

# Health Systems in Transition

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## Norway

Health system review

Ånen Ringard • Anna Sagan  
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Anna Sagan (Editor), Sarah Thomson and Ewout van Ginneken were responsible for this HiT

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# Health Systems in Transition

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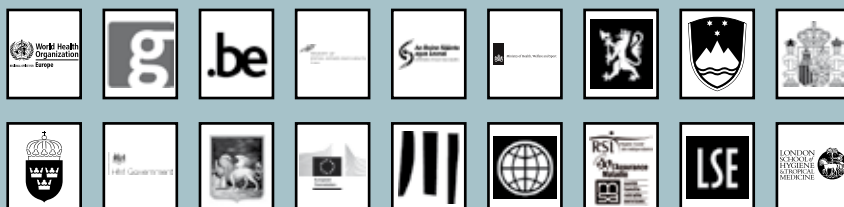
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## Norway:

### Health System Review 2013



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## Preface

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

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

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

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

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

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

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

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



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**T**he HiT on Norway was co-produced by the European Observatory on Health Systems and Policies and the Norwegian Knowledge Centre for the Health Services, 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 area of health systems, health services, public health and health management research. They draw on their own extensive networks in the health field and their track record of successful collaboration with the Observatory to develop and update the HiT.

The Norwegian Knowledge Centre for the Health Services supports the development of quality in the health services by summarizing research, promoting the use of research results, contributing to quality improvement, measuring the quality of health services and working to improve patient safety.

This edition was written by Ånen Ringard, Ingrid Sperre Saunes and Anne Karin Lindahl of the Norwegian Knowledge Centre for the Health Services and Anna Sagan of the European Observatory on Health Systems and Policies. It was edited by Anna Sagan, working with the support of Sarah Thomson of the Observatory's team at the London School of Economics and Political Science and Ewout van Ginneken of the Observatory's team at the Department of Health Care Management, Berlin University of Technology. The basis for this edition was the previous HiT on Norway, which was published in 2006, written by Jan Roth Johnsen and edited by Vaida Bankauskaite.

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Thanks are also extended to the WHO Regional Office for Europe for their European Health for All database from which data on health services were extracted; to the OECD for the data on health services in western Europe; and to the World Bank for the data on health expenditure in central and eastern European countries. Thanks are also due to national statistical offices that have provided data. The HiT reflects data available as of 1 May 2013, unless otherwise indicated.

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

## List of abbreviations

<b>Abbreviations</b>	<b>English</b>	<b>Norwegian</b>
AED	accident and emergency department	
AIDS	acquired immunodeficiency syndrome	
ALOS	average length of stay	
AMK	Emergency Medical Communication Centre	<i>Akuttmedisinsk kommunikasjonsentral</i>
BMI	body mass index	
CAM	complementary and alternative medicine	
CARK	Central Asian Republics and Kazakhstan (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan)	
CIS	Commonwealth of Independent States	
CMHC	community mental health centre	
COPD	chronic obstructive pulmonary disease	
CT	computer tomography	
DALE	disability-adjusted life expectancy	
DDD	defined daily dose	
DMFT	decayed, missing or filled teeth	
DPC	district psychiatric centre	<i>Distriktpsykiatrisk senter</i>
DRG	diagnosis-related-group	
ECTS	European Credit Transfer and Accumulation System	
EEA	European Economic Area	
EMS	emergency medical services	
EPR	electronic patient record	
EU	European Union	
EU12	EU members since 2004 or 2007 but before July 2013	
EU15	EU members before May 2004	
EU27	EU members before July 2013	
FFS	fee-for-service	
GATS	General Agreement on Trade in Services	

<b>Abbreviations</b>	<b>English</b>	<b>Norwegian</b>
GDI	Gender-related Development Index	
GDP	gross domestic product	
GP	general practitioner	
GPF	Government Pension Fund	
HCQI	Health Care Quality Indicator	
HELFO	Norwegian Health Economics Administration	<i>Helseøkonomiforvaltningen</i>
Hib	<i>Haemophilus influenzae</i> type B	
HINAS	Health Agency Procurement Service	<i>Helseforetakenes Innkjøpsservice</i>
HiT	Health Systems in Transition	
HIV	human immunodeficiency virus	
HLY	healthy life year	
HPV	human papilloma virus	
HSCL	Hopkins Symptom Check List	
HSPM	Health Systems and Policy Monitor	
HTA	health technology assessment	
ICSR	individual case safety report	
IMF	International Monetary Fund	
INN	international non-proprietary name	
ISO	International Organization for Standardization	
IPLOS	Information System for the Nursing and Care Sector	<i>Individbasert pleie- og omsorgsstatistikk</i>
IT	information technology	
KOSTRA	Municipality–State Reporting System	<i>Kommune-Stat-Rapportering</i>
KS	Norwegian Association of Local and Regional Authorities	<i>KS Kommunesektorens organisasjon</i>
LTC	long-term care	
MAH	marketing authorization holder	
MMR	measles, mumps and rubella	
MRI	magnetic resonance imaging	
MSIS	Norwegian Surveillance System for Communicable Diseases	<i>Meldingssystem for smittsomme sykdommer</i>
NATO	North Atlantic Treaty Organization	
NAV	Norwegian Labour and Welfare Administration	<i>Arbeids- og velferdsforvaltningen</i>
NHP	National Health Plan	
NHS	national health service	
NIPH	National Institute of Public Health	<i>Nasjonalt Folkehelseinstitutt</i>
NIS	National Insurance Scheme	
NKr	Norwegian krone	
NOIS	Norwegian Surveillance System for Infections in Hospitals	<i>Norsk overvåkingssystem for antibiotikabruk og helsetjenesteassosierte infeksjoner</i>

<b>Abbreviations</b>	<b>English</b>	<b>Norwegian</b>
NOKC	Norwegian Knowledge Centre for the Health Services	<i>Nasjonalt Kunnskapssenter</i>
NOKUT	Norwegian Agency for Quality Assurance in Education	<i>Nasjonalt organ for kvalitet i utdanningen</i>
NoMA	Norwegian Medicines Agency	<i>Statens legemiddelverk</i>
NORM	Surveillance System for Antimicrobial Drug Resistance	<i>Norsk overvåkingssystem for antibiotikaresistens hos mikrober</i>
NorPD	Norwegian Prescription Database	
NOU	Norwegian Official Report	<i>Norges Offentlige Utredninger</i>
NPE	Norwegian System for Patient Injury Compensation	<i>Norsk pasientskadeerstatning</i>
NPR	Norwegian Patient Register	
NRLS	National Reporting and Learning System	
OECD	Organisation for Economic Co-operation and Development	
OOP	out-of-pocket	
OST	opioid substitution treatment	
OTC	over-the-counter	
P4P	pay-for-performance	
PET	positron emission technology	
PN	practical nurse	
POBO	Health and Social Services Ombudsman	<i>Pasient- og brukerombudet</i>
PPP	purchasing power parity/pharmacy purchase price	
PRAC	Pharmacovigilance Risk Assessment Committee	
PROMs	patient-reported outcome measures	
PSUR	Periodic Safety Update Report	
QALY	quality-adjusted life year	
RHA	regional health authority	
RGP	regular GP	
RN	registered nurse	
SAK	Norwegian Registration Authority for Health Personnel	
SMM	Norwegian Centre for Health Technology Assessment	<i>Senter for medisinsk metodevurdering</i>
THE	total health expenditure	
TRIPS	trade-related aspects of intellectual property rights	
UN	United Nations	
UNCAM	French National Union of Health Insurance Funds	
VAT	value added tax	

