991.

Slovenia covers an area of 20 273 km^2; it is a mountainous country with heavily forested areas. The climate is mixed, consisting of a sub-Mediterranean

climate on the coast, an alpine climate in the northwest 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 2.06 million in 2014, 49.7% of whom (in 2010) lived in urban centres. The capital of Slovenia is Ljubljana, with 269 146 inhabitants (Statistical Office of the Republic of Slovenia, 2015b). Table 1.1 shows key demographic and population indicators for selected years from 1980 to 2014.

Fig. 1.1
Map of Slovenia

Source: United Nations, 2004.

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, Bosnians, 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 EU countries. There are Slovene indigenous minorities in Italy, Austria and Hungary.

Table 1.1
Population and demographic indicators, 2000–2014

	1980	1990	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Mid-year population (thousands)	1 896	1 998	1 990	2 001	2 009	2 019	2 039	2 042	2 049	2 050	2 055	2 059	2 061
Population aged 0–14 years (% of total)	23.4	20.8	15.9	14.2	14.0	13.9	13.8	14.0	14.1	14.2	14.3	14.5	14.6
Population aged 15–64 years (% of total)	65.2	68.5	70.1	70.3	70.2	70.1	70.0	69.5	69.4	69.3	68.9	68.4	67.9
Population aged 65+ years (% of total)	11.4	10.7	14.0	15.5	15.8	16.0	16.2	16.5	16.6	16.5	16.8	17.1	17.5
Population growth (annual %)	1.0	–0.1	0.2	0.3	0.3	0.8	1.1	0.7	0.2	0.3	0.2	0.1	0.1
Population density (per km^2)	n/a	n/a	98.2	98.7	99.1	99.6	100.6	100.8	101.1	101.1	101.4	101.6	101.7
Fertility rate, total (births per woman)	2.10	1.70	1.26	1.26	1.31	1.38	1.53	1.53	1.57	1.56	1.58	1.55	1.58
Age dependency ratio	n/a	n/a	42.8	42.2	42.4	42.6	43.3	43.7	44.0	44.3	45.1	46.2	47.2
Population distribution (% urban)[a]	48.0	50.4	50.8	50.2	n/a	n/a	n/a	n/a	49.5	n/a	n/a	n/a	n/a
Population, female (% of total)	51.4	51.5	51.2	51.1	51.0	50.9	50.9	50.6	50.5	50.5	50.5	50.5	50.5
Crude birth rate (per 1000 population)	15.7	11.2	9.1	9.1	9.4	9.8	10.8	10.7	10.9	10.7	10.7	10.2	10.3
Crude death rate (per 1000 population)	9.9	9.3	9.3	9.4	9.1	9.2	9.0	9.2	9.1	9.1	9.4	9.4	9.2

Source: Statistical Office of the Republic of Slovenia, 2015b; [a]WHO Regional Office for Europe, 2015a.
Notes: Age-dependency ratio is the proportion of the population aged 0–14 and 65 and over against the population aged 15–64; n/a: Not available.

After its full integration into the EU, Slovenia did not see substantial immigration from the other EU Member States. The most numerous immigrants to Slovenia are still citizens of areas of the former Yugoslavia. In 2014, in total, 53% of all immigrants came from this area, with approximately 60% of them from Bosnia and Herzegovina. Since 2008, a steady rise in the number of immigrants from EU Member States has been observed, their share reaching 34% in 2014. The vast majority of immigrant workers from EU Member States come from Slovakia, then from Austria and the Czech Republic, but such numbers are still quite low (Statistical Office of the Republic of Slovenia, 2015b). Migration of health professionals is predominantly from the area of the former Yugoslavia, with most coming from Serbia, Macedonia and Bosnia and Herzegovina (Medical Chamber of Slovenia, 2015a).

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 are also Italian and Hungarian, respectively. Census data from 2003 (latest containing such information) show that a total of 69.1% of the population was Roman Catholic, with very few Evangelical Christians (1.1%), Muslim (0.6%) and Orthodox Christian (0.6%).

1.2 Economic context

Table 1.2 shows key macroeconomic development indicators for 2000 to 2014.

Table 1.2
Macroeconomic indicators, selected years

	2000	2005	2008	2009	2010	2011	2012	2013	2014
GDP (current, million US$)[a]	20341	36345	55819	50445	48060	51360	46238	47689	49557
GDP (PPP, current international $, in millions)[a]	35567	47787	59827	56122	56467	58489	58526	59447	61695
GDP per capita (current US$)[a]	10225	18165	27606	24708	23457	25019	22481	23155	24036
GDP per capita (PPP, current international $)[a]	17882	23888	29598	27515	27564	28492	28450	28859	29917
GDP growth (annual %, constant prices)[b]	4.2	4.0	3.3	–7.8	1.2	0.6	–2.7	–1.1	3.0
Agriculture, forestry and fishing, value added (% GDP)[a]	3.3	2.6	1.9	1.9	2.0	2.3	2.2	2.1	2.2
Industry, value added (% GDP)[a]	35.0	34.1	34.1	31.4	30.6	30.9	31.7	32.0	32.8
Services, value added (% GDP)[a]	61.7	63.3	64.0	66.7	67.4	66.8	66.1	65.9	65.1
Current account balance (% GDP)[b]	–2.7	–1.7	–5.4	–0.5	–0.1	0.4	3.3	6.3 (p)	n/a
Labour force (% total population)[c]	49.0	57.8	61.9	60.5	58.8	58.1	57.4	56.5	57.2
Unemployment (% population)[c]	12.2	10.2	6.7	9.1	10.7	11.8	12.0	13.1	13.1

Source: [a]World Bank, 2015b; [b]Eurostat, 2015b; [c]Statistical Office of the Republic of Slovenia, 2015b.
Notes: PPP: Purchasing power parity; (p): provisional; n/a: Not available.

In 2014, Slovenia's industry accounted for approximately 33% of the country's GDP, while agriculture contributed only 2% and services and other[1] contributed 65% (World Bank 2015b). 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 last in particular has been marked by a very lengthy process, which is still ongoing. 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

[1] Services correspond to ISIC divisions 50–99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional and personal services such as education, health care, and real estate services. Also included in this category are imputed bank service charges and import duties.

to provide long-term social security, the pension system was reformed in 2013, with a further increase in retirement age to 65 years for both sexes and extending the required active pension insurance period for a full pension to 40 years.

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

In 2014, the nominal GDP per capita was US$ 24 035, while the GDP per capita adjusted for purchasing power parity (PPP) was international $ 29 917. These levels represent a decline from about 89% of the EU average in 2008 to 82% of the average in 2014, which is comparable with the level of development in Slovenia in 2002 prior to EU accession. These data need to be seen in the context of the financial and economic crisis, which affected Slovenia significantly and which led to a severe economic contraction of 7.8% of real GDP in 2009, sharper than the average contraction across the 28 European Union Member States (EU28) of 4.4%. Since then, real GDP growth rates have varied from +1.2% in 2010 to -1.0% in 2013 (Eurostat, 2015b).

The unemployment rate has been increasing since the country regained independence in 1991, reaching the first peak of 14.5% in 1998, after which it steadily fell to 7.7% of the labour force in 2007. The financial and economic crisis starting in 2008 reversed those trends, causing the rates to rise above 10%, reaching 13.1% in 2014 (or around 120 000 people in absolute terms) (Statistical Office of the Republic of Slovenia, 2015b), compared with around half of that number in 2008. Many individuals had been out of work for 12 months or more as of the fourth quarter of 2014; 55.6% of the working age unemployed (15–74 years) was considered as long-term unemployed, which is above the EU average of 49.8% (Eurostat, 2015a).

There are notable disparities 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 Slovene regions fall significantly behind the EU average (Statistical Office of the Republic of Slovenia, 2015b). 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 2014 was 0.874 and the country ranked 25th in the world, placing it as the highest among the EU13; it was also ranked ahead of Italy (26th) (UNDP, 2015).

The percentage of the population "at risk of poverty" is 20.4%, which is between the middle and the lower third of the scale among EU Member States (Eurostat 2013). The Gini coefficient is 0.249, which is a favourable value when

compared with most European countries (OECD, 2015c). In February 2015, there were 62 000 people (3.1% of the population) 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 (Državni zbor), which adopts laws. The current government (in December 2015) is a centre-left coalition, composed of three political parties and enjoys a stable majority in the National Assembly.

There are 88 electoral constituencies and, since proportional representation is applied, the governments in Slovenia have always been coalitions. There is also one representative seat for each of the Hungarian and the Italian minorities. Assembly members serve four-year terms and are directly elected by secret ballot. The Parliament is also composed of a 40-member National Council (Državni svet), 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 five-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 four-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 directly responsible only for health care services infrastructure and capital investments in all hospitals, clinics and national research and tertiary institutions (see Chapter 2).

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 five-year terms. Borut Pahor, a member of the Social-Democratic Party won the last presidential elections in December 2012.

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 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 possibility of integrating municipalities into wider, local self-governing communities. The Constitution explicitly transfers the mandate of taking on competencies related to local matters to municipalities and, when all municipalities agree, some state competencies may be transferred to them if the state provides the necessary financial means. In 1994, Slovenia was divided into 147 municipalities (previously there were 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). An expansion of new municipalities in 2006 and 2010 brought the total number to 212, ranging from a population of 372 (Hodoš in the northeast) to 286 307 in Ljubljana (Skupnost občin Slovenije, 2015). 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 municipalities and the state; legislative attempts to define and adopt provinces have all failed and – for the time being – there are no plans for provinces or regions to be established as an intermediate administrative or governmental level.

Slovenia formally joined the North Atlantic Treaty Organization 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, the World Health Organization (WHO), the World Trade Organization, the International Monetary Fund, the International Atomic Energy Agency and the International Finance Corporation. 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.

1.4 Health status

As in other countries of central and eastern Europe (CEE), the main demographic characteristics in Slovenia are a low birth rate, a low fertility rate, a low rate of population growth and increasing life expectancy, the last resulting from both reduced premature mortality as well as extension of life in the older age groups. Hence, Slovenia's population is ageing, with consequent effects on the health system.

The crude birth rate decreased from 15.7 per 1000 population in 1980 to 9.1 in 2005 and has increased slightly since then to 10.3 in 2014 (Table 1.1). Slovenia continues to have one of the lowest fertility rates of all EU Member States. The total fertility rate of 1.58 births per woman in 2014 was far below the replacement level. In 2014, Slovenia's crude death rate was 9.2 per 1000 population (Table 1.1). Since the early 1990s the elderly population (65 years and over) has increased by approximately 60%, representing 17.3% of the total population in 2014, which raises concerns over the incidence of chronic diseases and their social implications. This is all the more relevant because the elderly population is estimated to increase further in the next 45 years according to European Commission estimates, which forecast that the share of elderly people (aged 65 and over) will rise from 17.3% to 29.4% (European Commission, 2014b).

The main characteristics of the falling birth rate is a decreasing number of women with three or more children, an increase in childbearing age and changes in the spacing of births during the fertile period of a woman's life. In 2013, women were 30.5 years of age, on average, at childbirth and 29 years of age, on average, at the time of their first childbirth. The most significant fall in the number of childbirths is among women with primary school education.

Table 1.3 shows mortality and health indicators for 2000–2014. Life expectancy at birth in Slovenia in 2013 was 77.2 years for males and 83.6 years for females. In the same year, the EU averages were 77.5 years for men and 84.2 years for women (Eurostat, 2015b). Life expectancy in Slovenia decreased slightly during the transition period (1990–1993) for both males and females, through an increasing probability of death at almost all ages except during childhood. Since 1993, however, total life expectancy has been increasing, from a low of 73.6 years in 1993 to 80.5 years in 2013 (Eurostat, 2015b; see also Table 1.3). Life expectancy in Slovenia is higher than the average for the EU13 and just slightly below the EU average of 80.6 years in 2013.

Table 1.3

Mortality and health indicators, 2000–2014

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Life expectancy at birth, total (years)[a]	76.2	76.4	76.6	76.4	77.2	77.5	78.3	78.4	79.1	79.4	79.8	80.1	80.3	80.5	n/a
Life expectancy at birth, female (years)[a]	79.9	80.4	80.5	80.3	80.8	80.9	82.0	82.0	82.6	82.7	83.1	83.3	83.3	83.6	n/a
Life expectancy at birth, male (years)[a]	72.2	72.3	72.6	72.5	73.5	73.9	74.5	74.6	75.5	75.9	76.4	76.8	77.1	77.2	n/a
SDR female, all ages, (per 1000 females)[b]	1.7	1.6	1.6	1.6	1.6	1.5	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.0
SDR males, all ages (per 1000 males)[b]	10.9	10.9	10.7	10.9	10.0	9.8	9.2	9.1	8.4	8.3	8.0	7.9	7.8	7.6	7.1
Infant deaths (per 1000 live births)[c]	4.9	4.2	3.8	4.0	3.7	4.1	3.4	2.8	2.4	2.4	2.5	2.9	1.6	2.9	n/a
Probability of dying under age 5 (per 1000 live births)[d]	5.5	5.2	5.0	4.7	4.5	4.3	4.1	3.9	3.7	3.5	3.3	3.2	3.0	2.9	n/a

Source: [a]Eurostat 2015b; [b]NIPH, 2015c; [c]Statistical Office of the Republic of Slovenia, 2015b; [d]UNICEF, 2015.
Notes: SDR: Standardized death rate, all causes; n/a: Not available.

Life expectancy, morbidity and mortality data show disparities between regions, which correspond 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. There are also important differences in mortality between men and women as well as across the different educational classes. The average mortality rates place Slovenia between Denmark and Portugal, close to the EU average.

When looking at the mortality rates for those in the top two income categories (quintiles 4 and 5), these are 6% lower than the EU average. By comparison, the group with the lowest income (quintile 1) places Slovenia's mortality rate above the EU average by as much as 30%. To illustrate these disparities, a 30-year-old man with a university degree can expect a life expectancy that is 7.3 years longer than a man with only an elementary school education but this would still be 4.3 years shorter than that of a woman with a university degree and even 1.8 years shorter than a woman with only elementary school education (NIPH, 2011).

Indicators showing the most important causes of premature mortality further confirm regional disparities, as suicide rates differ at a ratio of 1:3 at the county level. Average suicide rates at the country level are already above the EU average but the rates in the worst-off regions are proportionally worse. The

eastern regions, which are also less economically developed, show significantly higher suicide rates. Similar differences are observed in alcohol-related liver diseases, none of which compare favourably with EU15 countries.

Morbidity and mortality data show that Slovenia experiences the same characteristics as other countries in western and central Europe (Table 1.4). Diseases of the circulatory system are the most common cause of death in Slovenia, causing approximately 38% of all deaths. These are followed by cancers (33%), other noncommunciable diseases (13%) and deaths from injuries and poisoning (8%) (WHO, 2014; WHO Regional Office for Europe, 2015b).

For men, the most common type of cancer in 2012 was malignant neoplasm of the prostate (138.6 new cases per 100 000 men), followed by skin cancers, excluding melanoma (103.9 new cases per 100 000 population); cancer of the colon, rectum and anus (93.1 new cases per 100 000 population); and cancer of lung, trachea and bronchus (86.6 new cases per 100 000 population).

In women, the most common type of cancer was breast cancer (116.9 new cases per 100 000 women), followed by skin cancers, excluding melanoma (105.4 new cases per 100 000 population); cancer of lung, trachea and bronchus (35.5 new cases per 100 000 population); and cancer of the colon, rectum and anus (62.4 new cases per 100 000 population). While the incidence of female breast cancer between 2002 and 2012 remained rather stagnant at around 85 new cases per 100 000 women, the standardized death rate for breast cancer decreased from 30.6 deaths per 100 000 in 2002 to 16.3 per 100 000 in 2012 (Zadnik & Primic Žakelj, 2015).

Mortality by age and sex groups shows a pattern similar to the EU average. The infant mortality rate fell to below 10 per 1000 live births in 1988 for the first time. In 2014, infant mortality was at its lowest, with 1.8 infant deaths per 1000 live births (Statistical Office of Slovenia, 2015b).

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. Because of the traditionally good immunization coverage, 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. However, smaller outbreaks of measles were registered in 2014 and 2015. 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 2011 was 5.4 per 100 000 population (WHO Regional Office for Europe, 2015a).

Table 1.4

Selected mortality in Slovenia and the EU, latest available year

	Standardized death rate, all ages (per 100 000 population)				
	Slovenia	WHO European Region	EU	EU Member States pre-2004	EU Member States post-2004
Communicable diseases					
Infectious and parasitic diseases	2.80	12.89	8.46	8.85	7.05
Tuberculosis	0.62	4.98	0.82	0.39	2.41
HIV/AIDS (as recorded by routine mortality statistics system)	0	1.84	0.80	0.91	0.38
Noncommunicable diseases					
Diseases of the circulatory system	218.40	366.81	218.36	164.76	415.71
Malignant neoplasms, all	195.99	158.18	167.68	160.70	193.36
Mental and behavioural disorders	5.47	9.20	13.07	15.36	4.64
Diseases of the respiratory system	32.34	44.27	41.09	41.28	40.36
Diseases of the digestive system	39.71	37.05	29.81	25.81	44.54
External causes					
Injury and poisoning	56.31	57.50	35.97	30.75	55.17
Suicide and intentional self-harm	17.17	11.71	10.26	9.05	14.68
Selected alcohol-related causes[a]	90.95	73.32	57.97	49.47	89.23
Selected smoking-related causes[a]	185.02	221.15	196.25	160.38	328.32

Sources: WHO Regional Office for Europe (2015a); [a]WHO Regional Office for Europe, 2015b.

From 1987 to 2013, the annual reported incidence rate for AIDS varied from 0.05 to 0.53 per 100 000 population. A cumulative total of 135 AIDS cases had been reported by the end of 2013 plus a cumulative total of 438 cases of HIV infection that had not yet developed to AIDS (WHO Regional Office for Europe, 2015a).

Since the second half of the 1980s, Slovenia has had one of the highest suicide rates in the world, at approximately 17.1 suicides per 100 000 inhabitants in 2010 (Table 1.4); the level of suicide committed by males (29.3 per 100 000) was more than four times that of females (6.1 per 100 000) (WHO Regional Office for Europe 2015b). 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 standardized death rate

(per 100 000 population) for injury or poisoning decreased from 104.8 in 1986 to 83.2 in 1997 and to 56.3 in 2010, Slovenia still has one of the highest rates of this kind of mortality in Europe, exceeding the European average by 56.5% (see Table 1.4) (WHO Regional Office for Europe, 2015b).

In spite of a slight trend towards a decrease in deaths caused by chronic liver diseases and cirrhosis in men and women, Slovenia is still one of the European countries with the highest mortality from diseases caused by the abuse of alcohol (Table 1.4). In 2010 (the latest year for which Slovene data are available), Slovenia had 24.0 deaths from liver diseases per 100 000 population, compared with an EU average of 12.9. This is despite the fact that average alcohol consumption decreased from 13.4 litres per capita in 1995 to 10.3 litres in 2010, which is similar to the EU average (10.0 litres) (WHO Regional Office for Europe, 2015a).

In 2014, 23% of the adult population aged between 15 and 64 years were smokers: 25% of all men in this age group and 20% of all women (NIPH, 2014a). There was a clear decline with respect to smoking prevalence even before new legislation restricting tobacco smoking in closed public spaces was introduced in 2007. While there has been a declining trend in the prevalence of smoking among adolescents, almost 15% of 15 year olds are smokers and 17% of all youngsters started smoking before the age of 13.

Trends in maternal and child health indicators (Table 1.5) suggest that Slovenes are not only having children later in life but are also having fewer children. 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 postneonatal 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 preventive 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.

Table 1.5

Maternal and child health indicators, selected years

Indicator	1980	1990	1995	2000	2005	2010	2011	2012	2013
Live births to mothers aged under 20 years (% all live births)[a]	13.25	7.81	5.14	2.79	2.01	1.13	1.16	1.01	n/a
Neonatal deaths (per 1000 live births)[b]	10.80	4.99	3.09	3.60	3.00	1.80	2.30	1.10	1.80
Postneonatal deaths (per 1000 live births)[a]	4.53	3.27	2.50	1.32	1.05	0.72	0.96	0.55	1.09
Maternal deaths (per 100 000 live births, based on clinical data)[a]	13.4	15.5	8.80	22.00	16.59	0	0	n/a	n/a
Abortions (per 1000 live births)[a]	647.00	658.57	568.55	463.64	323.47	194.99	196.14	189.27	n/a

Sources: [a]WHO Regional Office for Europe, 2015a; [b]OECD, 2015b.
Notes: n/a: Not available.

2. Organization and governance

Slovenia has a social health insurance system with a single public insurer, the HIIS, providing universal compulsory health insurance. The HIIS represents the interests of insured people in negotiations on health service programmes and their implementation; as the main purchaser of services in the health system, it plays a primary role in the formulation of prices for such services. Three private companies (Adriatic-Slovenica, Triglav and Vzajemna) provide voluntary health insurance (VHI), which is mainly used by patients to cover co-payments.

The key regulatory role rests with the Ministry of Health, which is also the owner of all public hospitals and national institutes, their key manager and investor as well as the granting authority of practice authorizations for specialists. The Ministry is supported by the Health Council, an advisory body that advises on policy, as well as on HTA and the introduction of new therapeutic and diagnostic procedures. Municipalities are responsible for the organization of primary care. The regulated professions have their own professional associations (chambers) that administer and regulate their licensing, continuous education and training. They also exercise a role in planning, in particular the Medical Chamber, which is solely responsible for doctors' specialty training.

Several health-related NGOs are active in the health system, including patient groups and those focused on issues such as promoting tobacco control or sober driving. Patient organizations are often invited to participate in the drafting of policies and regulations in their specific area. So far, attempts to establish an umbrella organization that represents the interests of all patients have failed. Patients participate in the process of purchasing health services only indirectly, voicing their concerns and suggestions to any one of the key negotiating partners (providers of health care services, the HIIS and the Ministry of Health). The protection of patient rights is monitored by the Ministry of Health.

2.1 Overview of the health system

Since 1992, Slovenia has had a Bismarck-type 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 employment status or on a legally defined dependency status (assigned to minors, unemployed spouses, registered unemployed people and individuals without source of income). The Ministry of Health has a supervisory role within the 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 (mainly co-payments and complementary insurance) have become significant, reaching 28.6% of total health expenditure in 2014 (Statistical Office of the Republic of Slovenia, 2015a). Co-payments have never fully reached their goal of discouraging unnecessary utilization, as most of the population liable for co-payments takes out complementary insurance offered for this particular purpose and accounting for 14.2% of total health expenditure in 2014 (Institute of Macroeconomic Analysis and Development (IMAD) calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a).

Some of the tasks previously undertaken by the state have been assigned to professional chambers, which control the qualifications, specialty training and continuous education of health professionals. Another important feature of Slovenia's health system is the growing share of private providers, particularly in primary and specialist health care. This has led to increasingly complex contracting arrangements, as privatization is associated with fragmentation in provision. Most care is still delivered by state-owned (hospitals, most of outpatient specialist care and tertiary care) and municipality-owned (primary health care centres) providers, who collectively employ more than 83% of the total health workforce (NIPH 2015b). Only for dental services does the share of private providers exceed 50%, with 15% of all providers working exclusively for OOP payments (NIPH, 2015b). The organizational structure of the health care system as of 2015 is depicted in Fig. 2.1.

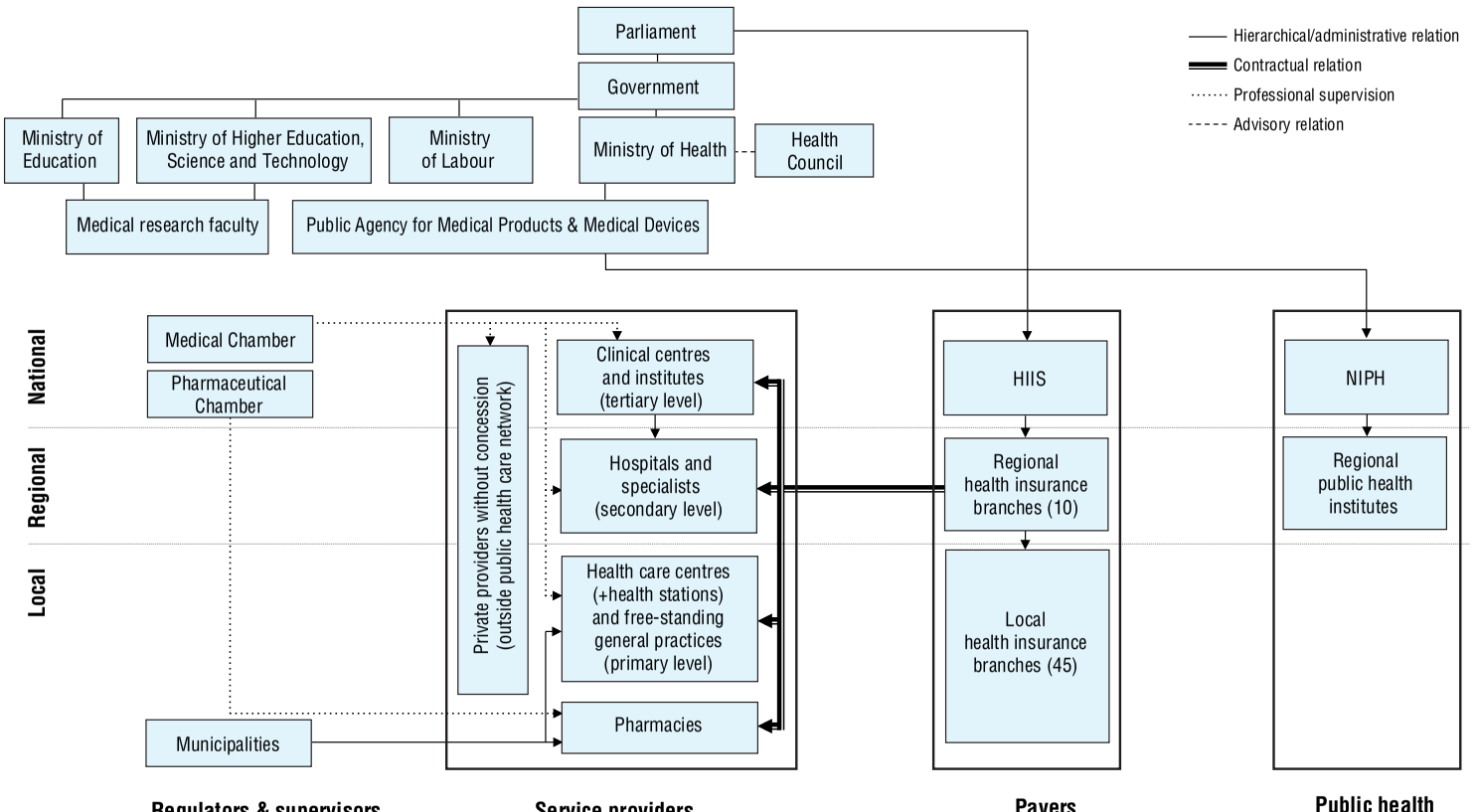
2.2 Historical background

Period from 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

Fig. 2.1

Organization of the Slovene health care system



time, medical care was delivered on the basis of private practice. The first developments towards a health insurance system occurred during the second half of the 19th century. In 1858, insurance covering illnesses was extended to railway workers, and in 1869 it was expanded to also cover injury. Compulsory insurance against injury (following the Bismark model) was enacted within the Austrian part of the Habsburg monarchy in 1887 and expanded in 1888 to incorporate health insurance beyond injuries. At the time, two thirds of health insurance funding was contributed by workers and one third by their employers.

The first actual sickness fund for compulsory health insurance in line with the German social insurance model was established in Ljubljana in 1889, followed by similar institutions in cities across the country. The role of the sickness funds was to protect worker's social rights during illness and their rights to health care services. Injury insurance was an autonomous element of this, covering workers against work-related injuries, with contributions solely paid by employers. By the end of 1889, 65 district health insurance funds were established in the Upper Carniola and Lower Styria regions, insuring approximately 15 000 people (about 11% of the population at the time). 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). After the First World War, health insurance dissipated into what was called "branch insurances" – organized in a similar manner to that in Germany – for certain large groups, such as railway employees, staff of the University of Ljubljana, miners and steel workers. Certain categories, such as farmers, were not included, which was important as they represented the majority of the population. In 1937, national pension and disability insurance programmes were established.

Period 1945–1991

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 and financed by the contributions of employers and employees; the state budget contributed only certain funds for soldiers and war veterans. Social insurance was governed by the state or by regional people's committees. Because of 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 transformed gradually through 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 schoolchildren 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. As the period after the Second World War was also one of construction, 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 health insurance providers organized at the municipality level.

At the regional level, institutions for social medicine and hygiene monitored the epidemiological situation. Large-scale disease prevention programmes and relevant measures related to public health were carried out by the Institute of Public Health of the Republic of Slovenia (IPH-RS, which was superseded by the NIPH in 2012; this HiT will use NIPH when referring to these) based in Ljubljana. Regional hospitals were established, and other health-related services were introduced, 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. In this context, health 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 communicable diseases, preventive health care). Health insurance providers consisted of community health insurance institutes, which were administered by representatives of employers and insured individuals. Contribution rates differed according to individual types of employment (e.g. for workers, for craftsmen, for farmers). 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 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 a "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, because of the 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. These problems were accompanied and further exacerbated by the utilization of questionable treatment protocols, which contributed to waste as well as inefficient and ineffective medical care. By 1990, the health care system was on the verge of financial collapse. Even in 2016, there remains a conflict between public expectations and the economic capacity of the system; it is a challenge for the public sector to continue to finance the provision of the benefits that Slovene citizens were entitled to under the former state.

Period from 1991

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 a collectivistic social philosophy to 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 methods of administering health care providers were redefined.

Prior to 1992 Slovenia's health care system had certain weaknesses in terms of securing resources, financing and efficiency. These problems were not merely a reflection of the accumulated, more general, problems of the former state but also 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 health insurance system and VHI and private practice was reintroduced. The main elements of the Act were as follows.

- Besides its legislative function, the government (and its bodies) became responsible for planning a strategy for health care development, designing a network of public health care services, monitoring health care services and health insurance, ensuring the education of health care personnel, monitoring and preventing communicable diseases, and for 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, became the owner or founder of health care institutions at the secondary and tertiary levels and became responsible for ensuring funds for 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, became responsible for defining a network of public health care services within their region and for ensuring appropriate investments. The new task for municipalities was to carry out programmes for improving the health of the population within their jurisdiction 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 provider of compulsory health insurance, HIIS, was assigned responsibility for implementing mandatory health insurance for the whole country (i.e. collecting contributions and entering into contracts with health care service providers, pharmacies and medical equipment suppliers) and for performing 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 Slovenia's Health Care Plan, implementing unified professional directives on individual medical conditions and implementing preventive and curative programmes upon formal agreement with the health insurance providers. Their association and other organizations were given public authorization to negotiate on the payment for health care services.
- Individuals became liable for making contribution payments in accordance with their financial capabilities and for taking care of their own health and their family's health.
- The right to choose a doctor at the primary care level was one of the rights regulated by the new 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, such as providing prescriptions to patients on their roster, evaluating their temporary inability to perform work, referring them to a specialist or to a hospital and maintaining their medical documentation. Other doctors were no longer allowed these competencies. Thus, insured individuals could now lose their right to health care service coverage if they did not sign up with a personal physician.
- A personal physician could be a general practitioner (GP), a specialist in child care/paediatrician working at primary care level or a specialist in women's health care/gynaecologist. The Act also introduced personal dentists. The introduction of personal physicians aimed to improve patient monitoring and enable physicians to 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 current health system is still largely based on the conceptual and legal framework established by the 1992 Act. Subsequent attempts (from 2003) to introduce major reforms of the health system are discussed in Chapter 6.

2.3 Organization

The Health Care and Health Care and Insurance Act of 1992 set out the basis for the system of compulsory health insurance and VHI, permitted privatization of health care services and transferred many administrative functions to the Medical and Pharmaceutical Chambers.

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, along with implementing standards and other mechanisms to assure the prevention of communicable diseases, a health-friendly environment and protection and health in the workplace. Other responsibilities include establishing special programmes on prevention and providing care and protection for the most vulnerable population groups. Furthermore, the state generally determines health care policy, most notably in regard to public health care tasks, planning and setting priorities. Finally, the state is the owner and administrator of public health facilities at the secondary and tertiary care levels.

Parliamentary Committee on Health

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

Ministry of Health

The task of the Ministry of Health is to prepare health care and health protection legislation, to supervise implementation and to ensure regulation. The activities of the Ministry of Health relate to health and health financing matters at the primary, secondary and tertiary levels. Furthermore, it monitors public health, develops and implements health promotion programmes and promotes people's health education. It also supervises the production, trade and supply of medicines and medicinal products.

The Ministry is also in charge of implementing international agreements concerning social safety and developing strategic plans for the health care system, which are submitted to the Parliament for approval. Particular strategies include:

- policy development on 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; and
- 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. In this capacity, the Ministry approves the policies of an institution, provides financing for specific expenses

such as capital investments in state-owned hospitals (including the building and medical appliances such as MRI, CT or PET scanners) and plays an active role in nominating directors for health institutions. There are two offices within the Ministry of Health: the Health Inspectorate and the National Chemicals Office. The Health Inspectorate oversees sanitation, hygiene and the ecological protection of the public, and also monitors environmental health. The National Chemicals Office, established in 1999, oversees policy and legislation relating to chemicals. It also maintains a list of chemicals; regulates the manufacturing conditions, trade and use of chemicals as well as their classification, marking and packing; and monitors the implementation of the Convention on Chemical Weapons and the Chemical Weapons Act.

Agency for Medicinal Products and Medical Devices of the Republic of Slovenia

The Agency for Medicinal Products and Medical Devices of the Republic of Slovenia (ARSZMP) was established in 2007 through the 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). The Agency is a public body affiliated with 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 pharmacovigilance and materiovigilance. It maintains the national database of pharmaceuticals as a sort of a national formulary. The database is freely accessible on the ARSZMP's web site and its content is supported and provided by the HIIS and the NIPH.

Health Council

The Health Council is a special advisory body to the Ministry of Health. It was set up following the 1992 Health Services Act and is responsible for assisting the Ministry in its planning tasks. The Council is formed for a four-year term; its members are nominated by the Minister of Health and confirmed by Parliament. Previously, the Council was nominated for terms independent of that of the current Minister of Health. As of 2006, the terms overlap and the Council's term must also cease when the Minister steps down, a phenomenon that occurred three times between 2007 and 2015. The Council consists of 19 members, nominated according to the following groups:

- eight members from the ranks of university professors in different clinical disciplines as higher academic advisers;
- six members from the ranks of experts in health care, public health, epidemiology, health care management and informatics;
- three members from the ranks of experts on health economics and health insurance;
- one representative of civil society; and
- the President of the Strategic Board on Nursing and Midwifery.

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 national specialty expert groups. The specific duties of the Health Council include:

- monitoring health conditions in the country;
- advising the Minister of Health on measures and priorities in health care programmes;
- proposing (preventive) health care programmes as well as health education and research initiatives;
- performing HTA on newly proposed pharmaceuticals and clinical interventions (see also section 2.7.2); and
- 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 below.

The Ministry of Finance. The Ministry 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 through the "budget memorandum" by the Ministry of Finance and Parliament each year.

The Ministry of Education, Science and Sport. The Ministry is in charge of implementing education policy and enforcing legislation for the education of the population spanning pre-school to higher vocational training as well as for sports. Among other things, the Ministry operates, funds and manages public institutions and human resources for education and determines enrollment procedures. As such, it is responsible for supervising activities

related to medical and health professional education and for the university and postgraduate education of junior researchers. It also administers certain health promotion programmes. Its mandate extends to the area of science, and it thus (co-)finances different research activities, including those in the area of medicine, health sciences and public health. Furthermore, it provides financial support for companies in the field of technological development.

The Ministry of Labour, Family, Social Affairs and Equal Opportunities. Acts with the Ministry of Health to coordinate the provision of nursing homes for the elderly and people with disabilities. It is also responsible for negotiating multisectoral bilateral conventions on social security.

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. The Ministry 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 transmittable animal diseases both nationally and internationally and for adopting programmes, coordinating activities and defining measures to prevent and control the spread of transmittable animal diseases and epidemics.

Other relevant ministries. The Ministries of Internal Affairs, Defence, and Justice finance health care for police and military personnel on active duty and for prisoners (see section 3.6.1). The Ministry of Public Administration is responsible for regulation of the salary system in the public sector and for the coordination of negotiations with the representatives of trade unions concerning salaries and working conditions.

National Institute of Public Health of Slovenia (NIPH)

The NIPH is the central institution in the field of public health. It is responsible for a number of public health functions, research and education and training in public health. NIPH is one of the key reporting institutions of national statistics for international and national purposes and the only one in the field of health. Based on this mandate, the NIPH performs analyses of population health as well as health care and its resources and performance. These analyses are central to the support the institute provides for the decision- and policy-making process at the level of the Ministry of Health, for example regarding the planning of health care capacities. A special focus of the NIPH's activities lies with health determinants and their impact on health. Some of its essential functions include the surveillance of communicable diseases, vaccination programmes and the stockpiling and distribution of vaccines across the country as sole

importer and distributor. In the area of environmental health, NIPH prepares risk assessments and evaluates environmental impacts on health. One of the most recent functions assigned to the Institute is the coordination, monitoring, assessment, management and provision of health promotion, prevention and screening programmes. NIPH also participates in HTA processes and represents Slovenia in professional public health organizations at European and international levels. It works closely together with the NLHEF on specific tasks (see below).

National Laboratory for Health, Environment and Food (NLHEF)
The NLHEF is the central and only public health laboratory in Slovenia. It carries out a number of functions ranging from microbiological tests for the needs of health care providers to the isolation of pathogens for epidemiological surveillance and the preparation and coordination of monitoring programmes at national level. On behalf of the Health Inspectorate, the NLHEF performs sampling of waters, foodstuffs, objects of common use, chemicals, alcohol, tobacco as well as living and professional environments. It prepares assessments on environmental risks, supports the activities of the different ministries and cooperates closely with the NIPH.

Health Insurance Institute of Slovenia (HIIS)
The HIIS was created in 1992 as a public non-profit-making entity closely 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 general manager 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 advisory in nature and they have no decision-making power on issues relating to health insurance. However, the 10 regional HIIS branches are responsible for contracting with providers.

The HIIS autonomously adopts the financial plans and policies that regulate the rights and benefits of the insured and proposes the level of contribution rates to the National Assembly on a regular basis. However, this autonomy is not absolute, since the final decision regarding contribution rates rests with the Parliament, and the HIIS's statute is bound by the approval of the Ministry of Health. Moreover, as the HIIS's founder, the government has retained some key levers to steer operations, such as involvement in determining the scope of benefits, the financial plan and the confirmation of the elected general manager.

The HIIS is the sole organization providing compulsory health insurance in Slovenia. Its tasks include issuing compulsory insurance, concluding contracts with providers of health care services and suppliers of technical aids, performing relevant 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. The Institute has the task of representing the interests of insured people in partner negotiations on health services programmes and their implementation, along with the formulation of prices.

Local government

Municipalities do not yet play an active role in decision-making in the health care system although that was envisioned by the health care reform legislation of 1992. They are currently principally responsible for the management of the primary health care network in their territory. They own and are responsible for capital investment in primary health care centres and pharmacies; they grant concessions to private health care providers who wish to work within the publicly operated primary health care system, and they support health promotion activities. A gradual fragmentation of the local government system in Slovenia began in 1995, with the splitting of the former larger municipalities into smaller ones, culminating in a total of 212 municipalities of varying sizes (see section 1.3). As a result, despite the target population coverage of 8000 inhabitants, local communities are often smaller in size, and only approximately 30% are self-sufficient in terms of 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, in particular, 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 and re-obtained public authorization for licensing and registration of nurses, midwives and health technicians in 2015. This task had been temporarily revoked and transferred to the Ministry of Health in 2012. There is also the Chamber of Physiotherapists, covering the approximately 800 active physiotherapists in Slovenia, and the Chamber of Laboratory Biomedicine. 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 (*Zdravniški Vestnik*).

Several trade unions represent the interests of health professionals, namely: 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 Care, which is also open to private providers. This Association bases itself 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

NGOs in the area of health can enable public participation in proposing and carrying out changes (reforms) in the organization of the health care system. In principle, NGOs can secure a small share of public financing from the state budget if they meet certain budgetary requirements. There are several active health-related NGOs, including patient groups and organizations as well as specific initiatives such as those promoting tobacco control or sober driving. There are also a number of self-help groups, the most prominent being Alcoholics Anonymous and a self-help group for patients with diabetes. The Slovene Consumers' Association has several projects related to out-of-court reconciliation, including for health-related issues. These were introduced by the Law on Patient Rights (2008).

2.4 Decentralization and centralization

The Slovene health care system remains relatively centralized, as the responsibilities of municipalities have not been implemented fully. The Ministry of Health has the task of planning health care regarding state-owned providers and for the health care system as a whole (ensuring equal access and patient rights across the whole country). All administrative and regulatory functions of the system take place at the national level; the subnational levels have predominantly executive duties. Compulsory health insurance is also centrally managed and administered, with the local levels conducting only those activities that are assigned to them from the central level. The professional chambers and organizations also operate at state level or through their regional branches.

Municipalities seem to be making limited use of the autonomy they gained to plan health services. Consequently, the de facto devolution in planning primary health care from the central government to local communities has not yet occurred. Moreover, considering the size of the country, the economic benefits of further health system decentralization are rather limited. The present fragmentation raises the challenges of equal access as well as balanced coverage and provision of services across the country, given the different economic strength and motivation of municipalities.

Privatization within the health care system has taken place gradually and at a constantly increasing pace (see sections 2.5, 2.6 and 4.2).

2.5 Planning

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 has been delegated to municipalities. As mentioned above, the pace and extent to which the municipalities have taken up this task varies.

The Slovene health care system is predominantly treatment oriented. Sociopolitical and socioeconomic changes, along with people's expectations, dictate changes in public health care activities in terms of quality improvement initiatives and health protection. It is important to note that from 2002 onwards more attention was given to a gradual reform towards the "New Public Health" paradigm. Unfortunately, so far, the establishment of a School of Public Health has not been realized. Nevertheless, study programmes in public health have been expanded, both in training for public health as a specialty and for masters and doctorate programmes at the Medical Faculty of the University of Ljubljana.

In March 2016, Parliament approved the National Health Plan "Together for a society of Health 2016–2025" (see sections 7.1 and 7.2) (Republic of Slovenia, 2016). The Plan is a strategic document that addresses the key problems of health and the health care system in Slovenia and is based on a broader analysis commissioned by the Ministry of Health in 2015. It sets the basis for the development of health care in Slovenia over the next 10-year period and

for proposed legislation on health insurance and health care activities, and it maintains the core vision of quality and affordable public health. Through the envisaged measures it strives to:

- strengthen and protect health and prevent illness;
- optimize medical care;
- enhance the performance of the health care system; and
- achieve fair, solidarity-based and sustainable health care financing.

Previous planning documents were the National Health Care Plan of Slovenia 2008–2013 "Satisfied health care users and health care providers" (Ministry of Health, 2008b) and the National Health Care Programme "Health for All by 2004" covering 2000–2004 (Ministry of Health, 2000).

2.6 Intersectorality

An intersectoral approach was first promoted by the NIPH as far back as 1994, with the organization of the first health promotion conference, which brought together senior representatives from 12 different ministries. This provided strong groundwork and encouragement for future activities where intersectorality was vital for successful interventions. Among these, the following examples are of note.

Introduction of a total ban on indoor smoking in public spaces. Close cooperation with the Ministry of Economy, Ministry of Finance, Chamber of Commerce and trade unions helped to reach understanding and the broadest support for the smoking ban.

Resolution on physical activity and nutrition. Incentives for enhancing physical activity and healthy nutrition were developed with the cooperation of the Faculty of Sports, Ministry of Agriculture and Ministry of Education.

Scheme on school fruit and vegetables. Successful initiative generated by cooperation between the Ministry of Health and the Ministry of Agriculture.

Act on subsidies for hot meals in secondary schools. The Act resulted from collaboration between the Ministry of Health, the Ministry of Agriculture and the Ministry of Education.

2.7 Health information management

2.7.1 Information systems

Slovenia has a general national orientation towards centralized registry data, with the first nationwide registries originating in the mid-1960s, strict legislation on personal data protection and considerable awareness of the importance of freedom of information among its population. This context has made a substantial contribution to the development of contemporary health information systems.

There have been two major players with large health databases since the early 1990s:

NIPH. Its major tasks concern public health and related registries of patients, deceased persons and services. The NIPH maintains a long list of registries and databases (e.g. National Birth Registry, Causes of Death Registry, Communicable Diseases Registry, Registry on Vaccination, Registry of Hospitalizations, database containing outpatient data, Accidents at Work Registry, Absence from Work Registry, Fetal Deaths Registry, Registry on Health System Workforce).

HIIS. Its large databases cover financial data.

There are also other registry holders, such as the Institute of Oncology (Cancer Registry) and the Golnik Clinics (Tuberculosis Registry). There is clear legislation on all these registries and databases, the majority of which are covered in the Health Databases Act of 2000.

