



Slovenia

Health system review

Tit Albreht
Katherine Polin
Radivoje Pribaković Brinovec
Marjeta Kuhar

Mircha Poldrugovac
Petra Ogrin Rehberger
Valentina Prevolnik Rupel
Pia Vracko



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA ZDRAVJE



European
Observatory



on Health Systems and Policies

a partnership hosted by WHO

Katherine Polin (Editor) and Anna Maresso (Series coordinator)
were responsible for this HiT

Editorial Board

Series editors

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

Series coordinator

Anna Maresso, European Observatory on Health Systems and Policies

Editorial team

Jonathan Cylus, European Observatory on Health Systems and Policies
Cristina Hernández-Quevedo, European Observatory on Health Systems and Policies
Marina Karanikolos, European Observatory on Health Systems and Policies
Sherry Merkur, European Observatory on Health Systems and Policies
Dimitra Panteli, Berlin University of Technology, Germany
Wilm Quentin, Berlin University of Technology, Germany
Bernd Rechel, European Observatory on Health Systems and Policies
Erica Richardson, European Observatory on Health Systems and Policies
Anna Sagan, European Observatory on Health Systems and Policies
Anne Spranger, Berlin University of Technology, Germany
Juliane Winkelmann, Berlin University of Technology, Germany

International advisory board

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

Health Systems in Transition

Slovenia

Health System Review 2021

Tit Albreht

National Institute of Public Health
(Nacionalni inštitut za javno zdravje)

Katherine Polin

European Observatory on
Health Systems and Policies

Radivoje Pribaković Brinovec

National Institute of Public Health
(Nacionalni inštitut za javno zdravje)

Marjeta Kuhar

National Institute of Public Health
(Nacionalni inštitut za javno zdravje)

Mircha Poldrugovac

Amsterdam UMC

Petra Ogrin Rehberger

National Institute of Public Health
(Nacionalni inštitut za javno zdravje)

Valentina Prevolnik Rupel

Institute of Economic Research, Ljubljana, and
DOBA Faculty of Applied Business
and Social Studies, Maribor

Pia Vracko

National Institute of Public Health
(Nacionalni inštitut za javno zdravje)



The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in Europe. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues.

The Observatory is a partnership, hosted by WHO/Europe, which includes other international organizations (the European Commission); national and regional governments (Austria, Belgium, Finland, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy (with Agenas)); other health system organizations (the French National Union of Health Insurance Funds (UNCAM), the Health Foundation); and academia (the London School of Economics and Political Science (LSE) and the London School of Hygiene & Tropical Medicine (LSHTM)). The Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Berlin University of Technology.

KEYWORDS:

DELIVERY OF HEALTH CARE

EVALUATION STUDIES

FINANCING, HEALTH

HEALTH CARE REFORM

HEALTH SYSTEM PLANS – organization and administration

SLOVENIA

© World Health Organization 2021 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies).

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

Please address requests about the publication to:

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

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>)

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

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

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

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

Suggested citation:

Albreht T, Polin K, Pribaković Brinovec R, Kuhar M, Poldrugovac M, Ogrin Rehberger P, Prevolnik Rupel V, Vracko P. Slovenia: Health system review. *Health Systems in Transition*, 2021; 23(1): pp.i–188.

CONTENTS

Preface	v
Acknowledgements	vii
List of abbreviations	xi
List of tables, figures and boxes	xiii
Abstract	xvii
Executive summary	xix
1 Introduction	1
1.1 <i>Geography and sociodemography</i>	2
1.2 <i>Economic context</i>	4
1.3 <i>Political context</i>	6
1.4 <i>Health status</i>	7
2 Organization and governance	12
2.1 <i>Historical background</i>	13
2.2 <i>Organization</i>	15
2.3 <i>Decentralization and centralization</i>	18
2.4 <i>Planning</i>	19
2.5 <i>Intersectorality</i>	20
2.6 <i>Health information systems</i>	23
2.7 <i>Regulation</i>	25
2.8 <i>Person-centred care</i>	34
3 Financing	40
3.1 <i>Health expenditure</i>	41
3.2 <i>Sources of revenues and financial flows</i>	46
3.3 <i>Overview of the statutory financing system</i>	49
3.4 <i>Out-of-pocket payments</i>	58
3.5 <i>Voluntary health insurance</i>	60
3.6 <i>Other financing</i>	62
3.7 <i>Payment mechanisms</i>	63

4	Physical and human resources	71
4.1	<i>Physical resources</i>	72
4.2	<i>Human resources</i>	80
5	Provision of services	88
5.1	<i>Public health</i>	89
5.2	<i>Patient pathways</i>	95
5.3	<i>Primary care</i>	99
5.4	<i>Specialized care</i>	102
5.5	<i>Emergency care</i>	105
5.6	<i>Pharmaceutical care</i>	109
5.7	<i>Rehabilitation/intermediate care</i>	116
5.8	<i>Long-term care</i>	118
5.9	<i>Services for informal carers</i>	119
5.10	<i>Palliative care</i>	120
5.11	<i>Mental health care</i>	122
5.12	<i>Dental care</i>	125
6	Principal health reforms	127
6.1	<i>Analysis of recent reforms</i>	128
6.2	<i>Future developments</i>	138
7	Assessment of the health system	143
7.1	<i>Health system governance</i>	144
7.2	<i>Accessibility</i>	147
7.3	<i>Financial protection</i>	151
7.4	<i>Health care quality</i>	153
7.5	<i>Health system outcomes</i>	158
7.6	<i>Health system efficiency</i>	161
8	Conclusions	167
9	Appendices	170
9.1	<i>References</i>	170
9.2	<i>Principal legislation</i>	178
9.3	<i>HiT methodology and production process</i>	180
9.4	<i>The review process</i>	182
9.5	<i>About the authors</i>	183

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 staff at the North American Observatory on Health Systems and Policies and the European Observatory on Health Systems and Policies. In order to facilitate comparisons between countries, reviews are based on a template prepared by the European Observatory, 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 and other countries. 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;
- describe the institutional framework, process, content and implementation of health care reform programmes;
- highlight challenges and areas that require more in-depth analysis;
- 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
- 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 data from national statistical offices, the Organisation for Economic Co-operation and Development (OECD), 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 situations. 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 contact@obs.who.int.

HiTs and HiT summaries are available on the Observatory's website (<https://eurohealthobservatory.who.int>).

ACKNOWLEDGEMENTS

The Health Systems in Transition (HiT) profile on the Republic of Slovenia (Slovenia) was co-produced by the European Observatory on Health Systems and Policies (Observatory) and the National Institute of Public Health of Slovenia (NIJZ), 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 Country Monitoring. It is made up of national counterparts that are highly regarded at national and international level and have particular strengths in the areas 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 NIJZ is Slovenia's central institution for public health. It is responsible for several 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 2021 edition was written by Tit Albreht (NIJZ), Katherine Polin (Observatory), Radivoje Pribaković Brinovec (NIJZ), Marjeta Kuhar (NIJZ), Mircha Poldrugovac (Amsterdam University Medical Centers – University of Amsterdam – Amsterdam UMC), Petra Ogrin Rehberger (NIJZ), Valentina Prevolnik Rupel (IER) and Pia Vracko (NIJZ). Contributions were also made (in alphabetical order) by Tatja Kostnapfel (considerable input to Chapter 2), Dalibor Stanimirović (section 2.6 on Health information systems), Momir Radulovic (section 2.7.3 on Health technology assessment) and Metka Zaletel (section 2.6 on Health information systems). We would like to thank contributors from the Ministry of Health of Slovenia (MoH), Marija Magajne and Darko Čander (section 5.5 on Emergency care), Klavdija Kobal Štraus (sections 5.7 and 5.8 on Rehabilitation and Long-term care). Special thanks

also go to Mateja Lopuh (section 5.10 on Palliative care) from the General Hospital Jesenice. The HiT was edited by Katherine Polin (Observatory), working with the support of Anna Maresso (Observatory) and Ewout van Ginneken, HiT Coordinator and Head of the Observatory's Berlin Hub. Deepest appreciation is extended to Giada Scarpetti (Observatory) for her critical and invaluable support in finalizing the manuscript and to Astrid Eriksen for her support in preparing the first stages of the manuscript. Jorge Espinosa Ossorio (Observatory) and Marina Karanikolos (Observatory) helped prepare the annexes, references and data. The basis for this edition was the previous HiT on Slovenia, which was published in 2016 and written by Tit Albreht (NIJZ), Radivoje Pribaković Brinovec (NIJZ), Dušan Jošar (MoH), Mircha Poldrugovac (then NIJZ), Tatja Kostnapfel (NIJZ), Metka Zaletel (NIJZ) and edited by Dimitra Panteli (Observatory) and Anna Maresso (Observatory).

The Observatory is grateful to Dr Dorjan Marušič (Health Centre Celjenje), Dr Dionne Sofia Kringos (Amsterdam UMC and Amsterdam Public Health Research Institute) and Dr Vesna Kerstin Petrič (MoH) for reviewing the report. The authors are also grateful to everyone else at the MoH for their assistance in providing information and for their invaluable comments on an earlier draft of the manuscript. Gratitude is extended to the WHO Representative to Slovenia, Dr Aiga Rurane, for reviewing the manuscript as well as to the WHO Regional Office for Europe for the European Health for All database from which data on health services were extracted. Thanks are due to the OECD for the data on health services in western Europe, the World Bank for the data on health expenditure in central and eastern European countries, and to the European Commission for the Eurostat database as well as to NIJZ, the Centre for Health Care at the NIJZ and the National Insurance Institute of Slovenia (ZZZS), all of whom provided data. The HiT uses data available in July 2021, unless otherwise indicated and reflects the organization of the health system, unless otherwise indicated, as it was in July 2021.

The Observatory is a partnership, hosted by the WHO Regional Office for Europe, that includes the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy; the French National Union of Health Insurance Funds (UNCAM); the Health Foundation; the European Commission; the World Bank; the London School of Economics and

Political Science (LSE); and the London School of Hygiene & Tropical Medicine (LSHTM). The Observatory is composed of a Steering Committee, core management team, research policy group and staff. Its Secretariat is based in Brussels, and it has offices in London at LSE and LSHTM and in Germany at the Berlin University of Technology. The Observatory team working on HiTs is led by Josep Figueras, Director; Elias Mossialos, Martin McKee, Reinhard Busse (Co-directors); Ewout van Ginneken and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Anna Maresso. The production and copy-editing process was coordinated by Jonathan North, with the support of Lucie Jackson, Andrea Kay (copy-editing) and Tetragon (typesetting).

LIST OF ABBREVIATIONS

ATC	Anatomical Therapeutic Chemical Classification
CHE	Current health expenditure
COPD	Chronic obstructive pulmonary disease
COVID-19	Coronavirus disease 2019
CPHC	Community-based primary health care centre
CRPD	Central Registry of Patient Data
CT	Computed tomography
CVD	Cardiovascular disease
DDD	Defined daily dose
DRG	Diagnosis-related group
EAPC	European Association for Palliative Care
ECDC	European Centre for Disease Control
EEA	European Economic Area
EMA	European Medicines Agency
EPHO	Essential Public Health Operations
EU	European Union
EU13	European Union Member States that joined between 2004 and 2007
EU27	European Union Member States 2020 and after
EU28	European Union Member States before 2020
FFS	Fee for service
GDP	Gross domestic product
GP	General practitioner
HEC	Health education centre
HPC	Health promotion centre
HPV	Human papillomavirus vaccination
HSPA	Health system performance assessment
HTA	Health technology assessment

JAZMP	Agency for Medicinal Products and Medical Devices of the Republic of Slovenia (<i>Javna agencija Republike Slovenije za zdravila in medicinske pripomočke</i>)
LTC	Long-term care
MAV	Maximum attributed value
MHC	Mental health centre
MIMP	Mutually interchangeable medicinal product
MMR	Measles, mumps and rubella (vaccine)
MoH	Ministry of Health
MRI	Magnetic resonance imaging
NGO	Nongovernmental organization
NIJZ	National Institute of Public Health (<i>Nacionalni inštitut za javno zdravje</i>)
NLZOH	National Laboratory for Health, Environment and Food (<i>Nacionalni laboratorij za zdravje, okolje in hrano</i>)
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket (payments)
OTC	Over the counter
PET	Positron emission tomography
PPP	Purchasing power parity
PREM	Patient-reported experience measure
PROM	Patient-reported outcome measure
SHI	Statutory health insurance
SRSS	Structural Reform Support Service
SURS	National Statistical Office (<i>Statistični urad Republike Slovenije</i>)
UHC	Universal health coverage
UMAR	Institute of Macroeconomic Analysis and Development (<i>Urad RS za makroekonomske analize in razvoj</i>)
UNDP	United Nations Development Programme
VHI	Voluntary health insurance
WHO	World Health Organization
ZZZS	Health Insurance Institute of Slovenia (<i>Zavod za zdravstveno zavarovanje Slovenije</i>)

LIST OF TABLES, FIGURES AND BOXES

■ Tables

TABLE 1.1	Trends in population/demographic indicators 2005–2020, selected years	2
TABLE 1.2	Macroeconomic indicators, 2010–2020, selected years	4
TABLE 1.3	Mortality and health indicators, 2000–2020, selected years	8
TABLE 2.1	Agencies and organizations with impact on health and health-related policy in Slovenia	21
TABLE 2.2	Overview of the regulation of providers	27
TABLE 2.3	Patient information	35
TABLE 2.4	Patient choice	36
TABLE 2.5	Patient rights	37
TABLE 3.1	Trends in health expenditure in Slovenia, 2000–2019	46
TABLE 3.2	Expenditure on health (as % of current health expenditure) according to function and type of financing, 2019	49
TABLE 3.3	User charges for health services	59
TABLE 3.4	Provider payment mechanisms in the statutory system	64
TABLE 4.1	Total number of hospital beds, 2005–2019, selected years	73
TABLE 4.2	High technology equipment available per 100 000 population in public hospitals, 2019	77
TABLE 4.3	Nationwide digital health applications	79
TABLE 5.1	Vaccination schedule in Slovenia	92
TABLE 5.2	Visits in outpatient settings in primary care, Slovenia, 2010–2019	100
TABLE 5.3	The number and costs of prescriptions according to the list of medicinal products and ATC classification, Slovenia, 2020	113
TABLE 6.1	Major health reforms and policy initiatives between 2016–2021	128

■ Figures

FIG. 1.1	Map of Slovenia	3
FIG. 1.2	Risk factors affecting health status 2019	10
FIG. 2.1	Organization of the Slovene health care system	15
FIG. 3.1	Current health expenditure as a share (%) of GDP in the WHO European Region, 2018	42
FIG. 3.2	Trends in current health expenditure as a share (%) of GDP in Slovenia and selected countries, 2000–2018	43
FIG. 3.3	Current health expenditure in US\$ PPP per capita in the WHO European Region, 2018	44
FIG. 3.4	Public expenditure on health as a share (%) of current health expenditure in the WHO European Region, 2018	45
FIG. 3.5	Financial flows	47
FIG. 3.6	Complementary VHI expenditure as share of total household consumption, according to income quintiles, 2008–2018, selected years	61
FIG. 4.1	Beds in acute hospitals per 100 000 population in Slovenia and selected countries, 2000–2019	73
FIG. 4.2	Practising nurses and physicians per 100 000 population, latest available year	81
FIG. 4.3	Physicians per 100 000 population in Slovenia and selected countries, 2000–2019	82
FIG. 4.4	Number of nurses per 100 000 population in Slovenia and selected countries, 2000–2019	83
FIG. 5.1	Typical patient pathway in Slovenia	98
FIG. 5.2	Day-care cases in hospitals in Slovenia, 2010–2019	103
FIG. 5.3	Age-standardized hospitalization rate for all causes by sex and total, Slovenia, 2010–2019	105
FIG. 5.4	Number of prescriptions per 1 000 population in Slovenia, 2006–2020	112
FIG. 5.5	Number of prescriptions per 100 inhabitants by age and sex in 2020	112
FIG. 5.6	Total cost of prescriptions in euros, Slovenia, 2006–2020	114
FIG. 5.7	Total value of medicines consumed in hospital in euros by main ATC groups in 2018	114
FIG. 5.8	Trend in the consumption of medicines prescribed in hospitals, 2009–2019	116

FIG. 5.9	Visits in dental offices per 1 000 population, 2010–2019	126
FIG. 7.1	Unmet need for a medical examination (due to cost, waiting time, or travel distance), by income quintile, EU/EEA countries, 2019	149
FIG. 7.2	Share of households that experienced catastrophic health expenditure, latest year for all countries with data available	151
FIG. 7.3	Household out-of-pocket payment as a share of current expenditure on health in Slovenia, 2009–2019	152
FIG. 7.4.	Share of direct household expenditure on health (OOP) by income quintile in Slovenia, 2009–2018	153
FIG. 7.5	Avoidable hospital admission rates for asthma, chronic obstructive pulmonary disease, congestive heart failure, hypertension and diabetes-related complications, Slovenia and selected countries, 2019	154
FIG. 7.6	Crude admission rates due to congestive heart failure per 100 000 population by region in Slovenia, average of 3 years (2017–2019)	155
FIG. 7.7	In-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction, haemorrhagic stroke and ischaemic stroke, Slovenia and selected countries, 2019	157
FIG. 7.8	30-day in and out of hospital mortality rates for haemorrhagic and ischaemic stroke in Slovenia, 2009–2019	157
FIG. 7.9	5-year survival rates for colon, breast (women) and prostate (men) cancer in 2010–2014	158
FIG. 7.10	Amenable and preventable mortality in European countries, all people, standardized death rates per 100 000	160
FIG. 7.11	Current health expenditure by function of health care, 2019	162
FIG. 7.12	Amenable mortality per 100 000 population versus health expenditure per capita in the EU/EEA region, 2017	164
FIG. 7.13	Share of emergency department visits by category of urgency in Slovenia, 2017	165
FIG. 7.14	Expenditure on pharmaceuticals and other medical non-durable goods in Slovenia, 2010–2018	166

■ Boxes

BOX 1.1	Socioeconomic inequalities in health status	11
BOX 2.1	CPHCs: Origins of universal health coverage (UHC) in Slovenia	14
BOX 2.2	Assessing institutional capacity for policy development and implementation	20
BOX 2.3	Recent intersectoral action on public health	22
BOX 3.1	Assessing coverage	53
BOX 3.2	Assessing equity in health financing	55
BOX 3.3	Assessing allocative efficiency	57
BOX 4.1	Distribution of health resources	75
BOX 5.1	Sample of documents relevant to public health policies addressing general or segmental issues	94
BOX 5.2	Assessing the accessibility and effectiveness of public health interventions	96
BOX 5.3	Assessing the strength of primary care	101
BOX 5.4	Integrated care in Slovenia	105
BOX 5.5	Patient evaluations of the care they receive	106
BOX 5.6	Evaluating pharmaceutical spending	115
BOX 5.7	Institutions providing mental health services	124
BOX 6.1	Amendments to the Health Services Act and the Patients' Rights Act, 2015–2018	131

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. Slovenia has a statutory health insurance system with a single public insurer, providing almost universal coverage for a broad benefits package, though some services require relatively high levels of co-insurance (called co-payments in Slovenia). To cover these costs, about 95% of the population liable for cost-sharing purchases complementary, voluntary health insurance. Health expenditure per capita and as a share of GDP has increased slightly, but still trails behind the EU average. Among statutory health insurance countries, Slovenia is rather unique in that it relies almost exclusively on payroll contributions to fund its system, making health sector revenues vulnerable to economic and labour market fluctuations, and population ageing. Important organizational changes are underway or have been implemented, especially in prevention, primary, emergency and long-term care. Access to services is generally good, given wide coverage of statutory health insurance. Further, Slovenia has some of the lowest rates of out-of-pocket and catastrophic spending in the EU, due to extensive uptake of complementary voluntary health insurance. Yet long waiting times for some services are a persistent issue. Though population health has improved in the last decades, health inequalities due to gender, social and economic determinants and geography remain an important challenge. There is variation in health care performance indicators, but Slovenia performs comparatively well for its level of health spending overall. As such, there is clear scope to improve health and efficiency, including balancing population needs when planning health service volumes. Recently, the Slovene health care system was overwhelmed by the demand for COVID-19-related care. The pandemic's longer-term effects are still unknown, but it has significantly impacted on life expectancy in the short-term and resulted in delayed or forgone consultations and treatments for other health issues, and longer waiting times. Additional challenges,

which are necessary to address to ensure long-term sustainability, strengthen resiliency and improve the capacity for service delivery and quality of care of the health system include: 1) health workforce planning; 2) outdated facilities; 3) health system performance assessment; and 4) implementation of current LTC reform.

EXECUTIVE SUMMARY

■ Slovenia has achieved important health gains, but inequalities in health due to social and economic status, gender and geography persist

The Republic of Slovenia is a parliamentary democracy located in central Europe. It is economically the most developed of the post-communist countries of the European Union (EU). In 2020, the population was approximately 2.1 million people, with recent increases mainly due to immigration.

In the past two decades, Slovenia achieved notable improvements with regards to population health status. Average life expectancy at birth increased from 76.1 years in 2000 to 81.6 in 2019, surpassing the EU average for the first time. However, the COVID-19 (coronavirus disease 2019) pandemic has undermined this progress; average life expectancy dropped by 1 year from 2019 to 2020, and in 2020 it was estimated to be back to 2013 levels (80.6 years). At 1.61 children per woman of reproductive age, Slovenia has one of the lowest fertility rates in Europe and one of the fastest ageing populations, which suggests significant impacts on the health system. Slovenia has broadly similar patterns of mortality and morbidity to other western and central European countries. However, mortality from external causes is particularly high, with one of the highest suicide rates in the world. Noncommunicable diseases, especially circulatory diseases (such as stroke and ischaemic heart disease) and cancer, account for a high share of mortality, and overweight and obesity rates are increasingly a public health concern. In addition, the burden of morbidity and mortality is linked to a high prevalence of behavioural risk factors, such as alcohol consumption and tobacco smoking. However, since the early 2000s the overall prevalence of smoking has dropped.

Inequalities in health due to gender are considerable. For example, although the difference in life expectancy at birth between men and women

has decreased since 2000, Slovenian men still live 5.6 fewer years than women (77.8 years compared with 83.4 years), which was equal to the EU average in 2020. Differences in life expectancy at birth are also linked to socioeconomic determinants such as education status. In 2017, men with the highest level of education could expect to live almost 6 years longer than those with the lowest level, while the gap was only about 3 years among Slovenian women. The education gap in longevity can partially be explained by higher mortality rates and higher exposure to various risk factors among people with low levels of education, including, for instance, higher smoking rates and worse nutritional habits. Deaths due to injuries (accidents and self-inflicted) also show an important socioeconomic gradient. Lastly, life expectancy, morbidity and mortality data also show inequalities between regions within the country, which reflect levels of poverty.

■ Slovenia's statutory health insurance system provides near universal coverage for a broad benefits package

Slovenia has a statutory health insurance (SHI) system with a single public insurer, the Health Insurance Institute of Slovenia (*Zavod za zdravstveno zavarovanje Slovenije – ZZZS*), providing almost universal compulsory health insurance (more than 99% of the population).

The benefits package from SHI is comprehensive and comprises primary, secondary and tertiary services; pharmaceuticals; medical devices; sick leave; and costs of travel to health facilities. For most areas of care, co-insurance (called co-payments) levels for services are determined by the ZZZS in agreement with the government; these range from no co-payment (e.g. for emergency care) to 90% for medicinal products considered less effective. Overall, the number of services fully financially covered is gradually decreasing, with uncapped cost-sharing varying between 10% and 90% of the price of services.

Three private companies provide complementary, voluntary health insurance (VHI), which is mainly used by patients to cover co-insurance via co-payments.

The Ministry of Health (MoH) oversees strategic planning and is responsible for governance and leadership of the health care system. Primary care is decentralized to the municipal level, though municipalities' role in primary health care governance differs based on a series of factors, such as

population size and economic strength. Inpatient hospital care is provided through a total of 30 mainly public and some private hospitals across Slovenia.

■ **Complementary health insurance is a defining feature of Slovenia's health system**

Slovenia's health system is mainly funded through SHI contributions, with the remainder coming from VHI and out-of-pocket (OOP) payments. In 2019, total health expenditure accounted for 8.5% of GDP. Public financing is the primary source of health system resources – 72.8% of the total in 2019 – with private sources accounting for 27.2%, above the EU average of 20.3%.

VHI premiums (15.5% of total health expenditure in 2019) and OOP payments (11.7%) represent the main private sources of funding. Within the VHI component, complementary VHI covers co-insurance levied on health care services included in the benefits package and is purchased by more than 95% of the population liable for co-payments (about 73% of the population) with a flat-rate premium. To balance uneven distribution of the risk portfolio and prevent cream-skimming among insurers, an equalization scheme was introduced in 2005. This buffer works for the services perceived as needed both by patients as well as by providers. The government pays for VHI at point of service for poorer households that receive social benefit payments (about 100 000 people). The remaining 5% for whom the complementary VHI premium is financially out of reach but who also do not qualify for social benefits likely experience higher levels of unmet need due to costs of the health services than the rest of the population.

■ **Health services to be provided and their volumes are defined annually via a stakeholder negotiation process**

Health services are purchased by the ZZZS and VHI companies. Services reimbursed by ZZZS as well as their volume are defined by representatives of the various health system stakeholders in annual agreements. Primary health care services provided in health centres by family medicine specialists, primary-level paediatricians and gynaecologists are financed through a combined system of capitation and FFS payments. Other services are paid

flat-rate or exclusively on a (capped) FFS basis. Outpatient secondary level 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 practise based on an employment contract (as salaried employees of a public provider), by means of a “concession” (as a private provider financed by public sources within the public health care network, payment depending on the contract) or as a private provider (paid directly by patients or by supplemental VHI, outside the public network).

■ Slovenia continues to work to address shortages of health care professionals

The MoH is responsible for capital investment in hospitals and other secondary care infrastructure at the national and regional levels. Local (municipal) governments finance such investments in public primary health care facilities and public pharmacies.

Compared with the EU average, in 2019 Slovenia had fewer total hospital beds (443 per 100 000 versus 532). The number of magnetic resonance imaging (MRI), computed tomography (CT) and positron emission tomography (PET) scanners is below the EU average. There is no national needs assessment or plan for such items of major medical equipment.

The density of physicians in 2019 (326 per 100 000 people) remains below the EU average of 389 physicians per 100 000. On the other hand, the number of practising nurses is above, at 1 028 nurses per 100 000 versus 838 per 100 000 population. This number includes vocationally trained nursing technicians (63%) and registered nurses (37%). Some challenges with respect to the geographical distribution of health care staff exist, particularly for primary care. Recently, Slovenia has attempted to address the shortage of health care professionals through the introduction of financial incentives, task shifting, as well as the introduction of new licensing regulations and reforms to education and training. Though there is no national health workforce strategy providing strategic and political continuity to planning, since 2018, the MoH and the National Institute of Public Health (*Nacionalni inštitut za javno zdravje* – NIJZ) perform systematic analyses of capacity needs across specialities as a way to inform health workforce planning.

■ A gatekeeping system is in place but waiting times for some health care services are an ongoing issue

All public health services are provided by the NIJZ and the National Laboratory for Health, Environment and Food (*Nacionalni laboratorij za zdravje, okolje in hrano* – NLZOH). Primary health care is provided mostly by a network of community-based primary health care centres (CPHCs), owned and managed by municipalities, providing a range of public health and primary care services under one roof by many different health care professionals (e.g. family medicine specialists, paediatricians, gynaecologists, dentists, youth dentists, physiotherapists and occupational therapists, nurses and others). Since the year 2000, all physicians working in family medicine practices are required to have 4-year specialisation (residency) in family medicine. General practitioners (GPs) with only medical faculty diploma are no longer allowed to work with patients. There are also office-based physicians in private practice, many of whom have concessions with ZZZS to deliver publicly funded primary care services.

Patients are entitled to choose their own personal physician at the primary care level, who acts as a gatekeeper to secondary level 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. Despite significant past efforts, long waiting times, especially for secondary level specialist ambulatory services, persist.

■ Advances in health digitalization, including digital health infrastructure and applications have been made, helping to ensure continuity of service provision during COVID-19

Slovenia has undertaken an ambitious e-Health programme over the last 5 years to improve service quality, integrate the existing disparate health information systems across the health care system and capture and optimize the use of enhanced health data. Recent applications include a Central Registry of Patient Data (CRPD), a patient portal, e-prescriptions, e-appointments and e-referrals, e-triage, teleradiology and monitoring for stroke patients. CRPD is at the core of the e-Health infrastructure; it has over 50 million records and enables secure information exchange between providers. The

zVEM patient portal, which was rolled out in 2017, is another key feature of Slovenian e-Health. It serves as a connecting service for all essential e-Health solutions and became even more important during COVID-19 for continuity of service provision and to provide patients with crucial health-related documents and information. The uptake in digital solutions has been considerable. For example, CRPD is used by all public health care providers and the share of concessionaires is growing (20–30% currently use CRPD), while the monthly share of both e-prescriptions and e-referrals has reached over 90% on average.

■ Public health, primary and long-term care are active areas of health policy reform

Beyond health digitalization, Slovenia has introduced a myriad of reforms in the last 5 years.

Within public health, reforms have addressed both enduring and emerging health issues, and the process of international policy alignment. In 2017, the Act on the Restriction of the Use of Tobacco and Related Products (2015) was updated and adopted, integrating related measures from EU legislation and the WHO's Framework Convention on Tobacco Control. Several reforms related to communicable disease prevention and management (in the context of increases in HIV infection rates) have been introduced in the past 5 years, and especially in last two due to COVID-19. Changes to existing laws were adopted to combat the impact of the COVID-19 pandemic on health and health care provision, including to the Communicable Diseases Act (1995).

Among several collaborative evaluations undertaken to inform health policy, in 2019, the WHO Regional Office for Europe and the NIJZ conducted an analysis of root causes of persistent and urgent challenges in the primary health care system to inform a new strategy, expected to be prepared in 2021. Other organizational reforms to primary care have occurred as well since 2016, which focus on integrated care, in line with the community-based person-centred primary health care model in Slovenia. Health promotion centres (HPCs) are gradually replacing health education centres (HECs) in CPHCs. In 2018 MoH agreed to a national scale-up of “family medicine model practices”, introduced in 2011, now called Family Medicine Practices. All family medicine teams will include 0.5 full-time equivalent of

registered nurses on the staff to improve prevention and care coordination for patients with stable chronic diseases. This both strengthens chronic care management at the primary health care level and introduces a new human resource standard for family medicine practice. Additionally, a network of mental health centres (MHCs) is now being introduced in community-based primary care practice.

Meanwhile, an ageing population and a health system primarily financed by SHI contributions poses challenges for the health sector and the provision and financing of long-term care (LTC). Currently, LTC spending in Slovenia is fragmented and levels are low, at 9.8% of total health spending, as compared with the EU average of 17.3%. After years of being on the policy agenda, the Long-term Care Act, first open to public discussion in 2017, was passed after a prolonged legislative process. It is expected to be adopted in late 2021 and would introduce systemic regulation of LTC, though the conditions and financing of this system are not defined in detail by the legislation. In 2016, a new Directorate for LTC was established at MoH to develop, coordinate and implement the Act.

Ongoing and future reforms are likely to continue to focus on the above areas as well as chronic care; health workforce; waiting times in secondary level specialist care; diversification of health system revenue; and health system performance assessment (HSPA), including strengthening its integration into planning and policy.

■ **Health financing system enables financial accessibility as well as household financial protection**

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 ZZZS is mainly progressive, VHI funding is regressive as it is based on a flat payment. Given high rates of complementary VHI and exemptions for poorer households, Slovene households are largely protected from catastrophic expenditure for health care. Only 1.0% of households experienced catastrophic spending in 2015, more than half of which was for dental services not covered by the ZZZS. This is the lowest in the EU (average: 6.6%). However, catastrophic spending is concentrated among the poorest households.

Slovenia had one of the lowest reported unmet needs for medical care in all income groups within the EU, with values between 0.1% and 0.4%, until 2016; however, before COVID-19, 2.9% of the population reported unmet needs for medical care due to cost, geography or waiting times in 2019. This is above the EU average, but this jump is primarily due to changes in the survey questions used. Long waiting times are the only statistically significant factor driving unmet medical need, which are likely to have a more severe effect on poorer households. Nevertheless, satisfaction with health care provision is high.

■ Populations who cannot meet formal residency requirements tend to be marginalized and face long-term lack of coverage

In terms of access, there are geographical 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. Yet shortages in primary care in some rural areas, such as in the Alps, persist. Though SHI is near universal, around 0.14% of the population were uninsured at the end of 2020. Most of these were temporarily uninsured, but some are individuals – primarily more vulnerable and marginalized – who cannot meet the formal residency requirements (e.g. undocumented migrants, ethnic minorities such as the Roma population and the homeless). In addition, 15 892 people at the end of 2020 are covered by SHI, but with unpaid contributions, meaning that their rights to health care services were on hold and that they only had access to emergency services.

■ Progress on population health suggests relative effectiveness and timeliness of health services

Slovenia has considerably reduced its amenable mortality rate since 2000 and it is lower than the EU average. Preventable mortality, despite recent reductions, is still above the EU average. The burden of noncommunicable diseases is high. Main causes of mortality are circulatory diseases and

malignant neoplasms. Standardized death rates per 100 000 population show improvement trends for both conditions. A first ever HSPA report considered survival rates for colorectal, breast, lung, prostate, cervical cancer and overall cancer survival rates and found most of these indicators were improving. However, all were worse than the EU average, except for cervical cancer survival, which was stable at a better than EU average rate. The HSPA report also looked at additional indicators in quality and safety – infant mortality rates, admission-based diabetes-related lower extremity amputations rates, 30-day mortality for acute myocardial infarction (AMI) and stroke and use of second line antibiotics. An overall assessment of the domain was good. Rates of mandatory vaccination are high. For influenza, vaccinations rates among those aged 65 years and over have increased slightly since 2016, but at only 13% coverage in 2018, Slovenia remains well below the EU average of 41%. Since 2020, all costs for the vaccine are fully reimbursed by health insurance, which could potentially increase uptake in the future. About 57% of the population over 18 years old has received at least one COVID-19 vaccination as at beginning of September 2021.

■ HTA, strengthened HSPA and health workforce planning are missed opportunities to improve the health system performance

No formal health technology assessment (HTA) has been established yet in Slovenia. To date, the introduction of new technologies into the SHI has been ad hoc and as a result, providers have considerable leeway in terms of which services they can provide for reimbursement by insurance. Despite the initiatives put forward mainly by the NIJZ, Agency for Medicinal Products and Medical Devices of the Republic of Slovenia (JAZMP) and other stakeholders in recent years, only components of HTA are considered in pricing and reimbursement decisions. 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 still missing.

Quality and safety have been identified as fundamental values in the Slovenian health system. Until 2015, health system efforts in quality improvement were explicitly framed in the National Strategy for Health Quality and Safety 2010–2015, but this strategy was not renewed, though there are several

objectives in the area of quality set out in the current National Health Care Plan 2016–2025. A new EU Structural Reform Support Service (SRSS) project on health quality and safety was launched in 2021.

While HSPA has been strengthened, particularly in inpatient care, in the last decade, with data collected at the regional and national levels used to inform national health policy objectives, it is underdeveloped in other care areas like primary health care. In 2017, the MoH asked the NIJZ to start the process of establishing HSPA frameworks and capacities in Slovenia, with co-financing from the European Commission and technical support from experts from the University of Malta and the Sant’Anna School of Advanced Studies. A report, first published 1 year after project completion found the overall assessment of health care quality in the Slovene health system to be good. Yet, while performance indicators have been defined for all levels of health care, they have not yet been integrated into the system.

Introduction

■ Chapter summary

- Located in central Europe, Slovenia is bordered by Austria, Croatia, Hungary, Italy and the Adriatic Sea; it has a population of 2.1 million.
- Slovenia is a parliamentary democracy with a tripartite division of power among the executive, legislative and judicial authorities. There is no administrative level between the municipal and state levels.
- Slovenia has one of the fastest ageing populations in the European Union (EU) and a consistently low fertility rate. Since 2014, the population has grown, but primarily due to immigration. Population ageing is reflected in the rising number of people living with chronic conditions.
- Life expectancy at birth was 81.6 years in 2019, slightly above the EU average for the first time; however, because of a high death rate due to the COVID-19 (coronavirus disease 2019) pandemic, in 2020, it fell by 1 year to 80.6 – back to 2013 levels. Values for excess mortality suggest that the death tolls related to COVID-19 in Slovenia are likely to be even higher than what is represented by the drop in life expectancy due to COVID-19-reported deaths. Circulatory diseases and cancers accounted for almost three quarters of deaths, with stroke, ischaemic heart disease and lung cancer the

main causes of death. The cancer burden in Slovenia is greater than the EU average.

- Behavioural and environmental risk factors contribute considerably to mortality; more than two fifths of all deaths are connected to dietary risks, tobacco use, alcohol, low physical activity and air pollution. Overweight and obesity rates are a public health concern, and alcohol consumption is high, especially among adolescents and men. On a positive note, smoking rates have decreased over the last two decades.
- Despite previous improvements in health, significant regional, gender and socioeconomic inequalities persist.

■ 1.1 Geography and sociodemography

Slovenia is in central Europe, situated between the Alps, the Pannonian Plain, the Mediterranean Sea and the Balkans. It borders Austria to the north, Hungary to the north and east, Italy to the west, and Croatia to the south and east (Fig. 1.1). Its 20 273 km² territory comprises mountainous terrain with heavily forested areas; it has a mixed climate, with a sub-Mediterranean climate on the coast, an alpine climate in the northwest and a continental climate in the plateaus and valleys to the east. Slovenia’s population is estimated at 2.1 million (Table 1.1), 55.2% of whom live in urban centres. The capital, Ljubljana, has 294 464 inhabitants (SURS, 2021).

TABLE 1.1 Trends in population/demographic indicators 2005–2020, selected years

	2005	2010	2015	2020
Total population	2 000 474	2 048 583	2 063 531	2 100 126
Population 0–14 years (% of total)	14.0	14.0	14.7	15.1
Population density (people per km ²)	99.3	101.7	102.4	103 ^a
Population growth (average annual growth rate) (%)	0.173	0.436	0.075	0.561
Fertility rate, total (births per woman)	1.26	1.57	1.57	1.61 ^b
Distribution of population (rural/urban) ^a (%)	48.5 / 51.5	47.3 / 52.7	46.2 / 53.8	44.8 / 55.2

^aData from 2018. ^bData from 2019.
Source: World Bank, 2021c.

FIG. 1.1 Map of Slovenia

Source: United Nations, 2004.

Slovenes, a Slavic ethnic group, constitute approximately 83% of Slovenia's population (according to 2003 census data; latest available data). Hungarians and Italians are considered indigenous minorities with rights protected under the Constitution. Other ethnic groups include Albanians, Bosniaks, Croats, Macedonians, Montenegrins, Serbs and Yugoslavs.

Slovene is the official language, though so too are Italian and Hungarian in nationally mixed areas. The religious composition of Slovenia is: Roman Catholic (69.1%), Evangelical Christians (1.1%), Muslim (0.6%) and Orthodox Christian (0.6%).

Despite recent increases, at 1.61 births per woman in 2019, the fertility rate is one of the lowest in the EU. The crude birth rate fell from 10.3 per 1000 population in 2014 to 9.3 in 2019 (World Bank, 2021b), in part due to increases in childbearing age and in the spacing of births. As such, a primary reason for Slovenia's increasing population (until 2020) was immigration, especially to stop-gap labour shortages. In 2019, 31 319 people immigrated, while 15 106 emigrated, and by 2020, the number of foreigners had risen to 156 351 (7.4% of the total population).

Slovenia has one of the fastest ageing populations in the EU (European Commission, 2019a): over 20% of the population is aged 65 years or older.

Estimates forecast this share to increase to 31% by 2100 (SURS, 2020b; Eurostat, 2021j).

1.2 Economic context

In 2019, services accounted for around 57% of Slovenia's gross domestic product (GDP). Industry, accounting for about 28% of GDP, is driven by electronics, electrical machinery, metal processing and metallurgy and motor vehicles. Agriculture, forestry and fishing (2% of GDP) is dominated by dairy farming and stock breeding, and growing corn, barley and wheat (Albreht et al., 2016; World Bank, 2021a).

Since gaining independence from the Socialist Federal Republic of Yugoslavia in 1991, Slovenia has adopted several economic reforms, including in banking, markets and privatization, related to joining the EU and Eurozone in 2004 and 2007, respectively. Moreover, the pension system was reformed in 2013 in response to population ageing and the fact that Slovenia had the smallest share of population in Europe above 55 years old actively employed. At this time, the retirement age was raised from 58 years for women and 60 for men to 65 years for everyone and the required active pension insurance period for a full pension was extended to 40 years (Albreht et al., 2016).

TABLE 1.2 Macroeconomic indicators, 2010–2020, selected years

	2010	2015	2019	2020
GDP per capita (current €)^a	17 751	18 828	23 172	22 045
GDP per capita (Int\$, PPP)^a	27 848	31 628	41 194	39 593
GDP annual growth rate (%)^a	1.3	2.2	3.2	–5.5
Public expenditure (government expenditure as % of GDP)^b	50.2	48.7	43.3	–
Government deficit/surplus (as % of GDP)^c	–5.6	–2.8	+0.5	–8.4
General government debt (% of GDP)^d	47.9	102.4	80.9	101.1
Unemployment, total (as % of labour force)^a	7.2	9.0	4.5	5.2
People at risk of poverty or social exclusion, total (% of total population)^e	18.3	19.2	14.4	15.0
Income inequality (Gini coefficient of disposable income)^f	23.8	24.5 ^g	23.9	23.5

GDP: gross domestic product; PPP: purchasing power parity.

^aWorld Bank, 2021c. ^bOECD, 2021c. ^cOECD, 2021b. ^dOECD, 2021a.

^eEurostat, 2021i. ^fEurostat, 2021c. ^gData from 2011.

In 2019, the nominal GDP per capita increased to € 23 165; the GDP per capita adjusted for purchasing power parity (PPP) was International \$ 49 194 (Table 1.2). These levels represent about 89% of the EU28 (European Union Member States before 2020) average that year. Since the financial and economic crisis of 2008–2009, real GDP growth rates have varied from +1.3% in 2010 to +3.2% in 2019 (Eurostat, 2021l). Preliminary data for 2020 shows a decrease in GDP per capita, as well as in GDP annual growth rate and government gross debt. However, caution is necessary in the interpretation of this data, which is likely related to the COVID-19 pandemic, so trends and long-term impacts are unclear.

Since independence in 1991, unemployment rates have fluctuated from 14.5% in 1998 (Albrecht et al., 2016) to 7.3% in 2010 to 9.7% in 2014, due to the 2008–2009 financial crisis. The unemployment rate has since declined again, reaching around 5% of the labour force in 2020 (Eurostat, 2021l) (Table 1.2). Forty-two per cent of the working-age (15–74 years) unemployed are considered as long-term unemployed (out of work for 12 months or more), which is equal to the EU average of 41.7% (Eurostat, 2021l). In the short-term, the COVID-19 pandemic has led to significant increases in unemployment.

Slovenia has seen considerable progress regarding living standards in the last decades. The Human Development Index increased from 0.874 in 2014 to 0.917 in 2019. It is now the highest among the EU13 group of countries (European Union Member States that joined between 2004 and 2007), and also is above that of France, Italy and Spain (UNDP, 2020). Poverty rates have also declined; in 2020, 15% of the population was at risk of poverty or social exclusion. Additionally, comparison of the distribution of total gross household income in 2020 (Gini coefficient 23.5) shows smaller inequalities across household incomes than in most European countries (Table 1.2) (Eurostat, 2020c).

Yet notable inequalities in terms of economic and social status across Slovenia's regions persist. While the central region measured above the national average across nearly all indicators and is 20% higher than the EU average for GDP, other regions lag significantly behind (UMAR, 2021). Geographical inequalities are also reflected in regional unemployment rates, with the highest unemployment rate in the predominantly agricultural Pomurje region (UMAR, 2021).

1.3 Political context

Slovenia is a parliamentary democracy, with a tripartite division of power among the legislature, executive and judiciary authorities. Due to proportional representation and party fragmentation, Slovene governments are coalitions. The current government (since May 2021) is a centre-right coalition of three political parties – the Modern Centre Party, New Slovenia and the Slovenian Democratic Party – with a marginal majority in the National Assembly (see below).

Legislative authority lies with Parliament, comprising the National Assembly (Državni zbor), which adopts laws, and the National Council (Državni svet), which proposes or requests considerations in the Assembly. The National Assembly consists of 90 members from all political parties, serving 4-year terms. Eighty-eight members, representing the 88 electoral constituencies, are directly elected through a preferential system. The Hungarian and Italian minorities each have one seat. The National Council has 40 members who serve 5-year terms and are elected by representatives of various social (including health care professionals), economic, professional and local interest groups.

The Government, comprising the President, Prime Minister and a 17-member Cabinet of Ministers, is the executive and supreme body of state administration. Executive function involves legislation preparation, proposal of the national budget and national programmes and implementation of laws passed by the National Assembly. The President, directly elected for a maximum of two 5-year terms, represents Slovenia and is commander of its armed forces. The Prime Minister is head of government and officially elected by the National Assembly. The Government endorses all health care reforms and, within its economic limits, is responsible for health care services infrastructure and capital investments in all hospitals, clinics, and national research and tertiary institutions (see sections 2.2 and 3.2).

Judicial authority is exercised by judges appointed for life in three types of courts: Ordinary Courts (district and local/municipal), Appellate Courts (high courts) and the Supreme Court (highest). A Constitutional Court has been strengthened since the introduction of the 1991 Constitution.

The Human Rights Ombudsman, proposed by the President and elected by the National Assembly for 6 years, is responsible for the protection of

human rights and fundamental freedoms in relation to state bodies, local administrative bodies and those with public jurisdiction.

Slovenia has two administrative levels: local (municipal) and national (see sections 2.2 and 2.3). The 1991 Constitution assigned municipalities a form of self-governance and anticipated the possibility of integrating municipalities into wider, local self-governing communities. It explicitly gives municipalities the mandate of taking on competencies related to local matters. When all municipalities agree, some national competencies may also be transferred to them if the necessary financial means are provided (see section 2.4). Slovenia currently has 212 municipalities (ranging in population from 355 (Hodoš) to 294 464 (Ljubljana)) (SURS, 2021). The Municipal Council is the highest decision-making body in a municipality; its members are directly elected, as are mayors.

■ 1.4 Health status

Population health in Slovenia has improved considerably over the last decades. Before the COVID-19 pandemic, which started in 2020, life expectancy at birth had been rising, from 73.6 years in 1993 to 81.6 years in 2019 (Eurostat, 2021l) (Table 1.3) and had surpassed the EU28 average (81.3 years in 2019). However, available estimates for life expectancy at birth for 2020 (available at the time of writing, July 2021) show that due to higher than usual death rates associated with COVID-19 during 2020, life expectancy in Slovenia had decreased by 1 year to its 2013 level, and now stands at 80.6 years. As with other indicators (Box 1.1), there are significant gender gaps in life expectancy; average life expectancy for men was 77.8 years in 2020, while it was 83.4 years for women.

Mortality by age and sex groups shows similar patterns to the EU averages. Both infant and maternal mortality have declined over the last two and a half decades.

The burden of noncommunicable diseases is high. Circulatory diseases, followed by cancers, are the most common causes of death, accounting for 40% and 33% of mortality, respectively, in 2018. Other noncommunicable diseases cause 13% of further deaths (NIJZ, 2018). Looking at more specific diseases, stroke and ischaemic heart disease were the leading causes of mortality in 2018 (about 10% of all deaths each), followed by lung cancer (6%) (OECD/EOHSP, 2021).

TABLE 1.3 Mortality and health indicators, 2000–2020, selected years

	2000	2005	2010	2015	2019	2020
Life expectancy (years)						
Life expectancy at birth, total	76.2	77.5	79.8	80.9	81.6	80.6
Life expectancy at birth, male	72.2	73.9	76.4	77.8	78.7	77.8
Life expectancy at birth, female	79.9	80.9	83.1	83.9	84.5	83.4
Life expectancy at 65 years, male	14.2	15.2	16.8	17.6	18.1	–
Life expectancy at 65 years, female	16.7	17.1	18.0	18.8	19.7	–
Mortality (SDR per 100 000 population)						
Circulatory diseases	620.9	585.1	451.1	449.6	403.4 ^a	–
Malignant neoplasms	326.3	316.2	324.5	310.5	309.3 ^a	–
Certain infectious and parasitic diseases (tuberculosis and HIV/AIDS)	6.2	11.1	3.9	6.1	3.4	–
External causes of death (injuries and poisoning)	81.9	72.2	69.4	58.9	59.2	–
All causes	1 406.1	1 310.4	1 083.6	1 041.1	984.92 ^a	–
Infant mortality rate	4.9	4.1	2.5	1.6	2.1	–
Maternal mortality rate ^b	–	16.6	0	5	0 ^a	–

SDR: standardized death rate.