<b>Abbreviations</b>	<b>English</b>	<b><i>Norwegian</i></b>
VHI	voluntary health insurance	
WHO	World Health Organization	
WTO	World Trade Organization	

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## Abstract

Norway's five million inhabitants are spread over nearly four hundred thousand square kilometres, making it one of the most sparsely populated countries in Europe. It has enjoyed several decades of high growth, following the start of oil production in early 1970s, and is now one of the richest countries per head in the world. Overall, Norway's population enjoys good health status; life expectancy of 81.53 years is above the EU average of 80.14, and the gap between overall life expectancy and healthy life years is around half the of EU average.

The health care system is semi-decentralized. The responsibility for specialist care lies with the state (administered by four Regional Health Authorities) and the municipalities are responsible for primary care.

Although health care expenditure is only 9.4% of Norway's GDP (placing it on the 16th place in the WHO European region), given Norway's very high value of GDP per capita, its health expenditure per head is higher than in most countries. Public sources account for over 85% of total health expenditure; the majority of private health financing comes from households' out-of-pocket payments.

The number of practitioners in most health personnel groups, including physicians and nurses, has been increasing in the last few decades and the number of health care personnel per 100 000 inhabitants is high compared to other EU countries. However, long waiting times for elective care continue to be a problem and are cause of dissatisfaction among the patients.

The focus of health care reforms has seen shifts over the past four decades. During the 1970s the focus was on equality and increasing geographical access to health care services; during the 1980s reforms aimed at achieving cost containment and decentralizing health care services; during the 1990s the focus was on efficiency. Since the beginning of the millennium the emphasis

has been given to structural changes in the delivery and organization of health care and to policies intended to empower patients and users. The past few years have seen efforts to improve coordination between health care providers, as well as an increased attention towards quality of care and patient safety issues.

Overall, comparing mortality rates amenable to medical intervention suggests that Norway is among the better performing European countries. Despite having one of the highest densities of physicians in Europe, though, Norway still struggles to ensure geographical and social equity in access to health care.

# Executive summary

## Introduction

Norway's five million inhabitants are spread over nearly four hundred thousand square kilometres, making it one of the most sparsely populated countries in Europe. It has enjoyed several decades of high growth, following the start of oil production in early 1970s, and is now one of the richest countries per head in the world. Norway is a parliamentary democracy, divided into three different administrative levels: the state, the 19 counties and the 429 municipalities. Norway is not a member of the EU, though it is a member of the European Economic Area. It also retains close cooperation with the other Nordic countries.

Overall, Norway's population enjoys good health status; life expectancy of 81.53 years is above the EU average of 80.14, and the gap between overall life expectancy and healthy life years is around half the size of the EU average. A key factor in improved health has been a decline in mortality from diseases of the circulatory system (the major cause of deaths in Norway), from 46% of deaths in 1991 to 31% in 2011. The proportion of smokers has also decreased in the last few years; however, both the proportion of people overweight or obese and the consumption of alcohol have increased over the past decades. Norway has by far the highest rate of work absences of full-time employees of any OECD country, with almost 7% of the workforce being on sick leave at any given time (almost twice the rate of other Nordic countries). Social inequalities in health persist (e.g., 50% higher prevalence of long-term and chronic conditions amongst less well educated people) despite significant improvements in the standard of living of disadvantaged population groups.

## Organization and governance

The Norwegian health care system can be characterized as semi-decentralized. The responsibility for specialist care lies with the state since 2002, administered by four Regional Health Authorities (RHAs). Municipalities are responsible for primary care and enjoy a great deal of freedom in organizing health services (though counties provide dental care).

The Ministry of Health is in charge of regulation and supervision of the system, but many of these tasks are delegated to various subordinate agencies, such as the Directorate of Health and the Norwegian Medicines Agency (NoMA). Various types of health data are collected by compulsory national registers (15 in 2012), such as national registers on cancer and cardiovascular disease, as well as around 200 further medical registries; overall supervision and monitoring of health services is provided by the National Board of Health Supervision.

Inter-sectoral cooperation across government has become increasingly important over the past few years, especially as a means for addressing social inequalities in health. More attention has also been paid to improving resource allocation (through priority setting and an increased use of health technology assessment), quality issues and patient safety. Strengthening the role of patients and next-of-kin has been a policy priority since the turn of the millennium, for example, through a comprehensive patient rights law regulating issues such as patient choice and complaint procedures.

## Financing

In 2011, health care expenditure accounted for approximately 9.4% of Norway's GDP, placing it on the 16th place in the WHO European region in terms of the share of GDP spent on health. However, Norway has one of the highest values of GDP per capita in the world (85% higher than the EU27 average) and thus its per capita health expenditure is higher than nearly all countries (only Luxembourg and Monaco are higher in Europe).

Public sources account for over 85% of total health expenditure, mostly comprising financing from the central and local governments and from the National Insurance Scheme (NIS) (around 12% of total health expenditure). The vast majority of the 15% of health expenditure that is privately financed comes from households' out-of-pocket payments; mainly for pharmaceuticals and

dental care, though there is a €21 co-payment for GP visits, for example. The role of voluntary health insurance in health care financing is negligible despite an increase in the number of Norwegians holding private health insurance to over 5% of the population.

Primary care is financed from municipal taxes, block grants from the central government, and earmarked grants for specific purposes. Capitation payments amount to around 30% of GPs' income, with the rest on a fee-for-service basis. Most specialist care is financed through block grants (60%), plus partly through activity based financing from the central government to the RHAs (40%), with the latter component based on Diagnosis Related Groups.

## **Physical and human resources**

Several trends can be discerned in both the infrastructure and organization of the hospital sector. The number of hospital beds has been declining since the late 1980s. The average length of hospital stay has also declined, often thanks to the introduction of new treatment options and modalities. However, at the same time, bed occupancy rate is high at 93% (the EU average is 76%) and this is reflected in long waiting times for elective care. According to a 2010 OECD survey, 50% of respondents in Norway had to wait more than four weeks for a specialist consultation, and 21% of respondents had to wait four months or more for elective surgery; in both cases Norway was the third highest score after Canada and Sweden. The number of long-term beds has remained stable despite the current government's ambition to increase it, although municipalities have increased provision of home-based services.

Municipalities are responsible for investment in infrastructure such as primary care and long-term care facilities; the RHAs are (since 2002) responsible for investment in hospital infrastructure. The central government is responsible for large infrastructure projects, such as the Norwegian Health Network, which enables electronic exchange of patient information throughout the health and social services sectors.