These databases and registries serve different purposes. The information system at NIPH is tailored to public health issues, namely to the delivery of information to decision- and policy-makers, various analyses and wide data dissemination. NIPH is also an authorized producer of official national statistics, coordinated by the National Statistical Office. Consequently, the NIPH is the centralized, single reporting point responsible for data dissemination to international organizations such as WHO, Eurostat, OECD, the European Food Safety Authority and the European Monitoring Centre for Drugs and Drug Addiction. The NIPH also disseminates health statistics at its own data portal (NIPH 2015b). The primary purpose of databases held at HIIS is to collect information on the financial management of the health system.

Over the past years, there have been many efforts to set up a health information system at national and local levels to ensure high quality data for decision-making, financing and quality improvement.

The Health Sector Management Project. This was launched in 1999–2000 and financed through a development loan from the World Bank. It aimed to produce a common dataset and data dictionary as a basis for the development of a National Health Information Clearinghouse. This was intended to become the main broker of health care information, serving all the key stakeholders and integrating certain tasks that are currently the responsibility of the HIIS and the NIPH. While this goal was not reached, the aim of developing joint codes and classifications remained.

NIPH. The NIPH as a major patient and service registry holder has improved and renovated its data collection system

HIIS. The HIIS adapted its data collection system in 2013 to enable the procurement of information at patient level and improve quality of data, transparency of financial flows as well as to facilitate better management.

National eHealth project. Between 2010 and 2015, the national eHealth project (*e-Zdravje*) implemented various new applications to improve quality of services and in many cases capture additional data to enhance existing information (e.g. e-prescriptions, e-waiting lists, telemonitoring for stroke patients, national interoperable "backbone"). One of the most important achievements of this project is the so-called "uniform information model", wherein involved institutions agreed to using certain classifications, code lists and definitions of selected variables.

Based on these activities, the whole system, from single service at inpatient or outpatient level to final information for decision-makers consists of several sections connected by an interoperable "backbone". HIIS already has a single entry point for financial data and NIPH has also been developing the single entry point for public health data (while it is in operation for hospital data, it is still under construction for outpatient data). Both institutions make available detailed instructions for data providers on their web pages, including all definitions of variables, code lists, formats of data reporting (usually XML format) and data security issues. Data providers are also informed in advance on all data that will need to be provided within the next calendar year.

Next to registry data, surveys of different target populations are carried out, mostly by NIPH. In general, one or two large-scale surveys per year are conducted to gather information on lifestyle, health determinants (e.g. drug use, alcohol, dietary habits), opinions on health system utilization and so on. Given the respondents' consent and/or necessary legal background, the combination of registry and survey data offers a rich basis to explore lifestyle in conjunction with health system utilization. Some studies in this direction have already been

performed and indicate that such topics may be one of the most important challenges for the future. Finally, big data are another important source of information. The areas of alternative medicine or dementia are only two fields where this approach can contribute significantly to relatively poor data sources. The exploration of big data for such purposes has been initiated.

Despite the significant progress described above, Slovenia is facing several challenges regarding its health information system.

Decreasing the burden on data reporting. The uniform data model described above is to be fully implemented and its scope broadened; as described, there are now two "single entry points" (HIIS and NIPH), but data-reporting channels for health care providers on the portal could be improved.

Relevance of delivered information. There are some areas (e.g. long-term care, dementia, health system management) where data are still lacking, yet other areas where some information is collected but almost not utilized at all. Collected information will need to be reviewed and adapted accordingly.

Data quality. High-quality entry data are required for high-quality information. Since 2010, much effort has been put into data quality improvement, with an emphasis on hospital data. The quality of public health data is regularly monitored by special procedures. Nevertheless, quality of outpatient data could be further improved by better informing and training data providers.

Usefulness of delivered information. While health information providers have a great deal of data available, only a small proportion is translated into understandable information that could be directly used by policy-makers. Better use of new dissemination tools, such as infographics, could be beneficial.

Data linkage. While the linkage of data sources held by different institutions containing additional information on health system utilization, social information or spatial/pollution information could offer extremely valuable information, its implementation is challenging because of data protection issues, as there is no legal background that enables the exchange of personal data between institutions.

2.7.2 HTA

HTA is not formally established in Slovenia as an aid to the introduction of new health care technologies into the compulsory health insurance system. Health technologies are usually introduced arbitrarily and, as a result, providers have considerable leeway when providing services, for which they can then get reimbursed by insurance.

HTA is performed at a very basic level, despite the initiatives put forward mainly by the NIPH but also by other stakeholders in recent years. Significant attempts have been made to improve the situation, for example 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 for medical premises and equipment as well as measures for the assessment of new methods of treatment (e.g. medical effectiveness, economic efficiency, social aspects). However, these processes have not been completed yet.

The HIIS is the only actor in the health system consistently involved with the evaluation of health technologies, namely pharmaceuticals. Pharmaceuticals are systematically evaluated once marketing authorization has been granted in order to be placed on the positive or intermediate list.[1] A Pharmaceutical Reimbursement Commission (Commission on Classification of Medicinal Products on the List of Medicines) is summoned by the HIIS to provide relevant recommendations, while the final decision for inclusion rests with the HIIS. Effectiveness is the main criterion, but costs and cost–effectiveness are also considered important factors. Relevant experts, usually from the Faculty of Pharmacy at Ljubljana University, are responsible for the assessment of scientific evidence, which is ordinarily based on material submitted by manufacturers wishing to have their products included in the reimbursement lists.

Furthermore, a special protocol to evaluate proposals for the funding of new diagnostics, treatments, procedures and therapies was adopted by the government. The Health Council at the Ministry of Health appraises these proposals by means of a questionnaire based on HTA principles in an ad hoc manner. Approved proposals are then discussed by the Ministry of Health, the HIIS and health providers and their coverage by compulsory health insurance is negotiated on a yearly basis.

The latter track reflects the general intention of the government to implement the European endorsement of HTA, which was established in Directive 2011/24/EU on patient rights in cross-border health care. The NIPH was formally tasked with participating in the preparation of expert groundwork for the assessment of health technologies in the context of the European HTA network set out in the Directive. Consequently, there is now a legal framework for the assessment of high technology, but implementation is ongoing. The NIPH and the Institute for Economic Research have been involved in the European collaboration platform EUnetHTA since 2010 and 2013, respectively.

[1] Three different lists exist for pharmaceuticals: positive, intermediate and negative with only items on the first two being reimbursed by compulsory health insurance.

2.8 Regulation

The health care system has characteristics of both the integrated and the contract model of health care. Delivered services are paid by the HIIS based on its contracts with public health care providers (e.g. primary health care centres, hospitals). In addition, most private providers are contracted by the HIIS based on a concession (given either by the Ministry of Health or by municipalities) and are part of the public health care network.

2.8.1 Regulation and governance of third-party payers

Third-party payers are the HIIS and VHI companies. The HIIS is regulated by the government and the Parliament and monitored by the Ministry of Health. VHI companies are regulated by the Ministry of Finance and monitored by the Insurance Supervisory Agency.

In accordance with the Health Care and Health Insurance Act, annual partnership negotiations are conducted in order to define and specify national guidelines and priorities in terms of public health care programmes, their volume and cost, capacities for providing health services, payment mechanisms, tender processes and selection of providers, supervision processes and other rights and responsibilities of health care partners in terms of service provision, data reporting and financing of services. These partnership negotiations culminate in the adoption of an annual General Agreement (and its annexes), which regulates different groups of health care providers and is the key output of the first phase of the contracting process. It is subsequently used directly for the individual contracting process between the HIIS and each provider, to determine the final content of contracts.

2.8.2 Regulation and governance of providers

Individual contracts between third-party payers and providers follow the General Agreement and specify the type and volume of services to be provided, the cost and/or prices of services, methods of payment, quality requirements and conditions for monitoring contract implementation, and the individual rights and responsibilities of the contracting parties. The payments for most health services are prospectively defined and capped, which means that health services provided above the prospectively determined plans are not reimbursed by the HIIS (see section 3.3.4). If the purchaser (HIIS) and a provider do not reach a consensus within the framework of the General Agreement, both parties are entitled to initiate an arbitration process, after which the final decision is adopted by the HIIS, the provider and the Ministry of Health. The Ministry is the key arbiter in this case and has final decision-making power.

Health care providers can be categorized as providers at individual level (i.e. medical doctors, nurses, dentists and pharmacists) and providers at institutional level (hospitals, rehabilitative centres and primary care centres). Individual providers are regulated by professional chambers and financed by third-party payers. Institutional providers 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. Thus, it is the responsibility of the municipalities to grant concessions for private health care providers in primary health care (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 (with certain limitations and restrictions). The concession is necessary only for practitioners seeking reimbursement for their services by compulsory health insurance and/or VHI and only applies to the specific services they wish to be reimbursed for. Those who are not reimbursed from compulsory health insurance funds can only offer services to patients who purchase supplementary VHI (e.g. for specialist visits outside the public network and without waiting times) or directly make OOP payments. Once a concession has been granted, 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 gives the private health care provider the same rights and obligations as public providers. The only difference is 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 and pharmacists. Moreover, these chambers are responsible for supervising, monitoring and ensuring the quality of care as defined by the relevant legislation for each field (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.

Providers at both the clinical centre level and the hospital level are directly employed by their respective health care institution; as these facilities are publicly owned, such providers have the status of public employees and are paid in accordance with the collective public sector pay agreement.

The majority of providers at the primary care level are contracted by the HIIS and are employed in health centres, while a smaller number works in private practices; however, this system is in transition at the time of writing. According to the Resolution on the National Health Care Plan "Together for a healthy society" for 2016–2025 (Republic of Slovenia, 2016), the system of concessions and relevant legislation is to be updated, particularly regarding better regulation and supervision by the Ministry of Health, and transparency is to be enhanced. At the end of 2014, only 190 doctors and dentists were practising outside the public system (i.e. without a concession). Patients make direct OOP payments for visits to physicians without concessions in private practices, for the purchase of services that are not included in their benefits package or, to lesser extent, to avoid waiting lists for services in the basic package (see section 3.4).

Health care provider institutions are governed by their internal regulations according to the public health care network and by their contracts with third-party payers. 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 their directors under supervision of the council of the respective institution. Councils consist of representatives from the Ministry of Health or the municipalities, patients' representatives and a representative from the HIIS. Public providers of health services have their own association, which represents them in the annual partnership negotiation process with the HIIS. This association has sections for primary health centres, hospitals, dental care and public health.

Chapter 4 has more information on hospitals and health sector infrastructure.

2.8.3 Registration and planning of human resources

Registration/licensing of physicians

All physicians who work in health care, irrespective of whether their daily practice directly involves patients, have to become members of the Medical Chamber[2] and must be in possession of a valid licence after graduation from medical school. In 2007, compulsory specialist training for all physicians wishing to practise (including GPs) came into force. A six-month internship in intensive care and emergency medicine is required, after which a state registration examination has to be passed (composed of a practical part,

[2] Membership is compulsory under both the Health Care and Health Insurance Act (1992) and the Medical Services Act (1999).

a theoretical part and a segment on the administration of the health care system). The registration examination only qualifies junior doctors to enter into a structured process of specialty training, which is a condition for obtaining a full medical licence for independent work.

Once physicians have completed their specialty training, including a final specialty examination, they receive their first licence for independent work. Thereafter, the licence must be renewed every seven years. This renewal depends on various types of (points-based) scoring obtained through participation in different types of continuous medical education, such as additional training, courses, conferences, congresses, seminars and workshops. All of these are rated by a special committee nominated by the Supreme Professional Council of the Slovene Medical Association. In cases where candidates do not reach the required number of points, they must sit a re-certification examination. After reaching the age of 70, a physician is assigned a lifetime licence.

Registration/licensing of nurses

According to related regulations set up by the Ministry of Health in 2005, nurses obtain their registration after graduation and successful completion of an internship. The requirement of having to pass a compulsory state registration examination was abolished in 2005 (European Parliament and European Council, 2005). Licences for nursing professionals are granted by the Nursing Chamber (the task was temporarily transferred to the Ministry of Health between 2012 and 2015). Therefore, the entire process of registration, licensing and re-certification based on continuous professional education is administered by the Nursing Chamber.

Registration/licensing of dentists

Dentists obtain their registration after a qualifying examination, which is taken after a one-year internship. There are no additional training requirements for obtaining a licence for general dentistry. The general licence has to be renewed every seven years, similar to medical specialists. For dentists who decide to pursue additional specialty training, the process is the same as for physicians.

Registration/licensing of pharmacists

Pharmacists have two distinct pathways after graduation. One is to continue working in health care, either in a community pharmacy or in a pharmacy attached to a hospital or laboratory; the other is to opt for a career in industry. For the former, they have to pass a state registration examination after completion of a one-year internship. This examination entitles them to work anywhere in the health care sector according to their professional background. Registering with the Pharmaceutical Chamber to regulate their status as a pharmacist is

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

Registration/licensing of other allied health professionals

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

Planning of health professionals

The Ministry of Health has always played a key role in the planning of health professionals. Historically, this process was driven by simple ratios of physicians, dentists, nurses or pharmacists to population. The desired ratios were based on empirical evidence and grounded in retrospective data. From 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 – particularly 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 an adequate workforce.

Prior to 1992, the Medical Faculty of the University of Ljubljana, which was the only medical faculty at the time, insisted on a *numerus clausus*, where rigorous admission criteria, including entry examinations to the Faculty and final high school examination marks and other high school performance data were scored in order to rank all candidates. Entry examinations to the University of Ljubljana Medical Faculty were abolished through changes to the admission criteria for university studies in 1995: universities then adopted the national high school final examination (known as the *matura* in Slovenia) as the qualification required to enter university. However, 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 "imports" of health professionals from other territories of the Socialist Federal Republic of Yugoslavia (which were then citizens of the same country) resulted in a relatively well-balanced situation. Slovenia's independence and the resulting (temporary) end to the free flow of health professionals between countries of the former Yugoslavia revealed deficits, which Slovenia managed to overcome around 2010–2011.

The Health Council, in cooperation with the Medical Faculty, professional colleges and other institutions, proposes and monitors the implementation of health-related professional education. The Health Council issues recommendations on the number of health professionals, and decisions to adjust enrollment 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 little 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 (medical doctors and dentists). Based on its defined workforce estimates and projections, it prepares an annual plan of the number of new posts to be offered to junior medical and dental doctors. This is then confirmed by the Ministry of Health and financed through a special fund created and maintained by the HIIS.

Since the mid-1990s until the end of the first decade of 2000s, Slovenia experienced moderate shortages within the health professional workforce, in particular regarding physicians and registered nurses but also, to a lesser degree, dentists and pharmacists. In the latter case, the deficit was only transient. Between 2003 and 2011, several measures were taken to alleviate these shortages. A second medical faculty was established at the University of Maribor and the recruitment of foreign medical graduates was simplified and enhanced. This resulted in significant growth in the number of medical doctors as their total number increased by 12.5% between 2003 and 2011 (see also section 4.2.1).

In nursing, the process of establishing new educational capacity was much more intense. By 2011, there were already five fully accredited nursing schools (Ljubljana, Maribor, Izola, Jesenice and Novo Mesto) and three with "extraordinary study programmes" (Celje, Murska Sobota, Slovenj Gradec). The latter means that these schools admit only students who are doing part-time studies in nursing (mostly health technicians upgrading their education to that

of registered nurses). An NIPH assessment stated that this intensification in the number of educational posts for nursing professionals was excessive and would provide too many registered nurses (NIPH, 2014b). Discussions on the role of the different levels of professionals in nursing care are still ongoing (see also section 4.2.1).

2.8.4 Regulation and governance of pharmaceuticals

The regulation of medicinal products for human use is an important part of the effort to protect public health in Slovenia. The Ministry of Health is the regulator for medicinal products, medical devices and pharmacy services. Relevant provisions are set out in the Medicinal Products Act, the Medical Devices Act and the Pharmacies Act.

The Medicinal Products Act regulates the field of medicinal products: the conditions and measures to ensure their quality, safety and efficacy; conditions and procedures for their testing, production and distribution; official controls; and pricing.[3]

The Pharmacies Act regulates the provision and organization of pharmacy services and activities. It ensures the supply of medicinal products to inhabitants and health institutions as well as other organizations.

The ARSZMP is the competent authority for medicinal products and medical devices. It oversees tasks pertaining to marketing authorization, distribution, post-marketing evaluation and vigilance for pharmaceuticals and medical devices. It has an inspection function for clinical trials and is responsible for cooperation with other EU Member States and the European Medicines Agency. Its main responsibilities will be illustrated in more detail in the upcoming paragraphs.

Marketing authorization

In Slovenia, a medicinal product may be marketed if:

- it has obtained marketing authorization (see more information below);
- ARSZMP authorizes its use for individual patients at the personal responsibility of their attending physician, following a request by a hospital or institute;

[3] In accordance with the Act, a medicinal product is any substance or a combination of substances presented as having properties for treating or preventing disease in human beings or animals. A medicinal product is also any substance or a combination of substances that may be used in humans or animals, in order to establish a diagnosis or to restore, correct or modify physiological functions by exerting pharmacological, immunological or metabolic action, or to aid in diagnosis.

- it receives a temporary permit from ARSZMP reserved for exceptional cases (e.g. infections, poisoning, radiation) and other reasons relevant to public health protection;
- it is covered by the state budget as humanitarian aid in crisis situations (in accordance with Article 141 of the Medicinal Products Act), if no authorized product with the same composition is on the market; or
- it is on the list of essential or urgently needed medicinal products without marketing authorization referred to in Article 17 of the Act.

In accordance with European legislation, medicinal products must obtain marketing authorization prior to their placement on the market. This can be obtained via the national procedure (based on the Medicinal Products Act), via mutual recognition or a decentralized procedure, or via the centralized procedure led by the European Medicines Agency. The procedure for granting marketing authorization starts with an application submitted by a legal entity or natural person established in the European Economic Area. Documentation must be prepared in accordance with Articles 5 to 20 of the "Rules on marketing authorization of medicinal products for human use" and the application must be in the form of a common technical document that contains the five modules set out in Annex I to Directive 2001/83/EC. In the national marketing authorization procedure, ARSZMP checks whether the quality, safety and efficacy of the medicinal product in question have been proven, and whether the risk–benefit ratio for its use is favourable. ARSZMP also decides on the prescription status (available over the counter/by prescription/by restricted prescription) and the terms of supply (pharmacies only/non-pharmacy outlets and pharmacies) of the product.

Medicinal products with marketing authorization are registered in the online database of medicinal products (www.cbz.si). The database includes information from the Summary of Product Characteristics, which is intended for health care professionals, and the patient information leaflet that must be enclosed with each medicinal product placed on the market.

Marketing authorization is generally issued for a period of five years. Once it has been granted, the holder is expected to maintain it by reporting any variations to the product and applying for its renewal. The ARSZMP must be notified of any new information that could impact the terms of authorization or require a change in the medicinal product documentation. Marketing authorization holders must submit their application for renewal at least nine months prior to the expiry of the authorization's initial five-year period of validity. A reassessment of the product's risk–benefit ratio by ARSZMP or

the European Medicines Agency is required, depending on which procedure was followed for the original decision. Once the marketing authorization has been renewed for the first time, it is generally valid for an unlimited period of time unless the ARSZMP decides that another renewal is necessary in the interest of public health protection. A product's marketing authorization can be suspended or withdrawn by the ARSZMP or the European Medicines Agency following pharmacovigilance findings (see below). It can also cease to be valid when the product is no longer on the market or at the request of the marketing authorization holder. Patent protection for originators (reference products) lasts 10 years, with a possible one year extension for new indications.

Pharmacovigilance

The area of pharmacovigilance for human use is governed by the Medicinal Products Act and the "Rules on pharmacovigilance of medicinal products for human use". Pharmacovigilance involves monitoring the safety of medicinal products after marketing authorization has been granted and includes all activities relating to the detection, assessment, understanding and prevention of adverse reactions and other possibly associated complications. In Slovenia, it is among ARSZMP's responsibilities to collect and evaluate reports on adverse reactions reported in the pharmacovigilance system as well as in the periodic safety update reports submitted by manufacturers. The ARSZMP is furthermore mandated to carry out risk assessments and subsequently adopt and implement measures for the safe use of medicinal products, encourage and support reporting of adverse events by medical professionals and inform the professional and general public when necessary. It also participates in activities within the international pharmacovigilance system

ARSZMP's Inspection Department performs sampling of medicinal products for official quality control, pharmacovigilance and good clinical practice inspections as well as on-site inspections of marketing authorization holders, wholesalers, pharmacies and retail specialized stores selling over-the-counter products. The department is also responsible for the coordination and implementation of measures in cases of inadequate quality, suspected counterfeits and other emergencies.

Wholesale and retail distribution of medicinal products

The ARSZMP grants authorizations for the wholesale trade in medicinal products. There are 85 authorized wholesalers, most of them active; their profit margin is not fixed. The same rules apply for retail specialized stores. The pharmacy retail added value of pharmaceutical products is based on a fee for service (FFS) system and does not directly influence co-payment values. Over-the-counter medicinal products can also be obtained at online retailers.

Pricing

The Medicinal Products Act and Health Care and the Health Insurance Act, together with their implementing regulations, were amended in 2008 to ensure compliance with the provisions of EU Directive 89/105/EEC. The Directive regulates only the fundamental procedural parameters of pricing and reimbursement, while the choice of pricing model and relevant policy-making remains within Slovenia's jurisdiction. Prices of medicinal products not financed from public funds are set freely based on market mechanisms. Price setting for medicinal products reimbursed in the public system is regulated and carried out by the ARSZMP in accordance with the relevant legislation. ARSZMP determines maximum prices based on external reference pricing with Germany, France and Austria as the reference countries.

Only in exceptional cases can a price higher than the maximum price be set; this depends on relative therapeutic value, cost–effectiveness, the relation of the proposed higher price to the median price in reference countries, specific factors relevant to the placement of the product in national health programmes, an established public health interest and risk assessment of the potential disruption in the supply of the product given economic conditions. Actual prices can be lower than the set maximum prices following agreements between the manufacturer and/or wholesaler and public payers (e.g. HIIS, pharmacies, hospitals) or as a result of public tendering procedures.

The system of interchangeable medicinal products

In the EU, interchangeability of medicinal products is within national jurisdiction. In Slovenia, the system of maximum attributed value (MAV) for mutually interchangeable medicinal products (MIMPs) was introduced in 2003. The ARSZMP officially recognizes pharmaceutical products as mutually interchangeable based on their essential similarity in accordance with the Medicinal Products Act (the same active ingredient(s) under the Anatomical Therapeutic Chemical Classification (ATC; WHO, 2003) at level 5 ATC, same strength, same or comparable pharmaceutical form and same or comparable packaging). The HIIS takes the list of MIMPs defined by the ARSZMP and publishes a derivative list of MIMP clusters, along with their MAVs. The MAVs are assigned by the HIIS based on the lowest wholesale price among the interchangeable medicinal products. They are updated every six months.

The MAV system was extended to the so-called "therapeutic groups of medicinal products" in October 2013. The concept entails the formation of bigger groups of pharmaceuticals that have the same effect but include different molecules. For the same therapeutic indication, health insurance covers those medicinal products that are comparable in efficacy, safety and cost–effectiveness.

For each therapeutic group, the MAV is determined according to the most favourable ratio between the costs and effects of treatment. All pharmaceuticals in the group are reimbursed only up to a level corresponding to the price of the cheapest molecule. In 2013 and 2014, seven therapeutic groups were defined for this purpose (proton pump inhibitors, products changing the level of serum lipids, angiotensin-converting enzyme inhibitors, products with acetylsalicylic acid 100 mg, imatinib treatments, products with triptan and products for glaucoma).

When the manufacturer's price exceeds the MAV set for each MIMP cluster or therapeutic group, the difference has to be made up by OOP payments by patients.

Reimbursement

Financing medicinal products from public funds is regulated by the Health Care and Health Insurance Act and falls within the competence of the HIIS. The HIIS can place medicinal products either on the positive list or on the intermediate list. Products on the positive list are either fully covered (medicines prescribed for children and specific conditions, such as diabetes, cancer, multiple sclerosis and epilepsy) or a 30% co-payment is required. Statutory health insurance covers 10% of the price of medicinal products on the intermediate list. There is also a negative list, with products completely excluded from any kind of public reimbursement scheme. Patients have to pay for these products fully out of pocket. A Pharmaceutical Reimbursement Commission (see section 2.7.2) provides recommendations on reimbursement level, with the final decision for inclusion resting with the HIIS. Effectiveness is the main criterion, but cost–effectiveness and financial resources also play an important role.

Substitution

Physicians may choose to prescribe pharmaceutical products either by their trade names or, as of 2003, by their international nonproprietary names. Pharmacists are permitted to dispense a cheaper product from the MIMPs system than the one prescribed by trade name. Patients to whom a product with a price higher than the relevant MAV has been prescribed can choose to either pay the difference out of pocket 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. Pharmacists are required to offer patients a choice among the pharmaceuticals available for substitution. Prescribers can explicitly exclude pharmacy-level substitution on the prescription but should be able to present documented justification for this decision if they do so. Both physicians and pharmacists are required to inform patients appropriately about generic prescribing and substitution. Pharmacists have to keep a record of patients to whom substitute preparations were dispensed to enable tracking for prescribers, payers and regulators.

Prescription monitoring

Prescription monitoring was introduced in 1995. Each physician has a prescribing number and all prescriptions are recorded with a bar-coding system. The HIIS is authorized to monitor the activities of medical doctors with a contractual relationship (concession) with compulsory health insurance. Observed irregularities regarding financial issues or the violation of patient rights can lead to penalties based on health insurance regulation.

Common public procurement

Common public procurement for very costly medicinal products in hospitals was introduced in 2013 and includes 95 active substances at level 5 ATC (with approximately 330 proprietary names for medicinal products). For the majority of these medicinal products, common public procurement is obligatory for all hospitals owned by the state. A pilot project including all medicinal products was successfully completed in 2015.

Price regulation, reference pricing, MIMPs, MAVs–MIMPs, MAVs for therapeutic groups and common public procurement represent the principal tools for establishing immediate and long-term systemic conditions for price competition as well as reducing and rationalizing the public costs of pharmaceuticals in Slovenia.

2.8.5. Regulation of medical devices and aids

According to the Medical Devices Act, which corresponds to Council Directive 93/42/EEC, medical devices cover all products used for the diagnosis, prevention, monitoring, treatment and alleviation of diseases, disorders, disabilities, anatomical functions or physiological processes. They are divided into "general" medical devices, active implantable medical devices and in vitro diagnostic medical devices. Devices are classified on the basis of risk level for the user, the location and method of use, dependence on power source, useful life and other characteristics.

To be placed onto the market, medical devices must obtain a CE (conformité Européenne) mark from a notified body, in line with the essential quality and safety requirements of regulations of the Republic of Slovenia and EU Council Directive 93/42/EEC.

As the relevant competent authority, the ARSZMP has regulatory and supervisory functions in the entire field of medical devices in the Slovene market. These include activities related to the classification of products as medical devices, the verification of essential requirements for marketing authorization, clinical investigations of medical devices and the medical device vigilance

system. ARSZMP supervises manufacturers or their authorized representatives as well as wholesale and retail suppliers of medical devices to ensure that they fulfil the conditions for performing this activity in accordance with national and EU legislation. It also provides expert advice with regard to borderline products, the classification of medical devices and instructions for labelling. The ARSZMP maintains a number of publicly accessible registers, such as the Register of Medical Device Manufacturers (which has its registered office in Slovenia), the Register of Business Entities Carrying out Wholesale Trade in Medical Devices and the Register of Specialized Stores Retailing Medical Devices.

Investment in medical devices such as costly equipment is the responsibility of the owner of the particular health care provider (see also section 4.1.3). Since most 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 approves the eligibility of costs based on national priorities, scientific justification and economic sustainability of the proposed programme.

The HIIS introduced regulation for the classification and reimbursement of medical devices used in primary health care and reimbursed from public funds in 2014. In order to further rationalize expenditure, the Ministry of Health in collaboration with the Ministry of Public Administration and the Ministry of Finance initiated activities for common public procurement in the area of medical devices and medical equipment used in hospitals (e.g. gloves, surgical material, clippers) in 2015. The implementation will be gradual and will occur after the technical specifications are set.

2.8.6 Regulation of capital investment

The disbursement of government funds for capital investments is strictly controlled by the Ministry of Health as the allocation of government financing is approved during the complex process described in Chapter 4. Proposals are prepared by the Department of Investments and Public Procurement of the Ministry and, after their approval by the Minister, a public tender is held for the execution of the work. The tender is reviewed by the National Court of Audit, which carries out routine controls in all public institutions every year. Finally, the funds provided from the budget are scrutinized by the Ministry of Finance, subject to the supervision of the internal commission on budgetary supervision. Capital investments for public health care providers are the responsibility of the owner (state or municipalities depending on the level of care). A positive aspect of the centralized capital and facilities tendering process lies in the rather important role of health professionals in the decision-making process.

Decisions on capital investments for private health care providers are their own responsibility. However, a special committee appointed by the Ministry still has to approve the premises to ensure that they conform to spatial and construction standards. Equity in public investments is ensured through the complex approval process, which also takes into account the geographical distribution of funds and equitable access for all citizens. Nevertheless, private providers have argued that they do not have sufficient access to public funds for capital investments and would like to see a commitment on behalf of the state to sponsor all providers equally.

There are national standards for physical infrastructure (i.e. premises that need to be modernized). However, there are fewer standards regarding equipment and types of appliance to be used by various clinical and hospital departments. Such decisions are predominantly based on empirical and practical experience, and partly also on foreign approved standards.

2.9 Patient empowerment

2.9.1 Patient information

Several sources of information are available for citizens in order to guide them through the health care system. After the adoption of the Patient Rights Act in 2008, the Ministry of Health published a short brochure (available on the Ministry's web site) to raise public awareness of patient rights (Ministry of Health, 2008a). There are also 13 patient rights representatives, who contribute to informing patients about their rights through various avenues, including participation in radio and television shows and public debates.

The HIIS publishes on its web site information about how citizens and residents can settle their compulsory health insurance status and about provider organizations, which are part of the network of public providers. Additionally, it also provides periodically updated information about the availability of individual GPs in the public network, as they are required to accept patients only until they reach a set quota of patients.

Another important source of information is the NIPH, which publishes self-reported waiting times (updated monthly) by provider for a limited number of services. Concerns have been raised about the reliability of published data on waiting times. Therefore, national electronic monitoring of waiting lists, which was developed and is currently under implementation within the national eHealth project, is expected to provide more precise and comprehensive data in the near

future. Most of the information mentioned above can also be retrieved through the National Contact Point, which was established according to the requirements of Directive 2011/24/EU on patient rights in cross-border health care.

A publicly available measure of quality of health services is represented by the accreditation status of providers. The accreditation procedure is voluntary and is separate from, and in addition to, the formal licensing procedure (called "verification") of health service providers. Under the voluntary accreditation procedure, providers are accredited by internationally recognized organizations independent of the Ministry of Health or the HIIS (e.g. Det Norske Veritas International Accreditation Standards, Accreditation Canada International). Prompted by HIIS-provided financial incentives to gain such accreditation, 24 out of 30 providers of acute care services were accredited by one of these organizations between 2011 and 2014. Accreditation is also becoming more common among providers of outpatients specialized services and health care centres. The data on accreditation is published on the Ministry's web site.

In 2011, the Ministry of Health broadened the set of quality indicators that hospitals must monitor and there are now 73. However, based on the latest available information, there is a lack of external verification of data produced by hospitals and a relatively short time series; therefore, the data are still deemed too unreliable to be used by patients as a measure of the quality of services (Poldrugovac et al., 2011). Nonetheless, most indicators are published on each hospital's web site and periodically also in a national report published by the Ministry in association with the Medical Chamber, HIIS and NIPH. The Ministry of Health has established an adverse event reporting system that requires reporting to the Ministry of Health of very serious adverse events within 48 hours of their occurrence. This reporting system is mainly a learning tool that requires the analysis of serious adverse events and is aimed at initiating corrective actions when needed. Data on adverse events are not publicly available, as the confidentiality of reporting is necessary to establish a non-punitive environment. The latter is essential to foster reporting of such occurrences by health care workers, who may otherwise fear disciplinary action.

Specific information about the rights of children in health care is made available by several hospitals, the human rights ombudsman and NGOs. This information is aimed mainly at their parents.

There are two autochthonous ethnic minorities in Slovenia, Italians in the southwest of the country and Hungarians in the northeast, for which there are special provisions in the law concerning the use of language. This translates into an obligation by some local health care institutions to offer information in both Slovene and the other autochthonous language.

2.9.2 Patient choice

Every person covered by compulsory health insurance has the right to choose a personal physician without administrative and/or territorial constraints within the country. Moreover, insured people also have the right to choose a personal gynaecologist and dentist. These primary care physicians act as gatekeepers, who provide access to secondary and tertiary care through referrals (see section 5.3). Patients can choose their secondary or tertiary provider anywhere in the country every time they are given a referral.

There is only one insurer offering compulsory health insurance, the HIIS. Complementary insurance is offered by three insurance companies, which patients can freely choose from (see section 3.5). These companies also offer supplementary insurance packages, as do other insurance companies; however, the supplementary insurance market in Slovenia is rather small.

2.9.3 Patient rights

In line with the WHO Declaration on the Promotion of Patients' Rights in Europe (WHO, 1994), which distinguishes between social and individual rights, the Patient Rights Act 2008 is mainly concerned with individual rights (while also acknowledging the interconnectedness of the two sets of rights). According to the Act, these rights must be respected by all health care providers, public or private.

Article 5 of the Patient Rights Act lists 14 patient rights. These are:

- the right to access to health care and preventive services;
- the right to equal access and to equal treatment;
- the right to choose one's physician and health care provider organization;
- the right to appropriate, high-quality and safe health care;
- the right to respect patients' time;
- the right to be informed and to cooperate;
- the right to choose one's own treatment (i.e. to consent to treatment);
- the right to express one's wishes in advance;
- the right to avoidance and relief of suffering;
- the right to a second opinion;
- the right to be informed about the content of one's patient health records;
- the right to the protection of privacy and of personal data;
- the right to due process in case of violation of patient rights; and
- the right to support in the implementation of patient rights free of charge.

It is worth noting that Article 4 of the Patient Rights Act sets important general limitations to these rights, among other things stating that their realization must take into account the right to health care services (social rights to health care), as determined in other laws and regulations, and modern medical doctrine and standards (e.g. physicians have the right to refuse treatment if it is not medically necessary).

The protection of patient rights is monitored by the Ministry of Health, which issues an annual report that is adopted by the government. The main sources of information for the national report are the annual reports provided by the 13 patient rights representatives and by the Commission for the Protection of Patient Rights, which were all established under the provisions of the Patient Rights Act. The last annual report highlighted both positive and negative aspects of the new law, as learnt from the experiences of its implementation (Republic of Slovenia, 2014). A separate Mental Health Act regulates the additional and specific set of rights of patients in this area. The Act defines the procedures to be followed in particular situations, such as involuntary hospitalization and the use of restraints (see section 5.11).

The social rights of patients, which mainly relate to the basket of services covered by compulsory and complementary health insurance, are set out in the Health Care and Health Insurance Act 2006 (and its subsequent amendments; see also section 3.3.1).

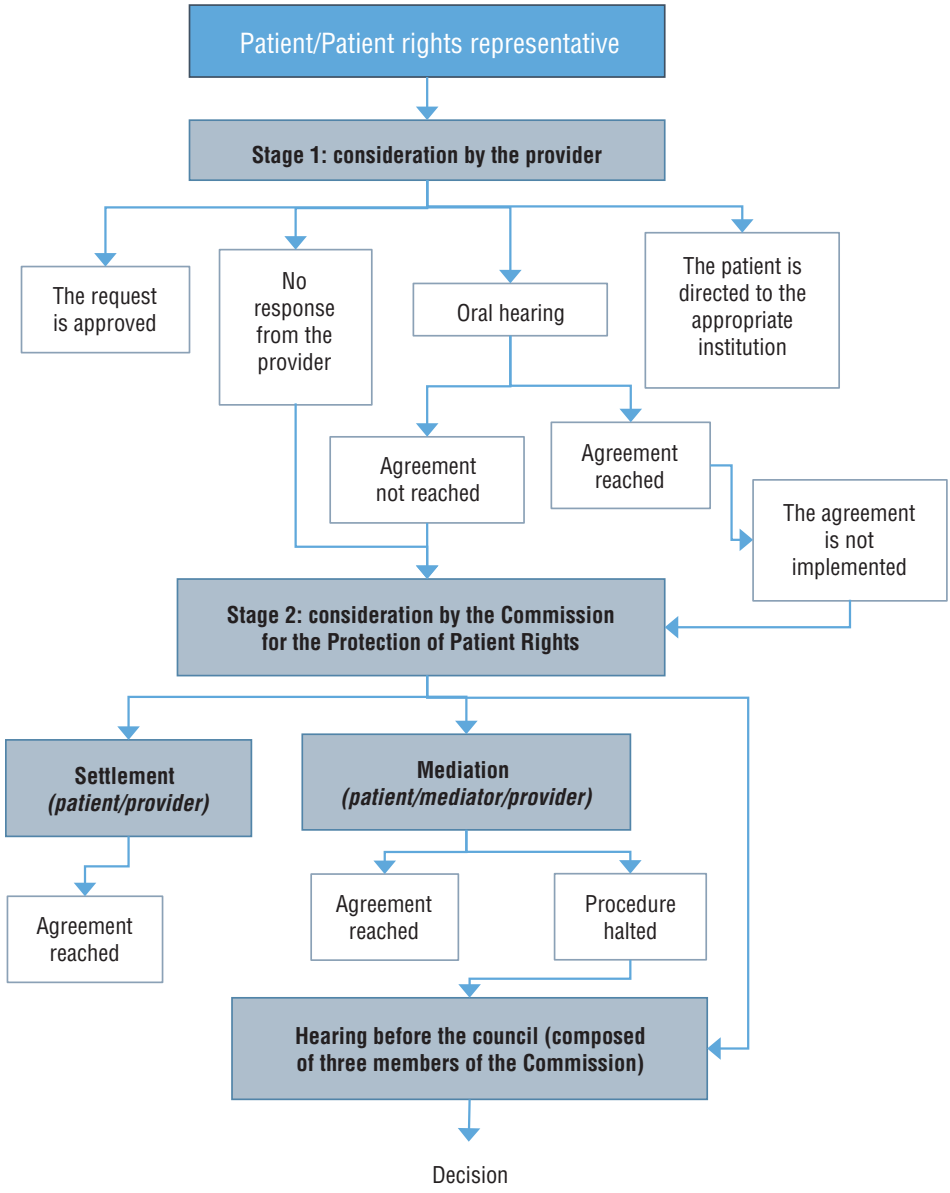
2.9.4 Complaints procedures

The Patient Rights Act established a new complaints procedure with two stages. First, patients may file a complaint with the authorized representative of the health care provider, either individually or through a patient rights representative/organization. If the two sides cannot reach a mutually acceptable solution, the complaint may then be filed with the Commission for the Protection of Patient Rights, where several options are available to resolve the issue. Only in cases where a consensual solution cannot be found with the help of the Commission and its mediators, a small council of three Commission members will rule on the complaint. Fig. 2.2 provides a flowchart of the two-stage complaints procedure. The main aim of the procedure is to provide a transparent and clear framework to support the fast and effective resolution of disputes.

It is important to point out that the authority of the patient rights representatives and of the commission is limited to complaints about the rights set out under the Patient Rights Act, which relate to the individual rights

of patients. A separate procedure is in place at the HIIS to handle complaints related to social rights. The complaints procedure under the Patient Rights Act also explicitly states that it is not intended as a means of achieving compensation.

Fig. 2.2
Complaints procedure under the Patient Rights Act



Source: Adapted from Ministry of Health, 2008a.

In the area of social rights, patients most often complain about the right to extended sick leave and the right to rehabilitation services at spas. All complaints related to such rights, which are defined in the Health Care and Health Insurance Act and in the rules on compulsory health insurance, are dealt with by the so-called "named physician": a medical doctor authorized by the HIIS to decide on these matters. Patients can appeal the decisions of the named physician to a health commission, also named by the HIIS, which rules on the issue. Patients may then appeal these decisions in court. A similar commission is also established at the Pension and Disability Insurance Institute of Slovenia, which decides on the right to disability benefits.

The Mental Health Act also foresees the establishment of patient rights representatives specific to the area of mental health. Their mandate is to support patients in the realization of their rights in this area.

In principle, patients can choose between various institutions to file their complaint; the choice depends, above all, on what kind of right has been (or is perceived to have been) breached. The patient can file a complaint directly with the health care provider, the HIIS, the Pension and Disability Insurance Institute, the Medical Chamber, the Ministry of Health, the Market Inspectorate, the courts and the Ombudsperson for Human Rights. The Ministry of Health advises consumers on which institutions they can approach to seek assistance (e.g. the Medical, Pharmaceutical or Nursing Chambers). The Ministry of Health also deals with complaints on whether health care providers are acting in accordance with the law. It does so through inspections performed by commissions, which may, for example, review whether a provider fulfils the requirements of the Patients Right Act, the Health Services Act or even the Public Sector Salary System Act. In some cases, patients are also referred to the centres for social work and to other ministries. Patients can also file their complaints with the Medical Chamber, where special boards for professional–medical and legal–ethical matters exist. In cases of denial of treatment, patients can appeal against the provider at the HIIS. Unsatisfied patients can always, depending on the breached right, file charges in the legal, social, civil or criminal courts.

2.9.5 Public participation

Decisions about purchasing of health care services are made through negotiations between the key partners in health care: providers of health care services, the HIIS and the Ministry of Health. Patients may participate in the purchasing process only indirectly, voicing their concerns and suggestions to

any one of the partners. All proposed laws and regulations undergo a public debate phase, in which individuals can participate directly.

There are several patient organizations in Slovenia, and they are often invited to participate in the drafting of policies and regulations in their specific area. However, so far, attempts to establish an umbrella organization that would represent the interests of all patients have failed. Patient rights representatives play an important role as they point out major issues observed through their activities in the Ministry of Health's annual report on patient rights (see section 2.9.3).

Patients' experiences in the area of acute care are regularly surveyed. The survey, which publishes the scores achieved by each hospital on varied measured dimensions, is nationally agreed and administered by the Ministry of Health, with the results published on the Ministry of Health web site. On average, the experience of patients seems to be very positive: the last published survey (Ministry of Health, 2013b) recorded an overall average score of 90.4 out of 100, which is similar to the results obtained in previous years. However, concerns have been raised about the reliability of these results. For example, the methodology requires the survey to be administered to patients by hospital employees while the patients are still in hospital. A Eurobarometer survey on patient safety and quality of care published in 2014 reported that 73% of those surveyed considered the overall quality of health care in Slovenia to be very good or fairly good, compared with an EU28 average of 71% (European Commission, 2014b). When asked for the three most important criteria determining high-quality health care, Slovenes frequently mentioned a lack of waiting lists to be seen and treated (47%, compared with the EU 28 average of 24%). The quality criterion mentioned most often both in Slovenia and in the EU28 was well-trained medical staff. Slovenes also cited the frequency of adverse events experienced by those surveyed or their family members as a criterion, with a rate similar to the EU28 average (31% compared with 27%). However, the likelihood of reporting an event in Slovenia was, at 11%, one of the lowest in the EU (EU28 average 46%).

The Slovene Public Opinion Poll of 2011 (Toš, 2013) included a section on health and health care, with a module agreed at the International Social Survey Programme Consortium. The results of the survey showed that a considerable number of surveyed people agreed with the statement that people use health care services more than necessary. Most of those surveyed also agreed that, generally speaking, physicians were trustworthy, but at the same time almost 40% of surveyed people agreed or strongly agreed with the statement "Physicians are more concerned with profit than with their patients". Table 2.1 contains a short excerpt of the survey results.

Table 2.1
Excerpt of Slovene Public Opinion Poll results on health care, 2011

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not sure, no answer	Average
	1	2	3	4	5	8	
Question: To what extent do you agree or disagree with the following statements?							
A: In the next few years the health care system in Slovenia will improve	0.9	20.3	27.4	36.8	5.5	9.2	3.3
B: People use health care services more than is necessary	7.9	37.4	23.3	24.1	2.0	5.3	2.7
C: Government should ensure only a limited number of health services	0.6	10.0	13.1	56.7	15.7	4.0	3.8
D: As a whole the health care system in Slovenia is ineffective	5.9	21.1	32.2	35.4	2.7	2.8	3.1
Question: To what extent do you agree or disagree with the following statements about physicians in Slovenia?							
A: On the whole physicians can be trusted	6.3	64.1	19.6	9.0	0.5	0.6	2.3
B: Physicians discuss with patients all possible treatments	2.9	40.2	28.3	22.5	3.2	3.0	2.8
C: The medical knowledge of physicians is not as high quality as it should be	2.7	23.5	25.9	37.5	2.6	7.9	3.2
D: Physicians are more concerned with profits than with patients	8.1	31.7	30.1	22.8	2.9	4.4	2.8
E: Physicians would admit a mistake to their patient, if it occurred during treatment	1.7	17.9	17.6	42.1	14.0	6.9	3.5

Source: Toš, 2013.
Notes: Translation by the authors. Results for categories 1–5 are percentages of respondents. The Average column gives the average response (between categories 1 and 5).