^a Data from 2018.^b The maternal mortality rate is calculated per 100 000 births. Given that there are roughly 20 000 births per year in Slovenia, one case brings the value to 5, resulting in these fluctuations.

Source: Eurostat, 2021i; OECD, 2021e.

The main cancer site among men in 2018 was prostate cancer (161.1 new cases per 100 000 population – 78.6 standardized incidence rate), followed by skin cancers, excluding melanoma (147.5 new cases per 100 000 population – 69.6 standardized incidence rate); cancer of the colon, rectum and anus (80.5 – 39.3); and cancer of lung, trachea, and bronchus (71.4 – 33.3). The most common type of cancer was breast cancer among women (134.2 new cases per 100 000 – 71.6 standardized incidence rate), followed by skin cancers, excluding melanoma (146.5 – 57.7); cancer of lung, trachea, and bronchus (50.6 – 22.7); and cancer of the colon, rectum, and anus (54.3 – 21.4). Notably, though the incidence of female breast cancer grew 1.63% on average annually between 2002–2018, the standardized death rate decreased from 30.6 to 14.7 deaths per 100 000 population (Zadnik & Žagar, 2020).

In 2020, COVID-19 accounted for about 11.8% of total deaths in Slovenia. Most deaths (83%) were among those over 75 years of age. The mortality rate from COVID-19 up to the end of June 2021 was about 45% higher in Slovenia than the average across EU countries (about 2 267 per million population compared with about 1660). Moreover, data on excess mortality suggests that the direct and indirect death toll related to the pandemic in Slovenia is likely to be higher. Overall, excess mortality from March to December 2020 was around 3 900 deaths – about 30% higher than total reported COVID-19 deaths (2 891) (OECD/EOHSP, 2021).

Apart from COVID-19, communicable diseases are not a significant cause of morbidity or mortality. Immunization coverage is higher than the EU average. The incidence of vaccine-preventable diseases, such as measles and mumps, is decreasing, though there have been small measles outbreaks (in 2014, 2015, 2019) due to people with incomplete vaccinations travelling to other countries in which there occasionally are outbreaks of measles. There is also growing vaccine hesitancy, especially in the context of COVID-19; around 30% of the adult population in July 2021 opposed getting the vaccine (ranging, by age groups, between 27.5 and 31.2%; PANDA survey (NIJZ, 2021d)). In a 2019 Eurobarometer survey, while 83% of respondents believe vaccines are rigorously tested before authorization, 60% think that vaccines can often produce serious side-effects (European Commission, 2019b).

External causes (injuries and poisoning) account for 7.3% of deaths and are the leading cause of death for those aged between 1 and 45 years. This rate exceeds the European average.

Additionally, a large share of deaths is connected to behavioural factors (Fig. 1.2); for example, dietary risks (16% of all deaths), tobacco smoking (15%) and alcohol consumption (5%). Overweight and obesity rates are higher than in many EU countries and increasingly are a public health concern, particularly for teenagers (Inchley et al., 2020; OECD/EOHSP, 2021) (see section 7.5).

Despite decreases in deaths caused by liver diseases, Slovenia has one of the highest mortality rates from diseases caused by alcohol abuse in Europe. In 2016, 17.9 deaths per 100 000 population were caused by liver disease, which is down from 30 per 100 000 population in 2011 (Eurostat, 2021i), but still higher than the EU average of 14.5 per 100 000. Though average alcohol consumption decreased from 13.4 litres per capita in 1995 to 11.0 litres in 2019 (NIJZ, 2020b), on a par with the EU average (WHO, 2020),

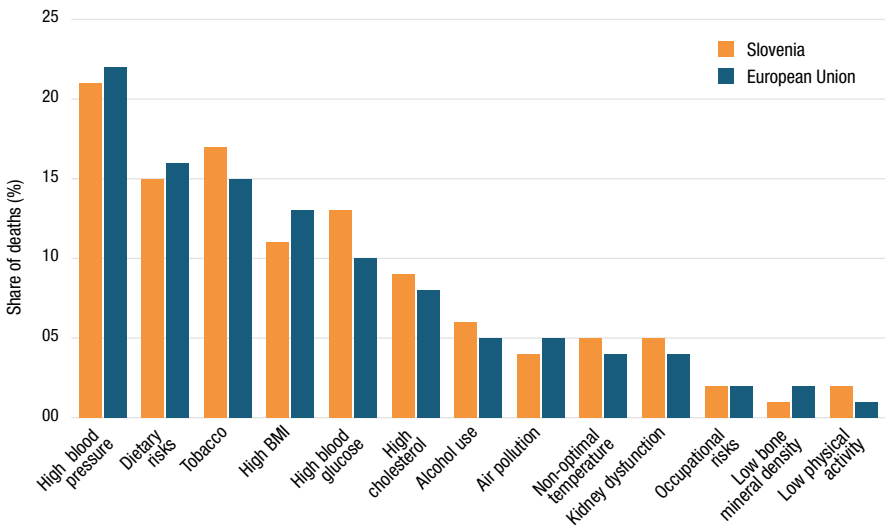
there are substantial gender and age inequalities with more men (29%) more likely to report heavy episodic alcohol use than women (10%) (OECD/EOHSP, 2021).

The percentage of adults in Slovenia who smoke daily has fallen since the early 2000s. At 17.4% of the adult population between 15 and 64 years in 2019, it is below the EU27 (European Union Member States 2020 and after) average (19.5%). There is a gender and socioeconomic dimension, with more men and people with lower educational attainment likely to be daily smokers (Box 1.1). Smoking in children and teens has decreased but remains high: 16% of 15-year-olds are smokers (which is the lowest recorded percentage in 16 years) and 2.6% of all youngsters start smoking before the age of 13 (Inchley et al., 2020; OECD/EOHSP, 2021), significantly down from 17% in 2014.

Meanwhile, over one third of adults reported a chronic condition in 2019, a proportion equal to the EU average. People with higher incomes are more likely to report better health, and fewer women perceive themselves to be in good health compared with men (Eurostat, 2021b; OECD/EOHSP, 2021).

See Box 1.1 for more information on the gender and socioeconomic dimension of health status.

FIG. 1.2 Risk factors affecting health status 2019



BMI: body mass index.

Source: Global Burden of Disease Collaborative Network, 2020.

BOX 1.1 Socioeconomic inequalities in health status

Indicators on mortality and morbidity disaggregated by gender and other socioeconomic determinants reveal that these have significant implications for population health in Slovenia. The following are non-exhaustive examples of this enduring challenge.

Gender

In 2020, average life expectancy for men was 77.8 years; for women it was 83.4 years. Additionally, more men (19.3%) in the age group 15–64 were smokers in 2019 than women (15.6%). Slovenia has one of the highest suicide rates in the world, at 16.9 per 100 000 inhabitants in 2018; the level of suicide committed by males (28.6) is more than four times that of females (7.2).

Income and education

Average mortality for all causes in 2018 places Slovenia between Portugal and the Netherlands, and lower than the EU average. In 2017, overall mortality was between Germany and Denmark; however, rates for the highest income quintile are 6% lower than the EU average as compared with the lowest income group, which are 30% higher.

More adults (19.7%) in the lowest income quintile smoke more than those in the highest (15.6%); those with lower educational attainment report higher rates of daily smoking (17%) than those with higher educational attainment (12%).

Geography

Regional differences also exist with respect to life expectancy, morbidity and mortality data. Differences largely correspond to indices in relative poverty. Western and central regions are much better off than the eastern and north-eastern regions of Slovenia and better health and health care outcomes are observed in the data. Suicide rates vary at a ratio of 1:3 at the county level and are also linked to upstream determinants of health, including poverty levels. Similar differences are observed in alcohol-related liver diseases.

Sources: Albreht et al., 2016; Inchley et al., 2020; OECD/EOHSP, 2021; Eurostat, 2021a.

2

Organization and governance

■ Chapter summary

- Slovenia has a universally accessible, mostly publicly owned health care system underpinned by the core values of universality, solidarity, equality, equity of funding, accessibility, quality and safety. It is based on a statutory, employment-based health insurance (SHI) system; voluntary health insurance (VHI) provides complementary coverage for co-insurance of the services included in the benefits package.
- The Ministry of Health (MoH) is responsible for the development, regulation and supervision of the system and for strategic health policy development, ensuring that public health and health care services are provided in accordance with national legislation and regulations. Service provision is relatively centralized: the national government is responsible for secondary and tertiary care, while municipalities oversee primary health care.
- Primary health care is delivered mainly through a network of 63 multidisciplinary community-based primary health care centres (CPHCs), which serve as entry points to the health care system and offer a broad array of services close to where people live. A strong collaboration between CPHCs and public health programmes

results in holistic and prevention-oriented primary health care services, emphasizing community outreach and providing tailored approaches to vulnerable populations and individuals.

- Intersectoral action for health is reflected in public health policies addressing upstream determinants of health and health equity through, for example, education, social protection, tax policies, health supportive environments and road safety and injury prevention.
- Health system performance has improved in the past three decades, predominantly for inpatient care. Data on quality indicators, for example, are used to systematically measure performance at the regional, national as well as international level.
- Developments in health informatics include digital solutions to improve service quality and capture enhanced health data. Recent applications include a Central Registry of Patient Data (CRPD), a patient portal, e-prescriptions, e-appointments and triage, and teleradiology and monitoring for stroke patients.

■ 2.1 Historical background

Health care in Slovenia has undergone various changes, in parallel with its being part of different political states. Elements of today's health care system emerged during several of these periods. For example, organized health care dates to when Slovenia was part of the Habsburg monarchy when the first civil hospital in Ljubljana (1784) and the Slovenian Medical Association (1861) were established. In 1887, during the Austro-Hungarian Empire (1867–1918), a Bismarck-type model of social health insurance was introduced, covering work-related injuries; the first sickness fund was introduced in Ljubljana in 1889, with other cities following.

Under the Kingdom of Serbs, Croats and Slovenes (1918–1929) and the Kingdom of Yugoslavia (1929–1941), further foundations of Slovenia's current health system emerged. An Association of Health Insurance Funds was established (1919) and a National Institute for Hygiene, with regional social hygiene institutes, was founded in 1923, informed by the ideas of Dr Andrija Štampar (Brown & Fee, 2006). In 1926, the first CPHC, which still exists to this day (see sections 5.1 and 5.3), was established (Box 2.1).

BOX 2.1 CPHCs: Origins of universal health coverage (UHC) in Slovenia

"The most important task of our hygienic work will be to heal our village, and the basic guideline is that we will reach out to the patients ourselves and not wait for them to come to us."

Dr Ivo Pirc, Director, Institute for Hygiene and founder of CPHCs

CPHCs, run by municipalities, were established to ensure access to health and health care without financial hardship to everyone and represent the first traces of UHC in Slovenia. Originally, they were outreach focused and targeted disease prevention and maternal and child health care, especially through ensuring safe and healthy drinking water and food, the investigation and control of infectious diseases, and health education and promotion. Within a decade of inception, infant mortality halved and childhood vaccinations against diphtheria and scarlet fever significantly reduced the burden of infectious disease in Slovenia. Sixty-three CPHCs are the point of entry into the health system; multidisciplinary teams of professionals provide health services for the majority of health needs.

In the Socialist Federal Republic of Yugoslavia (1945–1991), health care facilities became state owned, all physicians became salaried state employees and private practice was outlawed. Primary health care continued to be delivered through CPHCs, including services in general practice, paediatrics, medicine for schoolchildren and adolescents, occupational medicine, pulmonary care, gynaecology with maternal and child health and dentistry. In 1955, the state-governed social insurance was replaced by various health insurance and social insurance schemes associated with employment type. Since 1972, SHI has been provided by a single scheme and operated by one state-owned entity, the Health Insurance Institute of Slovenia (*Zavod za zdravstveno zavarovanje Slovenije – ZZZS*) (see section 2.2).

Independence in 1991 and the subsequent transition to a free-market economy as well as the adoption of the Health Care and Health Insurance Act (1992) and the Health Services Act (1992), facilitated a modernization of health care in Slovenia.

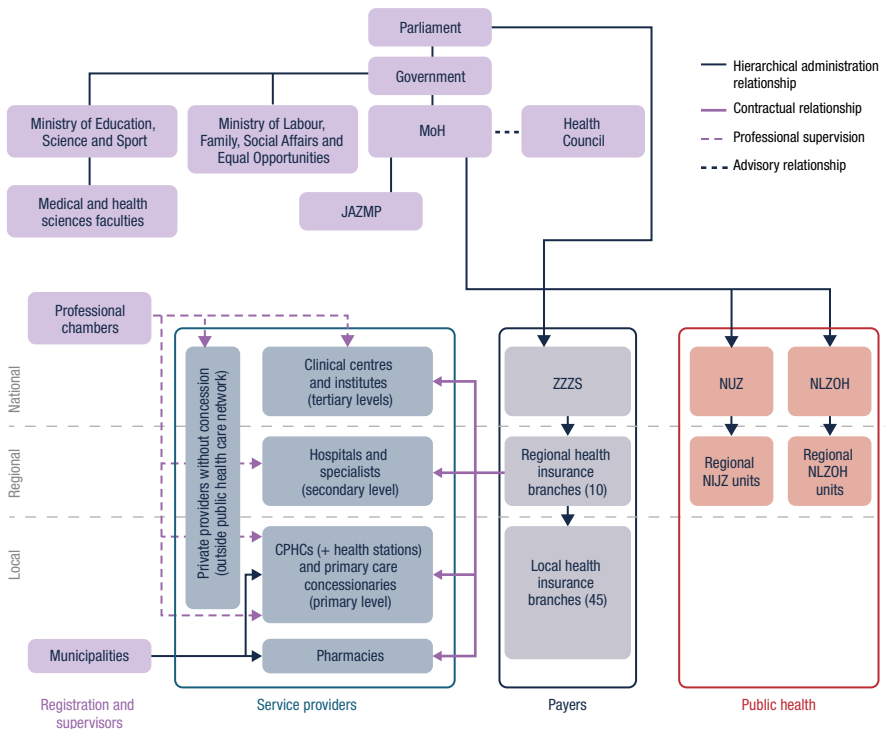
2.2 Organization

The Health Care and Health Insurance Act (1992), updated in 2018, and the Health Services Act (1992), which has not been changed considerably since its introduction, underpin the current SHI system in Slovenia. These ensure universal health insurance, permit privatization of services and transfer some regulatory and administrative functions to professional associations. The system is organized across the national and local (municipal) levels of government (Fig. 2.1).

The **National Parliament** has primary administrative and regulatory authority and determines policy. Health and health care-related legislation is adopted by Parliament, which also approves relevant budgets annually.

The **Parliamentary Committee on Health** prepares legislative materials and seeks to obtain consensus on matters undergoing health-related parliamentary consideration.

FIG. 2.1 Organization of the Slovene health care system



CPHC: community-based primary health care centre; JAZMP: Agency for Medicinal Products and Medical Devices of the Republic of Slovenia; NIJZ: National Institute of Public Health; NLZOH: National Laboratory for Health, Environment and Food.

Source: Johansen et al. (2020), adapted from Albrecht et al. (2016).

The **Ministry of Health (MoH)** is responsible for governance and leadership of the health care system. Together with adjunct state agencies and offices, it implements legislation, standards and other mechanisms for ensuring health and health care. It determines health and health care policy through the national health care plan and oversees procurement for bigger investment projects, supervision of medicines and medical devices (see section 2.4) and implementation of international agreements. It also defines the master plan of public health care providers and regulates the numbers of students who can matriculate into medicine and health sciences programmes. The **Ministry of Education, Science and Sport** is responsible for the overall regulation and organization and financing of the medical and health sciences education (see section 4.2).^{*} Finally, the MoH cooperates on health financing and health insurance matters and is the owner of public health care facilities at the secondary and tertiary care levels.

There are two component-offices within the MoH: The **Health Inspectorate** controls the implementation of health and health care legislation and the **National Chemicals Office** assesses and manages chemical-related hazards and risks, including maintaining a national register of chemicals and monitoring the trade and production and use of chemicals.

The **Health Council** is the highest professional body supporting the development of health policy and other governance issues, including ethics and medical doctrine.

Affiliated with the MoH, the **Agency for Medicinal Products and Medical Devices of the Republic of Slovenia** (*Javna agencija Republike Slovenije za zdravila in medicinske pripomočke* – JAZMP) is the official quality control laboratory for medicinal products and devices. It is the national regulatory body for pharmaceutical products and medical devices and is responsible for pharmacovigilance and materiovigilance. It maintains the national database of pharmaceuticals.

Several other ministries have mandates that impact on health policy, services or health determinants. The **Ministry of Finance** reviews and approves the budget of the MoH and health care-related investments. Distribution of the state budget, local authorities' budgets, and compulsory health insurance[†] and pension and disability insurance are also approved by the Ministry of

^{*} This includes medical doctors, doctors of dental medicine, physiotherapists, occupational therapists, nurses, clinical psychologists, radiotherapists, laboratory engineers, and others providing primary health services.

[†] Throughout this HiT, the terms statutory health insurance and compulsory health insurance, or iterations thereof, will be used to describe the same system.

Finance and Parliament yearly. The ministries of **Internal Affairs**, **Defence** and **Justice** finance health services for police, military personnel on active duty and prisoners, respectively. The **Ministry of Public Administration** oversees public sector operational regulations, regulates the salary system in the public sector; coordinates the negotiations with trade unions concerning salaries and working conditions; and defines the procurement rules for all public sector agencies, including all publicly owned health care providers.

Municipalities define the local network of primary care providers and pharmacies and own CPHCs and local pharmacies. They have authority to grant concessions to private health care providers looking to work within the publicly operated primary health care system. Municipalities also decide on and ensure funding for local health care infrastructure investments (section 4.1) and pay health insurance contributions for individuals without income, though in reality they do not have sufficient capacities and are only 30% self-sufficient in terms of capital.

The ZZZS administers the centralized compulsory health insurance (SHI) and aligns its work to the National Health Plan and the MoH priorities. It collects employment-based payroll health care contributions and contracts health care providers, pharmacies and medical equipment suppliers. It monitors health expenditures and negotiates prices of health services. ZZZS has 10 regional branches responsible for contracting and supervising providers and 45 local offices. The ZZZS Assembly, comprising representatives of employers, the insured population, retirees, people living with disabilities and farmers, approves ZZZS's annual financial plan, prepared by the MoH and the Ministry of Finance, which defines the level of funding for public health care services.

Three complementary health insurance companies, Vzajemna, Triglav zdravstvena zavarovalnica and Adriatic Slovenica zdravje, provide insurance for co-insurance (called co-payments in Slovenia) (section 3.5). According to law, their main purpose is not to make profit, but to complement SHI and strengthen financial protection.

The **National Institute of Public Health** (*Nacionalni inštitut za javno zdravje* – NIJZ) is responsible for essential public health functions, including health intelligence, health information and digitalization (e.g. data treatment and processing), health promotion, protection and disease prevention programmes, and provides support for health system and health care governance. It conducts public health research and education and is the key reporting institution for national health and health care statistics (section 2.6). NIJZ

works closely with the **National Laboratory for Health, Environment and Food** (*Nacionalni laboratorij za zdravje, okolje in hrano* – NLZOH), Slovenia's central and only public health laboratory and, since 2017, the official national laboratory that performs laboratory analyses for quality control of medicinal products. Each has a national and regional presence; NIJZ is headquartered in Ljubljana and NLZOH is in Maribor.

Professional associations such as the Medical Chamber of Slovenia and the Slovene Pharmaceutical Chamber have supervisory, (postgraduate) educational and administrative functions related to their constituencies. The Nursing Chamber has authority over the licensing and registration of nurses, midwives and health technicians. There is also a Chamber of Physiotherapists and of Laboratory Biomedicine. The Slovene Medical Association convenes physicians to discuss professional and operational issues. The **Association of Health Institutions of Slovenia** is also open to ZZZS-contracted private providers (concessionaires) and represents the interests of its members in negotiations with payers of services, and informs and advises them on topics related to management and legislation.

Several **trade unions** represent the interests of health professionals: 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. Slovenia has a fairly strong health-related **nongovernmental organization (NGO) sector**. NGOs provide health promotion services and ensure public participation in decision-making processes (section 2.5).

Employers are responsible for ensuring safe and healthy workplaces, covering part of the SHI contribution and paying a special contribution for work injuries and occupational illness. Their representatives in the ZZZS Assembly participate in ZZZS governance, which includes decisions on the allocation of health care funds. The organization of service providers in Slovenia is described in chapter 5.

■ 2.3 Decentralization and centralization

The Slovene health care system is relatively centralized. The MoH oversees strategic and infrastructure planning (see section 2.4), ZZZS centrally manages and administers compulsory health insurance (SHI), while local and

regional ZZZS branches conduct activities that are assigned to them from the central level. The professional chambers operate at state level or through their regional branches.

Inpatient hospital care is provided by 30 – mostly public – hospitals (see section 4.1.1). Since 2014, all public health services have been provided by the NIJZ and the NLZOH. Meanwhile, municipalities own the CPHCs; however, their role in primary health care governance varies based on several factors, including economic strength, population size and motivation. For example, altogether Slovenia's 212 municipalities have 63 CPHCs (in 2020) (NIJZ, 2021b); some operate their own centres while others combine resources (see sections 5.1 and 5.3). There is no subnational administrative level for secondary and tertiary care.

■ 2.4 Planning

The MoH is responsible for strategic planning. A national health care plan, which must be approved by Parliament, is the principal instrument and is underpinned by the core values of universality, solidarity, equality, equity of funding, accessibility, quality and safety. The current National Health Care Plan 2016–2025 “Together for a society of health” (Government of the Republic of Slovenia, 2016) defines the goals and activities to address key health and health care system challenges in Slovenia, including those for improving allocative efficiency (see section 7.6.1).

The current Plan is based on a broader 2015 analysis commissioned by the MoH and performed by the European Observatory for Health Systems and Policies and WHO, and sets forth the basis for health care system development over the 10 years (see section 6.1). This will be guided by new legislation on health insurance and health care activities, which has not been prepared as yet.

Planning of secondary and tertiary health care facilities, distribution of large-scale medical equipment, and capital investment in hospitals is based on a health needs assessment and is overseen by the MoH. Municipalities are responsible for capital investment planning of primary health care facilities (see sections 2.2 and 4.1.1).

The MoH is further responsible for workforce planning, based on an overview of personnel shortages and bottlenecks. The MoH also defines the

number of private providers to be contracted as concessionaires. Since 2018, the MoH and NIJZ have performed systematic analyses of health professional capacity needs across specialities and upon which health workforce planning is based. However, there is no national health workforce strategy providing strategic and political continuity to planning. There is also no overall planning regime in the fully private provider network.

BOX 2.2 Assessing institutional capacity for policy development and implementation

Health policy-making in Slovenia frequently suffers from insufficient capacity for policy development and implementation. This has been obvious, for example, in the case of a long-awaited reform of long-term care (LTC) (see section 6.1) and in the preparation of planning and strategic documents, which can take a long time. Further the implementation of these instruments is often uncertain due to a lack of adequate resources, both human and financial. Frequent political changes in Slovenia also impact implementation efficiency.

A notable exception is the public health system, which enjoys strong institutional capacity through the Public Health Directorate at the MoH and the NIJZ. The close collaboration of these entities ensures strong scientific support for the development of public health policies and facilitates programme implementation. Such strong institutional capacity is also more resilient to frequent political changes.

■ 2.5 Intersectorality

Slovenia has a tradition of intersectoral public health action, rooted in an understanding of the interconnected economic, social, educational, environmental, behavioural, commercial and political determinants of health inherited from its socialist past. Even before adopting EU legislation in 2004, intersectoral public health action was a priority at both the national and local levels. Formal intersectoral groups harmonized policies across sectors, which, at the local level, meant routinely performing (a sort of) health impact assessment of different sectors' policies and other activities. At this time, the health sector presided over more policy areas for action to protect population health.

EU legislation transferred many responsibilities for public health action to other ministries, limiting the health sector's competency in cross-sectoral action to providing information, counselling and advocating for others to implement measures for health promotion and protection. Therefore, today the MoH and public health institutions (NIJZ, NLZOH) actively collaborate with a range of ministries and organizations to address upstream determinants of health and health equity.

Table 2.1 gives an overview of entities involved in intersectoral action on health in Slovenia. Box 2.3 provides examples of recent intersectoral activities.

TABLE 2.1 Agencies and organizations with impact on health and health-related policy in Slovenia

ENTITY/INSTITUTION	ROLE IN POPULATION HEALTH
Ministry of Labour, Family, Social Affairs and Equal Opportunities	MoH's key partner in LTC; provides for nursing homes for the elderly and people with disabilities and negotiates bilateral conventions on social security
Ministry of Environment and Spatial Planning	Cooperates with the MoH around environmental determinants of health
Ministry of Agriculture, Forestry and Food	Oversees agriculture, forestry, food safety, veterinary medicine and integrated rural planning and policy
Veterinary Administration	Responsible for monitoring, prevention and control of transmittable animal diseases and epidemics
Ministry of Education, Science and Sport	Key MoH partner in implementation of health education programmes in educational institutions (from kindergarten until university) and important for ensuring healthy nutrition in educational settings. This Ministry was also essential for implementing measures to control the spread of COVID-19 in school settings during the pandemic
NGOs	Facilitate public participation in proposing and implementing health reforms. Active health-related NGOs include patient groups, organizations and initiatives, such as those promoting tobacco control or sober driving, and support and self-help groups
Economic and Social Council	Main consultative and coordinative institution for social dialogue; links social partners, employer associations, trade unions and government

LTC: long-term care; MoH: Ministry of Health; NGO: nongovernmental organization.

BOX 2.3 Recent intersectoral action on public health

- National Programme on Nutrition and Physical Activity for Health 2015–2025, developed jointly by the ministries of health, agriculture, forestry and food and education.
- National Strategy on Children’s and Youth’s Environmental Health 2012–2020, coordinated by the MoH, other ministries and two government offices.
- Restriction of the Use of Tobacco and Related Products Act (2017), an MoH collaboration with ministries of the economy and finance, Chamber of Commerce and trade unions.
- Several measures for the prevention of injuries and traffic accidents, including the National Road Safety Plan 2013–2022.
- National Programme for the Prevention and Suppression of Crime 2019–2023.
- Collaboration between several national and international stakeholders, including the MoH, the Ministry of Agriculture, Forestry and Food, the Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection, NIJZ, NGOs (Nutrition Institute, Slovenia’s Consumers Association) and the European Food Safety Agency (EFSA), on health safety of food and foodstuffs.
- National Programme on Illicit Drugs 2014–2020.
- National Programme for Equal Opportunities for Women and Men 2015–2020.
- Activities to establish a uniform, sustainable LTC system – MoH in cooperation with the Ministry of Labour, Social Affairs and Equal Opportunities.

At the local level, commitment to intersectoral action for health is reflected in partnerships between public health institutions and CPHCs with stakeholders in local community, such as educational and social care institutions and NGOs. Through this community-engagement-for-health approach, special attention is paid to vulnerable population groups, considering their special needs, available resources and the impact of the social and cultural environment on health status.

■ 2.6 Health information systems

Health system performance has strengthened in the last 30 years, primarily in inpatient care where it is used to systematically measure performance at the regional, national as well as international levels. The information generated has a clear influence on national health policy goals, but performance assessment based on enhanced information still needs to be introduced in primary health care and could be designed to enable individual providers to continuously monitor their own performance and benchmark it against peers.

Slovenia's health information system is based on strict legislation on personal data protection. Most registries and databases are covered by the Health Databases Act (2000, updates in 2015, 2018 and 2020). In December 2019, WHO reviewed Slovenia's system and affirmed the overall high quality as well as the achievement of desired standards.

Since the 1990s, the NIJZ and ZZZS are the principal controllers and processors of large health data repositories, and they represent the two entry points for data reporting. NIJZ maintains patient and service registries, ranging from births and deaths, causes of mortality to vaccinations, hospitalizations, outpatient services and the health system workforce.

NIJZ is an authorized producer of official national statistics, coordinated by the National Statistical Office (*Statistični urad Republika Slovenija – SURS*) and is the reporting point for data to international organizations. It disseminates health statistics as open data at its own data portal (NIJZ, 2021a). ZZZS collects data on the financial management of the health system. There are several other institutions managing different disease registries. The Institute of Oncology is the operator and processor of the Cancer Registry (Europe's oldest), two cancer screening programmes registries and numerous clinical registries. University Clinic Golnik manages the Tuberculosis Registry and Valdoltra Orthopaedic Hospital the Arthroplasty Registry.

Survey data is increasingly important in Slovenia, with NIJZ conducting large-scale surveys such as the European Health Interview Survey and topic-specific surveys. Other institutions that collect health survey data include the SURS and several university institutes. Several survey methodologies have been developed and, when applicable, web-assisted interviewing is widely used. Since 2019, NIJZ also gathers data on the patient experience in outpatient and inpatient hospital settings nationally.

Over the past two decades, several attempts have been made to modernize Slovenia's health data collection. Efforts to develop a uniform and standardized health information system have leveraged e-Health solutions and standard classification sets, leading to new streamlined data collection systems at NIJZ, ZZZS and the Institute of Oncology. A national e-Health (*e-Zdravje*) project (2010–2015) implemented new applications to improve service quality and capture additional data. These include the CRPD, zVEM patient portal, e-prescriptions, appointments and triage, and teleradiology and telemonitoring for stroke patients (see section 4.1.3). This project also introduced a “uniform information model” involving standardized classifications and data standards, code lists and definitions of selected variables, and using the CRPD as an interoperable “backbone”.

Together this has led to a reduction in the administrative burden on health care providers as well as clarity on reporting paths and increased potential for linkage and availability of health data. Provided certain conditions are met, there is also clear legal and operational framework to connect the data from these sources – namely, NIJZ, ZZZS and the Institute of Oncology – via personal identity numbers, which allow these data to be linked (in adherence with privacy and data protection standards) with those of other databases and registries within and outside the health system, for example, the central Population Registry.

However, despite progress, important issues remain. Though substantial information is collected, some areas of the health system are underrepresented, including LTC and health system management; data for other areas is underutilized by the decision-makers; and data collection should correspond better to population and system needs. Further, data quality in certain sectors poses a challenge, particularly outpatient care and service delivery. Additionally, due to a lack of systematic data linkage, data cannot be connected across institutions or sectors (i.e. on sociodemographics, spatial/pollution, care utilization, employment), preventing research that focuses on health, health services and their determinants. Finally, effective health-related communication publicly and politically, especially data-driven insights, is also a challenge with only a small proportion of the data available directly utilized by policy-makers to shape policies to improve the health system operation.

■ 2.7 Regulation

The legislative and regulatory framework for the health care system in Slovenia begins with the Constitution of the Republic of Slovenia (1991) which defines fundamental rights related to health: the right to health care, freedom of choice in family planning and the right to a healthy living environment. Slovene legislation is harmonized with that of the EU and applies nationally.

Two acts, the Healthcare and Health Insurance Act (1992) and the Health Services Act (1992), further define the health care system, and are supported by the Medical Services Act (1999), Pharmacy Practice Act (2016), Patients' Rights Act (2008), and Healthcare Databases Act (2000). Other health-related areas are also regulated by legislation, but will not be discussed here.

■ 2.7.1 *Regulation and governance of third-party payers*

Third-party payers are the ZZZS and VHI companies (see section 2.2). ZZZS is regulated by the Government and Parliament and monitored by the MoH. VHI activity is regulated by the Ministry of Finance and monitored by the Insurance Supervisory Agency (see section 3.5).

■ 2.7.2 *Regulation and governance of provision*

Health care providers are categorized as individual (e.g. medical doctors, nurses, dentists, physiotherapists, pharmacists and other) or institutional providers (e.g. CPHCs, hospitals and rehabilitative centres). Individual providers are regulated by professional chambers, while institutional providers are regulated through legislation adopted according to the policies of the MoH. The Medical and the Pharmaceutical Chambers have high levels of self-regulation and autonomy. They have control over professional advancements, including professional auditing and licensing of physicians, dentists and pharmacists, and are responsible for supervising, monitoring and ensuring quality of care as defined by relevant legislation (e.g. Medical Services Act (1999) and the Pharmacy Practice Act (2016)). Other professional

associations (see section 2.2) play an important role in organizing professional (postgraduate) training, adopting and monitoring implementation of professional instructions.

CPHCs and hospitals are managed by directors under supervision of the council of the respective institution. Councils consist of representatives from the MoH or the municipalities, patient representatives and a representative from ZZZS.

Annual partnership negotiations between providers, represented by the Association of Health Institutions of Slovenia, and the payer (ZZZS define and specify national guidelines and priorities, culminating in a General Agreement (and its annexes) (see section 3.3.4). Individual contracts between ZZZS 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. Some services (e.g. magnetic resonance imaging (MRI) and computed tomography (CT) scans, dialyses, transplantation and some outpatient services; see section 3.7) are paid with no caps; however, payments for most health services are prospectively defined and capped; those provided above the determined threshold are not reimbursed by ZZZS (see section 3.3.4). If ZZZS and a provider do not reach a consensus within the framework of the General Agreement, both parties may initiate an arbitration process. The MoH is the key arbiter in this case and has final decision-making power.

Most private providers are contracted by ZZZS based on a concession for inclusion in the network of publicly financed health care providers (with certain restrictions). Once a concession is granted, providers approach ZZZS to define the terms of the contract regarding provision, extent and reimbursement. The contract with ZZZS endows the same rights and obligations as public providers, except that private providers cannot apply for public funds for capital investments. Concessions are for practitioners seeking reimbursement for their services by SHI and/or VHI and only apply to the specific services. Non-concessionaires may offer services to patients who purchase supplementary VHI (e.g. for specialist visits outside the public network or to circumvent waiting times) or pay out of pocket (OOP).

Municipalities are responsible for regulating primary health care services. Most providers are contracted by ZZZS and are employed in CPHCs, with

TABLE 2.2 Overview of the regulation of providers

	LEGISLATION	PLANNING	LICENSING/ ACCREDITATION	PRICING/TARIFF SETTING	QUALITY ASSURANCE	PURCHASING/ FINANCING
Public health services	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annually. For infrastructure: MoH For services: public health institutions (NIJZ, NLZOH, Institute of Oncology) and NGOs	MoH	NA	Internal quality control according to ISO standards	MoH, ZZS and research and policy development projects
Primary health care	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annual negotiations between providers and ZZS (see section 3.3.4)	Individuals: professional chambers Institutional: MoH	ZZS	MoH and professional chambers; Internal quality control according to ISO standards	ZZS
Specialized (secondary) ambulatory care	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annual negotiations between providers and ZZS (see section 3.3.4)	Individuals: professional chambers Institutional: MoH	ZZS	MoH and professional chambers; Internal quality control according to ISO standards	ZZS
Specialized inpatient care	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annual negotiations between providers and ZZS (see section 3.3.4)	Individuals: professional chambers Institutional: MoH	ZZS	MoH and professional chambers; Internal quality control according to ISO standards	ZZS
Urgent and emergency care	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annual negotiations between providers and ZZS (see section 3.3.4)	MoH	ZZS	MoH and professional chambers; Internal quality control according to ISO standards	ZZS
Dental care	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annual negotiations between providers and ZZS (see section 3.3.4)	MoH	ZZS/market price	MoH and professional chambers; Internal quality control according to ISO standards	ZZS; largely provided by private providers paid OOP
Pharmaceutical care	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Annual negotiations between providers and ZZS (see section 3.3.4)	MoH	ZZS	JAZMP	ZZS
Long-term care	The LTC Act was drafted in 2017 and passed by government in 2021; still in process for adoption by Parliament	MoH and Ministry of Labour, Family, Social Affairs and Equal Opportunities	MoH and Ministry of Labour, Family, Social Affairs and Equal Opportunities	Act defines types of LTC services, who the contractors may be for each type of service and the criteria for beneficiaries of each type of service. It also determines the share covered by mandatory LTC insurance	Act provides for the establishment of a mechanism for the supervision and quality of LTC	LTC services will be financed by a combination of contributions from the statutory health insurance fund, the pension and disability insurance fund, the state budget, and, from 2025 on, from mandatory LTC insurance
University education of personnel	Health Care and Health Insurance Act (1992); Health Services Act (1992)	Undergraduate curricula defined annually by MoH	Ministry of Education, Science and Sport	According to public policy	Ministry of Education, Science and Sport and internal quality assurance mechanisms	State budget

ISO: International Organization for Standardization; LTC: long-term care; MoH: Ministry of Health; NA: not applicable; NIJZ: National Institute of Public Health; NGO: nongovernmental organization; NLZOH: National Laboratory for Health, Environment and Food; OOP: out of pocket; ZZS: Health Insurance Institute of Slovenia.

a small number working in private practice as concessionaires. The system of concessions and relevant legislation was updated in 2017 in line with the National Health Care Plan 2016–2025 (Government of the Republic of Slovenia, 2016), particularly around transparency and better regulation and supervision by the MoH.

■ 2.7.3 *Regulation of services and goods*

BASIC BENEFIT PACKAGE

All residents of Slovenia are entitled to essential and other medical and care services, medication and devices, as codified in the Health Care and Health Insurance Act (1992). There is a list of services fully covered by the statutory system (section 3.3). The benefits package is determined annually through the determination of the General Agreement between stakeholders (see section 3.3).

HEALTH TECHNOLOGY ASSESSMENT

No formal health technology assessment (HTA) has been established yet in Slovenia. To date, the introduction of new technologies into the SHI system has been ad hoc and, as a result, providers have considerable leeway in terms of which services they can provide for reimbursement by insurance. Despite the initiatives put forward mainly by the NIJZ, JAZMP and other stakeholders in recent years, only elements of HTA are considered in pricing and reimbursement decisions.

ZZZS as a purchaser is consistently involved with the evaluation of pharmaceutical products. Once marketing authorization has been granted (see section 2.7.4), pharmaceuticals are systematically evaluated for placement on one of three lists of medicinal products – the positive, intermediate or negative reimbursement list (see sections 2.7.4 and 5.6).

Recent attempts have been made to introduce parts of HTA systematically, which reflect a general intention of Slovenia to integrate the European endorsement of HTA (Directive 2011/24/EU) into policy. For example, the MoH has introduced standards for medical premises and equipment

and measures for assessing new treatment methods. Additionally, in 2015, a protocol to evaluate proposals for the funding of new diagnostics, treatments, procedures and therapies was adopted. Here, the Health Council appraises proposals using a questionnaire informed by HTA principles. Approved proposals are discussed by the MoH, ZZZS and providers, with reimbursement of the new intervention negotiated on a yearly basis. These processes, however, have not yet been fully implemented and are mostly ad hoc.

NIJZ and the Institute for Economic Research are involved in the European EUnetHTA Joint Actions 1 (2010–2012), which put into practice effective and sustainable cooperation on HTA in Europe, and Joint Action 2 (2012–2015), which strengthened the practical application of tools and approaches to cross-border HTA cooperation. From 2016–2020, MoH together with NIJZ and JAZMP also collaborated and contributed to EUnetHTA Joint Action 3 to build on the lessons, successes and products of the previous actions.

■ 2.7.4 *Regulation and governance of medicinal products*

The Medicinal Products Act (2014) and Medical Devices Act (2009) regulate all products used for the diagnosis, prevention, monitoring, treatment and alleviation of diseases, disorders, disabilities, anatomical functions or physiological processes, while the Pharmacies Act (1992) regulates the provision and organization of pharmacy services and activities. The MoH acts as the regulator of medicinal products, medical devices and pharmacy services in Slovenia. JAZMP is the competent authority for medicinal products and medical devices, overseeing tasks pertaining to marketing authorization, distribution, post-marketing evaluation and vigilance for pharmaceuticals (and medical devices). It also has an inspection function for clinical trials and pharmacy services and cooperates with other EU Member States and the European Medicines Agency (EMA).

In accordance with European legislation, medicinal products must obtain marketing authorization prior to their placement on the market, with some exceptions. Generally, there are four procedures to apply for marketing authorization: the national procedure; mutual recognition procedure; and the two methods via the EMA, the decentralized procedure and the centralized

procedure. In the national procedure, JAZMP checks whether the quality, safety and efficacy of the medicinal product in question have been proven, and whether the risk–benefit ratio for use is favourable. JAZMP also decides on the prescription status (available over the counter (OTC)/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).

After market access has been granted by national procedure, the applicant may apply, through the mutual recognition procedure, to be recognized in other EU/European Economic Area (EEA) Member States. The applicant may also choose to seek authorization separately from all Member States (decentralized procedure) or apply directly to the EMA for a single authorization, evaluation and authorization throughout the EU (centralized procedure).

Marketing authorization is generally issued for 5 years, after which a renewal must be applied for. Authorization can also cease to be valid when the product is no longer on the market or at the request of the marketing authorization holder. For reference products, patent protection is granted lasts 10 years, with a possible 1-year extension for new indications.

Pharmacovigilance is governed by the Medicinal Products Act (2014) and the “Rules on pharmacovigilance of medicinal products for human use”. A product’s marketing authorization can be suspended or withdrawn by JAZMP or the EMA following negative pharmacovigilance findings. JAZMP is responsible for the monitoring and acting on issues of quality and safety related to all medicinal products used in Slovenia. It evaluates and reports on adverse reactions, performs risk assessments, adopts and implements measures for the safe use of medicinal products, and encourages reporting of adverse events by medical professionals. The Inspection Department of NLZOH samples medicinal products for quality control, pharmacovigilance and good clinical practice inspection, performs on-site inspections of marketing authorization holders, wholesalers, pharmacies and other retailers and is responsible for the management of measures in cases of inadequate quality, suspected counterfeits and other emergencies. Further, JAZMP participates in activities within the international pharmacovigilance system.

DISTRIBUTION OF MEDICINAL PRODUCTS

JAZMP grants authorizations for the wholesale trade of medicinal products. There are 85 authorized wholesalers currently. The mark-up for wholesalers is not fixed; the same applies to retail stores selling OTC products. The price margin of OTC products sold in a retail setting is determined by the pharmacies themselves; prices of prescribed drugs reimbursed by ZZZS are defined by negotiation between ZZZS and manufacturers.

OTC products can also be obtained at online retailers, though the online sale of medicinal products is only allowed with JAZMP or EU authorization.

For acute diseases, physicians may prescribe medicines for up to 10 days. When longer-term treatment is necessary, a prescription can go for a maximum of 30 days; however, in exceptional cases and for specific indications, medicinal products can be prescribed for up to 3 months. Physicians may choose to prescribe pharmaceutical products either by their trade names or their generic equivalents.

EU Directive 2011/62/EU established an obligation to affix security features to all prescription-only medicinal products to prevent entry of falsified medicinal products into the legal supply chain. Security features comprise, for example, unique labelling and anti-tampering measures. A European-wide archive system, including an EU Hub and national and transnational archives, stores security information and enables the verification of authenticity of medicinal products. In Slovenia, the Institute for the Authentication of Medicinal Products was established in 2016 for this purpose.

PRICING

Parameters of pharmaceutical pricing and reimbursement are outlined in the Medicinal Products Act (1992) and the Health Care and Health Insurance Act (1992) and their implementing regulations. These were amended in 2008 to comply with the EU Directive 89/105/EEC, though the pricing model and relevant policy-making remains within Slovenia's jurisdiction.

For medicinal products not financed from public funds, prices are set freely based on market mechanisms. Price setting for products reimbursed in

the public system is regulated by JAZMP, which determines maximum prices. An external price referencing system, with Austria, France and Germany as reference countries, is used. Actual prices may be lower than the maximum-set price following agreements between the manufacturer and/or wholesaler and public payers (e.g. ZZZS, pharmacies, hospitals), or because of public tendering procedures. Only in exceptional cases can a price be set higher than the maximum price.

Since 2003, a system of maximum attributed value (MAV) for mutually interchangeable medicinal products (MIMPs) has been in place in Slovenia for products that no longer hold market exclusivity. JAZMP officially lists pharmaceutical products as mutually interchangeable based on their essential similarity in accordance with the Medicinal Products Act (1992). ZZZS creates MIMP clusters and defines MAVs (updated every 6 months) based on the lowest wholesale price among the mutually interchangeable products.

In 2013, the MAV system was extended to “therapeutic groups of medicinal products” – clusters of pharmaceuticals composed of different molecules but having the same effect. For each group, an MAV is determined according to the most favourable ratio of treatment costs and effects. All pharmaceuticals in a group are reimbursed by SHI only up to a level corresponding to the price of the cheapest molecule. When the manufacturer’s price exceeds the MAV set for each MIMP cluster or therapeutic group, the difference must be paid by patients OOP.

SUBSTITUTION

Both physicians and pharmacists are required to inform patients appropriately about generic prescribing and substitution. Patients for whom a product with a price higher than the relevant MAV has been prescribed may choose to either pay the difference OOP or to receive a generic product without co-insurance (in the form of co-payment). For all chemical entities, there is at least one medical product available without additional co-payment. Pharmacists are permitted to dispense a cheaper product from the MIMPs system and are required to offer patients a choice among the pharmaceuticals available for substitution. Prescribers may explicitly exclude pharmacy-level substitution on the prescription but should be able to present justification for

this decision. Records of dispensed substitutions at pharmacy level enables tracking for prescribers, payers and regulators.

REIMBURSEMENT

Reimbursement of medicinal products from public funds falls within the competence of ZZZS. A Pharmaceutical Reimbursement Commission provides recommendations on reimbursement level. Criteria include effectiveness, costs and cost-effectiveness. ZZZS ultimately places products on a positive or negative list. SHI covers all medicinal products on the positive list fully (medicines prescribed for children and specific conditions, such as diabetes, cancer, multiple sclerosis and epilepsy) or with a 30% co-payment; 10% of the price of products on the intermediate list is covered. Co-payments are covered by complementary VHI health insurance or paid OOP. For war veterans, prisoners and socially vulnerable people, they are covered by the state budget. A negative list includes products completely excluded from public reimbursement; patients must pay for these products in full and OOP. Physicians working in the public network use a system of green and white prescriptions when prescribing from the positive/ intermediate list or the negative list, respectively. Private physicians without a concession may only issue white prescriptions.

■ 2.7.5 *Regulation of medical devices and aids*

To enter the market, medical devices must obtain a CE (conformité Européenne) mark from a notified body, in line with national quality and safety requirements of regulations and EU Council Directive 93/42/EEC. The Medicinal Products Act (2014), which corresponds to Council Directive 93/42/EEC, regulates the field of medicinal products. As the relevant competent authority, JAZMP has regulatory and supervisory functions over the Slovene medical device market, including activities related to the classification of products, the verification of essential requirements for marketing authorization, clinical investigations of medical devices and the medical device vigilance system. JAZMP supervises manufacturers or their authorized representatives as well as wholesale and retail suppliers to ensure that they

adhere to national and EU legislation. It maintains several public registers on medical devices production and trade, such as the Register of Medical Device Manufacturers and of Business Entities Carrying Out Wholesale Trade in Medical Devices.

For information on the investment in and procurement of medical devices see sections 2.4 and 4.1.2.

■ 2.8 Person-centred care

■ 2.8.1 *Patient information*

Several sources of information are available for patients to guide them through the health care system (Table 2.3). The websites of MoH, ZZZS, NIJZ and health care providers are the main sources of information. ZZZS provides information on benefits, how citizens and residents can settle their compulsory health insurance status and about public provider organizations. It also offers periodic updates on the availability of individual family medicine specialists* and other primary care providers in the public network. The NIJZ publishes electronically-monitored waiting times (updated monthly) by provider for a limited number of services. These data are self-reported by the providers, and to counteract reporter bias, the MoH is currently planning to introduce measures to ensure reporting accuracy and timeliness by the providers. Most of this information can also be retrieved through the National Contact Point, which was established according to the requirements of EU Directive 2011/24/EU on patient rights in cross-border health care (see section 2.8.4).

For the two autochthonous ethnic minorities in Slovenia (Italians in the southwest and Hungarians in the northeast), some local health care institutions are obliged to offer information in Slovene and an autochthonous language. Information brochures and health promotion materials may also be provided in English, Albanian and certain other languages. Further, according to European legislation, patient information leaflets must be enclosed with each medicinal product placed on the market.