The availability and use of information technology (IT) continues to increase within the health care system as well as in other parts of the society. Several national strategies for a more digitalized health care system have been launched and implementation of these strategies is now starting to gain momentum. The use of IT tools in primary care is very high, for example to store and share patient data and for decision support systems. The use of e-tools in hospitals is

less common than in general practice but has been increasing. Introduction of some types of e-solutions such as e-referrals from GPs and electronic hospital discharges has been difficult due to the lack of coordination between the two levels responsible for provision of care. On-going e-health projects include the introduction of electronic medical records on the national scale. There is limited but increasing use of telemedicine to improve access to care for remote areas such as the northern region of Norway.

The number of practitioners in most health personnel groups, including physicians and nurses, has been increasing in the last few decades and the number of health care personnel per head is high compared to other EU countries. Around 8% of medical personnel comes from abroad and Norway has long pursued an active policy of recruiting foreign health care personnel. In 2011 the government adopted the WHO's ethical code of practice for recruitment of international health care personnel, which discourages active recruitment from poor countries with shortages of health care personnel.

## Provision of health care services

Public health services are delivered at the local and national levels. They are integrated with curative services at the municipal level, but are run by separate institutions at the national level, including the National Institute of Public Health. During the past decade, the government has launched a number of national public health programmes and strategies focusing on risk factors such as smoking, alcohol consumption, diet, and physical activity.

Primary care is provided at the municipal level, mostly by self-employed physicians and as part of municipal public services (e.g., nursing homes and home based services). General practitioners (GPs) act as gatekeepers, referring patients to more complex care. Inpatient specialized care is mainly provided by hospital trusts owned by the RHAs, as well as some contracted private facilities. Hospitals also provide outpatient specialist care in their outpatient departments. A deliberate substitution policy has been pursued since the late 1980s with the aim of replacing relatively expensive inpatient care with less-costly outpatient and day care and bringing care closer to patients' homes.

Access to pharmaceuticals is good, with Norway being among the quicker countries in Europe to license new medicines, prices falling (by an average of 2.4% per year in the last decade). Since the liberalising 2000 Pharmacy

Act the number of pharmacies has also grown significantly. Consumption of medicines has grown in recent years, though it is still substantially lower than in neighbouring Sweden and Finland.

At the primary care level, emergency or acute primary care services are in most municipalities provided by regular GPs (within office hours) and on-call GPs (outside office hours), supported by telephone services. Hospitals receive emergency cases in Accident and Emergency Departments.

Rehabilitation is provided at the primary (physiotherapy, occupational therapy, etc.) and secondary (specialized rehabilitation) levels. Long-term care is provided in three types of settings: patients' homes, nursing homes or sheltered homes run by the municipalities. Development of sheltered housing and nursing homes is encouraged by the state through the provision of earmarked funding. In nursing homes, there has been a deliberate shift towards increasing the number of single occupancy accommodation to make it more home-like. Palliative care services are provided at all levels of care but their availability is only moderate in comparison to other countries. In the area of mental care, there has been a shift towards deinstitutionalization, but substantial waiting times remain for those without a serious mental health problem. Statutory dental care services are provided for children and adolescents; adults see private dentists and pay the full fee.

Overall, there is little information on the accessibility, affordability and quality of various types of care. Quality standards (including educational standards) and guidelines are missing for some types of care and payment for services is usually not linked to quality (however, there are initiatives to link a portion of hospital funding to quality and safety performance). There are geographical differences in access, with people living in rural and more remote areas having to travel long distances to access care. Despite the high ratios of health care professionals to the number of population, the long waiting times for elective care constitute a major barrier to accessing care.

## **Recent reforms**

The focus of health care reforms has seen shifts over the past four decades. During the 1970s the focus was on equality and increasing geographical access to health care services; during the 1980s reforms aimed at achieving cost containment and decentralizing health care services; during the 1990s the focus was on efficiency. Since the beginning of the millennium the emphasis

has been given to structural changes in the delivery and organization of health care and to policies intended to empower patients and users. The past few years have seen efforts to improve coordination between health care providers, as well as an increased attention towards quality of care and patient safety issues.

## Assessment of the health care system

Overall, the level of financial protection of the system is good. Coverage is universal and public sources, which in Norway constitute a progressive source of financing, account for the majority (85%) of health expenditure. Moreover, various mechanisms, such as exemptions and ceilings on out-of-pocket payments, limit the financial burden of care on individuals. However, the level of protection is much lower for certain types of care (e.g. dental care for adults is virtually excluded from coverage).

Despite having one of the highest densities of physicians in Europe, Norway struggles to assure geographical equity in access to health care. While GPs are fairly well distributed across the country, specialist care is concentrated in the urban areas. However, the large network of ambulance transportation helps to counterbalance these geographical inequalities. Despite a lower level of income inequality than in any EU country, socioeconomic inequalities in access exist and seem to persist over time .

User experiences with the health care system seem to be average compared to other OECD countries, though with regional variation within Norway. Coordination of hospital care with other health services and waiting times for elective care are two areas that could be improved. Avoidable admission rates for certain conditions, such as chronic obstructive pulmonary disease, are markedly higher than in most other OECD countries and may be seen as an indication that the quality of care could also be improved. Further improvements could also be made with regards to the system's efficiency and transparency, though significant progress has already been achieved in these areas in the past two decades.

Preventive services and improvements in the quality of care may have contributed to recent positive trends in health. Comparing mortality rates amenable to medical intervention suggests that Norway is among the better performing European countries, and can be seen as an indication of the contribution that health care makes to improving population health. In areas



where indicators see less favourable trends (such as survival rates for colorectal cancer) measures are taken to reverse them, which demonstrates that efforts are being made to allocate resources where they are needed.



# 1. Introduction

Norway is a small country with a low population density and a level of demographic development similar to other western European countries. It has enjoyed several decades of high gross domestic product (GDP) growth, following the start of oil production in the early 1970s, and is now one of the richest countries in the world. Private consumption as a share of GDP is lower in Norway than in most western European countries and the level of state ownership is relatively high. Norway is a parliamentary democracy, divided into three different administrative levels: the state, the counties and the municipalities. Overall, Norway's population enjoys a good health status compared to other countries and there has been a significant decline in mortality from diseases of the circulatory system – the major cause of deaths in Norway. The proportion of smokers has also decreased in the last few years; however, several other lifestyle indicators have seen less favourable trends. Although still low in comparison with many other countries, the proportion of people overweight or obese and the consumption of alcohol have both increased over past decades and social inequalities in health persist despite significant improvements in the standard of living of disadvantaged population groups.