2.9.6 Patients and cross-border health care

There are broadly two sets of situations where patients, who are insured by the HIIS, are entitled to health services abroad. The first includes situations covered by Regulation (EC) No 883/2004 on the coordination of social security systems and Regulation (EC) No 987/2009 laying down the procedure for implementing that Regulation in the context of the EU and by bilateral treaties signed by the HIIS with other countries. Generally, the health care received abroad in these cases results from the patient being located in another country (e.g. through schooling, work or tourism) and is not the result of an explicit intention of the patient to seek health care abroad. Sometimes these provisions cover only emergency care.

In this context, in 2014, the HIIS received new claims totalling just over €28 million related to its insured members who received care abroad. The largest proportion of new claims came from Bosnia and Herzegovina (39.5% of total value) and Croatia (25.5%). The number of claims spiked in 2014, from 42 221 in 2013 to 82 200. There was an increase of 34 666 claims from Croatia because of a change in the methods for calculating reimbursement costs between Croatia and Slovenia brought about by Croatia joining the EU. In the same year, the HIIS sent claims to foreign institutions related to the health care costs of foreigners treated in Slovenia, totalling approximately €18 million. Most claims were sent to Austria (24.8% of total value), Germany (24.7%) and Croatia (20.0%).

When patients seek elective health care outside Slovenia, the Health Care and Health Insurance Act defines three situations where patients are entitled to reimbursements or coverage:

- option A: all the treatment options available in Slovenia have been exhausted;
- option B: waiting times exceed the maximum permissible waiting times for individual health services or a reasonable period of time; or
- option C: patients choose to be treated in another country according to the provisions of Directive 2011/24/EU, which covers patient rights in cross-border health care.

It is important to distinguish the legal basis for using health services abroad because each of the three categories outlined above is governed by different reimbursement regimes and approval procedures. In situations where all treatment options in Slovenia have been exhausted (option A), patients are entitled to reimbursement of the actual costs of the health care services provided abroad. When the maximum permissible waiting time or a reasonable period of time in Slovenia is exceeded (option B), the patient is entitled to reimbursement of the costs of health care services up to the cost of these services in the public health care system in the country where the service is offered. In both categories, the patient is also entitled to reimbursement of travel costs and both require prior approval by the HIIS.

Option C is under the provisions of Directive 2011/24/EU, which have been transcribed into national legislation. In these cases, reimbursement of costs is limited up to the average cost of the health care service in Slovenia and travel costs are not reimbursed. The requirements for prior authorization follow those set out in the Directive. It is interesting to note that outpatient services for which prior authorization is required include CT and MRI scans.

In 2014, the HIIS approved 465 requests for reimbursement under option A, 14 requests under option B and 1108 requests under option C. Of the option C requests, 1098 were reimbursement claims for cases that did not require prior approval, while the remaining nine were approved in advance. The 1098 claims for reimbursement without prior approval totalled €157 510. Under this provision, the services most often provided abroad to persons insured in Slovenia were electromyography, vascular procedures and outpatient specialist services performed by ophthalmologists and orthopaedic doctors.

3. Financing

Slovenia's health system is mainly funded through compulsory health insurance, with the remainder coming from VHI and direct OOP payments. In 2013, total health expenditure (including capital investments) as a share of GDP reached 9.2%, compared with an EU average of 9.5% and an EU13 average of 6.8%. While public financing remains the primary source of health system resources – 71.4% of the total in 2014 – the share of private funding was 28.6% of current health expenditure, which is slightly above the EU average of 27%.

Compulsory health insurance contributions accounted for 68.1% of current health expenditure in 2014. The benefits package from compulsory health insurance covers primary, secondary and tertiary services, pharmaceuticals, medical devices, sick leave exceeding 30 days and costs of travel to health facilities. For the majority of areas of care, co-payment levels for services are determined by the HIIS in agreement with the government and range from no co-payment (e.g. for emergency care) to 90% co-payment for medicinal products considered less effective. General national- and municipal- level taxation represents another public source of funding (3.3% of current health expenditure in 2014). This mainly covers governance of the health system, specific public health and prevention programmes and co-payments for socially vulnerable groups.

VHI premiums (14.8% of total health expenditure) and OOP payments (12.7%) represent the main private sources of funding. Within the VHI component, complementary health insurance is the major share. It covers cost-sharing levied on health care services included in the benefits package and is purchased by more than 95% of the population liable for co-payments.[1] To balance uneven distribution of the risk portfolio and prevent cream-skimming among insurers, an equalization scheme was introduced in 2005.

[1] In Slovenia, cost-sharing is levied as a percentage of the price of health services. Based on the nomenclature generally adopted for HiTs, it is, therefore, technically co-insurance. However, as the relevant arrangements are referred to as co-payments in Slovenia, we adopt this terminology throughout this review.

Health services in Slovenia are purchased by the HIIS and VHI companies. The services reimbursed by the HIIS and the volume of services to be provided are defined by representatives of the various health system stakeholders in annual agreements.

Primary health care services provided in health centres are paid for through a combined system of capitation and FFS payments. Outpatient specialist services provided by hospitals are remunerated on a FFS basis. Inpatient care uses a payment model based on DRGs.

Health care personnel in primary and secondary care may practise based on an employment contract (as salaried employees of a public provider), by means of a concession (as a private provider within the public health care network, payment depends on the contract) or as a private provider (outside the public health care network, paid directly by patients or by VHI).

3.1 Health expenditure

Slovenia spends a substantial amount of its resources on health care. In 2013, total health expenditure,[2] as a share of GDP, reached 9.2%, compared with an EU average of 9.5% and an EU13 average of 6.8% (see Table 3.1 and Fig. 3.1). According to preliminary data for 2014, total health expenditure accounted for €3.3 billion or 8.9% of GDP (€3.2 billion and 8.7% of GDP in current health expenditure).

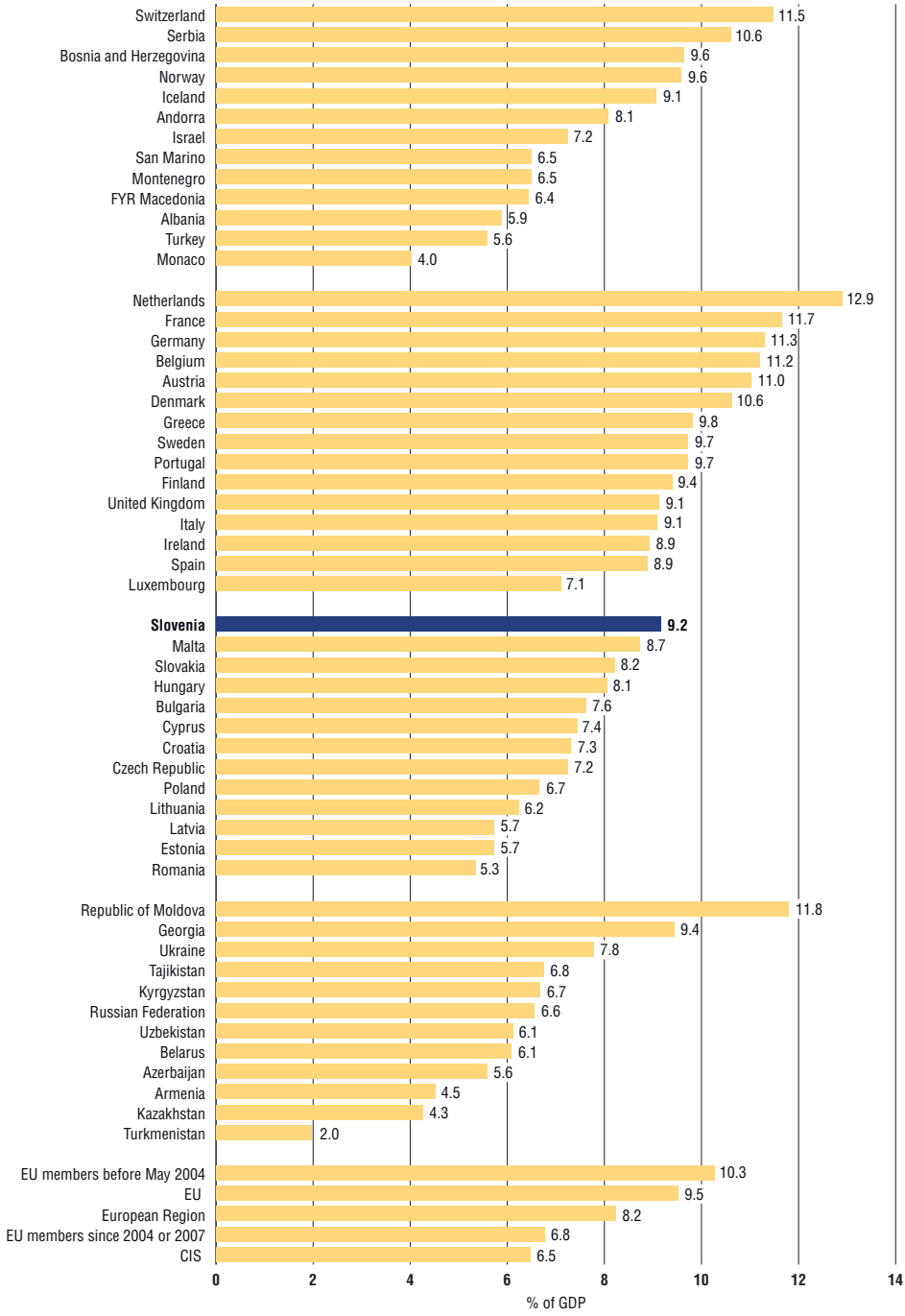
In 2000–2006, current health expenditure grew slowly and even decreased as a share of GDP from 8.1% to 7.8% as a result of strong economic growth, which exceeded health expenditure growth (similarly, total health expenditure reached a peak of 8.6% of GDP in 2001 and then declined to 7.9% in 2007; see Fig. 3.2). In 2009, the share of current health expenditure increased to 8.6% of GDP as a result of economic downturn and a substantial fall in GDP that year; it remained relatively stable at this level and unchanged until 2014 (OECD, 2015b).

In per capita spending, Slovene total health expenditure reached US$ PPP 2595 in 2013, corresponding to 77% of the EU average (Fig. 3.3). Among the EU13, Slovenia was among the highest in terms of per capita spending and health expenditure as a share of GDP in 2013. Estimated data for 2014 show current health expenditure per capita reaching US$ PPP 2585 (OECD, 2015b).

[2] Total health expenditure includes capital investments whereas current health expenditure does not.

Fig. 3.1

Total health expenditure as a percentage of GDP in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015a
Notes: CIS: Commonwealth of Independent States; FYR Macedonia: The former Yugoslav Republic of Macedonia.

Table 3.1

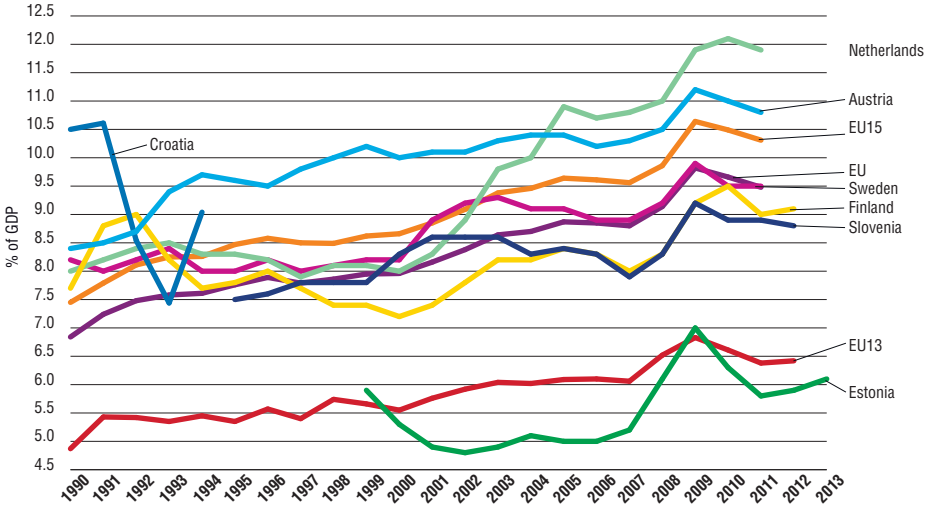
Health expenditure in Slovenia, 1995–2014

	1995	2000	2005	2010	2011	2012	2013	2014 (p)
Total health expenditure (US$ PPP per capita)[a]	970.4	1 449.8	1 997.9	2 452.3	2 559.3	2 617.7	2 595.2	
Total health expenditure (% GDP)[a]	7.5	8.3	8.3	8.9	8.9	9.2	9.2	8.9
Current heatlh expenditure[b] (US$ PPP per capita)	n/a	1 451.6	1 902.6	2 362.0	2 435.1	2 482.5	2 511.2	2 584.5
Current health expenditure (% GDP)	n/a	8.1	8.0	8.6	8.5	8.7	8.8	8.6
Mean annual real growth rate in current health expenditure	n/a	n/a	4.5	1.3	0.3	–0.6	–1.3	1.2
Mean annual real growth rate in GDP	n/a	4.0	4.2	1.2	0.6	–2.7	–1.1	3.0
Public expenditure on health (% current expenditure on health)	77.7	74.0	73.5	73.3	73.3	71.8	71.0	71.4
Private expenditure on health (% current expenditure on health)	22.3	26.0	26.5	26.7	26.7	28.2	29.0	28.6
Government health expenditure (% total government expenditure)	n/a	n/a	13.9	13.8	13.9	14.4	11.6[c]	n/a
Government total health spending (including capital investment; % GDP)	n/a	0.3	0.5	0.6	0.5	0.7	0.6	0.6
OOP payments (% current expenditure on health)	n/a	11.5	13.0	12.7	12.2	12.5	12.6	12.7
OOP payments (% private expenditure on health)	n/a	44.1	49.1	47.6	45.9	44.4	43.5	44.2
VHI (% current expenditure on health)	n/a	13.3	12.0	13.1	13.4	14.6	15.2	14.8
VHI (% private expenditure on health)	n/a	51.0	47.5	47.6	45.9	44.4	43.5	44.2

Sources: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia (2015a), OECD (2015b) and Eurostat (2015b); [a]WHO Regional Office for Europe, 2015a.
Notes: [b]Current heatlh expenditure excludes capital investment; [c]Decrease in 2013 is to be considered in conjunction with the high government expenditure dedicated to the capitalization of Slovene banks; n/a: Not available; (p): Preliminary data.

Fig. 3.2

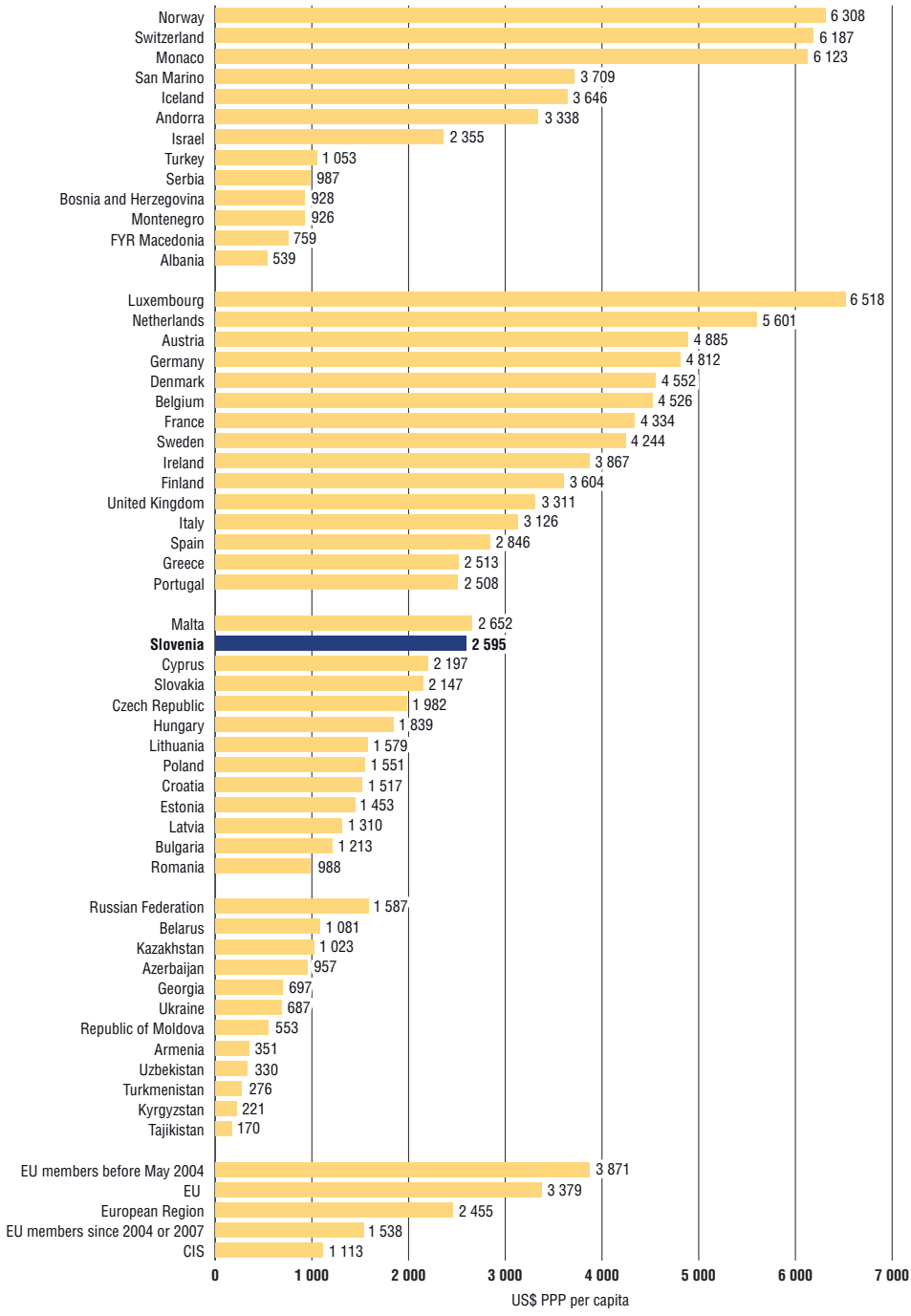
Trends in total health expenditure as a percentage of GDP in Slovenia and selected countries, 1990 to latest available year



Source: WHO Regional Office for Europe, 2015a.

Fig. 3.3

Total health expenditure per capita in the WHO European Region, 2013

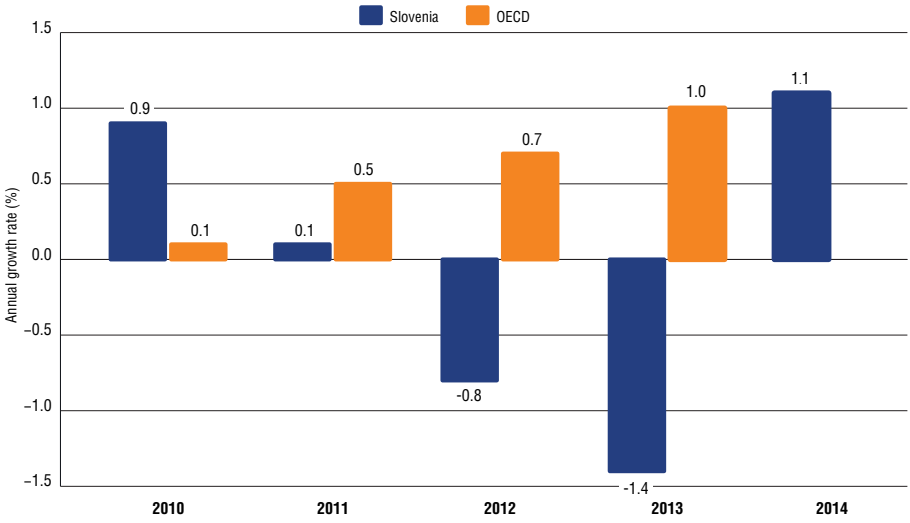


Source: WHO Regional Office for Europe, 2015a.
Notes: CIS: Commonwealth of Independent States; FYR Macedonia: The former Yugoslav Republic of Macedonia.

The total nominal increase of current health expenditure from 2008 to 2014 was only 7.3% (1.6% in real terms), from €3.0 billion (€1474 per capita) to €3.2 billion (€1550 per capita) (calculations based on data from the Statistical Office of the Republic of Slovenia using the GDP deflator approach to calculate growth rates in real terms). In 2009, Slovenia recorded a decrease in GDP higher than the EU average (decrease of 7.8% compared with the EU average decrease of 4.4%), while health expenditure still rose by 8.2% in real terms, mainly as a result of a public sector wage reform introduced in 2008 (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia (2015a) and OECD (2015b)). Consequently, health expenditure as a share of GDP in 2009 rose more in Slovenia than on average in the EU. In contrast, Slovenia's health expenditure in 2010–2013 recorded an average decline higher than that in other OECD countries. While OECD countries demonstrated an average annual growth of 0.8%, Slovenia's health expenditure remained, on average, unchanged despite fluctuations (Fig. 3.4).

Fig. 3.4

Annual growth rate of current expenditure on health, per capita, in real terms



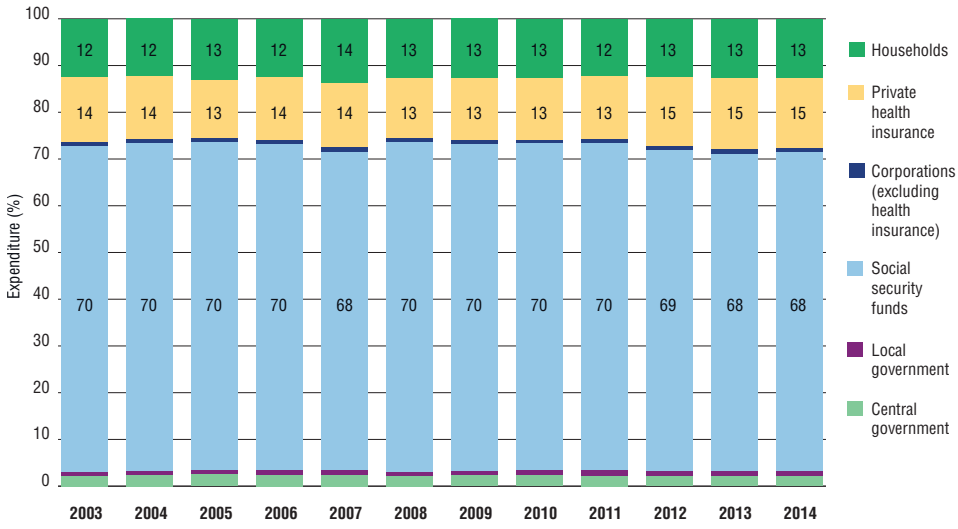
Source: OECD, 2015b
Notes: Data for 2014 are preliminary and not available for all OECD countries; an OECD average was not calculated.

Over the longer period of 2005–2013, Slovenia recorded an annual growth rate average of 1.4% in per capita health expenditure, compared with an OECD average of 2.0%. In 2000, public expenditure for health amounted to €1136 billion (€571 per capita), in 2008 to €2191 billion (€1106 per capita) and in 2014 to €2.281 billion (€1084 per capita) (OECD, 2015b). Therefore,

while a rise of 100% can be observed in comparison with 2000, public health expenditure has increased by only 4.1% since 2008. Between 2004 and 2014, the publicly funded share of health expenditure remained relatively stable at approximately 73% (Fig. 3.5). As of 2013, Slovenia occupied fifth place among EU13 countries and was relatively close to the EU average (76%; Fig. 3.6). A nominal decrease in public health expenditure as well as its decreasing share in current health expenditure from 2012 onwards can be explained by extensive austerity and cost-containment measures introduced as a result of the financial crisis (e.g. reduction on tariffs for health providers, salary freezes for public health workers).

Fig. 3.5

Health expenditure by source of funding, 2003–2014[a]

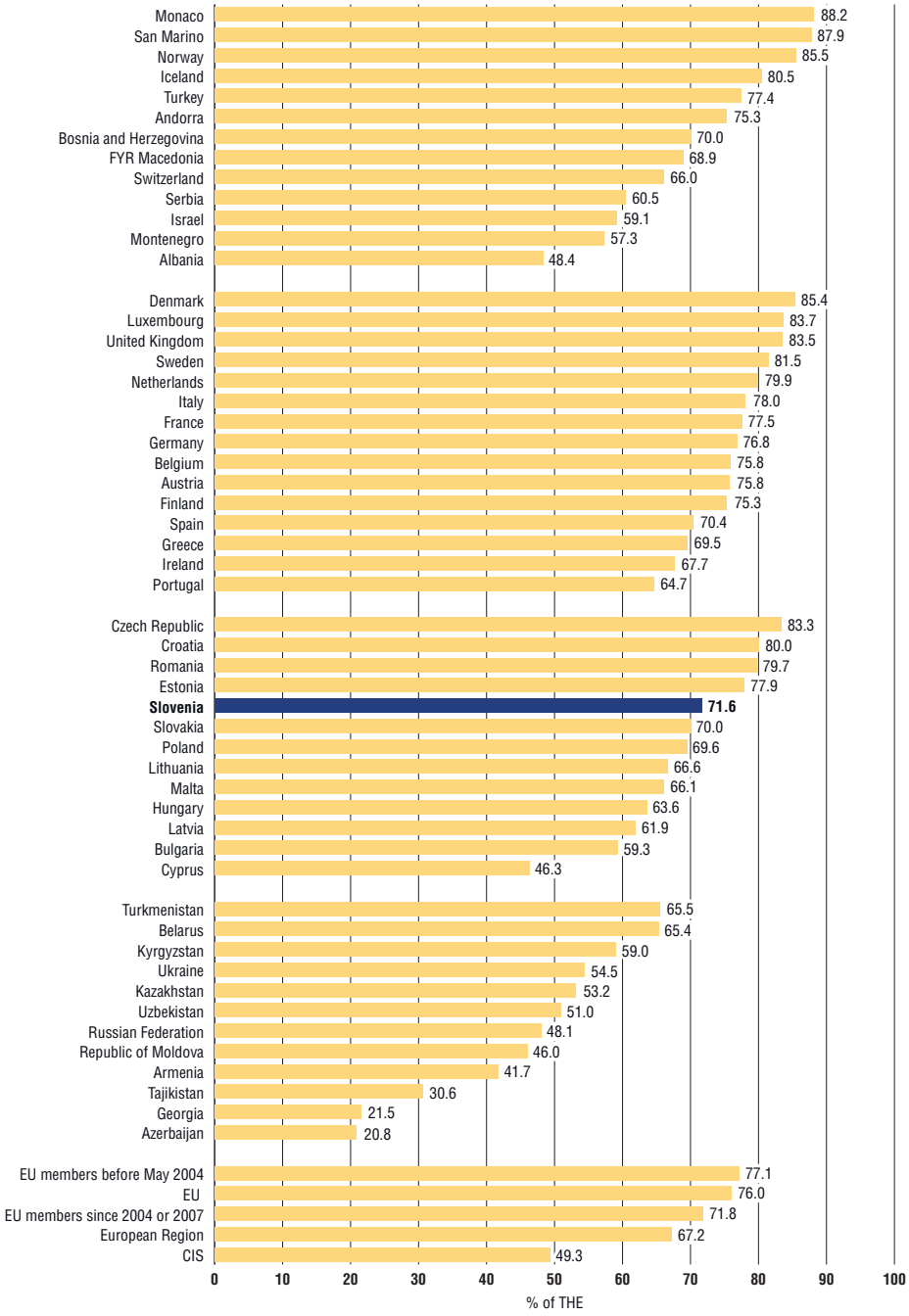


Sources: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia (2015a) for 2000–2013; preliminary data for 2014 taken from OECD (2015b).
Notes: [a]Excluding capital investment; non-profit-making institutions serving households did not measurably contribute to expenditure and are not depicted in this figure; GDP from European System of National and Regional Accounts 2010 revision (Eurostat, 2010).

According to disaggregated data on public expenditure by type of service (Fig. 3.7), throughout 2003–2013 most funds were used for curative care services (60–62%). The highest increase over the period was in the share of public expenditure used for outpatient care services (from 21% to 24%) and for long-term nursing care services (from 11.5% to 13.5%; see also section 5.8.3). Because of successful policy measures on pharmaceuticals and the increase in co-payments during the financial crisis, the share of public funds used for medical goods fell from 18.5% in 2003 to 14.8% in 2013 (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a).

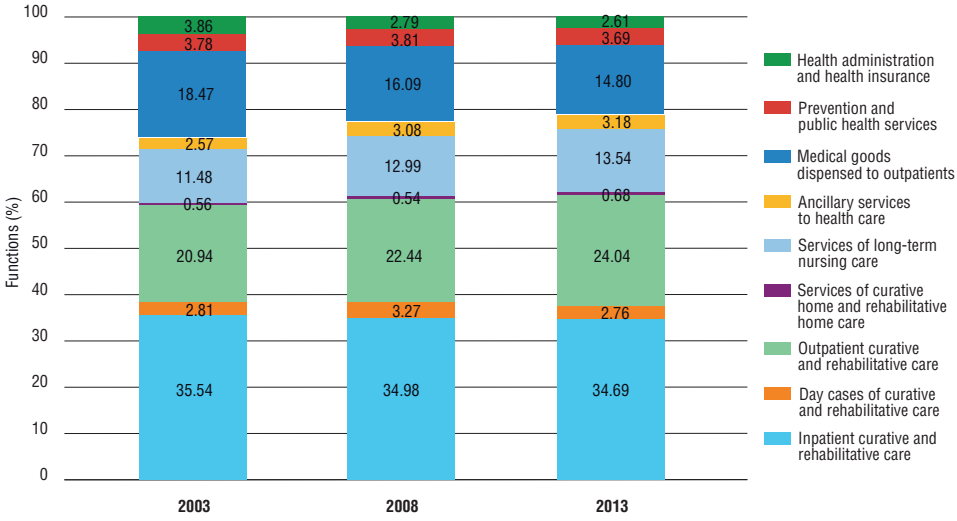
Fig. 3.6

Total health expenditure from public sources as a percentage of total health expenditure in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015a
Notes: CIS: Commonwealth of Independent States; FYR Macedonia: The former Yugoslav Republic of Macedonia; THE: Total health expenditure.

Fig. 3.7
Structure of current public health expenditure by health care functions



Source: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a.

3.2 Sources of revenue and financial flows

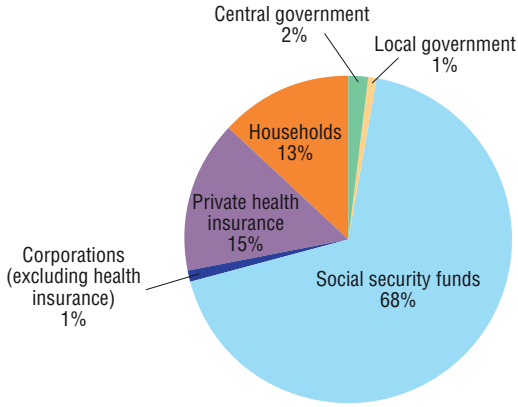
Revenue flows to the health care system through social security (compulsory) health insurance contributions, general taxation, VHI premiums and household OOP spending. Funds raised through compulsory health insurance contributions represent the largest share of the total revenue for health from public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

Compulsory health insurance contributions constitute the major source of health care financing, providing 68.1% of current health expenditure, amounting to almost €3.2 billion, and 95.4% of public health expenditure in 2014 (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a; see also Figs 3.5 and 3.8). Contributions are pooled by the HIIS and primarily allocated to health care providers for payment of services. Virtually the entire population permanently residing in Slovenia is covered under the sole compulsory insurance scheme, either as contributing members or as their dependants (see also section 3.3.1). The National Institute for Employment covers contributions for the unemployed; the state and/or municipalities for individuals without income, prisoners and war veterans; and the Pension and

Disability Insurance Institute pays contributions for pensioners by means of a monthly transfer (90% financed from salary contributions and 10% from the general budget) to the HIIS.

Fig. 3.8

Share of current expenditure on health by source of financing, 2014[a]



Sources: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a; preliminary data based on those reported to international databases using the System of Health Accounts (OECD, Eurostat & WHO, 2011).
Note: [a]Excluding capital investment; non-profit-making institutions serving households did not measurably contribute to current expenditure in 2014.

General national- and municipal-level taxation represents another public source of funding. In 2014, the national government share of current health expenditure was 2.1% and the local government share was 1.2% (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a; see also Fig. 3.8). In total health expenditure (including capital investment) was 4.7% for national government and 1.7% for local funds. Taxation is primarily used to cover capital investments in hospital care and health centres, facilities owned by the Ministry of Health or municipalities. The Ministry of Health funds capital investment for hospitals, specialized health institutions at national and regional levels, national health programmes as well as medical education and research. Municipalities raise their own revenue for health care and receive additional resources from the central government. They fund capital investment for public health centres and public pharmacies within their territory. Central and local governments also cover selected prevention programmes at national or primary care level (e.g. national programmes for breast cancer, cervical cancer and colorectal cancer) and ensure financial resources for socially vulnerable groups.

The amount of tax revenue allocated for health is not fixed and is estimated annually. Similarly, municipalities themselves estimate the share of the municipal budget allocated to health. National government expenditure for

current health care has shown a decreasing trend (from 2.6% in 2000 to 2.1% in 2014). However, when including capital investment, its share gradually increased between 2003 and 2009 (from 4.6% to 6.8% of total health expenditure) but fell to 5.0%, on average, as a result of the financial crisis. In contrast, the share of local governments in current health care expenditure increased from 0.8% to 1.2% between 2000 and 2014 (from 1.5% in 2003 to 1.7% in 2014 for total health expenditure, which includes capital investment).

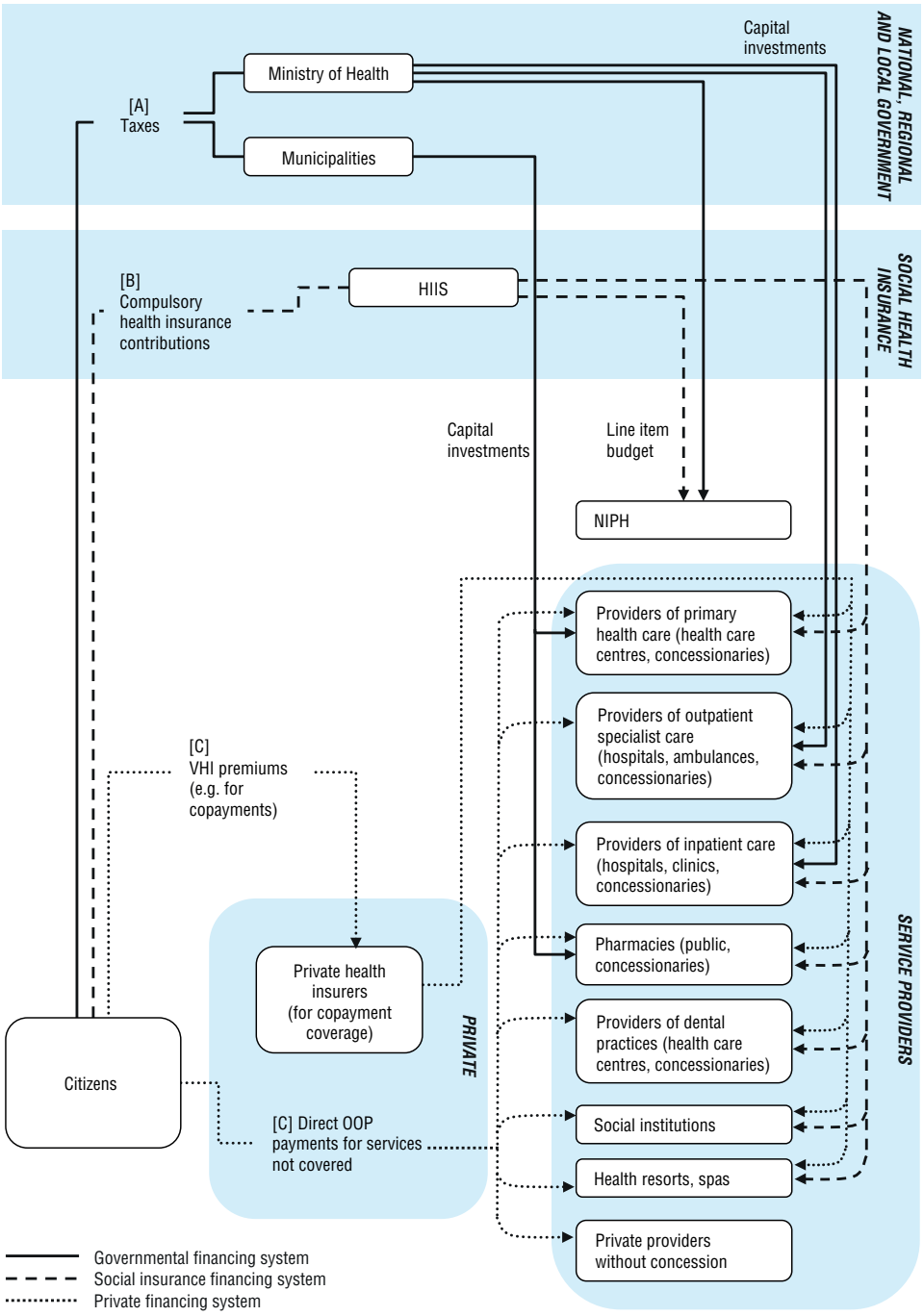
Private current health expenditure reached €750.3 million (€372 per capita) in 2007, an 88.1% increase compared with 2000, and represented approximately 28.5% of current health expenditure overall, up from 26.0% in 2000 (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a). In 2000–2007, the average annual real growth rate of private health expenditure was 4.5%. There was a slight decrease to 26.4% in 2008 before the share of private expenditure increased again gradually, reaching 29.0% in 2013; it then fell slightly to 28.6% in 2014. The average annual real growth rate in 2008–2014 was 1.6%. VHI contributions and household OOP spending represent the main private sources of funds in the health system. Their share in current health expenditure increased from 25.5% in 2008 to 27.5% in 2014.

This rise in the share of private expenditure between 2009 and 2014 resulted from austerity measures, which increased patient co-payments and thus the role of complementary health insurance within the limits defined in the Health Care and Health Insurance Act. By the end of 2014, more than 1.5 million people had purchased voluntary complementary health insurance to cover co-payments (Insurance Supervision Agency, 2014). Hence, according to information from the Ministry of Health and the NIPH, voluntary complementary health insurance covered between 95% and 98% of individuals subject to co-payments. In 2014, VHI represented 14.8% of current health expenditure, compared with 15.2% in 2013 and 12.9% in 2008 (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a).

OOP payments are the second most dominant private source of expenditure. In 2008, OOP expenditure reached €376.5 million (€162 per capita), 47.8% of private health expenditure and 12.6% of current health expenditure (compared with 11.5% in 2000). In 2014, OOP payments amounted to €405 million, demonstrating a 7.6% rise from 2008. During 2008–2014, the share of OOP in private expenditure decreased from 47.8% to 44.2% but maintained its share in current health expenditure (12.7%). The average annual growth rate in OOP expenditure between 2008 and 2014 was only 0.4%.

Fig. 3.9 provides an overview of the financial flows in the health system.

Fig. 3.9
Financial flows in the Slovene health system



3.3 Overview of the statutory financing system

3.3.1 Coverage

Breadth: who is covered?

The centralized compulsory health insurance system, administered by the HIIS, is defined in the Health Care and Health Insurance Act 1992. Virtually all individuals permanently residing in Slovenia are entitled to the health benefits covered under this compulsory insurance scheme, as contributing members or as their dependants. While permanent residence in Slovenia is one of the main factors determining entitlement to health services, Articles 15 to 18 of the Act also define other conditions (apart from residence) under which a person is compulsorily insured. There were 2 076 000 compulsorily insured individuals at the end of 2014, demonstrating a slight decrease of 0.14% compared with 2013 (HIIS 2015c). Consequently, coverage is universal apart from individuals whose insurance status is unclear (<1% of the insured population), mostly because of unclear residence situation (e.g. for commuters, those who have moved away). There are 25 categories of insured persons defined in Article 15 of the Act. Opting out of compulsory coverage is not permitted. There are different contribution rates for different categories of insured groups, while the National Institute for Employment covers contributions for the unemployed and the state and/or municipalities for individuals without income, prisoners and war veterans. Pensioners do not pay contributions but are covered by contributions from the Pension and Disability Insurance Institute (see also section 3.2). The invoicing of contributions, terms of payment, collection of interest for overdue payments, writing off of debt that is unlikely to be repaid, depreciation and penalties are subject to special regulations governing the settlement of taxes and contributions and fall under HIIS jurisdiction. In practice, these tasks have been passed to the Financial Administration of the Republic of Slovenia, which is a state agency. The HIIS does determine the criteria and conditions for the potential reduction or writing off of contributions. Compulsory health insurance coverage is also provided to citizens of almost all EU countries through arrangements governed by European regulation and bilateral agreements (see section 2.9.6). Specific provisions apply for certain vulnerable groups (see section 5.14).

VHI is mostly complementary in nature and purchased to cover co-payments. However, there are also VHI packages offered to cover higher standards of care and/or a scope of benefits not included in the basic package provided by compulsory coverage. At the initial formulation of VHI legislation in 1992,

the estimated number of people who would enrol into a VHI scheme in 1993 was 40 000, or 2% of the population. As of December 2014, approximately 1 485 000 of Slovenia's inhabitants were enrolled in VHI co-payment schemes, representing 71% of the population and more than 95% of the population subject to co-payments under compulsory health insurance (children under 18 years, students under 26 years and specific groups of the population described in the Health Care and Health Insurance Act are exempt from co-payments; see also section 3.5).

Scope: what is covered?

The provisions of the Health Care and Health Insurance Act 1992 on compulsory health insurance broadly define health services to be covered for the insured population. The benefits package comprises primary, secondary and tertiary services; pharmaceuticals; medical devices; sick leave exceeding 30 days; and costs of travel to health facilities. There are almost no differences in benefits between the categories of insured persons; however, specific benefits do not apply to all categories of insured persons. For example, retired people are not entitled to sick leave benefits and certain self-employed people and farmers are not entitled to reimbursement for travel expenses.

Compulsory health insurance provides full coverage for the following health services (delineated in Article 23, point 1 of the Act):

- all health services provided for children, pupils and students up to age 26, 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 for women;
- services as part of the prevention, diagnosis and treatment of infectious diseases, including HIV infection;
- treatment and rehabilitation of occupational diseases or injuries, muscular or muscular nerve diseases, mental diseases, epilepsy, haemophilia, paraplegia, quadriplegia and cerebral palsy, as well as advanced diabetes, multiple sclerosis and psoriasis;
- medical services related to the donation and transplantation of tissues and organs;
- emergency health care services including ambulance transportation;
- mandatory vaccination, imuno- and chemoprophylaxis (programme-based);

- treatment and rehabilitation of malignant diseases; and
- long-term nursing care, including home visits and treatment in nursing homes and other social care institutions.

All other health care services involve cost-sharing through co-payments (see below for depth of coverage). For the majority of areas of care, the Act does not provide a detailed list of services but mandates that co-payment levels for services be determined by the HIIS in agreement with the government. To this end, the HIIS issues the "Regulation of compulsory health insurance", which needs to be accepted by the HIIS Assembly and approved by the Minister of Health. In practice, this means that, although there are no services explicitly excluded from public coverage by law, certain services, such as cosmetic surgery, can be eliminated in the "Regulation of compulsory health insurance".

Depth: how much is covered?

Depending on the specific type of treatment or activity, the share taken on by compulsory health insurance for services that are not fully covered ranges from 10% to 90%. Since the adoption of the Fiscal Balance Act in 2013 these shares are as follows:

- a minimum of 90% 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 80% of the cost of treatment for 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 and orthodontics; orthopaedics;, hearing and other aids and appliances;
- a minimum of 70% of the cost of medications from the positive list;[3] and for specialist, hospital and spa treatment of injuries that are not work related;
- a maximum of 60% of non-emergency ambulance transportation for paralysed people, and medical and spa treatment that is not in continuation of hospital treatment;
- a maximum of 50% of the cost of ophthalmology devices and orthodontic treatment for adults; and

[3] Three different lists exist for pharmaceuticals: positive, intermediate and negative. Co-payment levels vary by list with pharmaceuticals on the negative list not reimbursed by compulsory health insurance.

- a maximum of 25% of the cost of pharmaceuticals from the intermediate list determined by the HIIS.

As mentioned, the vast majority of compulsorily insured individuals purchase VHI to cover co-payments (see sections 3.4.1 and 3.5).

3.3.2 Collection

In Slovenia, compulsory health insurance contributions are the most substantial source of revenue for health system financing. They are employment based and levied on gross income; contributions are split between employers and their employees except for specific population groups (see also section 3.3.1). Contribution rates for compulsory health insurance are regulated in the Health Care and Health Insurance Act and have remained unchanged since 2002. Contribution rates vary by category of insured individuals. Employees pay 6.36% of their gross income and employers 7.09% (in total, 13.45% of gross income is collected per insured person).