* In Slovenia, since 2000, all physicians working in family medicine practices are required to have 4-year specialisation (residency) in family medicine. GPs with only medical faculty diploma are no longer allowed to work with patients.

TABLE 2.3 Patient information

TYPE OF INFORMATION	IS IT EASILY AVAILABLE?	COMMENTS
Information about statutory benefits	Yes	ZZZS and health care providers
Information on hospital clinical outcomes	Yes	Available on the MoH website.
Information on hospital waiting times	Yes	NIJZ
Comparative information about the quality of other providers (e.g. primary care physicians)	No	
Patient access to own medical record	Yes	Available at the patient portal (see sections 2.6 and 3.7.1).
Interactive web or 24/7 telephone information	Yes	Many national and regional/local health-related hotlines, often operated by NGOs, e.g. for mental health support, smoking cessation, victims of violence. All CPHCs provide out-of-hours medical advice. A NIJZ-operated website offers young people a community to engage on health issues (https://www.tosemjaz.net/)
Information on patient experience collected (systematically or occasionally)	Yes	First patient-related experience measures (PREMs) survey was conducted by NIJZ in 2019 (see section 7.1)
Information on medical errors	Yes/no	Required reporting to the MoH on serious adverse events within 48 hours of occurrence. Data are not publicly available

■ 2.8.2 Patient choice

Statutory coverage via the single national insurance fund is obligatory and opting out is not permitted. There is no choice of the statutory benefits package. Patients can choose their personal primary care provider (family medicine specialists, paediatricians, gynaecologists, dentists), who act as gatekeepers, providing access to secondary and tertiary care through referrals (see section 5.3). Patients may choose their specialist providers with a referral without administrative or geographical constraint.

Patients have free choice of complementary insurance (covering co-insurance in the form of co-payments), which is offered by three insurance companies (see sections 2.2 and 3.5). These companies, along with several others, also offer supplementary insurance packages (e.g. for some ambulatory specialist services, specialist visits outside the public network and to circumvent waiting times), though the Slovene supplementary insurance market is small (Table 2.4).

TABLE 2.4 Patient choice

TYPE OF CHOICE	IS IT AVAILABLE?	DO PEOPLE EXERCISE CHOICE? ARE THERE ANY CONSTRAINTS (E.G. CHOICE IN THE REGION BUT NOT COUNTRYWIDE)? OTHER COMMENTS
CHOICES AROUND COVERAGE		
Choice of being covered or not	N	
Choice of public or private coverage	N	
Choice of purchasing organization	N	
CHOICES OF PROVIDERS		
Choice of primary care practitioner	Y	Switching possible once per year
Direct access to specialists	N	
Choice of hospital	Y	Countrywide choice and includes private hospitals with a concession; level of hospital treatment (secondary or tertiary) cannot be chosen
Choice to have treatment abroad	Y	See section 2.8.4
CHOICES OF TREATMENT		
Participation in treatment decisions	Y	
Right to informed consent	Y	See section 2.8.3
Right to request a second opinion	Y	See section 2.8.3
Right to information about alternative treatments	Y	See section 2.8.3

■ 2.8.3 Patient rights

Patient rights and responsibilities are regulated by the Patients’ Rights Act (2008, amended in 2017 and 2020). In line with the WHO Declaration on the Promotion of Patients’ Rights in Europe (WHO, 1994), which distinguishes between social and individual rights, the Act is mainly concerned with individual rights (Table 2.5).*

* 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).

TABLE 2.5 Patient rights

	Y/N	COMMENTS
PROTECTION OF PATIENT RIGHTS		
Does a formal definition of patient rights exist at national level?	Y	Patients' Rights Act (2008)
Are patient rights included in legislation?	Y	Patients' Rights Act (2008) Mental Health Act (2008)
Does the legislation conform with WHO's patient rights framework?	Y	
PATIENT COMPLAINTS AVENUES		
Are hospitals required to have a designated desk responsible for collecting and resolving patient complaints?	Y	The following information must be visible: name of designated person; telephone number; how to submit first request; contact information of nearest patients' rights ombudsman
Is a health-specific Ombudsman responsible for investigating and resolving patient complaints?	Y	13 regional patients' rights ombudsmen
Are there other complaints avenues?	Y	Commission for the Protection of Patient Rights
LIABILITY/COMPENSATION		
Is legal insurance required for physicians and/or other professions?	Y	Decision on insurance of doctors and dentists for damage that could occur in their work (2019)
Can legal redress be sought through the courts in the case of medical error?	Y	Medical Chamber has authority to conduct professional supervision
Is there a basis for no-fault compensation?	N	Non-fault compensation is under consideration (Debevec et al., 2019)
If a tort system exists, can patients obtain damage awards for economic and non-economic losses?	Y	Patients or their relatives can claim compensation
Can class action suites be taken against health care providers, pharmaceutical companies, etc.?	Y	Collective Actions Act (2017)

The Act (article 5) lists 14 patient rights and divides them according to level of engagement in the health system, such as rights expected as a user of health services, as a patient of a providers and procedural rights, including the right to have decisions reviewed and those related to the violation of other rights.

It also describes patient duties related to these rights. In practice, realization of these rights is conditioned by the right to health care services

and by evidence-based medical doctrine and standards (e.g. physicians have the right to refuse treatment if it is not medically indicated or is subject to concerns related to medical ethics).

Furthermore, the Act introduces 13 patients' rights ombudsmen, who are nominated by the MoH and responsible for regions, and the Commission for the Protection of Patient Rights, which provide support to patients and report annually to the government.

■ 2.8.4 *Patients and cross-border health care*

According to the EU Directive 2011/24/EU on patients in cross-border health care, EU citizens have the right to access health care in any EU country and be reimbursed for care abroad by their home country,* with differences between unplanned emergency treatment and planned treatment.

Insured people from one EU/EEA country are entitled to all public, emergency medical services in another, under the same conditions and for the same costs as the insured of the providing country. Slovenia has additional bilateral agreements for cross-border emergency health care with Australia, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Switzerland. Emergency medical services received in other countries are reimbursed (by ZZZS) only up to the average price of performed services in Slovenia, and not exceeding actual cost of services. People insured in an EU/EEA country may seek planned treatment abroad in three cases, each with its own legal basis, reimbursement regimes and approval procedure: 1) all treatment options in Slovenia have been exhausted; 2) waiting times exceed the maximum permissible waiting times or a reasonable period of time; or 3) the insured patient decides to receive treatment abroad on the basis of a previously issued referral and prior ZZZS approval. Primary health services cannot currently be sought outside of Slovenia.

Cross-border care represents a loss in revenue for Slovenia. Overall, 85 416 foreign citizens, mostly from Austria, Croatia, Germany and Italy, sought medical care in Slovenia in 2020, amounting to € 25 411 583, while

* EU Directive 2011/24/EU on patients' in cross-border health care sets out the conditions under which a patient may travel to another EU country to receive medical care and reimbursement. It covers health care costs, as well as the prescription and delivery of medications and medical devices.

86 761 people insured in Slovenia received health services abroad, totalling € 35 980 774, mostly in Bosnia and Herzegovina (35%), Croatia (23%) and Germany (13%). The data suggests that care is sought abroad primarily because certain hospital-related procedures are not being delivered in Slovenia and because of long waiting times (see section 7.2). When looking at specific grounds, 469 applications due to exhausted treatment options were approved in 2020, including for paediatric heart surgery and biomedically assisted fertilization. Twenty-two were approved, mostly for DaTscan (for diagnosis of Parkinson's disease) in Croatia, because of exceeded waiting times, and 1 180 applications were received for reimbursement of specialist care or medical products based on a previously issued referral or approval from ZZZS, mostly for dental services, electromyography tests and cardiovascular surgery.

3

Financing

■ Chapter summary

- Slovenia's health system is mainly funded through SHI, with the remainder coming from VHI and direct OOP payments. In 2019, current health expenditure (CHE) accounted for 8.5% of GDP.
- Public financing is the primary source of funding (72.8% of CHE in 2019). The share of private funding has been increasing since 2014 and amounted to 27.2% in 2019. VHI premiums (15% of CHE) alongside OOP payments (11.7% of CHE) comprise the main private sources of health funding.
- Complementary VHI represents the largest share of VHI, covering cost-sharing levied on health care services included in the benefits package. It is purchased by more than 95% of the population liable for co-insurance (or 73% of the total population). In Slovenia, cost-sharing is levied in a form of co-insurance (called co-payments), as a percentage of the price of health services. Several small companies make up a limited supplementary VHI market.
- Co-insurance levels for services not fully covered are determined by the ZZSZ in agreement with the government and range from 10% to 90% of the cost, depending on the treatment or service.

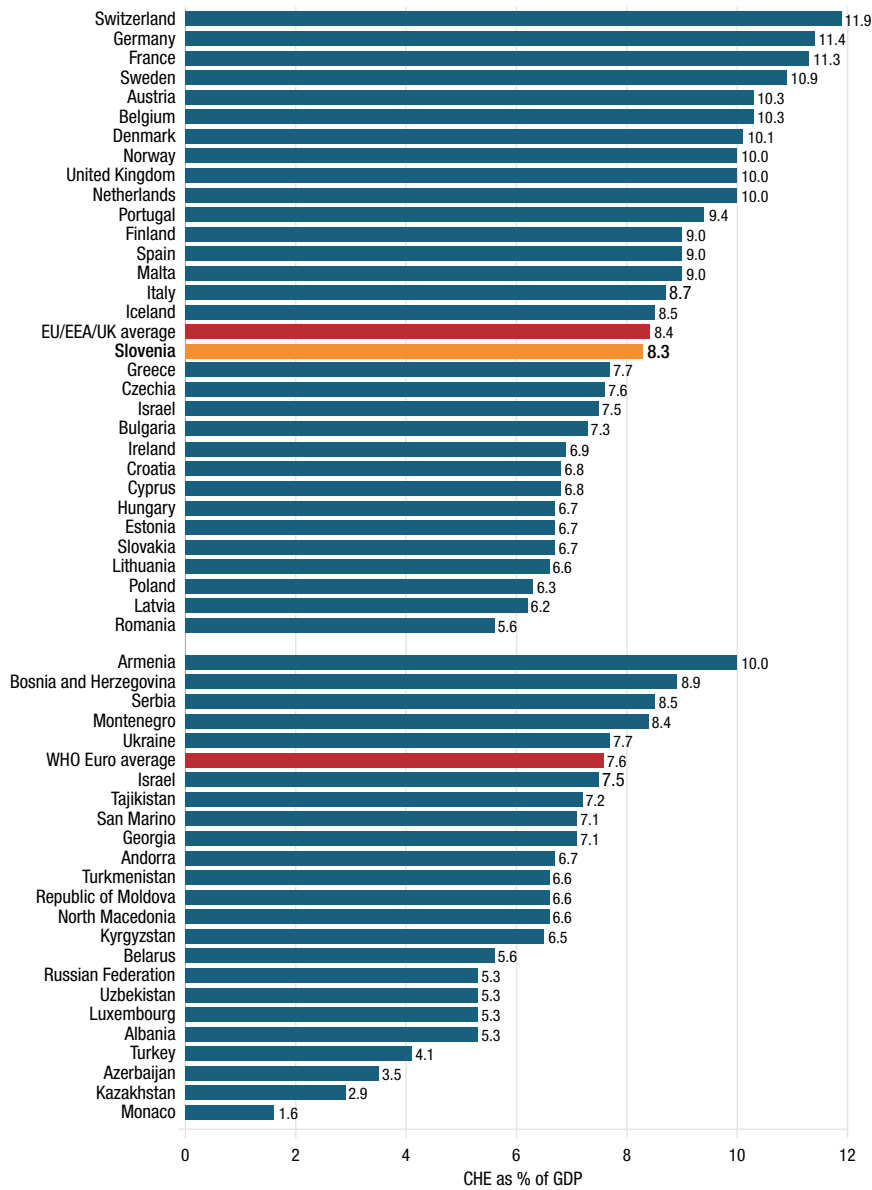
- Depending on the provider type, primary health care services are paid by a mix of capitation and fee-for-service (FFS) payments, flat-rate or exclusively FFS. Outpatient specialist services are remunerated exclusively on an FFS basis, while inpatient care is reimbursed according to a payment model based on diagnosis-related groups (DRGs).
- Health care personnel in primary and secondary care may practice 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, where payment is determined by a contract); or as a private provider outside the public health care network (direct payment by patients or VHI except complementary VHI).

■ 3.1 Health expenditure

Over time, health expenditure as a share of GDP has fluctuated in line with the development of the economy. CHE as a share of GDP increased significantly from 7.5% in 2007 to 8.6% in 2009, as a result of a shrinking GDP that year due to the 2008/2009 financial crisis. CHE remained relatively stable until 2014, when it started decreasing. In 2018, CHE in Slovenia accounted for 8.3% of GDP, only marginally below the European Region average that year (Figs. 3.1 and 3.2), according to WHO. More recently, CHE accounted for 8.5% of GDP in 2019, according to Organisation for Economic Co-operation and Development (OECD) data. In terms of PPP per capita, Slovenia has spent a steadily growing amount on health, from US\$ PPP 1 405 in 2000 to US\$ PPP 3 158 in 2018 (Fig. 3.3). Among countries with a SHI system, Slovenia spent more per capita on health than Slovakia and Czechia, but less than the Netherlands, Austria and Germany (UMAR, 2020b). In total, CHE amounted to € 3.81 billion in 2018 (SURs, 2018). Preliminary national data for 2019 estimates total health expenditure to be € 3.96 billion (8.2% of GDP) (ZZZS, 2020).

Recent decreases can partially be explained by a strengthening economy; however, reduction in overall public expenditure, from 6.1% of GDP in 2015 to 6.0% in 2018, also contributes to this trend. Public spending accounts for

FIG. 3.1 Current health expenditure as a share (%) of GDP in the WHO European Region, 2018



CHE: current health expenditure; EEA: European Economic Area; EU: European Union; GDP: gross domestic product; UK: United Kingdom; WHO: World Health Organization.

EU/EEA region countries located in the first group; additional WHO European Region countries located in the second group.

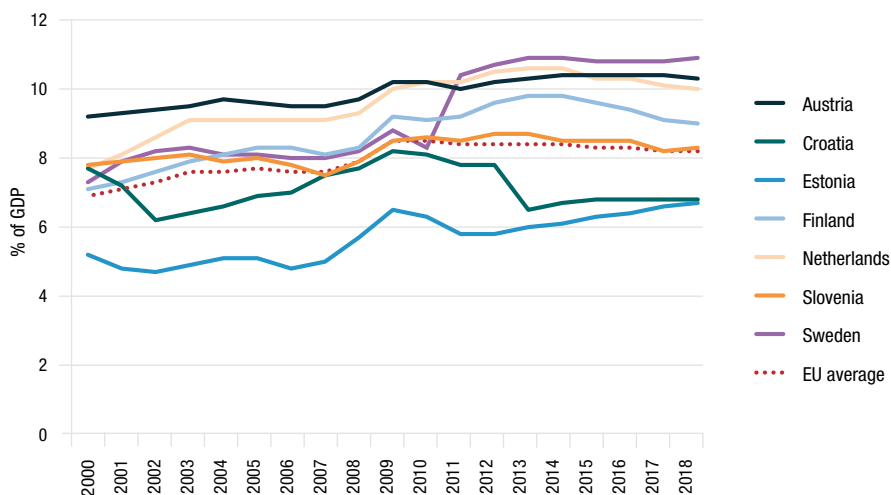
Source: WHO, 2020.

the largest share of CHE (72.4% in 2018), which is 19th in the European Region and more than the regional average of 71.2 %, according to WHO (Fig. 3.4). According to data from the OECD, public spending to health amounted to 72.8% of CHE in 2019 (Table 3.1) and was below the EU27 average of 79.7%.

According to international data, private health expenditure, including VHI and OOP spending, has been decreasing. In 2019, as a share of CHE, private expenditure reached 27.2%, compared with 28.6% in 2005 (SURS, 2020c) (see Table 3.1). The 2019 average for the countries in the EU27 was 20.3% of CHE.

Levels of OOP spending are among the lowest in Europe at 11.7% of CHE in 2019 (EU average: 15.4% of CHE). Historically, household OOP spending was the second most important private source of health expenditure after complementary VHI; however, the share of OOP payments in private health expenditure exceeded that of complementary VHI in 2018. OOP payments rose from 44.2% of private financing in 2015 to 48.3% in 2018, the level at which it remained in 2019 (Table 3.1).

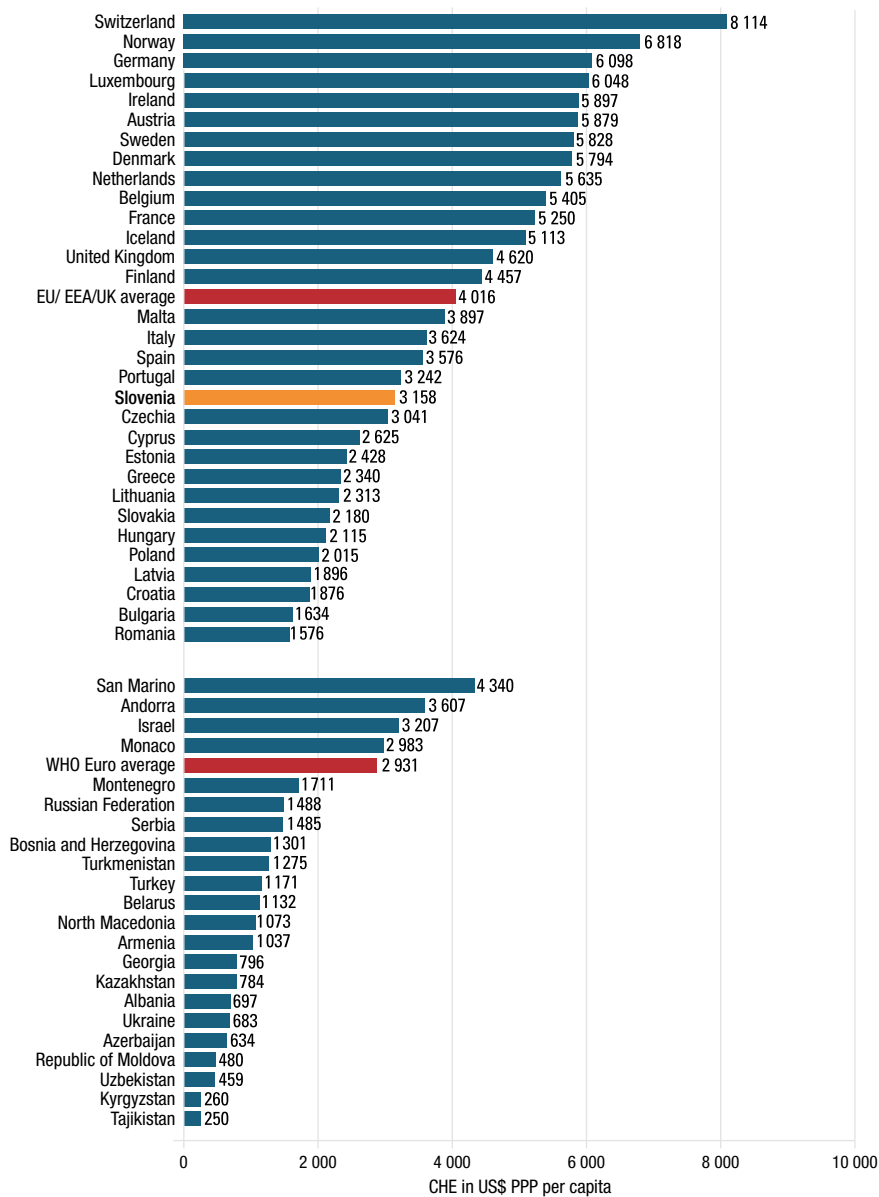
FIG. 3.2 Trends in current health expenditure as a share (%) of GDP in Slovenia and selected countries, 2000–2018



CHE: current health expenditure; EU: European Union; GDP: gross domestic product.

Sources: WHO, 2020; GHED, December 2020.

FIG. 3.3 Current health expenditure in US\$ PPP per capita in the WHO European Region, 2018

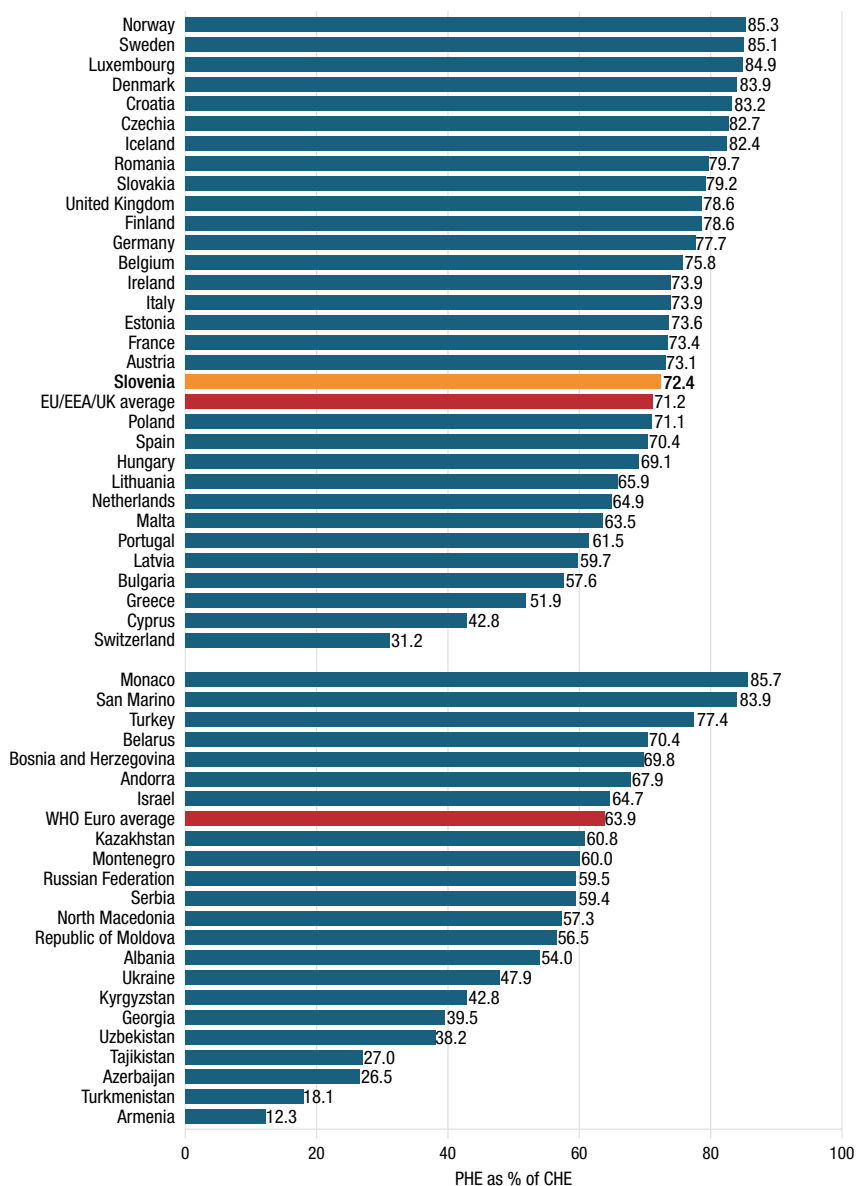


CHE: current health expenditure; EEA: European Economic Area; EU: European Union; PPP: purchasing power parity; UK: United Kingdom; WHO: World Health Organization.

EU/EEA region countries located in the first group; additional WHO European Region countries located in the second group.

Source: WHO, 2021a.

FIG. 3.4 Public expenditure on health as a share (%) of current health expenditure in the WHO European Region, 2018



CHE: current health expenditure; EEA: European Economic Area; EU: European Union; PHE: public health expenditure; UK: United Kingdom; WHO: World Health Organization.

EU/EEA region countries located in the first group; additional WHO European Region countries located in the second group.

Source: WHO, 2020.

TABLE 3.1 Trends in health expenditure in Slovenia, 2000–2019

EXPENDITURE	2000	2005	2010	2015	2018	2019
Current health expenditure per capita in international US\$ (PPP)^a	1 406	1 910	2 385	2 689	3 158	2 283 ^b
Current health expenditure as % of GDP^a	8.1	8.0	8.6	8.5	8.3	8.5 ^b
Public expenditure on health as % of current health expenditure on health^a	71.4	72.2	72.4	71.4	72.4	72.8 ^b
Public expenditure on health per capita in International US\$ (PPP)^a	1 004	1 379	1 726	1 919	2 287	2 404 ^b
Private expenditure on health as % of total expenditure on health^a	28.6	27.8	27.6	28.6	27.1 ^c	27.2 ^b
Public expenditure on health as % of general government expenditure^a	11.7	12.4	12.4	12.4	13.9 ^c	Not yet available
General government health spending as % of GDP^a	5.6	5.8	6.2	6.1	6.0	6.7 ⁱ
OOP payments as % of total expenditure on health	10.5 ^d	12.4 ^e	12.6 ^b	12.5 ^b	11.9 ^b	11.7 ^b
OOP payments as % of private expenditure on health	44.1 ^f	49.1 ^f	47.6 ^f	44.2 ^g	48.3 ^h	48.3 ^h
Private insurance as % of private expenditure on health	51.0 ^f	47.5 ^f	47.6 ^f	51.2 ^g	47.8 ^h	47.8 ^h

GDP: gross domestic product; OOP: out of pocket; PPP: purchasing power parity.

^aWHO, 2021a. ^bOECD, 2021e. ^cUMAR, 2020b. ^dUMAR, 2015. ^eUMAR, 2016.

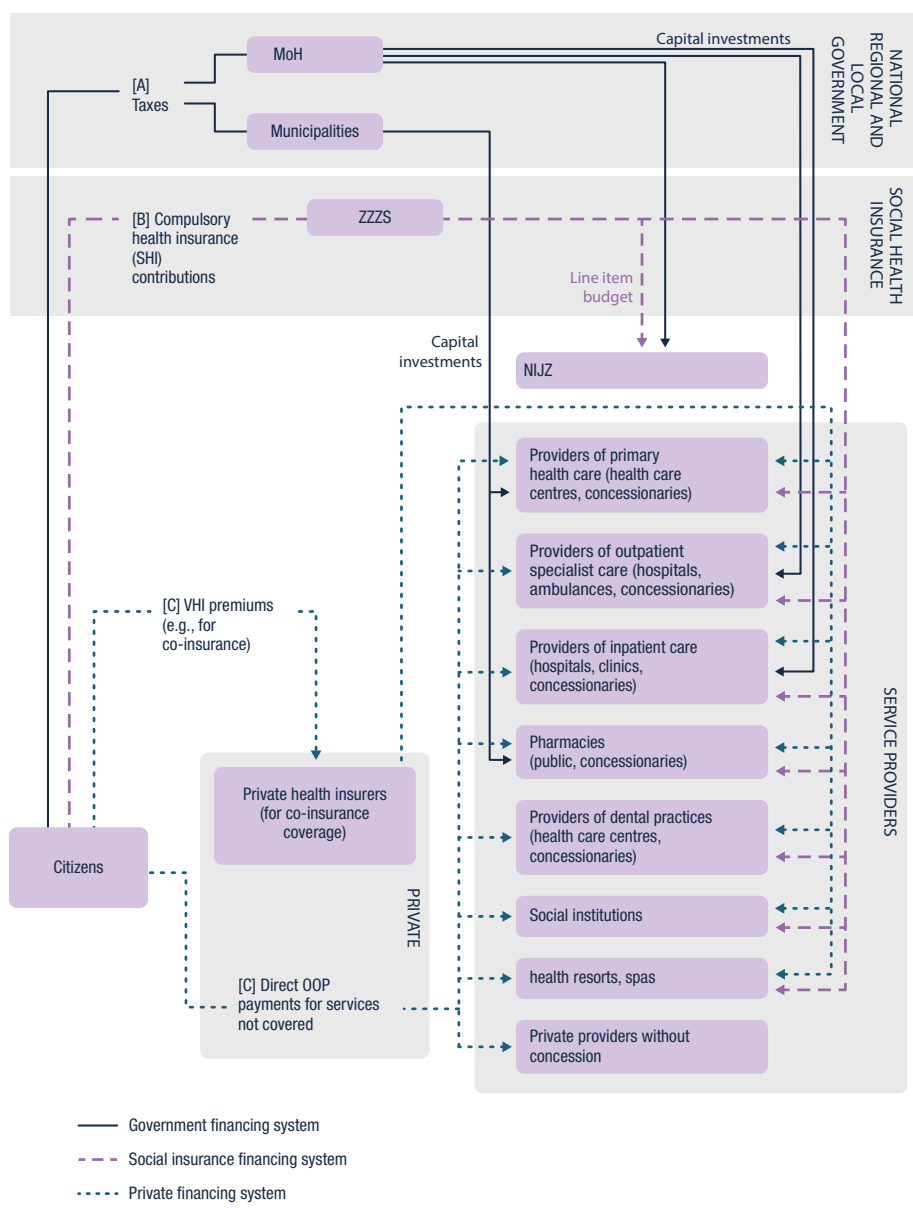
^fAlbrecht et al., 2016. ^gZZZS, 2019. ^hZZZS, 2020. ⁱSURS, 2020c.

■ 3.2 Sources of revenues and financial flows

Revenue flows to the health care system through public and private sources (see section 3.1). The main sources of public funding are SHI contributions and general taxation, while VHI schemes – complementary and supplementary – and household OOP spending drive private financing (see Fig. 3.5).

In 2019, 72.8% of CHE came from government (3.4%) and SHI (69.4%) (Eurostat, 2021d). Funds raised through the latter represent the largest share of the total revenue for health from all sources. In 2018, 92% of all publicly

FIG. 3.5 Financial flows



MoH: Ministry of Health; NIJZ: National Institute of Public Health; OOP: out of pocket; SHI: statutory health insurance; VHI: voluntary health insurance; ZZZS: Health Insurance Institute of Slovenia.
Source: Albreht et al., 2016.

sourced health expenditure came from SHI or the pension insurance fund (UMAR, 2020c). For more information on SHI, see section 3.3.

General national and municipal level taxation covers costs for capital investments and national public health programmes (i.e. cancer screening) and ensures financial resources for socially vulnerable groups (see section 4.1). In terms of municipal health budgets, besides raising taxes, municipalities receive additional resources from the central government, which fund capital investment for public health centres and public pharmacies within their territories (section 3.3.2). During the COVID-19 pandemic, the central government budget was a source of financing for pandemic-specific measures (e.g. protection equipment for health care staff, financing sick leave connected to COVID-19 quarantine).

In 2018, national sources show that 73% of the Slovene population (or 95% of those liable for co-insurance) has complementary VHI (UMAR, 2020b) (see section 3.5). Complementary VHI contributions represented € 525.8 million, or 14% of total health spending (€ 3.789 billion) (ZZZS, 2019; Zver, 2021). OOP payments, primarily for medicines and dental care and some outpatient care (section 3.4), account for € 454.9 million or 12.0 % of total health expenditures (€ 3.789 billion) (ZZZS 2020; Zver, 2021).

According to disaggregated data on health expenditure by function and financing scheme (Table 3.2), the main areas of health expenditure in 2019 were outpatient and inpatient care, with 55.8% of total health expenditure, almost entirely from SHI and VHI premiums (51% of CHE).

Since 2010, financial incentives have facilitated a shift from inpatient to outpatient care (see sections 3.7.1 and 4.1), leading to higher spending in the latter. In 2019, inpatient care received 26.8% of CHE, while outpatient care amounted to 29% of CHE (Table 3.2). Medical goods, including pharmaceuticals receive 21.2% of CHE, financed mainly through OOP payments and VHI (OECD, 2021e). At 10.2% of health expenditure, Slovenia spends considerably less than the EU27 average (16.3%) on LTC. Looking forward, though LTC legislation is due to be adopted by the end of 2021, it is unclear how the legislation will impact on the financing or availability of services (see Chapter 6).

The COVID-19 crisis prompted additional funding injections in 2020 and 2021 to support the health sector. Because the crisis was officially declared a pandemic, according to law, the government assumed responsibility

for the procurement of the necessary equipment and medicines for all public health care settings. The government health budget also fully covers testing and subsequent COVID-19-related health treatment.

TABLE 3.2 Expenditure on health (as % of current health expenditure) according to function and type of financing, 2019

	INPATIENT CARE	OUTPATIENT CARE	LONG-TERM CARE (HEALTH)	PHARMACEUTICALS	PUBLIC HEALTH AND PREVENTIVE	ADMINISTRATION	OTHER SERVICES	TOTAL
General/statutory government	23.4	21.3	9.5	10.1	2.0	1.9	2.2	72.8
Private sources (complementary VHI/household OOP)	3.4	7.7	0.7	11.1	1.2	1.9	1.1	27.2
Complementary and other VHI	3.1	3.2	0.1	4.8	1.2	1.9	1.1	15.6
Household OOP	0.3	4.5	0.6	6.3	–	–	0.0	11.7
Total expenditure	26.8	29.0	10.2	21.2	3.2	3.8	3.3	100.0

OOP: out of pocket; VHI: voluntary health insurance.

Notes: Complementary VHI for co-insurance and other VHI premiums.

Source: OECD, 2021e.

■ 3.3 Overview of the statutory financing system

■ 3.3.1 Coverage

BREADTH: WHO IS COVERED?

The centralized SHI system, administered by the ZZZS, is defined in the Health Care and Health Insurance Act (1992). Nearly every permanent resident in Slovenia is entitled to the health benefits covered under this scheme, as contributing members or as their dependents. Opting out is not permitted. Permanent residency is one of the main factors for entitlement to health services, but Articles 15–18 of the Act define additional conditions under which a person is compulsorily insured. Consequently, coverage is

near universal, with 2 116 739 compulsorily insured individuals in 2019, representing more than 99% of the population and a slight decrease of 0.8% from 2018 (ZZZS, 2019). About 0.14% (3 345) individuals were uninsured at the end of 2020. Most of these were temporarily uninsured; for example, awaiting recognition of the right to a pension or to unemployment benefits; the remaining were primarily individuals who cannot meet the formal residency requirements (e.g. undocumented migrants, ethnic minorities such as the Roma population and the homeless). In addition, 15 892 people at the end of 2020 are covered by SHI, but with unpaid contributions, meaning that their rights to health care services were on hold and that they only had access to emergency services (Box 3.1).

There are 25 categories of insured people, divided into two main groups. Each category has a different contribution rate, but contributions are mostly income-based. The first group is employees (and their dependents) and the second group comprises the unemployed, others without fixed income but not registered as unemployed, pensioners, farmers and the self-employed. The National Institute for Employment covers contributions for the unemployed; the state and/or municipalities for individuals without income, prisoners and war veterans. For more information on the collection and pooling of compulsory health insurance contributions, see section 3.3.2.

SHI coverage is also provided to citizens of almost all EU countries through European regulation and bilateral agreements (see section 2.8.4). Specific provisions apply for certain vulnerable groups.

SCOPE: WHAT IS COVERED?

The Health Care and Health Insurance Act (1992) broadly defines the 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 people; however, some specific benefits do not apply to all categories of insured people (e.g. retired people are not entitled to sick leave benefits and certain self-employed groups and farmers are not entitled to reimbursement for travel expenses).

Article 23, point 1 of the Act, delineates the following services to be fully covered by compulsory health insurance:

- All health services for children, 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, immuno- and chemoprophylaxis (programme-based).
- Treatment and rehabilitation of malignant diseases.
- 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 most 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 ZZZS in agreement with the government. To this end, the ZZZS issues the “Regulation of compulsory health insurance”, which must be accepted by the ZZZS Assembly and approved by the Minister of Health. Practically, this means that, although no services are 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?

For services not fully covered, compulsory health insurance will take on 10–90% of the cost, depending on the specific type of treatment or activity. Since the adoption of the Fiscal Balance Act in 2013, these shares are as follows.

A minimum of:

- 90% of the cost of services related to organ transplantation and urgent surgery, treatment abroad, intensive therapy, radiotherapy, dialysis and other urgent interventions included in the basic benefits package;
- 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 nonoccupational injuries; dental care and orthodontics; orthopaedics; hearing and other aids and appliances;
- 70% of the cost of medications from the positive list (see sections 2.7.4 and 5.6); 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;
- 50% of the cost of ophthalmology devices and orthodontic treatment for adults;
- 25% of the cost of pharmaceuticals from the intermediate list determined by the ZZZS.

As mentioned, most compulsorily insured individuals purchase complementary VHI to cover co-insurance (see sections 3.4.1 and 3.5).

BOX 3.1 Assessing coverage

Population coverage in Slovenia is nearly universal (over 99%); however, there are several populations which encounter challenges to obtaining insurance; for example, individuals with unclear or changing insurance status, those with unclear residence status, including ethnic minorities such as Roma, undocumented migrants, and homeless people and those with unpaid contributions. There were 15 892 people at the end of 2020 with unpaid contributions, meaning that their rights to health care services were on hold and that they only had access to emergency services. There are initiatives in place to address these gaps. Homeless people, for example, can register for permanent residence at the Centre for Social Work, after which their insurance contributions are covered from municipal budgets. There is little difference across categories of insured for a comprehensive list of services, though the share of the coverage for services in the basic benefit package has been decreasing as the funds collected have not been sufficient to cover the broad scope of services. As a result, the role of complementary VHI is increasing, offering financial protection from large co-payments. About 73% of the population purchases complementary VHI via a flat-rate premium to cover high cost-sharing arrangements. Due to high levels of complementary VHI, households' OOP spending is the lowest in the European Region (12% in 2018). For recipients of social benefit payments, the government covers co-insurance at point of service; however, for the 5% of the population for whom the complementary VHI premium is financially out of reach but who do not qualify for social benefits may face higher levels of unmet needs due to health costs than the rest of the population.

Source: OECD, 2019.

■ 3.3.2 Collection

GENERAL GOVERNMENT BUDGET

In Slovenia, SHI contributions are the largest source of revenue for health system financing (see section 3.2). They are regulated in the Health Care and Health Insurance Act (1992) and have remained unchanged since 2002. Contribution rates, which are employment-based and levied on gross income, vary by category and group of insured individuals (see section 3.3.1). Employees pay 6.36% of their gross income, while employers pay

6.56% for illness and injury out of work, plus 0.53% for injuries at work and occupational diseases (in total, 13.45% of gross income is collected per insured person). The contribution rates are the same for self-employed, though their contribution base is equal to the gross pension base but cannot be lower than 60% of the last-known average annual wage (ZZZS, 2019; 2020). The National Institute for Employment covers contributions for the unemployed and the state and/or local budgets cover contributions for individuals without income, prisoners and war veterans. The Pension and Disability Insurance Institute pays contributions for pensioners (at a 5.96% contribution rate from pensions) via a monthly transfer (90% financed from salary contributions and 10% from the general budget) to the ZZZS.

The ZZZS receives these contributions after initial collection by the Financial Administration of the Republic of Slovenia, which monitors these payments. Between 2014–2018, the total revenue generated by ZZZS increased by 18.7%, to € 2.7 billion from € 2.2 billion (ZZZS 2017; 2020) due to employment and wage growth post-2013. Nevertheless, ZZZS operations are increasingly under pressure because of the contraction of the working-age population (UMAR, 2020b) (Box 3.2).

In addition to SHI contributions, ZZZS receives other allocated funds such as non-tax revenues, capital revenues and grants. ZZZS revenue from SHI contributions and transfers represented 95.0% of total ZZZS revenue in 2018 (80.8% from contributions and 14.2% from social security transfers) – down from 98% in 2014. Most (>85%) of social security transfers are from the Pension and Disability Insurance Institute (ZZZS, 2019).

General taxation is non-earmarked revenue flowing from central revenue sources to the MoH budget or local tax revenues to municipal budget(s). Central budget tax revenue collected by the Tax Office of Slovenia includes revenue from income, corporate, value-added and excise tax. Municipal budget tax revenue from local taxes is collected by the municipalities. The amount of tax revenue nationally and locally allocated for health is not fixed but is estimated annually. In 2018, together, national and local government expenditure to health amounted to 3.4% of CHE excluding investments (Zver, 2021; UMAR, 2020b).

BOX 3.2 Assessing equity in health financing

Employee–employer contributions to SHI, complementary VHI premiums and OOP payments are the main sources of health financing. Together, the health financing system enables financial accessibility as well as household financial protection when seeking care, as evidenced by low levels of unmet medical need (see section 7.2 and 7.3) and the lowest rates of catastrophic expenditure related to health of any European country (1.0% in 2015; EU average: 6.6%). Still, half of this catastrophic spending is concentrated among the poorest households.

There are several challenges to future proof equity in the financing of the health system. While the ZZZS contribution rate is proportional, defined at 13.45% of gross income, this is only the case for regular employees. Employees in irregular forms of employment pay lower contributions from contribution bases that are hard to monitor, resulting in a redistribution of resources from the regularly employed population to individuals in all (precarious) forms of employment. This system of reliance on employment-based contributions presents an ever-growing challenge to equitable, sustainable health financing. This is particularly the case as not only is the number of individuals in irregular employment in Slovenia increasing, but so too is the number of pensioners (because of population ageing), who also pay lower contribution rates, necessitating a redistribution of SHI contributions in their favour.

Further, complementary VHI is purchased by more than 95% of the population liable for co-insurance (or 73% of the population), and is paid through regressive, flat-based premiums to cover varying rates of co-insurance (from 10–90% of cost of services). Exemptions help those who cannot cover complementary VHI premiums or OOP payments, including state subsidies for war veterans, prisoners and socially vulnerable people (Box 3.1).

■ 3.3.3 *Pooling and allocation of funds*

As per the Health Care and Health Insurance Act (1992), ZZZS is the sole provider of SHI. It collects and pools the contributions (see section 3.3.2). For each annual financial plan, it defines a maximum amount of collected contributions to be spent on health services for the upcoming year, informed by current and future macroeconomic conditions that influence the sum of contributions and other revenues of the ZZZS. This includes expected growth in GDP, rate of inflation, growth of wages and pensions and unemployment rates.

The national health budget is determined centrally by ZZZS in cooperation with the MoH and the Ministry of Finance. Once developed, it is presented to the ZZZS Board and Parliament and, after their confirmation, approved by the Government. The budget allocates resources based on historical data to different care areas, but there is no further allocation of health budget on a geographical basis, aside from local tax revenue flowing to municipal budgets. Annually, in parallel to the planning of the national budget, ZZZS and the Ministry of Finance establish a cap for total public expenditure on compulsory health insurance, which is then implemented into the contracts between ZZZS and health care providers (see sections 3.3.4 and 3.7).

■ 3.3.4 *Purchasing and purchaser–provider relations*

Health services in the statutory system are purchased by ZZZS. Purchasing occurs through a multi-step, stakeholder negotiation process (see section 2.7), through which the services to be reimbursed by ZZZS and the volume of services to be provided are defined in annual agreements. The MoH, ZZZS, the Association of Health Institutions of Slovenia, the Medical Chamber of Slovenia, the Slovene Chamber of Pharmacy, the Association of Social Institutions of Slovenia, the Association of Slovenian Training Organizations for Persons with Special Needs and the Association of Slovenian Natural Spas all participate in formulating this General Agreement, which clearly sets budgets for the services to be covered by public resources in compulsory health insurance.

The two-stage procedure for negotiating the General Agreement has not changed since it was first introduced in the Health Care and Insurance Act (1992). First, partners negotiate amendments to the existing General Agreement; only recommendations with 100% agreement among partners are adopted. Second, an arbitration phase begins, where controversial issues are negotiated. The quorum remains the same: changes are only adopted following full agreement of all participants. Most issues are about the level of funding and prices paid. For any remaining points, the government decides. The whole procedure of negotiations is not efficient, as partners can submit an unlimited number of recommendations or controversial issues and stall the process.

BOX 3.3 Assessing allocative efficiency

The system of purchasing health services involves several stakeholders and is quite complex (see sections 2.7 and 3.3.4). The process of allocating resources is to a large extent based on the historical data on the service volumes, with specific measures adapted to the changing epidemiology and demographic structure of the population, reflected in changing health care needs. However, the population needs are not evaluated systematically regularly, but rather identified by stakeholders on an ad hoc basis. For example, in 2019 additional family medicine and paediatric practices at the primary level were financed, based on the recognition of a lack of primary care doctors and overburdening of existing ones. In addition, resources were allocated to the establishment of mental health centres (MHCs), which is required by the implementation of the National Mental Health Programme 2018–2028. And several services, in particular outpatient visits, were guaranteed with reimbursement by the ZZZS, even if providers exceeded their annual programme of services by up to 15%, in an effort to reduce waiting times.

The need to improve allocative efficiency has been recognized in the National Health Care Plan 2016–2025 which set the following objectives on the subject: 1) analyse the needs of citizens and the capacity of the health care system; and 2) establish a model to calculate, implement and monitor the criteria that govern the publicly financed network of health care services and programmes.

Source: Government of the Republic of Slovenia, 2016.

Based on the General Agreement, ZZZS and individual providers in the public network then develop a contract specifying the type and volume of services to be provided (see section 2.7.2), as well as tariffs, methods of payment, quality requirements and supervision criteria. ZZZS issues public tenders open to all public providers and concessionaires. Selective contracting is not possible and there is no true competition for contracts. However, ZZZS has tendered certain programmes to address specific, priority issues (e.g. increasing the volume of services in sectors with lower accessibility/longer waiting times). Although the General Agreement and subsequent individual provider 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 providers have considerable latitude regarding their activities.

■ 3.4 Out-of-pocket payments

In Slovenia, OOP payments are due to cost-sharing and direct payments for services not included in the benefits package (see section 3.2). Since 2015, OOP spending has largely stayed around 12% of CHE, amounting to 11.7% in 2019 (Table 3.1), lower than the European regional average of 15.5%. OOP expenditures in 2018 were used for medicines (34%) and medical devices (22%), followed by ambulatory services (27%, of which 11% went to alternative medicine), dental care (10%), LTC (3%) and hospital care (4%). Exact information on the division of OOP payments according to user charges and direct payments is not available.

■ 3.4.1 *Cost-sharing (user charges)*

As a form of cost-sharing, co-insurance has been a key feature of the Slovenian compulsory health insurance system since the Health Care and Health Insurance Act (1992) (Table 3.3). It applies to most services and since 2007 to all patients except those listed in the legislation (see section 3.3.1 and Table 3.3).

Article 23 of the Act outlines the levels of co-insurance, which are further defined by ZZZS. These range from 10% to 90% of the price of services (see section 3.3.1) and the legislation does not foresee any capping. More than 95% of eligible individuals (73% of total population) take out complementary VHI (see section 3.5) to mitigate these high levels of cost-sharing. Since 2009, the central budget covers the co-insurance for socially vulnerable groups at the point of treatment (Box 3.2).

If a patient does not have complementary VHI, the difference up to the full price of health services must be paid directly OOP.

■ 3.4.2 *Direct payments*

Direct OOP payments at the point of use are required for goods and services not covered by any form of insurance. This includes visits to primary care physicians and private providers who are not under contract with ZZZS, secondary level specialist services without referral from a

TABLE 3.3 User charges for health services

	TYPE OF USER CHARGE IN PLACE	EXEMPTION AND/OR REDUCED RATES	CAP ON OOP SPENDING	OTHER PROTECTION MECHANISMS
Primary care	Co-insurance up to 20% of cost	Children and students up to age 26 are not liable for complementary VHI	For emergency care	Payment of share of service value covered by complementary VHI for socially deprived and vulnerable population groups from central budget
Outpatient specialist visit	Co-insurance up to 30% of cost		For emergency care: maximum co-insurance is defined annually by ZZS and cannot be higher than two annual premiums for complementary VHI	
Outpatient prescription drugs	Reference pricing Positive list (0% or 30% co-insurance); intermediate list (90% co-insurance)		Yes, for emergency care	
Inpatient stay	Co-insurance up to 30% of cost		Yes, for emergency care	
Dental care	Co-insurance up to 20% of cost		Yes, for emergency care	
Medical devices	Co-insurance up to 20% of cost, except for visual aids (at least 50%)		Yes, for emergency care	
Non-acute care and spa services after hospitalizations	Co-insurance up to 30% of cost		Yes, for emergency care	
All services and population groups listed in Article 23 point 1, Health Care and Health Insurance Act	None	None	None	None

OOP: out of pocket; VHI: voluntary health insurance; ZZS: Health Insurance Institute of Slovenia.

primary care provider and private dental services. Patients may also choose to pay directly for covered services to avoid long waiting times or for services beyond the statutory benefits package, such as special hospital (“hotel”) services, cosmetic plastic surgery or eye laser correction surgery. Additionally, an individual without complementary VHI must pay the co-payments directly OOP.