## 1.1 Geography and sociodemography

Norway is one of the Scandinavian countries. It is located in northern Europe and shares physical borders with Sweden, Finland and Russia and also borders the North Sea and the North Atlantic Ocean (Fig. 1.1). It consists of the mainland, the archipelago of Svalbard and the island of Jan Mayen. Norway's 5 million inhabitants (2011) live in a total land area of 386 958 km<sup>2</sup>, which averages 16 persons per km<sup>2</sup> (Ministry of Foreign Affairs, 2012) and makes Norway one of the most sparsely populated countries in Europe. The terrain is mostly barren, with high plateaux and rugged mountains, broken by fertile valleys,

small, scattered plains, a coastline that is deeply indented by fjords, and arctic tundra to the north. When calculated against the proportion of arable land, Norway has 22 persons per km<sup>2</sup> of land available for cultivation, compared with 8 in both France and Denmark (Johnsen, 2006). The climate is temperate along the coast, modified by the North Atlantic current; it is colder towards the interior.

**Fig. 1.1**

Map of Norway



Source: United Nations, Department of Peacekeeping Operations, Cartographic Section (2004) (<http://www.un.org/Depts/Cartographic/english/htmain.htm>).

The post-war baby boom, which lasted until the mid-1960s, was followed by a decline in the birth rate, reaching its lowest point around 1985. Since then, the trend in the natural population growth rate has turned upwards again, reaching an average of 3.4 per 1000 in the period 1996 to 2000 – a figure well above average European Union (EU) levels (Johnsen, 2006). In 2010, the total fertility rate was 1.95, which was below the replacement level (2.1). The contribution of excess of births (over deaths) to population growth has declined in the last decade and the contribution of net migration has increased: while in 2000 excess of births accounted for 60% of population growth and net migration for 40%, this proportion was more than reversed in 2010, with the former accounting for 32% and the latter for 68% of population growth (Table 1.1). At the beginning of 2012, immigrants accounted for 13.1% of the total population (655 000 people). The majority originated from Europe (45%), Asia (25%) and Africa (9%) (Statistics Norway, 2012f).

Although the proportion of people over 80 years old has increased slightly in recent decades, the share of the population aged 0–14 has also increased and the proportion of people aged 65 and over has remained relatively stable (Table 1.1). The old-age dependency ratio (those aged 65+ over those aged 20–64) in Norway, at 22% in 2010, was lower than in the EU27 (EU members before July 2013) and in other Nordic countries, with the exception of Iceland (Eurostat, 2012).

The vast majority of the population (78%) lives in urban areas (Table 1.1). Approximately one in four people lives in a two-person household; almost as many (23%) live in a four-person household; and 18% of the population (40% of households) live alone. The proportion of people living alone has increased gradually over a very long period of time (only 2% lived alone in 1920). Oslo has the highest proportion of one-person households, with slightly over 52% of single households (Statistics Norway, 2013b).

**Table 1.1**

Trends in demographic indicators, 1980–2010, selected years

Indicators	1980	1990	1995	2000	2005	2010
Total population (million)	4.08	4.23	4.35	4.48	4.61	4.86
Population female (% of total) <sup>a</sup>	n.a.	n.a.	50	50	50	52
Population ages 0–14 (% of total) <sup>a</sup>	n.a.	18	19	20	20	20
Population ages 65 and above (% of total)	14.8	16.3	n.a.	15.2	14.7	14.7
Population ages 80 and above (% of total) <sup>a</sup>	n.a.	3.6	3.9	4.2	4.6	4.7
Population growth (annual growth rate)	0.33	0.39	0.5	0.56	0.73	1.28
Population density (people per km <sup>2</sup> ) <sup>b</sup>	13	14	14	15	15	n.a.
Fertility rate, total (births per woman)	n.a.	n.a.	n.a.	1.85	1.84	1.95
Birth rate, crude (per 1000) <sup>b</sup>	12	14	14	13	12	13
Death rate, crude (per 1000) <sup>b</sup>	10	11	10	10	9	9
Age dependency ratio (% of working age) <sup>b</sup>	23	25	25	23	22	22
Contribution of excess births to population growth (%) <sup>c</sup>	n.a.	n.a.	n.a.	60	44	32
Contribution of net migration to population growth (%) <sup>c</sup>	n.a.	n.a.	n.a.	40	56	68
Distribution of population (rural as % of total) <sup>b</sup>	30	34	26	24	23	22
Proportion of single-person households	28	34	n.a.	n.a.	38 <sup>d</sup>	40 <sup>e</sup>
Educational level (% with upper secondary education)	39.9	42.9	n.a.	44.3	43.7	40.1

Source: Statistics Norway (2011) unless stated otherwise.

Notes: <sup>a</sup> Authors' calculations based on Statistics Norway (2011); <sup>b</sup> World Bank (2013); <sup>c</sup> Authors' calculations based on Statistics Norway (2013b); <sup>d</sup> Based on 2001 population census; <sup>e</sup> Based on 2011 population census; n.a. = not available.

In 2012, the proportion of the population with a university education, among those aged 16 years and older, was 27.1% for men and 32.5% for women. In all, about 72% of the population over the age of 16 had completed secondary education, up from 57% in 2001. Presently, the enrolment level in secondary and tertiary education amounts to more than two-thirds of the population over 16 years old, which makes the Norwegian population one of the most highly educated in the world (Eurostat, 2012; Statistics Norway, 2013g).

Norway is highly rated with respect to gender equality. Female participation rates are high within education, the labour market and political life. In the United Nations (UN) index for gender equality, based on the Gender-related Development Index (GDI), Norway was ranked among the most gender-equal nations in 2011 (UNDP, 2011).

According to 2011 Eurostat data, income inequality in Norway was lower than in any other EU27 country (Norway had a Gini coefficient of equalized disposable income of 22.9% compared to an average of 30.7% in the EU27). Norway also had one of the lowest shares of persons at risk of poverty (11.2% in 2010), just behind the Czech Republic (9.0%), Iceland (9.8%) and the Netherlands (10.3%) (Eurostat, 2013).

In 2010, 77% of the population declared membership of the Church of Norway and 9% declared membership of religious and philosophical communities outside the Church of Norway (Statistics Norway, 2012f). The vast majority of the population (over 95%) speaks Norwegian (no official data available).

## 1.2 Economic context

The Norwegian economy is generally characterized as a mixed economy – a capitalist market economy with a clear component of state influence. As in the rest of western Europe, private property rights and the private sector have largely governed the expansion of most industries. Nevertheless, the level of state ownership is relatively high. In 2008, although private consumption expenditure accounted for the biggest share of GDP (42%), this share of GDP was lower than in most other western European countries. General government consumption accounted for 22% of GDP and was followed by investment (21%) and export surplus (15%) (Economist Intelligence Unit, 2008).

Oil production, which started in 1971 (OECD, 2007), was the key driver behind Norway's high GDP growth and made it one of the richest countries in the world. GDP per capita rose from Nkr 23 500 in 1970 to Nkr 510 544 in 2010 (€65 371), which corresponds to a real growth of approximately 290% or 3.5% per annum in constant 2000 prices (Statistics Norway, 2009). In 2010, Norway's GDP was 81% higher than the average among the EU27 Member States (allowing for price differences in the different countries). Oil exports allowed Norway to build up an export surplus. With the exception of the period 1986–1988, Norway has had a surplus in external trade in commodities (approximately Nkr 384 billion in 2011 (€50 billion)). About 81% of Norwegian exports are to EU countries and 63% of the imports come from these countries (Statistics Norway, 2012f). As regards exports, oil (and increasingly gas) dominates, followed by metals (especially aluminium) and fish. For imports, motor vehicles (cars and buses) and other means of transport (aeroplanes and shipping vessels) are the most important.