Contributions are collected by the HIIS.[4] In the five-year period from 2000 to 2005, total revenue generated by HIIS increased by 59.2% (to €1.8 billion). By comparison in the six-year period from 2008 to 2014, total revenue generated by HISS increased by only 6.9% (€2.2 billion). 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. HIIS revenue from compulsory health insurance contributions and transfers represented 98% of total HIIS revenue in 2014. The majority (>85%) of social security transfers are actually from the Pension and Disability Insurance Institute (see also section 3.2). A detailed breakdown of revenue collected by the HIIS is presented in Table 3.2.

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 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. As noted above, the amount of the tax revenue allocated for health is not fixed but is estimated annually. Similarly, municipalities themselves estimate the share of the municipal budget allocated to health (see also section 3.2).

[4] The initial collection of contributions is carried out by the Financial Administration of the Republic of Slovenia, which is also responsible for monitoring these payments, which are then transferred to the HIIS.

Table 3.2

HIIS revenue by source as a share of total HIIS revenue, 2000–2014

Source	Percentage of total HIIS revenue														
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Social security contributions	79.76	80.26	79.69	79.94	79.55	78.84	79.91	80.48	80.86	80.31	79.83	79.32	79.40	78.90	79.50
Employee contributions	38.18	37.25	36.27	35.18	34.94	34.70	35.13	35.45	35.62	35.09	34.67	34.34	35.88	35.64	34.92
Employer contributions	36.59	36.97	37.46	38.85	38.89	38.69	39.33	39.72	39.93	39.30	38.91	38.43	36.30	35.89	37.30
Self-employed contributions	4.56	4.28	4.20	4.13	4.14	4.14	4.23	4.17	4.19	4.51	4.66	4.71	5.24	5.29	5.75
Other social security contributions	0.42	1.77	1.75	1.78	1.58	1.31	1.21	1.14	1.13	1.42	1.59	1.84	1.97	2.07	1.52
Non-tax revenues	2.17	1.34	1.33	1.22	1.89	1.79	1.96	1.92	2.01	1.58	1.61	1.73	1.83	1.78	1.77
Capital revenues	0.01	0.01	0.03	0.02	0.10	0.03	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Donations received	0.00	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transfered revenues	18.06	18.38	18.96	18.79	18.45	19.34	18.09	17.59	17.12	18.10	18.56	18.90	18.82	19.33	18.73
Transfers from the state budget	0.69	1.24	1.27	1.15	1.01	1.03	1.06	1.00	1.00	1.64	1.98	2.12	2.31	2.23	2.11
Transfers from local government budgets	0.80	0.79	0.88	1.00	1.05	1.03	1.02	0.89	0.76	0.77	0.68	0.64	0.64	0.78	0.75
Transfers from social security funds	16.57	16.35	16.81	16.64	16.38	17.28	16.01	15.69	15.36	15.68	15.90	16.13	15.87	16.32	15.87

Source: HIIS, 2000–2014.

3.3.3 Pooling of funds

In Slovenia there are two separate pooling mechanisms. The first is represented by the HIIS, which collects and pools compulsory health insurance contributions (see also 3.3.2). As per the Health Care and Health Insurance Act of 1992, the HIIS is the sole provider of compulsory health insurance. Within each annual financial plan, the HIIS defines a maximum overall amount of collected compulsory health insurance contributions to be spent on health services for the upcoming year. The prospectively determined and 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 national health budget proposal is then discussed at the HIIS Board and in Parliament. After their confirmation, the financial plan is approved also by the government. The national health budget is determined centrally. There is no further allocation of the health budget on a geographical basis, aside from local tax revenue flowing to the municipal budgets. On an annual basis, parallel to the planning of the national budget, the HIIS and the Ministry of Finance establish the cap for total expenditure on health insurance within the HIIS. This is the maximum amount that is to be spent from public funds. The fact that the annual HIIS budget on health insurance is capped is incorporated into the contracts between HIIS and health care providers (see section 3.3.4).

In the second pooling mechanism, the three main VHI companies collect and pool the VHI contributions in their respective pools, which are then re-allocated among them using a risk-equalization scheme determined by the Ministry of Health and based on level of costs (claims) paid, age and gender profile. 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 and report costs according to seven age groups and gender on a quarterly basis. Based on these quarterly figures, the Ministry of Health calculates the so-called "Slovene Portfolio". This 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 company during the respective quarter. VHI providers with more favourable risk portfolios subsequently have to contribute to a pool, from which compensation is paid to those VHI providers with less

favourable portfolios. In order to facilitate the re-allocation of resources, the Ministry of Health issues decisions to VHI companies regarding the amount they have to pay to, or are due to receive, to equalize differences in risk structures. This is made possible by the fact that the most common package offered by all three companies is total coverage against all co-payments and benefits and so they are easily compared. In contrast to the annual HIIS budget, the budget for VHI is not capped, which means that VHI companies have to pay for all provided services covered by complementary health insurance.

The global budget for health services is then implemented in the process of partnership negotiations as described in section 3.3.4. The partnership negotiation process also results in defining allocation models using different kinds of payment mechanisms (see section 3.7).

3.3.4 Purchasing and purchaser–provider relations

Health services in Slovenia are purchased by the HIIS and VHI companies. Purchasing of health services starts with a process of stakeholder negotiations (see also section 2.8.2). 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 (with appendices for different groups of health care provider) and its annexes is the key product of the first phase of the contracting process. It is then used in the direct contracting processes between the HIIS and providers in the public network (at all levels) to determine the final content of the contract. The Ministry of Health, the HIIS, the Association of Health Institutions of Slovenia, the Medical Chamber, the Pharmaceutical Chamber, the Association of Social Institutions of Slovenia, the Community of Organizations for Education of Special Needs Children in the Republic of Slovenia and the Slovene Spas Association (representing members) are involved in formulating the annual General Agreements to represent the interests of individual stakeholders.

The procedure of partnership negotiation for the General Agreement has been unchanged since it was introduced with the adoption of the Health Care and Health Insurance Act in 1992. The negotiations are carried out in two stages. First, partners negotiate recommendations to amend or change the existing General Agreement. Only recommendations where full (100%) agreement among partners is reached are adopted. The second stage is arbitration, when controversial issues are negotiated; the quorum remains the same as in the first stage – changes can only be adopted following full agreement of all partners

involved. The government reaches a decision on any remaining controversial issues. The whole procedure of negotiations is outdated, as partners can submit an unlimited number of recommendations or controversial issues and stall the process. Most issues are about the level of funding and the prices paid.

The second phase of purchasing of health services involves only two parties, the HIIS and the respective provider within the public health care network. Based on the General Agreement, 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, supervision of the implementation of the contract and the individual rights and responsibilities of the contracting parties (see also section 2.8.2). The HIIS issues public tenders open to all public providers and those private providers with a concession to work in the publicly funded system. Selective contracting of individual providers is not possible. Consequently, there is no true competition for contracts although the HIIS has tendered certain (priority) programmes, such as one to increase the volume of services in sectors with lower accessibility/longer waiting times. Although the General Agreement and, therefore, individual contracts contain provisions on monitoring quality, these are insufficiently implemented, and evidence-based clinical pathways and treatment protocols are not in place. Generally, contracts are unspecific and give the providers considerable latitude regarding their activities.

VHI companies do not participate in the negotiation process to define the General Agreement and its annexes. They are obligated to pay providers the total value of benefits covered by complementary VHI. Individuals who have taken out supplementary VHI policies pay premiums to the companies, who in turn pay the full costs directly to the respective health care provider.

3.4 OOP payments

OOP payments in Slovenia take the form of both cost-sharing and direct payments (see also section 3.2).

3.4.1 Cost-sharing (user charges)

Co-payments were introduced by the Health Care and Health Insurance Act 1992 as part of the compulsory health insurance system. They apply to most types of health care service and, since 2007, to all patients with the exception of children and students until the age of 26 plus some vulnerable groups, such

as unemployed individuals, those with income below a certain threshold and chronically ill people (breadth of coverage is also discussed in section 3.3.1). Co-payment levels are set out in Article 23 of the Act, and are defined by the HIIS on a regular basis; they range between 10% and 90% depending on type of treatment or activity (see depth of coverage in section 3.3.1). As mentioned above, the vast majority of compulsorily insured individuals purchase complementary VHI policies to cover co-payments. In the (rare) event that the patient does not have such a policy, the difference up to the full price of health services has to be paid to the provider directly. Otherwise the provider charges the respective VHI company.

3.4.2 Direct payments

Direct OOP payments at the point of use are required for goods and services that are not covered by any form of insurance. These occur 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 dental services. Patients may also choose to pay directly for covered services to avoid waiting times, or to pay for services not included in the benefits package of the compulsory insurance scheme, such as special hospital ("hotel") services or better food. Certain services, such as cosmetic plastic surgery or eye laser correction surgery, are not included in any health insurance packages and have to be paid fully out of pocket. There is no exact information available as to the share of total expenditure contributed via direct payments made by patients (Cylus, 2015).

3.4.3 Informal payments

Informal payments are not common in the Slovene health system. They occur in kind or in cash to health care providers, predominantly in primary care and for outpatient services. As the phenomenon is not widespread, they are not observed as a separate category but are included in OOP payments, and estimated by questionnaires.

3.5 VHI

3.5.1 Market role and size

VHI was introduced in 1993 to gather resources for health care additional to those accumulated through compulsory health insurance. VHI gained popularity, acceptance and affirmation as a result of the introduction of

co-payments for health services by the Health Care and Health Insurance Act of 1992. In the introductory years (1993–1994), it was predominantly large companies who purchased VHI collectively for their employees. As time went by, VHI was increasingly considered a matter of individual choice. Initial fears over the creation of a two-tiered medical system were overshadowed by arguments that, by demanding additional resources from consumers, the introduction of a VHI system would put an end to limitless claims and unnecessary utilization of the compulsory health insurance system.

The following types of VHI policies are available:

- complementary health insurance for co-payments; that is, partial cover for services not fully covered by compulsory health insurance;
- supplementary, parallel and other VHI policies offered by health insurance companies which can cover:
  - services excluded from compulsory health insurance coverage,
  - individuals who are not eligible for compulsory health insurance,
  - faster access to medical treatment, nonmedical services in hospitals etc.,
  - higher-quality materials, more convenient procedures, additional services in hospitals or health spas.

Since it is not possible to opt out of the compulsory scheme, there are no substitutive voluntary schemes for "full coverage". However, individuals not included in compulsory health insurance (e.g. people without permanent residence) can purchase VHI covering a variety of services. Co-payments for most of the services covered by compulsory health insurance are quite high. In contrast, the flat rate for VHI seems to be acceptable for the population. This can be explained by the fact that the legislation does not foresee any capping for co-payments and that high costs could thus be incurred by certain patient categories. For this reason, more than 95% of compulsorily insured individuals have also purchased complementary VHI. The basic benefit package in the compulsory scheme comprises a wide range of services; therefore, there is a little room for additional insurance for services, which is purchased only by a small fraction of the population. It is important to mention that this system has two adverse effects that need to be addressed. Certain low income groups cannot afford VHI and for them a special mechanism has been established by which co-payments are covered by the state budget. On the other hand insurance companies offering VHI have shown rising profits in recent years.

With the introduction of austerity measures in the context of the 2009 financial crisis, co-payments gradually increased and the share of coverage for health services shifted from the HIIS to complementary VHI (within the limits defined in Article 23 of the Health Care and Health Insurance Act). This was done to ensure financial sustainability for the compulsory health insurance scheme, as the HIIS must have an equal income and expenditure balance according to Pact on Stability and Growth. As a result, complementary health insurance expenses increased in nominal terms in 2010–2014 (Fig. 3.10), as did the share they had in total and current health expenditure (Fig. 3.5). However, this increase was mitigated by price reductions in health services, which were introduced as a part of the austerity package in the Law on the Balancing of Public Finances (2011) and were estimated by the HIIS, the Ministry of Health and other stakeholders at 18% over four years (Fig. 3.11). At the same time, monthly premiums for complementary health insurance increased in the period of economic downturn and austerity measures (2009–2015) by more than 20% (Thomas, Thomson & Evetovits, 2015).

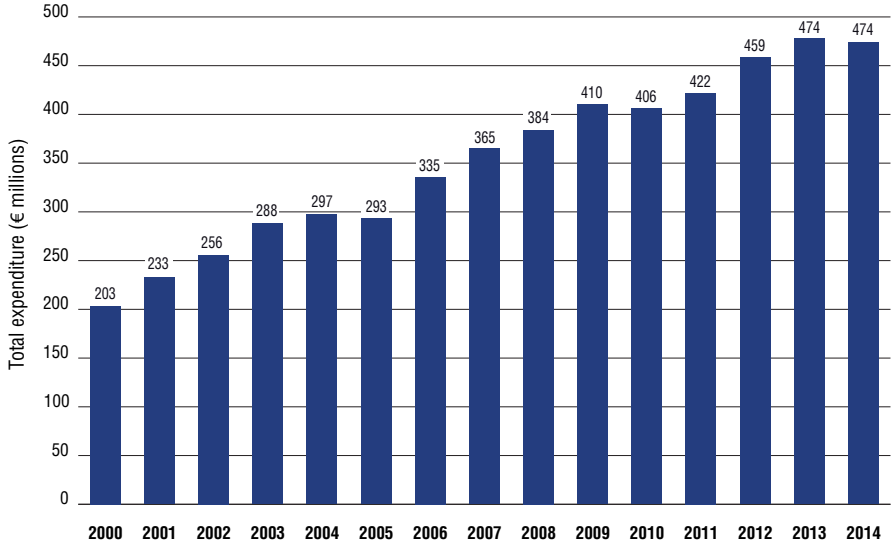
3.5.2 Market structure

Between 1993 and 1998, there were two providers of VHI: the HIIS (i.e. its department for VHI), which as a statutory body was responsible for providing a co-payment insurance policy complementary to the compulsory health insurance scheme, and Adriatic, a profit-making commercial provider. 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 that was independent from the HIIS and obliged by law to provide insurance schemes for co-payments. Vzajemna subsequently became the largest provider of VHI.

Currently, VHI is provided by Vzajemna, along with two profit-making companies: Adriatic-Slovenica and Triglav. Vzajemna is still the provider with the most insured individuals but its market share has been decreasing, from 1.2 million in 1993 to 900 000 in 2005 and 832 349 in 2014 (Fig. 3.12). The other two VHI companies (particularly Triglav) have been gaining enrollees following intensive publicity targeting younger entrants. Finally, there are several other providers of VHI who offer policies for smaller segments in the VHI market, for example policies for travel health insurance.

Fig. 3.10

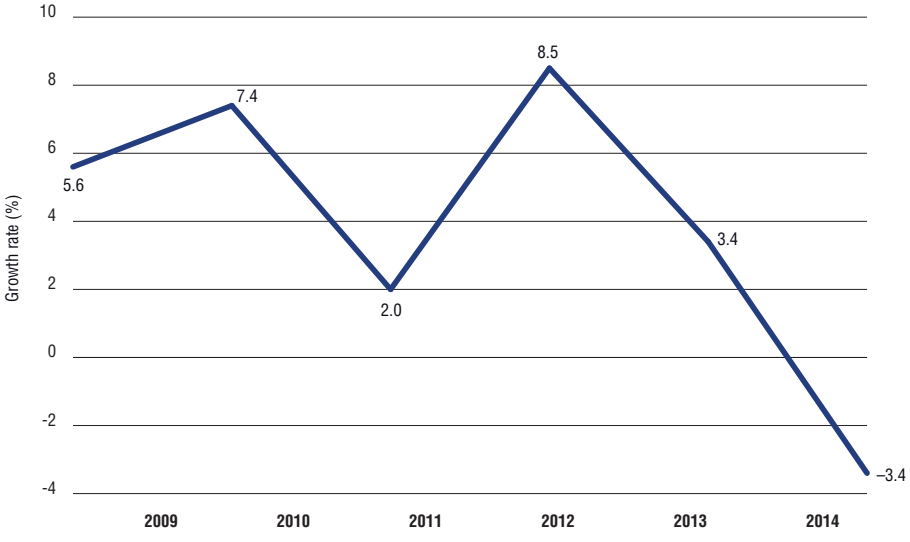
Total expenditure for complementary health insurance, 2000–2014



Source: IMAD calculations based on unpublished data provided by the Insurance Supervisory Agency.

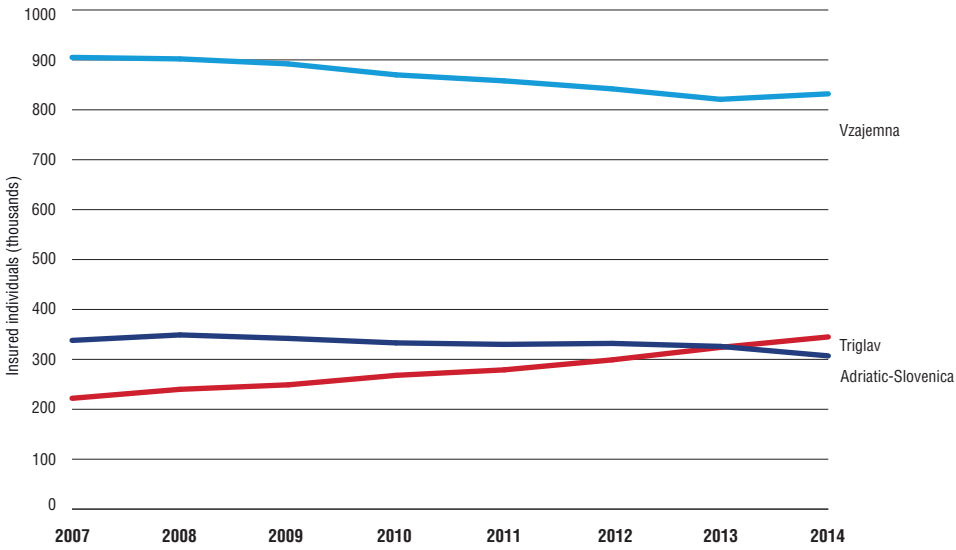
Fig. 3.11

Growth rates in complementary health insurance expenditure, 2009–2014



Source: IMAD calculations based on unpublished data provided by the Insurance Supervisory Agency.

Fig. 3.12
Number of insured individuals per VHI company, 2007–2014



Source: IMAD calculations based on unpublished data provided by the Insurance Supervisory Agency.

3.5.3 Market conduct

The Law on Changes and Amendments to the Health Care and Health Insurance Act (2005) stipulates a unified VHI flat premium for all insured people (community rating), irrespective of sex, age or health condition. This is set by actuarial calculations, which are supervised by the Insurance Supervisory Agency. In 2014, the premiums ranged between €26 and €27 per month (see section 3.5.4 for relevant public policy changes). While it is possible for primary and supplementary insurance policies to include cost-sharing in the form of deductibles, there are no such products being offered at the moment. Tariffs set in the General Agreement and its annexes also apply to VHI companies.

3.5.4 Public policy

After the introduction of VHI, there were clear signs of imbalance between different VHI companies. Premiums for complementary VHI were not risk related and all companies charged almost identical premiums. However, a commercial VHI company (Merkur, no longer in operation) entered into the Slovene market in 2004–2005 and 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 this included a large number of retired or elderly people. This resulted from Vzajemna's predecessor (HIIS) being chosen by the Pension Institute based on public tender in 1992, when VHI was introduced.

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 became obliged to participate in a risk-equalization scheme (see section 3.3.3). 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 policies. However, subtle cream-skimming still takes place in practice, despite the equalization scheme (see also section 3.5.2).

3.6 Other financing

3.6.1 Parallel health services

The Ministry of Defence owns separate first aid health care facilities within its military premises, staffed by military physicians who are salaried directly by the Ministry. 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 covered by the state budget.

3.6.2 External sources of funds

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. Because Slovenia has a relatively high per capita GDP compared with 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. Some external

financial activity took place in the form of co-financing legislative activities and building institutional capacity within the process of Slovenia's accession to the EU. In this regard, the EU provided significant resources. Financial contributions from WHO, the World Bank, the United Nations Development Programme and other United Nations organizations have been received for specific tasks (e.g. 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.

3.6.3 Other sources of financing

Large enterprises may employ occupational physicians. The employer is obliged to ensure all services and measures for protection and health within the workplace (e.g. advance and periodic medical check-ups for employees). If employees fall ill, the cost of their treatment is covered by compulsory health insurance.

3.7 Payment mechanisms

This section discusses payment arrangements for health care services and health care personnel. Generally, payment mechanisms and levels are regulated based on contractual arrangements between the HIIS and health care providers (see sections 2.8.2 and 3.3.4).

3.7.1 Paying for health services

The levels of payment for health services are based on annually renewed contracts between the HIIS and providers. Each contract determines 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 (e.g. outpatient specialist care, acute inpatient care, non-acute inpatient care). 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. Exempt from capped budgeting are special programmes financed regardless of the volume carried out (e.g. childbirth, the national programmes for the early detection of cancers such as cervical, breast and colon cancer, dialysis, organ transplantations; see also Inpatient care, below).

The payment mechanisms are the same for all providers in the public health care network (private and public). Mechanisms for different types of health service and provider-payment schemes are summarized in Table 3.3 and described in detail below.

Table 3.3
Payment mechanisms, 2014

Health service category	Payment mechanism (with regards to the basic payment unit)	Prospectively determined limited payment or retrospectively 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 days 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 practice	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 a spa	Fee for service	Prospective

Ambulatory care

Primary health care services provided by personal physicians (GPs and primary-level paediatricians and gynaecologists) in health centres are paid through a combined system of capitation and FFS 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 physician's list, the other half is paid by FFS payments in accordance with the volume of services provided. In 2003, financial incentives were introduced to reduce the number of referrals to specialists. Increased payments to providers are possible if the number of referrals to specialists they issue 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 payment by 2–4% of the total value of the agreed programme. In 2005, an additional incentive was introduced to strengthen the provision of preventive services: in order to fulfil eligibility criteria for HIIS payments, providers are required to implement programmes of prospectively determined volumes of preventive services; they may obtain the full budget if they perform the required preventive work, regardless of the number of provided curative services. The main issues with paying for services in primary care seem to be the lack of adequate age-weighting for capitation payments (as it is not based on current utilization or cost data) and the limited incentives to provide services and enhance quality of care (Panteli et al., 2015).

Outpatient specialist services provided by hospitals are remunerated by FFS payments according to a classification of services, colloquially known as the "Green Book", produced by HIIS. The volume of services provided that is reimbursable by the HIIS is outlined in the contracts and measured by a point system. The financial valuation of services takes into account calculation elements concerning salaries, proportions and amounts of material expenses, technology depreciation and overall consumption funds. Several problems with the billing of services on the basis of the Green Book need to be highlighted. Fee levels do not adequately reflect the costs of service provision, with some being overvalued and others undervalued; furthermore, fee levels for similar services vary substantially by provider group. Lastly, definitions of billable FFS items and billing rules are not sufficiently clear, enabling creative billing practices and hampering HIIS monitoring. The structure of the fee catalogue can also lead to excessive referrals (see also section 7.5).

Inpatient care

Hospital payment is based on provider budgets, which are negotiated between the HIIS and each provider in the contracting process. A payment model based on DRGs has been introduced gradually, beginning in 2003.

The DRG model classifies patients in groups that are comparable according to diagnosis or standard types of care and takes into account the whole care procedure for a particular patient. Thus, for different cases, different payments are ensured that are proportional to expected costs. The complexity of each case is determined by clinical diagnosis, procedures undertaken and length of treatment. This payment model is administratively and operationally demanding and depends on access to data on clinical procedures and costs. Since 2005, the Slovene classification system contains 653 DRGs (excluding certain services such as dialysis and transplantation). The cost weights used in the payment model are based on the Australian DRG system's cost weights for the public sector from the National Hospital Cost Data Collection Round 6 for 2001–2002 (v4.2). The cost weight represents the relative price of each DRG in comparison with the average DRG price at national level (price of average treatment at national level). The model is used to calculate the DRG budget for each provider, according to provided services, as well as benchmarking between the current budgets of each provider of acute inpatient care services and the DRG budget(s). This results in re-allocation of resources among providers, within the limits of a maximum possible loss compared with the current budget for acute inpatient health care. In 2005 and 2006, the maximum possible loss was 1%, while in 2007 and 2008 it was 2%. As of 2013, the price of one DRG weight is determined at national level and used for all providers. Also

in 2013, a new version of the Australian DRG model (v6.0) was imported but is currently only used for the classification of patients, while payments continue to be made on the basis of the previous version. Efficiency issues with regard to the DRG system (such as the use of imported cost weights) are presented in detail in section 7.5.

HIIS payments to the providers of acute inpatient care 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 that programme in the previous year, additional programmes for improving access to health services (particularly 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, based on the long-term savings enabled by the DRG payment model (e.g. reduction in hospital 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.

Specific programmes, such as prospective programmes and uncapped programmes, which are defined in the General Agreement (Appendix BOL II/b; see section 3.3.4) have special funding arrangements. Prospective programmes are programmes for services with long waiting times. They are prospectively defined in volume and price, and financial resources "earmarked" for such programmes cannot be used for any other purpose. They are funded at 10% above planned volume. Uncapped programmes as described in Article 40, section 7, in the General Agreement are not in any way limited regarding financing. Beside these programmes, there is an additional group of specifically listed procedures with long waiting times that are funded at 10% above planned volume (a 20% rate was introduced temporarily for 2015 only).

Furthermore, there are separate payment mechanisms for certain types of inpatient service: payment is based on a prospectively determined number of bed-days for non-acute care; on a prospectively determined number of cases for psychiatric care and the rehabilitation programme; and on an annual report on hospital activities in teaching, education, research and development, as well as complexity of treatments, for tertiary care (Table 3.3).

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 on an FFS

basis. The volume of services provided that is payable by the HIIS is outlined in the contract and measured by a point system. 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 based on days of nursing care and FFS payment. Social institutions are long-term care institutions, mostly under the jurisdiction of the Ministry of Labour, Family and Social Affairs but with health services funded by the HIIS. They include nursing homes for elderly people and rehabilitation institutions for physically and/or mentally ill individuals (see also section 5.8). The volume of days of nursing care (for four different categories determined by complexity of care) and services (measured by 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 the 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 FFS payments. The volume of days of nonmedical care and services (measured by 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 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 these are covered by VHI (co-payments and VHI are more extensively discussed in sections 3.4 and 3.5).

3.7.2 Paying health workers

Health care personnel in primary and secondary care may practise based on an employment contract (as an employee of a 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 working for public providers have "public servant" status and are salaried through payments from the HIIS and VHI companies. Salary levels are negotiated between trade unions and the Ministry of Health. The results of the new consensus are then also implemented in the General Agreement and appendices for different groups of health care providers via the partnership negotiation process. Therefore, physician payment has to follow the civil servant pay scale but this is considered inadequate for physicians and hampers the implementation of satisfactory arrangements for rewarding performance. As a work-around, there is a system of "equivalent hours", which is based on individual agreements with providers and allows specialists who work very quickly to receive payment for more hours of work than they have formally performed. This system leaves substantial flexibility for local agreements and enables second job contracts, where specialists are usually paid a fixed amount of equivalent hours for doing a certain amount of work (e.g. a certain number of endoscopy assessments). This is a highly untransparent system and often leads to the absence of physicians from their primary workplace.

Concessionaries are paid based on the type, volume and value of specific health care programmes, as determined in their contract with the HIIS. The standardization of programmes (aside from salaries) also includes standardized material costs, costs of services and depreciation. The exact payment mechanism depends on the content of the health care programme or service provided. It must be noted that the concession-granting system is not based on overall health system or public health goals and is characterized by a general lack of transparency, which undermines the HIIS' purchasing function. The issues connected with billing practices based on the Green Book, discussed above, also impact these private providers.

Private providers without concessions who are not contracted by the HIIS are paid by through patients' OOP payments or through supplementary VHI. According to the Health Services Act 1992, the Medical Chamber is responsible for setting prices for services delivered by private providers (outside the public health care network), which must then be approved by the Minister of Health.

4. Physical and human resources

The Ministry of Health is responsible for capital investment in hospitals and other secondary care infrastructure at the national and regional levels while local governments at municipal level finance such investments in public primary health care facilities and public pharmacies. In terms of hospital sector infrastructure, Slovenia had 455 beds per 100 000 population in 2013, 79% of which were dedicated to acute care (higher than the EU average of 69%). The number of acute care beds (359 per 100 000 population) is slightly above the EU average (356). The number of MRI, CT and PET units has risen since the mid-2000s, although there is no national needs assessment or plan for such items of major medical equipment.

Initiatives for e-health are promoted by the government, particularly through an ambitious national programme of development known as eHealth, which includes e-prescriptions, e-referrals and a system of electronic patient records. The aim is to integrate the disparate health information systems currently in operation across individual health care organizations by the end of 2016.

Although the number of physicians has been rising since the mid-1990s, at 2.63 physicians per 1000 people in 2013, Slovenia was well below the EU average of 3.5. The number of nursing professionals (which includes registered nurses as well as nursing technicians) was 8.38 per 1000 population; similar to the EU average of 8.49, although that is higher than the average for the EU13 (6.22). Current policy goals are directed towards maintaining present staffing levels within the health system, although the Nursing Chamber argues that more registered nurses are needed. There are also some challenges with respect to the geographical distribution of medical doctors across the country. As a relatively small country with historical links to the rest of former Yugoslavia, substantial cross-border mobility of health professionals was expected after joining the EU, but this did not materialize.

4.1 Physical resources

4.1.1 Capital stock and investments

In 2014, there were a total of 30 public and private hospitals in Slovenia: 10 general hospitals, 2 university hospitals, 1 oncological institute, 1 rehabilitation institute, 5 mental health hospitals, 3 hospitals for pulmonary diseases, 1 orthopaedic hospital, 2 gynaecological and obstetrics hospitals, 2 sanatoria for children and 3 private hospitals (1 for cardiovascular surgery, 1 general surgery sanatorium, 1 diagnostic centre). In addition, there are 7 more private providers who deliver acute hospital care either as day care or inpatient care (HIIS 2015d). For provision of inpatient care, these providers rent facilities, equipment and, eventually, nursing staff in public hospitals.

Table 4.1 outlines the number of public sector health care institutions in Slovenia in 2014. In addition to the 27 public hospitals, there were also 65 primary health care centres and 11 other public health care institutions (Blood Transfusion Centre Ljubljana, the NIPH and nine regional institutes of public health). A reorganization of the public health institutes took place in 2013 and from 2014 the previously separate institutes were combined and merged into two agencies: the NIPH and the NLHEF (see also Chapters 5 and 6). The total number of employees working in public sector health care institutions was 30 276 in 2014, with 67% being employed in hospitals (Table 4.1).

Table 4.1
Publicly funded health care institutions, beds and personnel, 2014

Type of provider	Number of institutions	Number of beds	Number of physicians	Number of nurses	Total number of employees
Primary health care centres	65	0	1540	3938	8475
General hospitals	10	3326	1184	3479	7422
University hospitals	2	3441	1548	4143	9933
Institute of Oncology	1	262	133	236	972
Rehabilitation Institute	1	200	34	98	520
Mental health hospitals	5	1185	137	505	1220
Hospitals for pulmonary diseases	3	443	82	357	814
Orthopaedic hospitals	1	190	43	150	337
Gynaecology and obstetrics hospitals	2	147	30	83	181
Sanatoria for children	2	60	6	28	90
Public health institutes	3	0	133	144	1098
Total	**95**	**9254**	**4870**	**13161**	**31062**

Source: Calculations based on HIIS National Health Care Providers Database.

The location of hospitals in Slovenia is historically based. Many of them were founded in the 19th century in the very same place that they are today. There are two university clinics in Ljubljana and Maribor, the country's two largest cities. The Institute of Oncology, the Rehabilitation Institute and the main psychiatric clinic are also based in Ljubljana. General hospitals exist in regional centres and have at least four departments each – internal medicine, surgery, paediatrics, and gynaecology and obstetrics. Specialized hospitals result from historic traditions, when hospitals were developed for certain major conditions.

The three private hospitals represent only 1% of all inpatient beds in Slovenia. The largest hospital in the country is the publicly owned University Medical Centre Ljubljana, which has approximately 2200 beds, while the second largest hospital is the University Medical Centre in Maribor with around 1300 beds. General hospitals have 330 beds on average (range, 130–720), while the six smallest hospitals have 50 beds on average (range, 25–85).

Investment funding

There is an ongoing investment process in facilities, particularly with regard to buildings; the most recent of which were the new building for the General Hospital Slovenj Gradec and the Diagnostic and Therapeutic Centre for the University Medical Centre Ljubljana. Most of the existing general hospital buildings date back to the 1970s. Investments of this type are provided by the national budget, since all public hospitals are owned by the state. There is no strategic document on the future development of hospitals. In 2012–2015, European regional development funds were used to build new emergency centres in general hospitals and university clinics (also see section 5.5).

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 proposed by the Ministry of Health's Investments and Public Procurement Unit and set by the Ministry of Health's Committee on Investments. 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 care facilities and public pharmacies.

Municipalities raise their own revenue for capital investments. However, financially disadvantaged municipalities with lower development levels receive additional financial assistance for capital infrastructure from the national

budget. The national budget for 2015 contained €0.49 million allocated to co-financing primary health facilities (which are predominantly financed by municipalities) and €62.7 million for investments in hospital infrastructure (including €19 million from the state budget, €7.4 million from a special state investment fund for public health institutions in addition to European regional development funds). However, neither the Ministry of Health nor the HIIS is liable to compensate for hospitals' deficits, whether these are overruns in the capital funds to build new facilities or deficits incurred once the facility is operational; these are generally the responsibility of the particular provider.

Capital investment in private practices is self-funded by providers. 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.

4.1.2 Infrastructure

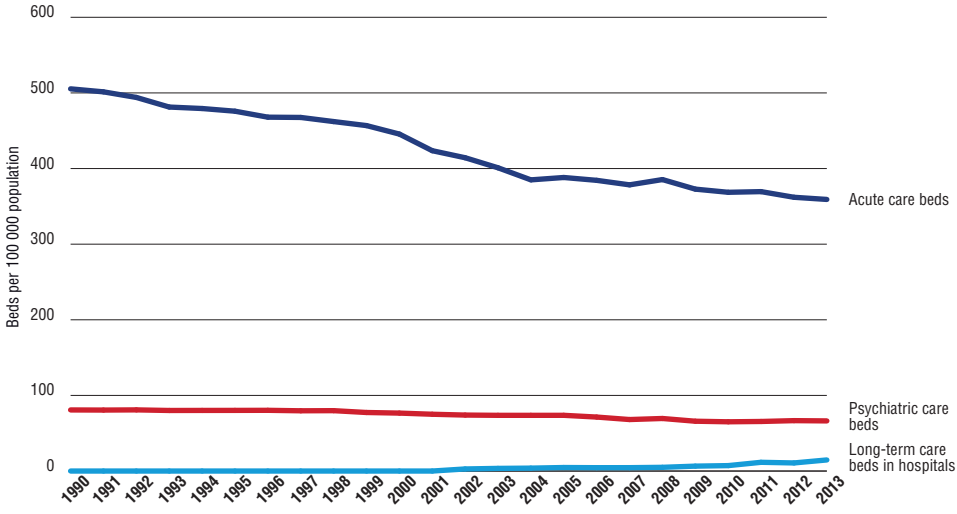
The total number of hospital beds has been decreasing since the 1980s in all hospitals – from 695 per 100 000 population in 1980 to 455 per 100 000 in 2013 (NIPH 2015d; WHO Regional Office for Europe, 2015a). This process was assisted by significant changes in the hospital reimbursement systems, including the shift from bed-day payments to case-based (DRG) payments. However, only a 3% decrease in bed numbers has occurred in the period since 2003.

Acute care beds, psychiatric beds and long-term care beds represent 79%, 15% and 3%, respectively, of all hospital beds (Fig. 4.1 and Table 4.1). From 1990 onwards, the number of acute care beds decreased by 37%, while psychiatric beds decreased by 18%. Long-term care beds in hospitals were introduced in the early 2000s with the initiation of non-acute hospital care and they are increasing in number. This type of care includes mixed nursing and medical care for patients, who expect to gradually improve their condition in order to be transferred from hospital to different types of care (e.g. rehabilitation in spas, home care or nursing homes for the elderly). In addition, long-term care beds are predominantly provided in nursing homes and other types of social care institutions. In early 2012, there were 19 973 beds available within these settings, where more than 50% of clients needed long-term health care (Association of Social Institutions of Slovenia, 2012).

When compared with selected countries, the number of acute care hospital beds in Slovenia (359 per 100 000 population in 2013) was substantially lower than the number in Austria (535) but considerably to moderately higher than in Sweden (293), Finland (280) or Estonia (337). It was slightly above the EU average (356) (Fig. 4.2).

Fig. 4.1

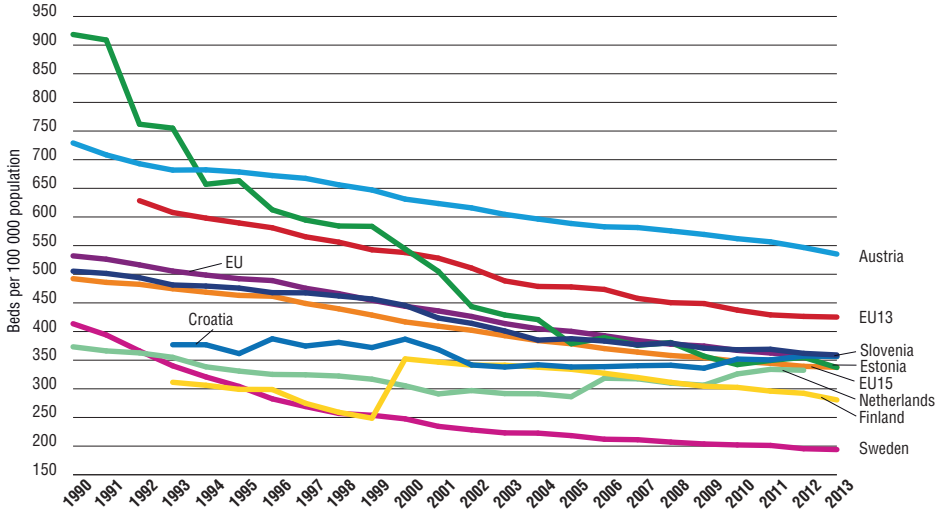
Beds in acute hospitals, psychiatric hospitals and long-term care (hospitals beds only), per 100 000 population, 1990–2013



Source: OECD, 2015b.

Fig. 4.2

Acute care hospital beds per 100 000 population, in Slovenia and selected countries, 1990–2013



Source: WHO Regional Office for Europe, 2015a.

Continuous development of health technologies and changes in the hospital reimbursement systems shortened the average (total) length of stay (from 11.4 days in 1990 to 6.9 days in 2014) (NIPH 2015d; WHO Regional Office for Europe, 2015a); consequently, there was a larger turnover of patients, which has led to less demand for hospital beds. Looking at data from the WHO Regional Office for Europe Health for All database, average length of stay in acute care hospitals in Slovenia was below the EU average between the late 1990s and 2010. After a methodological change in data interpretation in 2011, it increased by 23% to 6.8 days and thus exceeded the EU average of 6.4 (Fig. 4.3). Since then, average length of stay in acute care has been slowly decreasing to 6.3 days in 2013, which is equal to the EU average.

In 1990, the bed occupancy rate was 82%, falling over the next 10 years to 70%, where it has roughly remained (WHO Regional Office for Europe, 2015a). Compared with selected EU countries, the bed occupancy rate in acute care hospitals in Slovenia (at 68% in 2013), is significantly below that of Austria (80%) and Croatia (74%) and also below the EU average of 77% (in 2012) (Fig. 4.4).

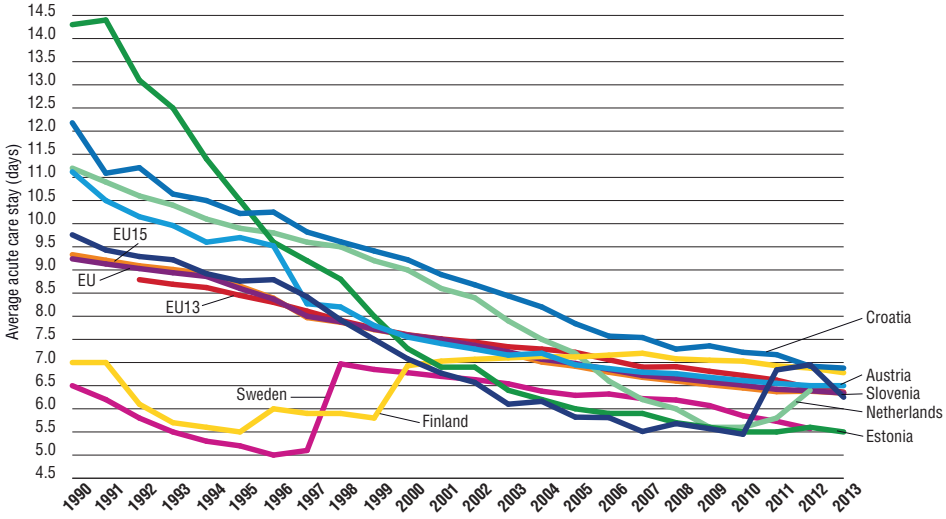
4.1.3 Medical equipment

Investment in medical equipment is the responsibility of the owner of the particular health care facility. For investments in new technology, the Health Council at the Ministry of Health approves costs, based on national priorities, scientific justification and the 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 to increase transparency in terms of spending public money, and to reduce prices. Consequently, the 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. National funds within the Ministry's budget are set aside for these investments. For example, in 2005 and 2006, the Ministry of Health purchased PET, MRI and CT equipment using this procedure. Minor investments are funded by providers themselves. Primary health care offers basic diagnostic and imaging tools, such as radiology and ultrasound devices. More specialized procedures are available at the 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.

Fig. 4.3

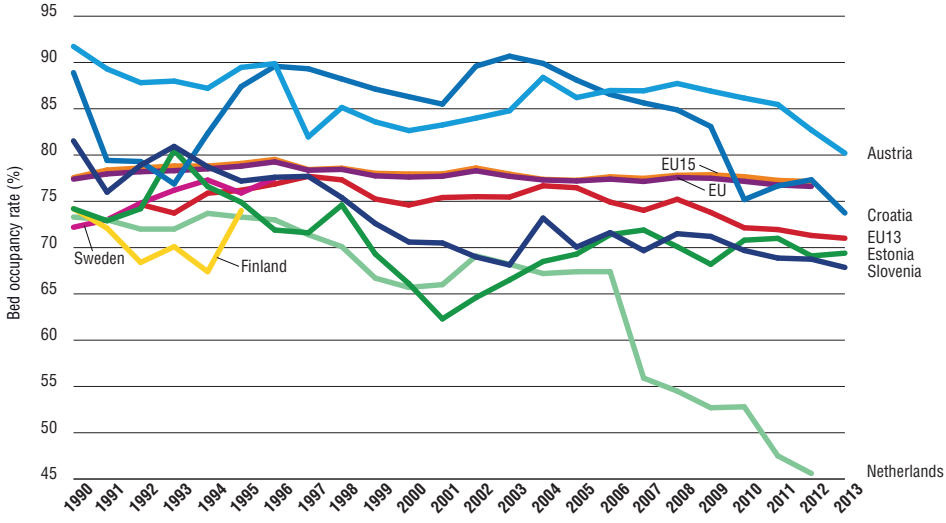
Average length of stay in acute care hospitals only, in Slovenia and selected countries, 1990–2013



Source: WHO Regional Office for Europe, 2015a

Fig. 4.4

Bed occupancy rate, acute care hospitals only, in Slovenia and selected countries, 1990–2013



Source: WHO Regional Office for Europe, 2015a.

However, this institution is not competent to supervise non-ionizing techniques, such as MRI. The registry is the only relevant source of data on available radiation devices in the country (Table 4.2).

Table 4.2
High-technology equipment available in public hospitals, 2014

Equipment	Number units
CT units	27
MRI units	18
Gamma cameras	17
Digital subtraction angiography units	17
PET units	2
Radiation therapy units	12

Source: Slovene Radiation Protection Administration internal data, 2014.

4.1.4 Information technology

General use

Since 2010, when the prevalence of Internet access and use was comparable with the EU average, Slovenia's gap with more advanced countries has been gradually increasing. In the first quarter of 2014, the share of Internet users (72%) was somewhat smaller than a year earlier (in contrast to the EU where it rose further), while the share of households with Internet access (77%) was again increasing more slowly than in the EU. The underlying cause of these developments is partly the impact of the financial crisis, which made the Internet less accessible, particularly to lower income households and users with lower levels of educational attainment (IMAD, 2015b). Furthermore, Internet usage among older people (particularly in the 55–64 age group) is notably lower in Slovenia than in the EU, presumably because of a lack of appropriate skills. When it comes to relatively simply services, Internet use in Slovenia is equivalent with that in the EU. In contrast, there is a wide gap in the use of more sophisticated services, in particular e-banking, online shopping and online travel bookings, which may be a sign of lower trust in e-services (IMAD, 2015b).

e-Health

The situation is similar in the field of health care informatics. Most existing health information systems in Slovenia have been developed within individual health care organizations and are designed specifically to meet their own needs; consequently, they are not adequate for interoperation and do not provide complete, relevant and timely information (Ministry of Health, 2005).