■ 3.4.3 *Informal payments*

Informal payments are not common. A 2017 systematic review found that Slovenia has the lowest levels of informal payments at 2.7%, while Azerbaijan has the highest (73.9%) (Habibov & Cheung, 2017). These occur in kind in case to health care providers, predominantly in primary care and outpatient services. As the phenomenon is not widespread, they are not considered a separate category but are included in OOP payments. Three per cent of respondents to a 2019 Eurobarometer survey on corruption reported giving an extra payment or a gift to a health care practitioner or making a hospital donation in the past 12 months (European Commission, 2019b).

■ 3.5 Voluntary health insurance

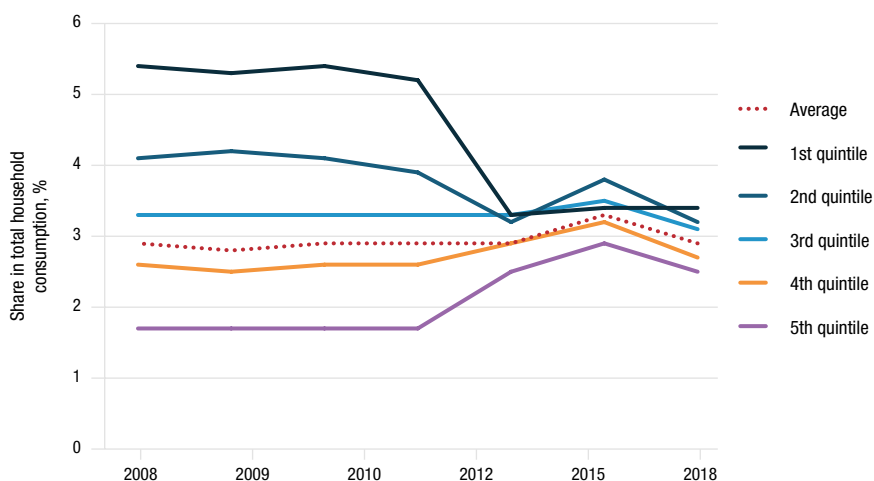
To help cover high levels of OOP spending on co-payments (for co-insurance), more than 1 500 000 inhabitants were enrolled in a complementary VHI scheme as of December 2018. Due to the high share of population covered by complementary VHI, it has been described as “compulsory” or “de facto essential” (Prevolnik Rupel, 2018) and is the main type of VHI in Slovenia.

The premium, which is flat rate and equal for everyone increased multiple times in the last decade. The largest increase was in 2012 when the share of co-insurance covered by complementary VHI for many health services in basic benefit package increased (within the limits defined in Article 23 of the Health Care and Health Insurance Act (1992)) to ensure financial sustainability of the compulsory health insurance scheme in the face of rising public expenditures on health. The complementary VHI premium

has risen further since due to increases in wages and other health care costs. Currently, the average premium is € 34 monthly in comparison to 2012, when it was € 12.

Since 2006, the share of complementary VHI in total household consumption levelled around 2.9%. In 2012, the regressive nature of complementary VHI premiums was importantly limited, when automatic coverage of complementary VHI claims for all socially vulnerable population from central budget was introduced (Fig. 3.6).

FIG. 3.6 Complementary VHI expenditure as share of total household consumption, according to income quintiles, 2008–2018, selected years



Source: Zver, 2021.

There are three main complementary VHI companies (*Vzajemna, Generali, Triglav zdravje*) that collect contributions in their respective pools. To ensure that they are not providing coverage to low-cost – e.g. healthy and young – individuals, they are obliged to participate in a risk-equalization scheme, which was prepared by the MoH, included in the Law on Changes and Amendments to the Health Care and Health Insurance Act (2005) and adopted by Parliament in September 2005. According to the scheme, contributions are reallocated among the complementary VHI companies based on level of costs (claims) paid, age and gender profiles of the insured. Based on these figures, the MoH calculates the hypothetical average of costs that would have occurred if VHI providers had identical portfolio structures.

VHI providers with more favourable risk portfolios must contribute to a pool, from which compensation is paid to those VHI providers with less favourable portfolios, to equalize differences in risk structures. In contrast to the annual ZZZS budget, the budget for VHI is not capped, which means that VHI companies have to pay for all provided services covered by complementary VHI. 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.

Since it is not possible to opt out of the compulsory scheme, there are no substitute voluntary schemes, though individuals not included in compulsory health insurance can purchase VHI for a variety of services. As the basic benefit package in the compulsory scheme comprises a wide range of services, there is a little room for supplementary VHI. However, health insurance companies do offer such insurance to cover services that are included such as faster access to medical treatment, nonmedical services in hospitals, higher-quality materials and additional services in hospitals or health spas. Since 2017, the share of other VHI policies has been increasing, mostly due to ever-lengthening waiting lists in public health care system (see section 7.2). In 2019, supplementary and parallel insurance was purchased by 26% of the population (2011: 5.6 %; 2015: 18.9 %); their premiums represent a small share (4.55%) of all VHI premiums.

■ 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 family medicine specialist under contract with ZZZS 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 in 1991, Slovenia has participated in many international technical programmes, including WHO's Eurohealth Programme, the EU's PHARE Programme and the World Bank Health Systems Management project (Bury, 1991; PHARE, 2010; ZZZS, 2020). Some external financial activity from the EU took place within the process of Slovenia's accession to the Union, in particular around institutional capacity-building and co-financing legislative activities. Other financial contributions from WHO, the World Bank, United Nations Development Programme (UNDP) and other UN organizations have been received for specific tasks (e.g. the regulation of illicit drug control). However, due to a relatively high per capita GDP compared with other central and eastern European countries and a relatively equal income and expenditure balance in the compulsory health system, external sources constitute only a marginal share of income for the country's health system.

■ 3.6.3 *Other sources of financing*

Large companies may employ occupational physicians in line with employers' obligations to ensure the protection of health at the workplace.

■ 3.7 **Payment mechanisms**

A capped annual budget for health care programmes at the national level allocated through the General Agreement results in capped payments for providers contracted by ZZZS. Specific services, their volumes and payment mechanisms are regulated based on contracts between ZZZS and health care providers (see sections 2.7.2 and 3.3.4), though some programmes, including childbirth, oncology, dialysis, organ transplants and some specialist services are not limited in volume.

Table 3.4 summarizes the payment mechanisms used to pay the different providers operating in the health system.

TABLE 3.4 Provider payment mechanisms in the statutory system

PAYERS/PROVIDERS	PAYMENT MECHANISM	PAYER
Family medicine specialists	Capitation and FFS (each 50%)	ZZZS
Ambulatory specialists	FFS	ZZZS
Acute hospitals	DRG	ZZZS
Non-acute inpatient care	Bed-days of stay	ZZZS
Psychiatric care	Case payment	ZZZS
Rehabilitation inpatient care	Case payment	ZZZS
Dialysis services	FFS	ZZZS
Transplantation programme	Case payment	ZZZS
Emergency care	FFS	ZZZS
Dental care	FFS	ZZZS
Pharmacies	FFS	ZZZS
Health and social care in social institutions	FFS	ZZZS (health care); Ministry of Labour, Family, Social Affairs and Equal Opportunities (social care)
Health care in spa	FFS	ZZZS

FFS: fee for service; DRG: diagnostic-related groups; ZZZS: Health Insurance Institute of Slovenia.
Source: Authors.

■ 3.7.1 *Paying for health services*

PRIMARY CARE

Since 2001, primary care services provided by personal physicians (e.g. family medicine physicians, primary-level paediatricians, and gynaecologists) (see section 5.3) in CPHCs are financed through a combined system of capitation and FFS payments. The volume of services payable by ZZZS is outlined in prospectively determined annual contracts with providers, with half of the programme value paid on a per capita basis for patients on the physician’s

list and the other half paid by FFS. Other primary health care services are paid flat-rate (e.g., mental health and health promotion services), while dentistry, physiotherapy and community nursing services are paid exclusively on a (capped) FFS basis.

Several financial incentives have been introduced to reduce the number of specialist referrals and strengthen primary care (see section 7.2). In 2003, additional payments were offered to primary care providers whose referral numbers were below the national average. Conversely, ZZZS is authorized to reduce payment by 2.0–4.0% of the total value of the agreed programme if a provider's level of referrals to specialists is above the national average. Between 2001–2011, ZZZS made performing preventive services for cardiovascular disease (CVD) among adults registered with a family physician a condition of receiving 4% of the health centre's income.

Moreover, in 2011, flat-based payments were introduced for a new model of care, known as “reference or family medicine model practices”, which expanded family medicine teams with a part-time graduate nurse to strengthen prevention for selected chronic diseases and unburden family practitioners by shifting specific tasks in the management of chronic patients (Marušič, 2011) (see sections 5.3 and 7.4). Since May 2019, payment correlates to the number of services provided: one graduate nurse is obliged to provide at least 1 200 services per year (in 2019, one service was worth around € 25).

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 more services and enhance quality of care (EOHSP/WHO/NIJZ, 2015).

OUTPATIENT SPECIALIST CARE

Secondary level outpatient specialist services provided by hospitals are remunerated by FFS payments according to ZZZS' classification of services, colloquially called the “Green Book”. The volume of services that are reimbursable is outlined in the contracts and measured by a point system. The financial valuation of services for a standardized care team takes into account calculation elements concerning length of time services take, salaries, proportions

and amounts of material expenses, technology depreciation, consumption funds and a flat sum for health information systems and digitalization. The total amount divided by the number of points represents the price of one point in each standardized specialty.

The fee catalogue of services is updated periodically, and involves simplifying codes associated with services (i.e. joining codes into wider categories). Recent changes have occurred in several care areas (e.g. dermatology, rheumatology and ophthalmology), and there are reforms underway in otorhinolaryngology, pulmonology, cardiology, neurology, diabetology and nephrology.

Several problems with the billing of services on the basis of the Green Book need to be highlighted. Classifications of outpatient services are not updated and are unclear, which can lead to creative billing practices and complicate monitoring processes by ZZZS. Fee levels of outpatient services also do not adequately reflect the costs of service provision with some undervalued and others overvalued. While the whole system is built on the price of one point, it is unclear what the number of points for a service are based on. Fee levels for similar services vary substantially by provider group because points do not have the same values within and across the specialties. Finally, incentives for improving care access are inappropriate and the structure of the fee catalogue can lead to excessive referrals and does not incentivize quality and safety improvement.

INPATIENT CARE

Since 2003, a case payment model based on DRGs has been gradually introduced and integrated into the annual budgets negotiated between ZZZS and each provider.

The DRG model classifies patients in groups that are comparable according to diagnosis or standard types of care and accounts for 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 type of 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 are based on the Australian DRG system for the public sector from the National Hospital Cost Data Collection Round 6 for 2001–2002 (v4.2). In 2013, a newer version of the Australian DRG model (v6.0) was imported and is used for the classification of patients. The model is used to calculate the DRG budget for each provider, according to provided services, and benchmark 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 the providers, within the limits of a maximum possible loss compared with the current budget for acute inpatient health care. Since 2013, the price of one DRG weight is determined at national level and used across all providers. In 2018, eight providers were included in a cost analysis showing that the actual provider costs are on average higher than currently defined, with some services undervalued, while others are overvalued. However, the cost analysis was performed only for a few providers, and cannot be a basis for new national weight.

ZZZS payments to providers are, however, based on the volume and value of programmes determined in the annual contract. The annual volume of services payable by ZZZS is prospectively limited, determined by the volume of activity in the previous year and measures to improve access to health services (especially to address long waiting times) and efficiency of providers. The volume of the programme in a contract is determined by the total number of cases and the total number of weighted cases (reflecting the complexity of cases). Specific DRGs for conditions with long waiting times are also determined prospectively in the programme.

There are separate payment mechanisms for certain types of inpatient services: payment is based on a prospectively determined number of bed-days for non-acute care; on a prospectively determined number of cases for psychiatric and rehabilitative care; 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).

Of note, since the early 2000s, there has been a policy shift from providing care in inpatient to outpatient settings (see section 4.1.1) which has

* 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).

been supported by several financial incentives, including the same price being paid for outpatient services as for inpatient procedures despite the lower costs.

DENTAL CARE AND PHARMACEUTICAL SERVICES

Dental and pharmaceutical services provided by public or private providers in the public health care network are paid FFS. The volume payable by ZZZS is outlined in the annual contract and measured by a point system. The number of points for a specific service is recorded in a special book of services. As with outpatient specialist care, the financial valuation of care days and services considers calculation elements regarding the salaries, proportions and amounts of material expenses and depreciation.

CARE IN SOCIAL INSTITUTIONS

Health care services provided by social institutions (or at home) in the context of LTC within the public health care network are paid for based on days of nursing care and FFS (see section 5.8). Social institutions are under the jurisdiction of the Ministry of Labour, Family and Social Affairs and Equal Opportunities and include nursing home and somatic and psychiatric rehabilitation facilities. The annual contract outlines the volume of nursing days (for four different categories according to complexity of care) and services (measured by number of points according to a classification list determined by the ZZZS and providers). The financial valuation of care days and services considers calculation elements regarding the salaries, proportions and amounts of material expenses and depreciation.

A draft Act on Long-term Care (LTC Act), written in 2017, was introduced in 2020 and passed through government in June 2021. It is expected to be adopted by Parliament in late 2021 after going through inter-ministerial harmonization). Among other things, the proposal determines a uniform definition of LTC, sets criteria for eligibility across different categories of need as well as services structures and recommends compulsory insurance (see sections 5.8, 6.1 and 6.2). In terms of insurance, the law provides a new contribution for funding this model; however, the insurance part of the LTC

Act (i.e. how exactly the insurance will be designed, who will contribute, what will the contribution rates be, etc.) is to be finally defined in 2024 and implemented in 2025, and it is unclear how – if at all – it will affect the financing model of LTC in Slovenia. In the meantime, the funding for new rights and services under the law will come from funds transferred from statutory health insurance, and disability and pension insurance. The remaining missing funds will be provided for from the state budget.

HEALTH CARE IN SPAS

Health care services provided by spas within the public health care network (see section 5.7) 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 ZZZS is outlined in the contract. The number of points for specific services is recorded according to a classification list determined by the ZZZS and providers. The financial valuation of days of nonmedical care and services considers calculation elements concerning the salaries, proportions and amounts of material expenses and depreciation.

■ 3.7.2 *Paying health workers*

Health care personnel in primary and secondary care 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 are public servants and are salaried through payments from the ZZZS and VHI companies. Salary levels are negotiated between trade unions and the MoH and must adhere to the civil servant pay scale, which is considered inadequate for physicians and hampers the implementation of satisfactory arrangements for rewarding performance. Specialists are usually paid for fixed number of hours for a certain amount of work (e.g. a certain number of endoscopy assessments); however, a system of “equivalent hours” allows specialists who work quickly to receive payment for more hours of work than formally performed. While this system provides flexibility for local agreements and

second job contracts, it is highly non-transparent, often leading to the absence of physicians from their primary workplace (Albrecht et al., 2016).

Concessionaries are paid based on the type, volume and value of specific standardized health care programmes, as determined in their contracts with the ZZZS. 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 ZZZS' purchasing function. The issues connected with billing practices based on the Green Book (see section 3.7.1) also impact concessionaries.

Private providers without concessions are paid by OOP payments or by 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 are then approved by the Minister of Health.

Physical and human resources

■ Chapter summary

- The number of acute hospital beds in Slovenia has fallen simultaneously with the EU average, per population and as a share of total hospital beds. Nevertheless, Slovenia has more acute care beds than the EU average at 413 per 100 000 population in 2018 (EU average: 374). When looking at the total number of all types of hospital beds, Slovenia has fewer than the EU average, at 443 versus 540 per 100 000. The total average length of stay in hospital has also decreased, from 11.4 days in 1990 to 7.0 days in 2018. The MoH is responsible for capital investment in hospitals and other secondary care infrastructure at the national and regional levels. Municipal governments finance such investments in public primary health care facilities and public pharmacies.
- In the last 5 years, the Slovene health care system has undergone a digital transformation. An ambitious national e-health programme includes e-prescriptions, e-referrals and a system of electronic patient records. The COVID-19 pandemic highlighted the strength of the system and has increased uptake of these solutions.

For example, in 2021, around 94% of all prescriptions are made electronically.

- Physician density has risen since the mid-1990s, at 326 physicians per 100 000 people in 2019, but remains well below the EU average (389 per 100 000). Some rural areas have difficulty maintaining the supply of primary care physicians.
- The number of practising nurses is 1 028 per 100 000 population (EU27 average: 837) and includes around twice as many vocationally trained nursing technicians as registered nurses.
- Slovenia lacks a comprehensive strategy and planning mechanism for human resources in health, which is reflected in the imbalances in the system. Preparation of such a strategy will start in autumn 2021.

■ 4.1 Physical resources

■ 4.1.1 *Infrastructure, capital stock and investments*

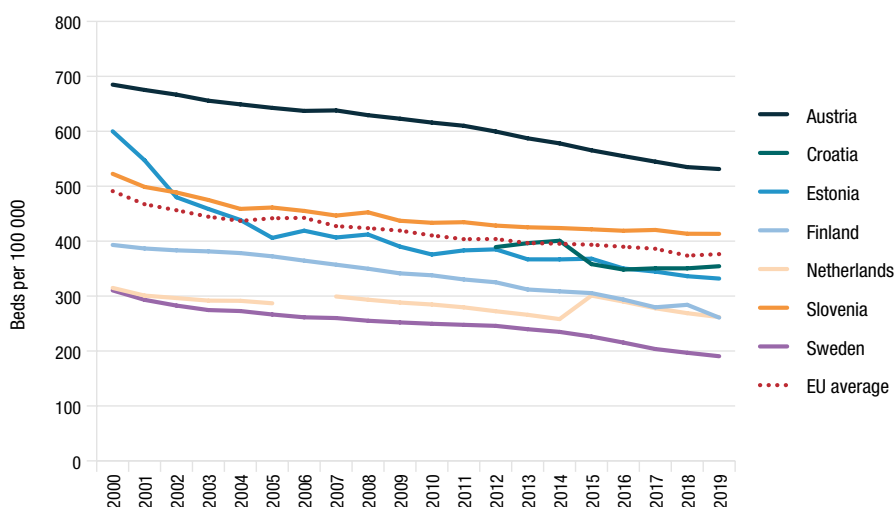
INFRASTRUCTURE

There were 413 beds in acute hospitals per 100 000 inhabitants in Slovenia in 2019. While this is substantially fewer than in Austria, for example, Slovenia has more beds in acute hospitals than the EU average, Estonia, Finland or Sweden (Fig. 4.1).

The total number of hospital beds has decreased since the 1980s – from 695 per 100 000 population in 1980 to 443 per 100 000 in 2019 (NIJZ, 2020b; WHO, 2015b). Since 2009, there has been only a 4% decrease, suggesting a slowing trend. When differentiating between bed types, since 1990, acute care bed numbers have decreased (by 37%), representing 79% of total hospital beds in 2019. There are also 18% fewer psychiatric beds since 1990; psychiatric beds now represent 15% of all beds. Conversely, LTC beds in hospitals, introduced in the early 2000s as non-acute care, have increased, accounting for 3% of all hospital beds in 2019 (Table 4.1), enabling a smoother transition of hospitalized patients to other non-hospital care settings (e.g. rehabilitation in spas, home care or homes for the elderly).

Continuous development of health technologies and changes to hospital reimbursement; for example, a shift from bed-day payments to case-based (DRG) payments, shortened the total average length of stay in hospital for inpatients from 11.4 in 1990 to 7.1 days in 2018 (NIJZ, 2019; Eurostat, 2021f). The average length of stay in acute care only decreased slightly, from 6.8 days in 2011 to 6.7 in 2018 (see section 5.4.3) (Eurostat, 2021d).

FIG. 4.1 Beds in acute hospitals per 100 000 population in Slovenia and selected countries, 2000–2019



Source: Eurostat, 2021l.

TABLE 4.1 Total number of hospital beds, 2005–2019, selected years

TYPE	2005	2010	2015	2019
Acute hospitals beds	8 101	7 887	7 631	7 582
Psychiatric hospital beds	1 472	1 333	1 383	1 364
Long-term care beds in hospitals	93	147	301	310
TOTAL	9 666	9 367	9 315	9 256

CURRENT CAPITAL STOCK

In 2019, there were a total of 27 public, state-owned (non-profit) hospitals in Slovenia, including 10 general (regional) hospitals, two university hospitals, one oncological institute, one rehabilitation institute, five psychiatric hospitals, three hospitals for pulmonary diseases, one orthopaedic hospital, two gynaecological and obstetrics hospitals, and two sanatoria for children. Three private hospitals provide for cardiovascular surgery, general surgery and a diagnostic centre. Seven additional private providers, who rent facilities, equipment and nursing staff in public hospitals, deliver acute hospital care as day care or inpatient care (ZZZS, 2015). Private providers operate as for-profit organizations. In addition to the 27 public hospitals, there are 63 municipality-owned CPHCs (see sections 2.1, 5.1 and 5.3) and three public health care institutions: the Blood Transfusion Centre of Slovenia, NIJZ and NLZOH. Box 4.1 describes the geographical distribution of health resources in Slovenia.

The three private hospitals represent only 1% of all inpatient beds in Slovenia. The largest hospitals, University Medical Centre Ljubljana and University Medical Centre Maribor, have 2 138 and 1 266 beds, respectively. General hospitals average 330 beds (130–720); the six smallest hospitals average 50 beds (25–85).

REGULATION OF CAPITAL INVESTMENT

Capital investment allocations for public health care institutions are proposed by the MoH's Investments and Public Procurement Unit and set by its Committee on Investments. Overall responsibility for the planning of infrastructure and capital investments in public facilities lies with the respective owners – the MoH for hospitals and other secondary care infrastructure and local (municipal) governments for public primary health care facilities and public pharmacies.

There is no national strategic document on the future development of hospitals; Slovenia continuously invests in construction, extension and refurbishment of health facilities, especially hospital buildings, including, most recently, General Hospital Slovenj Gradec, General Hospital Novo Mesto and General Hospital Brežice.

BOX 4.1 Distribution of health resources**Physical resources**

The location of hospitals in Slovenia is historically based; many of them were founded in the 19th century in the same place they are today. Two university clinics are in the largest cities, Ljubljana and Maribor. The Institute of Oncology, the Rehabilitation Institute and the main psychiatric clinic are in Ljubljana. Ten general hospitals, with at least four departments (internal medicine, surgery, paediatrics, and gynaecology and obstetrics), are located in regional centres.

CPHCs and private providers of primary care (concessionaires within the public network) are the first point of entry to health care and are relatively fairly distributed across Slovenia. CPHCs serve on average 35 000 residents (from 328 000 in Ljubljana to 4 200 in the small town of Radeče) (see sections 5.1 and 5.2).

Human resources

Most physicians work in hospitals (3 960 in 2019; 58.1%). The density of general practitioners ranges between 48–74 physicians per 100 000 inhabitants in 2019 (average: 60). Some rural areas have difficulty recruiting and retaining primary care physicians (e.g. specialists in family medicine, paediatricians and gynaecologists) (see section 7.2). Outpatient specialist care is mainly concentrated in larger towns.

Services

Some specialties, for example, oncology/radiotherapy, rheumatology, haematology, neurosurgery, are available only in larger centres such as the Institute of Oncology, Ljubljana, and the university medical centres in Ljubljana and Maribor.

Unmet Needs

In 2019, 2.9% of the population reported unmet needs for medical care due to cost, geography or waiting times, which is above the EU average (1.7%). Due to low rates of OOP and catastrophic spending and a relatively dense provider network, waiting times (see section 7.5 and Box 3.2) are the only statistically significant factor driving unmet need on secondary and tertiary level of health care.

INVESTMENT FUNDING

The MoH invests in hospitals and other secondary care infrastructure at the national and regional levels, while local governments at the municipal level are responsible for capital investments in public primary health care facilities and public pharmacies. Slovenia has also received support from the EU: during the period 2017–2019, European regional development funds helped build 11 emergency centres in hospitals (see section 5.5) and 25 health promotion centres (HPCs) within CPHCs (for a current total of 28; see section 5.1).

At the national and regional levels, capital investment funding is performed exclusively through a special allocation in the national budget and managed by the MoH. The volume of the government budget to capital investments is informed by suggestions from the leadership of the public provider institutions. Neither the MoH nor the ZZZS 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 respective provider. Municipalities raise their own revenue for capital investments, though financially disadvantaged municipalities with lower development levels receive assistance from the national budget.

Ongoing funding of capital and maintenance costs is covered through reimbursement for service delivery, though these costs are often underestimated in services' prices.

Capital investment in private practices is self-funded by providers, regardless of a contractual relationship with the ZZZS.

■ 4.1.2 *Medical equipment*

EQUIPMENT FINANCING

Investment in medical equipment is the responsibility of the owner of the particular health care facility. All public tenders for major pieces of medical technology, such as positron emission tomography (PET), MRI and CT equipment, in state-owned providers are prepared and conducted by the MoH. National funds within its budget are set aside for these investments. All other investments in medical equipment are funded by providers themselves from revenue earned.

For new technologies, the Health Council at the MoH approves costs, scientific justification and the economic sustainability of the proposed programme, in line with national priorities. In 2003, the MoH and the ZZZS centralized the procedure for purchasing medical equipment, devices and aids to increase transparency of public spending and reduce prices, consequently allowing for equitable geographical distribution of equipment, devices and aids.

There is no estimation of national medical equipment need, nor a national plan on such investments. Information on regulation of medical devices and aids can be found in section 2.7.5.

EQUIPMENT INFRASTRUCTURE

The availability of medical equipment is below the average of EU27 countries for which data is available (Table 4.2). MRI units and CT scanners are stationed in hospitals and in specialized ambulatory care. PET scans are only found in hospitals. Primary health care offers some diagnostic and imaging tools (e.g. radiology and ultrasound devices).

TABLE 4.2 High technology equipment available per 100 000 population in public hospitals, 2019

	SLOVENIA	EU27 AVERAGE
MRI units	1.24	1.64
In hospital (or similar)	0.81	1.1
In ambulatory care (or similar)	0.43	0.54
CT scanners	1.82	2.6
In hospital (or similar)	1.53	2.0
In ambulatory care (or similar)	0.29	0.55
PET scanners	0.14	0.22
In hospital (or similar)	0.14	0.19
In ambulatory care (or similar)	0.00	0.03

CT: computed tomography; MRI: magnetic resonance imaging; PET: positron emission tomography.

Source: Eurostat, 2021g

A registry of radiation sources in medicine and veterinary services developed at the Slovene Radiation Protection Administration is the only relevant source of data on available radiation devices in Slovenia. This institution is not competent to supervise non-ionizing techniques, such as MRI.

■ 4.1.3 *Information technology and e-Health*

DIGITALIZATION OF THE HEALTH CARE SYSTEM

In the last 5 years, the Slovene health care system has undergone a digital transformation, in line with national and European strategies, and WHO guidelines for improving the quality and efficiency of health care systems. New e-Health solutions are intended to streamline existing fragmented hospital and outpatient information systems to improve care coordination, enable secure exchange of data and facilitation of communication between providers and increase the availability of medical, economic and administrative data for research purposes (Stanimirović & Matetić, 2020) (see section 2.6).

The system has already resulted in long-term reductions in administrative costs and facilitated more efficient management of health-related data and information (Ministry of Public Administration, 2019).

The basis for this transformation has been the e-Health (*e-Zdravje*) Project, funded through EU cohesion funds and led by the MoH between 2008–2015 (see section 2.6). In December 2015, NIJZ assumed the management of e-Health for the country. Slovenia's e-Health implementation success, despite initial challenges, has been recognized by national and international authorities, including the Ministry of Public Administration and the European Commission in 2019. It was also placed sixth in e-Health Services for 2019 in the Digital Economy and Society Index Report.

Currently, there is no valid long-term national e-Health strategy; all planning and development activities are based on operative short-term plans of the NIJZ, adopted annually by the MoH. In April 2021, the government appointed a new committee for digitalization, whose tasks include delivering a new e-Health strategy. E-Health services are available to all health care providers and patients in Slovenia. All state- or municipality-owned providers are fully using e-Health solutions, as well as the great majority of private providers within public funding scheme.

TABLE 4.3 Nationwide digital health applications

APPLICATION	DESCRIPTION	MANAGED BY
eZdrav website (https://www.ezdrav.si)	The official platform for e-Health in Slovenia. It provides all necessary information about Slovenian e-Health solutions and individual e-Health services, including descriptions of e-Health solutions, current developments, promotional materials and various questions and answers about e-Health and specific digital solutions.	NIJZ
Central Registry of Patient Data (CRPD)	The CRPD links all other e-Health databases and all providers must submit to and utilize medical records in the CRPD. Patients have full access to their CRPD data via the zVEM patient portal (see below). Various types of health care documentation and structured patient summary records, including diagnostics, are included. Patients' statements, such as advanced health care instructions and privacy consents, are also stored here.	NIJZ
zVEM Portal	The zVEM portal is a "one-stop shop" patient portal. Patients authenticated by digital certificate have full access to data in any of the e-Health databases, including health care documentation, referrals, appointments and medication records.	NIJZ
e-Prescription	e-Prescriptions are designed to support the full electronic prescribing and dispensing of medications. They provide doctors and pharmacists with access to drug interaction databases and are included in the CRPD.	NIJZ
e-Appointment and e-Referral	The e-Appointment system enables appointments to be booked online and e-Referrals to be processed. An online waiting list is automatically updated by health care providers' own information systems.	NIJZ
zNET – Healthcare Network infrastructure	zNET is a communication infrastructure for e-Health solutions. It provides a secure and reliable communication channel between entry points (i.e. providers of health care) and other stakeholders in zNET.	NIJZ
e-Health Users Database (EUEZ)	The e-Health Users Database is the central security repository for e-Health applications. It authenticates, authorizes and manages e-Health users, who are registered via digital certificates and stores their eIDs. Users are patients and providers. Regarding the latter, EUEZ is linked to the National Registry of Healthcare Providers and Professionals. User roles are derived from professional qualifications and working positions at the respective health care provider.	NIJZ
Electronic Registry of Vaccinated Persons (eRVP)	This vaccination database enables planning and surveillance of vaccine use and coverage in Slovenia. Adverse reactions are recorded, as well as population vaccination coverage by disease, age group and geographical area. The registry is linked to the CRPD to ensure that patient vaccinations and adverse reaction histories are included into patient summaries.	NIJZ
Family medicine model practices e-Health application	This e-Health solution supports protocols for the treatment of chronic patients, preventive screenings, the establishment of registers of chronic patients, and the assessment of treatment quality by means of quality indicators.	NIJZ

The COVID-19 pandemic has raised awareness and increased usage of e-Health solutions (e.g. e-prescriptions, e-referrals and teleconsultations) more than any other – political, legislative, administrative or financial – initiative. It may mark a turning point in the perception of digitalization as an indispensable enabler in efforts to bridge and maximize health care system capacities and potentials, empower patients and as a tool to mitigate the impact of future pandemics (Stanimirović & Matetić, 2020).

Table 4.3 outlines current e-Health applications in Slovenia. These are designed around standards of interoperability.

Two of the most important developments in the Slovenian e-Health architecture are the national CRPD and the zVEM patient portal. The CRPD is the core of Slovenian e-Health infrastructure. It contains over 50 million records, is compliant with personal data protection and data security standards and enables information exchange between providers. Over 100 000 transactions occur on the platform hourly; over 20 000 new documents are stored. Generally, CRPD is used by all public health care providers and the share of concessionaires is growing. At the last estimation, 20–30% of concessionaires are using CRPD. zVEM, rolled out in 2017, serves as a connecting service for all essential e-Health solutions (Table 4.3). It became the most important national digital solution during COVID-19, providing patients with crucial health care documents and information throughout the pandemic. Further, ignoring fluctuations due to the pandemic, the number of patients' visits between January to May 2021 reached 5.3 million (Stanimirović, 2021). Moreover, the share of e-prescriptions monthly reached 93–94%, representing over 1.2 million e-prescriptions monthly on average, while the share of issued e-referrals is over 93% (350 000) on average monthly.

■ 4.2 Human resources

■ 4.2.1 *Planning and registration of human resources*

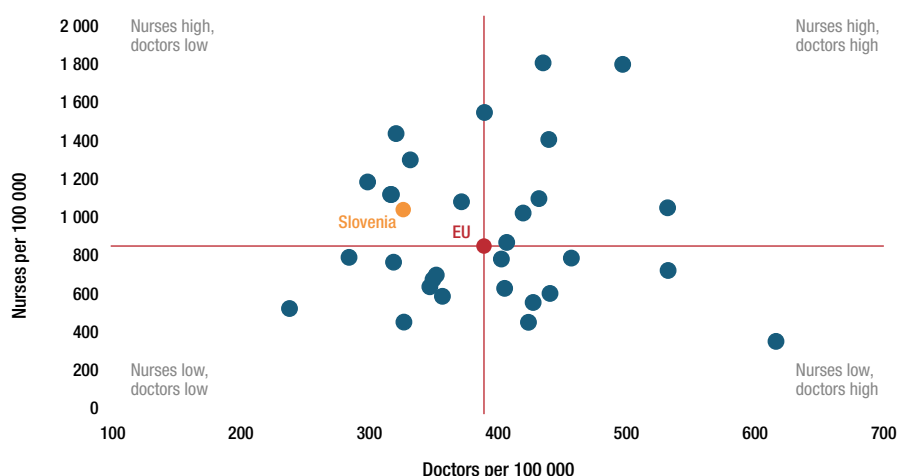
Health care human resource levels are a matter of frequent discussion and controversy. Issues include past shortages and worker workloads. While the first point reflects planning patterns (or their inadequacy) at the national

level in particular, the second is a consequence of organizational aspects of health care. Nevertheless, in general, current policy goals aim to increase the present staffing of health care as there are shortages of physicians, especially in primary care settings, as well as shortages of registered nurses in hospitals and nursing homes.

■ 4.2.2 Trends in the health workforce

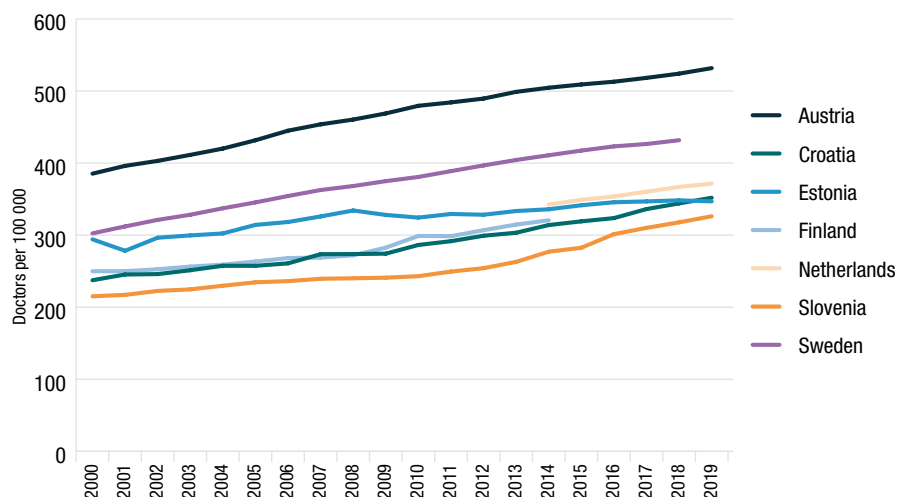
The number of practising physicians in health care has increased by 37% in the last 10 years, from 4 979 in 2010 to 6 812 in 2019 (NIJZ, 2019). By the end of 2019, 6 812 doctors were employed in the health care system, or 326 per 100 000 population. Despite these increases, the ratio of physicians to population remains lower than the EU27 average (389 per 100 000) (Eurostat, 2021), and most comparator countries (Figs. 4.2 and 4.3). According to national data, in October 2019, there were 134 registered unemployed medical doctors, 86 of them under the age of 29, waiting for their first employment (SURS, 2020a).

FIG. 4.2 Practising nurses and physicians per 100 000 population, latest available year



Source: Eurostat, 2021.

FIG. 4.3 Physicians per 100 000 population in Slovenia and selected countries, 2000–2019

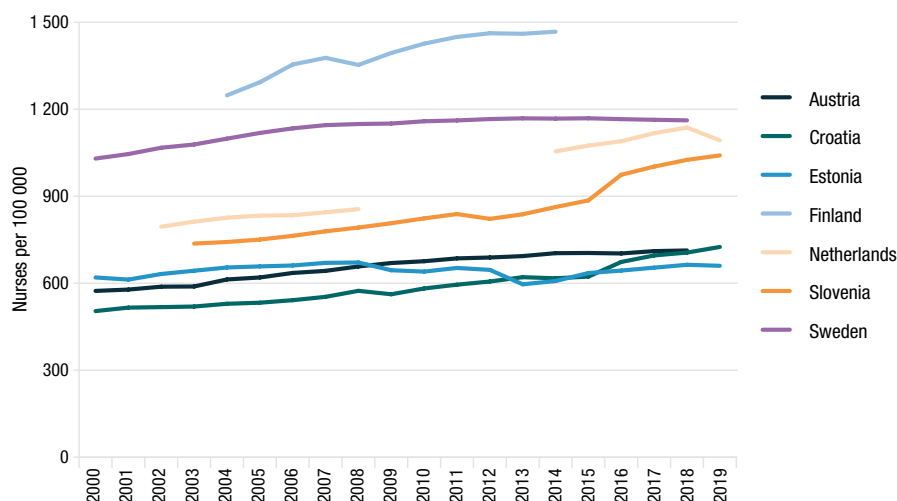


Source: Eurostat, 2021e.

Personnel shortages, which lead to overburdening of doctors, are most acute in family medicine and paediatrics at the primary level as well as for nursing professionals in hospitals. The COVID-19 pandemic highlighted shortages of health professionals, in particular in public health and in primary health care. Two trade unions, the Fides medical union and the Praktikum family doctors' union, went on strike in 2016, joining secondary level doctors. Consequently, an agreement was reached in 2017 with the MoH to limit the defined patient-to-physician ratio at around 1 500 listed patients; when this threshold is reached, physicians are no longer required to admit new patients. This agreement, however, faced interference with implementation (see section 6.1).

Slovenia has a significantly higher number of nursing professionals, at 1 041 per 100 000 population in 2019 which is higher than Austria, Croatia and Estonia (Fig. 4.4). In terms of practising nurses, Slovenia has 1 028 nurses per 100 000, which is higher than the EU27 country average (837 per 100 000 population) (Fig. 4.2). One third of all nurses work in outpatient settings and the numbers are expected to rise further in primary care with the further scaling-up of family medicine model practices, HPCs and MHCs (see section 5.3). Comparatively, the number of nurses working in hospitals is lower than in other more hospital-oriented health systems (NIJZ, 2021a).

FIG. 4.4 Number of nurses per 100 000 population in Slovenia and selected countries, 2000–2019



Note: Includes both nurses and midwives.

Source: Eurostat, 2021h.

Additionally, the high numbers of nursing professionals are partly misleading because these numbers include both registered nurses (37%; 7 996) and vocationally trained nursing technicians (63%; 13 468) (NIJZ, 2020b) (see section 4.2.4).

Because of comparatively low levels of physicians, task shifting to registered nurses was introduced in 2019, especially in primary health care (see section 5.3). Due to lower levels of registered nurses, nursing technicians have assumed responsibilities that are formally competencies of registered nurses. As a result, the Nursing Chamber of Slovenia advocates for disaggregating these categories when counting the number of nursing professionals and reversing the ratio of registered nurses to nursing technicians. One suggestion is to downsize the nursing technician population and introduce an additional 3 500–4 500 registered nurses. Moreover, in 2019, an agreement was reached, enabling nursing technicians to obtain a registered nurse license after fulfilling certain criteria (see section 4.2.6); around 1 500 have thus acquired the status of registered nurses. This reform has since seen challenges to implementation (see section 6.1).

In 2017 and 2018, a project financed by the EU Structural Reform Support Service (SRSS) facilitated the introduction of a geographical

planning and forecasting instrument for health professionals, which includes needs and demands by the population, not only the demographic characteristics of the specific health professional populations as had been the practice previously.

See Box 4.1 for more information on the geographical distribution of health workers in Slovenia.

■ 4.2.3 *Professional mobility of health workers*

Under the Socialist Federal Republic of Yugoslavia, Slovenia was the only republic with a strict *numerus clausus* system for the health workforce (since 1961). Medical and dental graduates from other Yugoslavian republics helped overcome domestic deficits in provider capacity through internal mobility.

Regulations after 1991, however, halted this type of mobility, but until the financial crisis in 2008/2009, Slovenia remained a destination country for health professionals, mainly medical doctors and dentists, from the area of the former Yugoslavia and the Balkans. After accession to the EU, more mobility was expected from the broader central and eastern European Region, but never materialized (Albreht, 2011). Despite salaries increasing significantly (1996, 2000 and 2008), there are few incentives for cross-border immigration. Available data suggest that to this day most immigrant medical doctors in Slovenia hail from areas of the former Yugoslavia and south-eastern Europe.

Domestic human resource shortages and challenges are increasingly being addressed. By contrast, the freezing of salaries through austerity measures in 2012–2016 has increased the likelihood of emigration of health professionals. Nevertheless, there are no recent published reports on trends in health workforce emigration from Slovenia.

■ 4.2.4 *Training of health personnel*

PHYSICIANS

To work as a physician, basic medical education is available from two medical faculties (Universities of Ljubljana and of Maribor) and lasts 6

years, after which there is an obligatory 6-month internship in emergency medicine. In 2020/2021, there was a *numerus clausus* of 160 students at Ljubljana and 106 at Maribor. Since 2007, junior physicians enter specialist training directly after their internship through open public tenders twice yearly for specialty training posts, organized by the Medical Chamber. Posts are offered by specialty and by region. Though candidates may apply for different specialties, they can eventually only qualify for one. Depending on the area of specialization, this training can last from 4 to 6 years. The number of posts (324 in 2020) is approved by the MoH and presented to the ZZZS.

Since 2009, ZZZS fully finances all medical specialist training in the public system. Competency for preparing and implementing the programme of specializations lies with the Medical Chamber. The Chamber prepares lists of qualified tutors to manage candidates, health care providers and institutions where training can take place. Coordinators for every specialty supervise both the tutors and the registered training institutions. The examination commission at the Medical Chamber conducts the final examination and issues certificates.

Newly qualified medical specialists are committed to the region where they trained, though most doctors stay at the institution in which their careers started.

NURSES

As already described above, there are two overarching types of nursing professionals in Slovenia: nursing technicians and registered nurses. Training of nursing technicians consists of a 4-year secondary professional education. Registered nurses go through a 3-year post-secondary programme at the first level of the Bologna Process (bachelor degrees) (European Commission, 2016). Community nurses require additional training.

Educational standards are set by universities. The Nursing Chamber authorizes the registration/licensing of nurses and the 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.

Eight higher education institutions for health professionals provide university- or college-level training for nurses: University of Ljubljana, University of Maribor, University of Primorska, College of Nursing in Jesenice, 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 latter three offer only part-time educational programmes and do not have a concession with the Ministry of Education. As such, they do not receive public funds and instead are funded from private sources, such as admission and teaching fees.

The curriculum for nurses (started in 1993) reflects the principles of primary health care (see section 5.3) and has a strong emphasis on health promotion and prevention. There are several bachelor's degrees available: general nursing, midwifery, physiotherapy, occupational therapy, sanitary engineering, and orthotics and prosthetics.

■ 4.2.5 *Physicians' career paths*

To be able to practice, medical doctors enter a 6-month internship in emergency medicine financed by the state budget after graduation. Then, they take the state registration examination, proving their knowledge in emergency medicine. Successful completion of subsequent specialty training (4–6 years) results in the doctors' first license, which entitles the physician to practice without supervision.

In public institutions, career advances are regulated by the Civil Servants Act (2002, amended in 2008), which allocates to all employed physicians and dentists a position within a number of ranked classes. As part of the Balancing of Public Finance Act (2012), advancement in the career rank classes was frozen, but resumed in 2015.

In primary care, a physician advances from junior specialist to senior specialist, to chief of a service to director. In hospitals, a physician similarly advances from junior to senior specialist. Additionally, he/she may become head of ward, of department or medical director. A 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).

■ 4.2.6 *Other health workers' career paths*

NURSES

Since 2019, nursing technicians with at least 12 years of experience and who have performed at least 50% of their working time in a particular care area may obtain a special license as registered nurse in this area, along with corresponding salary increases. This is the result of an agreement between the Nursing Chamber and MoH, and summarized in Article 38 of the Act Amending the Health Activity Act.

Additionally, there are several second-level Bologna programmes for masters' degrees in nursing.

OTHER HEALTH CARE PROFESSIONALS

As with physicians, the basic education for a doctor of dental medicine takes 6 years, followed by a 12-month internship. Dentists undergo similar procedures as medical doctors to obtain their dental specialty training. Since 2005, there are six specialties: orthodontics, oral surgery, maxillofacial surgery, paediatric and preventive dentistry, periodontology, dental diseases and endodontics.

Basic education for pharmacists lasts 5.5 years. There are two distinct pathways after university graduation: 1) to continue working in health care (community pharmacy, pharmacy attached to a hospital or laboratory); or 2) to opt for a career in industry. There are also several options for postgraduate training.

Physiotherapy basic education is a 3-year post-secondary programme at the first level of the Bologna Process, followed by a 6-month internship.

Clinical psychology is a specialty available to university graduates in psychology who previously concluded a 6-month internship in health care. Specialty training lasts 4 years.

A 4-year public health medical specialty was introduced in 2002, replacing three specialty training programmes (epidemiology, hygiene and social medicine). Within this specialization, there is now a two-semester training course (400 hours) in public health, organized by the Medical Faculty at the University of Ljubljana, which is open to all professional backgrounds and considered the equivalent of a master's in public health.

Provision of services

■ Chapter summary

- Primary health care is mainly delivered by 63 CPHCs, owned and managed by municipalities and offers a wide range of preventive, diagnostic, curative, rehabilitative, palliative and health promotion services, by family medicine specialists, primary gynaecologists, primary paediatricians, dentists, community nurses and physiotherapists, among others.
- 76% of physicians and 42% of dentists working in primary care are employed in CPHCs; 21.5% of doctors working in primary care in 2019 were office-based physicians in private practice under contract (concession) with the ZZZS to deliver publicly funded primary care services. Slovenia is ramping up health promotion and prevention, in line with its integrated, community-based primary care model, especially for vulnerable populations. HPCs, first introduced in 2014–2016, are being upgraded with the view to establish one HPC next to all CPHCs over the next 3 years. In January 2018, the MoH agreed that all family medicine teams should include 0.5 full-time equivalent of registered nurses, effectively scaling-up the formerly named “family medicine model practices” to strengthen chronic care management and preventive services, close to patients’ homes.
- A total of 30 public and private hospitals provide inpatient care in Slovenia. Public hospitals represent more than 90% of all inpatient

capacity, both in terms of the number of hospital stays and income. The number of inpatient hospitalizations has been decreasing, while hospital day-care cases have been increasing. Most secondary level outpatient services and nearly all inpatient services are provided in hospital. Hospital care is accessible through referral by specialists, by direct referral from primary care physicians or through an emergency service.

- In 2015, a restructuring of emergency care provision was implemented. A key change under this reform was a clearer division of emergency medical units responsible for life-threatening situations and those providing urgent care in primary health care centres. At the hospital-level of emergency care, 11 new “emergency centres” have been designed specifically to address the most life-threatening cases. The MoH has already ensured additional resources for better equipping and staffing primary care-level emergency centres. A network of emergency care centres at CPHCs will also help ensure timely availability of emergency services countrywide.
- The rights and services of LTC are the joint responsibility of the MoH and the Ministry of Labour, Family, Social Affairs and Equal Opportunities and are regulated under different sets of legislation. With no uniform regulation, the rights and services for the elderly, chronically ill, disabled and other individuals with special long-term needs are provided and financed through different routes across the health and social sectors. In 2017, the LTC Act was drafted and introduces a systemic regulation of LTC. It is currently in the phase of inter-ministerial harmonization and is expected to be adopted in late 2021.

■ 5.1 Public health

Institutional public health is organized mainly through two institutions: the NIJZ and the NLZOH (see section 2.2).