During the last 50 years, there have been some dramatic changes in the structure of the economy, with a move from primary (agriculture) and secondary (manufacturing) industries towards tertiary (service) industries. Primary industries now employ less than 3% of the labour force and secondary industries around 21%, while the tertiary industries (including public sector employees) account for a total of 76% (Oslo Chamber of Commerce, 2011). The picture is slightly different if one looks at the contribution these industries make to the GDP. Primary industries contribute 2%; secondary industries close to 40% (with petroleum contributing far more in economic value than in employment); and tertiary industries 58% (Table 1.2).

**Table 1.2**  
Macroeconomic indicators, 1980–2010, selected years

Indicators	1980	1990	1995	2000	2005	2010
GDP in million Nkr <sup>a</sup>	314 698	736 294	925 866	1 481 241	1 903 841	2 496 178
GDP (current US\$, million)	63 714	117 624	148 920	168 289	304 060	417 465
GDP, PPP (current international US\$, million)	39 125	81 062	102 930	162 289	220 190	279 802
GDP per capita (current international US\$)	15 595	n.a.	34 126	37 473	65 767	85 389
GDP per capita, PPP (US\$)	9 576	17 902	23 612	36 137	47 626	57 231
GDP average annual growth rate (%)	4.5	1.9	4.2	3.3	2.6	0.7
Public expenditure (% of GDP)	n.a.	n.a.	55	52.3	52.9	n.a.
Cash surplus/deficit (% of GDP)	n.a.	n.a.	n.a.	15.7	15.1	11.7
Tax revenue (% of GDP) <sup>a</sup>	n.a.	n.a.	n.a.	27.4	28.7	26.9
Central government debt (% of GDP)	n.a.	n.a.	n.a.	23.5	35.9	35.4
Value added in industry (% of GDP)	69	34	34	42	43	40
Value added in agriculture (% of GDP)	4	3	3	2	2	2
Value added in services (% of GDP)	39	63	63	56	56	58
Labour force, million (total) <sup>a</sup>	n.a.	2.169	2.197	2.375	2.426	2.508
Unemployment, total (% of labour force)	1.6	5.3	4.9	3.4	4.6	3.6
Poverty rate <sup>b</sup>	n.a.	10.1	10.7	9.9	n.a.	n.a.
Income or wealth inequality (Gini coefficient after taxes and transfers, total population) <sup>b</sup>	n.a.	0.217	0.236	0.262	0.327	0.245
Real interest rate	-0.1	9.9	4.4	-8.3	-4.5	11.4
Official exchange rate (Nkr per US\$)	4.94	6.26	6.34	8.8	6.44	6.04
Official exchange rate (Nkr per €) <sup>c</sup>	n.a.	n.a.	n.a.	8.23	7.99	7.81

Source: World Bank (2013), unless stated otherwise.

Notes: <sup>a</sup> Statistics Norway (2011); <sup>b</sup> Poverty rate is defined as the share of "continuous low-income individuals", i.e. individuals whose income was less than 60% of the median income in Norway for three or more consecutive years;

<sup>c</sup> Statistics Norway (2012f); n.a. = not available. GDP = gross domestic product; PPP = purchasing power parity.

The large petroleum revenues have resulted in substantial financial assets being accumulated in the Government Pension Fund (GPF), which was established in 2006 to facilitate government savings necessary to meet the rapid rise in public pension expenditures in the coming years, and to support a long-term management of petroleum revenues. At the end of December 2012, the value of the Fund's assets was estimated to be about Nkr 4000 billion (€535 billion) (Government Pension Fund, [www.nbim.no](http://www.nbim.no)).

### 1.3 Political context

Norway has been a constitutional state since 1814, following approval of the first democratic constitution and the establishment of the Norwegian parliament. Almost a century later, in 1905, the country dissolved the union with Sweden and became a sovereign state.



Norway is governed by a three-tier parliamentary system, with each tier governed by a popularly elected body: the national parliament (*Stortinget*), the county councils (*fylker*) and the municipal councils (*kommuner*). The parliament has 169 members and is elected by proportional representation for a four-year period. The King is formally the highest executive authority, although in practice the cabinet – comprising the prime minister (chosen by the King) and his/her cabinet members (selected by the prime minister) – has the executive power. Parliamentary members must leave the parliament if they are chosen to serve in the government.

In 2012, there were 19 counties and 429 municipalities. The capital and largest city, Oslo, is formally both a municipality and a county. Population density varies widely throughout Norway, ranging from 218 to approximately 600 000 inhabitants per municipality. There are 30 municipalities with fewer than 1000 inhabitants and one-third have between 2000 and 5000 inhabitants (Statistics Norway, 2012f).

Trade unions play an important role in Norway as they regularly negotiate wages and working conditions, resulting in wage agreements. Within the health-care sector, the following professions are organized in unions: doctors, nurses, dentists, psychologists, physiotherapists and radiographers. Some other professions, such as auxiliary nurses, dental hygienists and ambulance drivers, are represented by the Norwegian Union of Municipal and General Employees.

Politically, the country has been stable: the Labour Party (*Arbeiderpartiet*) held office between 1945 and 1965, and from 1965 to the time of writing (1 May 2013), the Labour government alternated with non-socialist coalition governments. Between 2001 and 2005, the country was ruled by a three-party coalition government (Christian Democratic Party (*Kristelig Folkeparti*), Liberal Party (*Venstre*) and Conservative Party (*Høyre*)). A new government coalition came to power following the 2005 election, with the Labour Party for the first time in history forming a coalition government, this being with the Socialist Left Party of Norway (*Sosialistisk Venstreparti*) and the Centre Party (*Senterpartiet*). In 2009, the coalition government was re-elected for another four years. A new parliamentary election will take place in September 2013.

Traditionally, close cooperation with the other Nordic countries (Denmark, Sweden, Finland and Iceland) has been the norm. In 1982 an agreement on a common labour market was signed between the five countries and since 1992 there has been a social security convention among them (extended to social assistance and social services in 1994). In 1972 and 1994, referendums were held on whether or not Norway should join the EU, with this proposition

being turned down on both occasions. Norway has ratified several bilateral social security agreements with other Nordic countries, as well as the European Economic Area (EEA) Agreement, which came into force in 1994.

Norway is a member of the UN, World Trade Organization (WTO), North Atlantic Treaty Organization (NATO), Council of Europe and the Nordic Council. Norway has, among others, signed the following international treaties and documents: General Agreement on Trade in Services (GATS), Convention on the Rights of the Child, European Convention on Human Rights, International Bill of Rights and the Barents Health Programme.

## 1.4 Health status

The health of Norwegians has improved considerably over the last few decades. In 2011, life expectancy at birth was 79 years for males and 83.5 years for females. Total mortality rates have been decreasing for both sexes, with mortality rates for women being much lower than for men but with the rate for men clearly catching up with the rate for women (Table 1.3).