The national eHealth project was launched with great expectations in 2005 and was intended to integrate all fragmented health information systems and offer a complete solution benefiting all parties. The eHealth project entails the inclusion of stakeholders into the functional network, reconstruction of the health care system business model as well as integration and harmonization of many information subsystems at different levels (Stanimirovic & Vintar, 2014). The objectives of the national project are to enable high-quality and professional working practices with patients and to make available relevant and reliable economic, administrative and medical data, which would facilitate better planning, control and management of individual health care organizations and the health care system in general (Ministry of Health, 2005, 2008c).

However, the development of eHealth has been significantly hampered by a number of regulatory, financial, institutional and technological factors. Consequently, the current infrastructure for eHealth is only partly functional (Stanimirovic, 2015). Aside from the operational difficulties of the existing health information system and deficiencies in project management, the biggest problem facing eHealth is a lack of appropriate strategic and implementation documents that can comprehensively regulate its further development. Existing strategic documents formally expired in 2010 and 2013 and implementation of such a large and complex project without proper strategic orientation is subject to various risks (Stanimirovic & Vintar, 2014). In fact, following an audit of the eHealth project by the Court of Auditors in 2013 that highlighted deficiencies, the Ministry of Health was requested to clarify objectives and improve planning, management and implementation.

Despite these problems and time delays, considerable progress has been made since 2013. Basic infrastructure components such as the Health Network, an interoperable backbone and some other important building blocks (a picture archiving and communication system, tele-stroke, e-triage) have been established and implemented on a national level. The national roll-out of the majority of the following eHealth applications should be completed by the end of 2016:

- e-prescriptions
- e-referral
- National Health Portal
- Central Registry of Patient Data and patient summaries
- Register of Health Care Providers and Health Care Workers
- Register of Vaccinated Persons
- Additional required modifications to legal regulations.

The operationalization of infrastructure components and the planned implementation of other e-health applications represent an important milestone in the public and professional perception of the use of information and communication technologies for health care in Slovenia. Successful implementation of e-health solutions will require relative consensus between the various stakeholders in the health care system as well as better coordination and cooperation throughout the development and implementation process.

4.2 Human resources

4.2.1 Health workforce trends

The level of human resources in health care is a matter of frequent discussions and controversies, partly because of past shortages and partly because of the segments of health care where workloads are higher. Obviously the first point is a reflection of the planning patterns or their inadequacy, while the second is a result of the organizational aspects of health care. Generally speaking, current policy goals are directed towards maintaining the present staffing of health care. There are also some challenges with respect to the geographical distribution of medical doctors. Intense efforts to secure an adequate number of medical doctors in the first decade of the 21st century resulted in significant increases. This fact, coupled with the impact of the financial crisis since 2009, caused temporary surpluses of medical doctors, and unemployment has been on the rise again. In October 2015, there were 53 registered unemployed medical doctors (State Employment Office, 2015). There is no evidence available to assess how Slovenia's accession to the EU changed cross-border movement of physicians. However, the available statistical data and data from the Medical Register held by the Medical Chamber suggest that most immigrant medical doctors come from areas of former Yugoslavia and the rest of south-eastern Europe.

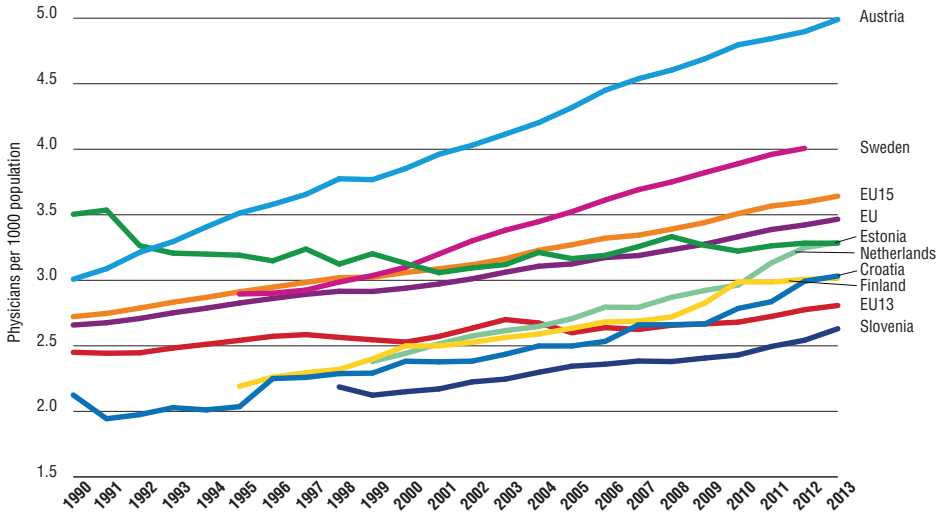
Fig. 4.5 presents trends in the number of physicians in Slovenia and some selected countries. In Slovenia, health policy since the late 1990s has translated into a steady growth in the number of physicians, from 2.19 per 1000 population in 1998 to 2.63 in 2013 (EU average is 3.5) (WHO Regional Office for Europe, 2015a). Two major factors influenced this change:

- the Medical Faculty at the University of Ljubljana increased its number of admissions and graduates, and another Medical Faculty at the University of Maribor was opened in 2003; and
- there was a higher level of immigration from other parts of former Yugoslavia.

Despite this, Slovenia still has by far the lowest number of physicians per capita among the selected countries shown in Fig. 4.5 and the number is significantly lower than most EU and CEE countries (see also Fig. 4.7 below).

Fig. 4.5

Number of physicians per 1000 population in Slovenia and selected countries, 1990–2013



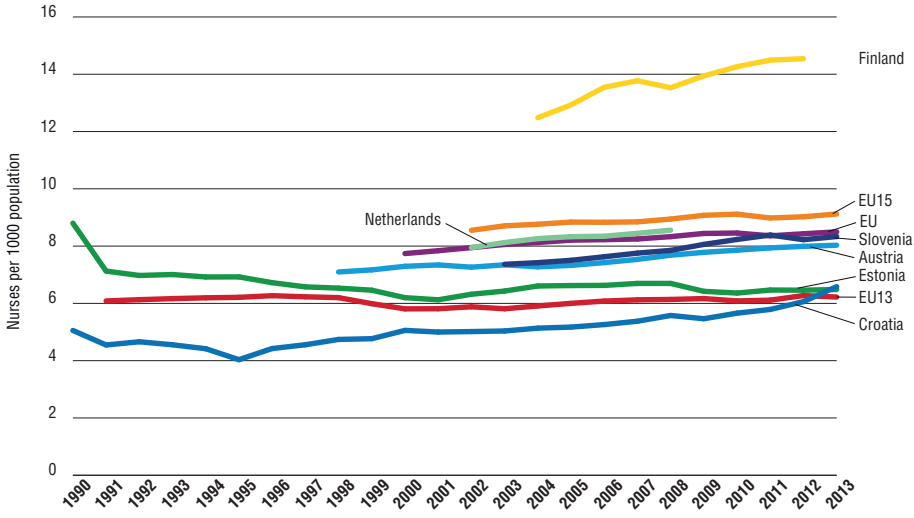
Source: WHO Regional Office for Europe, 2015a.

Fig. 4.6 shows trends in the number of nurses in Slovenia and selected countries. The issue of nurse numbers in Slovenia has two important facets. On the one hand, the Nursing Chamber does not agree with the current inclusion of nursing assistants (called health technicians) when officially counting the number of nursing professionals. According to the Chamber, the number should include only those nursing professionals who have successfully completed at least three years of study in post-secondary education (e.g. registered nurses). The Nursing Chamber, which represents both registered nurses and health technicians, also advocates that the ratio between registered nurses and health technicians, which is currently 35:65 in favour of the latter, should be reversed. This means that Slovenia would need to downsize the population of health technicians and introduce or educate another 7000 to 8000 registered nurses. Notwithstanding this dissonance about the number of nurses, Slovenia shows a high number of nursing professionals (both registered nurses and nursing assistants; 8.38 per 1000 population in 2013) when compared with Austria (8.03), Croatia (6.68), Estonia (6.48) and the average for the EU13 (6.22). On the other hand, the number of nurses in Slovenia is almost equal to the

EU28 average of 8.49 per 1000 population. Nurses are considered to be key members of health care teams in outpatient settings, particularly in primary care, where their numbers are expected to rise further through the progress made in establishing "model practices" (i.e. having an additional 0.5 full-time equivalent registered nurses in the primary care team for preventive activities; see also section 5.3). 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, health systems (NIPH, 2015b).

Fig. 4.6

Number of nurses per 1000 population in Slovenia and selected countries, 1990–2013



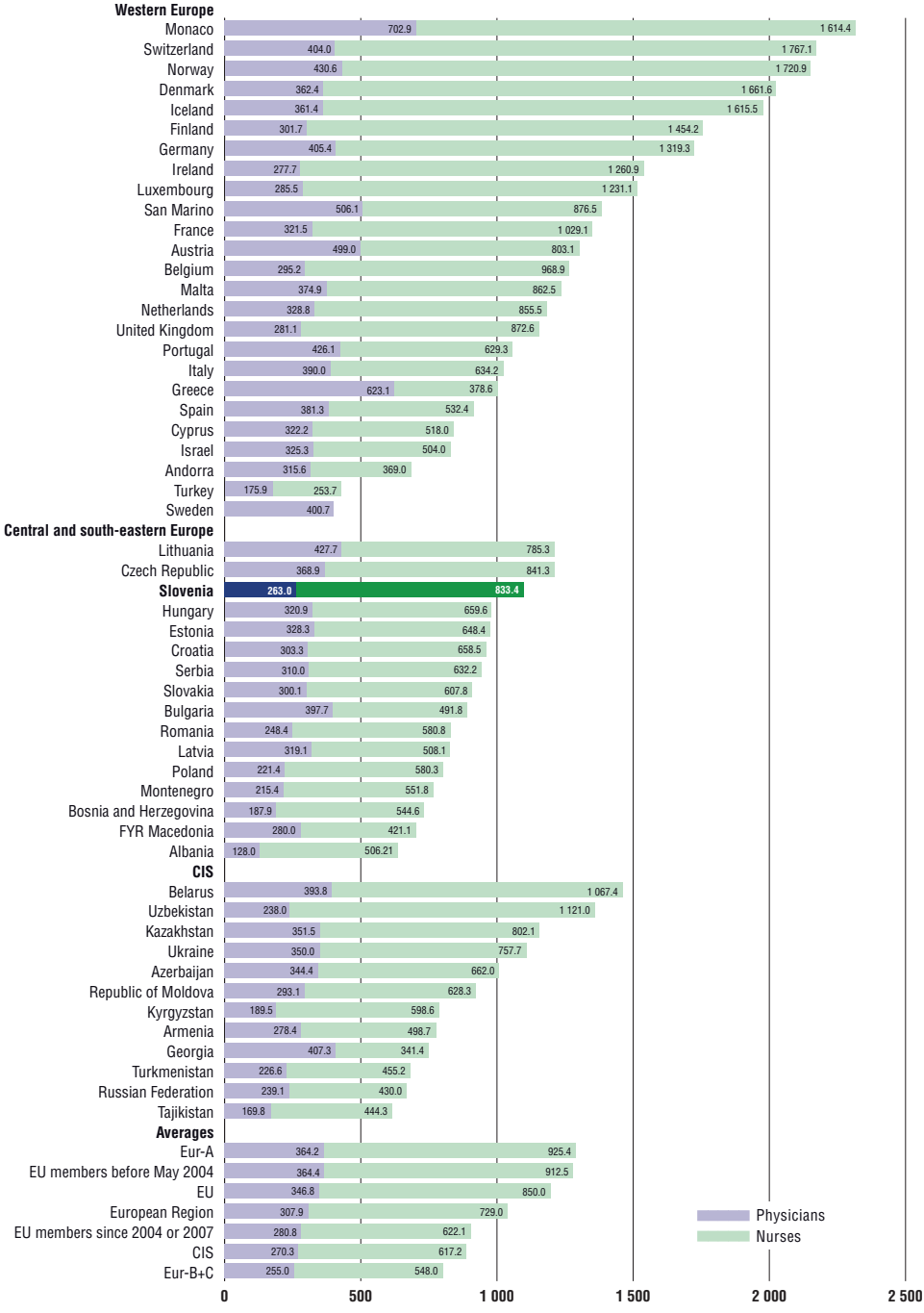
Source: WHO Regional Office for Europe, 2015a.

In Fig. 4.7, the number of physicians and nurses per 100 000 population is compared with other countries within and outside the EU. There were 263 physicians per 100 000 population in Slovenia in 2013, which was well below the EU15 average of 364 and the EU28 average of 347. In 2013, Slovenia had 833 nurses per 100 000 population, which was significantly below the EU15 average of 913 but closer to the EU28 average of 850.

The number of dentists in Slovenia has been increasing less rapidly over recent years, certainly at a slower pace than the number of physicians. The reason is that the number of students admitted to dental school remained much more stable, with fewer fluctuations from 2003 to 2011. A single increase of 12% was noted in 2003. There are no plans to increase the number of admissions at the University of Ljubljana, Department of Dentistry (part of the Medical Faculty).

Fig. 4.7

Number of physicians and nurses per 100 000 population in the WHO European Region, 2013[a]

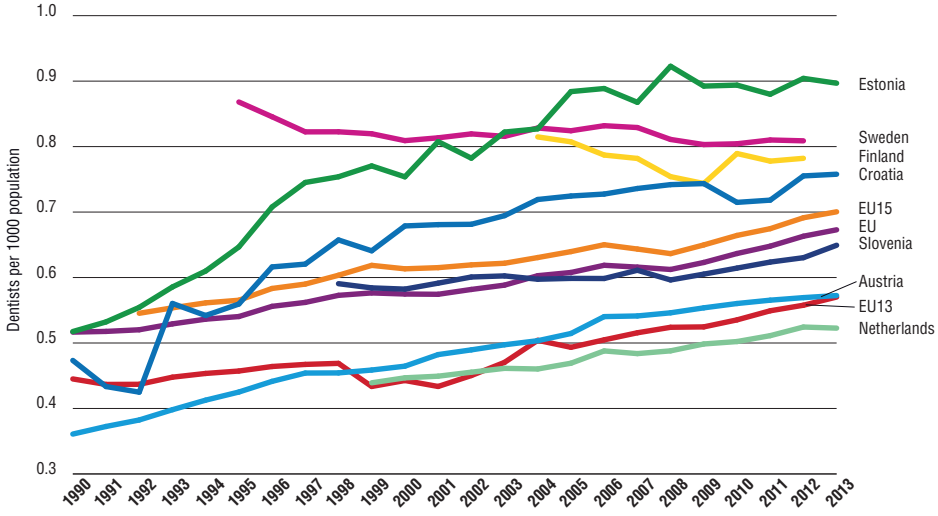


Source: WHO Regional Office for Europe 2015a.
Notes: [a]Countries for which data were not available were not included; CIS: Commonwealth of Independent States; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; FYR Macedonia: The former Yugoslav Republic of Macedonia.

As Fig. 4.8 shows, the number of dentists in Slovenia was 0.65 per 1000 population in 2013 which was slightly below the EU28 average of 0.67 per 1000, and significantly below that of countries such as Estonia (0.89), Sweden (0.80) and Finland (0.78). However, it was higher than the average for the Netherlands (0.52), Austria (0.57) and the countries that joined the EU since 2004 (0.57). In Slovenia, 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 (i.e. these services might depend more on OOP payments and private insurance).

Fig. 4.8

Number of dentists per 1000 population, WHO European Region, 1990–2013



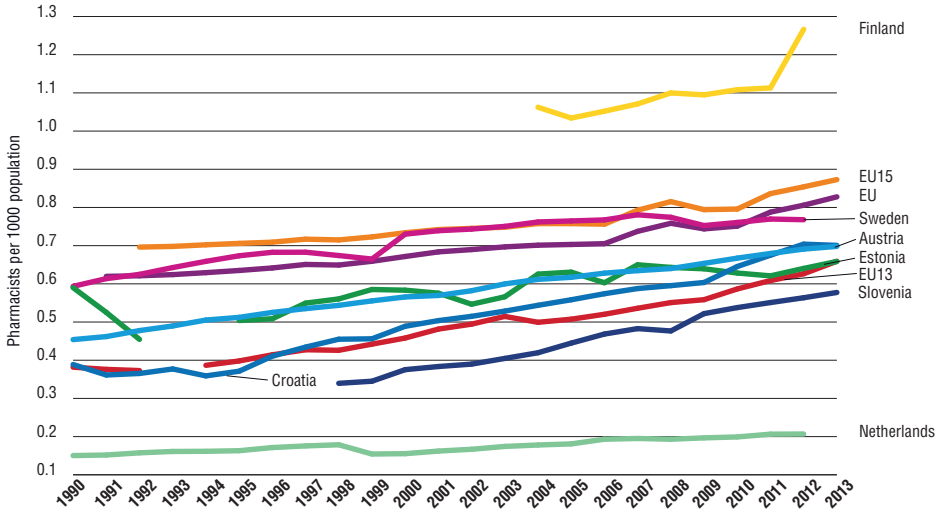
Source: WHO Regional Office for Europe 2015a.

The number of pharmacists in Slovenia has increased steadily since the late 1990s. However, as Fig. 4.9 shows, the number of pharmacists per 1000 population (0.58) in Slovenia in 2013 was significantly below the EU28 average of 0.82 and also below that for countries such as Finland (1.26), Croatia (0.70) and Austria (0.69). This is most likely the result of a rather conservative approach to planning and controlling pharmacist posts in pharmacies. However, the number of pharmacists working in pharmacies has been difficult to sustain as there is a well-developed national pharmaceutical industry, supplemented by a relatively dense network of foreign pharmaceutical companies operating in the country. Career preferences for many students and graduates of pharmacy are, therefore, linked to the industry and its representative offices, rather than to community pharmacies. The industry 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. Slovenia has only one faculty of pharmacy, which is at the University of Ljubljana and was established in 1961. Contrary to the situations described for physicians and dentists, planning of pharmacy student numbers has been 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. 4.9), is well balanced.

Fig. 4.9

Number of pharmacists per 1000 population in Slovenia and selected countries, 1990–2013



Source: WHO Regional Office for Europe 2015a.

4.2.2 Professional mobility of health workers

Historically, under the Socialist Federal Republic of Yugoslavia, Slovenia was the only republic that had a strict numerus clausus system for the health workforce (operating since 1961). After that, the increase in the country's provider capacity overcame domestic deficits through movements of medical and dental graduates from other republics. After 1991, this movement was stopped because of the new regulations set up by the newly established Slovene State and by the wars in other areas of the former Republic of Yugoslavia. These changes resulted in graduates that had moved to Slovenia prior to 1991 now being counted as foreign graduates.

After Slovenia's accession to the EU in 2004, more mobility was expected from the broader CEE area but that never materialized (Albreht, 2011). Although salaries were increased significantly in 1996, 2000 and 2008, there were not many other incentives for cross-border mobility on a more considerable scale. Before the financial crisis (pre-2008), Slovenia used to be a destination country for cross-border movement of health professionals, mainly medical doctors and dentists from the area of former Yugoslavia and the Balkan countries. As domestic shortages are increasingly being resolved and with the freezing of salaries through austerity measures, the potential for emigration of health professionals has increased again but there have not been any recent published reports showing any important trends in emigration.

4.2.3 Training of health workers

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 six-month internship, which until 2007 had been extended into an obligatory semistructured 18-month postgraduate training programme called "secundariate". In January 2007 the secundariate was abolished and young physicians now enter postgraduate medical specialist training directly after their internship through open public tenders for specialty training posts, organized by the Medical Chamber. The number of training posts for medical specialists is reviewed by the Ministry of Health and then approved. These numbers are then presented to the HIIS, which is the institution that finances in full all medical specialist training posts in the public system. This system was intended to guarantee free choice for medical doctors in training without tying them too strongly to a specific provider, which had been the case previously.

Competency for preparing and implementing the programme of medical specializations lies with the Medical Chamber. The Chamber prepares lists of qualified tutors, health care providers and institutions where 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 training, tutors should monitor candidates. The examination commission at the Medical Chamber conducts the final examination and issues certificates. Tenders occur twice a year in 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 through post-secondary courses, offered as three-year programmes at the first level of the Bologna Process (European Commission, 2016c). Additional training is required for community nurses. There are various second-level Bologna programmes for masters' degrees in nursing. There are eight higher education institutions for health professionals that provide university- or college-level training for nurses: the University of Ljubljana, the University of Maribor, the University of Primorska, the College of Nursing in Jesenice, the College of Nursing in Novo Mesto, College of Nursing in Slovenj Gradec, College of Nursing in Celje and College of Nursing in Murska Sobota. The three last institutions do not have a concession and have only part-time educational programmes. This means that the three colleges do not receive public funds to carry out their educational programmes but instead have funded themselves from private funds, such as admission and teaching fees. The new curriculum for nurses, which started in 1993 at the University of Ljubljana, is based on the principles of primary health care, with a 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 obtain bachelor degrees in nursing, midwifery, physiotherapy, occupational therapy or sanitary engineering.

Educational standards are set by universities. After a temporary suspension between 2012 and 2015, the Nursing Chamber recently regained authorization for the registration/licensing of nurses and for revalidation of qualifications through continuous professional education (see section 2.8.3). Nursing and midwifery are also two 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. Between 2000 and 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.

Since 2015, the Medical Chamber has been responsible for setting the standards for postgraduate training for dental specializations and for continuous medical education. 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 in pharmacy takes five and a half years. Pharmacists have two distinct pathways after graduation (section 2.8.3 has more details on this and on postgraduate training).

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 and the Medical Faculty in Maribor has two public health-related departments. The Department of Public Health in Ljubljana offers (in collaboration with the NIPH) various programmes for professional and research training (in particular, a one-year compulsory course for all future public health medicine specialists) as well as doctorate studies in public health.

In 2002, a public health medical specialty was introduced, which replaced the former three medical specialty training programmes in epidemiology, hygiene and social medicine. Specialization in public health takes four years of training. There are also training programmes (of two semesters; 400 hours of postgraduate courses) in social medicine; occupational medicine; health care for children, teenagers and women; and dental public health.

4.2.4 Doctors' career paths

Medical doctors start their career paths by entering into a six-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 examination, proving their knowledge in intensive medicine.

Since 2007, running an independent medical practice requires a successfully completed period of specialty training. There are no exceptions to this rule and medical doctors without a specialty can only work under supervision of a tutor or their head of practice. Specialty training ends with practical, written and oral examinations, which are taken in front of a committee 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, amended in 2008),

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. This system was implemented at the end of 2008 and is still in force. However, as part of larger austerity measures, advancement in the career rank classes was frozen by the Balancing of Public Finance Act 2011. This will change as some of the provisions of the Act are being softened (in 2015) and advancements will again be possible, in the first instance for those civil servants who should have had their advancements granted in the past three and a half years.

In a primary health care setting, a physician can become chief of a service (e.g. 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 responsible for a physician's evaluation every three years and can propose a regular promotion (one class) or extraordinary promotion (two classes). Promotions are based on the evaluation by the direct superior, but in public health care institutions these always depend on the approval of the director, who is independent in terms of this decision-making. 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 (bound by their contract) to remain employed there at least for the same period as their training had been after their examinations. The situation changed in 2009 when a central budget for the financing of specialty training was introduced, with funding provided by the HIIS and managed by the Medical Chamber. This meant that newly qualified medical specialists were only committed to the region where they trained but not to a specific provider.

Academic careers start with the post of teaching assistant, through to assistant professor ("docent") and associate professor and then to a full professorship. Academic assistants (junior professors) must complete their master of science degree in three years and their doctorate in nine years in order to continue to be eligible for a post.

5. Provision of services

Following major restructuring in 2012, all public health services are now provided by two national bodies: the NIPH and the NLHEF.

Primary care is provided mostly by a network of community-level primary health care centres, owned and managed by municipalities; this covers around 76% of physicians and 42% of dentists working in primary care. They provide general practice/family medicine services; emergency medical aid; health care for women, children and teenagers; community nursing; laboratory and other diagnostic facilities; preventive and curative dental care for children and adults; and physiotherapy. There are also contracted, office-based physicians in private practice, many of whom have contracts (concessions) with the HIIS to deliver publicly funded primary care services.

Patients are entitled to choose their own personal physician operating at the primary care level. Since 2011, a system of family medicine "model practices" have been in operation via public health care centres and contracted group practices, with a focus on prevention and care coordination for patients with stable chronic diseases. It is the government's intention that all practices adopt this model within the next few years.

Slovenia operates a gatekeeping system whereby patients require a referral from their primary care doctor in order to access specialist care. Specialist outpatient activities at the secondary care level are performed in public and private hospitals, primary health care centres, private specialist practices and spas. Clinics and specialized institutes provide more complex health services at the tertiary care level. Despite past efforts, long waiting times for some specialist services persist.

Inpatient hospital care is provided through a total of 30 mainly public and some private hospitals: 10 general hospitals, 2 university hospitals, 5 mental health hospitals and 13 specialized hospitals (3 of them private). Of these, some

highly specialized institutions provide tertiary care, such as the university hospitals in Ljubljana and Maribor, the Institute of Oncology, the University Clinic of Respiratory and Allergic Diseases Golnik, the Psychiatric Clinic Ljubljana and the University Rehabilitation Institute.

Since 2010, financial incentives have been in place to replace inpatient care with day care or ambulatory care. This has accelerated the steady rise in the proportion of day-care cases, from 11.1% of all hospital cases in 2005 to 30% in 2013 (with approximately 25% of all cases in acute care being day cases).

There is no single, overarching regulation concerning long-term care specifically. Such care (for the elderly, the chronically ill, the disabled and other individuals with special needs) is provided through different routes across the health, social care and pension and disability sectors, with different entry points and different procedures concerning the assessment of entitlements for supplements to support long-term care needs. As a consequence, some service users might end up benefiting more from current arrangements in place than others, or their needs might remain unrecognized altogether.

5.1 Public health

5.1.1 Organization of public health functions

Prior to 2014, public health functions in Slovenia were primarily undertaken by the NIPH and its nine regional institutes of public health. Since the early 1990s the NIPH has played a strong role in delivering public health initiatives, particularly in the case of health promotion and preventive programmes, with the regional institutes often finding alternative sources of public as well as private funding for these purposes. In 2012, the government proposed a major restructuring of the public health institutes through their mergers and simultaneous establishment of two new public health institutes at the national level: the NIPH and the NLHEF.

Since 1 January 2014, both the NIPH and NLHEF have been fully operational, the former having its seat in Ljubljana and the latter in Maribor. For both, there is a regional structure secured by the establishment of regional units. In the case of the NIPH, these have been established in all nine locations of the former regional institutes of public health, while NLHEF has seven regional units.

The role of the former Institute of Public Health was rather broadly defined in the Health Services Act of 1992, 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) have always been well-equipped public health laboratories, some of them serving as reference laboratories. These now operate as part of the NLHEF. Three other important areas are covered by the NIPH 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 – particularly at the HIIS, which supports its own monitoring and accounting functions by a strong information system.

Another very important function of the NIPH 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. Additionally, the Ministry of Health decided in 2015 that it will place the Centre for Informatics in Health (including the Ministry of Health's former eHealth Department of the Directorate General for Health Care) within the NIPH.

5.1.2 Communicable diseases control programmes

The immunization programme in Slovenia is rather extensive and some vaccinations are compulsory for children and adolescents:

- compulsory vaccinations for children 0–6 years of age:
  - diphtheria, tetanus, pertussis, Haemophillus influenzae B, poliomyelitis: vaccinations with three doses from 3 to 12 months of age and then the fourth dose in the second year of life, and
  - measles, mumps and rubella (MMR vaccine): compulsory between 12 and 18 months of age;
- noncompulsory vaccinations for children 0–6 years of age:
  - pneumococcal vaccine is based on indications from the personal paediatrician and is reimbursed by the HIIS, and
  - additional vaccinations for health or epidemiological indications, including tuberculosis, rabies, influenza, typhoid, meningococcal infections, hepatitis A and B, varicella (chicken pox) and respiratory syncytial virus;

- compulsory vaccinations for primary and secondary schoolchildren:
  - MMR vaccine (first year of elementary school),
  - hepatitis B,
  - diphtheria, tetanus and pertussis vaccine fifth dose in the third year of elementary school,
  - tetanus sixth dose for all children to the age of 18, and
  - tick-borne encephalitis and rabies vaccinations for pupils and students who may be exposed to the diseases in practical training;
- noncompulsory vaccinations for primary and secondary schoolchildren
  - human papillomavirus vaccination for girls in the sixth year of elementary school;
- adults
  - all adults have to be completely vaccinated against tetanus every 10 years and it is the responsibility of their GPs to keep track of these vaccinations,
  - all other vaccinations depend on the professional, training or accidental (voluntary or involuntary) exposure to a number of infections, and
  - vaccine for influenza is recommended throughout life but it is partly subsidized only for those over 65 years of age or for those with chronic diseases.

Paediatricians are fully responsible for the vaccinations of children from 0 to 19 years of age and GPs are responsible thereafter. The National Immunization Programme and the Calendar of Vaccinations are prepared and updated annually by the NIPH.

Vaccination coverage rates are in slight decline but are still within the 95% recommended coverage by WHO for MMR (Table 5.1). In 2015, there were vaccination promotion activities directed mostly towards parents concerned about the side-effects of vaccinations and who doubted the benefits of a large-scale vaccination programme. Coverage for human papillomavirus in girls is much smaller, even though it is reimbursed by the HIIS. However, since it is not compulsory, girls or, more frequently, their parents on their behalf, may decide against it. Controversies surrounding the initial phase of its introduction probably still contribute to the lower uptake levels. Coverage for the hepatitis B vaccine remains relatively high.

Table 5.1
Vaccination coverage for the most important vaccines, 2009–2014

School year	Coverage (%)			
	Hepatitis B	MMR vaccine	Diphtheria, tetanus, pertussis	Human papillomavirus vaccine
2009/2010	97.0	96.4	97.5	n/a
2010/2011	92.1	96.0	96.6	55.0
2011/2012	82.4	95.7	96.9	54.9
2012/2013	90.4	96.0	94.6	48.9
2013/2014	88.6	94.3	94.7	45.5

Source: NIPH internal data.
Note: n/a: Not available.

5.1.3 Screening programmes

Several screening programmes have been launched since 2000, including those for the early detection of cervical cancer (2001), risk factors for cardiovascular diseases (2002), breast cancer (2008) and colon cancer (2008). Apart from that, men over 50 are offered prostate specific antigen testing, which is not organized as a part of a systematic population screening programme but is reimbursed by the HIIS on demand from GPs who order the test for their patients.

5.1.4 Health promotion

In July 2008, parliamentary adoption of the National Health Plan for 2008–2013 (Republic of Slovenia, 2008) served as the basis for future action and development of public health, both at the conceptual and at the organizational level.

Several institutions are involved in health promotion. Since 2009, several initiatives, most notably by the Ministry of Health and the NIPH, have intended to strengthen this field. The reorganization of the NIPH also brought about the establishment of the Centre for the Management of Prevention Programmes and for Health Promotion as part of the NIPH, with the remit of designing, preparing and monitoring national prevention and screening programmes, including lifestyle changes. The Centre now effectively runs the national coordination of health-promoting programmes. This development occurred in parallel with the adoption of the first National Action Plan on Nutrition and Physical Activity, which has recently been adopted in a second edition. This effort serves – among several purposes – to collect improved data on the prevalence of chronic diseases and lifestyles in order to allow for more appropriate inputs into the planning of health promotion.

Health promotion and education programmes are also implemented at the primary health care level by nurses and other health care professionals working in primary health care centres. Programmes that have been established since the 1990s in cooperation with WHO – such as the Countrywide Integrated Noncommunicable Disease Intervention Programme and the Healthy Schools project – have become nationwide initiatives, although they operate at the level of local communities, cities and schools.

Furthermore, a new concept of GP practices was launched in 2011 ("model practices") that should enhance their prevention activities and also support lifestyle changes, particularly improvements in patients with chronic conditions, thus fulfilling a secondary and tertiary prevention mission (see also section 5.3). Involvement of additional nursing support at 0.5 full-time equivalents means that patients who visit the practice receive a consultation with a specially trained nurse who assesses their current lifestyle, provides advice and/or receives feedback from patients who have already subscribed to a programme (e.g. weight loss, smoking cessation, alcohol cessation). In 2015, around 50% of GP practices had already developed these services and it is expected that over the following two years all GP practices will adopt them (funding permitting). Similar initiatives now exist for primary care paediatrics and primary care gynaecology, pending approval by the Health Council.

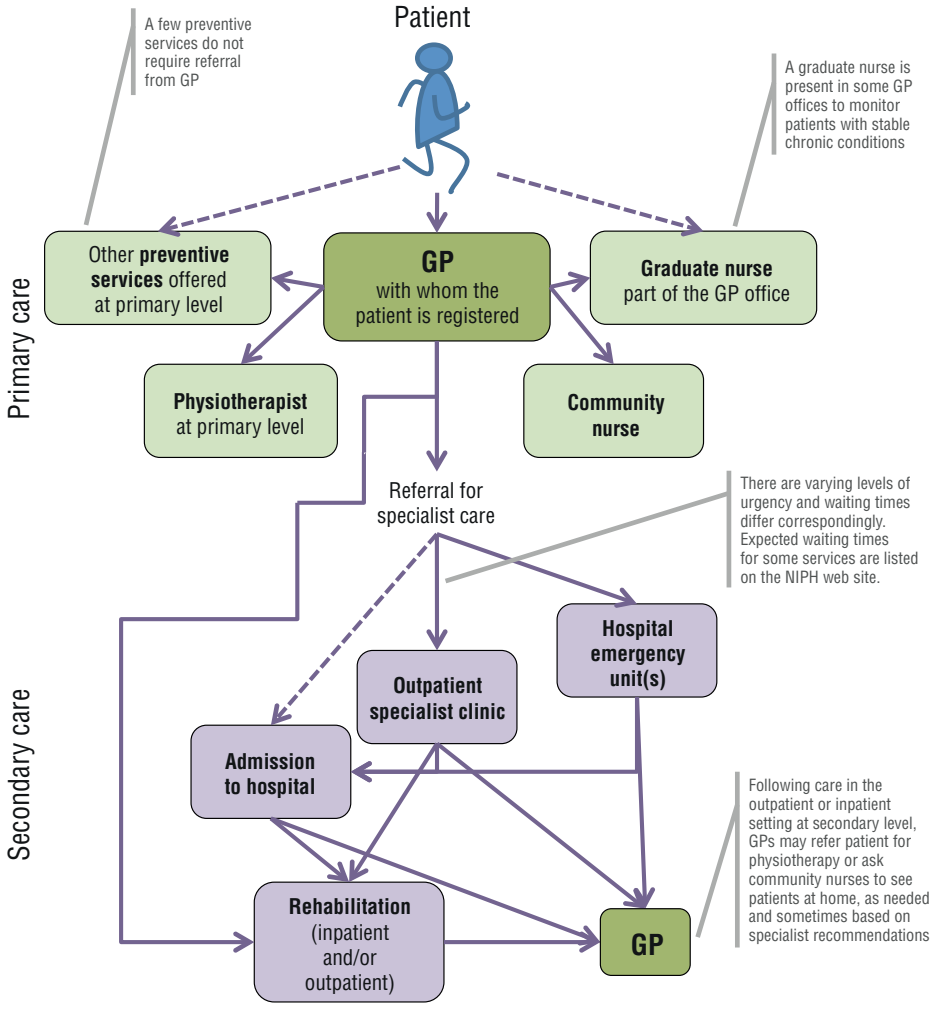
5.2 Patient pathway

Patient pathways may differ considerably according to the specific circumstances through which patients enter the health care system. Possible access points to emergency services, described in section 5.5, show the variability of pathways involved. At the same time, patient rights and entitlements are the same throughout Slovenia, and organizational settings differ only slightly between geographical areas. Fig. 5.1 shows the typical patient pathway that applies where the medical condition does not require direct involvement of emergency medical services at primary care level.

In Slovenia, care pathways are usually understood as a tool for organizing the care of patients at the level of individual provider organizations. The General Agreement, for example, required each general hospital to have a least 14 care pathways established by 2015 (HIIS, 2015d). According to a survey performed in 2009, most hospital health care workers estimated that care pathways were used for 20–40% of admitted patients (Kiauta et al., 2010). There are only a few nationally agreed care pathways, which involve different health care

organizations. Two notable examples are the guidelines for acute coronary syndrome, which are related to the national network of primary centres able to perform percutaneous coronary interventions at very short notice in emergency situations (usually situated within hospitals) (Radšel et al., 2015), and the recently implemented telemedicine care programme for stroke (Ministry of Health, 2015b).

Fig. 5.1
Simplified patient pathway in Slovenia



5.3 Primary/ambulatory care

Primary care falls under the jurisdiction of municipalities, which are responsible for health policy development at local level. Municipalities are the owners of the community-level primary health care centres that occur all over the country. Primary care is also provided by contracted, office-based physicians in private practice, including GPs, paediatricians and gynaecologists.

Access to primary care varies between regions, from 39.9 GPs per 100 000 population in the region of Pomurska to 68.5 in Notranjsko-kraška in 2013. On average, there were 49.8 GPs per 100 000 population in Slovenia in 2013 (NIPH, 2015a).

Primary health care centres

Primary health care centres are established and owned by one or more municipalities, which are responsible for the day-to-day functioning of the centre as well as for administration and ensuring adequate funds for the maintenance of premises. All employees are salaried according to the terms of the general contract for employees in the public sector.

In 2013, the 65 primary health care centres delivered care through a total of 459 locations or outreach posts.[1] Approximately 76.5% of all physicians and 42% of dentists working in primary care are based in publicly financed primary health care centres (NIPH, 2015b). Primary health care centres were first introduced in 1926 and are based on the ideas of Andrija Stampar (Zupanič Slavec, 2005). The original idea – that primary health care should be delivered to local communities, that various types of care should be integrated and that target-specific population groups should be addressed – has survived today. Legally and in practice, a primary health care centre is a public institution that 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 in primary health care centres include:

- emergency medical aid (see section 5.5)
- GP/family medicine
- health care for women, children and teenagers
- community nursing

[1] 2013 is the last year for which official data are currently available and this number was still valid in 2015, the time of writing.

- laboratory and other diagnostic facilities
- preventive and curative dental care for children and adults
- physiotherapy
- ambulance service(s) (see section 5.5).

In the past, the provision of care was facilitated by dispensaries, which introduced a population-wide approach to treating (public) health problems, such as tuberculosis and venereal diseases. With the decline in incidence of these types of disease, the provision of such services was reduced. However, access to care for tuberculosis and venereal diseases is still available to patients, who may access these services without referral via pulmology and dermatovenerology specialists.

Contracted provision of primary care

Primary care is also delivered through individual health professionals acting as providers, or by group practices with various combinations of services and specialties. These providers contract directly with the HIIS and are granted a concession by the respective municipality for the delivery of publicly funded primary care services (Pavlič Rotar, Švab & Brinovec Pribaković, 2015). In 2013, there were 297 private providers in family medicine, 71 in primary paediatrics, 46 in primary gynaecology and 708 in dentistry (NIPH, 2015b).

Primary care health professionals

Primary care practitioners in Slovenia include GPs (family practitioners), paediatricians and gynaecologists, as well as community nurses, midwives, dentists for adults and children, pharmacists, physical therapists, speech therapists, occupational therapists, psychologists or psychiatrists, and other health professionals necessary to deliver care.

GPs and nurses are the initial contact with patients for curative and preventive care, including general medical care, minor surgery and home visits when necessary. GPs provide care primarily to adults. The average number of patients per GP is approximately 1800 (which normally includes only up to 1% children and teenagers, since primary care paediatricians provide care for this group) (Ministry of Health, 2013a).

Community nurses support the recipient of nursing care through health promotion, prevention, curative and long-term care and palliative activities. Primary care nurses provide services in connection with the health care of various groups, including adolescents, healthy elderly people, the chronically ill and disabled, as well as carrying out prenatal and postnatal home visits for mothers and infants.

Paediatricians in primary care and school medicine specialists provide child and adolescent health care services. Teams include a professional nurse and an associate professional nurse (both as one full-time equivalent). Paediatric teams provide curative and preventive care services for about 80% of this population group. They are also responsible for immunization of preschool children, schoolchildren and youths. Patient lists include up to 25% of adults (a great majority of them belong to the age group 19–49) (Ministry of Health, 2013a). Shortages in some regions mean that paediatricians practising there have heavier workloads or that family physicians fill in. Ageing among the medical workforce in paediatrics led to an increase in placements for specialty training in paediatrics for junior doctors from the mid-2000s, hence ensuring delivery of child and adolescent primary care across the country, including in rural areas.

Gynaecologists (located in primary health care centres, independent practices or as part of outpatient services in hospitals) provide curative and preventive reproductive health services for all women over the age of 15, including family planning, antenatal and postnatal maternity care, screening for cervical cancer and early detection and treatment of other gynaecological conditions that can be managed at the outpatient level. Teams include a professional nurse (0.5 full-time equivalents) and an associate professional nurse (1 full-time equivalent). Many primary gynaecology practices are organized within hospital ambulatory departments in general and university hospitals (challenging the concept that women's health care should be organized at the primary level).

Occupational medicine specialists provide preventive services to workers, but they often also provide curative services, for which they are additionally licensed as GPs. Rehabilitation is provided by physical, occupational and speech therapists. Emergency services are available around the clock.

Personal physicians

Patients are entitled to select their own physician from among the physicians operating at the primary health care level (i.e. in primary health care centres or in private practice) provided the physician in private practice has a contract with the HIIS. Personal physicians for the adult population are GPs, and for children and youth they are primary care paediatricians or school medicine specialists. In certain rural areas, children may be registered with a GP. This selection is made for a period of at least one year and is independent of the place of residence. In 2013, approximately 93% of the population had selected a personal physician. Patients in GP practices have strong preferences to remain affiliated

with their personal physician (HIIS 2015b; Tinelli et al., 2015). Legislation introduced in 1992 also offers women the opportunity to choose a personal primary care gynaecologist.

Preventive care

With the introduction of a national programme on primary prevention of cardiovascular diseases in 2002 and the later development of family medicine "model practices" (in 2011) (see below) a preventive population approach was extended to the entire adult population (not just those groups previously served by dispensaries). Preventive care includes reproductive health care, child and adolescent health and dental care, prevention of chronic noncommunicable diseases in adults, community nursing and sports medicine.

"Model practices"

In 2011, a system of family medicine – "model practices" – was introduced (Poplas Susič & Marušič, 2011). These practices include, in addition to the regular nurse (i.e. associate professional nurse), a further part-time (0.5 full-time equivalent) registered nurse who has received additional training and whose tasks include screening for chronic disease risk factors and preventive counselling for patients aged 30 and over, as well as the care coordination of all registered patients with stable chronic diseases (e.g. arterial hypertension, diabetes type 2, asthma, chronic obstructive pulmonary disease, osteoporosis and depression).[2] By the end of 2014, there were 437 "model practices" in Slovenia out of a total of 948 family practices overall (46%) (Ministry of Health, 2015e); it is the government's intention that all practices adopt this model within the next few years. "Model practices" are a relatively new initiative and no evaluations are yet available on their performance or impact on prevention and population health status.

Gatekeeping

Slovenia operates under a typical gatekeeper system, and patients need a referral from their personal physician to be treated by a specialist. Personal physicians may refer their patients to a particular outpatient specialist or to hospital diagnostics and treatment units. Physicians may also advise patients on which specialist or institution they would recommend, but, ultimately, patients make the final decision. If patients select a private provider who does not have a contract with the HIIS, they are required to cover the cost of these services in full themselves.

[2] In the Slovene context, this nurse is referred to as a diploma nurse; however, in line with the international literature on Slovenia (e.g. Poplas Susič & Marušič, 2015) this review will define the role as nurse practitioner.

Outpatient contacts

Fig. 5.2 shows annual physician contacts per person for 2013 (the latest available year) within the WHO European Region. With 6.5 outpatient contacts per person in 2013, Slovenia is well below the 7.5 annual average for countries that joined the EU in 2004 and 2007, and also slightly below the EU28 annual average of 6.9 per person. This indicator includes both primary and secondary care (35% of all contacts) outpatient contacts. Most outpatient secondary care in Slovenia is provided in hospitals.

5.4 Specialized ambulatory care/inpatient care

Specialist outpatient care

Specialist outpatient activities at the secondary care level are performed in public and private hospitals, primary health care centres, private specialist practices and spas. Clinics and specialized institutes provide more complex health services at the level of tertiary care. In 2013, hospitals provided 69% of outpatient contacts, health care centres 11%, private practices 19% and spas less than 1% (unpublished data, calculated from the NIPH national database of outpatient specialist services (ZUBSTAT) 2013). Personal physicians refer patients to secondary or tertiary care. There were 291 private specialist practices and 15 spas in 2013. Table 5.2 shows the number of specialist physicians in different outpatient settings.