Both organizations were established in their current form by changes in the Health Services Act (1992) in 2013 and enacted in 2014, though the NIJZ and its nine regional public health institutes have played an important role in the delivery of public health initiatives since the 1990s. At the time, the

NIJZ's scope of work was broadly defined, spanning research, education and postgraduate training functions. The NIJZ also oversaw seven independent, regional public health (reference) laboratories. The 2013 reform transformed the separate public health institutes into regional units of the central NIJZ and established the NLZOH as the central public health laboratory with seven regional units (corresponding to the previous seven regional reference laboratories). Only one is still under the NIJZ: for stool samples for the national colorectal cancer screening programme.

Today, the NIJZ has a similar role and terms of reference as most equivalent national public health institutes in Europe. Covering all ten essential public health operations (EPHO) of the WHO Regional Office for Europe, its activities fall under four main branches: social medicine; hygiene; communicable disease epidemiology; and environmental health. The NIJZ maintains several important national health statistics databases (see section 2.6) and hosts the Centre of Informatics in Health and the Centre for Healthcare System.

In the absence of an explicit national public health strategy, several legislative actions and legal documents underpin Slovenia's public health approach (Box 5.1). A range of interventions impact on different levels of the health care system; some programmes, for example, directly address determinants of health, while others focus on secondary prevention (see below). Generally, Slovenia's health care system has a particular emphasis on public health and preventive interventions (see section 2.1). Primary care services are delivered mainly by CPHCs, but in close collaboration with independent primary care providers, including family medicine specialists, paediatricians, gynaecologists and community nurses, across 63 CPHCs that operate at 506 locations. CPHCs are meant to foster confidence between the respective populations and the primary care professionals and be the backbone of an efficient primary care system, providing a multi-disciplinary range of health promotion, preventive, diagnostic, curative, rehabilitative and palliative care, and also implement public health interventions (see section 5.3).

■ 5.1.1 *Surveillance and control of communicable diseases*

The NIJZ is responsible for surveillance of communicable diseases, with the NLZOH as its main diagnostic and microbiological partner. The Institute

of Microbiology at the Medical Faculty in Ljubljana also carries out laboratory testing for various infectious diseases and is the reference laboratory for haemorrhagic fevers.

The NIJZ maintains the annual immunization programme. It manages the central storage facility for all vaccines, including purchasing and stockpiling and oversees distribution of vaccines across Slovenia from its central storage facility in Ljubljana. This has also been the case during the COVID-19 pandemic.

■ 5.1.2 *Immunization*

Slovenia's immunization programme is extensive. The National Immunization Programme and the Calendar of Vaccinations are prepared and updated annually by the NIJZ. Children and students up to 26 years old receive free services, but the ZZZS reimbursement varies for adults. Paediatricians are fully responsible for providing vaccinations to children aged 0–19 years; family medicine specialists are responsible thereafter.

Table 5.1 outlines the schedule for mandatory and non-mandatory vaccinations by age and reimbursement level.

Population coverage for the basic vaccinations in the first year of life was around 94–95% for the past few years. In 2020, coverage was 94% of the target population for first and second doses of measles, mumps and rubella (MMR). The more recently introduced pneumococcal vaccine has seen rapidly enhanced coverage, from around 49% in 2015 to 70% in 2020; however, human papillomavirus vaccination (HPV) vaccine coverage in girls is still only around 59% (from 48% in 2016–2017). In May 2021, it was decided that the vaccine would also be introduced to boys. Coverage for the hepatitis B vaccine, which is now universally administered to all school children, is consistently high at around 80%. There is increasing concern about vaccine hesitancy, mostly from parents worried about the side-effects of vaccinations. In 2015, Slovenia launched several vaccination promotion activities to mitigate this issue.

In addition to those vaccines listed, COVID-19 vaccines are available free of charge for the entire population from the age of 12 without restrictions, following the recognized vaccination schemes defined specifically by each producer. COVID-19 vaccination is carried out by the vaccination centres mainly organized by the CPHCs. According to the European

TABLE 5.1 Vaccination schedule in Slovenia

AGE		VACCINATIONS	ZZZS REIMBURSEMENT LEVEL
0–6 years	Mandatory	<ul style="list-style-type: none"> Diphtheria, tetanus, pertussis, Haemophilus influenzae B, poliomyelitis (vaccinations with three doses from 3 to 12 months of age and then a fourth dose in the second year of life) MMR, between 12 and 18 months of age 	Full coverage
	Voluntary	<ul style="list-style-type: none"> Pneumococcal vaccine (based on indications from the personal paediatrician) Additional vaccinations for health or epidemiological indications; for example: <ul style="list-style-type: none"> tuberculosis rabies influenza typhoid meningococcal infections hepatitis A and B varicella respiratory syncytial virus 	Full coverage
Primary and secondary school age	Mandatory	<ul style="list-style-type: none"> 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 (up to age of 18) Tick-borne encephalitis Rabies vaccinations for pupils and students who may be exposed to the diseases in practical training 	Full coverage
	Voluntary	<ul style="list-style-type: none"> HPV (for girls in the sixth year of elementary school) 	Full coverage
Adults	Mandatory	<ul style="list-style-type: none"> Tetanus every 10 years (also later in life after adolescence) 	Full coverage
	Voluntary	<ul style="list-style-type: none"> All other vaccinations depend on the professional, training or accidental (voluntary or involuntary) exposure to a number of infection Influenza 	Partly subsidized only for those over 65 years or those with chronic diseases

HPV: human papillomavirus vaccination; MMR: measles, mumps and rubella (vaccine); ZZZS: Health Insurance Institute of Slovenia.

Sources: NIJZ, 2014; 2020a; ECDC, 2020.

Centre for Disease Control (ECDC), the cumulative uptake of at least one vaccine dose among adults aged 18 years or older in Slovenia is 51.0% (as of 3 August 2021), below the EU/EEA average of 70.8% (ECDC, 2021).

■ 5.1.3 *Prevention and health promotion*

Women often register with personal gynaecologists (also working as primary health care physicians) as well as family medicine physicians (see sections 5.2 and 5.3) and receive a variety of reproductive health services, including cervical cancer screening, family planning, and ante- and postnatal care.

Dentists in primary care provide both preventive and curative services for adults and children. Paediatric dentist services are fully reimbursed and providers are evenly distributed across the country (Johansen, West & Vracko, 2020) (see section 5.12).

The NIJZ and the MoH, as well as several other institutions, are involved in health promotion. Since 2013, NIJZ's Centre for the Management of Prevention Programmes and Health Promotion is responsible for designing, preparing and monitoring national prevention and screening programmes for adults. The Centre governs the national coordination of health promotion programmes and collects data on the prevalence of chronic diseases and risk factors to ensure appropriate inputs into the planning of health promotion activities. Maternal, children and adolescent health promotion programmes are designed and coordinated at the Centre for Analysis and Development of Health. The goals of Slovenia's public health approach are detailed in the National Plan on Nutrition and Physical Activity 2016–2025, along with an Action Plan for 2019–2022 (Box 5.1).

In line with the community-based primary health care model in Slovenia, encompassing a range of preventive and curative care (see sections 2.1 and 5.3), health promotion and education programmes to address most of the common population health needs across individuals' lifespans, close to where they live, are also implemented at the primary care level, primarily by nurses and other health care professionals working in the CPHCs. In addition, since the early 2000s, health education centres (HECs) work on health promotion (see section 5.3) in CPHCs. However, they are gradually being replaced by HPCs. HPCs were introduced in 2017 (see section 2.1) to enhance health promotion at the community level, especially for marginal and vulnerable

BOX 5.1 Sample of documents relevant to public health policies addressing general or segmental issues

- National Health Care Plan 2016–2025 “Together for a society of health”.
- Law on Restricting Access to Alcohol (2004; updated 2017).
- Law on the Restriction of the Use of Tobacco Products (2017, replacing a previous omnibus law first adopted in 1996 and subsequently amended).
- Communicable Diseases Act (1995; updated four times in 2020 and 2021 to provide the legal basis for various interventions related to the management of the COVID-19 pandemic).
- National Plan for Nutrition and Physical Activity 2016–2025.
- National Mental Health Programme 2018–2028.

For more information, see section 6.1.

groups. Starting with three pilots, there are now 28 centres across the country, staffed by registered nurses, physiotherapists, psychologists and dietitians. They link closely to the municipality, local communities and NGOs on different health promotion topics and offer a wide range of services supporting healthy lifestyle choices and advice to the healthy population.

The aim is to establish a HPCs next to all CPHCs over the next 3 years. In addition, building on the Programme for early detection of depression and treatment (Box 5.2), MHCs, staffed with registered nurses, psychologists and psychiatrists, will be launched in 2021 to connect HPCs to facilitated access to psychiatric and psychological care (see sections 6.1 and 7.6.1).

Since 2011, “family medicine model practices” have also been in place in some CPHCs to improve management of chronic diseases and noncommunicable disease risk factors (see section 5.3). Since 2018, these have been renamed Family Medicine Practices and have been stepwise introduced and become a standard for family medicine practice. They focus on prevention and care coordination for patients with stable chronic diseases, such as hypertension, heart failure, diabetes diseases of the prostate and chronic obstructive pulmonary disease (COPD), thus fulfilling a secondary and tertiary prevention mission (see sections 5.3 and 7.4). An additional 0.5 full-time equivalent of nursing support means that patients who visit a practice receive a consultation with a specially trained nurse who assesses their current lifestyle and screens for risk factors. Once part of the programme,

the nurse then provides regular advice and follow-up (e.g. on weight loss, smoking cessation, alcohol cessation), and takes on and incorporates feedback from patients. In 2021, around 75% of all family medicine practices had adopted these services; it is expected that by 2023 all will have. Similar initiatives are now underway for primary care paediatrics and gynaecology, pending approval by the Health Council.

■ 5.1.4 *Screening programmes*

Several national screening programmes have been launched since 2000, including for the early detection of cervical cancer (2002), risk factors for CVDs (2002), breast cancer (2008) and colorectal cancer (2008) (Box 5.2). The Institute of Oncology organizes the screening programmes for cervical and breast cancer; the NIJZ for colorectal cancer. CVD risk factor screening is conducted through the network of family medicine practices. Though not organized as systematic population screening, men over 50 are also offered prostate-specific antigen testing that is reimbursed by the ZZSZ on demand from the primary care physicians who order the test.

Box 5.2 provides information on the accessibility and effectiveness of public health interventions in Slovenia.

■ 5.2 **Patient pathways**

Patient rights and entitlements are the same throughout Slovenia (see section 2.8.3), and organizational settings differ only slightly across geographical areas.

A patient's first contact with the health care system is usually through non-emergency primary care. A range of primary care physicians,* called personal physicians, play a gatekeeping role to secondary level ambulatory specialist care (see section 5.3). In the case of medical emergencies, patients attend the nearest emergency centre, either in a hospital or CPHC. For ambulatory specialist care, the personal physician makes an appointment on behalf of the patient or provides a referral.

* Primary care physicians include family medicine specialists, primary care paediatricians and gynaecologists and general and youth dentists.

BOX 5.2 Assessing the accessibility and effectiveness of public health interventions**Accessibility**

All public health interventions, such as screening programmes and preventive and health promotion activities, are free of charge for use and fully financed by the ZZZS. This translates to an even distribution of activities and services across the country, as well as equal access to all insured. Given the nature of financing, however, valid health insurance is a condition for accessing these programmes, which is a barrier for the small portion of the population without insurance.

Effectiveness

Targeted anti-tobacco and alcohol interventions have seen a significant impact on health behaviours in Slovenia (see section 1.4). An important amendment to the previous Law on restricting the use of tobacco products, adopted in 2017, introduced the following: plain packaging; gradually increasing excise tax; strict regular control on the contents of tar and nicotine in all tobacco products; and measures to control all non-smoke and related products offered on the market (including e-cigarettes, snus, etc.).

Further, in the past 20 years, three major public health interventions in secondary prevention have made a tangible difference, though their roll-out has taken longer than expected.

- 1) **Programme for early detection of risk factors for CVDs:** introduced in 2002 as CVD screening (including hyperglycaemia), involves screening for most common risk factors and group and individual-level interventions on health determinants at CPHCs. In 2014–2016, this was upgraded to include noncommunicable diseases and their risk factors screening (e.g. hypertension, diabetes, hyperlipidaemia, COPD, depression, certain types of cancer, overweight/obesity, smoking, alcohol, physical activity/sedentary lifestyle). This programme has contributed to an improved network of emergency care services with advances of intervention cardiology technologies as well as secondary prevention through hypertension and hyperlipidaemia drugs.

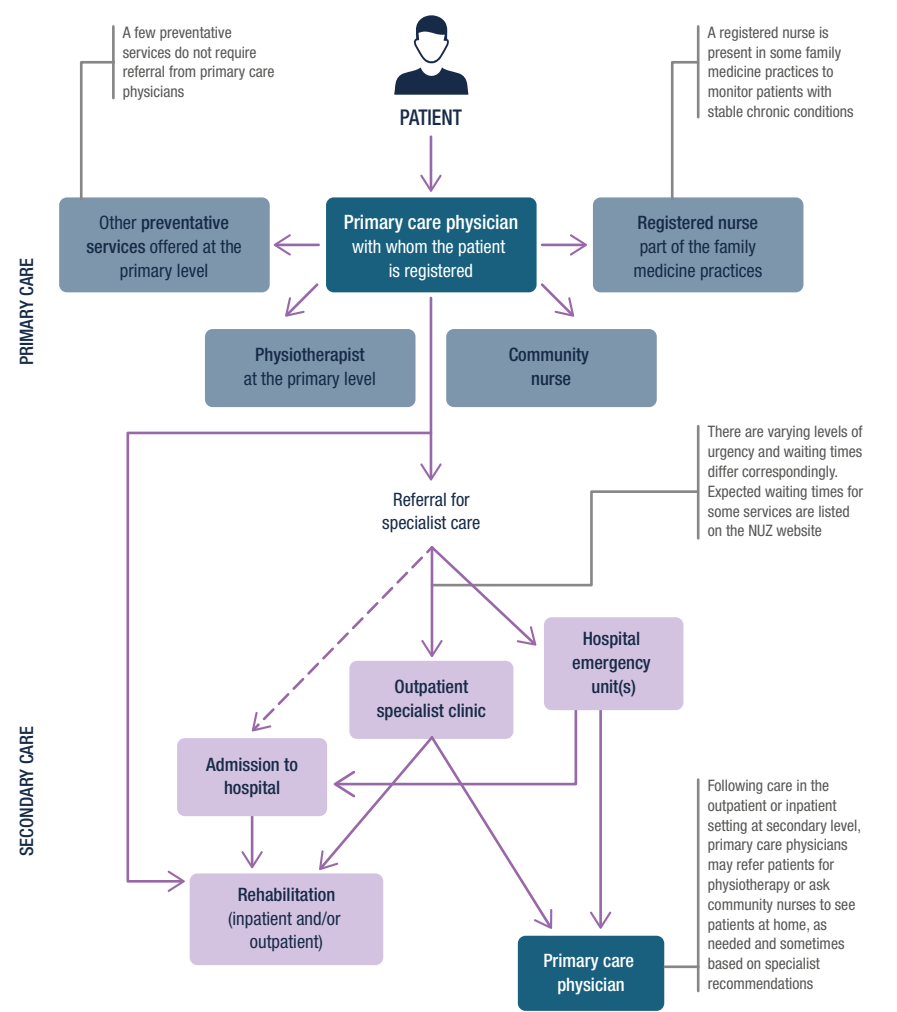
- 2) **Programme for early detection of depression and treatment:** launched in 2006, provides better access to psychological care, provided either by a psychiatrist or a psychologists, depending on the person's needs. Access to psychotherapy is currently very difficult in Slovenia and is usually provided by either psychologists or psychiatrists. The programme provides easy access to diagnosis and more suitable management of depression, enabling a significant reduction in the number of suicides. The intervention consists mostly of screening for depression and rapid initiation of antidepressants. Suicide numbers are currently at their lowest level in terms of absolute numbers and rates since after the Second World War.
- 3) **Cancer screening programmes** for cervical (2002), breast (2008) and colorectal cancer (2009) have helped reduce the incidence of cervical and colorectal cancer, decrease mortality due to cervical and colorectal cancer and increase relative survival for breast cancer. Participation rates for each of the three population-based cancer screening programmes surpassed 60% in 2021 and were approaching 70% coverage of the target population; they operate in all regions of Slovenia (see section 7.5).

Occupational health services

There are two important groups of services related to occupational health. Occupational medicine specialists, who are specialists of occupational, traffic and sports medicine, perform 5-yearly check-ups of the employed and consult with employers on the specific requirements of typical workplaces. They also perform regular health check-ups of professional sportsmen/women and children. Special emphasis is placed on professional truck-, train- and bus drivers, pilots and ship captains. Sickness absence is managed by family medicine physicians and paid by the employer for the first 30 calendar days and by the NIJZ thereafter. Since 2020, it has been possible to claim a 3-day sickness absence without certification by a family medicine physician, but one must be acquired for longer absences. The ZZZS commission must confirm an absence beyond 30 days. In cases when sickness absence is related to occupational disease or occupation-related disability, interventions at the workplace or changes in employment may be required. The entire process is overseen by the NIJZ and the pension insurance system.

Figure 5.1 shows the typical patient pathway that applies where emergency medical services at primary care level are not required. Of note, in Slovenia, care pathways are understood as a tool for organizing the care of patients at the level of individual provider organizations, especially hospitals and less as a tool for a generalized standardization of health care processes. The General Agreement (see section 3.3.4), for example, required each of the 10 general hospitals (see section 4.1) to have a least 14 care pathways established by 2015 (ZZZS, 2015). Other hospitals also publish certain

FIG. 5.1 Typical patient pathway in Slovenia



NIJZ: National Institute of Public Health.
Source: Albreht et al. (2016)

typical patient pathways; the Institute of Oncology has published a total 20 patient pathways and several additional clinical recommendations (Institute of Oncology, 2021). There are also a few nationally agreed care pathways, involving different health care organizations for specific health conditions. According to a 2009 survey, hospital health care workers estimated that care pathways were used for 20–40% of admitted patients (Kiauta et al., 2010).

■ 5.3 Primary care

Primary health care is organized by municipalities for their own territory, or jointly with other municipalities when the municipality is too small to organize its own provision.

Primary care provides patient-centred, integrated health care by multi-disciplinary teams consisting of family medicine, primary care paediatrics and gynaecology, emergency medical aid, general and youth dentistry. They also provide laboratory and other diagnostic services; physiotherapy, occupational therapy, speech therapy and mental health services; community nursing; health promotion and health education programmes; and selected secondary level specialist ambulatory practices. The organization and operation of primary care follows a community-oriented model and offers a wide range of preventive, diagnostic, curative, rehabilitative, palliative and health promotion services (see sections 2.2, 5.1 and Table 5.2) close to patients' homes. The majority of primary care is delivered by a network of 63 CPHCs, owned and managed by municipalities (covering around 76% of physicians and 42% of dentists working in primary care in 2015) (see sections 2.1, 2.2, 5.1 and 7.2).

Primary care provision is also supplemented by individual or group practices of private practitioners, who are contracted by the ZZSZ (concessionaries) (see sections 2.2, 3.3.4 and 3.7.2), though private practitioners usually work in single-handed practices and provide only one type of service. Out of 2 214 doctors working in primary care in 2019 in Slovenia (NIJZ, 2020b), a total of 475 (21.5%) worked in independent practices as concessionaries. Most dentists at the primary level are private practitioners, mostly working in solo practices (638 publicly-salaried versus 762 private).

Every insured person must register with a primary care physician. The choice is free and not bound by residence or by employer location; a personal doctor can be changed yearly. In this system, primary health care teams

operate registered lists of patients and physicians. Providers in all four categories (family medicine, primary paediatrics, primary gynaecology, general and youth dentistry) are considered personal doctors and are responsible for the provision of services to the enrolled patients on the list. They also act as gatekeepers to secondary level specialist care.

Additionally, CPHCs are important in providing comprehensive preventive services (see section 5.1). They were the original location of HECs, established in early 2000s to support lifestyle interventions, following the launch of the screening programme for the early detection of risk factors for CVDs (see section 5.1). These centres, working with small groups and individuals with a common risk factor or problem, are led by registered nurses, who schedule visits and carry out both individual preventive check-ups as well as health promoting workshops and group interventions. They are gradually being scaled up in the form of HPCs, introduced in 2017 (see sections 2.1 and 5.1).

CPHCs also house Family Medicine Practices, formerly called “family medicine model practices”. These focus on prevention and care coordination for patients with chronic diseases and entail an additional 0.5 full-time equivalent registered nurse to perform screening, intake and management of at-risk patients (see section 5.1).^{*} For information on the geographical distribution of primary health care resources, see section 4.1.1 and Box 4.1.

TABLE 5.2 Visits in outpatient settings in primary care, Slovenia, 2010–2019

	2010	2011	2012	2013	2014	2015	2016 ^a	2017	2018	2019	10-YR % INCREASE
Number (thousands)											
Preventive visits	1 237	1 193	1 186	1 209	1 229	1 313	1 299	1 299	1 324	1 435	7.0
Curative visits	7 383	7 487	7 199	7 355	7 525	7 828	7 681	7 496	7 540	7 790	5.5
Home visits	73	72	71	70	69	72	68	67	66	59	-20.0
Phone counselling	4	9	23	29	32	36	44	57	68	100	2390.0
Total	8 698	8 761	8 480	8 663	8 855	9 249	9 092	8 919	8 999	9 384	8.0
Per 1 000 population											
Preventive visits	604	581	577	587	596	636	629	629	640	687	14.0
Curative visits	3 603	3 648	3 501	3 572	3 650	3 794	3 721	3 628	3 643	3 729	3.5

^a Changes in data for 2016 due to subsequent amendments

^b Team consultations and other type of preventive activities are not included.

Notes: Inappropriately registered triage visits and preventive visits in outpatient specialties are not included.

Source: NIJZ, 2021b.

* The whole list of chronic diseases observed includes: arterial hypertension, benign prostatic hyperplasia, coronary disease, diabetes, COPD, depression, osteoporosis, asthma.

BOX 5.3 Assessing the strength of primary care

Since the 19th century, primary care has been a priority in Slovenia (see section 2.1). The organization of CPHCs, which is the core of the primary care provider network as well as the backbone for health promotion and preventive programmes, enables a unique integration of preventive and curative services as well as an interaction of individual with group and community preventive and health promoting activities, with special emphasis on reaching out to identify vulnerable populations and individuals and provide them services tailored to their specific health needs. In addition, primary care in Slovenia is well distributed geographically, following territorial logic (Box 4.1).

Starting in the early 1990s, the government introduced several reforms to ensure financial protection for patients and improve the effectiveness of primary health care, especially in the context of the country's burden of chronic diseases. Exemptions are in place for those who cannot cover OOP, such as state subsidies for pharmaceutical co-payments for war veterans, prisoners and people without income (Box 3.1).

The effectiveness of the primary care system is reflected partially in Slovenia's performance across international quality indicators. In 2019 (or nearest year), the rate of avoidable hospital admissions overall was 447.2 per 100 000, considerably lower than the EU22 average of 630. For diabetes, avoidable hospital admissions per 100 000 in 2019 was 106.3 per 100 000, below the EU22 average of 140, Finland (112.1) and Austria (154.8), and above Estonia (104.1) (OECD, 2021e). The rate of combined asthma and COPD avoidable hospital admissions was 118.6 per 100 000 (EU22: 211). Avoidable hospital admissions due to hypertension and congestive heart failure stood at 266.1 admissions per 100 000 population, lower than Austria, Estonia, Finland and the Netherlands (see section 7.5).

Despite the relative effectiveness of primary care, various systemic challenges persist. The density of family medicine specialists ranges between 48–74 physicians per 100 000 inhabitants in 2019 (average: 60), with increasing shortages due geography and population need. Some rural areas encounter difficulty in attracting and retaining several types of primary care physicians (e.g. specialists in family medicine, paediatricians and gynaecologists). There are also shortages of primary care paediatricians and community nurses across the country (see section 4.2.2). Moreover, there is insufficient cooperation with the secondary care level in securing seamless care and rational monitoring of complex chronic patients. Ongoing primary care reforms, including MHCs and HPCs, aim to strengthen care coordination and prevention at the primary level (see section 2.2 and Chapter 6).

■ 5.4 Specialized care

■ 5.4.1 *Specialized ambulatory care*

Specialized secondary level ambulatory care in Slovenia is predominantly delivered in three types of settings. Most specialized ambulatory care is provided by the hospitals (university, clinical or general). Certain, bigger CPHCs may also offer different types of specialized secondary level ambulatory services (see section 5.3). This is especially true of cities as well as towns that do not have a general hospital nearby. Finally, individual or group practices of private specialists also provide care. These may have a concession from the MoH, meaning that services are covered by the ZZZS, or they do not, in which case services are paid for OOP or with supplementary VHI. Private practitioners may work either in their own premises, premises hired from CPHCs or in space rented for their own practice. Even when delivered within the organizational structures of the CPHCs, private provision of specialized ambulatory services is managed and supervised by the MoH.

Access to specialized secondary level ambulatory care is typically by referral, which is mandatory for reimbursement by the ZZZS. All providers are obliged to keep a clear and transparent system of waiting lists and report to the central system monthly to ensure that the overview of waiting lists maintained by the NIJZ is actualized (see section 4.1.3).

In 2019, 314 (around 6% of all) medical specialists worked in individual or group private specialized ambulatory care practices, along with 147 registered nurses and 297 nurse technicians. It is difficult to estimate the effective number of specialists working in ambulatory settings in hospitals – both in terms of people or FTE – even though the reimbursement system of the ZZZS includes salaries for staff in its calculation of FFS values (see section 3.7.1).

Long waiting times have characterized specialized secondary level ambulatory services in the last years. They are the only statistically significant factor driving unmet medical need in Slovenia (see section 7.2). Though the Government has frequently tried to address long waiting times (see Chapter 6), waiting times are a persistent problem that has only been exacerbated in the COVID-19 crisis.

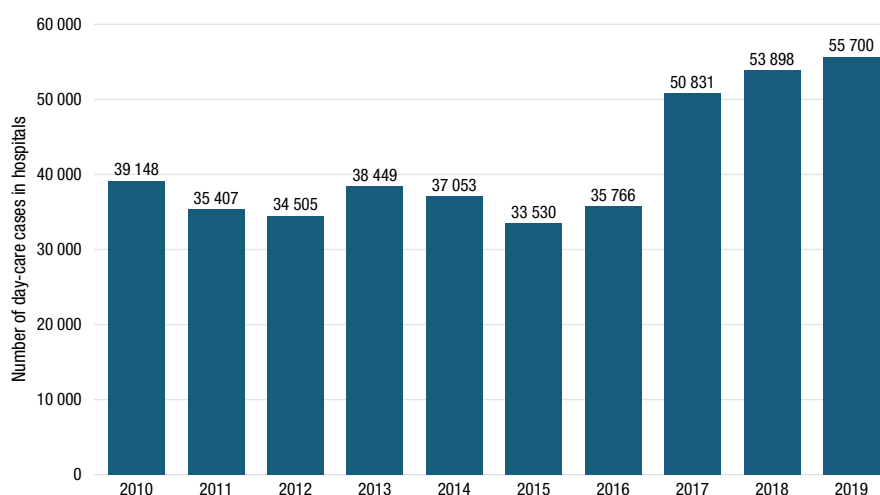
■ 5.4.2 Day care

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 once, for several consecutive days or several times a week but spend every night at home. The main services provided in day-care settings are related to medical abortion and gynaecological disorders, diseases related to the joints, injuries and mental health disorders. The highest number of such cases occurs in psychiatry. Day care is provided in the 30 public and private hospitals in Slovenia; an additional seven providers delivering acute hospital care may also provide day care (see section 4.1).

Fig. 5.2 shows the number of day-care cases in hospitals stagnating until 2017, after which it increased significantly as a result of incentives in the reimbursement of these cases. Nevertheless, compared with standard hospital stays, the number of day care cases is relatively low.

FIG. 5.2 Day-care cases in hospitals in Slovenia, 2010–2019



Source: Hospital discharge database (NIJZ, 2021c).

■ 5.4.3 *Inpatient care*

A total of 30 public and private hospitals provide inpatient care in Slovenia. Public hospitals represent more than 90% of all inpatient capacity, both in terms of the number of hospital stays and income. Private inpatient providers are mostly smaller sanatoria, which provide certain diagnostic and surgical procedures, requiring a stay in a day hospital or a short hospital stay (see section 4.1).

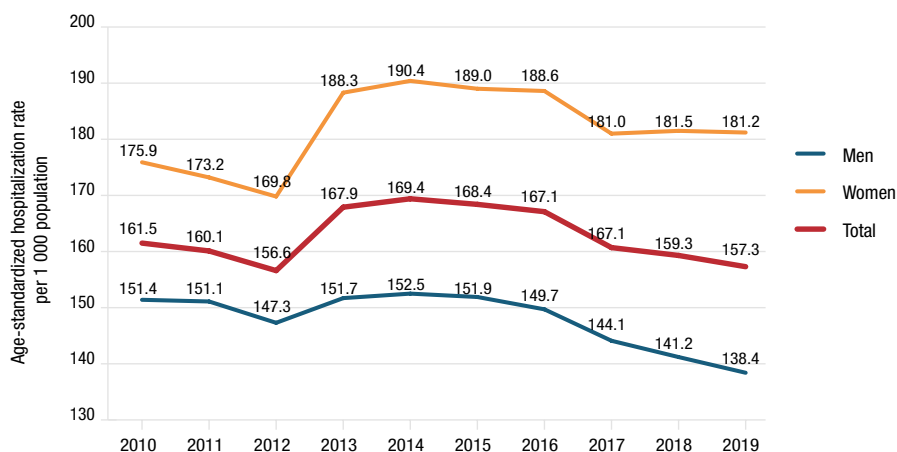
Most secondary level outpatient services and nearly all inpatient services are provided in hospital. Hospital care is accessible through a referral by a specialist, by direct referral from the primary care physician or through an emergency service (see section 5.2). When patients are referred, they can freely choose their secondary care provider, who are mainly in regional centres, where hospitals are located. 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 total number of hospitalizations in Slovenia increased between 2010 and 2015, after which there was a decline until 2019, due to a 9% drop in age-standardized hospitalization rates for men. In the same period, age-standardized hospitalization rates for women increased by around 3% (Fig. 5.3). Since the early 2000s, there has been a policy shift from providing care in inpatient to outpatient settings, encouraged by several financial incentives (see section 3.7.1). Consequently, the number of acute hospital beds and the average length of stay have been decreasing in Slovenia (OECD, 2019) (see section 4.1), while the shares of procedures performed as 1-day surgery have generally increased. This is reflected in the marked increase in in-hospital day-care cases in the last 3 years (Fig 5.2). The proportion of 1-day surgery in knee arthroscopy, for example, rose from 41.3% in 2009 to 54.4% in 2019; in operations of inguinal hernia from 11.6% to 15.0% in the same period; and in tonsillectomy and/or adenoidectomy from 0.25% to 0.82%. A particular success regarding this transition from inpatient to outpatient care has been in cataract surgery. With 97.9% of procedures performed in outpatient care, Slovenia is among the leading EU countries for performing cataract surgery in outpatient settings (Perko & Borovničar, 2020).

BOX 5.4 Integrated care in Slovenia

Although public health and primary care services are quite well integrated (see sections 5.1, 5.2 and Table 5.2), cooperation between primary and secondary care levels over the years has not improved substantially (see Box 5.3). Interaction between the two takes place mostly through referrals and exchange of patient records. With the advent of new e-solutions for patient records and prescriptions, among others, perhaps this will change in the future (see sections 4.1.3 and 6.1). There are good examples of coordination with social care, mostly for patient who need institutionalization or at-home nursing care.

FIG. 5.3 Age-standardized hospitalization rate for all causes by sex and total, Slovenia, 2010–2019



Notes: Hospitalization rate not including non-Slovenian nationals. All causes includes hospitalizations due to illness, injuries, poisonings, childbirth, as well as fetal deaths and treatment of neonates (and accompanying persons), sterilizations and organ donations. The total includes cases where gender is undefinable or unknown.

Source: Hospital discharge database, NIJZ (2021a).

5.5 Emergency care

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 death. Services are integrated into the public network of health care services at the primary and secondary level.

BOX 5.5 Patient evaluations of the care they receive

There has been increased attention on measuring and improving quality of care (see sections 6.1 and 7.4) in Slovenia, including around patient experience (see section 2.8.1). However, while there are structures in place to monitor quality indicators, they are not yet integrated into national priority-setting, capacity planning or health service purchasing mechanisms (Box 3.3), which would make the care provided more responsive to population need.

At the national level, patients' experiences primarily in acute care and mental health are surveyed. The survey is nationally agreed and administered by the MoH and measures hospitals on several dimensions of patient experience. Scores achieved by each hospital are published on its website. The last published survey (Ministry of Health, 2013) recorded an overall average score of 90.4 out of 100. However, concerns have been raised about the reliability of these results given that the survey is administered while the patients were still in hospital. Moreover, the questionnaire had not changed since first used in 2007. In 2008, the government first passed the "Regulation on dealings with users in public health care" to address the lack of a nationally agreed survey measuring satisfaction within non-acute services. While this included a requirement for providers to measure users' satisfaction monthly in accordance with a methodology published by the MoH, it was not enforced nor was the required methodology published. In 2017, a national system for patient-reported experience measures (PREMs) and patient-reported outcome measures (PROMs) was established by the NJIZ at the request of the MoH. Subsequently, a standardized survey for specialist outpatient services was introduced in 2019 as well as an update of a pre-existing survey on patient experience in acute (hospital) care (see section 7.4). Using this tool, the overall assessment of patient experiences of outpatient services in 2019 was high, with an average score of 9.25 out of 10.

At the European level, a 2014 Eurobarometer survey – the most recent available – on patient safety and quality of care reported that 73% of respondents 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, 2014). The three most important criteria determining high-quality health care, according to Slovenes were: waiting lists, well-trained medical staff and frequency of adverse events. A 2021 Eurobarometer survey identified that more Slovene respondents (51%) find health to be the most important issue facing the country than the European average (44%) (Eurobarometer, 2020).

■ 5.5.1 *Organization of emergency care*

A 2015 reform to optimize the use of emergency care services led to the restructuring of service provision, with an emphasis on:

- organization of emergency centres in two Clinical Centres and in nine general hospitals;
- establishment of a single medical dispatch service, currently operating at two locations;
- strengthening the emergency care in outpatient clinics at the primary level with the organization of satellite emergency units in some CPHCs;
- education of lay first responders and their integration into the system; and
- systematic training and proficiency testing of emergency medical services, particularly for natural and other disasters.

Prior to 2015, a patient who required immediate medical attention could present themselves directly at the emergency department of the nearest hospital at any time. More often, urgent outpatient services were available throughout the day (and sometimes at night, outside normal working hours) at designated primary health care centres. In these, a patient was usually seen by a family medicine specialist, who decided whether to make a referral to a hospital emergency unit. As such, emergency services were principally managed at the primary care level. There was, however, a growing number of patients, however, who go directly to hospital emergency units, partly due to a lack of understanding of how the emergency system works and partly to a lack of explicit nationally agreed rules on accessing emergency care.

The main change under the 2015 reform involved a stricter division of emergency medical units responsible for life-threatening situations and those providing urgent care in primary health care centres (Ministry of Health, direct communication, 2021). The “Rules governing urgent medical aid services” define the characteristics of emergency care unit types and determine how many there are.

At the hospital-level of emergency care, 11 new “emergency centres” have been established since 2015 (a twelfth is forthcoming in 2022). These

are designed specifically to address the most life-threatening cases. Not all hospitals in Slovenia are equipped to handle all types of emergencies; for example, only a few hospitals can perform an emergency primary percutaneous coronary intervention for acute coronary syndrome. In addition, in the future, these emergency centres will be supported by a network of satellite emergency centres, already identified and located at existing CPHCs.

The MoH has already ensured additional resources for better equipping and staffing these primary care-level centres. And emergency room specialists will be employed as much as possible to deliver care there both to professionalize emergency care and strengthen the capacity of all levels of the health system to be able to treat life-threatening conditions. A network of emergency care centres at CPHCs will also help ensure timely availability of emergency services countrywide.

In 2019, approximately 45 000 interventions in hospital emergency units and 660 000 in either outpatient care or emergency centres were performed (email communication with the MoH, July 2021). These interventions include both life-threatening conditions and acute health problems that are not immediately life-threatening.

Looking forward, the MoH has ensured a higher annual budget for emergency medical care for 2022, particularly to strengthen the capacity and availability of urgent care. And a clearer distinction between emergency medical care and acute care services will be necessary. As part of the new emergency care system, a uniform triage system is also being introduced at the medical dispatch service (see below) and the emergency centres.

■ 5.1.2 *Medical dispatch services*

In 2018, a dispatch service was formally established as an organizational unit within the University Medical Centre Ljubljana. Currently, the unified dispatch service operates at two locations (Maribor and Ljubljana) and covers an area with 44% of the population. The inclusion of all medical emergency service providers in the dispatch centre is planned for the end of 2022.

■ 5.1.3 *Key priorities in emergency care*

A main priority for the new emergency care system is improving quality-of-care indicators. To do so, the most important thing is to strengthen the emergency centres in hospitals and satellite emergency centres and to unify the processes within and between them. Another important area of action is to renovate and equip mobile emergency units and geographically distribute them so as to ensure the best availability of quality services in all parts of the country.

■ 5.6 **Pharmaceutical care**

The overarching objective of medicinal products supply in Slovenia is to provide residents with all medicines to cover public health needs, balancing developments in demographic trends with the restrictions imposed by the size and purchasing power of the pharmaceutical market. In terms of overall financing, Slovenia spent 17.4% of CHE on pharmaceuticals in 2019, higher than the EU27 average of 13.9%.

Two companies constitute Slovenia's pharmaceutical industry – Lek Ljubljana (taken over by Novartis in 2002) and Krka Novo Mesto. Most domestic pharmaceutical manufacturing is export oriented. In 2020, the national market turnover for 18.6 million prescription medicines was € 559 million (approximately € 266.3 per capita): the percentage value (€) of generics is 22.1%, percentage volume (defined daily dose; DDD) of generics is 54.3% and percentage prescriptions of generics is 51.5% (Box 5.6). In its first ever report, the NIJZ found that the national market turnover for medicines in the 30 hospitals in Slovenia's public health network in 2018 was approximately € 208 million in 2019, of which € 97 million were for expensive hospital medicines (ZZZS List B); € 22 million for medicines in ampoules (ZZZS List A); and € 89 million for other pharmaceuticals.

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 and/or hospitals. There are 24 public pharmacy institutions with 193 pharmacies and 49 pharmacy subsidiaries; 87 private pharmacies with 11 pharmacy subsidiaries; and two

hospital pharmacies. This amounts to a total of 342 pharmacy units altogether as of 31 December 2020 (compared with 324 in 2015), corresponding to one pharmacy unit per 6 174 inhabitants (compared with 6 366 inhabitants in 2015). For information on governance of public pharmacies, see sections 3.2 and 4.1.

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 2020, 1 377 pharmacists worked in the pharmacy network (1 044 in public pharmacies and 333 in private pharmacies). Therefore, every pharmacist provided for an average of 1 525 inhabitants (compared with 1 879 inhabitants in 2015).

SHI 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 maximum attributed value (MAV) set by the NIJZ (see section 2.7.4).

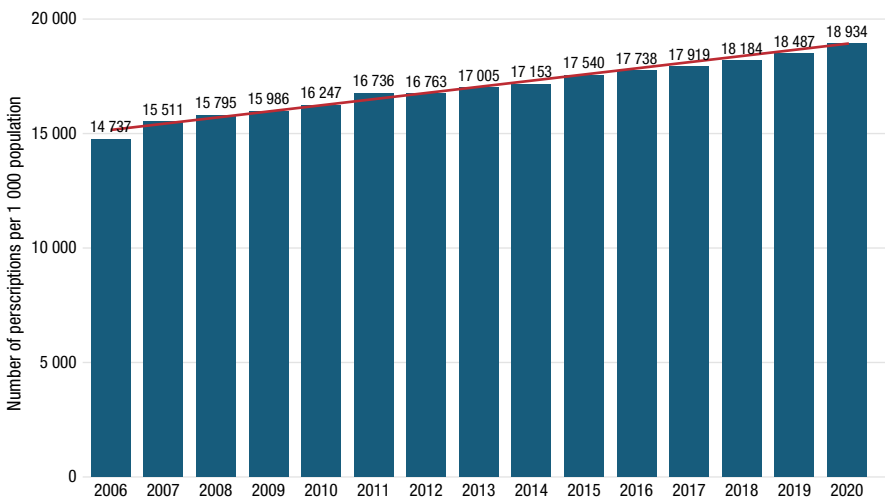
The number and composition of prescriptions depend on individual professional decisions of physicians, reflecting to a degree systemic measures, such as the introduction of mutually interchangeable medicinal products (MIMPs) and therapeutic groups (see section 2.7.4). Monitoring and analysis of drug consumption is performed by the NIJZ under the Health Care Databases Act (2000). Data are presented according to the Anatomical Therapeutic Chemical Classification (ATC)/DDD methodology recommended by WHO, which classifies drugs according to their main indication within 14 main (anatomical) groups, then in detail up to the fifth level of subgroups. Consumption of medicinal products prescribed to outpatients can be described by the number of prescriptions according to ATC group, by the number of DDDs and by the number of DDD per 1 000 inhabitants per day (WHO Collaborating Centre for Drug Statistics Methodology, 2011; 2015; Kostnapfel Rihtar & Albrecht, 2015). This information is collected directly from pharmacies by the NIJZ; records are based on both green and white prescriptions. In addition, prescription monitoring was introduced in 1995; each physician has a prescribing number, and all prescriptions are recorded with a bar-coding system. The ZZZS monitors the activities of all medical doctors with a contractual relationship (concession) with the ZZZS, publicly financed through SHI. Observed irregularities regarding financial issues or the violation of patients' rights can lead to penalties based on health insurance regulation.

Despite the introduction of cost-containment measures, between 2006–2020, the numbers of prescriptions has grown (Fig. 5.4). Total prescriptions in 2006 were about 14 737 000 as compared with 18 934 114 in 2020, leading to a 2020/2019 index of 102. Fig. 5.5 shows the number of prescriptions per 100 inhabitants by age and sex in 2020. There has been a marked, steady increase in prescriptions for men and women for the age groups above 50 years. For example, in 2014 the number of prescriptions per 100 inhabitants aged between 70–79 years was 2 106 for men and 2 174 for women; in 2020, the levels were 2 332 and 2 339, respectively.

The prices for medicinal products also increased during this time (Fig. 5.6), though the introduction of MAV for MIMPs and the system of therapeutic groups of medicinal products (section 2.7.4) led to a brief decline in 2014. Costs for all prescriptions amounted to € 423.8 million in 2006 and to € 568.9 million in 2020 (2020/2019 index: 105), with an average prescription cost of € 30.01. Of all prescriptions, 98% (18 493 528) were green prescriptions – totalling € 560 801 650 – and the rest (440 586) were white prescriptions – amounting to € 7 437 943 in 2020 (see section 2.7.4). In terms of health indication, 27.1% of prescriptions in 2020 were for CVD; 19% for nervous system (ATC group N); 14.5% for alimentary tract and metabolism-related issues; and 6.0% for diseases of the musculoskeletal system. Further, 50.1% included medicinal products from the positive list, 47.5% products from the intermediate list and 2.3% from the negative list.

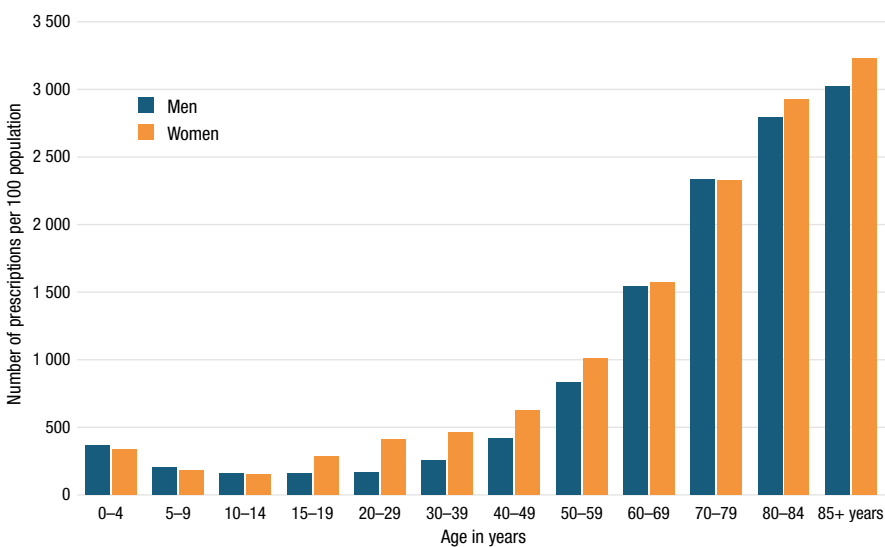
Table 5.3 shows the share of the value of prescriptions (only outpatient consumption) classified on the positive, intermediate list and the list which is not covered by the compulsory health insurance (main ATC groups) according to the classification of medicinal products as of 31 December 2020. Some € 391 619 735 (68.9%) for total prescriptions were on the positive list; € 169 480 136 (29.8%) were for medicines classified on the intermediate list. For most drug groups, more funds were spent on drugs from the positive list, with some exceptions. The following saw more funds going to medicines on the intermediate list of medicines: CVDs (ATC group C; 65.9%), urinary and vascular diseases and sex hormones (ATC group G; 62%), diseases of the musculoskeletal system (ATC group M; 87.7% of funds and various medicines (ATC group V; 61.9%).

FIG. 5.4 Number of prescriptions per 1 000 population in Slovenia, 2006–2020



Source: Kostnapfel Rihtar & Albreht, 2021.

FIG. 5.5 Number of prescriptions per 100 inhabitants by age and sex in 2020



Source: Kostnapfel Rihtar & Albreht, 2021.

TABLE 5.3 The number and costs of prescriptions according to the list of medicinal products and ATC classification, Slovenia, 2020

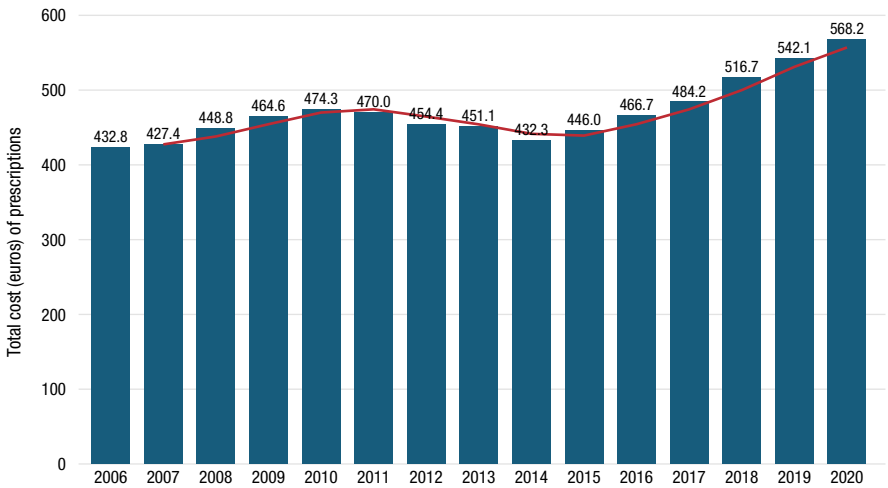
ATC	NO. OF PRESCRIPTIONS (THOUSANDS)				COSTS (IN THOUSANDS OF EUROS)			
	All prescriptions	Positive list	Intermediate List	Not covered	All prescriptions	Positive list	Intermediate list	Not covered
A	2 741	1 052	1 646	43	72 248	53 466	18 119	663
B	1 096	797	250	48	67 665	39 463	27 463	739
C	5 134	2 006	3 081	46	83 433	27 794	55 026	613
D	564	391	52	121	8 180	5 711	1 122	1 348
G	886	316	519	51	21 395	5 729	13 632	2 034
H	537	530	5	2	10 958	9 696	1 227	35
J	812	776	17	19	22 304	21 753	323	228
L	216	213	2	0	139 493	138 991	452	50
M	1 145	203	932	10	18 988	3 922	14 943	123
N	3 594	1 890	1 652	51	67 501	42 985	23 740	776
P	58	56	0	2	642	606	0	36
R	1 065	681	362	22	27 689	23 008	4 410	271
S	665	416	234	14	10 492	6 476	3 872	144
V	118	12	106	0	8 315	3 150	5 150	15
Other	305	302	0	3	8 935	8 870	0	65
Total	18 934	9 644	8 859	432	568 240	391 620	169 480	7 140

ATC: Anatomical Therapeutic Chemical Classification.