**Table 1.3**

Mortality and health indicators, 1980–2011, selected years

Indicators	1980	1990	1995	2000	2005	2010	2011
Life expectancy at birth, total <sup>a</sup>	76	77	78	79	80	81	81.5
Life expectancy at birth, male	72.3	73.4	74.8	76	77.8	78.9	79.0
Life expectancy at birth, female	79.2	79.8	80.8	81.5	82.7	83	83.5
Total mortality rate, adult, male (per 1000 male) <sup>a</sup>	146	132	112	107	88	82 <sup>b</sup>	n.a.
Total mortality rate, adult, female (per 1000 female) <sup>a</sup>	n.a.	n.a.	n.a.	61	56	50 <sup>b</sup>	n.a.

Source: Statistics Norway (2013a), unless stated otherwise.

Notes: <sup>a</sup> World Bank (2013); <sup>b</sup> 2009 data; n.a. = not available.

There is a gap between life expectancy overall and the expected number of years without disability measured by disability-adjusted life expectancy (DALE) but it is similar to other comparator countries. The difference between the overall life expectancy and healthy life years (HLYs) is much smaller in Norway than in other comparator countries (Table 1.4).

**Table 1.4**

Overall and disability-adjusted life expectancy and healthy life years, Norway and selected comparator countries, latest available year

Indicators	Norway	Denmark	Finland	Sweden	EU15	EU12	EU27
Life expectancy at birth (2011)	81.53	78.51 <sup>a</sup>	80.76	81.77 <sup>b</sup>	81.24 <sup>b</sup>	75.78	80.14
DALE (2007)	73	72	72	74	73	67	72
HLY, females (2011)	70 (e)	59.4	58.3	70.2	n.a.	n.a.	62.2 (e)
HLY, males (2011)	69.9 (e)	63.6	57.7	71.7	n.a.	n.a.	61.8 (e)

Sources: Data on life expectancy at birth and DALE from WHO (2012); data on HLY from Eurostat (2013).

Notes: <sup>a</sup> 2006; <sup>b</sup> 2010; (e) = estimate; n.a. = not available.

One of the major reasons for increased life expectancy in Norway since the 1970s is attributed to a decline in mortality from diseases of the circulatory system, the key cause of deaths in Norway. Mortality rates declined for both men and women. On the other hand, mortality rates attributed to malignant neoplasms increased for both males and females. Malignant neoplasms remain the second largest cause of mortality in Norway (Table 1.5).

**Table 1.5**

Main causes of death, by number of deaths, 1991–2011, selected years

Cause of death	1991	1995	2000	2005	2010	2011
<b>Total (I)</b>	<b>44 822</b>	<b>45 182</b>	<b>44 018</b>	<b>41 152</b>	<b>41 442</b>	<b>41 304</b>
Males (II)	23 086	23 024	21 676	20 065	19 976	20 029
% of (I)	52	51	49	49	48	48
Females (III)	21 736	22 158	22 342	21 087	21 466	21 275
% of (I)	48	49	51	51	52	52
<b>Cardiovascular diseases (I00–I99)</b>						
<b>Total</b>	<b>20 818</b>	<b>19 867</b>	<b>18 191</b>	<b>14 537</b>	<b>13 128</b>	<b>12 964</b>
% of (I)	46	44	41	35	32	31
Males	10 623	10 016	8 659	6 886	6 105	6 007
% of (II)	46	44	40	34	31	30
Females	10 195	9 851	9 532	7 651	7 023	6 957
% of (III)	47	44	43	36	33	33
<b>Malignant neoplasm (C00–C97)</b>						
<b>Total</b>	<b>9 785</b>	<b>10 371</b>	<b>10 447</b>	<b>10 564</b>	<b>10 926</b>	<b>10 838</b>
% of (I)	22	23	24	26	26	26
Males	5 353	5 579	5 532	5 596	5 816	5 817
% of (II)	23	24	26	28	29	29
Females	4 432	4 792	4 915	4 968	5 110	5 021
% of (III)	20	22	22	24	24	24
<b>Diseases of the respiratory system (J00–J99)</b>						
<b>Total</b>	<b>4 344</b>	<b>4 930</b>	<b>4 384</b>	<b>4 082</b>	<b>3 882</b>	<b>4 026</b>
% of (I)	10	11	10	10	9	10
Males	2 044	2 360	2 052	2 027	1 880	1 961

<b>Cause of death</b>	<b>1991</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2011</b>
% of (I)	9	10	9	10	9	10
Females	2 300	2 570	2 332	2 055	2 002	2 065
% of (III)	11	12	10	10	9	10
<b>Other diseases</b>						
<b>Total</b>	<b>7 330</b>	<b>7 740</b>	<b>8 628</b>	<b>9 559</b>	<b>10 979</b>	<b>10 869</b>
% of (I)	16	17	20	23	26	26
Males	3 471	3 655	4 007	4 126	4 701	4 719
% of (II)	15	16	18	21	24	24
Females	3 859	4 085	4 621	5 433	6 278	6 150
% of (III)	18	18	21	26	29	29
<b>Accidents</b>						
<b>Total</b>	<b>1 780</b>	<b>1 663</b>	<b>1 752</b>	<b>1 835</b>	<b>1 941</b>	<b>1 890</b>
% of (I)	4	4	4	4	5	5
Males	1 033	963	976	1 048	1 068	1 026
% of (II)	4	4	5	5	5	5
Females	747	700	776	787	873	864
% of (III)	3	3	3	4	4	4
<b>Suicides</b>						
<b>Total</b>	<b>675</b>	<b>548</b>	<b>541</b>	<b>533</b>	<b>548</b>	<b>598</b>
% of (I)	2	1	1	1	1	1
Males	499	411	409	360	384	434
% of (II)	2	2	2	2	2	2
Females	176	137	132	173	164	164
% of (III)	1	1	1	1	1	1
<b>Homicides and other violent deaths</b>						
<b>Total</b>	<b>90</b>	<b>63</b>	<b>75</b>	<b>42</b>	<b>38</b>	<b>119</b>
% of (I)	0.2	0.1	0.2	0.1	0.1	0.3
Males	63	40	41	22	22	65
% of (II)	0.3	0.2	0.2	0.1	0.1	0.3
Females	27	23	34	20	16	54
% of (III)	0.1	0.1	0.2	0.1	0.1	0.3

Source: Statistics Norway (2013a).

As in all western countries, infectious diseases have been on the decline due to better hygiene, vaccinations and much improved living standards. All children residing in Norway are offered vaccinations against 10 diseases and children belonging to risk groups are also offered additional vaccinations (see section 5.1.2). Vaccination rates are very high as more than 90% of children and adolescents receive the recommended vaccines in the childhood immunization programme (NIPH, 2013c). The human immunodeficiency virus (HIV) epidemic hit Norway in the 1980s, but effective measures have been introduced and the total number of persons infected each year is somewhere between 250 and 300 (NIPH, 2010).