Table 5.2

Number of physicians in specialized ambulatory care, 2013

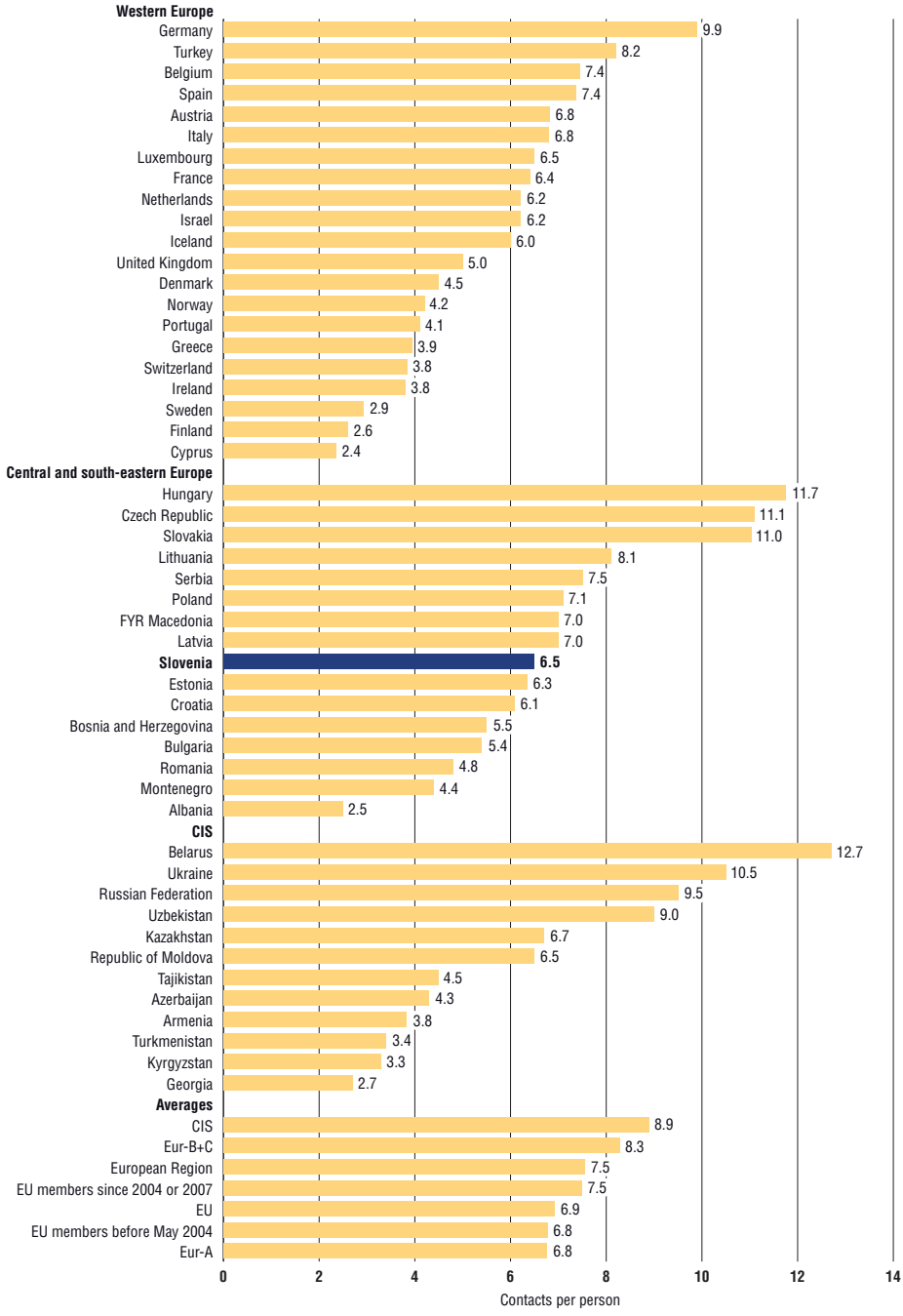
Type of provider	Number of physicians
Public hospitals[a]	2961
Primary health care centres	140
Private practices (including private hospitals)	291
Spas	27
Total	3419

Source: Unpublished data calculated from the NIPH national registry of health workers 2013.
Note: [a]Total number of physicians cannot be separated into those physicians (or time equivalents) who provide inpatient care and those who provide outpatient care.

Private specialist practices receive a concession from the Ministry of Health, after which they have the right to bid for contracts under the public tenders announced annually by the HIIS. Not all private providers have a concession or contracts with the HIIS, and there are a few purely private health care providers offering specialist care and diagnostic services who are reimbursed

Fig. 5.2

Outpatient contacts per person in the WHO European Region, 2013[a]



Source: WHO Regional Office for Europe, 2015a

Notes: [a]Countries for which data were not available, or where most recent data are older than 1995, have not been included; CARK: Central Asian Republics and Kazakhstan; CIS: Commonwealth of Independent States; Eur-A B C; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

by OOP payments from patients. In these situations, prices are not regulated. These practices claim to offer a higher standard of service in terms of time and staffing. At the time of writing (end 2015), there were no combined public–private (in terms of ownership) practices in Slovenia.

Inpatient hospital care

A total of 30 public and private hospitals provide inpatient care in Slovenia. There are 10 general hospitals, 2 university hospitals, 5 mental health hospitals and 13 specialized hospitals (3 of them private) (see also Table 4.1). In addition, seven more private providers deliver acute hospital care either as day care or as inpatient care, in the latter case leasing facilities, equipment and staff in public hospitals. When they are referred, patients freely choose their secondary care provider. Since most outpatient services and almost all inpatient services are provided within hospitals, accessibility is mainly related to the distance from a patient's home to regional centres.

Ownership of hospitals is clearly divided between the state, which is the single owner of all public hospitals, and private companies, which own private hospitals. Public hospitals are non-profit-making organizations. Private hospitals are profit-making organizations. They receive concession from the Ministry of Health and bid for contracts with the HIIS in the same way as private ambulatory practices in secondary care.

Tertiary care is provided by university medical centres in Ljubljana and Maribor, the Institute of Oncology, the University Clinic of Respiratory and Allergic Diseases Golnik, the Psychiatric Clinic Ljubljana and the University Rehabilitation Institute.

The HIIS has adopted certain financial incentives to replace inpatient care with day care or ambulatory care (Fakin et al., 2011–2015). Since 2010, additional funds have been provided to increase the number of first attendances in specialist ambulatory care. This incentive also aims to shorten long waiting times in this area. In addition, the HIIS has introduced case-based payment for several surgical and non-surgical procedures delivered in ambulatory care, such as cataract, inguinal hernia and hysteroscopic operations as well as for comprehensive HIV treatment.

Over the years, cooperation between the primary and secondary levels of care has not substantially improved. This collaboration essentially takes place in the form of referrals and the limited exchange of patient records. There are good examples of coordination with social care, mostly for patients who need institutionalized or home nursing care.

5.4.1 Day care

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. In these cases either special beds (e.g. beds for recuperation or 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.

Day care is provided in public and private hospitals. Between 2005 and 2013, the number of cases in day care increased from 40 629 to 143 715; these figures included both day care and long-term day care. In 2005, day care represented 11.1% of all hospital cases, while in 2013 this proportion had increased to 30%. Furthermore, day cases represented 24.8% of all cases in acute care and 77.5% in mental health care, where long-term day care prevailed (unpublished data, calculated from the NIPH internal data on national hospital care, 2005 and 2013).

The main medical services provided in day-care settings were related to medical abortion and gynaecological disorders, arthropathies, injuries and mental health disorders.

5.5 Emergency care

Slovenia is characterized by a high number of interventions in emergency care settings: approximately 640 000 interventions in 2014 (Ministry of Health, 2015c). These interventions include both life-threatening conditions as well as acute health problems that are not immediately life threatening.

Arrangements for emergency medical services

Emergency medical care in Slovenia is defined as the provision of emergency services which, if withheld, would lead to irreversible and serious damage to the health of the patient or to death. Emergency medical services are integrated into the public network of health care services at the primary and secondary level and aim to provide emergency medical care at all times, including the transportation of patients to emergency care settings.

With the objective of optimizing the use of emergency care services, a reform programme has been implemented since 2015. Under the previous emergency care system, patients who required immediate medical attention could present themselves directly at the emergency department of the nearest hospital. More often, however, emergency outpatient services were available throughout the day (and in some cases at night, outside a GP's normal working hours) within designated primary health care centres for patients who felt they needed urgent medical care. In these emergency outpatient clinics, patients were usually seen by GPs, who decided whether it was necessary to refer the patient to a hospital emergency unit. Therefore, generally emergency services were managed at the primary care level through the emergency outpatient clinics within the primary health care centres.[3] Nevertheless, there has been a growing number of patients who should have been seen in emergency outpatient clinics by a GP yet would go directly to hospital emergency units – and would rarely be refused care. Part of this problem stemmed from a lack of understanding of how the emergency system works and partly it reflected a lack of explicit nationally agreed rules on accessing emergency care.

The main change under the emergency care reform involves applying a stricter division of emergency medical units into those responsible for life-threatening situations in the field and those providing urgent outpatient GP services in primary health care centres (Ministry of Health, direct communication). The "Rules governing urgent medical aid services" define the characteristics of the various types of emergency care unit and their number in the country. At the hospital level of emergency care, nine new "emergency centres" have been put into operation in 2015 (with a tenth due to open in the course of 2016). However, not all hospitals are equipped to handle all types of emergency (Ministry of Health, 2015a). For example, there are only a few hospitals equipped to perform primary percutaneous coronary intervention for acute coronary syndrome, which is a procedure performed in certain emergency situations. Nevertheless, these hospital-based emergency centres are designed to deal specifically with life-threatening cases.

In future, these emergency medical units will be supported by a network of satellite emergency centres, established to ensure timely availability of emergency services countrywide. These satellite centres in all probability will be located within some of the existing primary health care centres and will provide services similar to those in emergency hospital-based units; that is, the aim is to concentrate emergency care as much as possible on treating

[3] Although in some cases, a primary health care centre may have had its emergency outpatient clinic physically located at a nearby hospital.

life-threatening situations and to professionalize it, employing emergency room specialists as much as possible to deliver these services. In the meantime, this additional (satellite) support is still provided by 51 existing emergency outpatient clinics based in primary health care centres. It is evident that the population is used to the broader availability of GPs outside regular office hours, which is one of the reasons why it is necessary to maintain the very extensive network of outpatient urgent care provided within primary health care centres during the transitional period. Moreover, primary health care centres are keen to retain their emergency outpatient clinics, not only because they generally support the broader notion of emergency and urgent care being available at the primary care level but also because the loss of emergency outpatient clinics would result in a commensurate transfer of funding away from primary health care centres.

As part of the new emergency care system, a uniform triage system will be introduced at both the medical dispatch service and at the emergency centres (Ministry of Health, 2015a). Box 5.1 describes the patient pathway to accessing emergency care under the new (reformed) arrangements.

Box 5.1

Patient pathway in emergency care

Patients who need urgent medical attention will call the emergency number 112 or go to the nearest emergency centre or satellite emergency centre.

- A patient calling the emergency number will have a triage assessment and will be referred either to the nearest emergency centre (with or without emergency transportation) or to their own GP to be seen when the GP is available.
- A person going directly to an emergency centre (or satellite emergency centre) will also be triaged and treated accordingly.

Medical dispatch services

A key element of the emergency care network is the emergency medical dispatch service (i.e. ambulance services). Currently, there is no dedicated communication centre related to emergency medical care; calls from the operative–communications centre administered by the police (the emergency number is 112) are redirected to the local emergency medical service team, which may lead to unnecessary delays and coordination issues. These issues have been recognized in several reports but the implementation of change has been slow (Medical Chamber of Slovenia, 2011; Ministry of Health, 2015c). The introduction of a dedicated medical dispatch service was mooted to start in 2016 (Ministry of Health, direct communication).

5.6 Pharmaceutical care

The aim of the supply of medicinal products is to provide Slovene residents with all medicines to cover public health needs taking into account developments in demographic trends as well as some of the restrictions imposed by the size and purchasing power of the pharmaceutical market. The national market turnover for pharmaceuticals prescribed to outpatients in 2014 was approximately €425 million (approximately €206.3 per capita), of which 24.2% was attributable to originator pharmaceuticals and 65% to generics. The national market turnover for pharmaceuticals in hospitals was approximately €130 million in the same year. There are two companies representing Slovenia's pharmaceutical industry: Lek Ljubljana, which was taken over by the multinational pharmaceutical company Novartis in 2002, and Krka Novo Mesto. The majority of domestic pharmaceutical manufacturing is export oriented. The distribution of medicinal products takes place through wholesalers, who obtain medicinal products from domestic producers or through imports and sell them to public or private pharmacies (see also section 2.8.4).

Pharmacy services are delivered to the public by 24 public pharmacy institutions with 182 pharmacies and 42 pharmacy subsidiaries, 88 private pharmacies with 10 pharmacy subsidiaries, and 2 hospital pharmacies, amounting to 324 pharmacy units altogether as of 31 December 2014 (compared with 321 in 2013). This corresponds to one unit per 6366 inhabitants. In addition, 27 hospital pharmacy units with a permanent staff of pharmacists (and without access to outpatients) were organized in 26 hospitals. As of December 2014, there were 1097 pharmacists in the pharmacy network (819 in public pharmacies and 278 in private pharmacies). Therefore, every pharmacist provided for an average of 1879 inhabitants (Kostnapfel Rihtar & Albreht, 2015).

Compulsory health insurance covers all medicinal products on the positive list (with a 0–30% co-payment) and intermediate list (90% co-payment) and only up to the MAV set by the HIIS for each medicinal product (see section 2.8.4). Co-payments can be covered by complementary health insurance or paid out of pocket. Copayments are covered by the state budget for war veterans, prisoners and socially vulnerable people (Health Care and Health Insurance Act, Article 24). Physicians working in the public health system use green prescriptions when prescribing medicinal products on the positive or the intermediate list and white prescriptions when prescribing products on the negative list. Private medical doctors without a contractual relationship (concession) with compulsory health insurance are only allowed to issue white prescriptions, which are to be paid by the patient in their entirety, regardless of the classification of the specific

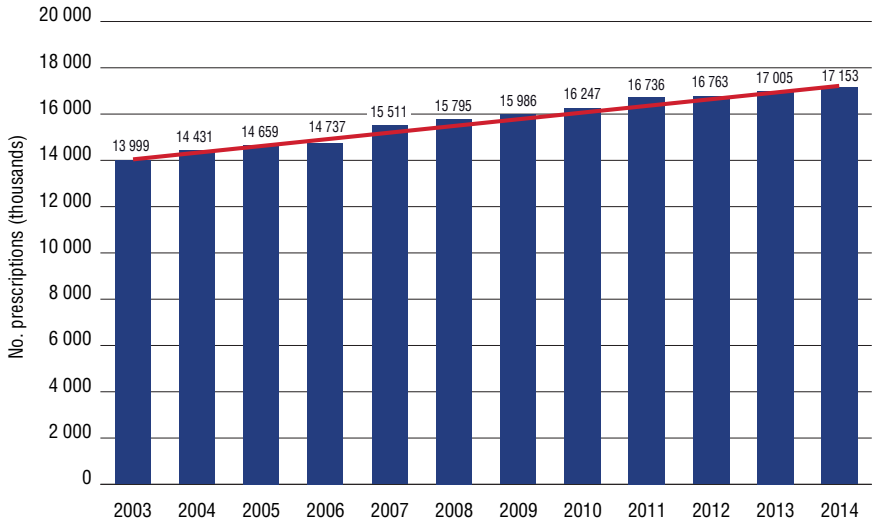
pharmaceutical. For acute diseases, medical doctors in Slovenia can prescribe medicinal products for up to 10 days. For chronic conditions or when long-term treatment for the same person is necessary, the smallest required quantity of medicinal products can be prescribed for a maximum of 30 days. In exceptional cases and for specific indications, medicinal products can be prescribed for a period of up to three months.

The number and composition of prescriptions depend on individual professional decisions of medical doctors and to a certain extent reflect systemic measures, such as the introduction of the system of MIMPs and therapeutic groups (see section 2.8.4). Consumption of medicinal products prescribed to outpatients can be described by the number of prescriptions according to ATC group, by the number of defined daily doses and by the number of defined daily doses per 1000 inhabitants per day (WHO Collaborating Centre for Drug Statistics Methodology, 2011, 2015; Kostnapfel Rihtar & Albreht, 2015). This information is collected directly from pharmacies and records are prepared by the NIPH. These records are based on both green and white prescriptions. There is no centralized detailed analysis of inpatient consumption in Slovenia as each hospital maintains its own utilization records.

Between 2003 and 2014, the numbers of prescriptions as well as prices for medicinal products increased, despite the introduction of cost-containment measures (Fig. 5.3).

Fig. 5.3

Number of prescriptions, Slovenia, 2003–2014



Source: Kostnapfel Rihtar & Albreht, 2015.

The total number of prescriptions in 2014 was 17 153 277, leading to a 2014/2013-index of 101. Costs for all prescriptions amounted to €432 294 676 (2014/2013 index: 96) with an average prescription cost of €25.20. There were 16 662 087 green prescriptions, corresponding to a total amount of €425 255 948 and 491 190 white prescriptions (paid for by the patient entirely) with a total cost of €7 038 728. Out of all prescriptions in 2014, 56.1% included medicinal products from the positive list, 41.1% products from the intermediate list and 2.8% products from the negative list.

Fig. 5.4 shows the number of prescriptions per 100 inhabitants by age and sex in 2014. For both men and women, a marked, steady increase in prescriptions can be observed for the age groups above 50.

Fig. 5.5 represents total costs of prescriptions from 2003 to 2014. The overall cost of medicinal products is not known precisely because consumption in hospitals and products dispensed over the counter (without a prescription) in pharmacies are not recorded at national level. While costs showed a stable increasing trend until 2010, the introduction of MAVs for MIMPs and the system of therapeutic groups of medicinal products (see also section 2.8.4) led to a decline in following years.

Table 5.3 shows a detailed breakdown of prescriptions by list type and ATC group.[4] Out of all prescriptions, medicinal products for cardiovascular diseases (group C) had a 26.9% share, the nervous system (group N) an 18.8% share, the alimentary tract and metabolism (group A) a 12.1% share and the musculoskeletal system (group M) a 7.2% share (Kostnapfel Rihtar & Albreht, 2015).

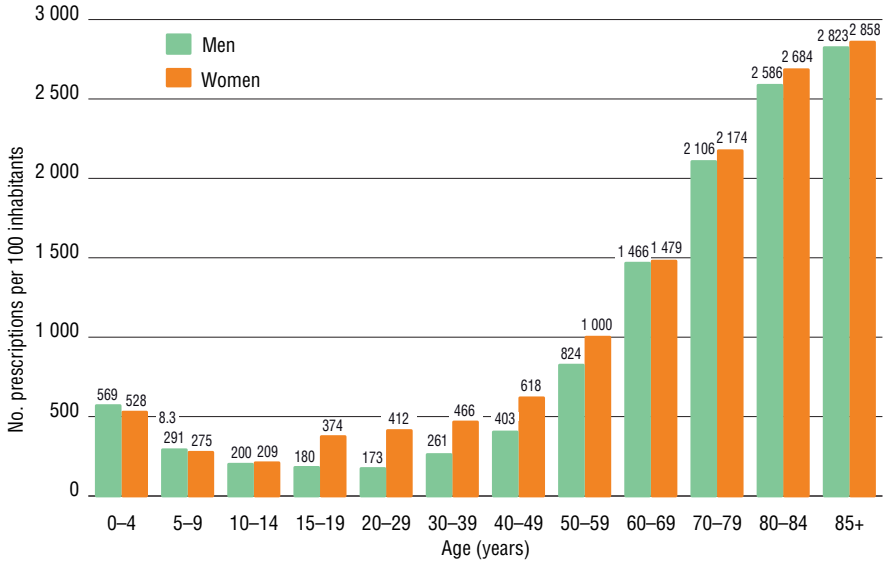
5.7 Rehabilitation/intermediate care

Rehabilitation is provided at all three levels of health care (primary, secondary and tertiary). Rehabilitation can be generally divided into three types: medical, professional and social. Rehabilitative teams vary in composition at the different levels but the basic composition of a team will include a specialist in physical and rehabilitative medicine, a team leader, a physiotherapist, an occupational therapist, a logotherapist, a clinical psychologist and a social worker.

[4] This illustration only takes outpatient consumption into account as there is no centralized, detailed analysis of hospital consumption.

Fig. 5.4

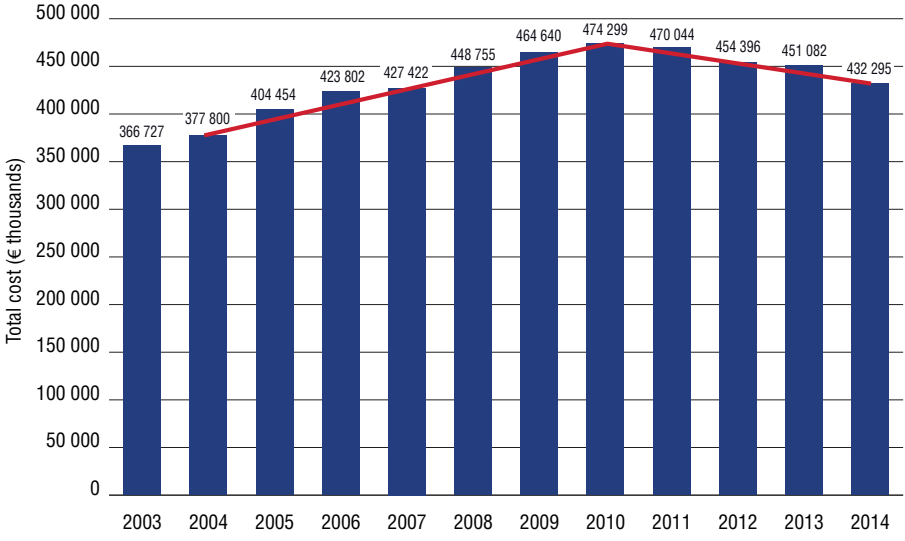
Number of prescriptions per 100 inhabitants by age and sex in 2014



Source: Kostnapfel Rihtar & Albreht, 2015.

Fig. 5.5

Total costs of prescriptions in Slovenia, 2003–2014



Source: Kostnapfel Rihtar & Albreht, 2015.

Table 5.3

The number and costs of prescriptions according to the List of Medicinal Products and ATC classification, Slovenia 2014[a]

ATC group	No of prescriptions				Costs (€)			
	All prescriptions	Positive List	Intermediate List	Not covered (negative list)	All prescriptions	Positive List	Intermediate List	Not covered (negative list)
A	2034236	971558	1017296	45382	50140905	34332957	15232993	574955
B	957517	848302	82329	26886	31255708	23933721	6917535	404452
C	4530469	2012182	2459144	59143	81155014	31086180	49236811	832023
D	616028	434717	68677	112634	7775116	5906852	912853	955411
G	881661	459595	376910	45156	23787756	9474904	12619904	1692948
H	361621	355756	3850	2015	9292870	7486090	1753133	53647
J	1120599	1089354	12688	18557	19883402	19331530	332033	219839
L	118406	116788	1291	327	75469621	74499233	889839	80549
M	1216979	158202	1040969	17808	15718714	1889140	13622036	207538
N	3167417	1709010	1406415	51992	69666769	48901637	19923497	841635
P	53875	52310	0	1565	459070	439301	0	19769
R	1038878	643736	343228	51914	26642505	21783101	4388258	471146
S	682360	439161	217097	26102	7980577	5918634	1884689	177254
V	35863	8209	27166	488	6008918	3185807	2813433	9678
Other	337368	317242	0	20126	7057730	6768776	0	288954
Together	17153277	9616122	7057060	480095	432294675	294937863	130527014	6829798

Notes: [a] Only outpatient consumption as there is no centralized detailed analysis of hospital consumption; A: Alimentary tract and metabolism; B: Blood and blood-forming organs; C: Cardiovascular system; D: Dermatologicals; G: Genitourinary system and sex hormones; H: Systemic hormonal preparations, excluding sex hormones and insulins; J: Anti-infectives for systemic use; L: Antineoplastic and immunomodulating agents; M: Musculoskeletal system; N: Nervous system; P: Antiparasitic products, insecticides and repellents; R: Respiratory system; S: Sensory organs; V: Various.

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. Physiotherapy is organized in primary health care centres or in private practices, where physiotherapists work as private health professionals under 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 and link closely with district nurses whenever needed for patients in the catchment area.

Rehabilitation at the secondary care level includes, above all, medical rehabilitation programmes provided in hospitals, spas or special rehabilitation centres. In hospitals, departments for physical medicine and rehabilitation encompass the whole range of rehabilitative care, including methods of early rehabilitation before and immediately after surgical interventions and for injuries, diseases and other changes in health status. The majority of hospital departments for physical medicine and rehabilitation do not have their own beds but treat patients from all other departments through services delivered mostly at the departments. Rehabilitation in spas is set up with a view to enable the integration of the injured/sick individuals into their normal life. Rehabilitation in secondary care is also provided in special hospitals, such as orthopaedic hospitals, children's special hospitals and specific institutions for people with special needs. Rehabilitation services are partly included in compulsory health insurance, with the remaining parts having to be covered either through co-payments or via complementary health insurance.

At the tertiary 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.

Generally, rehabilitation centres are concentrated in bigger cities and spas, which poses problems in terms of access for people from rural areas. For more complex rehabilitation, this results in a need for treatment on an inpatient basis, when patients are either admitted to hospitals (or remain hospitalized after the end of acute treatment) or are transferred to a spa department for rehabilitation. These departments are fully equipped for complete rehabilitation; some spas

specialize in the rehabilitation of patients after injuries and orthopaedic surgery, while others focus on rehabilitation of patients with medical conditions, primarily after a heart attack or a stroke.

In Slovenia, intermediate care is underdeveloped for most types of disease. Once discharged from hospital, there are few options available for disabled individuals: one option is to receive point-of-service care at primary care institutions or 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. Because of need and demand, extended hospitalization can be provided for patients who experience a sudden event, often a hip fracture or some other major injury or a stroke, and are not able to return to their home because they either live alone and have no carer or a carer is not available to suit their significantly increased needs.

The lack of services for intermediate care in Slovenia is a problem, particularly for senior citizens who have undergone hip replacements, for example. Assistance in activities of daily living is a particularly pressing issue as many patients experience difficulties in organizing that part of their lives while still being offered medical and physiotherapy services as a part of their extended treatment and rehabilitation process. The important problems in this regard are the lack of providers and the lack of more significant financial resources that could support payments to fund the use of such services. While the Pension and Disability Fund grants cash benefits for patients who need the assistance of an external carer, these amounts are generally not sufficient to pay for all necessary services.

5.8 Long-term care

At present, long-term care is the responsibility of the Ministry of Health and the Ministry of Labour, Family, Social Affairs and Equal Opportunities and regulated under different sets of legislation, including pensions (Pension and Disability Insurance Act; War Veterans Act and War Disability Act), health care (Health Care and Health Insurance Act), and social and family care (Social Security Act; Financial Social Assistance Act and Exercise of Rights to Public Funds Act; Parental Protection and Family Benefit Act; Act Concerning Social Care of Mentally and Physically Handicapped Persons).

As there is no single overarching regulation specifically concerning long-term care (Council of the European Union, 2014; Meglič Črnak et al., 2014), such care for the elderly, chronically ill, disabled and other individuals

with special needs is provided through different routes across the health, social care and pension and disability sectors, with different entry points and different procedures concerning the assessment of entitlements for supplements to support long-term care needs. As a consequence, some service users might end up benefiting more from current arrangements in place than others, or their needs might remain unrecognized altogether.

5.8.1 Types of service and recipients of long-term care

In line with the international definition of long-term care, Nagode et al. (2014) distinguish four types of long-term care provision.

Inpatient long-term care. Such care is provided by nursing homes; special social security institutions; centres for training, occupation and care; and centres for education and rehabilitation of children with special needs.

Day cases of long-term care. Day care over a longer period is provided by day centres in nursing homes and day-care centres for training, occupation and care.

Home-based long-term care. Care at home is provided by community nursing services, home helps, family assistants, personal assistance and housing groups in the field of mental health.

Long-term care cash benefits. Direct payments are provided under different schemes including the Act Concerning Social Care of Mentally and Physically Handicapped Persons, the Pension and Disability Insurance Act, the Social Security Act, the War Veterans Act, the War Disability Act and supplements for child care. Recipients of cash benefits are not included in any other formal long-term care service.

At the end of 2013, there were a total of 60 312 recipients of long-term care (Statistical Office of the Republic of Slovenia, 2014). Of these, 36% were in institutional long-term care, with another 34% receiving home-based long-term care services; 28% received cash benefits and less than 1% were users of organized day-care services (Table 5.4). Inpatient long-term care has a long tradition in Slovenia and is seen to be well developed and distributed across the country. Home-based care has evolved since the mid-1990s, and an increasing number of people are receiving this type of service. Formal care arrangements (institutional and home-based care) are more common among recipients aged 65 years and older (Nagode et al., 2014). Table 5.4 also contains figures for long-term care recipients aged over 65 years for 2012 (the most recent year with age-related data). Of those receiving any formal long-term care (excluding cash

benefits) in 2012, almost 80% were aged 65 years and older, equating to some 10% of the Slovene population of this age group. Of those receiving formal long-term care, about half received institutional (inpatient) care (5% of the total population of this age group) and half home-based long-term care, with only 1% receiving long-term day-case care.

Table 5.4
Long-term care recipients in Slovenia, 2012–2013

	2012[a]			2013
	All recipients	Recipients aged 65 years and over	Percentage population aged 65 years and over (n = 341 192)	All recipients
Inpatient long-term care	20 974	17 035	4.99	21 902
Day cases, long term	444	294	0.1	485
Home-based long-term care	20 446	16 090	4.7	20 744
Long-term care cash benefits	17 261	5656	1.66	17 181
Total	59 122	39 075	11.3	60 312

Source: Statistical Office of the Republic of Slovenia, 2014.
Note: [a] Age-related data is only available for 2012.

5.8.2 Delivery of long-term care

Delivery of long-term care services can be through public or private providers, both of which have to meet centrally set standards for long-term care services (e.g. staffing, qualifications, processes, equipment and premises) (Council of the European Union, 2014). Standards are defined by the HIIS (health care services: institutional and community services) and the state (Ministry of Labour, Family, Social Affairs and Equal Opportunities for social care services: institutional and home-based care).

As noted above, institutional long-term care in Slovenia is considered to be well developed (Hlebec et al., 2014). It is organized through the network of institutions for older people and people with special needs, which are publicly owned or are private facilities with a concession; people residing in institutional care are provided with integrated health and social care services (Council of the European Union, 2014). Conversely, the provision of community nursing and home help has been viewed as less well coordinated; this has, in part, been attributed to different systems overseeing these services, and providers consequently operating under different regulatory systems. Community nursing services, on the one hand, are provided by nurses who are employed by primary health care centres or who are self-employed but closely cooperate with

primary health care centres (on concession; about 15% of community nurses). Home help services (social long-term care), on the other hand, are mainly provided by public agencies such as centres for social work and homes for older people and private agencies with a concession. Home help includes assistance for activities of daily living, instrumental activities of daily living and social inclusion services (Council of the European Union, 2014). Special types of home-based service for severely disabled users of long-term care include help provided by family assistants and personal assistants.

Long-term care services financed by the HIIS are essentially free of charge for service users whereas social long-term care services are only partially subsidized by the state or the municipality. Access to publicly subsidized long-term care services is means tested based on the rules set by the government. The competent centre for social work at the municipality level may grant partial or full exemption from payment for long-term care services by the service user for institutional and community based services (Council of the European Union, 2014). Full or partial exemption from payment is defined on the basis of a maximum cap on spending and ability of users or their families to pay for the service. Where contributions do not cover the costs associated with the long-term care provided, the remaining amount is paid for by the local municipality or central government. Local government may further stipulate entitlements.

However, municipalities vary in their ability to provide adequate community-based long-term care services for older people in particular, with differences between urban and rural areas (Hlebec, Mali & Filipovič Hrast, 2014). Available evidence suggests that rural areas, particularly, may not provide for sufficient institutional care and social home care while urban areas tend to offer a wide range of assistance.

5.8.3 Expenditure on long-term care

In 2012, total expenditure on long-term care was €477 million or 1.32% of GDP (Statistical Office of the Republic of Slovenia, 2014). Of this, almost three quarters (72.6%) came from public sources (0.97% of GDP) with the remainder covered by private sources (0.36% of GDP). Between 2003 and 2012, overall expenditure on long-term care grew by 87% (from 0.31% of GDP in 2003), and this increase was higher than the growth in GDP over the same period (51%). During this period, private expenditure grew at a higher pace than public expenditure, rising from 24% of total expenditure on long-term care in 2003 to 27% in 2012 (based on data from the Statistical Office of the Republic of Slovenia and calculated by IMAD using the System of Health

Accounts methodology (OECD, Eurostat & WHO, 2011)). Private expenditure on long-term care mainly includes co-payments for accommodation and food in nursing homes and other forms of institutional care, along with household expenses for home assistance.

About half of the public budget for long-term care services is covered by mandatory health insurance contributions. In 2013, the HIIS spent €160 million, which accounted for 47% of all public expenditure on long-term care. Spending under health insurance is mainly on the provision of health care in nursing homes and in special social security institutions, hospital inpatient long-term care and community nursing. The Pension and Disability Insurance Institute contributed €77 million to public expenditure on long-term care (23%), mainly through care allowances. These are also partly covered by the Ministry of Labour, Family, Social Affairs and Equal Opportunities, which contributed another €33.3 million of public funds to long-term care (10%). Taken together, the funds allocated by these three state bodies constitute the major part of expenditure on long-term health care. The remaining 20% of public expenditure covered long-term social care is financed by the state budget (mostly through the Ministry of Labour, Family, Social Affairs and Equal Opportunities) and municipal budgets (IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a).

Considering long-term care by function of care (health care versus social care), expenditure on the health care function, while increasing by 77% overall between 2003 and 2013, fell from just over 70% in 2003 to 67% in 2013 as a proportion of total expenditure. At the same time, the share of spending on the social care function increased (Table 5.5). Within the health care function, about 78% of total expenditure was allocated to institutional long-term care in 2013 and 22% to home-based long-term care. Over half of institutional long-term care was allocated to health care provided in nursing homes, some 15% to special social security institutions and about 4% to long-term hospital inpatient care (data not shown). About 96% of expenditure on institutional and home-based long-term care was from public sources. Conversely, the majority of expenditure on the social care function of long-term care is from private sources, accounting for some 75% of total expenditure in 2013.

5.9 Services for informal caregivers

Informal care in Slovenia largely depends on family members, mainly spouses and daughters, followed by other family members and neighbours. Women predominantly carry the highest burden in providing informal care, while in recent years NGOs have an increasingly important role.

Table 5.5

Expenditure on long-term care by source of financing and by function, 2003–2013

	2003	2005	2010	2012	2013	Nominal growth index 2013/2003	Average annual real growth rate 2013/2003 (%)
Expenditure by source of financing (€, million)							
Total	254	314	450	480	471	186	5.3
Public	192	245	339	349	342	178	4.8
Private	62	70	111	131	130	209	6.9
Share of GDP (%)							
Total	0.99	1.08	1.24	1.33	1.30		
Public	0.75	0.84	0.94	0.97	0.94		
Private	0.24	0.24	0.31	0.36	0.36		
Structure (%)							
Public	75.5	77.8	75.3	72.7	72.5		
Private	24.5	22.2	24.7	27.3	27.5		
Expenditure by function (€, million)							
Total	254	314	450	480	471	186	5.3
Health care (HC.3)	179	230	315	327	314	176	4.6
Social care (HC.R.6.1)	75	84	134	153	157	209	6.9
Structure (%)							
Health care (HC.3)	70.4	73.3	70.2	68.1	66.7		
Social care (HC.R.1)	29.6	26.7	29.8	31.9	33.3		

Source: Based on data from the Statistical Office of the Republic of Slovenia and calculated by IMAD using the System of Health Accounts methodology (OECD, Eurostat & WHO, 2011).

In Slovenia, there is no national policy regarding informal care, although there is clear need for training and support for informal caregivers, including more flexible employment arrangements, remuneration or respite services. Users who are in need of assistance from others can be awarded cash benefits from the National Pension Insurance Institute. Family members, as caregivers, are entitled to a paid absence of leave if they are employed but only for a set period of time. Moreover, family members who decide to opt for employment change, such as part-time employment, because of their informal care responsibilities cannot retain the full level of social security benefits nor do they receive any compensation for lost income.

Informal care mainly includes helping with instrumental activities of daily living, while basic activities of daily living are provided as combined formal and informal care. The proportion of care provision divided between formal

home care services and informal care depends on whether users live alone or with family, with the former receiving more home care services from formal carers (Hlebec et al., 2014).

A survey on the needs, capabilities and attitudes of the population over 50 years of age (Ramovš, 2013) showed that in the six months prior to survey 18.9% of people over 65 and 43.4% of people over 80 were in need of informal care. In the same period, 20% of inhabitants aged over 50 years provided informal care (Ramovš, 2013).

5.10 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 while respecting human and patient rights (Ministry of Health, 2007). In addition to physical pain, suffering also includes psychosocial problems and spiritual distress.

In Slovenia, palliative care is still in its initial developmental stages and is progressing steadily to become an integral part of health care. According to the European Association for Palliative Care (EAPC) Task Force on the Development of Palliative Care in Europe (EAPC, 2013), 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 mainly on the development of primary care networks, with a secondary aim of providing palliative beds in hospitals.

A specialist accreditation for palliative care was created by the Slovene Medical Society and the Slovene Palliative Medicine Society in 2011. It is awarded only to physicians upon completing a 50-hour course and passing the examination, whereupon they receive a diploma certifying their specialist knowledge in this area. This accreditation is part of the EAPC's wider educational programme that has been adopted by the Slovene Palliative Medicine Society. While the 50-hour course is open to all health professional groups – the curriculum at this level is the same for all groups – so far, only physicians obtain a diploma. Courses and seminars are also organized

for health care professionals in all disciplines involved in the emergence of palliative care in Slovenia. Such limited-hours courses are organized separately for each professional group by their societies but do not have a final examination, nor do they result in special diplomas. At the tertiary education level, an Institute for Palliative Medicine and Care was founded in 2013 within the Medical Faculty of the University of Maribor and is responsible for advanced education of all professional groups. Moreover, courses on various topics related to palliative care have been organized as part of the curricula for family medicine, public health, oncology and emergency medicine offered by the Faculty of Medicine at the University of Ljubljana. There is also a teaching unit at the acute palliative care department within the Institute of Oncology for general physicians who circulate during their speciality and oncology training, which provides practical insight into hospital-based palliative care. Practical training is available at the Jesenice General Hospital for mobile palliative units, focusing on field-based palliative care and the special needs of patients and their relatives at home.

Palliative care services are provided in all hospitals as part of basic care: 16 palliative care teams are in operation and work in secondary hospitals throughout the country. Specialized beds are available in many hospitals as part of different wards. There is an acute palliative care department at the Institute of Oncology in Ljubljana, which is also a teaching unit for palliative care. A mobile palliative team operates in northern Slovenia, organized by Jesenice General Hospital. There is also one hospice run by the Hospice Society (EAPC, 2013). In addition, a paediatric palliative team is based at the Paediatric Clinic in Ljubljana, which coordinates palliative care for children all over Slovenia. The clinic makes it possible for children to be visited by the team in their home environment.

Bereavement services are provided by both professional teams and support groups; there is also a tradition of providing a children's group bereavement holiday every summer, organized by the Hospice Society. Bereavement counselling is available at the University Clinic for Respiratory and Allergic Diseases Golnik, the Institute of Oncology and various 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 the country (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 need to develop palliative care is also a consequence

of demographic trends and the rising number of patients with chronic conditions. Against this background, the challenges and activities detailed below are of particular relevance (Ministry of Health, 2007):

- a national programme for the development of palliative care was endorsed by the government in 2010 with the aim of enabling more patients to live and die at home; its main policies are based on an interdisciplinary approach, which will be implemented by general and specialist palliative care teams as well as through the active participation of patients and their families in treatment while respecting patient rights and autonomy;
- the new Health Services Act will cover all palliative care activities, thus providing the legal basis for the implementation and development of palliative care programmes;
- educational programmes in palliative care are being implemented in undergraduate and 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; and
- all opioids in all pharmaceutical forms are available in Slovenia and patients can obtain such medication in pharmacies with a prescription from a physician; and
- there is a well-organized pain management service and all hospitals provide outpatient pain clinics for chronic pain.

5.11 Mental health care

Mental health care policy

The Mental Health Act was adopted in 2008 and at the time of writing (December 2015) the Draft National Mental Health Plan was under preparation. The Plan, which has undergone public consultation three times (2009, 2011, 2014), is the first national plan and will contain relevant data on capacity and funding in the mental health area.[5]

The Mental Health Act also represents the first law in the area of mental health. The legislation joins the health and social welfare systems into a tightly interwoven entity, primarily focused on individuals' needs and aiming to

[5] Previously, no national programme on mental health existed in Slovenia because a legal basis, which is a precondition for any national strategy or programme, was lacking. The enactment of the Mental Health Act 2008 provided the necessary basis.

protect and assure basic human rights. The main components of the Act outline the admission conditions and procedures for:

- treatment in a psychiatric hospital ward under special supervision with and without consent (the latter on the basis of a court order);
- treatment in a secure ward of special residential institutions with and without consent (the latter on the basis of a court order);
- supervised psychiatric treatment; and
- community treatment.

The legislation lays down special treatment methods that may be applied only exceptionally under certain conditions and only in psychiatric hospitals; it also defines the use of special security measures under specific conditions. The law defines the obligations of both the health and social welfare ministries. The latter is responsible for guaranteeing the conditions of secure wards within special residential institutions as well as assuring the network of community care coordinators and the network of professional advocates for people with restricted rights; these advocates work in secure wards.

The treatment processes outlined under the legislation define new stakeholders in the management of mental health patients as well as their roles, obligations, responsibilities and communication pathways. These include:

- community care coordinators;
- advocates for people with restricted rights, working in secure wards; and
- multidisciplinary teams (consisting of psychiatrists, community care coordinators, social workers, practical aid nurses, clients and/or their relatives, NGO representatives and others, which are important for the reintegration process).

Despite the fact that the National Mental Health Plan has not yet been officially adopted, some developments are already underway in new models of community care. Community mental health services started in 2008 and since 2012 have been provided by all psychiatric hospitals on an outpatient basis. Since 2013, community mental health services also have been provided at the primary care level in primary health care centres in four regions (Prekmurje, Koroška, Dolenjska, Spodnjesavska) where previously access to mental health services was more difficult than the national average.

Over the last few years, Slovenia has endeavoured to establish conditions for deinstitutionalization: in 2008, the Mental Health Act established a wide support system to accelerate the safe and monitored transfer of people with

mental health problems from institutions to local communities. The role of the regional network of community care coordinators has been very important in this process. Coordinators are employed in state centres for social work and their main task is to help and support people with mental health problems to reintegrate into a community environment as soon as possible after medical psychiatric treatment or special treatment in a residential institution. Through the Operational Plan based on the national Mental Health Plan there is an intention to strengthen and widen the current network of community-based care and to link programmes aimed at integrated and quality treatment, adjusted to individuals' needs, expectations and social/working abilities.

Since 1990, Slovenia's efforts to strengthen community-based approaches to mental health care have also been supported by NGOs, which have provided many examples of good practice, particularly in devising more individualized and personalized care for people with mental health problems of all age groups.

Delivery of services

In Slovenia, there are two main groups, for which institutional care is provided: people with mental health problems and people with learning or intellectual disabilities.

There are various types of state-run institution providing such care:

- psychiatric hospitals (five hospitals plus one unit/department): the one at the University Medical Centre Maribor has a special unit for forensic psychiatry patients;
- special residential institutions for people with mental health problems (five institutions with 1520 residents);
- special residential–vocational institutions for children with learning or intellectual disabilities, combined with mental health problems and other disabilities (five institutions with 431 children and 795 adults); and
- residential institutions–care homes for the elderly (55 residential homes with 18 295 residents): general long-term care homes for older people and not specifically for residents who suffer from dementia or other mental health conditions (see also section 5.8).

The psychiatric hospitals are:

- University Psychiatric Hospital Ljubljana
- Psychiatric Hospital Vojnik
- Psychiatric Hospital Begunje
- Psychiatric Hospital Ormož

- Psychiatric Hospital Idrija
- Department of Psychiatry at University Medical Centre Maribor.

Table 5.6 shows that the number of beds in psychiatric hospitals is slowly decreasing. However, it is worth noting that the number of psychiatric care hospital discharges has slightly increased (Table 5.7). This may reflect both an increased number of admissions and a decrease in lengths of stay. In addition, the "revolving door" phenomenon is sometimes at play. The number of long-stay patients (staying for more than one year in psychiatric care) has decreased significantly.

Table 5.6
Number of beds in psychiatric facilities, 2008–2013

	2008	2009	2010	2011	2012	2013
Number of psychiatric care beds	1397	1339	1333	1344	1370	1365
Number of psychiatric care beds (per 100000)	68.50	65.56	65.04	65.48	66.62	66.30

Source: NIPH, 2015d

Table 5.7
Admissions/discharges in psychiatric facilities (mental and behavoiural disorders), 2008–2013

	2008	2009	2010	2011	2012	2013
Hospital discharges	10061	9987	10328	9858	10404	10564
Hospital discharges (per 100 000)	493.3	489.0	504.0	480.3	506.0	513.1
Long-stay patients (365+ days)	51	33	52	28	44	24

Source: NIPH, 2015d.