Source: Kostnapfel Rihtar & Albreht, 2021.

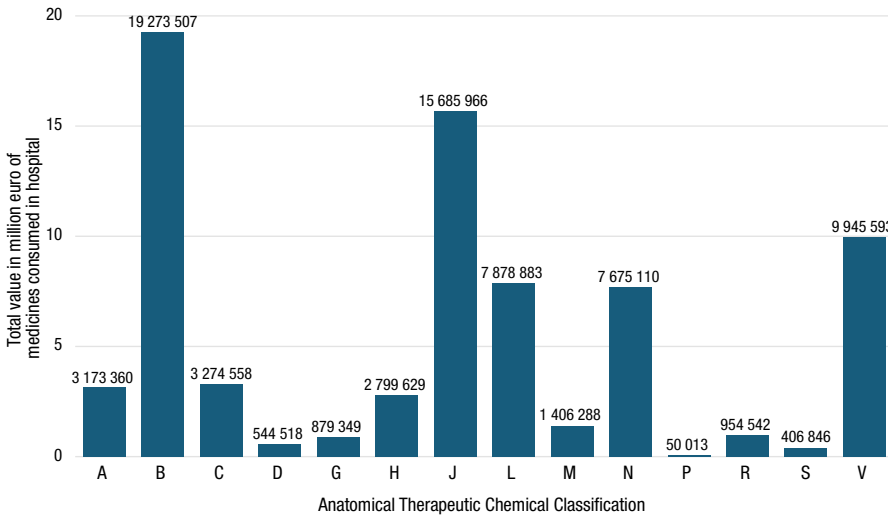
To ascertain the overall cost of medicinal products and obtain a comprehensive overview of the consumption of medicines, the NIJZ undertook a first complete analysis of medicines used in hospitals at the end of 2019, looking at 2018 consumption. Data was directly obtained from the databases of individual hospitals; data were provided by 30 hospitals, of which 26 were public, three publicly funded private hospitals and one public health institution. Fig. 5.7 describes pharmaceutical consumption in hospitals, by individual ATC groups, in 2018.

FIG. 5.6 Total cost of prescriptions in euros, Slovenia, 2006–2020



Source: Kostnapfel Rihtar & Albreht, 2021.

FIG. 5.7 Total value of medicines consumed in hospital in euros by main ATC groups in 2018



Notes: This does not include products on List A (ambulatory drug treatment under separately chargeable material) or List B (expensive hospital drugs).
Source: Kostnapfel Rihtar & Albreht, 2021.

BOX 5.6 Evaluating pharmaceutical spending

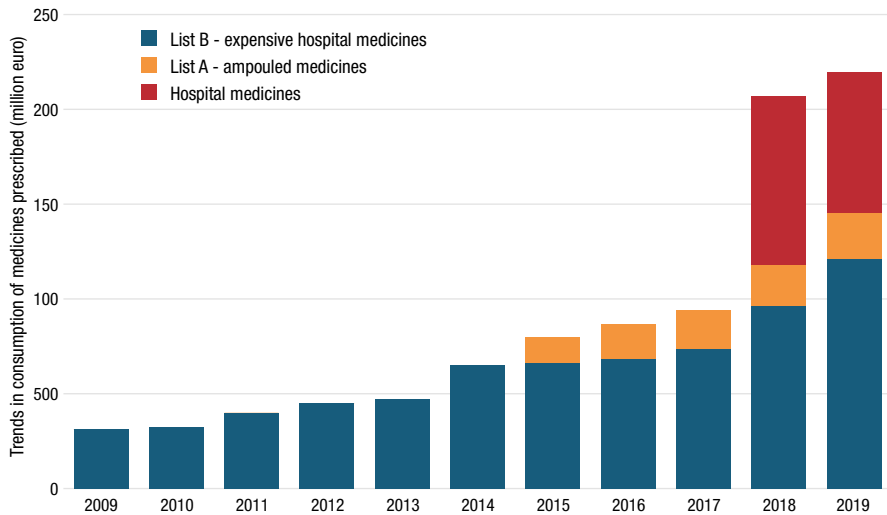
The data show that the consumption of medicines in Slovenia is steadily increasing. Compulsory health insurance covers medicinal products that are on the ZZZS's positive and intermediate lists and only up to a maximum price set by the ZZZS. Products on the positive list are either covered in full or require 30% co-insurance; products on the intermediate list require a 90% co-insurance. Patients who have been prescribed a product with a higher price than set by the ZZZS can either pay the difference or receive a generic product without co-insurance.

Cost control measures are an important policy area for Slovenia, and is one which can have a long-term impact on the supply of medicines. Special attention is also paid to the rational prescribing of drugs and in preventing the accumulation of already dispensed, but unused, medicines in the home environment. Rational use of medicines requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate time period, at the lowest cost to them and their communities. According to WHO guidelines there are some interventions to promote more rational use of medicines in Slovenia: the classification of new drugs on the drug lists takes place on a regular basis, establishment of a multidisciplinary national body to coordinate policies on medicine use, development and use of national essential medicines list, preventing falsified medicines entering the legal market, continuing medical education, use of clinical guidelines, supervision, and proper patient information and public education about medicines.

Additionally, by volume the share of the generics market in Slovenia is steadily growing, from 35.2% in 2005 to an estimated 53.2% in 2019 above the EU average of 49.5% (OECD, 2021e). According to national data, the share of generics was 54.3% in 2020, accounting for 22.1% of the value (€), 54.3% of volume (DDD) and 51.5% of all prescriptions. Though above the regional average, there is room to scale-up generic penetration.

In addition, the consumption of expensive hospital drugs (List B) and those on the list of medicines in ampoules and other ambulatory drugs treatment under separately chargeable material (List A), were added to the analysis for 2019. Data for the consumption of medicines from Lists A and B were obtained from ZZZS (Fig. 5.8).

FIG. 5.8 Trend in the consumption of medicines prescribed in hospitals, 2009–2019



Source: Kostnapfel Rihtar & Albreht, 2021.

5.7 Rehabilitation/intermediate care

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

At the primary care level, rehabilitation is provided through physiotherapeutic services, coordinated and led by specialists in physical and rehabilitative medicine. Physiotherapy is organized in CPHCs 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; physiotherapists are included in home care and in occupational care and link closely with district nurses.

At the secondary care level, rehabilitation includes, above all, medical rehabilitation programmes provided in hospitals, spas or special rehabilitation centres. In hospitals, departments for physical medicine and rehabilitation encompass the range of rehabilitative care, including methods of early

rehabilitation before and immediately after surgical interventions for changes in health status. Most physical medicine and rehabilitation departments do not have their own beds but treat patients in beds in other departments. Rehabilitation in spas aims to enable reintegration of the injured/sick individual 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 covered by SHI, with the remaining costs paid for OOP or via complementary VHI.

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 special medical devices, which are not provided at the secondary care level, are prescribed and administered at this level, such as certain prostheses and stimulators. Generally, rehabilitation centres are concentrated in bigger cities and spas, which can impact access for people from rural areas.

More complex rehabilitation occurs on an inpatient basis. Patients are either admitted to hospitals (or remain hospitalized after acute treatment) or are transferred to a spa department. Some departments are fully equipped for complete rehabilitation, others specialize in certain care areas.

In Slovenia, intermediate care is underdeveloped for most conditions. Once discharged from hospital, there are few options available for disabled individuals. The main option is to receive point-of-service care at CPHCs or social assistance provided at home, financed by social care. Such services are not provided on a full-time basis and are mainly provided in cities. Extended hospitalization can be provided for patients who experience a sudden event (e.g. a hip fracture, another major injury or a stroke) and are unable to return to home because they live alone with no carer or because a carer is not available to suit their significantly increased needs.

This lack of intermediate care is a problem, particularly for senior citizens who have undergone hip replacements, for example. And while assistance in daily living activities is a pressing issue as many patients find it hard to organize their lives while also receiving still medical and physiotherapy services, workforce shortage and the lack of significant financial resources to support payments to fund such services undermine their provision. The Pension and Disability Fund grants cash benefits for patients who need the

assistance of an external carer, but these amounts are generally not sufficient to pay for all necessary services.

As part of its pandemic response, the Government, established extended hospital treatment and rehabilitation services through the Act on Additional Measures to Mitigate the Effects of COVID-19 (PISG, 2021), i.e. in nursing care, physiotherapy and occupational therapy for people recovering from COVID-19. The objective of this extended treatment is to enhance patients' self-management and self-care capacity and support them in a gradual return home. In addition, within the framework of the European structural funds, the MoH is exploring the possibility of more efficiently addressing the needs of the elderly, including providing rehabilitation services at home and in other home settings. The MoH is coordinating a project "Mobile teams for rehabilitation" from April 2021 to June 2023 to test and provide rehabilitation services at patients' homes, thus providing better access to rehabilitation care to the elderly population, in particular those with mobility handicaps from recovering from disease, operations, injuries or as a consequence of degenerative and cognitive disorders. This especially applies to the people who have limitations in access to services in the existing rehabilitative settings, due to their condition (Ministry of Health, 2021).

■ 5.8 Long-term care

The rights and services of LTC are the joint responsibility of the MoH and the Ministry of Labour, Family, Social Affairs and Equal Opportunities and are regulated under different sets of legislation, including for pensions: Pension and Disability Insurance Act (1999), War Veterans Act (1995) and War Disability Act (1995); health care: Health Care and Health Insurance Act (1992); and social and family care: Social Security Act (1992), Financial Social Assistance Act (1992), Exercise of Rights to Public Funds Act (2010) and Parental Protection and Family Benefit Act (2014). As there is no single overarching regulation specifically concerning LTC (Council of the EU, 2014; Meglič Črnak et al., 2014) the rights and services for the elderly, chronically ill, disabled and other individuals with special long-term needs are 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 financial support for LTC. Consequently, a certain number of people in need of these services might end up benefiting more from current arrangements in place than others, or their needs might remain unrecognized altogether.

In 2017, the MoH undertook the preparation and coordination of multiple projects – under the common title “Implementation and execution of pilot projects, supporting the transition into the implementation of system Act on Long-term Care” – in LTC as well as the drafting of the LTC Act (Ministry of Health, 2018). The objective of the projects, which ran from 2018–2020, was to test mechanisms and services planned in the framework of proposed legal solutions included in the Act in various environments (e.g. urban, rural and semirural). These include the establishment and functional setup of a universal entry point of access; testing of a new scale for the assessment of the right to LTC (see section 3.7.1); enabling and testing new services; training of professionals; and the introduction of information support to all the processes.

The draft Act was first opened to public discussion in 2017, and then again in August 2020 (Ministry of Public Administration, 2021). It is currently in the phase of inter-ministerial harmonization and is expected to be adopted by Parliament in late 2021 (see Chapter 6). The need for a universal systemic solution for LTC was further reinforced by the COVID-19 pandemic (see sections 3.7.1 and Chapter 6).

In addition, reform measures in the field of LTC within health care will be addressed in the framework of the European Recovery and Resilience Plan.

■ 5.9 Services for informal carers

There is no national policy regarding informal care in Slovenia, which largely depends on family members, mainly spouses and daughters, followed by other family members and neighbours. NGOs have an increasingly important role, but women predominantly carry the highest burden in providing informal care. Those who need assistance may receive cash benefits from the National Pension Insurance Institute. Family members, as caregivers, are entitled to a paid leave of absence if they are employed, but this applies only for a set period of time. Family members who decide to change their employment model; for example, to part-time, 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, as 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).

■ 5.10 Palliative care

In Slovenia, palliative care is still in developmental stages, but 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), in Slovenia the number of palliative care experts willing to work in palliative care as providers and teachers is insufficient. Furthermore, it found that a lack of established financing and classification of palliative care standards at the national level hinders care delivery, and that teamwork and multidisciplinary collaboration could be improved. 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. In terms of training, 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. 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 is the same for all groups – so far, only physicians may obtain a diploma. Courses and seminars are also organized by professional societies across disciplines involved in palliative care in Slovenia, although without a final examination, nor 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 General Hospital Jesenice 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. There is also one hospice run by the LjubHospic, Ljubljana. The Slovenian society Hospic provides services primarily focusing on supporting the terminally ill, also in home settings, and volunteers help with bereavement (www.hospic.si). 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. Recently, mobile palliative care units have been launched. So far, they are only available in two regions (Gorenjska and Prekmurje). Four more were in progress but have not been implemented yet at the time of writing (July 2021).

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 (Albrecht et al., 2016).

- 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.
- All opioids in all pharmaceutical forms are available in Slovenia and patients can obtain such medication in pharmacies with a prescription from a physician.
- There is a well-organized pain management service and all hospitals provide outpatient pain clinics for chronic pain.

■ 5.11 Mental health care

In 2008, the Mental Health Act was adopted; it represents the first law in mental health and joins the health and social welfare systems into a tightly interwoven entity, primarily focused on individuals' needs, and aims to protect and assure basic human rights within mental health services. The Act delineates the obligations of both the MoH and the Ministry of Labour, Family, Social Affairs and Equal Opportunities. The latter is responsible for guaranteeing the conditions of secure wards within special residential institutions and assuring a network of community care coordinators and professional advocates for people with restricted rights (see below). Despite these efforts, the mental health system is characterized by fragmented planning, financing and provision of services, with little collaboration across social, health and other relevant sectors.

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 (by Court order); a secure ward of special residential institutions with and without consent (by 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 and also defines the use of special security measures under specific conditions.

However, in 2015, the Constitutional Court of Slovenia annulled parts of the Act and ruled the Act unconstitutional in 2019 due to legal shortfalls concerning compulsory commitment to care by Court decision in secure wards within special residential institutions. As of time of writing (July 2021), the Act has not yet been amended in accordance with the Constitutional Court ruling.

The treatment processes outlined under the legislation define new stakeholders in the management of mental health patients, and their roles, obligations, responsibilities and communication pathways. These new stakeholders 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 important for the reintegration process).

Mental health care in Slovenia is predominantly hospital-based; however, over the years, Slovenia has endeavoured to establish conditions for deinstitutionalization and shift to new models of community-based care (Box 5.7). The Mental Health Act (2008), for example, established a system to accelerate the transfer of people from institutions to local communities and introduced new stakeholders at the community level. The number of psychiatric beds is slowly decreasing, with 18% fewer psychiatric beds in 2019 than 1990. Psychiatric beds now represent 15% of all hospital beds (see section 4.1).

Studies have highlighted inequalities in access across Slovene regions and the connection between socioeconomic status and mental health problems (NIJZ, 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. Despite recent increases in numbers of certain professions (i.e. psychiatrists, child and adolescent psychiatrists), the need and demand for services still exceed existing workforce capacities.

BOX 5.7 Institutions providing mental health services

Psychiatric hospitals: University Psychiatric Hospital of Ljubljana; Psychiatric Hospital Vojnik; Psychiatric Hospital Begunje; Psychiatric Hospital Ormoz; Psychiatric Hospital Idrija; and Department of Psychiatry at University Medical Centre Maribor.

Residential, social care institutions: five institutions for people with mental health problems provide rehabilitation, sometimes occupational therapy and employment. These are social care institutions with some health professionals. Most of the services are paid for by the social care sector.

Community based:

- Residential units for adults, established by NGOs.
- Special residential public institutions, which are downsizing their capacities and establishing smaller units.
- Occupational day centres established by NGOs.
- Occupational day centres established by the state.
- Information offices and counselling units.
- Phone counselling.

The Social Security Act (1992) 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.

Additional weaknesses of the mental health system in Slovenia include fragmented planning, financing and provision of services, with little collaboration across social, health and other relevant sectors, despite efforts to align them. In 2018, after four public consultations (2009, 2011, 2014, 2017), the National Assembly passed the National Mental Health Programme 2018–2028. The Programme provides national stakeholders with a set of objectives, actions and measures to guide development in public health interventions related to mental health; mental health care service organization and delivery; human resources and workforce planning; and health information and quality assurance. One objective is to improve access to prevention, early detection and treatment of mental disorders; access to psychotherapy; and strengthened rehabilitation and social integration support for mental health

patients. In this way, it builds principles of community-level care provision to introduce community-based MHCs to address unmet mental health needs of children, adolescents and adults. These are intended especially to tackle inequalities in access to services among vulnerable groups, including children and adolescents, older people, the poor, people with various degrees of disability and immigrants and ethnic minorities, such as the Roma populations. The programme envisions a network of 25 MHCs for adults and 27 for children and adolescents (see section 6.1). In the first 3 years of the implementation, 10 MHCs for adults and 11 for children and adolescents have been established.

Other priority actions have been addressed to a lesser extent or not at all, mainly due to insufficient or unstable political and financial support as well as interprofessional conflicts concerning certain implementation measures. Looking ahead, additional mental health challenges due to the COVID-19 may emerge, especially for youth. This will only add to the importance of organizing youth mental health care in Slovenia.

■ 5.12 Dental care

Dental care is organized principally at the primary care level and dentists are one of the categories considered as personal physicians (see section 5.3). Dental services are performed by three types of providers. Looking at their ownership structure, these are:

1. dentists in the public network, funded through the ZZZS, working in CPHCs (about 50% of all dentists);
2. private dentists working under contract with the ZZZS (concessionaries; often only a partial contract; for example, 50% or 0.5 full-time equivalent);
3. private dentists working only for private patients, financed either through VHI or directly OOP.

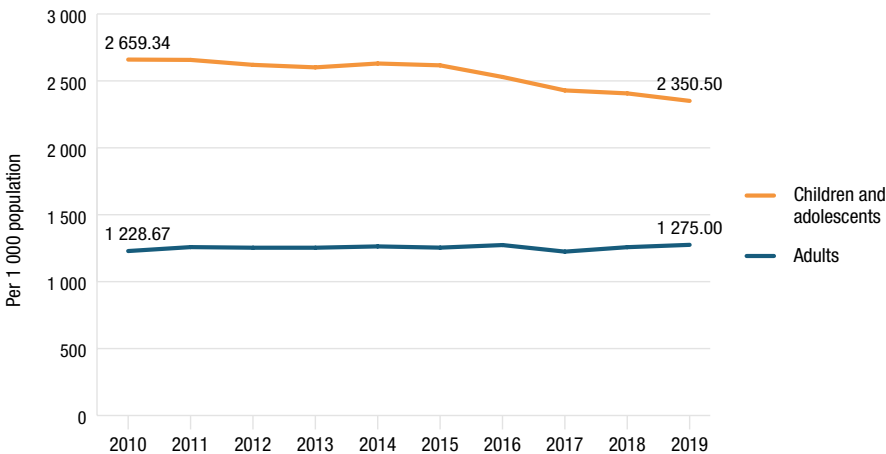
A particular characteristic of dental care in Slovenia is the rather high share of purely private providers, that is, those not working under a contract with the ZZZS. These comprise approximately 15% of all active dentists. In addition, more than 40% are concessionaires, or private providers who are

working under contract with the ZZZS. See section 3.4 for information on payments mechanisms in dental care.

Dental care is historically part of the basic benefits package in Slovenia. In 2019, public financing for dental care is larger in Slovenia than the EU average, at 49% and 31%, respectively. While dental care is fully covered for children and youth, co-insurance at different levels for different services is required for adults (see section 3.3). Notably, while adults’ visits to dental office are relatively stable, there is a clear trend of a declining number of visits in dental offices for children and youth, in particular since 2015 (Fig. 5.9). This can be attributed partly to the fact that, in some cases, adults who opt to see a private dentists bring children along and partly to the fact that some dedicated paediatric dental offices have turned into general dental offices.

Levels of unmet need for dental care were 3.7% in 2019 (compared with 2.8% in the EU). This is higher than the unmet need for medical care (Box 4.1) and levels vary by socioeconomic status. Four per cent of individuals in the lowest income quintile experience unmet due to cost, distance or waiting time as compared with 3.3% in the highest. Like medical care, unmet need for dental care is primarily driven by long waiting times; 3.4% of Slovenes report this as the main reason.

FIG. 5.9 Visits in dental offices per 1 000 population, 2010–2019



Source: Reporting system for dental health care (NIJZ, 2021a).

Principal health reforms

■ Chapter summary

- Important amendments to the Health Services Act (1992) and the Patients' Rights Act (2008) happened between 2015 and 2018.
- Slovenia has undertaken several collaborations to evaluate the health system (or aspects thereof) to inform national health reforms, including the National Health Care Plan 2016–2025, and the forthcoming national public health strategy and primary care strategy.
- Since 2018, significant reforms, particularly related to the prevention and management of chronic diseases and mental health, have been undertaken to strengthen primary health care services. There have also been considerable advances in digital health.
- Since 2018, both a volatile political situation (five health ministers between 2018–2021) and the COVID-19 pandemic have resulted in protracted processes for long-awaited reforms, including on the diversification of revenue for the health care; adjustments to the statutory benefits basket; and addressing long waiting times for secondary specialist services.
- Although LTC has been on the reform policy agenda from the mid-2000s, only in 2017 was the LTC Act finally drafted and open to public discussion. The Act, which was passed by the Government in June 2021, is currently in the phase of inter-ministerial

harmonization at the National Assembly and is expected to be adopted by Parliament in late 2021.

6.1 Analysis of recent reforms

Table 6.1 provides an overview of health care policy initiatives (mostly) from 2016 until July 2021 (time of writing); for information on health reforms prior to 2016, please refer to the previous HiT (Albrecht et al., 2016).

TABLE 6.1 Major health reforms and policy initiatives between 2016–2021

YEAR	REFORM/INITIATIVE	DESCRIPTION	IMPLEMENTATION STATUS
2014–2016; 2018	Pilot project to develop programmes for integrated prevention and management of lifestyle related chronic diseases in primary health care with an emphasis on vulnerable populations	Upgrades to HPCs, strengthens collaboration between public health and primary health care, and community-engagement-for-health approaches, including engagement of civil society	Implemented
2015	National Programme on Nutrition and Physical Activity for Health 2015–2025	Defines 10 strategic goals and actions for improving nutrition and enhancing regular physical activity in all groups of the population by enabling healthy food choices and recreational physical activity throughout the life-course	Under implementation (periodical action plans)
2016	National Health Care Plan 2016–2025 “Together for a society of health”	Sets the vision and objectives for the development of the health system from 2016 to 2025	Under implementation
2016	New Directorate for LTC at MoH	New directorate set up to develop, coordinate and implement the LTC Act	Established
2016; amended in 2017, 2019 (twice), 2020 (twice), 2021	Amendments to the Pharmacy Services Act (2016)	Replaces the Pharmacies Act (1992), with main goals to reduce polypharmacy and increase patient safety	Adopted
2016	Process to prepare strategy on primary health care development launched	Participatory process launched with all stakeholders in collaboration with WHO	Draft strategy was prepared, but not adopted
2017	Slovenian Development Strategy 2030	Sets a high quality of life for all as a primary objective of sustainable development and defines healthy and active life as the first goal; introduces healthy life years as an indicator of development	Adopted
2017	New Act on the Restriction of the Use of Tobacco and Related Products	Transposes provisions of Directive 2014/40/EU related to tobacco into national law and includes additional measures from WHO’s Framework Convention on Tobacco Control, including plain packaging and the equating of e-cigarettes with other tobacco products	Adopted

YEAR	REFORM/INITIATIVE	DESCRIPTION	IMPLEMENTATION STATUS
2017	National Cancer Control Plan 2017–2021	Aims to slow down the incidence rate growth, decrease mortality, improve survival and provide a greater quality of life for cancer patients	Adopted
2017	Efforts to advance HSPA	At the request of the MoH, NIJZ began efforts to advance and enhance implementation of HSPA	Project completed; HSPA not yet implemented
2017, 2019, 2021	MoH project to reduce waiting times. MoH actions on reducing waiting lists in specialist care	The government passed a special project providing financial incentives to reduce waiting times and improve the quality of care of public services at all health care levels. One of the priorities of the current government is the reduction of the number of patients waiting beyond the maximum established waiting times	Project completed. Waiting times not reduced. In progress
2017	National Strategy for HIV Prevention and Management 2017–2025	Addresses recent increases in HIV infection rates	Adopted
2017	Launch of the e-referral system	Enables the issuing of e-referrals and digital scheduling of medical appointment at the secondary and tertiary levels	Implemented
2017, 2018, 2019, 2020	Amendments to Medical Services Act (1999)	Reforms the current system of postgraduate medical specialist training	Adopted
2017	Amendment to Health Services Act (1992)	Introduces new regulations for granting concessions; defines the competition ban; regulates the supervision of health care providers and the advertising of health services	Adopted
2017	National Strategy for Dementia Control 2017–2020	Enables a coordinated and integrated approach to address dementia and related conditions	Adopted
2017, 2021	Amendments to Patients' Rights Act (2008)	Redefines guidelines around specialist referrals and waiting times	Adopted
2017, 2020	Act on recognition of professional qualifications for medical doctors, specialist doctors, doctors of dental medicine and specialist doctors of dental medicine	Introduces new regulations for the recognition of professional qualifications for foreign physicians and dentists	Adopted
2017, 2019	Amendments to Health Care and Health Insurance Act (1992)	Introduces new regulations around rights of insured people to medical care and medical devices and their reimbursement	Adopted
2017–2019	Self-assessment of the 10 Essential Public Health Operations (EPHO)	The MoH, WHO Regional Office for Europe and the NIJZ launched a self-assessment of the 10 EPHOs to inform a new public health strategy	Self-assessment completed and published
2017	Long-term Care Act	Introduces a systemic regulation of LTC	In final stage of adoption process. The mandatory insurance part of the LTC Act is to be defined in 2024 and implemented in 2025

YEAR	REFORM/INITIATIVE	DESCRIPTION	IMPLEMENTATION STATUS
2018	Final stages of nationwide “family medicine model practices” roll-out	Starting in 2018 as pilots to improve care of chronic patients and introduce preventive services, “model practices” were scaled up nationally and recognized as standard for family medicine team	Implemented
2018	National Mental Health Programme 2018–2028	Introduces new paradigm of mental health care in Slovenia, including strengthening of community approach and MHCs at primary care level	Adopted
2018, 2020	Amendments to the Health Databases Act (2000)	Ensures legislative basis for the introduction of e-Health solutions, upgrade of IT system, health and health care data processing, and to expand health registries and databases	Adopted
2019	Analysis of root causes of persistent and urgent challenges in primary health care	Performed with WHO Regional Office for Europe; supports a new primary health care strategy	Performed and published
2019	Amendment to the Law on Mental Health (2008)	Ensures legislative basis for the measures of the National Mental Health Programme 2018–2028	Adopted
2019	Professional competencies and activities in nursing care	Introduces clear distinction between the competencies and tasks of vocationally trained nursing technicians and registered nurses	Adopted
2020, 2021	Amendments to the Communicable Diseases Act (1995)	Epidemic preparedness-and-response-related changes	Adopted and implemented
2021	National Diabetes Management Plan 2020–2030	Follow-up to the National Diabetes Plan 2010–2020	Adopted
2021	Amendment to the Health Care and Health Insurance Act (1992)	<p>Proposes significant changes to the governance structure of ZZZS. The proposal abolishes the ZZZS Assembly, in which representatives of the insured population approve the institute's annual financial plan (see section 2.2). Instead, a council of 11 members, including five from the MoH, would have a dominant role in decision-making around the distribution of health funds within the statutory system and in managing the institute.</p> <p>The proposal also bestows final approval/veto of decisions on the Minister and outlines a new procedure for appointing the director of ZZZS by this new council. The proposal essentially gives greater supervision over ZZZS to the government and reduces its autonomy.</p>	In public discussion (at time of publication)

EPHO: Essential Public Health Operation; HSPA: health system performance assessment;
HPC: health promotion centre; LTC: long-term care; MHC: mental health centre;
MoH: Ministry of Health; NIJZ: National Institute of Public Health;
WHO: World Health Organization.

■ 6.1.1 *National health care strategy*

Based on the results of a 2015 assessment of the Slovene health system performed by the European Observatory on Health Systems and Policies and the WHO Regional Office for Europe (WHO, 2016), the current National Health Care Plan 2016–2025 – “Together for a society of health” – was designed and confirmed by the Parliament. This strategic Plan sets the vision and objectives for the development of the health system from 2016 to 2025.

BOX 6.1 Amendments to the Health Services Act and the Patients’ Rights Act

Health Services Act (1992) tightens regulation of issuing licenses for performing health care activities; regulates the systematic, transparent and controlled granting of concessions; regulates the implementation of health care activities in social and social welfare institutions; complements the regulation regarding the work of health care workers outside public institutions that perform health care activities; implements 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 health care; regulates the internships of health professionals and health care associates; regulates the advertising of health care activities; comprehensively regulates the field of supervision of the professionalism of the work of health care professionals and health care associates and institutions.

Patients’ Rights Act (2008) ensures information to patients; introduces innovations related to patient referral and redefines the levels of urgency of the referral; implements 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 health care in part, which refers to the treatment of violations of patients’ rights, the right to protection of personal data and the right to acquaint oneself with medical documentation; defines the maximum acceptable patient waiting time in the outpatient clinic before treatment (respect for the patient’s time); regulates the field of management, monitoring and control of waiting lists; regulates the field of health data exchange and access to personal health data; regulates the content of the treatment report; allows the right to a second opinion; regulates the control over the implementation of the law and determines the misdemeanour authorities.

■ 6.1.2 *Amendments to the principal health legislation*

To provide for a legislative basis for the National Health Care Plan 2016–2025, several critical amendments to the Health Services Act (1992) and the Patients' Rights Act (2008) occurred between 2016 and 2021 (Box 6.1). Essential amendments to the Health Care and Health Insurance Act (1992) to ensure financial sustainability of the health system, including diversification of revenue and adjustments to the statutory benefits basket are yet to be prepared.

■ 6.1.3 *Public health and preventive care reforms*

There have been several reforms in the area of public health, especially to address emerging health issues and within the process of international policy alignment.

TOBACCO CONTROL

The Restriction of the Use of Tobacco and Related Products Act in 2017 transposed the Tobacco and related products Directive 2014/40/EU of the European Union into Slovenian law and introduced other additional measures from the WHO Framework Convention on Tobacco Control (FCTC) (WHO, 2003) including:

1. total advertising and sponsorship ban including point of sale displays ban (since 11 March 2018) for all tobacco and related products (e-cigarettes with and without nicotine, herbal products for smoking and novel tobacco products);
2. a licensing system for retailers of tobacco and related products (since autumn 2018). In the case of selling to minors or violating advertising ban, the licence is withdrawn, and the fine is € 50 000. After the third offence the withdrawal of licence is final with no option to regain (first offence: prohibition of selling for six months; second offence: withdrawal of licence for three years);
3. a ban on distance sales (Internet sales) of tobacco and related products;

4. a ban on the depiction of smoking or of tobacco and related products on TV shows for minors, except for in films;
5. a ban on smoking and using related products in all vehicles (also private cars) in the presence of minors (under 18 years old);
6. except for plain packaging, the same scheme as described above (e.g. ban on smoking in all enclosed public places and workplaces, ban on advertising, ban on selling to minors, and a licensing system) applies to tobacco products, e-cigarettes, herbal tobacco for smoking and novel tobacco products (for instance, heated tobacco products); and
7. plain packaging for cigarettes and roll-your-own tobacco (mandatory at the retail level since 1 January 2020).

ASSESSMENT OF ESSENTIAL PUBLIC HEALTH OPERATIONS

The MoH, together with the WHO Regional Office for Europe, the NIJZ and over 120 professionals in public health and beyond, conducted a comprehensive self-assessment of the WHO Regional Office for Europe's 10 EPHOs in 2017–2019. The final report, published in September 2021 (WHO, 2021c), will be used to support the development of a new national public health strategy.

COMMUNICABLE DISEASE MANAGEMENT

All services and treatments related to communicable diseases are fully covered by SHI. In the past 5 years, and especially in last two due to COVID-19, several reforms have happened in communicable disease prevention and management. Institutional strengthening, including investments in new treatment facilities in the area of noncommunicable diseases are underway, as well as preparation of a proposal of a new Communicable Diseases Act.

Due to significant increases in HIV infection rates, the National Strategy of HIV Prevention and Management 2017–2025 was adopted in 2017, introducing new innovations in prevention, testing and treatment and focuses on systematic education of young people about sexual and reproductive health, among other things. The strategy envisages the preparation and implementation of national guidelines for HIV testing and for the provision of health care for people with sexually transmitted infections.

Changes to existing laws were necessary to combat the impact of the COVID-19 pandemic on health and health care provision. These were adopted, including to the Communicable Diseases Act (1995).

■ 6.1.4 *Primary health care*

NATIONAL PRIMARY HEALTH CARE STRATEGY

In 2016, the process to prepare a strategy on primary health care was launched in collaboration with WHO involving all relevant stakeholders. A draft strategy was developed, but not adopted due to the change of the government. In 2019, WHO Regional Office for Europe and the NIJZ conducted an analysis of root causes of persistent and urgent challenges in the primary health care system to inform further development of the strategy, expected to be finalized in 2021.

REFORMS TO CPHCS

To strengthen Slovenia's integrated, person-centred primary health care system, HECs (see section 5.3) in CPHCs are gradually being replaced by HPCs. This recent invention for preventive care and health promotion was developed with support of the Norwegian Financial Mechanism and was first piloted in 2014–2016 (see sections 2.1 and 5.1). Starting with three pilots, there are now 28 HPCs across the country operating within CPHCs. Slovenia was receiving financial support via EU regional development funds from 2017 to 2019 to build these additional 25 HPCs (see sections 4.1 and 5.1).

In January 2018, the MoH agreed that all family medicine teams should include 0.5 full-time equivalent of registered nurses, effectively scaling-up the formerly called “family medicine model practices”; they are now called Family Medicine Practices. Not only does this decision aim to strengthen chronic care management and preventive services at the primary health care level – and close to patients' home – but it also introduces a new human resource standard for family medicine teams.

Additionally, through amendments to the Law on Mental Health (2008) and the National Mental Health Programme 2018–2028, a network of

MHCs was introduced. They include the establishment of 25 adults MHCs and 27 MHCs for children and adolescents (see section 5.11).

■ 6.1.5 *Chronic care reforms*

The Government has adopted several other legislative actions in chronic care, highlighting the increasing concern and burden of chronic diseases within the population (see section 1.4). In 2017, the National Strategy for Dementia Control 2017–2020 was adopted to ensure preventive measures, early detection and an appropriate standard of health care and social protection for people with dementia. A new National Diabetes Management Plan 2020–2030 was also adopted giving strategic direction for the comprehensive and integrated management of the burden of diabetes. To address the growing burden of cancer, an updated Slovene National Cancer Control Plan for 2017–2021 was adopted; a draft of the 2022–2026 Plan is currently in the process of adoption.

■ 6.1.6 *Waiting times in ambulatory/outpatient specialist care*

Waiting times for specialist referral appointments are an enduring challenge in the Slovene health care system. Several different approaches to improve waiting times have recently been undertaken. In 2017, a governmental project to reduce waiting times and improve the quality of care of services provided in public facilities at all health care levels began (see section on Reforms which were not proposed or experienced implementation setbacks). In 2019, the Government targeted the reduction of the number of patients waiting beyond the maximum established waiting times and an assessment has been started together with the European Observatory on Health Systems and Policies. The aim was to ensure:

- improvements in the reporting system on waiting lists;
- additional financial resources to tackle incentives for health professionals as well as for the increase in material costs for patients;
- prioritizing the most hard-hit areas in terms of number of people waiting and the level of their objective urgency.

Amendments to the Patients' Rights Act (2008) in 2017 and 2020 were introduced to support these efforts, including redefining the degrees of urgency for referral and deadlines for submitting referrals.

■ 6.1.7 *Long-term care*

LTC reform has been on the policy agenda since the early-2000s with the aim to streamline the current fragmented and non-transparent services, which are guided by various regulations and funding sources, and to ensure equity in access and solidarity. A new Directorate for LTC was established at MoH in 2016 to develop, coordinate and implement the LTC Act, originally open to public discussion in 2017. This Act was submitted by the government to the National Assembly in June 2021 and is expected to be adopted by Parliament in late 2021. It introduces a systemic regulation of LTC along with mandatory LTC insurance (to be defined by 2024), sets out eligibility and services structures, recommends improving the working conditions of LTC staff, proposes to co-finance e-care services, raises the level of compensation for out-of-work family carers and introduces the possibility of 21 days of replacement care in institutions to relieve family carers (see sections 2.7, 3.7.1, 5.8 and 6.2).

■ 6.1.8 *Digitalization of health care*

There have also been considerable advances in e-Health. The Health Databases Act (2000) was amended in 2018 and 2020 to support the introduction of several e-Health solutions; upgrade the IT system; enhance health and health care data collection and management; and expand health registries and databases. The aim is to achieve more population data coverage and enable the linking of national databases. New digital applications include an e-referral system and appointment scheduling system at the secondary and tertiary levels, through a web portal (see sections 2.6 and 4.1.3).

■ 6.1.9 *Health system performance assessment (HSPA)*

HSPA has been strengthened, particularly in inpatient care. Data collected at the regional and national levels is systematically used to influence national health policy goals. However, HSPA is underdeveloped in other care areas like primary health care. In 2017, the MoH asked NIJZ to start the process of establishing HSPA frameworks and capacities in Slovenia. Initial efforts were co-financed by the European Commission; experts from the University of Malta and the Sant'Anna School of Advanced Studies provided technical support (see section 7.1). While performance indicators have been defined for all levels of health care, they have not yet been integrated into the system.

■ 6.1.10 *Health workforce*

Recent reforms to address workforce shortages and large workloads aim to both maintain and increase present staffing levels. The Act on Recognition of Professional Qualifications for Medical Doctors, Specialist Doctors, Doctors of Dental Medicine and Specialist Doctors of Dental Medicine (2010), was amended in 2017 and 2020, and adjusts how professional qualifications of foreign physicians and dentists will be recognized in Slovenia.

■ 6.1.11 *Reforms which were not proposed or experienced implementation setbacks*

Several reforms were launched but failed, were never formerly proposed or were passed by the government but were never implemented. For example, there were several attempts to change how complementary, VHI works – or even to abolish/replace it through SHI. Although some adjustment is needed, especially to change regressive into progressive contributions and to redefine how funds are allocated, the VHI system was confirmed to positively complement the SHI and to be particularly valuable as a compensating mechanism during the financial crisis.

As mentioned in section 4.2.2, in 2017–2018 a project supported by the EU SRSS enabled the development of a methodology that provides a base for

planning and forecasting of health professionals based on population needs and demand for health services, as well as taking note of the organizational specifics of the existing health care settings.

Additionally, the 2019 reform of professional competencies and activities in nursing care, in which vocationally trained nursing technicians could obtain registered nurse status by fulfilling certain criteria based on experience and by obtaining skills at posts otherwise designated for registered nurses (see sections 4.2.2 and 4.2.6), ended up not being feasible. According to the new regulations, nurse technicians may no longer perform tasks originally within their job descriptions as they now fall under the scope of registered nurses. With insufficient capacities of registered nurses to replace technicians to perform these routine tasks, managers were not able to implement the new reform and still maintain service provision.

Some reforms ran into conflicting impacts of other health care reforms. The 2017 project to shorten the waiting times for secondary level specialist care, for example, ultimately generated longer waiting lists 1 year later. However, this is a result of several factors. For example, at the time, family medicine physicians collectively decided to continue to refer more complex patients and new methodology for waiting list organization, regulation and monitoring, necessitated a new approach to referring patients (one referral for one medical service, rather than one referral for one medical specialist) that created greater administrative burden for primary care physicians by the ZZZS and an increased overall number of referrals overall.

Due to the large workloads (including administrative burden) faced by family physicians, in 2017–2018, the family physicians' union pressured the MoH to reduce the required number of patients registered at family medicine practices. This reform was unintentionally undermined by the new referral methodology and additional administrative requirements, resulting in even more red tape.

■ 6.2 Future developments

Much of the policy effort in the years to come will deal with the continued implementation of ongoing reforms. In addition, the COVID-19 pandemic has uncovered – or further highlighted – weaknesses in the health system, including workforce shortages, waiting times for secondary

ambulatory services, ageing hospital facilities and a fragmented and under-funded LTC system. The following areas are expected to be priorities in the coming years.

■ 6.2.1 *Primary health care*

The view is to establish a HPC next to all CPHCs over the next 3 years. In addition, MHCs (see section 7.6.1), staffed with registered nurses, psychologists and psychiatrists, will be launched in 2021 to facilitate access to psychiatric and psychological care at the community level.

Further, reforms will focus on ways to increase primary health care professionals' satisfaction and work experience and reduce burnout; address organizational and governance challenges constraining primary health care performance; establish an effective quality improvement system; and ensure sustainability of health care financing. Innovations may include strengthening the MoH's institutional capacity to serve as an effective steward of the health system overall; replacing the current morass of administrative and clinical information systems with user friendly, fit-for-purpose information systems for outcome-focused quality improvement processes at both the facility and system level; reforming the ownership and governance structure of primary health care facilities; and strengthening the governance structure of the ZZZS.

Finally, the process of developing a primary health care strategy will continue. This will build on the 2016 draft strategy and include measures to address fundamental issues within the current system as identified by the WHO Regional Office for Europe in 2019.

■ 6.2.1 *Public health strategy*

As mentioned above, the MoH, the NIJZ and the WHO Regional Office for Europe, together with national professionals, performed a self-assessment of Slovenia's public health system across WHO Regional Office for Europe's 10 EPHOs in 2017–2019. The final report and recommendations will be applied in the development of a new national public health strategy. The strategy will aim to further strengthen public health capacities and services,

both at the population and individual level, and enhance collaboration within primary health care. Specific priorities will include health equity; addressing upstream health determinants through multisectoral collaboration for health; and strengthening public health intelligence, particularly by introducing data modelling-based predictive analytics.

■ **6.2.2** *Long-term Care Act implementation*

If the LTC Act is adopted by Parliament, then a major task of the Slovene health system will be to operationalize it in the years to come. As envisaged, the rights under the LTC Act will be integrated at intervals. For example, a full legislative proposal for a special bill on mandatory LTC insurance, which will determine the conditions – including financing – of compulsory insurance for LTC, is expected in 2024 and implemented in 2025.

■ **6.2.3** *Public health care facilities management and governance*

Managers of the publicly owned health care facilities need more powers and tools for effective leadership and management, both in terms of financial and performance outcomes. Professional criteria for the members of health care institutions governing boards need to be introduced, defining the required knowledges, skills and experiences of the members.

Additional investments are expected to rebuild some of the older hospitals, digitalize the epidemiologic surveillance system and introduce an electronic-based system for the coding of causes of death.

■ **6.2.4** *Health digitalization*

Although Slovenia does not yet have a digital health strategy, comprehensive upgrades to existing digital applications will likely be undertaken to ensure user friendly information systems that support quality improvement and managerial processes at both the facility and system level. Plans have already been included in Slovenia's submission to the EU Recovery and Resilience Fund for 2021–2026.

■ 6.2.5 *Waiting times*

As waiting times and lists continue to be a health system challenge, more efforts to address them are expected. Specifically, the MoH will introduce measures to improve the reporting accuracy and timeliness of provider self-reported data about waiting times/lists. Extra funding of services to shorten waiting times is envisioned, which will also be expanded to private providers.

■ 6.2.6 *Financial sustainability of health system and diversification of revenue sources*

As envisioned in the National Health Care Plan (2016–2025), the Health Care and Health Insurance Act (1992) needs to be updated to: 1) adjust the basket of basic services covered by SHI and complementary VHI to support the financial sustainability of health care system and services; and 2) diversify health funding sources by increasing the share to health from the state budget and by broadening the eligibility base (and adjusting rates) for SHI contributions. Diversifying the system's revenue base to ensure a stable and adequate level of funding for priority health programmes will help ensure that the policies and practices of the ZZZS support the achievement of the goals and objectives set out in the National Health Care Plan.

Also, complementary VHI contributions need to switch to a progressive scale. Moreover, the allocation of funds needs to be redefined: 1) to ensure more flexibility for their use; and 2) to clarify who can decide how they are going to be used (at the moment, the ZZZS defines their use to a certain extent but often not all funds are used). In doing so, this may help to offset the impact of economic crises on health financing. For example, during the 2008/2009 financial crisis, the payroll-share of SHI contributions was reduced. This loss of revenue could have been balanced by more flexibility in the use of complementary, VHI.

■ 6.2.7 *Human resource management plan*

Human resource shortages due to the lack of planning at national level based on the needs of population represent a serious challenge for the Slovenian

health system. The COVID-19 pandemic has revealed further shortages of health professionals, in particular in public health and in primary health care. A process to prepare and adopt human resource management plan based on the needs of population has been started at MoH recently. In August 2021, the MoH appointed a special committee for the preparation of a strategy for planning and forecasting of health workforce (nominations in progress at time of writing). The objective is to prepare a special strategy with a dynamic approach to adapting the needs for health workforce. The plan will also serve as a basis for planning investments in health care facilities and procurement and distribution of expensive technologies.

Assessment of the health system

■ Chapter summary

- Health reforms are guided by a national health strategy (National Health Care Plan 2016–2025). However, progress on their implementation is slow. A contributing factor is discontinuity in the priorities pursued despite the national health strategy.
- Accessibility of services is generally good, given near universal population coverage of SHI, covering a wide range of services. Low OOP spending compared with the European average also facilitates access to services not covered by public financing.
- An emerging challenge is a lack of physicians, particularly among family medicine specialists, making it hard for the health system to ensure patients' ability to have a family medicine specialist of their choosing, close to their place of residence.
- In 2019, prior to the COVID-19 pandemic, 2.9% of the population reported unmet needs for medical care due to cost, geography or waiting times, above the EU average. In Slovenia, this is exclusively the result of long waiting times, especially for secondary level specialist services. This has prompted targeted monitoring and financial incentives as a way to address this issue.

- Slovenia has significantly reduced both its amenable and preventable mortality rates since 2010. In 2017, amenable mortality rates were below the EU28 average, while rates for preventable mortality rates were above the EU28 average, despite considerable efforts to address wider determinants of health, related to behaviour and lifestyle factors.
- Health care performance indicators show large variation, with good scores for mortality following an acute myocardial infarction (AMI), but weaker scores for mortality after a stroke. There is no currently valid national strategy on health care quality and safety, though several objectives in this area have been identified in the National Health Care Plan, including the establishment of HSPA.
- In terms of efficiency, Slovenia performs as expected in relation to its European peers for its level of health spending. To generate further improvements in amenable mortality, increased funding is necessary; by investing more resources in the right parts of the Slovene health system, there would be improvements to timely and appropriate treatment. The main challenge is ensuring allocative efficiency through a systematic approach to considering population needs when planning health services volumes.

■ 7.1 Health system governance

The MoH has a central role in health system governance, both regarding decision-making and in terms of developing strategies and reforms. Publicly owned health provider organizations are governed by councils (see section 2.7.2). In publicly owned hospitals and in the case of the NIJZ, most council members are appointed by the Government based on the recommendation of the MoH. The ZZZS is mostly governed by employers' and employees' representative organizations, with the government playing a limited role. However, the competencies and responsibilities of the ZZZS are framed by detailed national regulation and the government plays an important role in health care planning, for example, within the annual partnership negotiations (see section 2.7.2).

Health system governance is largely determined by public governance

practices, including around transparency and accountability. As set out in the Legislative Regulation (2009), there are clear requirements for integrating ex-ante impact assessments and stakeholders' consultations in any regulatory or policy proposal. Furthermore, for all sectors, the government budget must link expenditure items to performance targets, as per the Public Finance Act (2011).

The effectiveness of such rules and regulations in increasing transparency and accountability within strong governance is not clear. In 2018, a regulatory policy review by the OECD (OECD, 2018) found that stakeholder engagement and evaluations are often not implemented in line with requirements. Moreover, Slovenia's Corruption Perceptions Index (CPI) was 60 out of 100 in 2020 (Transparency International, 2020), which is below the EU average and has not changed significantly since 2012. Within this broader context, efforts in the health system to improve governance in the past decade have been considerable. In 2015, the MoH commissioned an analysis of the health system (see section 6.1) to inform its National Health Care Plan (2016–2025) "Together for a society of health", the overarching programmatic document in the health sector in Slovenia as per the Health Care and Health Insurance Act (1992) (see section 2.4). The MoH also participated in the WHO-led initiative on evidence-informed health policy-making as a pilot country in the European Region, EVIPnet, which yielded a published situation analysis (WHO, 2017). In 2017, at the request of the MoH, the NIJZ began work on establishing an HSPA process, with technical support from experts from the University of Malta and the Sant'Anna School for Advanced Studies, co-financed by the European Commission. A comprehensive assessment of 10 of the WHO Regional Office for Europe's EPHOs was also performed in 2016–2018 (see sections 5.1 and 6.2) as a broad participatory process, engaging over 120 national experts in public health and beyond, to inform the national public health strategy. A broad participatory process was also undertaken to prepare a national primary health care strategy in 2016–2017, engaging most primary health care stakeholders in the country. And, in 2019, at the request of the MoH, WHO and the NIJZ performed an assessment of the root causes of the most salient issues in primary health care (Table 6.1).