In general, the health status of Norwegians is good. Although fewer people die before retirement age (mainly thanks to the decrease in the number of deaths from cardiovascular diseases), a substantial part of the working population claims a disability pension (around 10% in 2009) (NIPH, 2010). Moreover, with almost 7% of the workforce on sick leave at any moment, Norway has by far the highest rate of work absences of full-time employees in the whole OECD area and almost twice the rate of other Nordic countries. Between 1994 and 2009, the annual number of persons on sick leave increased by 59%. Regulations on sick leave, other benefits and dismissal contribute to the very high incidence of absence (OECD, 2013b).

While musculoskeletal disorders still account for the highest share of work absences (41% in 2010), their share has been falling (from 50% in 1994). On the other hand, the share of persons who are sick because of mental illness rose by 8 percentage points, from 10% to 18%, between 1994 and 2010, while the share of all other medical conditions remained stable (OECD, 2013a). In 2008, approximately 10% of adult Norwegians were found to have mental problems (i.e. defined as having an HSCL-25 score above 1.75), with anxiety and depression being the most common mental disorders in adults (Directorate of Health, 2012b).

The prevalence of obesity and type 2 diabetes in adults has increased. The proportion of persons between 16 and 79 years old with a body mass index (BMI) of 27 or more (i.e. overweight or obese) has increased significantly over the past 40 years: in the early 1970s, 14% of men and 15% of women fell into this category, while in 2008 the respective figures were 32% among men and 21% among women (NIPH, 2010).

Lack of physical activity is an important risk factor for both type 2 diabetes and other chronic diseases. According to a recent study by Hansen et al. (2012), the population levels of physical activity are low in Norway: adults and older people spend most of their time pursuing sedentary activities, and only 20% of the population meets the current physical activity guidelines of 60 minutes per day. Children are more physically active than adolescents and adults and have a lower prevalence of overweight and obesity (NIPH, 2010).

The percentage of regular daily smokers in Norway decreased from more than 40% in 1973 to 21% in 2009 (NIPH, 2010). The standardized mortality rate due to smoking-related causes has also been decreasing since the 1990s. About 5% of the population suffers from alcohol addiction (Ministry of Health, 2009a).

Since the beginning of the 1970s, the average childbearing age has increased by approximately four years, and the average age for first-time birth was 27.5 in 2008 (NIPH, 2010). Teenage pregnancy has declined significantly over the past several decades (Table 1.6). The proportion of abortions among teenagers in Norway in 2010 was about 14.1 per 1000 women. The overall number of abortions has stabilized since the introduction of the Abortion Act in 1978 at between 14 000 and 16 000 per year. In 2010, 15 735 abortions were carried out, a figure equivalent to some 25.2% of all live births (NIPH, 2013a).

The perinatal death rate is one of the lowest in the world and decreased from 14.2 per 1000 births in 1975 to 2.9 per 1000 births in 2010 (WHO, 2012).

**Table 1.6**

Maternal, child and adolescent health indicators, 1980–2010, selected years

	1980	1990	1995	2000	2005	2010
Termination of pregnancy rate (per 1000 women) <sup>a</sup>	14.6	14.7	12.8	13.7	12.9	13.8
Adolescent fertility rate (15–19 years, per 1000 women) <sup>b</sup>	n.a.	n.a.	13	11	9	8
Perinatal mortality rate (per 1000 births)	8.9	5.6	4.6	4.6	3.3	2.9
Neonatal mortality rate (per 1000 live births)	5.1	3.9	2.7	n.a.	2.1	1.7
Post-neonatal mortality rate (per 1000 live births)	3.0	3.1	1.4	n.a.	1.0	0.9
Under-five mortality rate <sup>b</sup>	10	9	6	5	4	3
Maternal mortality rate (per 100 000 live births)	n.a.	3.3	6.6	3.4	3.5	4.9
Syphilis incidence rate (per 100 000 person years) <sup>c</sup>	n.a.	0.05 <sup>e</sup>	0.2	0.95	0.6	1.2 <sup>f</sup>
Gonorrhoea incidence rate (per 100 000 person years) <sup>d</sup>	n.a.	n.a.	4.1	5.6	6.1	9.1

Source: WHO (2012), unless stated otherwise.

Notes: <sup>a</sup> NIPH (2013a); <sup>b</sup> World Bank (2013); <sup>c</sup> Jakopanec et al. (2010); <sup>d</sup> Authors' calculations based on Statistics Norway (2012f); <sup>e</sup> 1992; <sup>f</sup> 2008; n.a. = not available.

The dental health of young Norwegians has improved significantly over the past 25 years (Table 1.7). The proportion of 5-year-olds without decayed, missing or filled teeth (DMFT) was 80% in 2010, while the corresponding figure for 12-year-olds was 50%. There are significant differences in the proportions of children with no DMFT among the counties (Directorate of Health, 2012b).

**Table 1.7**

Percentage of children/adolescents without decayed, missing or filled teeth (DMFT), 1990–2010, selected years

Age group	1990	1996	1999	2005	2010
5-year-olds	61	68	66	71	80
12-year-olds	32	43	48	42	50
18-year-olds	7	12	15	16	17

Source: Directorate of Health (2012b).

Social inequalities in health persist despite significant improvements in the standard of living of all Norwegians (i.e. including disadvantaged population groups) in the last four decades (NIPH, 2010; Fosse, 2012). There are large differences in mortality between the population groups with lower and higher incomes (with higher mortality rates observed among the poor), for both men and women. There are also differences in life expectancy according to education, with better-educated men and women living longer. The mortality rate in children is also 30–40% higher for mothers with less than 10 years of education compared to those with more than 12 years of education (data from early 2000s; NIPH 2010, 2013b).

For both men and women, mortality from cardiovascular diseases and cancer is highest in groups with low income and/or low education. The exceptions are breast and skin cancer – mortality from these types of cancer is highest in the upper social groups. The prevalence of both long-term and chronic diseases is also higher in lower socioeconomic groups: about 50% higher among less well-educated men and between 50% (chronic illness) and 90% (chronic diseases) higher for less well-educated women. People in lower socioeconomic groups also report (data from 2002) having more mental problems and more anxiety and depression than people in higher social classes and also have poorer health behaviour in terms of, for example, smoking, lack of physical activity and consumption of fruit and vegetables (NIPH, 2010).





## 2. Organization and governance

The Norwegian health-care system can be characterized as semi-decentralized. The responsibility for specialist care lies, since 2002, with the state – the owner of four regional health authorities (RHAs), which in turn own the hospital trusts. Municipalities are responsible for primary care and enjoy a great deal of freedom in organizing health services. The role of counties in the provision of care is limited to statutory dental care.

The Ministry of Health is in charge of regulation and supervision of the system but many of these tasks are delegated to various subordinate agencies. The ministry controls the activities of its subordinate agencies through direct steering (in the case of national agencies), ownership arrangements such as budgets and letters of instructions (RHAs), and legislation and financial instruments (counties and municipalities). It ensures that health and social services are provided in accordance with national acts and regulations.