There are various types of community-based programmes whose common aim is to ensure that users have as independent a life as possible; they are organized by NGOs and public institutions that are aware of the negative effects of institutionalization. These include:

- residential units for adults, established by NGOs (46 units for 230 residents); and
- special residential public institutions, which are downsizing their capacities and establishing smaller units (36 residential units for approximately 200 residents).

There are also other programmes for people with long-term mental health problems who need coherent care and for people experiencing mental health crises with psychiatric diagnoses of various types; these programmes are co-financed by the state and implemented by NGOs. These are:

- occupational day centres established by NGOs (11 units for 118 programme users);
- occupational day centres established by the state (18 units for 585 programme users);
- information offices and counselling units (3 units for 1574 programme users); and
- phone counselling (10 744 programme users in 2014).

The Social Security Act also provides for other non-institutionalized programmes for people suffering from mental health problems and/or disabilities, such as personal assistance, organized help at home for special target groups and family assistance.

Access

Studies on the availability and access to mental health care in Slovenia have highlighted differences between Slovene regions and the connection between socioeconomic status and mental health problems (NIPH, 2009; Buzeti et al., 2011; Sociomedical Institute Scientific Research Centre of the Slovene Academy of Sciences and Arts, 2011; Lekic et al., 2014). In some regions, there are longer waiting lists for outpatient mental health care compared with other types of care, and there are longer waiting lists for psychotherapy. However, quality of services in general is considered to be "fair", particularly because of the availability of modern psycho-pharmacotherapy, which is covered by the compulsory health insurance system.

Prevention and mental health promotion

The NIPH has an important role in the field of mental health promotion and prevention of mental health disorders. It is currently developing programmes aimed at enhancing the mental health of children and adolescents, which will be deployed within schools. In addition, programmes for primary and secondary prevention for adults with depression are being delivered within primary care settings. The NIPH is also conducting schemes for the early detection of people with certain mental health problems (stress, anxiety). New forms of support and assistance to help people with mental health problems (psychoeducational programme, relaxation techniques workshop) are also being piloted. If the pilot projects are successful they will be implemented

nationally within primary care settings in a similar manner to current programmes for adults with depression.

5.12 Dental care

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). Preventive dental care is available for all children and teenagers. When using dental services offered by a provider working under contract with the HIIS, patients are required to sign up with a particular dentist and the same rules apply on choice and switching as for personal physicians (HIIS, 2015b). A particular characteristic of dental care is the rather high share of purely private providers (not working under a contract with the HIIS), at approximately 15% of all active dentists. In addition, more than 40% are private providers who are working under contract with the HIIS.

In contrast to the situation with personal physicians, dentists are not paid by capitation but according to a predetermined budget based on an estimated mix of services. However, the HIIS regulates provision of dental care with several financial incentives. In primary dental care, the number of patients on a dentist's list should not fall more than 10% below the national average. In addition, half of all services for the adult population has to be provided for the treatment of mouth and teeth diseases and half for dental prosthetics. Other incentives apply to dental subspecialties in pedontology, endodontics, paradontology and orthodontics (HIIS 2015c).

Dental care in Slovenia is historically part of the basic benefits package, albeit with significant co-payments, which were introduced in the 1970s. Therefore, patients are accustomed to OOP payments for most dental services, regardless of the provider type or ownership. Following this approach, dental care is increasingly facing sustainability problems with regard to services under the public financing scheme. In part, this is a consequence of an outdated list of services purchased by the HIIS that was established in the 1980s, which at its core still serves as the basis for defining the (basic) services provided to patients. Moreover, only 5.5% of compulsory health insurance funds are available for dental care (HIIS 2015c) and dentists often claim that they cannot provide good-quality services and materials for the prices paid by the HIIS (Ferlič Žgajnar, 2010).

The basic benefits package includes most dental services for children and teenagers without co-payment (except for certain items such as white fillings

or implants). For the adult population, dental services require co-payments in all cases apart from rare emergencies (e.g., emergency treatment of acute pain or emergency tooth extraction). The co-payments range from 10% to 60%. The framework provides ample opportunity for offering additional services.

Private providers who do not have a concession and are, therefore, not contracted by the HIIS work as private dental practitioners. Where patients do not have private health insurance for dental care, they must pay for services in full. Private dentists' tariffs vary as they are free to have their own price lists. The vast majority of these private 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.

It is likely that some key policy decisions regarding dentistry will be made in the near 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 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 altogether, thus providing more room for VHI to cover these services. Under this option, dental care for children and teenagers and preventive services would still remain part of the compulsory health insurance package.

5.13 CAM

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

In Slovenia, the Alternative Medicine Act 2007 separates 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 provided in a non-regulated environment and was not monitored by any form of professional surveillance. Alternative practitioners bring their diplomas to Slovenia from all over the world in order to demonstrate their professional competency. However, as currently there is no formal CAM education in Slovenia, their

diplomas cannot be accredited and such certificates do not provide the formal right to practise.

Legally, CAM may be provided by a citizen or foreign "natural or legal person", who may perform healing activities as a sole proprietor – that is, as an individual who performs independent healing activities and has a valid licence obtained in accordance with the Act. Companies may also perform healing activities if they have adequate facilities and equipment and the healing activities are carried out by a healer with a valid licence. The partial implementation of Directive 2006/123/EC on services in the internal market via an article in the Alternative Medicine Act means that the Health Inspectorate and other inspectorates are now responsible for professional supervision and inspection in relation to the Act.

To practice CAM, practitioners must have at least a secondary education in health care or a secondary education accompanied by a knowledge test on health care topics prescribed by the Ministry of Health, as well as a valid licence acquired in compliance with the Alternative Medicine Act. For CAM candidates who do not have a health care-based secondary education, the "Rules on testing the medical knowledge of healers who do not have a health education" defines the required knowledge base and the prescribed medical examination. The examination covers first aid, anatomy and physiology, health and hygiene education, internal medicine and pathology. Notwithstanding these general rules, homeopathy, chiropractice and osteopathy can only be performed by people with a diploma from a medical faculty, knowledge of homeopathy, chiropractice or osteopathy and a valid licence.

In order to be eligible for a licence to practice, CAM practitioners must meet the following conditions:

- have at least a secondary education in health care or a secondary education accompanied by a knowledge test on prescribed health care topics (see above);
- be competent to implement an individual CAM system or method;
- have active knowledge of the Slovene language and, in the country's bilingual areas, be able to communicate in the language of the ethnic community;
- have no convictions for intentionally committed criminal offences with a final sentence of imprisonment of more than six months; and
- have not been subject to a safety measure prohibiting the pursuit of their profession.

5.14 Health care for specific populations

Under the Health Care and Health Insurance Act, funding is made available for emergency treatment for people of unknown residence, foreigners from countries that have not signed international treaties with Slovenia, Slovene citizens and residents residing abroad temporarily, foreigners residing in Slovenia or who are travelling through the country and cannot provide payment for medical services, as well as other people not covered by compulsory health insurance and not insured under foreign health insurance.

Ambulance services for the general population that provide services to people without health insurance are based on voluntary work by doctors and other medical staff. In addition, three free clinics operate (in Ljubljana, Maribor, Koper) for people without health insurance who would not otherwise have access to health services. Such groups include foreigners, homeless people, workers with unstable and low-paid employment, migrants, older residents, drug users and people with disabilities. The basic characteristics uniting these groups are poverty, unregulated health insurance and reduced access to public health programmes. They typically experience difficult living conditions and, consequently, suffer from increased morbidity and mortality.

The major obstacle to such marginalized groups receiving health care services is lack of compulsory health insurance, for which eligibility conditions must be met. In such cases, some solutions have been devised. For example, many homeless people can register for permanent residence at institutions that provide them with material assistance (e.g. Centre for Social Work, Red Cross, Caritas). With permanent residence, people from vulnerable groups can then acquire the right to compulsory health insurance, and their contributions would be funded from municipal budgets.

Another initiative in this area is the project "Together for Health" (*Skupaj za zdravje*) funded by the Norwegian Government, which aims to identify the health access problems of specific population groups and to overcome current obstacles. The longer-term objective is to propose changes in primary care legislation and organization that, if adopted, will greatly improve access to general health service services for specific populations.

6. Principal health reforms

There have been several attempts to reform the health care system in Slovenia since the mid-2000s. The approaches have varied from attempts to implement substantial structural changes, such as redefining the structure of hospitals and granting autonomy to public health care providers by declaring them the legal owners of their facilities (in contrast to state ownership), to renewed attempts to remodel or abolish VHI.

Up to 2008, achievements include legislation to restrict the use of alcohol, ban smoking in public places, regulate CAM, restructure mental health services and consolidate patient rights. Since 2009, the failure of major structural reform attempts has been mostly caused by political instability (successive changes of government), lack of consensus among stakeholders and a lack of political support for health ministers. An exception to this trend is the restructuring and merger of the former national and nine regional institutes of public health to create the single NIPH and the NLHEF in 2012.

Future reforms are likely to focus on ensuring the sustainability of health system funding, fundamentally restructuring the funding and provision of long-term care, enhancing health system efficiency through reform of purchasing and provider-payment systems, and strengthening primary care with the continued evolution of coordination mechanisms and integration of care, particularly for patients living with chronic diseases.

6.1 Analysis of recent reforms

Table 6.1 lists major health care reforms in Slovenia since 2003. More detailed information on the major reforms proposed or implemented up to 2009 can be found in the previous HiT profiles on Slovenia (Albreht et al., 2002, 2009). This

chapter briefly outlines some of the major developments before discussing the prevalent focus of past reform attempts.

Table 6.1

Major health care-related legislation and reforms in Slovenia since 2003

2003	**Restricting the Use of Alcohol Act** Defined measures for the restriction of alcohol consumption and aims to prevent harmful consequences of alcohol misuse
2004	**Health Services Act** Defined more clearly the process of granting concessions for health care providers, along with the limitations and validity of the concessions, and introduced the concept of free specialists
	Introduction of DRGs The hospital payment method for inpatient care was changed to case-based payments (DRG system)
2005	**Amendments to the Health Care and Health Insurance Act** Aimed to put an end to "cream-skimming", which started after general insurance companies entered the VHI market. The main objective of the legislation was to equalize the financial risks that citizens incur when opting for VHI (which covers co-payments)
2007	**Smoking Prevention Act** Introduced a total ban on smoking in public places
	Complementary and Alternative Medicine Act Separated "official" biomedicine and CAM into two distinct areas with no formal overlap. The Act also established a public authority, the Alternative Medicine Chamber, responsible for licensing CAM professionals and maintaining a register
2008	**Patient Rights Act** Identified categories of patient rights and their implementation
	Mental Health Act Among other things, the Act defined 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 situations such as involuntary treatment
	Regulation on the National Health Plan 2008–2013 A strategic planning document for the development of the health sector from 2008 to 2013. Among other things, it addressed the issues of health care expenditure, health workforce planning, privatization of health care services and demographic change
	Amendment to the Health Care and Health Insurance Act Mainly stipulated exemptions from co-payments for low income groups and introduced liability of income from various forms of contract work for contributions to compulsory health insurance
2010	**National Cancer Control Programme** Introduced a comprehensive approach to managing cancer care in Slovenia
2012	**Restructuring and merger of regional public health institutes** Created the NIPH with nine regional units and the National Laboratory for Health, Environment and Food, also with nine regional units
	Law on Balancing Public Finances The main impacts of this broader public sector law were to lower the salaries of health professionals working in public facilities and limit public expenditure. It also introduced therapeutic groups for pharmaceuticals for the purposes of reimbursement
2013	**Adoption of "health care networks"** To address a lack of primary care physicians and paediatricians in some areas of the country, this policy sets specific objectives such as the expected number of patients per GP or primary care paediatrician
2015	**Establishment of the Centre for Health Care Informatics at the NIPH** All eHealth activities, coordination and financing moved from a special unit in the Ministry of Health to become a new centre at the NIPH
2016	**Regulation on the National Health Plan 2016–2025** The new strategic planning document sets the vision and objectives for the development of the health sector from 2016 to 2025

Period 2003–2008

A large set of reforms aimed at restructuring the whole health care system were proposed by the Ministry of Health in a 2003 White Paper (Keber et al., 2003), which had an ambitious agenda focusing on equity, accessibility, quality and efficiency. Apart from controversial proposals on the role of VHI (known as complementary health insurance in Slovenia, see below), some of the other major proposals targeted the management of public health care provision and the quality of services. The proposals would transform public health care institutions (including hospitals) into parastatal companies, whereby the former councils of these institutions would be transformed into supervisory bodies similar to those of private companies. The proposed reforms also envisaged improved access to services by reducing waiting times and a change in the payment system of hospitals. The latter was successfully implemented with the introduction of a DRG payment system in 2004. However, overall, the White Paper only outlined possible future directions for many reform areas rather than concrete proposals and presumed that goals could be reached using existing resources and efficiency savings. In fact, since the majority of proposals would have involved increases in public spending, most never came to fruition.

This period did see major steps in advancing public health measures through the successful enactment of legislation restricting the use of alcohol (in 2003) and introducing a smoking ban in public places (in 2007). Efforts also focused on legislating in areas that previously had not been systematically addressed. In 2007, the Complementary and Alternative Medicine (CAM) Act for the first time stipulated the status and role of CAM practitioners (although CAM services are still not covered by compulsory health insurance; see section 5.13), while in 2008 the Mental Health Act represented the first law in the area of mental health, outlining a new structure for mental health services delivery, defining the responsibilities of new stakeholders in the management of mental health patients and outlining the rights of patients in situations such as involuntary treatment (see section 5.11).

Spurred on by public expectations, as well as by providers and health professional organizations who saw patients rights as a way of improving patients' experience of the health care system, 2008 also saw the introduction of the Patient's Rights Act, which outlined 14 separate individual rights of patients, including rights to equal access to health care and preventive services, the right to choose a personal physician and the right to know the content of one's personal medical records (see section 2.9.3).

The other major activity that came to fruition in 2008, after a long period of preparation, was the launching of the National Health Plan 2008– 2013 (Republic of Slovenia, 2008). The first National Health Plan, covering 2000–2004, had

taken eight years to develop because of a lack of a broader political consensus on several important issues. Similarly, previous drafts of a new National Health Plan also failed to gain acceptance in 2003 and 2007, before being adopted in 2008. Devised as a strategic planning document aimed at guiding the development of health care delivery over a five-year period, the National Health Plan dealt with a number of elements, including health expenditure and health system sustainability, public health challenges, the development of primary and secondary care, the need for strengthened information technology infrastructure in the health sector and the transfer of key health (capital) investment tasks from the national to the municipal level.

Arguably, the most difficult and contentious policy areas that were the subject of reform proposals over this period were health financing, the functioning of the compulsory health insurance system as the primary payer/purchaser in the health system and the role of complementary health insurance. In 2008, the compulsory health insurance system was addressed after a long period of debate. The Amendment to the Health Care and Health Insurance Act outlined exemptions from co-payments for individuals with low incomes, increased health insurance contribution rates for certain groups of individuals (e.g. tradesmen, farmers), and widened the income base to calculate compulsory health insurance contributions. Further amendments focused on 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.

In addition, greater regulation and government oversight of the VHI sector was achieved in 2005. The national government acquired the competency formerly held by the Insurance Supervision Agency to supervise the operations of insurance companies that offer this type of insurance. Moreover, the practice of cream-skimming was addressed by introducing compulsory community rating to set premiums (i.e. insurance companies are required to accept any person who wishes to be insured, regardless of age, sex or health status, and premiums must be equal) and the Ministry of Health became responsible for organizing and supervising a risk-equalization scheme (see section 3.3.3). Private health insurers were also required to limit disbursement of revenue surpluses (dividends) to a maximum of 50% and to reinvest the other 50% in order to facilitate a reduction in premiums, and to manage their complementary health insurance revenue and expenditure separately from their other insurance business.

These stricter regulatory measures came after failed attempts, instigated under the 2003 White Paper, to abolish altogether the role of complementary health insurance in reimbursing co-payments. This highly contentious proposal almost

overshadowed all others in the White Paper. The Ministry of Health strongly supported the abolition of complementary health insurance on equity grounds. It argued that since complementary health insurance mainly covered co-payments levied on a large range of health services provided under the compulsory health insurance system it effectively makes it inseparable from compulsory insurance. This was judged to be a barrier to accessing such services if individuals, particularly those from low income groups, could not afford to pay privately for complementary health insurance premiums or to pay the co-payments directly. The Ministry of Health also showed that the financial burden of compulsory health insurance contributions and complementary health insurance premiums on households with lower incomes were much greater than for those with higher incomes.

The Ministry of Health's proposal was to abolish complementary health insurance and to cover the costs of this previously private spending via a modest increase (totalling 0.6% of gross pay) in the compulsory health insurance contributions of employers and employees, effectively merging the two types of insurance under a single public insurance scheme. The idea was attractive for a large majority of the public but was challenged by a number of stakeholders, namely economists and employers, as well as by the Ministry of Finance. In particular, economists argued that the transfer of previously private expenditure into public funds would have additional serious consequences for Slovenia's public finances. Employers opposed the scheme on the basis that higher compulsory health insurance contribution rates would increase the costs of the labour force and, consequently, reduce their competitiveness in foreign markets. This debate took place within a context of weak public finances and Slovenia's preparations for accession to the EU, prompting fears, particularly by the Ministry of Finance, that increased public expenditure would further destabilize the country's economic outlook. Coupled with fears that higher compulsory health insurance contribution rates would provide an incentive for trade unions to demand pay rises, the reform proposal was eventually dropped.

Period 2009–2015

Since 2009, only a few partial reforms have been implemented. In fact, most reform proposals between 2009 and 2015 were eventually abandoned mainly because of political instability (successive changes of government) and a lack of political support for health ministers and their proposals from the wider government, which eventually led to the resignation of two ministers of health – Tomaž Gantar in November 2013 and Alenka Trop Skaza in February 2014. Two notable examples of unsuccessful reform attempts from 2012 were the renewed proposal to abolish complementary health insurance and the proposal to redefine the structure of general hospitals, which would require them to have only internal medicine, surgical and intensive care units.

Attempts to amend the Health Services Act initiated in 2010 are still ongoing and include proposals to strengthen the public side of health care delivery, open up private provider concessions to competitive tender, make membership of the Medical Chamber voluntary rather than compulsory and to better regulate the ability of health professionals to work for more than one provider. On the positive side, after several years of development, the National Cancer Control Programme was adopted in 2010, providing a comprehensive approach to managing cancer care, increasing patient involvement and creating a more transparent approach to the delivery of quality cancer care with more concentrated clinical care in two secondary centres.

One of the most important external impacts on the health care system came with the economic and financial crisis, which in Slovenia started in 2009 when GDP fell by more than 8% (Statistical Office of the Republic of Slovenia, 2011; Cylus, 2015). This development had a series of consequences in different government sectors and throughout society as a whole. One of the first was an exploding unemployment rate, which almost doubled between 2008 and 2012 (from 6.7% to 12%).[1] This had an inevitable impact on the revenues of the HIIS, even though it ended 2008 with a surplus of €130 million (out of which, around €27 million was allocated to its reserve fund). In addition, a new salary system was introduced for the entire public sector in 2008, increasing salaries that had been stagnant for almost six years. Faced with potentially negative financial impacts from these developments, the HIIS decided to reduce the level of prices for hospital services in two consecutive years running, putting a strain on many providers.

By 2012, the government responded to the deteriorating financial situation through austerity measures, outlined in the wide-ranging Law on the Stabilization of Public Finances. In the health sector, the principle impacts were to:

- reduce the salaries of all health professionals working in public facilities by 8%, with immediate effect, and freeze them at that level until further notice;
- freeze all promotions and other career advances, normally envisaged every three years, also with immediate effect and until further notice;
- reduce sick leave payments;
- allow salaried health professionals employed in the public sector to work for another employer in the public or private sector, subject to certain conditions;[2] and

[1] After 2012, the rate changed little but started to show a more sustained decline from 2014.

[2] Permission would be needed from the main employer and could be given on the basis that such (extra) activity does not cause economic harm to the main employer.

- introduce a new system of therapeutic groups of medicines, whereby all medicines in the same group are reimbursed at the price of the cheapest among them (the reference price).

Also in 2012, the largest structural change to the health system since 1992 was achieved through the merging of the former national and nine regional institutes of public health into create the single NIPH and the NLHEF (see also section 5.1). Moreover, in 2015, after several years during which e-health activities were coordinated and financed by a special Unit at the General Directorate for Health Care at the Ministry of Health (and with the end of its financing through EU structural funds), the entire activity was moved to continue as a Centre for Health Informatics at the NIPH with special funding, particularly for supporting infrastructure and research and development in information technology.

A concern over ensuring geographical access to primary care services, particularly in light of a lack of GPs and paediatricians in some areas of the country, was highlighted in the National Health Plan for 2008–2013. Consequently, in 2013, the Health Council adopted the plan for a health care network in the area of family medicine and paediatrics that would set specific objectives, such as the expected number of patients per GP or primary care paediatrician (Petrič & Žerdin, 2013). This measure was taken in line with others, such as increasing the number of residency places in family medicine.

Finally, in early 2016, a new National Health Plan covering 2016–2025 was adopted by Parliament (Republic of Slovenia, 2016).

6.2 Future developments

Several factors have driven a renewed focus on reforming the health care system in Slovenia. From an economic context, the government since 2010 has been embarking on fiscal consolidation measures and targeting structural reforms to improve public sector efficiency and performance, including in the health sector. In parallel, as part of its obligations as an EU Member State, Slovenia has been responding to policy recommendations by the European Commission (known as Country Specific Recommendations) that also encompass issues such as the financial sustainability of the health system and regulating long-term care (European Commission, 2016a). In response, the Ministry of Health in 2015 commissioned a team of international experts to work in conjunction with national experts to complete a wide-ranging health system review of Slovenia.

The resulting set of reports assessed, among other things, the sustainability of funding sources for health care and identified some clear areas where health sector efficiency and service delivery could be improved (Cylus, 2015; Nolte et al., 2015; Normand, 2015; Panteli et al., 2015; Thomas, Evetovits & Thompson, 2015; Thomas, Thomson & Evetovits, 2015).

However, the most important impetus for setting the reform agenda has been the development and parliamentary approval (in March 2016) of the new National Health Plan 2016–2025, which not only sets out the objectives and values of the health care system but also signposts the priority areas for policy development over the next 10 years. The National Health Plan is a strategic framework for the management and development of the health care system in Slovenia and the basis for drafting and passing relevant laws in the field of health insurance and medical activities. It also presents the preconditions for drawing EU resources under the Operational Programme for the Implementation of Cohesion Policy in 2014–2020 and the EU's third programme in the field of health (2014–2020). The National Health Plan can also be considered as one of the implementation tools of the country's broader development strategy, "Slovenia's Vision 2050", which is currently undergoing a consultation process with different stakeholder representatives. The Vision strategy takes into account the United Nations' sustainable development goals, in particular improved health and well-being for all and reduced inequalities.

As outlined in the National Health Plan, the core values of Slovenia's health care system are universality, solidarity, equality, equity of financing, accessibility, and quality and safety of health care (see section 7.1). Four priority areas of action are foreseen in the National Health Plan:

- health promotion, disease prevention and health protection;
- optimizing health service delivery;
- improving health system performance in terms of quality and safety, governance and management, purchasing and payment of services and planning of human resources; and
- sustainable financing.

Implementation of the National Health Plan will be based on cooperation with all key stakeholders, including users/patient groups and progress will be monitored through selected processes and outcome indicators.

Key immediate reform priorities are to ensure the sustainability of health system funding, to fundamentally restructure the funding and provision of long-term care, to enhance health system efficiency through reform of

purchasing and provider-payment systems, and to strengthen primary care with the continued evolution of coordination mechanisms and integration of care, particularly for patients living with chronic diseases. According to government plans, a new Health Care and Health Insurance Act will be submitted for approval in 2016 that will address the roles and responsibilities of different stakeholders in the health system, including in the areas of the benefit basket, purchasing and payment of health services and in financing. Moreover, a new law on long-term care will define a benefits basket for long-term care users and will outline new arrangements for the organization and financing of long-term care services. Finally, a new strategy will set a vision for the development of primary health care.

Sustainable health system funding

Given its almost exclusive reliance on payroll taxes (i.e. labour force contributions for compulsory health insurance), the main challenge for health system funding in Slovenia is to diversify the resource base to sustain current and future expected expenditure levels while preserving the existing benefits package and quality of care.

The first strategic aim is to secure the revenues of the HISS. Currently, health sector revenues are very susceptible to labour market fluctuations. The recent economic crisis highlighted this vulnerability clearly, with significant reductions in contributions to the HIIS as a result of rising unemployment and slower wage growth. This will become an even greater challenge in future as the population ages and dependency ratios change. Notwithstanding improvements in the economy since 2014, a number of policy options present themselves:

- re-examining and revising the solidarity-based contribution rates of the different groups currently contributing to compulsory health insurance;
- raising the contribution rates of groups that have their contribution rates to compulsory health insurance covered for them by other social security funds (e.g. pensioners, the unemployed); and
- considering the introduction of contributions for children and covering these on their behalf through direct budget transfers.

More generally, health care spending by central and local government in Slovenia remains low by EU standards, despite slight increases in spending in recent years. Nearly all other health systems in Europe, including those traditionally thought of as social insurance systems, receive significant supplementary funding from general tax revenues. Current reform proposals envisage increased health system funding from the general budget and the

possible establishment of a countercyclical financing mechanism that would aim to mitigate the potential adverse effects of revenue fluctuations in economic cycles. As of early 2016, such plans are still under discussion.

Moreover, there are almost no resources available for investments in health system development (e.g. strengthening primary health care requires investments in human resource development (training) and information technology support). In early 2016, the Minister of Health suggested new legislation on tobacco products in which a part of tax revenues from this source would be pledged to the health budget for developing and implementing preventive services and care. However, is still not clear whether the new proposals will be accepted by the government.

The government may also revisit the role of complementary health insurance. This system largely exists to finance public sector co-payments and is funded through flat rate premiums requiring complex risk-equalization across insurers to prevent cream-skimming and, thus, generating high administrative costs relative to the compulsory health insurance system. On the positive side, complementary health insurance premiums currently seem to be affordable by the majority of the population without generating unmet need and do protect people against the negative effects of co-payments (Thomas, Thomson, Evetovits, 2015). Against this, by providing coverage for high co-payment levels (ranging from 10% to 90%), complementary health insurance may play a role in providing incentives for the oversupply of services. Given the controversial nature of attempts to abolish (or replace) complementary health insurance in the past (see section 6.1), it is unclear whether this issue will be tackled in the shorter term, and much will depend on improvements in the economic outlook and the success of other measures aimed at sustainable health system funding. It is likely that a gradual reform approach will be taken, with the first steps aimed at better regulating this sector to ensure better use of resources.

Long-term care

Acknowledging forecasts of an ageing population, particularly an estimated three-fold increase in the proportion of the population aged 80 and over, from 4.5% in 2013 to 12.3% in 2060 (Council of the European Union, 2014), several challenges need to be faced in the reform of long-term care. A recent report showed that long-term care spending, under various scenarios, is likely to grow rapidly, and that the rate of growth will vary hugely between the different public funders of care (Normand, 2015). Moreover, there is unnecessary fragmentation and complexity in the current public funding of long-term care that leads to confusion about entitlements and difficulty in brokering access to combinations of services needed by users; this may be a factor in the overreliance on residential

care (see section 5.8). Current policy goals aim to establish long-term care as an autonomous social protection scheme, bringing together the different existing regulations under one new Act on long-term care, personal assistance and long-term care insurance. As discussed above, the new legislation is anticipated to regulate the range of services to be provided, eligibility criteria as well as ensuring stable financing (Republic of Slovenia, 2016).

Enhancing health system efficiency

A number of areas can be addressed to improve health system efficiency and performance. The National Health Plan has mooted the wider use of HTA to evaluate medicines and medical devices as well as for implementing a more transparent system for public procurement in the health sector (Republic of Slovenia, 2016). The latter would involve making the purchasing system, and the current contracting mechanisms with the public network of providers, more robust, with clearer roles and responsibilities, stricter deadlines for the conclusion of negotiations and simplified administrative burdens in the purchasing process. Similarly, the National Health Plan foreshadows greater transparency in the system for granting concessions (authorizations) to private providers who contract with the HIIS and supply services to the publicly funded health system (see Chapter 3). While this is unlikely to result in selective purchasing arrangements, the aim is to shape a provider network that meets evolving population needs.

In the next few years, efficiency gains will also be sought in the area of provider payments. The hospital payment system based on DRGs could be improved significantly with the introduction of cost accounting systems that allow the calculation of national cost weights, thus ensuring that the actual price for inpatient services reflects the real cost of the respective service (rather than the current dependence on the imported Australian DRG weights). Related to this, the FFS payment catalogue for outpatient specialist services (Green Book) is currently not fulfilling needs as fees do not reflect the actual costs of services and instead provide incentives for creative billing practices (see section 7.5). Both these areas will require substantial technical capacity and investment over the medium term in order to implement the necessary changes. Finally, the payment of physicians, particularly primary care physicians, has been targeted as a potential area for improvement. Here, resolving the issue of the rigidity of the civil service pay scale that applies to all publicly employed doctors is the main obstacle. Introducing a possible mechanism that rewards quality and performance is also an aspiration, but this objective would need to be explored after the principal shortcomings of the physician payment system have been addressed.

Strengthening primary care

While Slovenia has a strong foundation in primary care, it still faces the challenges of fragmentation in service organization and delivery. In recent years, there has been an emphasis on preventive activities and better management and coordination of services, particularly for patients with chronic diseases. Building on the "model practices" framework (see section 5.2) that the government plans to roll out to all primary care practices by the end of 2018, further initiatives will look at enhancing vertical and horizontal integration of financial and human resources, as well as providing better integrated care pathways and treatment for patients (Republic of Slovenia, 2016). Better integration between health and long-term care is also needed.

The new Strategy for the Development of Primary Health Care will address the changing needs of the population and inequalities in health related to insufficient responses from health services. The Strategy will revisit the different roles of health services providers and will outline how preventive services will be upgraded to cover the entire population, in particular more vulnerable and difficult to reach groups. Existing good practices that have been identified in the health system review commissioned by the government (e.g. the introduction of clinical pharmacists into primary health care teams) will serve as a model for service optimization and will aim to achieve better health outcomes and reduce avoidable admissions to hospital. Improving and standardizing information technology support, introducing quality of care monitoring and planning human resource development in primary health care will be addressed as priority action areas to strengthen primary health care delivery.

7. Assessment of the health system

The Slovene health care system is based on solidarity. The economically active population (employees) and their employers carry the highest financial burden (almost 76%). While public financing through the HIIS is mainly progressive, VHI funding is regressive as it is based on a flat payment.

Despite having relatively high levels of cost-sharing, these expenses are counterbalanced by VHI, which is purchased by 95% of the population liable for co-payments. Furthermore, the government pays certain VHI claims on behalf of poorer households. Slovene households are largely protected from the costs of health care. Only 1.0% of households experienced catastrophic spending in 2012, more than half of which was for dental services not covered by the HIIS.

Slovenia consistently has had among the lowest reported levels of unmet health care needs in Europe for all income groups in the EU-SILC surveys. However, waiting times since 2013 have been increasingly affecting poorer households more severely. Nevertheless, satisfaction with health care provision is high.

Regarding access to health care services, there are geographic variations in hospitalizations, possibly attributable to regional variation in supply and morbidity. Acknowledging regional shortages in primary care, the number of publicly financed residency places in family medicine was increased and the concept of a health care network in family medicine and paediatrics was initiated. At the secondary care level, proposals to restructure the hospital sector and reduce capacity in various areas in the country have met strong public opposition from local communities.

Although Slovenia has a comparatively low level of income inequality, there are gradients of increasing morbidity and mortality at different income or education levels. Furthermore, marginalized population groups (e.g. undocumented migrants or Roma) exist without health insurance coverage. The goal of reducing inequalities in health is a key future aim.

Cancer, cardiovascular diseases and injuries are the main causes of premature mortality. Survival rates for breast and colorectal cancer have improved considerably since 1985 but that for cervical cancer has more recently started to deteriorate. Tobacco and alcohol consumption rates have been declining but binge-drinking remains an issue. Vaccination rates are high, with the exception of influenza, for which rates are among the lowest in OECD countries.

Many elements that could improve efficiency – such as a clear methodology for budget allocation, a strategic purchasing process or the use of HTA for coverage decisions – are missing but changes in hospital reimbursement, new health technologies and a shift from inpatient to day care have had a major impact on reducing both average length of stay in hospital and the number of acute hospital beds. However, the DRG system is considered to have several shortcomings that impede its proper functioning. Capped hospital budgets provide few incentives for efficiency and the billing of services in specialized outpatient care is inadequate, which together lead to further inefficiencies.

7.1 Stated objectives of the health system

The foundations of the health care system in Slovenia were laid by legislation in 1992, based on the European values of solidarity, equality and justice. The goal of the Health Care and Health Insurance Act was to provide Slovene citizens with affordable and good-quality health care and assure emergency treatment for those without health insurance. Since then, the health system has strived to adapt to new population needs by means of strategic and legal solutions in individual fields of health care. Requirements of the EU and advanced development processes in Europe have been followed.

Comprehensive strategic plans for the development of health care have been adopted periodically: the National Health Care Programme "Health for All by 2004" (Ministry of Health, 2000), the National Health Care Plan "Satisfied users and performers of medical services" for 2008–2013 (Republic of Slovenia, 2008) and, most recently, the National Health Care Plan 2016–2025 "Together for a healthy society" (Republic of Slovenia, 2016), which was adopted by the National Assembly on 29 March 2016 (see section 6.2).

According to the Plan, universality, solidarity, equality, equity of financing, accessibility, quality and safety of health care remain the core values of the health care system in Slovenia. The following headline targets in health have been set out for the 2016–2025 Plan's implementation period:

- improved health and well-being and lessened inequality in the health of Slovene citizens;
- accessible, successful and stable system of health care, which adjusts effectively to citizens' needs;
- satisfied patients and providers; and
- greater contribution of health care to the development of Slovenia.

To achieve this vision, the government has stated that measures will be implemented until 2025 in four priority fields of health care development:

- health promotion, health protection and disease prevention;
- optimization of health service delivery;
- improvement of the health system; and
- fair, solidarity-based and sustainable financing of the health care system.

A number of new measures are being pursued to implement or bolster these objectives. Section 6.2 gives more detail on new reform directions, particularly in the areas of improving health system performance (through, among other things, measures to enhance efficiency), optimizing health services delivery (through the development of a new primary care strategy, the extension of "model practices" and the reform of long-term care), and ensuring fair and sustainable health system funding (through measures to diversify the health system's revenue base and introducing a countercyclical financing mechanism).

In the priority area of health promotion, health protection and disease prevention, a national plan on nutrition and physical activity was adopted in 2015, and is being implemented. New legislation on restricting the use of tobacco and related products is currently under public discussion. The bill transposes all the stricter provisions of Directive 2014/40/EU related to tobacco and includes additional measures from the Framework Convention on Tobacco Control, which have not yet been implemented in Slovenia. The issue of addressing harmful alcohol consumption more systematically is also on the agenda. In other developments, the NIPH is in the final phase of redesigning and piloting equity-focused prevention programmes for all age groups. This new approach emphasizes the public health role of primary health care centres. Based on the very good results of initial pilots, funding from European structural funds has been secured for further piloting in 2017–2020. To strengthen service delivery, a pilot project to reduce waiting lists was initiated in 2015 and will focus specifically on those issues that have the biggest impact on quality of life and health outcomes, starting 2016.

The implementation of the National Health Plan is based on cooperation between partners in and outside health care. One of the key partners is civil society, including patients' associations, whose task is to provide information on the needs of health system users/patients and point out possible delays in implementation. The Ministry of Health will appoint a coordination and monitoring group, which will report regularly and publicly on progress.

7.2 Financial protection and equity in financing

7.2.1 Financial protection

Financial protection refers to how well the population is protected from the financial consequences of illness. In general, financial protection is reflected through the level of OOP payments made by individuals and households. If households are exposed to large financial consequences when they need health services, financial protection is limited. According to the Statistical Office of the Republic of Slovenia (2015a) and OECD health data (OECD, 2015a), the Slovene health care system in 2014 was predominantly publicly financed (71.4%), with private financing making up 28.6% of total health expenditure. Private financing consists of VHI (14.8%), mainly to cover co-payments, and OOP payments (12.7%), which are primarily to purchase goods and services not covered by HIIS and to access health care from the private sector.

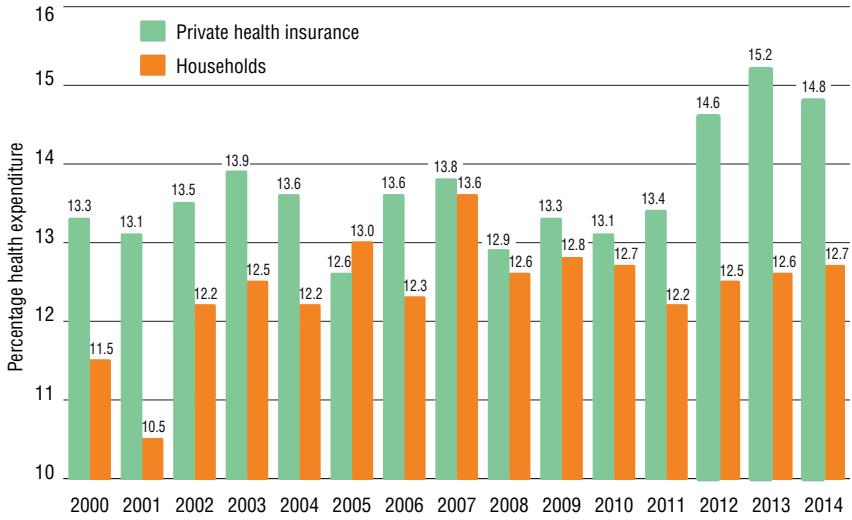
Fig. 7.1 shows the level of VHI and direct OOP payments for health services as a proportion of current health expenditure between 2000 and 2014. Since 2000, OOP payments have varied moderately (from a low of 10.5% in 2001 to a high of 13.6% in 2007) but have averaged at around 12.4% over the period. VHI levels have remained roughly at 13% over the period, although since 2012 they have exceeded 14.5%.

In spite of having relatively high levels of co-payments for the services covered in the health benefits basket (15% on average), these cost-sharing expenses are well managed by VHI, which covers almost the entire population that is liable to pay co-payments (coverage is estimated at over 95% of this group; see also section 3.4). Since 2008, the government has been paying direct claims deriving from VHI claims on behalf of poorer households that meet predefined criteria. Nevertheless, there are still OOP payments, predominantly for avoiding long waiting periods for adult dental services, MRI scans and so on.

Since the start of the global economic crisis, households' OOP expenditure as a share of current health expenditure has remained fairly stable compared with other countries (Fig. 7.2) as most of the shortfall in public funding was compensated for by VHI.

Fig. 7.1

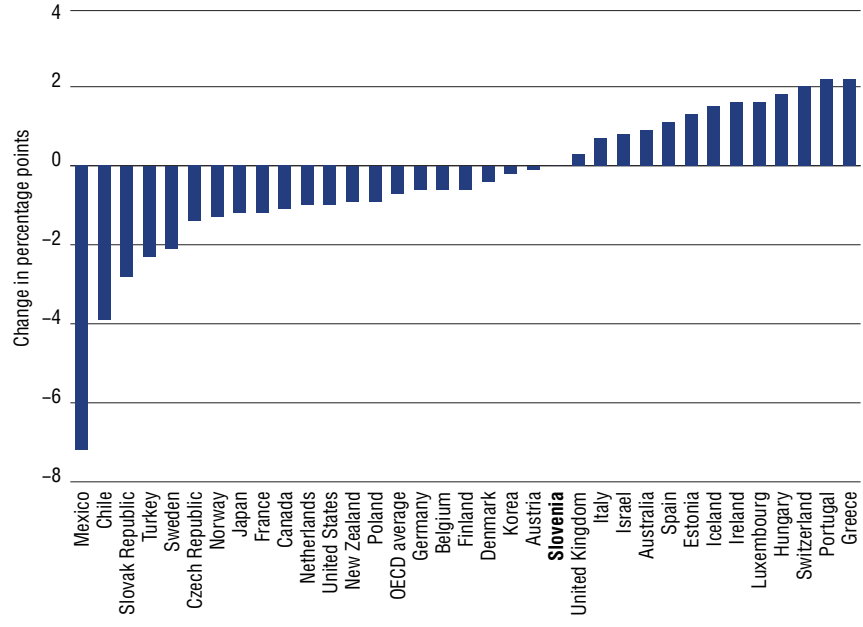
VHI and household OOP as a percentage of current health expenditure



Source: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia (2015a) for 2000–2013; preliminary data for 2014 taken from OECD (2015b).
Note: GDP deflator is used to calculate real growth rates.

Fig. 7.2

Change in the share of household OOP expenditure as a proportion of current health expenditure in 2008–2014 (or nearest year)



Source: OECD, 2015a.

According to Household Budget Survey data since the crisis, the share of total household consumption as OOP payments on health care increased from 1.8% in 2008 to 2.3% in 2012. This growth has been driven by relatively wealthy households, whose increases in OOP spending relative to total household spending are more expansive, and who spend higher levels overall than poorer households. The Household Budget Survey also revealed that households in the first two income quintiles (i.e. the two poorest quintiles) cut down on their health expenditure in 2009–2012, allocating an increasingly large share of disposable income to food and other essentials, and postponing purchases of health services and goods that have to be covered by OOP payments (dental care, prosthetics, corrective glasses). By comparison, higher income households (the fifth quintile) did not significantly reduce their health expenditure. The share of health care as a proportion of total household consumption declined for low income households (from 2.8% in 2009 to 2.5% in 2012), while the corresponding share for households with higher incomes increased (from 1.7% in 2009 to 2.1% in 2012). Higher income households limited expenditure on other goods more than they limited their health care expenditure, while households with lower incomes did the opposite (IMAD, 2014). It is important to note at this point that approximately 22 000 fewer people had VHI coverage in 2014 compared with 2008. Between 2008 and 2010, the number of individuals who had apparently lost complementary insurance coverage – and were thus exposed to co-payments and unmet need – was even higher (Thomas, Thomson & Evetovits, 2015).

Slovene households allocate the largest shares of OOP expenditure to pharmaceuticals (40%), therapeutic appliances (20%; of which 18% for glasses), various other health services (physiotherapy) and alternative medicine (11%), dental care (8%) and specialist outpatient care (8%). In 2009–2013, increases in OOP expenditure were recorded for medical goods and therapeutic appliances, while decreases in OOP expenditure were recorded for dental care, specialist outpatient care and various other health services (physiotherapy, alternative medicine).

According to EU-SILC data, Slovenia consistently has among the lowest (if not the lowest) levels of unmet health care needs in Europe for all income groups. In 2013, for example, 99.8% of the population declared no unmet needs (Eurostat, 2015a).[1] Moreover, according to the Special Eurobarometer survey (European Commission, 2014a) satisfaction with health care provision in Slovenia is high (almost 60% of people in Slovenia are "satisfied" or "fairly satisfied")

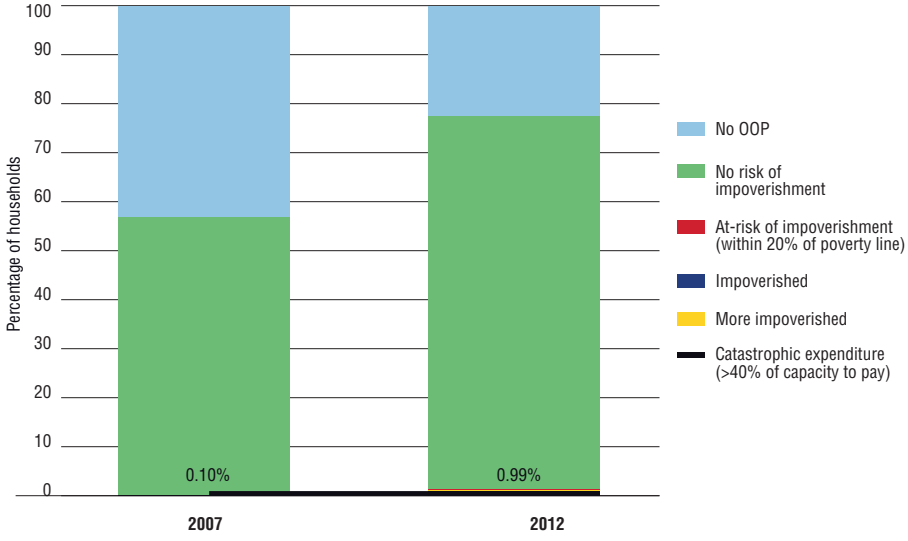
[1] It should be noted, however, that the robustness of these data for Slovenia has been questioned because of potential interpretation issues with the questionnaire (e.g. European Commission, 2016b).

and has even increased during the crisis (IMAD, 2015c). However, waiting times have been getting longer since 2013 (see section 5.3), which has probably more severely affected poorer households that cannot afford to pay for private health care services.