Though these are encouraging developments, there are still challenges in ensuring policy continuity. As an example, there was a 3-year gap between

the expiration of the previous National Health Care Plan in 2013 (started in 2008) and the adoption of the new one in 2016. In addition, there has been no publicly available evaluation of the previous plan. Similarly, as yet no comprehensive report on the implementation of the current National Health Care Plan has been published. Meanwhile, to date, the situation analysis published in 2017 has not resulted in a knowledge translation platform and the first HSPA report was published more than 1 year after project completion. In addition, the report on EPHO assessment was published in late 2021; and the primary health care strategy has not yet been finalized (see Chapter 6).

The Slovenian Court of Audit recently published a review of organizational and human resources challenges in health care (Court of Audit of the Republic of Slovenia, 2017). Spanning 1992–2016 and focused on the activities of the MoH, the review found, among several issues, that insufficiently detailed and updated information about providers operating within the public network hampers the Ministry's ability to take informed decisions related to workforce planning (see section 4.2). MoH oversight of NIJZ and the Medical Chamber of Slovenia was found to be insufficiently implemented as well.

Another recent governance review by the Court of Audit (Court of Audit of the Republic of Slovenia, 2021) encompassing all public institutes in Slovenia (i.e. not limited to the health sector) found that the rules and regulations on the competences, responsibilities and accountability of governing councils were not sufficiently defined. On the other hand, the Court found that the MoH was the only ministry which had set a transparent and clearly defined process to choose council members and had implemented a training programme for council members.

Patient-centredness in health services is supported at the health system level by the Patients' Rights Act (2008) (see section 2.8.3) and by external accreditation institutions for hospitals. External accreditation was until recently incentivized through provisions of the General Agreement on health services (see section 3.3.4). In 2017, the MoH requested the NIJZ to establish a national system for PREMs and PROMs. These efforts were financed by the European Commission and led by the Netherlands Institute for Health Services Research (NIVEL), resulting in the establishment of a standardized survey for specialist outpatient services (Murko et al., 2021), followed by an update of a pre-existing survey on patient experience in acute

(hospital) care. The annual report on the status of patient rights in Slovenia for 2019, which cited the survey results, found considerable improvement in the respect of patients' rights.

Finally, civil society activities in central and eastern Europe tend to lag behind the level of activity observed in other European countries with a longer democratic tradition. Within this context, the level of civil society activities in Slovenia is considered high. In the health sector, there is a tradition of co-financing public health programmes, which are mostly carried out by NGOs. However, civil society's role in health policy-making has been declining (Fink-Hafner & Novak, 2017), with some exceptions (Rakar et al., 2011). In particular, the public health division of the MoH, the Directorate of Public Health, has strongly supported the activities of the NGOs in the field of lifestyle interventions. For that purpose, a fraction of the increased tobacco excise tax goes specifically to the NGOs in this field, where programmes are tendered from this additional budget in a competitive way and in close collaboration with the NIJZ.

■ 7.2 Accessibility

Slovenia's centralized SHI system is defined in the Health Care and Health Insurance Act (1992) (see section 3.3.1). More than 99% of residents in Slovenia were covered by SHI in 2019; however, several populations face difficulties in obtaining insurance, including individuals with unclear or changing insurance status, those with unclear residence status, undocumented migrants, the homeless and those with unpaid contributions (Box 3.1).

The scope of coverage under SHI in Slovenia is quite broad (see section 3.3.1). The statutory benefits package includes primary, secondary and tertiary services; pharmaceuticals; medical devices; sick leave; and costs of travel to health facilities. There are almost no differences in benefits between the categories of insured people, though some specific benefits do not apply to all categories of insured people (see section 3.3.1). Access to hospitals and specialist outpatient care require referral by a primary care provider, except for medical emergencies. Patient rights are comprehensive and health care is accessible to all, regardless of health or socioeconomic status.

Co-insurance applies to most services and to all patients since 2007 except those specifically listed (see section 3.3.1 and Table 3.3), including children under 18, people with disabilities, war veterans, family members of deceased war veterans, and those on low incomes. Social health insurance will cover from 10% to 90% of the cost, depending on the specific type of treatment or activity (see section 3.3.1). A majority of people have complementary VHI to help cover OOP spending on co-insurance, purchased with a flat-rate premium (see sections 3.5, 3.6 and 7.3).

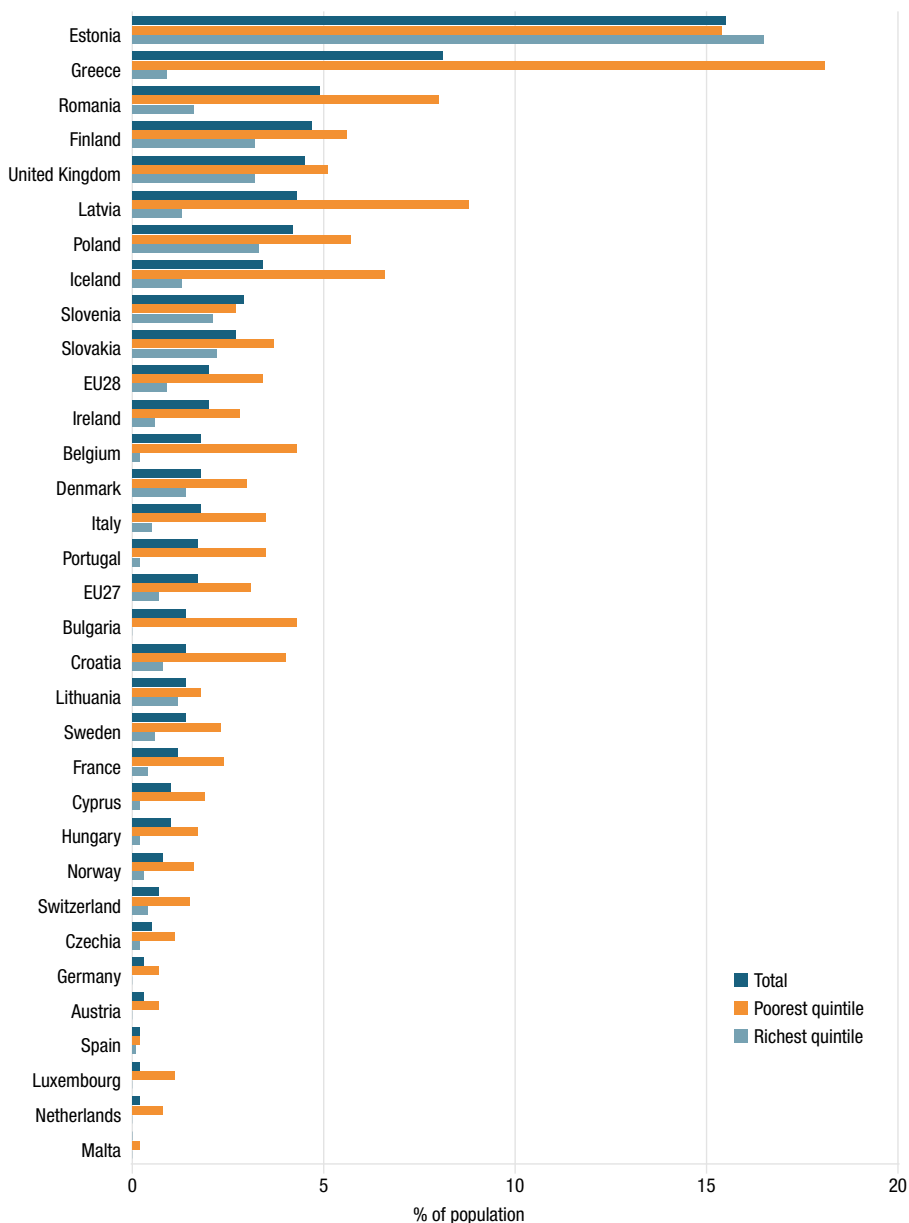
In 2019, according to the Eurostat data based on SILC data, 2.9% of the population expressed an unmet need for medical examination and care, due to cost, distance or waiting time/long waiting lists (Eurostat, 2021k) (Fig. 7.1).^{*} While above the EU average (1.7%), unlike most EU countries, the difference in unmet needs between income groups is negligible, reflecting the near universality of coverage and low rates of OOP spending and catastrophic expenditure (see section 7.3 and Box 3.2). Long waiting times are by far the most important factor driving unmet medical needs in Slovenia.

During COVID-19, many services, including all preventive measures, dental services and non-emergency outpatient visits, except oncological and pregnancy related services, were suspended from March to May 2020 to maintain capacity to combat the pandemic. Despite resumption of services, these measures may have increased unmet need. A Eurofound survey found that 24% of Slovenians reported that they had experienced some unmet needs for health care during the first 12 months of the COVID-19 pandemic, above the EU average of 21% (Eurofound, 2021).

Unmet need for dental care are higher than those for medical care, at 3.7% in 2019 (compared with 2.8% in the EU), varying between 4.0% in the lowest income quintile and 3.3% in the highest. As with medical care, these are mainly due to long waiting times; 3.4% of Slovenes reporting this as the main reason. However, the larger discrepancy between income levels reflects relatively limited scope of coverage in dental care and higher accompanying OOP payments.

* Notably, between 2009 and 2016, Slovenia had one of the lowest reported unmet needs for medical care within the EU, ranging between 0.0% and 0.4% of the population according to Eurostat. However, the rate increased to 3.5% in 2017 before falling to 2.9% in 2019 (Fig. 7.1). This increase is not due to a significant change in access, but rather to adjustments in the survey questions used as a basis to calculate the indicator.

FIG. 7.1 Unmet need for a medical examination (due to cost, waiting time, or travel distance), by income quintile, EU/EEA countries, 2019



EEA: European Economic Area; EU: European Union;
EU28: European Union Member States before 2020.

Notes: Data refer to 2019, except United Kingdom and Iceland (2018).

Source: Eurostat, 2021i, based on EU-SILC (Eurostat, 2021b).

As waiting times are the main barrier to accessibility of services in Slovenia, especially for secondary level specialist services, they have been a matter of public and political debate for several years and have prompted targeted monitoring and financing incentives to address them. For example, additional funds were made available to increase the volume of some operative procedures with particularly long waiting times and financial stimulations were put in place for increased specialist outpatient visit volumes. It is important to note, however, that the impact of the COVID-19 pandemic on unmet need for medical care of the dynamics between patients and the health system are as yet unknown.

Monitoring is currently based on data gathered from the new, national e-Referrals system (see section 4.1.3). According to these data, on 1 March 2020, i.e. just before the COVID-19 crisis started, 38% of patients were on a waiting list for a first specialist consultation and 33% of those waiting for a diagnostic procedure or treatment, were scheduled to wait more than the maximum permissible waiting time (which varies depending on assigned degree of urgency and type of service), though there is considerable variation in reported waiting times depending on the type of service (Breznikar, 2020). While monthly data on waiting times continue to be published, considering the disruption to general health services brought about by the COVID-19 pandemic, it will likely take several months to comprehensively evaluate the impact of these disruptions on waiting times.

Primary health care provides access to a wide range of promotive, preventive, diagnostic, curative and rehabilitative health services addressing most of the population's health needs across the life-course (see section 5.3). The majority of primary care is delivered by a network of 63 CPHCs, owned and managed by municipalities (around 76% of physicians and 42% of dentists working in primary care in 2015). In 2018, just over a quarter of family medicine teams (providing primary care) were represented by independent private concessionaries contracted by the ZZZS (ZZZS, 2020).

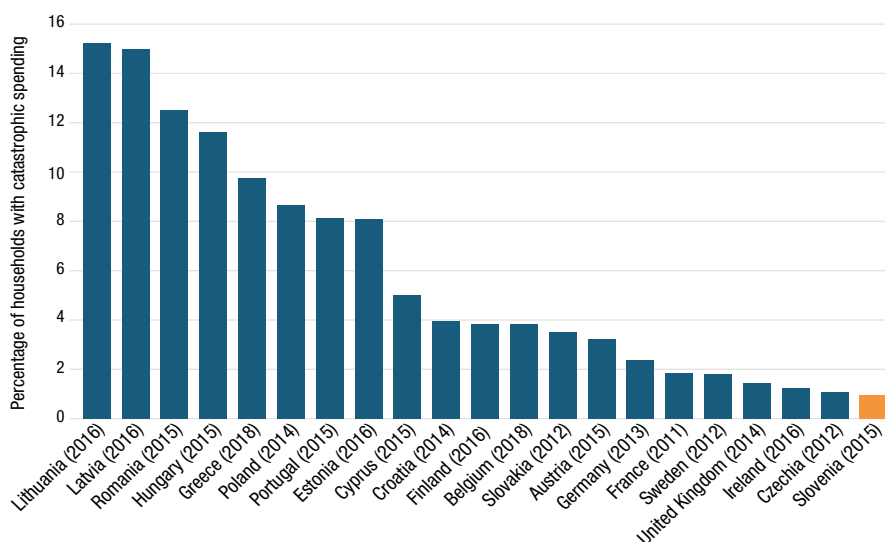
There are considerable challenges in ensuring sufficient levels of health care workers in some areas, particularly family medicine specialists and primary care paediatricians. As mentioned in Chapter 4, some rural areas experience difficulties in maintaining the supply of primary care physicians. However, more densely populated urban areas are also affected (Zabukovec, 2020; Human Rights Ombudsman of the Republic of Slovenia, 2020). For example, in April 2021, the webpage of the Ljubljana CPHC, one of the

largest in the country, informed users that due to a lack of capacity and that family medicine specialists could not enlist new patients.

7.3 Financial protection

The Slovenian health system offers a high degree of financial protection. Catastrophic health expenditures in households are rare. In 2015, only 1% of households recorded catastrophic spending due to OOP payments for health care, the lowest among EU countries for which data is available (Fig. 7.2). Moreover, unmet medical needs due specifically to cost is negligible in Slovenia, recording levels close to zero over the last decade, with little difference between income groups (see section 7.2).

FIG. 7.2 Share of households that experienced catastrophic health expenditure, latest year for all countries with data available



Brackets indicate year of latest available data.

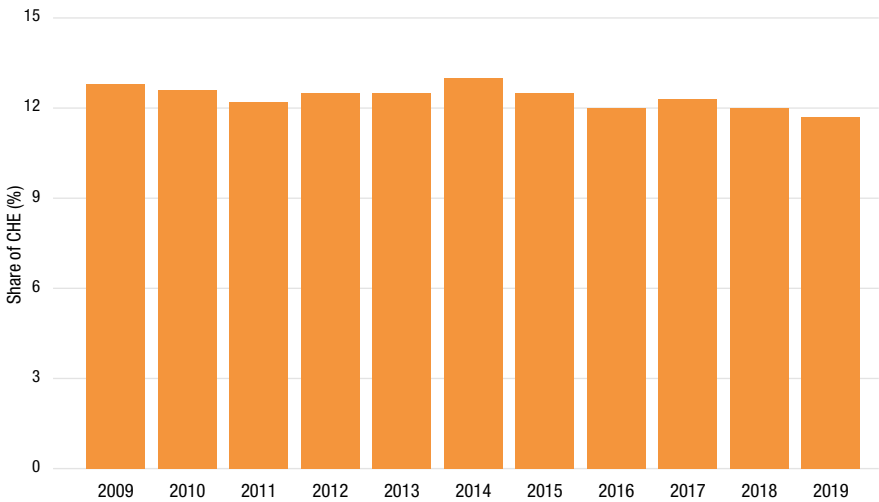
Source: WHO, 2019.

The publicly financed share of health care expenditure in Slovenia in 2019 was less than the EU average (at 72.8% and 79.7%, respectively) (OECD, 2021e). As mentioned in Chapter 3, complementary VHI helps to pay for co-insurance, covering 95% of the population that is liable for

co-payments (73% of the population in total). Exemptions from co-insurance are also in place for socially vulnerable groups along with subsidies for designated groups to help them afford complementary VHI (see sections 3.5 and 3.6).

OOP payments in 2019 were 11.7% of total health expenditure, below the EU27 average of 15.4% (OECD, 2021e). As shown in Fig. 7.3, OOP spending as a share of current health expenditure has remained rather constant over the past 10 years. More than half is due to pharmaceuticals and other medical goods. This relates especially to OTC drugs, prescription medications not covered by health insurance and medical goods such as glasses. Another important share of expenditure is related to outpatient visits, including in the area of alternative medicine (Zver & Srakar, 2018). Dental care accounts for 10% of OOP expenditure.

FIG. 7.3 Household out-of-pocket payment as a share of current expenditure on health in Slovenia, 2009–2019

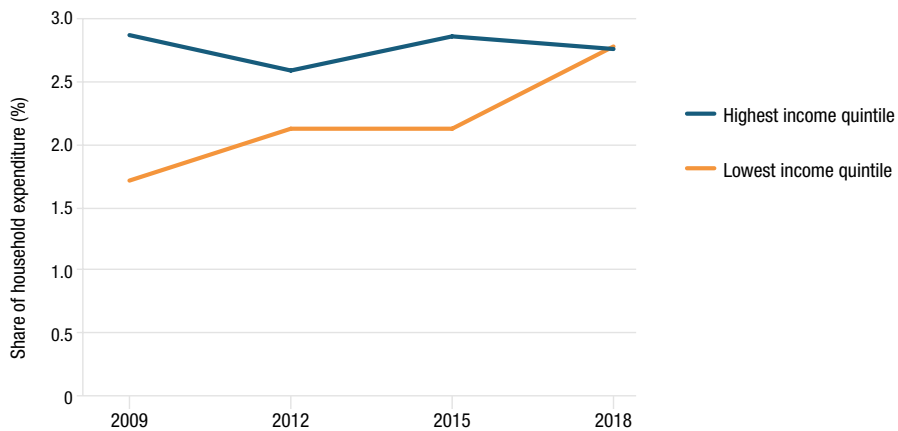


CHE: current health expenditure.
Source: OECD, 2021e.

Household consumption surveys offer insights into changing patterns of OOP expenditure. Fig. 7.4 shows a relatively stable share of direct household expenditure on health (OOP) in the lower income quintile of the population. For the highest income quintile, however, OOP expenditure on health over the past decade increased considerably, which brings the

respective levels of share of household health expenditure closer together, though the highest quintile represents much higher spending in absolute terms. This increased OOP spending in the higher income group, mainly for outpatient specialist consultations, partly results from patients circumventing long waiting times for publicly financed health providers by seeking private sector alternatives.

FIG. 7.4. Share of direct household expenditure on health (OOP) by income quintile in Slovenia, 2009–2018



Source: SURS, 2021.

■ 7.4 Health care quality

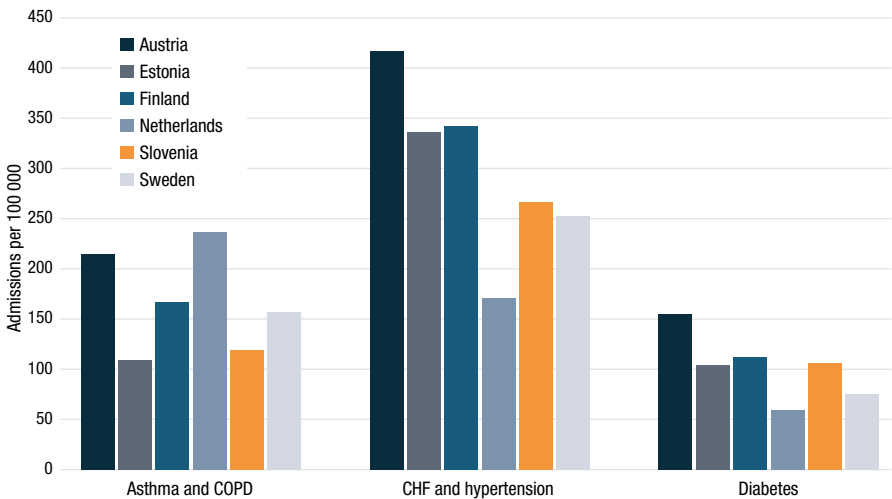
Quality and safety have been identified as fundamental values in the Slovenian health system. Until 2015, health system efforts in quality improvement were explicitly framed in the National Strategy for Health Quality and Safety 2010–2015, published in 2010, but this strategy was neither renewed nor revised. There are several objectives in the area of quality set out in the National Health Care Plan 2016–2025. These include clearly defining the competencies and responsibilities of each stakeholder in improving quality and safety, increasing capacity by ensuring human and financial resources, and strengthening training in quality, safety and patient communication. The Plan foresees an update of the set of quality indicators that are currently collected. While this is still to be implemented, some other of its key quality related strategies have been implemented, some described above.

- A project to develop a new adverse event reporting system.
- Standardized patient experience measurement in outpatient consultation (Murko et al., 2021) (see also Box 5.3).
- Updated survey of patient experiences in acute inpatient care.

Otherwise, reforms in other areas may also influence health care quality. For example, recent changes to primary care service delivery models likely had a significant impact on the quality of primary care provided (Tomšič et al., 2016). In particular, the progressive shift of family medicine practices to Family Medicine Practices (previously called “family medicine model practices”) and the restructuring of HPCs currently underway is changing many aspects of chronic patients’ care (see sections 5.1 and 5.3).

The indicator of avoidable admissions to hospitals is often used to gauge the strength and quality of primary care. Potentially preventable hospitalizations are admissions to a hospital for certain acute illnesses or chronic conditions, such as asthma, COPD, congestive heart failure, hypertension and diabetes, that might not have required hospitalization had these conditions been managed successfully with good outpatient care, especially at the primary level. By this measure, Slovenia fares well compared with other European countries (Fig. 7.5).

FIG. 7.5 Avoidable hospital admission rates for asthma, chronic obstructive pulmonary disease, congestive heart failure, hypertension and diabetes-related complications, Slovenia and selected countries, 2019



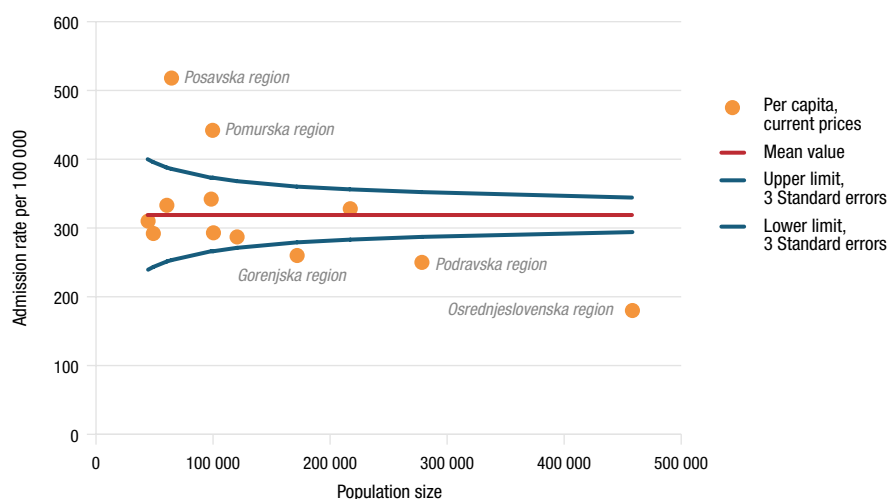
CHF: congestive heart failure; COPD: chronic obstructive pulmonary disease.

Note: Data for Netherlands is from 2016.

Source: OECD, 2020.

However, the crude admission rates vary significantly by region. The Podravska region is an outlier in terms of admissions due to COPD and asthma, while the Pomurska region is an outlier in admissions due to congestive heart failure (Fig. 7.6) and hypertension. In all these cases, admission rates are higher than expected, though the Osrednjeslovenska region has a lower than expected rate of admission on three out of the four conditions considered (Perko & Borovničar, 2020). Despite the use of a funnel plot to identify outliers,^{*} caution is necessary in the interpretation of this data. First, the data are not adjusted by sex and age, nor by the regional prevalence of these conditions. Secondly, different admission rates may be due to different practices in labelling the primary diagnosis in the various hospitals. Thirdly, different admission rates may be due to differences in bed (or staff) availability in regional hospitals.

FIG. 7.6 Crude admission rates due to congestive heart failure per 100 000 population by region in Slovenia, average of 3 years (2017–2019)



Notes: Data is an average of 3 years (2017–2019). The standard error is the standard deviation of sampling distribution or an estimate of that standard deviation. It takes into account the standard deviation of the sample and the sample size.

Source: Perko & Borovničar, 2020.

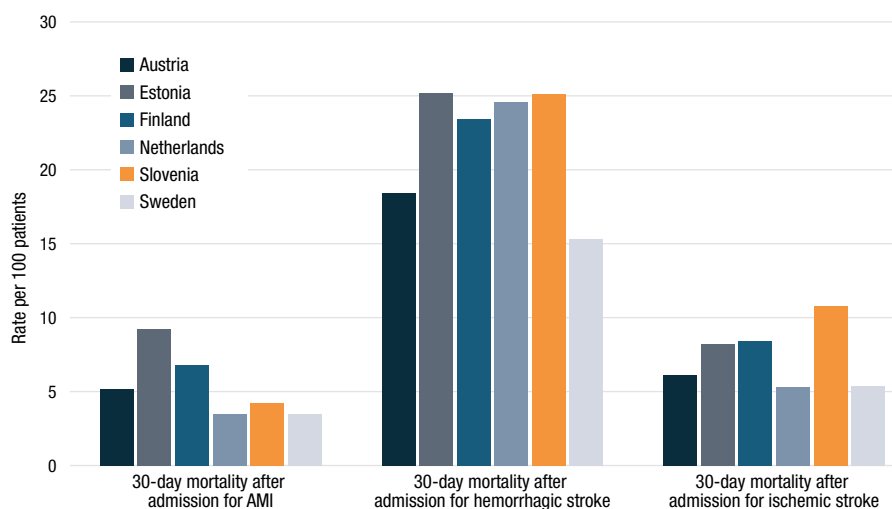
* The rate of hospital admissions may vary randomly every year. This is why a simple comparison between the admission rates in each region does not necessarily suggest superior performance in one region over another. The random variation is usually considered to be limited to 3 standard errors above and below the mean value for all hospitals. The standard error changes with the size of the population, giving the characteristic funnel shaped limits. Hospitals outside these limits are considered outliers, having higher or lower than expected rates that require further attention.

The changes of family medicine practices to adhere to model of Family Doctor Practices, completed in 2018, included provisions to establish registries at practice level that would allow monitoring of specific patient groups and to monitor a broad range of indicators. The 2019 report on family medicine practices, evaluated performance focusing in particular on identifying people at risk of chronic conditions and monitoring chronic patients by registered nurses (Ministry of Health, 2019). The indicators were mostly process focused, such as measuring HbA1c for patients with diabetes at least once a year. The report found that most practices did not achieve the target values on the indicators considered. There were also considerable differences in the results achieved, pointing to the need to reduce variation in addition to overall performance improvement. These findings must be interpreted in the broader context of a rapidly evolving situation. For example, in 2014 there were 433 family medicine practices operating according to the new model, while in 2018 there were 864 of them. Crude rates indicate that the amount of data available is still increasing (Ministry of Health, 2019), suggesting that adaptations to the new model are still underway in many practices.

The quality of hospital care in Slovenia is difficult to assess as performance varies, depending on the condition or indicator considered. Compared with other selected countries, the standardized 30-day hospital mortality rate for AMI is low (Fig. 7.7). Indeed, it is the second lowest in Europe at 4.2 per 100 patients after the Netherlands and Sweden (3.5 per 100 patients each). However, the rate of 30-day mortality following both ischaemic and haemorrhagic stroke is concerning; Slovenia had some of the highest in-hospital case-fatality rates in Europe in 2009 (OECD, 2012a). Since then, the values have improved for both conditions (Fig. 7.8). Nonetheless, the country has still above average values, as compared with selected countries and the EU.

Slovenia's HSPA report (see section 7.1) considered survival rates for colorectal, breast, lung, prostate, cervical cancer and overall cancer survival rates (Perko et al., 2019). It found most of these indicators were improving. However, the overall survival rate was worse than the EU average. A notable exception was cervical cancer survival, which was stable at a better than EU average rate. The HSPA report included a few other indicators in the quality and safety domain: infant mortality rates, admission-based diabetes-related lower extremity amputations rates, 30-day mortality for AMI and stroke and use of second line antibiotics. The overall assessment of health care quality was good (Perko et al., 2019).

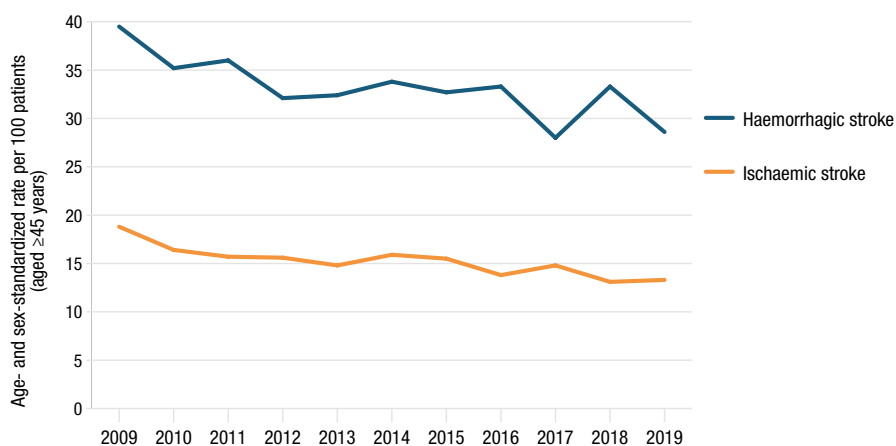
FIG. 7.7 In-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction, haemorrhagic stroke and ischaemic stroke, Slovenia and selected countries, 2019



Note: Data for Netherlands is 2016.

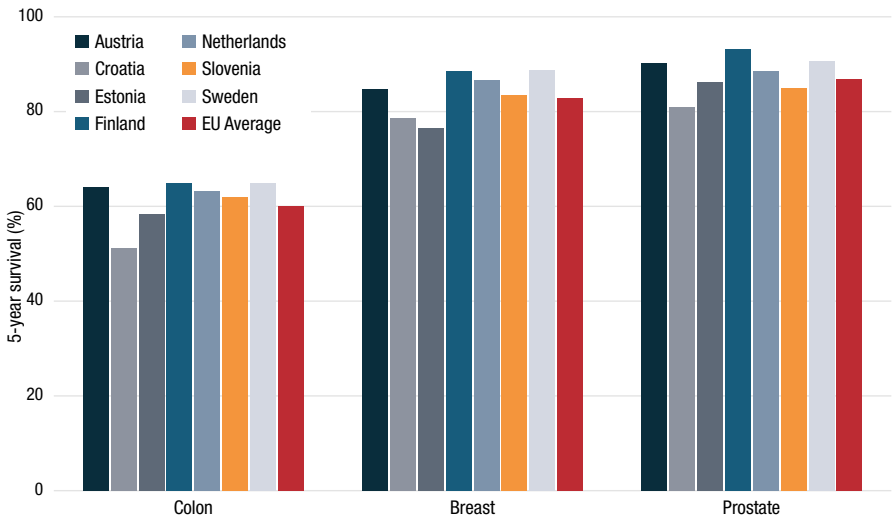
Source: OECD, 2021e.

FIG. 7.8 30-day in and out of hospital mortality rates for haemorrhagic and ischaemic stroke in Slovenia, 2009–2019



Source: OECD, 2021e.

FIG. 7.9 5-year survival rates for colon, breast (women) and prostate (men) cancer in 2010–2014



Notes: EU average calculation does not include data for Greece, Hungary and Luxembourg.
Source: Allemani et al., 2018.

■ **7.5 Health system outcomes**

Life expectancy at birth has been increasing in Slovenia for more than two decades. Average life expectancy at birth increased from 76.1 years in 2000 to 81.6 in 2019, surpassing the EU average (see section 1.4). The year 2020 was a notable exception as average life expectancy dropped by 1 year between 2019 to 2020 due to the COVID-19 pandemic (it was estimated to be 80.6 years, the same level it was in 2013).

Inequalities due to gender and socioeconomic determinants are considerable. For example, although the gap has decreased since 2000, Slovenian men still live 5.6 fewer years than women (77.8 years compared with 83.4 years), a different that is equal to the EU average in 2020. Further, in 2017, men with the highest level of education could expect to live almost 6 years longer than those with the lowest level, while the gap was only about 3 years among Slovenian women. While the education gap in longevity can partially be explained by higher mortality rates and higher exposure to various risk factors, including higher smoking rates and worse nutritional habits, disentangling the contribution of health system determinants and of broader societal changes is challenging. Nevertheless an indication may be offered

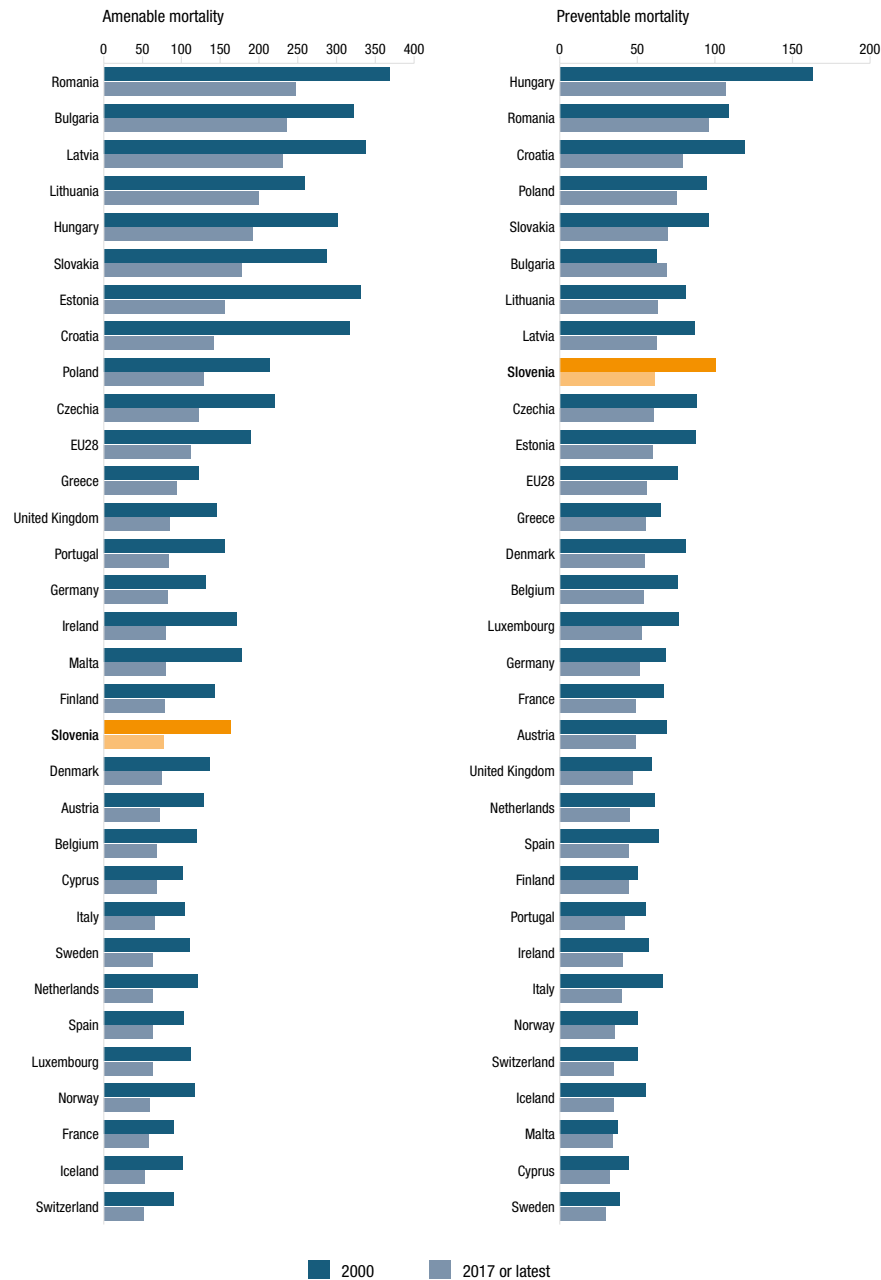
by the metric of avoidable mortality which comprises two components: 1) *amenable mortality* (otherwise known as mortality from treatable causes) refers to deaths that should not occur if the population receives appropriate and timely care, including screening and treatment; and 2) *preventable mortality* refers to deaths that could have been avoided through public health and primary prevention interventions focusing on the wider determinants of health such as behaviour and lifestyle factors.

Slovenia has considerably reduced its amenable mortality rate since 2010 and it is lower than the EU28 average (Fig. 7.10). The leading causes of treatable mortality are ischaemic heart disease, colorectal and breast cancers, along with cerebrovascular disease (stroke). Despite a relatively large reduction also in preventable mortality (around 9% since 2011), related to various public health policies, programmes and legislation addressing risk factors like smoking, alcohol consumption, nutrition and physical activity, the rate is still above the EU28 average. Together, lung cancer, alcohol-related diseases and ischaemic heart diseases are the leading causes of preventable mortality, accounting for around half of all deaths in 2017.

Although the National Health Care Plan 2016–2025 targeted reduction of rates of overweight and obesity in the population, the HSPA report identified increasing trends among children and adolescents. Similarly, there is a rising share of heavy episodic drinking among adults (see section 1.4) (Perko et al., 2019). While there are also positive trends, such as improvements (i.e. reductions) in the share of children and adolescents smoking and consuming alcohol, international comparisons place Slovenia around the EU28 average or worse. The overall assessment of health determinants in the HSPA report was poor.

The main causes of mortality in Slovenia are circulatory diseases and malignant neoplasms. Standardized death rates per 100 000 population show improvements on both conditions (see section 1.4). There are several likely reasons for such improvements: a national programme for the primary prevention of CVD has been in place since 2002 and the national cancer plan was launched for the first time in 2010 and renewed in 2017. Three cancer screening programmes were launched in the last 20 years, including for cervical cancer in 2001, colon cancer in 2008 and breast cancer in 2008. Since then, regional coverage as well as coverage of the target population for these programmes has expanded and they currently cover the whole territory.

FIG. 7.10 Amenable and preventable mortality in European countries, all people, standardized death rates per 100 000



EU28: European Union Member States before 2020.

Notes: 2000–2017 unless stated otherwise. Age-standardized death rates for all people; calculated by European Observatory for Health Systems and Policies.

Sources: Mortality data from WHO (2021b) (released Dec 2019). Population data from WHO (2021b) except for Canada (UNDP, 2019) and USA (HMD, 2021). Amenable causes as per list by Nolte & McKee (2004).

Better management of acute coronary syndrome was brought about by the design of an integrated pathway spearheaded by clinicians. A major campaign in the past decade aimed at sensitizing the general population to the timely recognition of stroke signs. The available data does not allow a breakdown of the relative influence of each of these factors on the reduction in mortality. Nonetheless, it seems unlikely that the same improvements could be possible without these interventions.

As noted in section 3.3.1, population coverage with both SHI and complementary VHI for co-insurance is very widespread. Clearly, formal access to health care services is not a guarantee of equality in health in the population but Figure 7.1 shows relatively small differences in unmet needs by income quintile, as compared with other EU countries. While this is reassuring, a thorough analysis of inequities in health in Slovenia published in 2011 (Buzeti et al., 2011) showed that the issue requires stakeholders' attention. In 2018, an analysis of the impact of the financial crisis on health inequalities based on socioeconomic status found that they did not increase (NIJZ, 2018). Several initiatives have been undertaken in the past decade to reduce health inequalities, most notably in health promotion with the "Together for Health" programme and the related MoST project (*Model skupnostnega pristopa za krepitev zdravja in zmanjševanje neenakosti v zdravju v lokalnih skupnostih* [Community approach model for health promotion and reduction of health inequalities in local communities]).

■ 7.6 Health system efficiency

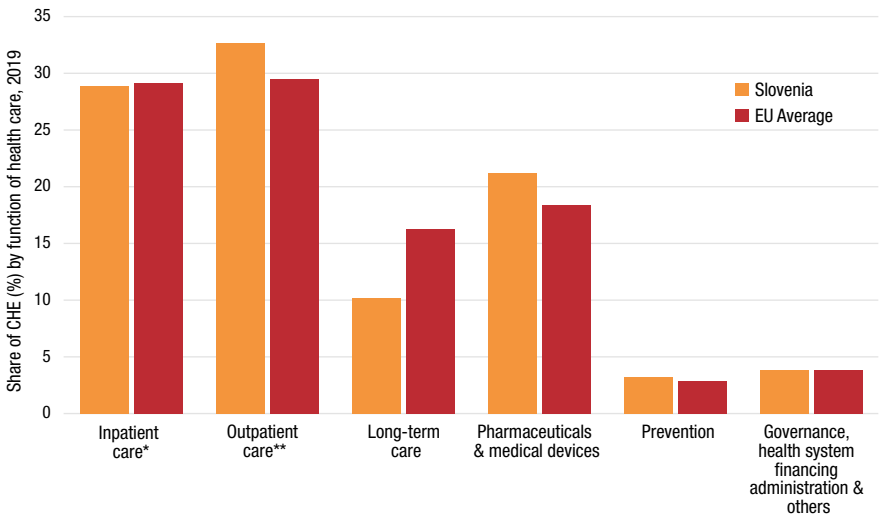
■ 7.6.1 Allocative efficiency

The Slovene health system in 2019 allocated most expenditure to outpatient and inpatient care, amounting to about 62.0% of CHE, 32.7% and 28.9%, respectively. Inpatient care spending that year was lower than the EU27 average of 29.1% of total health expenditure, while outpatient care spending was higher (EU27 average: 29.5%). Since 2010, there has been a shift from inpatient to outpatient care, reflected in spending levels: inpatient care expenditure was 32.2% of CHE that year versus 27.2% for outpatient care. The share of CHE to LTC was 10.2% in 2019, far below the EU27 average of 16.3%. There are several cash benefits available for some categories of

LTC care, but in aggregate these are not sufficient for any significant service needed (see sections 5.8 and Chapter 6) (Fig. 7.11).

The system of purchasing health services involves several stakeholders and is quite complex (see section 3.3.4). Negotiations on the annual allocation of resources are not based on calculations of needs or other regular data inputs. Instead, historical volumes of services are considered and modified through discussions among the involved stakeholders. For example, in 2019 additional family medicine and paediatric practices at the primary level were financed, based on the recognition of a lack of primary care doctors and overburdening of existing ones. Resources were allocated to the establishment of MHCs, which is required by the implementation of the National Mental Health Programme 2018–2028. For several services, in particular outpatient visits, reimbursement was guaranteed by the ZZZS, even if providers exceeded their annual programme of services by up to 15%, in an effort to reduce waiting times (Bogataj et al., 2020). Therefore, the process of allocating resources is to some extent sensitive to changing population needs and the influence of stakeholders. However, the population needs are not evaluated systematically, but rather identified by stakeholders on an ad hoc basis (Box 3.3).

FIG. 7.11 Current health expenditure by function of health care, 2019



CHE: current health expenditure.

^aRefers to curative-rehabilitative care in inpatient and day care settings. ^bIncludes home-care and ancillary services.

Sources: Eurostat, 2021i; OECD, 2021e.

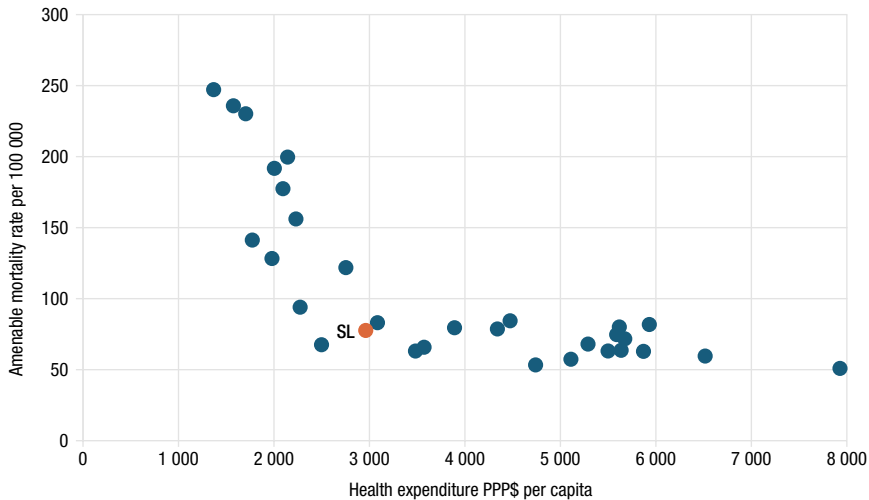
In addition, no formal HTA has been established yet in Slovenia (see section 2.7.3); for example, an agency mandated to regularly assess health technologies that providers wish to introduce. Data such as international studies on econometric evaluations of new health technologies are required as part of proposals to introduce new technologies that need to be approved by the Health Council at the MoH or by the Committee on Medicinal Products at the ZZZS. However, to date, the process of introduction of new technologies into the SHI has been ad hoc and providers have considerable leeway in terms of which services they can provide for reimbursement by insurance. Despite the initiatives put forward mainly by the NIJZ, the JAZMP and other stakeholders in recent years, only elements of HTA are considered in pricing and reimbursement decisions. 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 still missing.

The need to improve allocative efficiency has also been recognized in the National Health Care Plan 2016–2025, which set the following objectives on the subject: 1) analyse the needs of citizens and the capacity of the health care system; and 2) establish a model to calculate, implement and monitor the criteria that govern the publicly financed network of health care services and programmes.

■ 7.6.2 *Technical efficiency*

Regional variations in hospitalization rates and provision of other services are undesirable if they are not dictated by differing needs (see section 7.4). However, even if variations are assumed to be unwarranted, by themselves they do not reveal whether the issue in each case is an overproduction of health services, thus leading to inefficiencies or underproduction, leading to suboptimal care. Figure 7.12 provides an entry point for discussion, offering a health system perspective and comparison with other European countries. One country spends less on health than Slovenia and has lower rates of amenable mortality, while two spend slightly more and have lower rates. Otherwise, a cluster of countries spend significantly more and have correspondingly lower amenable mortality. This suggests that by investing slightly more resources in the right parts of the Slovene health system, there would be improvements to timely and appropriate treatment.

FIG. 7.12 Amenable mortality per 100 000 population versus health expenditure per capita in the EU/EEA region, 2017



EEA: European Economic Area; EU: European Union; SL: Slovenia; PPP: purchasing power parity.

Grey circles represent other countries in the EU/EEA region.

Note: Data on health expenditure from WHO GHED (2017); amenable mortality rates from WHO mortality data (2017 or latest available data year).

Source: WHO 2021a; 2021c.

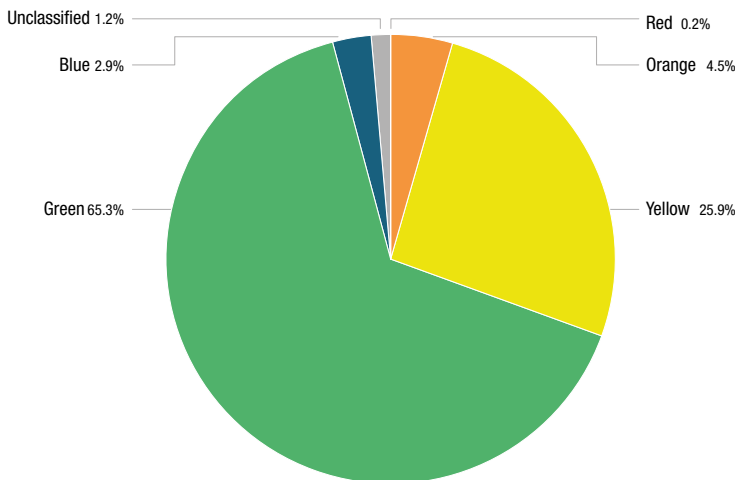
The hospital sector is an area where some efficiency metrics are available and can be evaluated. The average length of stay in hospital (for acute care) in Slovenia in 2018 was 6.7 days, which is less than Germany and Italy, but more than Austria and Czechia (see section 4.1). Discharge rates are similar to the EU average (Perko et al., 2019).

At a more granular level, Slovenia has a set of self-reported indicators that is regularly collected on the efficiency of use of operating rooms. It shows large variation in terms of share of elective operative procedures that were cancelled, ranging from 0% to 15% (Perko & Borovničar, 2020). Caution is warranted in the interpretation of this indicator. Not all hospitals have emergency service departments and unplanned admissions, and surgical procedures are less likely in the absence of an emergency department. This in turn increases the predictability of operating rooms occupancy with implications for the percentage of cancelled elective procedures. Another indicator of efficiency is the share of surgeries carried out as day cases. These vary considerably by type of procedure. For example, the values are very high and comparable to most EU countries in the case of cataract surgery and

very low and below any other EU country providing the data in the case of tonsillectomies (Perko et al., 2019).

The HSPA report identified the rate of preventable emergency department visits as an indicator of efficiency (Perko et al., 2019). The report drew on data based on the Manchester Triage System used in Slovenia. According to this classification based on signs and symptoms, emergency department patients are classified into one of five groups of decreasing urgency: red, orange, yellow, green and blue. Red refers to patient that need immediate attention, with no waiting time, orange refers to patients who should receive medical care within 10 minutes, yellow refers to patients who should receive care within 60 minutes, green refers to patients who are supposed to receive care within 240 minutes and blue refers to patients who do not need urgent medical care and should be referred to a specialist. The share of emergency department visits in each category is shown in Fig. 7.13.

FIG. 7.13 Share of emergency department visits by category of urgency in Slovenia, 2017



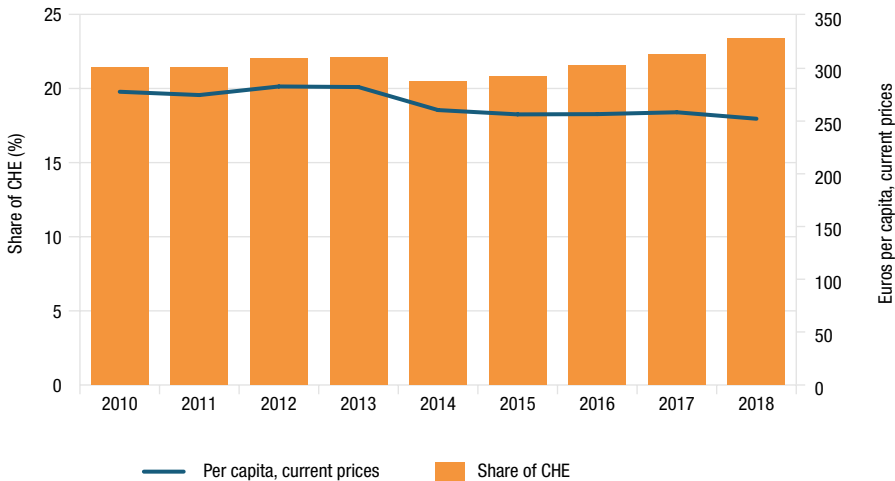
Sources: Perko et al., 2019.

Currently it is not clear to what extent patients categorized as green could have avoided the emergency department, for example, by visiting their regular primary care physicians during office hours. Depending on whether an emergency department visit categorized as green is considered avoidable or not, the share of avoidable visits ranges between 4.1% and 69.4%. It is

worth noting that this indicator is still being developed and faces challenges in international comparability (Perko et al., 2019). The HSPA report also considered the rate of MRI and CT examinations per 100 000 as an indicator of efficiency and it found that the rates were below that of comparable European countries (Perko et al., 2019) (see section 4.1.2).

Pharmaceutical expenditure is difficult to interpret in international comparisons: Slovenia is in the top half of pharmaceutical expenditure among EU28 countries when measured as a share of health expenditure, but in the bottom half when this expenditure is measured as per capita spending (euros adjusted for differences in purchasing power). Time trends show increases in pharmaceutical expenditure in euros per capita particularly since 2014, but also a slight decrease in pharmaceutical spending as a share of CHE in the same period (Fig. 7.14). The share of generics in the pharmaceutical market is very similar to the average of 26 OECD countries that recently provided data (OECD, 2019). The share of generics in Slovenia was 23% by value and 51% by volume (the respective OECD averages were 25% and 52%) (see section 5.6 and Box 5.5). As several countries have significantly higher shares than Slovenia, there is scope to achieve still more efficiency gains.

FIG. 7.14 Expenditure on pharmaceuticals and other medical non-durable goods in Slovenia, 2010–2018



CHE: current health expenditure.

Source: OECD, 2021e.

Conclusions

Slovenia has the highest per capita GDP in the region of central and eastern Europe and is one of the countries which joined the EU in 2004 and 2008. The strengthening of the economy during the late 1990s and until 2009 ensured a relatively stable financing of health care. The economic crisis of 2009–2013 and the restrictive economic policies of the time had an impact on health care, which resulted in unmet needs and steady growth of waiting times and waiting lists, which have since continued to rise, despite attempts to address them.

Slovenia has relatively high levels of private expenditures on health given that a large proportion of the population take out VHI to cover co-insurance. Despite several attempts to abolish or significantly transform complementary VHI, this type of socialized cost-sharing has remained and even buffered the austerity measures undertaken by ZZZS. A more stable economic environment until the COVID-19 crisis provided an opportunity to reflect on the possible solutions of raising additional funding for health and health care, which is necessary for the future financial sustainability and economic resiliency of the health system (see Box 3.2 and Chapter 6). However, reforms related to the diversification of funding sources for the public health system continue to languish.

Slovenia's health care system has seen some important successes in terms of organizational changes and outcome indicators. Life expectancy in 2019 ranked alongside Denmark and Germany despite significantly lower health financing adjusted for economic power, though it decreased again by

1 year in 2020 due to the impact of COVID-19. Primary care, with stronger monitoring and interventions on chronic patients and lifestyle, show significant positive results. Primary and secondary prevention, related to CVD and cancer in particular, have resulted in reductions of premature morbidity and mortality as well as incidence for screened cancers. Conversely, hospitals have not seen a serious organizational and structural reform yet and this is an important challenge for the future.

Challenges lie with two chronically present health policy issues. One of them is the shortage of doctors in primary care and shortage of nursing professionals in hospitals. These two shortages are partly, even if not entirely, related to an inappropriate salary system, which favours certain settings over others. Additionally, career opportunities would also need to be explored as a stimulus. The other, strongly pushed to the top by the COVID-19 pandemic, is the unresolved problem of the fragmented organization and financing of LTC. Since the early 2000s, many attempts of trying to institute LTC insurance have resulted in a standstill. This includes the current LTC Act, which, though initially open to public discussion in 2017 and proposed in 2018, has experienced a protracted legislative process – it was introduced to government in 2020 and ultimately passed and sent to the National Assembly in June 2021. As of the time of writing (July 2021), the Act was in the phase of inter-ministerial harmonization and it is expected to be adopted in late 2021.

Overall, the system requires thorough and regular assessment (HSPA), including the collection of indicators, which are partly already collected such as is the case for hospital care. Benchmarking (and possibly explicit disclosure of rankings) of such data should be expanded and further implemented, and additional assessments in the outpatient settings introduced. HSPA, as has already been proposed, needs to be integrated throughout the system, including in all care settings and for explicit selective purchasing and remodelling of (public) providers to improve system efficiency and quality of care.

Population ageing in Slovenia, which is and will remain one of the most marked in the EU, will require a well-structured, multi-level approach and a further strengthening of primary care and care management. These will be addressed soon with the establishment of the HPCs and MHC in primary care, proving a much-needed support for comprehensive management of lifestyle challenges, chronic patients and mental health care at the local and community levels. Vertical coordination will be the evident next step,

which will help in tackling the rational management of the most important health problems of the Slovenian population. The multidisciplinary primary health care teams that are currently being piloted are expected to be rolled out nationwide and will play a vital role in this enterprise.

Appendices

9.1 References

- Albreht T (2011). Addressing shortages: Slovenia's reliance on foreign health professionals, current developments and policy responses. In: Wismar M et al., editors. Health professional mobility and health systems evidence from 17 European countries. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, pp. 511–37.
- Albreht T et al. (2016). Slovenia: Health system review. *Health Syst Transit*.18(3):1–207.
- Allemani et al. (2018). Global surveillance of trends in cancer survival 2000–14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. *Lancet*.391(10125):1023–75. doi: 10.1016/S0140-6736(17)33326-3.
- Bogataj B et al. (2020). *Poslovno poročilo za leto 2019* [Business report for 2019]. Ljubljana: Health Insurance Institute of Slovenia.
- Breznikar D (2020). *Nacionalno spremljanje čakalnih dob. Mesečno poročilo za stanje na dan 1.3.2020* [National monitoring of waiting times. Monthly report on the situation on 1 March 2020]. Ljubljana: National Institute of Public Health of Slovenia.
- Brown TM, Fee E (2006). Andrija Stampar: Charismatic leader of social medicine and international health. *Am J Public Health*.96:1383. doi:10.2105/ajph.2006.090084.
- Bury JA (1991). Eurohealth: A programme for central and eastern Europe. *World Health Nov-Dec*:20–21 (<https://apps.who.int/iris/handle/10665/46389>, accessed 12 September 2021).
- Buzeti T et al. (2011). *Neenakosti v zdravju v Sloveniji* [Inequities in health in Slovenia]. Ljubljana: National Institute of Public Health of Slovenia.
- Council of the European Union (2014). Adequate social protection against long-term care needs in an aging society. Brussels: Council of the European Union.
- Court of Audit of the Republic of Slovenia (2017). *Revizijsko poročilo. Organizacijski in kadrovski izzivi zdravstvenega varstva v Republiki Sloveniji* [Review report. Organizational and human resource challenges in the health care system in Slovenia]. Ljubljana: Court of Audit of the Republic of Slovenia.
- Court of Audit of the Republic of Slovenia (2021). *Revizijsko poročilo. Učinkovitost sistema upravljanja javnih zavodov* [Review report. Effectiveness of the governance system of public institutions]. Ljubljana: Court of Audit of the Republic of Slovenia.
- Debevec E et al. (2019). Non-fault compensation system in healthcare. Ljubljana: Institute for Comparative Law (<https://www.pf.uni-lj.si/media/nosz.-koncni.izdelek.pdf>, accessed 5 July 2021).

- EAPC (2013). Slovenia. Atlas of palliative care in Europe. Milan: European Association for Palliative Care Task Force on the Development of Palliative Care in Europe.
- ECDC (2020). Slovenia: Recommended vaccinations. Stockholm: European Centre for Disease Prevention and Control (<https://vaccine-schedule.ecdc.europa.eu/Scheduler/ByCountry?SelectedCountryId=188&IncludeChildAgeGroup=true&IncludeChildAgeGroup=false&IncludeAdultAgeGroup=true&IncludeAdultAgeGroup=false>, accessed 12 September 2021).
- ECDC (2021). COVID-19 vaccine tracker. Stockholm: European Centre for Disease Prevention and Control (<https://vaccinetracker.ecdc.europa.eu/public/extensions/COVID-19/vaccine-tracker.html#uptake-tab>, accessed 12 September 2021).
- EOHSP/WHO/NIJZ (2015). Analysis of the Health System in Slovenia: Purchasing and Payment Review. Final Report. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies (https://www.euro.who.int/_data/assets/pdf_file/0009/336393/Purchasing-and-Payment-Review-review-Slovenia.pdf, https://www.euro.who.int/_data/assets/pdf_file/0009/336393/Purchasing-and-Payment-Review-review-Slovenia.pdf, accessed 12 September 2021).
- Eurobarometer (2020). Standard Eurobarometer 93 – Summer 2020. Brussels: European Commission (<https://europa.eu/eurobarometer/surveys/detail/2262>, accessed 12 September 2021).
- Eurofound (2021). Factsheet: Living, working and COVID-19 (Update April 2021): Mental health and trust decline across EU as pandemic enters another year. Brussels: Publications Office of the European Union (https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef21064en.pdf, accessed 12 September 2021).
- European Commission (2016). The Bologna Process and the European higher education area. Brussels: European Commission (https://ec.europa.eu/education/policies/higher-education/bologna-process-and-european-higher-education-area_en, accessed 12 September 2021).
- European Commission (2019a). Digital public services. Digital economy and society index report. Brussels: European Commission (https://ec.europa.eu/digital-single-market/en/desi_, accessed: 15 April 2021).
- European Commission (2019b). Special Barometer 502: Corruption. Brussels: European Commission (http://www.stopcorrupt.lu/wp-content/uploads/2020/06/ebs_502_sum_en.pdf, accessed 11 May 2021).
- Eurostat (2021a). European Statistical Recovery Dashboard. Luxembourg: European Commission (http://ec.europa.eu/eurostat/data/database?node_code=demo_mlexpec, accessed 12 September 2021).
- Eurostat (2021b). European Union Statistics on Income and Living Conditions. Luxembourg: European Commission (<https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>, accessed 12 September 2021).
- Eurostat (2021c). Gini coefficient of equivalised disposable income – EU-SILC survey. Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/ilc_di12/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021d). Health care expenditure by financing scheme [hlth_sha11_hf]. Luxembourg: European Commission (https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_sha11_hf&lang=en, 12 September 2021).
- Eurostat (2021e). Health personnel (excluding nursing and caring professionals). Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/HLTH_RS_PRS1_custom_1254192/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021f). In-patient average length of stay (days). Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/hlth_co_inpst/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021g). Medical technology. Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/hlth_rs_equip/default/table?lang=en, accessed 12 September 2021).

- Eurostat (2021h). Nursing and caring professionals, nurses and midwives. Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/HLTH_RS_PRSNS_custom_1254197/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021i). People at risk of poverty or social exclusion. Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/t2020_50/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021j). Population on 1st January by age, sex and type of projection. Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/proj_19np/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021k). Self-reported unmet needs for medical examination by sex, age, main reason declared and income quintile. Luxembourg: European Commission (https://ec.europa.eu/eurostat/databrowser/view/HLTH_SILC_08_custom_1252548/default/table?lang=en, accessed 12 September 2021).
- Eurostat (2021l). Statistical database. Luxembourg: European Commission (<http://ec.europa.eu/eurostat/data/database>, accessed 12 September).
- Fink-Hafner D, Novak M (2017). Country Report: Slovenia. In: Vandro P et al., editors. Civil society in central and eastern Europe: challenges and opportunities. Vienna: ERSTE Foundation.
- Global Burden of Disease Collaborative Network (2020). Global burden of disease study 2019 (GBD 2019) Results. Seattle: Institute for Health Metrics and Evaluation (IHME).
- Government of the Republic of Slovenia (2010). *Nacionalna strategija kakovosti in varnosti v zdravstvu (2010–2015)* [National Strategy for Health Quality and Safety (2010–2015)]. Ljubljana: Government of the Republic of Slovenia (<https://core.ac.uk/download/pdf/52484025.pdf>, accessed 6 July 2021).
- Government of the Republic of Slovenia (2016). National Health Plan 2016–2025 “Together for a healthy society”. Ljubljana: Government of the Republic of Slovenia.
- Government of the Republic of Slovenia (2021). Project SenSys. Ljubljana: Government of the Republic of Slovenia (<https://www.gov.si teme/varnost-zdravstvenega-varstva/>, accessed 6 July 2021).
- Habibov N, Cheung A (2017). Revisiting informal payments in 29 transitional countries: The scale and socio-economic correlates. *Soc Sci Med.* 178:28–37.
- Hlebec V et al. (2014). *Kakovost socialne oskrbe na domu: vrednotenje, podatki in priporočila* [Quality of home social care: evaluation, data and recommendations]. Ljubljana: Faculty of Social Sciences, University of Ljubljana.
- HMD (2021). The Human Mortality Database. (<https://www.mortality.org>, accessed 12 September 2021).
- Human Rights Ombudsman of the Republic of Slovenia (2020). *Pomanjkanje zdravnikov družinske medicine* [Lack of family physicians]. Ljubljana: Ombudsman of the Republic of Slovenia (<https://www.varuh-rs.si/porocila-za-javnost/novica/pomanjkanje-zdravnikov-druzinske-medicine/>, accessed 12 September 2021).
- Inchley J et al., editors (2020). Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 1. Key findings. Copenhagen: WHO Regional Office for Europe.
- Institute of Oncology (2021). List of patient pathways and additional clinical recommendations. Ljubljana: Institute of Oncology (<https://www.onko-i.si/klinicne-poti>, accessed 5 July 2021).
- Johansen A, West R, Vracko P (2020). Integrated, person-centred primary health care produces results: case study from Slovenia. Copenhagen: WHO Regional Office for Europe (<https://apps.who.int/iris/bitstream/handle/10665/336184/9789289055284-eng.pdf>, accessed 12 September 2021).
- Kiauta M et al. (2010). *Nacionalna strategija kakovosti in varnosti v zdravstvu (2010–2015)* [National strategy on healthcare quality and safety 2010–2015]. Ljubljana: Ministry of Health.

- Kostnapfel Rihtar T, Albreht T, eds. (2015). *Poraba ambulantno predpisanih zdravil v Sloveniji* [Consumption of outpatient prescribed drugs in Slovenia]. Ljubljana: National Institute of Public Health (http://www.nijz.si/sites/www.nijz.si/files/datoteke/poraba_ambulantno_predpisanih_zdravil_v_sloveniji_2014.pdf, accessed 3 May 2016).
- Kostnapfel Rihtar T, Albreht T (2021). The consumption of medications in Slovenia in 2020. Ljubljana: National Institute of Public Health.
- Lekic K et al. (2014). Encounters on the web. The needs of Slovenian youth and online counselling. Ljubljana: National Institute of Public Health.
- Marušič D (2011). *Sklep o imenovanju projektnega sveta "Referenčne ambulante"*. Ljubljana: Ministry of Health.
- Meglič Črnak A et al. (2014). *Podpora samostojnemu bivanju v domačem okolju in dolgotrajna oskrba* [Support for independent stays in the home environment and long-term care]. In: Drole J, Lebar L, eds. *Analitsko poročilo DP5 projekta AHA.SI* [Analytical report WP5 of AHA.SI project]. Ljubljana: National Institute of Public Health (http://www.staranje.si/sites/www.staranje.si/files/upload/images/wp5_analitsko_porocilo.pdf, accessed 12 September 2021).
- Ministry of Health (2013). *Univerza v Ljubljani, Medicinska fakulteta, Institut zabio statistiko in medicinsko informatiko. Nacionalna anketa o izkušnjah odraslih pacientov v akutni bolnišnici. Leto 2012* [National survey on the experiences of adult patients in acute care. Year 2012]. Ljubljana: Ministry of Health (http://www.mz.gov.si/fileadmin/mz.gov.si/pageuploads/kakovost/anketa_pacienti_kazalniki_kakovosti_in_varnosti_2010/Nac_anketa_o_izkusnjah_odraslih_pac_v_akutni_bol_2012_200313.pdf, accessed 5 July 2021).
- Ministry of Health (2018). Implementation of pilot projects that will support the transition to the implementation of the systemic law on long-term care. Ljubljana: Government of Slovenia (<https://www.gov.si/zbirke/projekti-in-programi/izvedba-pilotnih-projektov-ki-bodo-podpirali-prehod-v-izvajanje-sistemskega-zakona-o-dolgotrajni-oskrbi/>, accessed 12 September 2021).
- Ministry of Health (2019). *Učinkovitost dela ambulant družinske medicine za področje nalog diplomirane medicinske sestre* [Effectiveness of Family Medicine Clinics in the area of work of graduate nurses]. Ljubljana: Ministry of Health.
- Ministry of Health (2021). Public tender for the selection of the operation "Mobile rehabilitation teams". Ljubljana: Government of Slovenia (<https://www.gov.si/novice/2021-04-12-javni-razpis-za-izbor-operacije-mobilni-timi-za-rehabilitacijo/>, accessed 12 September 2021).
- Ministry of Public Administration (2019). Evaluation of the effects of the implementation of eHealth project: ePrescription and eAppointment. Ljubljana: Ministry of Public Administration of the Republic of Slovenia.
- Ministry of Public Administration (2021). Proposal for a regulation: Long-Term Care Act. Ljubljana: Ministry of Public Administration of the Government of Slovenia (<https://e-uprava.gov.si/drzava-in-druzba/e-demokracija/predlogi-predpisov/predlog-predpisa.html?id=7885>, accessed 12 September 2021).
- Murko E et al. (2021). *Izkušnje pacientov z zunajbolnišnično specialistično zdravstveno obravnavo: raziskava v Sloveniji med odraslimi pacienti* [Experiences with specialist outpatient clinics health care: study among adult patients in Slovenia]. Javno Zdravje.2021(1):1–9.
- NIJZ (2009). *Duševo zdravje v Sloveniji* [Mental health in Slovenia]. Ljubljana: National Institute of Public Health.
- NIJZ (2014). Vaccination. Ljubljana: National Institute of Public Health of Slovenia (<https://www.nijz.si/sl/podrocja-dela/nalezljive-bolezni/ceplj>, accessed 12 September 2021).
- NIJZ (2018). Examining health inequalities in Slovenia during the financial crisis. Key takeaway messages. Ljubljana: National Institute of Public Health of Slovenia.
- NIJZ (2019). *Duševo zdravje v Sloveniji* [Mental health in Slovenia]. Ljubljana: National Institute of Public Health.
- NIJZ (2020a). Vaccination calendar for preschool and school children in Slovenia. Ljubljana: National Institute of Public Health of Slovenia (<https://www.nijz.si/sl/koleadar-cepljenja-predsolskih-in-solskih-otrok-v-sloveniji>, accessed 12 September 2021).

- NIJZ (2020b). *Zdravstveni statistični letopis 2019* [Health Statistical Yearbook 2019]. Ljubljana: National Institute of Public Health of Slovenia (<https://www.nijz.si/sl/publikacije/zdravstveni-statisticni-letopis-2019>, accessed 5 July 2021).
- NIJZ (2021a). Data portal [online database]. Ljubljana: National Institute of Public Health of Slovenia (https://podatki.nijz.si/pxweb/sl/NIJZ%20podatkovni%20portal/?px_language=en&px_db=NIJZ%20podatkovni%20portal&rxid=1669b5c7-f8da-4032-9b45-ecf99f90507c, accessed 5 July 2021).
- NIJZ (2021b). Health Data Centre. Ljubljana: National Institute of Public Health of Slovenia.
- NIJZ (2021c). *Zdravstveni statistični letopis 2020* [Health Statistical Yearbook 2020]. Ljubljana: National Institute of Public Health of Slovenia (<https://www.nijz.si/sl/publikacije/zdravstveni-statisticni-letopis-2020>, accessed 5 July 2021).
- NIJZ (2021d). *Pandemija COVID-19: V Sloveniji. Izsledki panelne spletne raziskave o vplivu pandemije na življenje (SI-PANDA), 12. val.* [COVID-19 pandemic: Slovenia. Results of a panel online survey on the impact of a pandemic on life (SI-PANDA), 12th vol.]. Ljubljana: National Institute of Public Health of Slovenia (https://www.nijz.si/sites/www.nijz.si/files/uploaded/panda_porocilo_po_12_valu_koncno_1.pdf, accessed 12 September 2021).
- Nolte E, McKee M (2004). Does health care save lives? Avoidable mortality revisited. London: Nuffield Trust (<https://researchonline.lshtm.ac.uk/id/eprint/15535/1/does-healthcare-save-lives-mar04.pdf>, accessed 12 September 2021).
- OECD (2012a). Health at a Glance: Europe 2012. Paris: OECD Publishing (https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2012_9789264183896-en, accessed 12 September 2021).
- OECD (2012b). Slovenia: Towards a strategic and efficient state. Paris: OECD Publishing.
- OECD (2018). Regulatory policy in Slovenia: Oversight matters. OECD Reviews of Regulatory Reform. Paris: OECD Publishing.
- OECD (2019). Health at a Glance 2019: OECD indicators. Paris: OECD Publishing.
- OECD (2020). Realising the potential of primary health care. OECD Health Policy Studies. Paris: OECD Publishing (https://www.oecd-ilibrary.org/social-issues-migration-health/realising-the-potential-of-primary-health-care_a92adee4-en, accessed 12 September 2021).
- OECD (2021a). General government debt (indicator). Paris: OECD (doi: 10.1787/a0528cc2-en, accessed on 12 September 2021).
- OECD (2021b). General government deficit (indicator). Paris: OECD (doi: 10.1787/77079edb-en, accessed 12 September 2021).
- OECD (2021c). General government spending (indicator). Paris: OECD (doi: 10.1787/a31cbf4d-en, accessed 12 September 2021).
- OECD (2021d). Health status: causes of mortality: OECD Statistics. Paris: OECD (<https://stats.oecd.org/Index.aspx?QueryId=30115>, accessed 12 September 2021).
- OECD (2021e). OECD health statistics, 2021. Paris: OECD (<http://stats.oecd.org>, accessed 12 September 2021).
- OECD/EOHSP (2021). Slovenia: Country health profile 2021. State of Health in the EU. Paris: OECD/Brussels: European Observatory on Health Systems and Policies.
- Perko D et al. (2019). Health system performance assessment for Slovenia. Ljubljana: Government of Slovenia (<https://www.gov.si/assets/ministrstva/MZ/DOKUMENTI/Kakovost-zdravstvenega-varstva/HEALTH-SYSTEM-PERFORMANCE-ASSESSMENT-FOR-SLOVENIA.pdf>, accessed 12 September 2021).
- Perko D, Borovničar A, editors (2020). *Kazalniki kakovosti v zdravstvu. Letno poročilo za leto 2019* [Healthcare Quality Indicators. Annual report for the year 2019]. Ljubljana: National Institute of Public Health of Slovenia Ministry of Health.
- PHARE (2010). European Commission – Enlargement. (https://web.archive.org/web/20100505090129/http://ec.europa.eu/enlargement/how-does-it-work/financial-assistance/phare/index_en.htm, accessed 12 September 2021).

- PISG (2021). Additional Measures for Mitigation of Consequences Act COVID-19 (ZDUOP) (Uradni list RS, št. 15/21). Ljubljana: Government Office for Legislation (<http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8321>, accessed 12 September 2021).
- Prevolnik Rupel V (2018). ESPN Thematic Report on Inequalities in access to healthcare Slovenia, 2018. Brussels: European Commission (https://www.google.com/url?sa=t&rcrt=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwi_zdW2pc7xAhWGOuwKHYY-4DfYQFjABegQIBBAD&url=https%3A%2F%2Fec.europa.eu%2Fsocial%2FBlobServlet%3FdocId%3D20347%26langId%3Den&usg=AOvVaw2lLcbjtFq1B3Qy_rs68uE, accessed 18 January 2021).
- Rakar T et al. (2011). CIVICUS civil society index Slovenia: analytical country report 2010. Ljubljana: Social Protection Institute of the Republic of Slovenia.
- Sociomedical Institute Scientific Research Centre of the Slovene Academy of Sciences and Arts (2011). *Analiza tveganj za razvoj težav v duševnem zdravju prebivalcev Republike Slovenije v posameznih statističnih regijah s pomočjo prilagojene metodologije Indeksa boljšega življenja* [Risk analysis for the development of mental health problems of the population of the Republic of Slovenia in individual statistical regions using customized methodologies index for a better life]. Ljubljana: Slovene Academy of Sciences and Arts.
- Stanimirovič D (2021). eHealth Patient Portal – Becoming an indispensable public health tool in the time of Covid-19. *Stud Health Technol Inform.* 281:880–4. doi: 10.3233/SHTI210305.
- Stanimirovič D, Matetič V (2020). Can the COVID-19 pandemic boost the global adoption and usage of ehealth solutions? *J Glob Health.* 10(2):0203101. doi: 10.7189/jogh.10.0203101.
- SURS (2018). *Izdatki in viri financiranja zdravstvenega varstva, Slovenija, 2018*. [Health care expenditure and financing sources, Slovenia, 2018]. Ljubljana: Statistical Office of the Republic of Slovenia.
- SURS (2020a). e-iskalnik KLASIUS. Ljubljana: Statistical Office of the Republic of Slovenia (<https://www.stat.si/klasius/>, accessed 12 September 2021).
- SURS (2020b). EUROPOP2019: in 2100 population 207 000 less than now, the share of the elderly at nearly a third. Ljubljana: Statistical Office of the Republic of Slovenia (<http://stat.si/StatWeb/en/News/Index/8917>, accessed 12 September 2021).
- SURS (2020c). Government expenditure by function, Slovenia, 2019. Ljubljana: Statistical Office of the Republic of Slovenia (<https://www.stat.si/StatWeb/en/News/Index/9268>, accessed 1 September 2021).
- SURS (2020d). Health expenditure and sources of funding, Slovenia, 2018. Ljubljana: Statistical Office of the Republic of Slovenia (<https://www.stat.si/StatWeb/en/News/Index/8916>, accessed 1 September 2021).
- SURS (2021). Population by large and 5-year age groups and sex, municipalities, Slovenia, half-yearly. Ljubljana: Statistical Office of the Republic of Slovenia (<https://pxweb.stat.si/SiStatData/pxweb/en/Data/-/05C4004S.px>, accessed 12 September 2021).
- Tomšič S et al. (2016). *Evalvacija pilotnih izvedb v projektu Za boljše zdravje in zmanjšanje neenakosti v zdravju otrok in mladostnikov*. Ljubljana: NIJZ. (<http://skupajzazdravje.nijz.si/media/evalvacijsko.porocilo.pilotnih.izved.v.delovnem.sklopu.otrok.in.mladostnikov.pdf>, accessed 12 September 2021).
- Transparency International (2020). Corruption Perception Index. Berlin: Transparency International (<https://www.transparency.org/en/cpi/2020/index/svn>, accessed 5 July 2021).
- UMAR (2015). *Poročilo o razvoju 2014* [Development Report 2014]. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.umar.gov.si/fileadmin/user_upload/publikacije/pr/2014/Apor_2014.pdf, accessed 26 January 2021).
- UMAR (2016). *Poročilo o razvoju 2015* [Development Report 2015]. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.umar.gov.si/fileadmin/user_upload/publikacije/pr/2015/PoR_ang_2015.pdf, accessed 26 January 2021).
- UMAR (2020a). Economic issues 2019. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.umar.gov.si/fileadmin/user_upload/publikacije/izzivi/2019/angleski/a_EI_2019_cel.pdf, accessed 12 May 2021).

- UMAR (2020b). *Poročilo o razvoju 2019* [Development Report 2019]. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.umar.gov.si/fileadmin/user_upload/publikacije/izzivi/2019/angleski/a_EI_2019_cel.pdf, accessed 12 September 2021).
- UMAR (2020c). *Poročilo o razvoju 2020* [Development report 2020]. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.umar.gov.si/fileadmin/user_upload/razvoj_slovenije/2020/angleski/Development_report_2020.pdf, accessed 12 September 2021).
- UMAR (2021). *Poročilo o razvoju 2021* [Development report 2021]. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.umar.gov.si/fileadmin/user_upload/razvoj_slovenije/2021/slovenski/POR2021_skupaj.pdf, accessed 12 September 2021).
- UNDP (2019). World Population Prospects – Population dynamics. New York: United Nations Development Programme (<https://population.un.org/wpp/DataQuery/>, accessed 12 September 2021).
- UNDP (2020). Human Development Report 2020, The next frontier: Human development and the Anthropocene. New York: United Nations Development Programme (<http://hdr.undp.org/sites/default/files/hdr2020.pdf>, accessed 12 September 2021).
- United Nations (2004). Slovenia. Geneva: United Nations (<https://www.un.org/geospatial/content/slovenia>, accessed 12 September 2021).
- WHO (1994). A declaration on the promotion of patients' rights in Europe. European consultation on the rights of patients. Geneva: World Health Organization (http://www.who.int/genomics/public/eu_declaration1994.pdf, accessed 12 September 2021).
- WHO (2003). WHO framework convention on tobacco control. Geneva: World Health Organization (<http://apps.who.int/iris/bitstream/handle/10665/42811/9241591013.pdf;jsessionid=6AA2A4890757BA1C86283FB3D13D0AE5?sequence=1>, accessed 12 September 2021).
- WHO (2015a). Health for All database [online database]. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/data-and-evidence/databases/european-health-for-all-database-hfa-db>, accessed 3 May 2016).
- WHO (2015b). The European Health Report 2015: Targets and beyond – reaching new frontiers in evidence. Copenhagen: WHO Regional Office for Europe.
- WHO (2016). Slovenia Health System Review Reports. Copenhagen: WHO Regional Office for Europe (<https://www.euro.who.int/en/countries/slovenia/publications/slovenia-health-system-review-reports>, accessed 12 September 2021).
- WHO (2017). EVIPNet Europe. Situation analysis on evidence-informed health policy-making. Slovenia. Copenhagen: WHO Regional Office for Europe (https://www.euro.who.int/_data/assets/pdf_file/0019/367111/evipnet-euro-series-no1-eng.pdf, accessed 12 September 2021).
- WHO (2017). Situation analysis on evidence-informed health policymaking. Slovenia. Copenhagen: WHO Regional Office for Europe.
- WHO (2019). Can people afford to pay for health Care? New evidence on financial protection in Europe. Copenhagen: WHO Regional Office for Europe (<https://apps.who.int/iris/bitstream/handle/10665/311654/9789289054058-eng.pdf?sequence=1&isAllowed=y>, accessed 12 September 2021).
- WHO (2020). Integrated, person-centred primary health care produces results: case study from Slovenia. Copenhagen: WHO Regional Office for Europe (<https://www.euro.who.int/en/publications/abstracts/integrated,-person-centred-primary-health-care-produces-results-case-study-from-slovenia-2020>, accessed 5 July 2021).
- WHO (2021a). Global Health Expenditure Database [online database] (<https://apps.who.int/nha/database/ViewData/Indicators/en>, accessed December 2020).
- WHO (2021b). WHO Mortality Database [online database]. Geneva: World Health Organization (<https://www.who.int/data/data-collection-tools/who-mortality-database>, accessed 12 September 2021).
- WHO (2021c). Essential public health operations in Slovenia. Key findings and recommendations on strengthening public health capacities and services. Copenhagen: WHO Regional

- Office for Europe; 2021. Licence: CC BY-NC-SA 3.0 IGO. <https://apps.who.int/iris/bitstream/handle/10665/345236/9789289055895-eng.pdf>
- WHO Collaborating Centre for Drug Statistics Methodology (2011). Guidelines for ATC classification and DDD assignment, 12th edn. Oslo: Norwegian Institute of Public Health.
- WHO Collaborating Centre for Drug Statistics Methodology (2015). Structure and principles. Oslo: Norwegian Institute of Public Health (http://www.whocc.no/atc/structure_and_principles/, accessed 3 May 2016).
- World Bank (2021a). Agriculture, forestry, and fishing, value added (% of GDP) – Slovenia. Washington, DC: World Bank Group (<https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=SI>, accessed 12 September 2021).
- World Bank (2021b). Birth rate, crude (per 1 000 people) – Slovenia. Washington, DC: World Bank Group (<https://data.worldbank.org/indicator/SP.DYN.CBRT.IN?locations=SI>, accessed 12 September 2021).
- World Bank (2021c). World development indicators. Washington, DC: World Bank Group (<http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#>, accessed 12 September 2021).
- Zabukovec M (2020). *Dobiti zdravnika – srečno naključje* [Finding a doctor – lucky coincidence]. DELO 19 October (<http://www.delo.si/lokalno/ljubljana-in-okolica/dobiti-zdravnika-srecno-nakljucje/>, accessed 12 September 2021).
- Zadnik V, Žagar T (2020). SLORA: *Slovenija in rak. Epidemiologija in register raka*. Ljubljana: Onkološki inštitut.
- ZRSZ (2021). *Zavod Republike Slovenije za zaposlovanje* [Employment Service of Slovenia]. (<https://www.ess.gov.si>, accessed 5 July 2021).
- Zver EH (2021). *Ekonomika zdravstva, Viri in izdatki za zdravstvo v Sloveniji in državah EU* [Health economics, resources and expenditure on health care in Slovenia and EU countries]. Ljubljana: Institute for Macroeconomic Analysis and Development (https://www.nijz.si/sites/www.nijz.si/files/uploaded/ekonomika_zdravstva_viri_in_izdatki_za_zdravstvo_v_sloveniji_in_eu_eva_zver_24.5.2021.pdf, accessed 24 May 2021).
- Zver E, Srakar A (2018). *Financijsna dostopnost do zdravstva v Sloveniji in njen vpliv na neenakosti v zdravju* [Financial access to healthcare in Slovenia and its effect on health inequalities]. In: Lesnik T et al. editors. *Neenakosti v zdravju v Sloveniji v času ekonomske krize* [Health inequities in Slovenia during the financial crisis]. Ljubljana: National Institute of Public Health of Slovenia.
- Zver E, Nagode M, Srakar A (2021). *Dostopnost do zdravstvenega varstva in dolgotrajne oskrbe* [Access to health care and long-term care]. In: Gabrijelčič Blenkuš M et al. editors. *Neenakosti v zdravju: izzivi prihodnosti v medsektorskem povezovanju* [Inequities in Health: a future challenge in intersectoral cooperation]. Ljubljana: National Institute for Public Health.
- ZZZS (2015). *Splošni dogovor za pogodbeno leto 2015. Priloga BOL IIb* [General agreement for the year 2015. Annex BOL IIb]. Ljubljana: Health Insurance Institute of Slovenia (<http://www.zzzs.si/egradivap/2EC3F2AC07922434C1257E7C0040094A>, accessed 3 May 2016).
- ZZZS (2017). *Poslovno poročilo Zavoda za zdravstveno zavarovanje Slovenije za leto 2016* [Health Insurance Institute of Slovenia: 2016 Annual Report]. Ljubljana: Health Insurance Institute of Slovenia ([https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/7868d258ee297a14c12580d5003e95b3/\\$FILE/Poslovno%20poro%C4%8Dilo%20ZZZS%20za%20leto%202016_24.3.2017.pdf](https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/7868d258ee297a14c12580d5003e95b3/$FILE/Poslovno%20poro%C4%8Dilo%20ZZZS%20za%20leto%202016_24.3.2017.pdf), accessed 26 January 2021).
- ZZZS (2019). *Poslovno poročilo Zavoda za zdravstveno zavarovanje Slovenije za leto 2018* [Health Insurance Institute of Slovenia: 2018 Annual Report]. Ljubljana: Health Insurance Institute of Slovenia ([https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/8ba7cb093e9155ebc12583c80038f7cd/\\$FILE/Poslovno%20poro%C4%8Dilo%20ZZZS%20za%20leto%202018_16.4.2019.pdf](https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/8ba7cb093e9155ebc12583c80038f7cd/$FILE/Poslovno%20poro%C4%8Dilo%20ZZZS%20za%20leto%202018_16.4.2019.pdf), accessed 26 January 2021).
- ZZZS (2020). *Poslovno poročilo Zavoda za zdravstveno zavarovanje Slovenije za leto 2019* [Health Insurance Institute of Slovenia: 2019 Annual Report]. Ljubljana: Health Insurance Institute of Slovenia (<https://api.zzzs.si/ZZZS/info/egradiva>

[nsf/0/968a5df3e47b29b4c125851c0035369d/\\$FILE/Poslovno%20poro%C4%8Dilo%20ZZZS%20za%20leto%202019_marec%202020.pdf](https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/a998991f0f548b4bc125868c0040ba61/$FILE/Letno%20poro%C4%8Dilo%20ZZZS%202020.pdf), accessed 18 January 2021).

ZZZS (2021). *Poslovno poročilo Zavoda za zdravstveno zavarovanje Slovenije za leto 2020* [Health Insurance Institute of Slovenia: 2020 Annual Report]. Ljubljana: Health Insurance Institute of Slovenia ([https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/a998991f0f548b4bc125868c0040ba61/\\$FILE/Letno%20poro%C4%8Dilo%20ZZZS%202020.pdf](https://api.zzzs.si/ZZZS/info/egradiva.nsf/0/a998991f0f548b4bc125868c0040ba61/$FILE/Letno%20poro%C4%8Dilo%20ZZZS%202020.pdf), accessed 12 September 2021).

■ 9.2 Principal legislation

LEGISLATION

- Action Plan on Nutrition and Physical Activity (2016)
- Additional Measures to Mitigate the Effects of COVID-19 Act (2021)
- Annex to the Collective Agreement for Doctors and Dentists in the Republic of Slovenia (2017)
- Balancing of Public Finance Act (2012)
- Civil Servants Act (2002)
- Collective Actions Act (2017)
- Communicable Diseases Act (1995)
- Exercise of Rights to Public Funds Act (2010)
- Financial Social Assistance Act (1992)
- Health Care and Health Insurance Act (1992)
- Health Databases Act (2000)
- Health Services Act (1992)
- Law on Changes and Amendments to the Health Care and Health Insurance Act (2005)
- Law on Mental Health (2008)
- Legislative Regulation (2009)
- Medical Devices Act (2009)
- Medical Services Act (1999)
- Medicinal Products Act (2014)
- Mental Health Act (2008)
- National Health Care Plan (2016–2025)
- National Strategy on Children's and Youth's Environmental Health (2012–2020)
- Ordinance on the development strategy of non-governmental organisations and volunteering until 2023 (2018).

- Parental Protection and Family Benefit Act (2014)
- Patients' Rights Act (2008)
- Pension and Disability Insurance Act (1999)
- Pharmacies Act (1992)
- Pharmacy Practice Act (2016)
- Public Finance Act (2011)
- Legislative Regulation (2009)
- National Programme on Nutrition and Physical Activity for Health 2015–2025 (2015)
- Restriction on the Use of Tobacco and Related Products Act (2017)
- Rules on Emergency Medical Services (2015).
- Rules on the Conditions for Pharmacy Activity (2018)
- Social Security Act (1992)
- War Disability Act (1995)
- War Veterans Act (1995)

EUROPEAN UNION DIRECTIVES

- Council Directive 89/105/EEC relating to the transparency of measures regulating the prices of medicinal products for human use and their inclusion in the scope of national health insurance systems (1988). Official Journal L40, pp. 8–11.
- Council Directive 93/42/EEC concerning medical devices (1993). Official Journal L169, p. 1–43.
- European Parliament and Council Directive 2011/24/EU on the application of patients' rights in cross-border healthcare (2011) Official Journal L88, pp. 45–65.
- European Parliament and Council Directive 2011/62/EU amending Directive 2001/83/EC on the Community code relating to medicinal products for human use, as regards the prevention of the entry into the legal supply chain of falsified products (2011). Official Journal L174, pp. 74–87.
- European Parliament and Council Directive 2014/40/EU 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 Text with EEA relevance. Official Journal L 127, pp. 1–38.

■ 9.3 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 latest version of the template (2019) is available on the Observatory website <https://eurohealthobservatory.who.int/publications/i/health-systems-in-transition-template-for-authors>.

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.

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 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 OOP payments, VHI and how providers and health workers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which IT systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, LTC, services for informal carers, palliative care, mental health care and dental care.
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 of systems for monitoring health system performance, the impact of the health system on population health, access to health services, financial protection, health system efficiency, health care quality and safety, 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 and useful websites.

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.
- 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.

■ 9.4 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

■ 9.5 About the authors

Tit Albreht is Head of the Centre for Health Care at the National Institute of Public Health of Slovenia.

Katherine Polin is Research Fellow at the European Observatory on Health Systems and Policies and the Department of Health Care Management, Berlin Technical University, Germany.

Radivoje Pribaković Brinovec is Head of the Centre for Prevention Programmes Management at the National Institute of Public Health of Slovenia.

Marjeta Kuhar is a health economist and policy researcher at the Centre for Health Care at the National Institute of Public Health of Slovenia.

Mircha Poldrugovac is HealthPros PhD fellow at Amsterdam UMC, University of Amsterdam, Netherlands.

Petra Ogrin Rehberger is a senior researcher in health care systems at Centre for Health Care at the National Institute of Public Health of Slovenia.

Valentina Prevolnik Rupel is a senior researcher in health care systems and long-term care at the Institute of Economic Research, Ljubljana, and a professor at the DOBA Faculty of Applied Business and Social Studies, Maribor, Slovenia.

Pia Vracko is a researcher and senior adviser on health systems and policies at the National Institute of Public Health of Slovenia, and teaching assistant at the Medical Faculty of the University of Ljubljana. Previously, she served as State Secretary at the Ministry of Health, responsible for Primary Healthcare and Public Health, Slovenia.

The Health Systems in Transition Series

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country reports provide an analytical description of each health system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond.

The HiTs are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health services;
- to describe accurately the process, content and implementation of health reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in countries of the WHO European Region.

How to obtain a HiT

All HiTs are available as PDF files at eurohealthobservatory.who.int, where you can also join our listserve for monthly updates of the activities of the European Observatory on Health Systems and Policies, including new HiTs, books in our co-published series with Cambridge University Press, Policy briefs, Policy Summaries, and the Eurohealth journal.

If you would like to order a paper copy of a HiT, please contact us at:
contact@obs.who.int

The publications of the
European Observatory on
Health Systems and Policies
are available at

eurohealthobservatory.who.int

HiT Country Reviews Published to Date

Albania

(1999, 2002^{ag})

Andorra

(2004)

Armenia

(2001^a, 2006, 2013)

Australia

(2002, 2006)

Austria

(2001^e, 2006^e, 2013^a, 2018)

Azerbaijan

(2004^a, 2010^a)

Belarus

(2008^a, 2013)

Belgium

(2000, 2007, 2010, 2020)

Bosnia and Herzegovina

(2002^a)

Bulgaria

(1999, 2003^b, 2007^a, 2012, 2018)

Canada

(2005, 2013^c, 2020)

Croatia

(1999, 2006, 2014)

Cyprus

(2004, 2012)

Czech Republic

(2000, 2005^a, 2009, 2015)

Denmark

(2001, 2007^a, 2012)

Estonia

(2000, 2004^{ai}, 2008, 2013, 2018)

Finland

(2002, 2008, 2019)

France

(2004^{cg}, 2010, 2015)

Georgia

(2002^{dg}, 2009, 2017)

Germany

(2000^e, 2004^{eg}, 2014^a, 2020)

Greece

(2010, 2017)

Hungary

(1999, 2004, 2011)

Iceland

(2003, 2014)

Ireland

(2009)

Israel

(2003, 2009, 2015)

Italy

(2001, 2009, 2014)

Japan

(2009)

Kazakhstan

(1999^a, 2007^a, 2012)

Kyrgyzstan

(2000^a, 2005^a, 2011^a)

Latvia

(2001, 2008, 2012, 2019)

Lithuania

(2000, 2013)

Luxembourg

(1999, 2015)

Malta

(1999, 2014, 2017)

Mexico

(2020)

Mongolia

(2007)

Netherlands

(2004^a, 2010, 2016)

New Zealand

(2001^{*})

Norway

(2000, 2006, 2013, 2020)

Poland

(1999, 2005^k, 2011, 2019)

Portugal

(1999, 2004, 2007, 2011, 2017)

Republic of Korea

(2009^{*})

Republic of Moldova

(2002^a, 2008^a, 2012)

Romania

(2000^f, 2008, 2016)

Russian Federation

(2003^a, 2011^a)

Serbia

(2019)

Slovakia

(2000, 2004, 2011, 2016)

Slovenia

(2002, 2009, 2016)

Spain

(2000^h, 2006, 2010, 2018)

Sweden

(2001, 2005, 2012)

Switzerland

(2000, 2015)

Tajikistan

(2000, 2010^a, 2016)

The former Yugoslav

Republic of Macedonia

(2000, 2006, 2017)

Turkey

(2002^{ai}, 2011ⁱ)

Turkmenistan

(2000)

Ukraine

(2004^a, 2010^a, 2015)

United Kingdom of Great

Britain and Northern Ireland

(1999^a, 2015)

United Kingdom (England)

(2011)

United Kingdom (Northern

Ireland)

(2012)

United Kingdom (Scotland)

(2012)

United Kingdom (Wales)

(2012)

United States of America

(2013, 2020)

Uzbekistan

(2001^a, 2007^a, 2014^a)

Veneto Region, Italy

(2012)

All HiTs are available in English.

When noted, they are also available in other languages:

- ^a Albanian
- ^b Bulgarian
- ⁱ Estonian
- ^c French
- ^d Georgian
- ^e German
- ^k Polish
- ^f Romanian
- ^g Russian
- ^h Spanish
- ⁱ Turkish



**The publications of the
European Observatory
on Health Systems
and Policies
are available at**

www.healthobservatory.eu





The Observatory is a partnership, hosted by WHO/Europe, which includes other international organizations (the European Commission); national and regional governments (Austria, Belgium, Finland, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy (with Agenas)); other health system organizations (the French National Union of Health Insurance Funds (UNCAM), the Health Foundation); and academia (the London School of Economics and Political Science (LSE) and the London School of Hygiene & Tropical Medicine (LSHTM)). The Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Berlin University of Technology.

HiTs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.