A methodology developed by the WHO Barcelona Office for Health Systems Strengthening to measure financial protection shows that Slovene households are largely protected from the costs of health care (Fig. 7.3). In 2007, before the crisis, only 0.1% of households experienced catastrophic spending,[2] with more than half of this spent on dental services that are not covered by the HIIS. By 2012, catastrophic spending increased marginally in absolute terms to 1.0% of households, and more than half of catastrophic spending was still for dental services. Fig. 7.3 also shows that 43.2% of households had no OOP expenditure at all in 2007 while this fell to 22.4% in 2012, indicating an increased propensity for households to purchase health care goods and services out of pocket; however, the large majority of households using OOP payments were still not at risk of impoverishment as a result of this health care spending.

Fig. 7.3

Financial protection, 2007 and 2012



Source: Calculations based on Household Budget Survey Data;
Note: "More impoverished" households are below subsistence levels and have some OOP expenditure (2007: 0.0%, 2012: 0.2%); "impoverished" households spend more OOP than their capacity to pay (2007 and 2012: 0.0%); "at-risk of impoverishment" households had consumption minus OOP below 120% of subsistence levels (2007: 0.0%, 2012: 2.2%); "no risk of impoverishment" households have consumption minus OOP that is greater than 120% of subsistence levels.

[2] Catastrophic expenditure includes households for whom OOP health expenditure is greater than 40% of their capacity to pay, households impoverished by OOP health care expenditure and households living below subsistence levels who incur OOP health care expenditure.

7.2.2 Equity in financing

The Slovene health care system is based on solidarity, which implies the concept of vertical equity (Wagstaff & van Doorslaer, 2000) whereby everybody pays according to their ability to pay. Progressive financing systems ensure better outcomes for equity in financing and greater vertical equity than proportionate systems.

The vast majority of HIIS revenues come from social contributions paid by insured people. Health care contribution rates for different categories of insured people (see section 3.3.1) are set as a percentage of the relevant base applicable to each category (e.g. personal gross salary or income, average salary in Slovenia, allowance). Table 7.1 sets out the main categories of insured people, along with their average monthly contributions in 2014. In 2014, the largest share of HIIS income came from contributions from the economically active population (75.6%), followed by contributions for pensioners made on their behalf by the Pension and Disability Insurance Institute (15.8%).

Table 7.1.
Average monthly compulsory health insurance contributions by category, 2014

Category	Number of insured	Average monthly contribution per insured (€)	Total contributions for 2014 (€, thousands)
Employed population	719510	202	1749203
Employer	719510	104	900581
Employee	719510	98	848622
Sole traders (self-employed)	70315	129	109187
Farmers	12819	40	6085
Pensioners (Pension and Disability Insurance Institute of Slovenia)	547513	56	364940
Unemployed (National Institute for Employment)	19931	104	24827
Insured by paragraph 20 of the Health Care and Health Insurance Act (self-payers/those without income but with other means to pay)	70821	20	17051
Insured by paragraph 21 (Socially disadvantaged individuals without income, paid for by municipalities)	53065	28	17766
Rest	47421	44	25043
Total	**1541395**		**2314101**

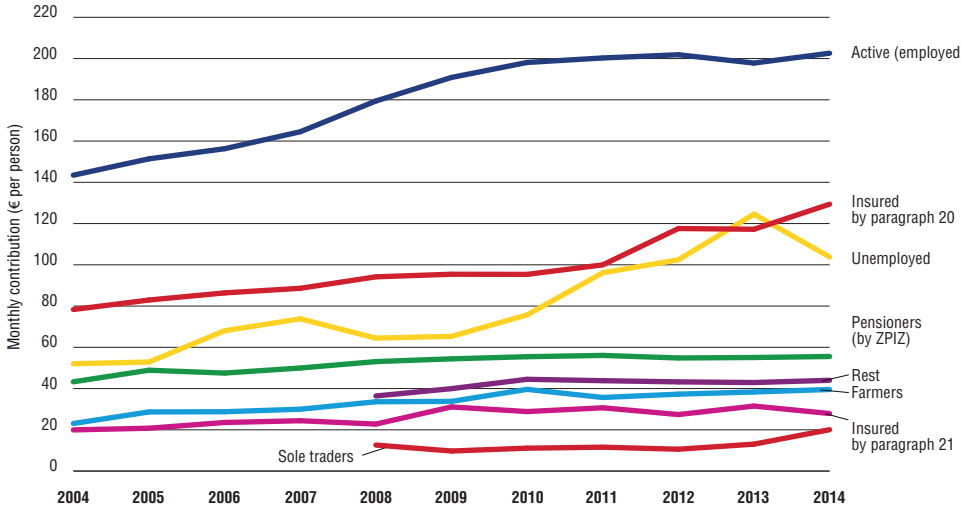
Source: HIIS, 2015a.

As shown in Table 7.1 and Fig. 7.4, the active population (employees), who pay their contributions from their salaries and wages, and their employers together carry the highest financial burden in terms of contribution rates.

In contrast, those insured under Paragraphs 20 and 21 of the Health Care and Health Insurance Act pay only €20 and €28 per month, respectively, for the same scope of benefits. In 2013, an amendment to the Act increased the contribution rates for some groups, namely sole traders, those insured under Paragraph 20, farmers and for professional athletes. There were also attempts to levy social contribution rates for health on other income (dividends from capital and other assets), but this provision was not passed by Parliament. The contribution rates for pensioners are financed from the Pension Fund by means of a monthly financial transfer to the HIIS. This transfer is raised predominantly from salary-based contributions (>90%) and general taxation. However, only an employer contribution (5.96%) is covered for each pensioner, which is less than half of the combined (13.45%) contribution rate paid by the active population (employees 6.36% and employers 7.09%).

Fig. 7.4

Average monthly compulsory health insurance contributions by category, 2004–2014



Source: HIIS, 2015a.

Public financing through the HIIS is mainly progressive with higher contribution rates broadly paid by those on higher incomes. The funding of VHI is, however, regressive being based on a flat payment. While the amount of funds through the latter channel is not a large proportion of the total financing picture, the fall in VHI coverage in the wake of the financial crisis mentioned in section 7.2.1 may indicate that such payments are impacting on coverage decisions and there may then be exposure to co-payments and potential unmet need, particularly for more vulnerable income groups (Thomas, Thomson & Evetovits, 2015).

7.3 User experience and equity of access to health care

7.3.1 User experience

Patients' experiences are regularly surveyed with a nationally agreed methodology and questionnaire (see also section 2.9.5). Satisfaction scores are generally very high. Interestingly, in the latest available report, which covers 2012, aggregated scores were highest in two privately owned specialized hospitals that provide public health services (Ministry of Health, 2013b). Whether this justifies the conclusion that the private sector is better suited to providing services with high patient satisfaction rates compared with public hospitals is less clear. There is no external oversight of the questionnaire administration process: hospitals receive instructions by mail, together with the questionnaire, and there is a high risk of selection bias inherent in the methodology. Additionally, the questionnaire itself has not changed since it was first used in 2007. Given this, an update of the survey methodology and of the questionnaire is necessary to enhance the validity of its results.

The survey is limited to patient experiences with hospitalizations in acute care and mental health settings. There is no nationally agreed survey measuring satisfaction with primary care, outpatient secondary care or other types of health service. This limitation was recognized by the government, which in 2008 passed the "Regulation on dealings with users in public health care". This includes a requirement for all health services providers to measure users' satisfaction monthly in accordance with the methodology published by the Ministry of Health. Unfortunately, these requirements were not enforced, nor has the required methodology been published.

Public hospitals are required to report on feedback from users that they collect and evaluate in their annual reports (Ministry of Health, 2014). An analysis of these reports, published in 2013 (Simčič & Poldrugovac, 2013), showed that many hospitals use different survey tools in addition to national ones, which often include outpatient services. Also in these cases, the average scores are reported to be generally good. Long waiting times are a recurring complaint. The analysis included a recommendation to adapt the national and local questionnaires in order to improve their capacity to indicate opportunities for improvement.

Public opinion with respect to health care issues is surveyed regularly in the Slovene Public Opinion Poll (Toš et al., 2004; Toš, 2013). As highlighted in Table 2.1 (see Chapter 2), 27% of those surveyed agree or strongly agree with the statement, that "as a whole the health care system in Slovenia is ineffective",

whereas 38.1% disagree or strongly disagree. Also 70.4% of those surveyed agreed or strongly agreed with the statement that "on the whole physicians can be trusted".

Another important source of information on user experiences in health care is the annual report on the protection of patient rights in Slovenia. According to the report, a total of 6611 patient contacts were recorded by 12 patients' ombudsmen in 2013 (Republic of Slovenia, 2014), which is slightly more than the corresponding number in 2012 (6249 contacts) (Republic of Slovenia, 2013). Many of these contacts in 2013 were only requests for advice or informal support and only 71 of these contacts resulted in the first stage of a formal complaint procedure (see Fig. 2.2). This is almost the same number of first-stage complaint procedures processed in 2012 (73 procedures).

Waiting times are the cause of much public debate in Slovenia and probably are a major source of patient dissatisfaction with the health care system. Waiting times can vary considerably according to the service and in most cases are much longer than in Spain and New Zealand but much shorter than Poland and Estonia (OECD, 2015a).

In 2010, the "Rules on the management of waiting lists and maximum waiting times permissible for individual health services" led to the establishment of a nationwide system of monitoring waiting times for public health services. The system requires monthly reporting of waiting times for a predetermined list of services, which include operative and diagnostic procedures and outpatient visits. The introduction of these Rules had an initial impact on waiting times, reducing them significantly in the first few months after their adoption. However, waiting times have tended to increase in subsequent years. Moreover, users and health care providers have raised concerns about the correctness of the data.

From 2016, a new system of nationally integrated e-referral and e-waiting lists will allow more detailed and accurate monitoring of waiting times for a broad set of services. In addition, the Ministry of Health recently launched an initiative to analyse waiting times and pilot innovative approaches to reduce them in two regional hospitals (Ministry of Health, 2015d). The results of this initiative are expected to inform future actions to reduce waiting times.

Considering the data above, it is somewhat surprising that Slovenia had the lowest levels of self-reported unmet needs for medical examination or treatment in the EU, according to Eurostat data for 2012 (Eurostat, 2013). It could be speculated that the low level of unmet needs found in Slovenia might reflect translation issues leading to a different understanding of the questionnaire items that this indicator is built upon (European Commission, 2016b).

7.3.2 Equity of access to health care

In recent years, the public debate in Slovenia about equity of access to health care has concentrated mainly on the geographic distribution of the provision of services and differences in health status found in different income or education level groups.

Investigations of geographic variations in the provision of services are usually concentrated on hospitalization data, probably because of the detailed data available in the national database (Statistical Office of the Republic of Slovenia, 2012, 2013). In addition to observations of variations in acute care hospitalization rates in Slovenia's statistical regions, efforts in recent years have concentrated on a subset of hospitalizations. One example is the report on avoidable hospital admissions (Garcia-Armesto et al., 2014c). These admissions to hospitals are considered to be avoidable if good outpatient services, particularly at primary care level, are provided. As such they are often used as an indicator for the quality of primary care received.

Geographic variations in hospitalization have been found whenever they have been analysed (Statistical Office of the Republic of Slovenia, 2013; Garcia-Armesto et al., 2014a–c). However, the reasons for such variations are much more difficult to determine. They may reflect supply factors in the various regional hospitals, differences in morbidity across the country, availability of GPs, differences in clinicians' prevailing customs or other factors (Appleby et al., 2011).

In the public debate, geographic availability of health care services is epitomized by the concept of the health care network. The "Resolution on the National Health Plan for 2008–2013 (Republic of Slovenia, 2008) defined the health care network as "the distribution in space and time of the capacities of public health care providers and concession holders, including human, material, spatial and other resources, with which the state ensures optimal access to health services at primary, secondary and tertiary level to its residents". The Resolution found that the lack of primary care physicians in some areas of the country was a particularly pressing issue.

Since the publication of the Resolution, some actions have been taken, notably the relative increase in the number of publicly financed residency places that have been made available in the area of family medicine, particularly when compared with other medical training specialties (Medical Chamber of Slovenia, 2015b). Another is the publication and adoption by the Health Council of the concept of the health care network in the area of family medicine and paediatrics (Petrič & Žerdin, 2013). The document sets specific objectives, such as the expected number of patients per GP or primary care paediatrician, and is intended to

guide further actions taken by stakeholders. While these actions are expected to have important midterm and long-term implications, ensuring the availability of primary care physicians in some areas continues to be a challenge.

At the secondary level, the main issue on the policy agenda has been that relatively small regional hospitals offer a wide range of specialized services. This implies that providers sometimes perform only a few procedure of a specific type per year, raising concerns about patient safety and economic efficiency. In the past, proposals to reduce the number of hospitals that offer specific procedures or to reduce the number of hospital departments in various areas in the country have met strong public opposition from local communities, which felt that they would be disadvantaged. Two examples of such proposals are the 2010 Health Care Services Bill and the "Strategy for the development and comprehensive governance in the area of obstetrics and gynaecology in Slovenia" (Ministry of Health, 2010), neither of which ended up being adopted by the competent authority.

Perhaps the most striking feature of the public debate on the issue of the health care network is the lack of Slovene studies linking the availability of services with outcome measures such as patient mortality, the international evidence on the issue notwithstanding. For example, there is no research investigating the relationship between the number of procedures performed by an individual or a hospital and the outcome for patients. Similarly, there is no study relating GPs' workload, which is higher in underserved areas, and patient outcomes.

A study published in 2011 provides an extensive investigation of health inequalities in Slovenia, particularly with respect to income and education level (Buzeti et al., 2011). Gradients of increasing morbidity and increasing mortality at different income or education levels were found in almost all the cases considered in the analysis. While it is encouraging that Slovenia has a comparatively low level of income inequality as a whole, with a Gini index of 25.6 (World Bank, 2015a), the data on inequalities in health represents a clear call for action. Indeed the goal of reducing inequalities in health is prominently in the new Resolution on National Health Care Plan 2016–2025, which recently underwent public consultation and was adopted in early 2016 (Republic of Slovenia, 2016).

A recent needs assessment report concerning the area of health promotion and prevention featured an extensive chapter on marginalized population groups (NIPH, 2014b). The main reason for the exclusion of such marginalized groups from health services is the lack of health insurance. The report pointed out that undocumented migrants and entrepreneurs undergoing bankruptcy

procedures are not counted in the official statistics and so coverage rates may be slightly overestimated. Additionally, ethnic minorities, such as the Roma population, migrants and homeless people are marginalized groups with specific needs. In order to fulfil these needs, the report calls for, among other things, training of health care workers to gain cultural competencies to enhance care for these groups, and for a proactive approach in the area of prevention and health promotion activities.

7.4 Health outcomes, health service outcomes and quality of care

7.4.1 Population health

Since 1993, total life expectancy in Slovenia has been increasing, from 73.6 years in 1993 to 80.5 years in 2013 (see also section 1.4). Life expectancy in Slovenia is higher than the average for the EU13 and just slightly below the EU average of 80.6 years in 2013 (Eurostat, 2015b).

Cancer, cardiovascular diseases and injuries are the main causes of premature mortality in Slovenia and contribute to 75% of the difference in life expectancy between Slovenia and the EU15 (Zatonski, 2008). Cardiovascular diseases remain the leading cause of death in Slovenia, despite the fact that cardiovascular mortality (218.4 per 100 000 population in 2010, the latest year with comparable data for Slovenia and the EU) has been declining since the mid-1980s in all age groups and in both sexes. It equals the EU28 average but is still considerably higher than the EU15 average (164.8 per 100 000 in 2010). Since 2009, cancer has replaced cardiovascular diseases as the leading cause of death in Slovene males. Trends in cancer mortality have shown only a slight decrease since the end of the 1990s.

Cardiovascular diseases are also the most frequent cause of hospitalizations, followed by cancer, injuries, respiratory diseases and gastrointestinal diseases. Respiratory and musculoskeletal diseases are the main reasons for outpatient contacts (NIPH, 2016a). The incidence of cancer is still increasing at an average annual rate of almost 3% and the crude incidence rate in 2012 was 645.7 per 100 000.

The five-year relative survival rate for breast cancer in Slovenia has been increasing steadily since 1985 and was 83.6% in 2013, which is similar to the average in OECD countries (84%). For cervical cancer, while both the incidence and mortality rates have been steadily decreasing (in 2014 these reached their

lowest historical levels at 6.6 per 100 000 and 1.9 per 100 000, respectively), the five-year relative survival rate has instead worsened since 2007, decreasing from 76.1% in 2007 to 56.5% in 2013 (OECD average 65%). The decrease in cervical cancer incidence and mortality is most likely a result of successful screening in the national programme for the early detection of cervical cancer, with early detection and treatment of precancerous and early cancerous cervical lesions in women participating. The decrease in survival of patients with cervical cancer is most likely a result of late diagnosis of the cancer at its advanced stages, when treatment is often not successful, in those who have not attended the national screening programme. This indicates that greater efforts are needed to promote the screening programme for early detection of cervical cancer among its target group of women. For colorectal cancer, the relative five-year survival rate has largely improved since 1985, reaching 61.3% in 2013, which is almost equal to the OECD average of 62.2% (OECD, 2015a).

In 2012, 23% of adults were smokers, with the highest rate (25%) among men aged 25–39. Nevertheless, smoking rates have been declining since the late 1990s, particularly among men. In terms of alcohol consumption, Slovenia has one of the highest rates in Europe. Since 2001, the rate for heavy and moderate drinkers has decreased, becoming 10.2% and 69.3% of adults, respectively, in 2012. However, over this period there has been an increase in high-risk (binge) drinking among men and women, with high rates of drinking still persisting among Slovene youngsters.

In Slovenia in 2012, 44% of adults were of normal weight, 37% were overweight and 17% were obese. Higher overweight and obesity rates are found among men; since 2001 the rate of overweight men decreased but the rate for obese men increased (Tomšič et al., 2014). Both rates increase with age and decrease with level of education.

7.4.2 Health service outcomes and quality of care

The National Strategy for Health Quality and Safety (2010–2015) aims at systematic development of continuous improvements in health care. Strategic objectives are

- the development of quality management systems;
- the development of a clinical culture of safety and quality within the health sector;
- the development and implementation of education programmes in quality and safety; and
- systematic improvement of the efficiency and effectiveness of health care.

During the period of the strategy, most hospitals and many other providers accredited their quality management systems through one of the international standards (e.g. ISO 9001, Joint Commission International, DNV International Accreditation Standard for Hospitals). In addition, financial incentives for the accreditation of providers and for publishing quality indicators were part of the contracts between the HIIS and providers. However, as a quality improvement tool, practical implementation of other concrete measures in line with the National Strategy has been rather sluggish (Panteli et al., 2015).

Slovenia introduced health care quality indicators in 2010. Several methodologies were applied to compile an extensive list of such indicators, namely those of the OECD Health Care Quality Indicators project, WHO Performance Assessment Tool for Quality Improvement in Hospitals, indicators developed by the Slovene Ministry of Health and others formulated by the Medical Chamber.

Quality indicators for measuring acute exacerbations of chronic diseases show that 30-day mortality after admission to hospital for acute myocardial infarction in Slovenia is below the average for OECD countries. There is large variation between the high (better performers) and low volume hospitals within the country. In contrast, the indicator for 30-day mortality after admission to hospital for ischaemic stroke shows that the rate for Slovenia is 48% higher than the OECD average and variation between hospitals is less prominent. In maternity care, Slovenia has one of the lowest caesarean section rates among OECD countries (19.5 per 100 live births compared with the OECD average of 27.6) (OECD, 2015a).

Vaccination rates for diphtheria, tetanus, pertussis, polio and Haemophilus influenzae B (5-antigen vaccine) were 95.3% and for MMR were 94.3% in 2013, with small variations in the rates over the last few years. In contrast, vaccination rates for influenza are among the lowest in OECD countries; in 2013/2014 the rate for those aged 65 or over was 12.8% (NIPH, 2016b).

Hospitalizations for asthma, chronic obstructive pulmonary disease, congestive heart failure, hypertension and diabetes are considered to be potentially avoidable since they could be at least partly prevented with adequate primary care measures. In Slovenia, hospital admissions for asthma (42.6 admissions per 100 000 population in 2013) show a stable trend over time and are comparable to the OECD average (41). Admissions for chronic obstructive pulmonary disease (108.3 admissions per 100 000 population in 2013) are declining and are well below the OECD average (204). Hospital admissions for congestive heart failure slightly increased by 3% between 2009

and 2013, to 305.6 admissions per 100 000 population and are 25% above the OECD average (242). Avoidable hospital admissions for diabetes (112.3 admissions per 100 000 population) also show a stable trend over time and are 30% below the OECD average (151). Although the number of major lower extremity amputations in adults with diabetes declined between 2011 and 2013, this rate (15.3 admissions per 100 000 population in 2013) remains one of the two highest rates among OECD countries. There are also considerable differences in amputations between men and women, the former being twice as affected (OECD, 2015a).

Drug prescribing indicators measure quality of prescribing in primary care, for example regarding the management of risk factors for diabetic patients or the prudent use of antibiotics. Looking at the percentage of patients with diabetes who had at least one prescription of cholesterol-lowering medication or recommended antihypertensive agent in the past year, Slovenia lags behind the OECD average for cholesterol-lowering drug prescriptions (62% and 69%, respectively), but records higher levels of recommended antihypertensive agents (92% and 77%, respectively). In terms of OECD drug prescribing indicators, Slovenia's rates for the overall volume of antibiotics (12.5 defined daily doses per 1000 population) and for second-line antibiotics (10% of all antibiotics) prescribed in primary care placed it in the group of countries with the lowest rates (OECD, 2015a).

Patient-reported outcome measures have not yet been introduced in Slovenia.

7.4.3 Equity of outcomes

The pattern and magnitude of health inequalities in Slovenia are similar to those found in other EU Member States. Lifestyle factors such as diet, physical activity, overweight and obesity, alcohol consumption and smoking are the least good in lower socioeconomic groups. Regarding self-assessed health status, more women than men in the groups with primary and vocational education assessed their health as being poor. In 2011, the percentage of those who assessed their health as good or very good increased with increasing levels of education. Prevalence of arterial hypertension and heart disease in those aged 45–64 years was highest in the group with the lowest level of education (primary school or less) for both men and women, while it was the lowest in the group with tertiary education (Buzeti et al., 2011). According to the European Health Interview Survey conducted in 2007 (NIPH, 2007), low level of education is associated with a significantly increased risk of type 2 diabetes mellitus among women aged 40–64 years. The level of education was not associated with prevalence

rates of known diabetes in men. Women living in families with low income per family member had a higher risk of developing diabetes (NIPH, 2007). Furthermore, an older study on the influence of socioeconomic differences on cancer incidence in Slovene municipalities showed an association between economic deprivation in the eastern part of Slovenia and a higher risk for head and neck cancer (Zadnik, 2005).

7.5 Health system efficiency

7.5.1 Allocative efficiency

Resource allocation

The allocation of funds from payers to providers – if aligned to societal health care needs – has the potential to play a key role in improving a health system's overall performance in terms of quality and cost. In this regard, there is no sophisticated approach for health system budget allocation in Slovenia: budgets are allocated to different sectors of the health system based on historical volumes, with no general formula or applied methodology. Nor is there a strategic purchasing process that would bridge the gap between planning functions and the budgetary allocation of resources. Since many crucial elements that enable allocative efficiency are missing, it is highly likely that resources are not currently allocated as efficiently as they could be.

HTA in relation to improved efficiency

Experience from other countries has shown that HTA significantly contributes to increased cost-effectiveness. As discussed in section 2.7.2, HTA is not formally established in Slovenia to aid the introduction of new health care technologies into the compulsory health insurance system. Since HTA is applied in an ad hoc way, providers enjoy wide scope in supplying services that are reimbursed by the health insurance system. However, when HTA is applied, two relevant tracks of evaluation are in place, one for pharmaceuticals and one for new diagnostics treatments, procedures and therapies. Pharmaceuticals are systematically evaluated after the marketing authorization stage in order to be placed on the positive or intermediate list, with effectiveness being the main criteria, along with costs and cost–effectiveness. However, while a special protocol for evaluation of new diagnostic treatments is in place, it is not applied systematically (see section 2.7.2). The protocol reflects the government's general intention to implement the European endorsement of HTA, which was established in Directive 2011/24/EU on patient rights to cross-border health care. Furthermore, the NIPH and Institute of Economic Research were involved in the

European collaboration platform EUnetHTA JA2 and currently the Ministry of Health is a member of EUnetHTA JA3.

7.5.2 Technical efficiency

Hospital indicators

The average length of stay in hospital and the hospital bed occupancy rate have fallen since the early 1990s, mostly through the use of new health technologies and changes in hospital reimbursement methods. In 2003, the hospital payment method was changed from bed-day payments, which have inbuilt incentives to provide longer inpatient treatment, to a DRG system, where this is not the case. In addition, new health technologies entail shorter patient treatment, earlier discharge and an increase in day hospital services. The average total length of stay in hospital decreased from 11.4 days in 1990 to 6.9 days in 2014, which also resulted in a larger turnover of patients and, consequently, in less demand for hospital beds. In line with this development, the occupancy rate of hospital beds has fallen from 82% in 1990 to 68% in 2012 (see Fig. 4.4).

The combination of factors – changes in hospital reimbursement, new health technologies and a shift from acute inpatient treatment to more day hospital treatment – has also had a major impact on reducing the number of acute care beds. The total number of hospital beds has gradually fallen from 695 per 100 000 population in 1980, to 505 in 1990 and to 455 in 2013 (NIPH 2015d; WHO Regional Office for Europe, 2015a; see Fig. 4.2).

Payment systems: inpatient hospital care

Slovenia has attempted to improve efficiency through the use of a DRG (case-based) system since 2004 (see also section 3.7). However, several shortcomings with the current DRG system impede its proper functioning. The overriding problem is that national cost weights cannot be calculated (except for a small number of DRGs where normative cost estimates have been made) because there are no standardized rules for cost accounting in Slovenia. Currently, Slovenia uses an imported version of Australian DRG system and these hypothetical DRG-based case payments are valued on the basis of imported Australian cost weights. This is an important problem because imported (and potentially inadequate) cost weights will lead to overpayment for some DRGs and underpayment for others. In addition, hospitals' financial statements are not sufficiently detailed to be used for the adjustment of cost weights. As a result, there is no reliable information on whether the actual price for inpatient services reflects the real cost of the particular service. Moreover, there is no adjustment of DRG-based payments for day cases, short-stay or long-stay outliers; nor is there any adjustment for readmissions or (re)transfers – each case is counted

separately. Finally, monitoring of reported case (DRG billing) data by HIIS is impaired because there are very few medical reviewers (monitoring coded data) and no controls over medical documentation in hospitals – although there is some oversight by complementary health insurance (Panteli et al., 2015).

Another related issue is weak incentives for increased efficiency: hospital management has only weak incentives to increase the number of cases by making more efficient use of available infrastructure (e.g. by increasing the number of day cases or reducing length of stay) because hospital budgets are capped. At the same time, hospital management may accept higher costs of care (e.g. for expensive technologies) because ultimate financial responsibility for covering deficits is borne by the government (as the owner of hospitals) (Panteli et al., 2015).

There are several options for making use of DRGs to increase efficiency. One option is to use DRGs for the allocation of a national or regional budget. In Slovenia, the DRG payment system plays a general role in budget allocation in acute inpatient care, but there have been no major shifts of resources between hospitals because there has no specific (cost) analysis of each hospital. Currently, budgets are allocated according to available resources and historical volumes. Another option is to increase the importance of DRG-based case payments and to reduce the importance of hospital budgets. Currently, DRG-based case payments do not play an important role in determining the overall budget size as most hospitals reach their DRG-based budget cap well before the end of the year. If the budget cap were changed into a target budget and hospitals were allowed to provide services beyond the budget, they would have a stronger incentive to increase the number of treated patients (although the strength of the incentive could be reduced by applying a DRG lower base rate for services provided in excess of the budget, for example at 35% of the normal base rate as happens in Germany). While DRG-based case payments potentially provide stronger incentives for productivity, a disadvantage is that they reduce macro-level budgetary control. Whatever improvements are eventually adopted, it is important to carefully manage a transition to stronger financial incentives for hospitals on the basis of DRGs as increasing the strength of incentives for efficiency can also have unintended consequences (Cots et al., 2011). Like most other countries Slovenia would need to gradually increase the strength of DRG-based incentives during a transition period and the effects would need to be carefully monitored.

Payment systems: outpatient specialist care

As described in section 3.7, the payment for outpatient specialist care is based on a FFS catalogue colloquially known as the Green Book, which was originally developed during socialist times with the aim of measuring physician activity rather than as a means of defining FFS rates. Furthermore, it has only had minor updates because stakeholders who are jointly responsible for updating payment systems in Slovenia have failed to agree collectively on changes. Consequently, such fees are defined in terms of a certain number of points, which are based on historic estimates of costs and time. The actual fee level is determined during the process of annual negotiations, which defines a point value in euros.

There are several problems with the billing of services on the basis of the Green Book. First, definitions of the billable FFS items (about 2000) and the billing rules are not sufficiently clear, leaving ample room for creative billing practices and complicating monitoring processes by HIIS. Second, fee levels for similar services provided by different specialists differ enormously (e.g. the fee for the excision of a skin lesion is 10 times higher for surgeons than for dermatologists), and this can lead to excessive referrals. Third, and most importantly, fee levels do not adequately reflect the costs of service provision and some fees are overvalued while others are undervalued. Thus, the current payment system has weak incentives for efficiency as provider-level budget caps are easily reached with the help of creative billing practices and do not create incentives for providers to deliver required services or to attract patients (Panteli et al., 2015).

7.6 Transparency and accountability

The preparation of policy and regulation proposals should follow recommendations in the "Resolution on legislative regulation" (2009), which include the requirement to consult experts and stakeholders. Policy and regulation proposals are regularly posted on government web sites for public debate. Despite such formal processes for public consultation, a report by CIVICUS in 2011 found that "The government refuses to recognize civil society as a relevant actor and partner. Consultation is often formal and civil society neutralized, although there are a few positive exceptions." (Rakar et al., 2011). In its preamble, the Resolution is very critical of the way in which such proposals were prepared in the past, particularly with respect to their expected impacts. Consequently, the Ministry of Public Administration published a manual detailing how to perform ex-ante impact assessments of policy and regulation

proposals, as required by the Resolution (Ministry of Public Administration, 2011). Impact assessment documents, including financial impacts, are part of the documentation required by the government to pass any such proposal, and hence are usually publicly disseminated on the government's web site.

The government budget is required by law to refer to performance targets (Public Finance Act). In 2010–2011, the budget was constructed in such a way that each spending item had one or more performance indicators attached to it. This was considered a positive step towards decreasing the influence of short-term political interests on decision-making regarding the budget (Radej, 2009). The government budget, including its targets and indicators, are publicly available on the Ministry of Finance web site.

In 2012, the OECD Public Governance Review for Slovenia found that "strategy documents are clear, but the issue is the extent to which these are assimilated in practice by the central public administration into its policy decisions" (OECD, 2012). This observation was also echoed in the 2010 Policy Mix Peer Review, which found that "National programmes (though formally binding) are considered as non-binding political documents…" (ERAC Policy Mix Expert Group, 2010). These observations relate to policy-making in all government sectors, including the health sector.

In the specific case of health care, the National Health Plan represents the medium and long-term planning document that sets goals for the next period of 5 to 10 years. In the case of the National Health Plan for 2008–2013, no comprehensive report has yet been produced on the achievement of the goals set in the documents. On a more positive note, the proposal for the new "Resolution on the National Health Care Plan 2016–2025" (Republic of Slovenia, 2016) was announced in June 2015 and underwent a public consultation period lasting two months. This represents an attempt at transparency on two levels: on the one hand, it is testimony to the well-established notion that all policy and legislative proposals must undergo public debate; on the other hand the renewal of a long-term plan in the area of health care increases the transparency and accountability of government by indicating future policy directions against which government actions can be assessed by the public.

Additionally, one of the pillars of the proposed "Resolution on the National Health Care Plan 2016–2025" relates to improving governance in health care. Among the various actions to be taken, the proposal recognizes, for example, the need for systemic interventions aimed at decreasing the risk of corruption,

strengthening provisions aimed at protecting the public interest, improving oversight of public–private partnerships in health care and improving governance of health care institutions.

In terms of accountability, there are many areas within the health care system where relationships are not sufficiently clear. The Court of Audit report on supervision mechanisms in the health sector included oversight mechanisms for which the Ministry of Health is responsible, but also many for which responsibility lies with the HIIS (financial oversight), the Medical Chamber and other professional associations (professional oversight) and the inspection procedures delegated to specific government bodies (Court of Audit, 2011). The overall assessment of the Court of Audit was negative, requiring the Ministry of Health to intervene on different levels. Work commissioned by the Ministry of Health in 2015 to enable evidence-informed policy-making in this direction further highlighted areas where responsibilities in the Slovene health system need to be defined more clearly and accountability needs to be strengthened (Panteli et al., 2015; Thomas, Thomson & Evetovits, 2015).

Overall, while there are many areas in which transparency and accountability mechanisms within the health care system can be improved, at the same time, the very reports cited here show progress as their public availability implies an effort to ensure transparency and increase accountability.

8. Conclusions

Key findings

The Slovene population shows a continued increase in life expectancy, which in 2013 almost reached the EU average. The gap between men and women in life expectancy has been declining since the mid-1980s. Outcomes have improved through decreasing premature mortality from ischaemic heart disease in men, a result of lifestyle changes and early detection of risk factors. In turn, cancer has become the main cause of death in men, while women owe improvements to nationwide implementation of cervical and breast cancer screening programmes. The extension of life expectancy continues after the age of 65 as the life expectancy for both men and women is increasing. Slovenia is one of the countries with the lowest infant mortality in the world. Nevertheless, having one of the lowest fertility rates, Slovenia is demographically challenged for the future.

Access to health care services can be seen as good, although growing waiting lists for some outpatient specialist services is a cause for concern and a target for government action. Geographic variations in hospitalizations are possibly because of supply factors in the various regional hospitals, such as varying morbidity across the country and the availability of GPs. Some actions have been taken to address the lack of primary care physicians in certain areas, such as an increase in the number of publicly financed residency places and the development of the concept of a health care network in the area of family medicine. At the secondary care level, past proposals to rationalize the number of hospitals or the composition of hospital departments in various areas in the country have met strong public opposition from local communities, thus impeding progress.

Primary care has always been a preferred segment of the health care system, at least nominally. Several interventions have been carried out through primary care, ranging from programmes for the early detection of cardiovascular risk

factors to the establishment of health-promoting centres in primary health care centres. In addition, the establishment of "model practices" with additional nurses with a prevention role strengthening the GP team has allowed much needed time to be dedicated to patients with chronic conditions and to the secondary and tertiary prevention of such conditions. This has enhanced the role of GPs. Nevertheless, for almost two decades after its independence, Slovenia was struggling with a shortage of medical doctors, which was resolved through the opening of a second medical faculty in Maribor and enhanced acceptance of foreign doctors, mostly from southeastern Europe. However, because of austerity measures, these increases have come to a halt and since 2012 the two medical faculties have started reducing admission numbers. In turn, nursing education has expanded through the opening of new schools and is likely soon to exceed the numbers of registered nurses needed by the system.

Since the 2000s, the country's ability to push through health reforms has been in stalemate. The main systemic reform in the organization of health care was the reform of the public health institutes, where the former national and nine regional institutes were merged into two new national institutes – the NIPH and the NLHEF. Apart from that, Slovenia's health system has not changed significantly in the organizational sense over the last few years. This is particularly true of hospitals, which all remain in the same locations and with the same departments. It is true, however, that lengths of stay for acute hospital care have been shortened and that consequently the turnover of patients has increased. A combination of factors – changes in hospital reimbursement, new health technologies and a shift from acute inpatient treatment to day hospital – has had a major impact on reducing both average length of stay in hospital and the number of acute care hospital beds since the late 1980s. This trend stopped with the adoption of austerity measures, which capped hospital budgets at lower levels than before 2009. This move caused financial losses in almost all hospitals, which are very sensitive to any change in the basic income coming from compulsory health insurance.

Slovenia continues to have a single insurer for compulsory health insurance, the HIIS, which managed its budgets relatively well in the period of the most pronounced financial crisis (2009–2014). The HIIS entered the period with some accumulated reserves and was able to shift a part of its expenditure over to complementary health insurance (i.e. VHI). Similarly, in spite of several nominal attempts to reform the system of co-payments, which is buffered by the complementary insurance system, the system still remains in place. Complementary insurance increased to approximately 15% of total health expenditure in 2014, absorbing many deflected costs from compulsory health insurance; consequently, this shifting of costs might have almost reached its limits.

Challenges for the future

One of the most important challenges is how to ensure the future financial stability and sustainability of the health care system. While it managed to overcome the huge challenges of the economic and financial crisis, the crisis also revealed its vulnerability. The Slovene health care system takes up a rational share of GDP but it has also spent most of its reserves under the current financing model. It relies strongly on the contributions from salaries, which have remained the most important source of revenue. At the same time, expenditure that would have otherwise turned into a net deficit for the HIIS was diverted to complementary health insurance. As complementary health insurance is a private insurance based on flat rate premiums, it remains controversial in view of its regressivity and the fact that together with other OOP payments it represents almost 30% of total health expenditure. This means that there is limited space to increase private contributions and OOP payments, while at the same time there are still other incomes where no levy is imposed for health insurance. Moreover, with shifting of costs from compulsory to complementary health insurance during the time of economic downturn, overall financing has become more regressive. This could eventually lead to it becoming unaffordable for socially vulnerable groups, reducing access to health care services. Overall, establishing a financial basis for the health system that increases solidarity is an issue that also involves the future of complementary health insurance in the system. In public financing, other policy issues that will require attention is the option of establishing a countercyclical financial mechanism to deal with times of economic downturn, aided by a further diversification of the sources of revenues. Another important potential source of health sector financing is the national budget, which currently has one of the lowest contributions to a country's total health expenditure in the EU.

An increasingly important challenge for the Slovene health care system is the changing epidemiological pattern. As Slovenia managed to become a leader in reducing infant mortality and premature mortality from cardiovascular diseases, it is becoming evident that cancer control and addressing multimorbidities are the next challenges. Cancer will need a multilevel approach, as initiated by the first national cancer control programmes, with strong primary and secondary prevention, efficient screening programmes, early diagnosis and treatment in specialized centres. Multimorbidity will require strengthening of the primary care efforts and close coordination. The "model practices" approach should see nationwide dissemination, and case managers will need to be introduced. Home care and long-term care are essential in assisting acute care providers in coping with this challenge. The role of nurses will have to be strengthened and the particular roles of the different nursing professionals who have entered

primary care since the late 1990s need to be more closely defined. Preventive nursing through the organization of district ("patronage") nurses remains one of the cornerstones of communication between preventive and curative services.

Among the governance challenges at the regulatory levels, it is important to stress particularly the following three:

- planning and forecasting the needed and required human resources for health, particularly the number of regulated health professionals;
- developing incentives for health professionals and health care providers at all levels; and
- assessing socioeconomic differences in health by social, economic and geographic strata.

The numbers of medical doctors and nurses, whose availability has oscillated in the past, need to be stabilized to ensure effective coverage and consistent planning of educational capacity. For this purpose, a more structured approach at the policy as well as the technical level is warranted. A special challenge in planning health professional capacity is the expectation of nursing professional organizations that the ratio between registered nurses and health technicians should shift in favour of the former. This requires a close revision of the competencies of each professional group as well as adequate adjustments in the educational capacities at all levels. A feasibility study of the financial consequences will also be required.

Rather strictly regulated salary, reimbursement and financing systems have not been able to provide adequate and motivating incentives for health care providers at all levels of care, neither for individuals nor for organizations, such as primary health care centres and hospitals. Resolving the issues surrounding provider-payment systems has the potential to contribute to greater health system efficiency.

Despite the fact that Slovenia has a comparatively low level of income inequality as a whole, gradients of increasing morbidity and increasing mortality at different income or education levels have been found in research. There are marginalized population groups without health insurance. The goal of reducing inequalities in health is prominent in the new National Health Care Plan 2016–2025 (Republic of Slovenia, 2016).

As much as the Slovene health care system is performing fairly well and has recently shown considerable resilience, it is clear that its conceptual framework set by the legislation from 1992 needs to be thoroughly revised. The multiple

challenges listed above require a look into the future with a more innovative perspective. Regulation of the system through financial leverage alone will not be sufficient for an adequate response. Challenges posed by some unfavourable trends in obesity, smoking prevalence and physical activity further confirm the need for comprehensive reform. The funding and provision of long-term care is another area where consolidation of eligibility criteria, funding and benefits is overdue, particularly in view of the large OOP expenditure incurred by service users.

While many reform attempts in the past have failed, mostly through lack of political support and lack of consensus among stakeholders, the coming years present a new opportunity for renewed efforts. Armed with the most recent exercises in evidence-based policy-making (through a comprehensive health system review) and the newly adopted National Health Plan, which had widespread stakeholder engagement, much of the ground work in strategic reform planning has already been achieved. The next steps will be to translate this work into concrete actions in the chosen priority areas.

9. Appendices

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9.2 Principal legislation

Legislation

Alternative Medicine Act, 2007

Balancing of Public Finance Act, 2011

Civil Servants Act 2002 (amended 2008)

Complementary and Alternative Medicine (CAM) Act

Data Collection Healthcare Act 2000

Financial Social Assistance Act and Exercise of Rights to Public Funds Act

Fiscal Balance Act, 2013

Health Care and Health Insurance Act, 2006 (and subsequent amendments)

Health Services Act, 2015

Medical Devices Act, 2009

Medicinal Products Act, 2014

Mental Health Act, 2008

Parental Protection and Family Benefit Act 2014

Patient Rights Act, 2008

Pension and Disability Insurance Act, 2013

Pharmacies Act, 2004

Public Finance Act, 2011

Public Sector Salary System Act

Social Care of Mentally and Physically Handicapped Persons Act 1983

Social Security Act

War Disability Act

War Veterans Act

Regulations and decrees

Rules on marketing authorization of medicinal products for human use (Official Gazette of the Republic of Slovenia, 57/2014).

Rules on pharmacovigilance of medicinal products for human use (Official Gazette of the Republic of Slovenia, 57/2014).

Rules on the classification of medicines on the list (Official Gazette of the Republic of Slovenia, 35/2013).

Rules on medical devices (Official Gazette of the Republic of Slovenia, 37/2010, 66/2012).

Rules on the vigilance of medical devices (Official Gazette of the Republic of Slovenia, 61/2010).

Rules on the method and procedure of analytical, pharmaco-toxicological and clinical testing of medicinal products for human use (Official Gazette of the Republic of Slovenia, 86/2008, 37/2010).

Rules on the pricing of medicinal products for human use (Official Gazette of the Republic of Slovenia, 102/2010 as amended).

Rules on the manufacturing and trade with medical devices (Official Gazette of the Republic of Slovenia, 37/2010).

Rules on the management of waiting lists and maximum permissible waiting times for individual health services (Official Gazette of the Republic of Slovenia, 63/2010).

Rules on testing the medical knowledge of healers who do not have a health education, 2008.

Rules governing urgent medical aid services (Official Gazette of the Republic of Slovenia, 106/2008 and subsequent amendments).

Rules on dealings with users in public health care (Official Gazette of the Republic of Slovenia, 98/2008).

Rules on compulsory health insurance, 1994 (and subsequent amendments).

European Union directives

Regulation (EEC) 1408/71 on the application of social security schemes to employed persons and their families moving within the Community.

Council Directive of 20 June 1990 on the approximation of the laws of the Member States relating to active implantable medical devices (90/385/EEC)

Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.

Directive 98/79/EC of the European Parliament and of the Council of 27 October 1998 on in vitro diagnostic medical devices.

Regulations (EC) No 883/2004 on the coordination of social security systems and (EC) No 987/2009 laying down the procedure for implementing Regulation (EC) No 883/2004.

Directive 2006/123/EC on services in the internal market.

Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare.

Commission Implementing Regulation (EU) No 920/2013 of 24 September 2013 on the designation and the supervision of notified bodies under Council Directive 90/385/EEC on active implantable medical devices and Council Directive 93/42/EEC on medical devices.

Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC.

9.3 Useful web sites

Health Insurance Institite of Slovenia
www.zzzs.si

Ministry of Health, Slovenia
www.mz.gov.si

National Institute of Public Health
www.nijz.si

Statistical Office of the Republic of Slovenia
www.stat.si

9.4 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits/hit-template-2010.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as

those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in All Policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments. With its summer 2013 edition, the Health for All database started to take account of the enlarged EU of 28 Member States.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.
2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights, complaints procedures, public participation and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which information technology systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.

5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care, dental care, complementary and alternative medicine, and health services for specific populations.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment based on the stated objectives of the health system, financial protection and equity in financing; user experience and equity of access to health care; health outcomes, health service outcomes and quality of care; health system efficiency; and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references, useful web sites and legislation.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following:

- A rigorous review process (see the following section).
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches). The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

9.5 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

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ISSN 1817-6127