Intersectoral cooperation has become increasingly important over the past few years, especially as a means of preventing social inequalities in health. More attention has also been paid to improving resource allocation (through priority setting and an increased use of health technology assessment), quality issues and patient safety. Strengthening the role of patients and next of kin has been a policy priority since the turn of the millennium, for example, through a comprehensive patient rights legislation regulating issues such as patient choice and complaint procedures.

### 2.1 Overview of the health system

The organizational structure of the Norwegian health-care system is built on the principle of equal access to services for all inhabitants, regardless of their social or economic status and geographical location. This overarching goal has

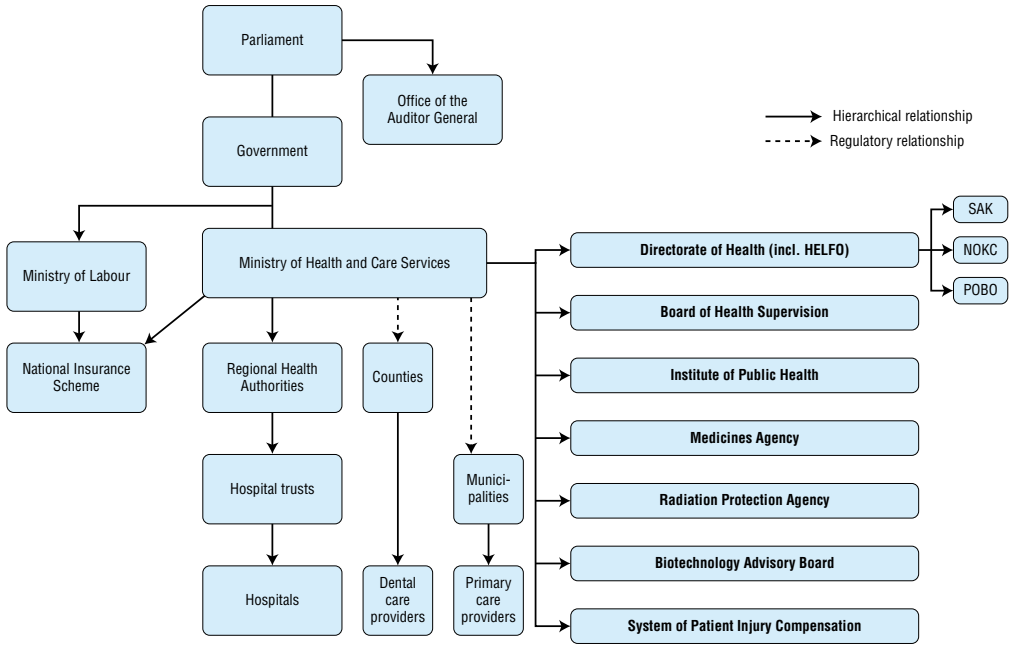
been a long-standing feature of the Norwegian welfare system (Schiøtz, 2008) and has also been embedded in the national health-care legislation and strategic documents (Ministry of Health, 2011b). Health care is organized at three main levels: national/state, health regions (RHAs owned by the Ministry of Health) and municipalities (see Fig. 2.1). A few health-care responsibilities are held by the counties.

The system is regulated through a large number of acts and secondary legislation. Legislation broadly reflects the decentralized nature of the health-care system: specialist care, organized at the level of the RHAs, is regulated by the Specialist Care Act of 1999 and the Health Authorities and Health Trusts Act of 2001; primary care, organized at the level of municipalities, is regulated by the Municipal Health and Care Act of 2011; and dental care, organized at the level of the counties, is regulated by the Dental Health Services Act of 1983. Certain other areas of care that span several organizational levels are regulated by separate acts, for example, the Mental Care Act of 1999 and the Public Health Act of 2011. Other key acts are the Patients' Rights Act of 1999 and the National Insurance Act of 1997. The latter regulates financing and entitlement to certain non-medical benefits in case of sickness, maternity, disability, rehabilitation or occupational injury.

Fig. 2.1 presents an overview of the health system. At the national level, the parliament serves as the political decision-making body. The Office of the Auditor General is an independent agency that acts as the supreme audit institution and the supervisory body of the parliament. Its main tasks are to monitor public assets and ensure that these are used and administered according to sound financial principles, in keeping with the decisions and intentions of the parliament. Since the 2002 hospital reform (see section 2.2), the office has had a separate department for health services.

The government decides on general national priorities and proposes bills and the national budget to be discussed by the parliament. Each member of the parliament serves on one of the 12 permanent committees and most proposals presented to the parliament are first prepared by a committee. The Standing Committee on Health and Care Services is responsible for matters relating to health services, care services, public health, drug and alcohol policy, and pharmaceuticals.

**Fig. 2.1**  
Overview of the health system



*Notes:* See section 2.3 for more information about the key actors included in Fig. 2.1. NOKC = Norwegian Knowledge Centre for the Health Services; POBO = Health and Social Services Ombudsman; SAK = Norwegian Registration Authority for Health Personnel; HELFO = Norwegian Health Economic Administration

The overall responsibility for the health-care sector rests, at the national level, with the Ministry of Health and Care Services. The ministry determines the national health policy, prepares and oversees legislation, decides on the allocation of funds within the health sector (allocation of resources to health and other sectors is the responsibility of the Ministry of Finance), and implements national health policy with the help of several subordinate institutions (Directorate of Health, 2012c).

The Ministry of Labour is indirectly involved in the health-care system, mainly through the Labour and Welfare Administration (NAV), which administers different benefit schemes within the National Insurance Scheme (NIS), such as sick leave and disability compensation. Since 2009, the Ministry of Health and the Directorate of Health have been responsible for the health-care part of the NIS budget. This part of the budget is administered by the Norwegian Health Economics Administration (HELFO). The roles of the main actors in the system are described in section 2.3.

## 2.2 Historical background

Well into the twentieth century, the financing and organization of the health-care system reflected the fact that the country remained poor and that the majority of the population lived in rural, sparsely populated areas. The first significant number of physicians established themselves during the second part of the eighteenth century. Hospital-like institutions started developing at the same time but physicians and medical personnel were still rare in rural areas. Municipalities and voluntary organizations played an important role as welfare and health-care providers and the role of the state was limited (e.g. to employment of physicians as public ‘officers’, known as district medical officers, in the area of preventive public health) (Schjøtz, 2003; Berg, 2005; Johnsen, 2006).

The beginning of the twentieth century was marked by an increase in public responsibility for health matters at both state and municipal levels. As the population grew and industrialization increased, hospitals were built, especially in urban areas. These were owned and run either by voluntary organizations, the church, municipalities or the state. Health-care insurance schemes developed, based on individual applications. The Practitioners Act of 1912 provided equal access to physicians’ services to anyone, regardless of their income and settlement.

After the Second World War, the organizational structure of the health-care system changed significantly at the state level. The Directorate of Health was established in 1945 within the Ministry of Social Affairs as a regulatory instrument of the medical professionals – it gave physicians a unique role as policy and medical practitioners (Berg, 2009). Undoubtedly, the Directorate’s work and the health policy were inspired by the United Kingdom’s Beveridge Report (Kuhnle, 2006). The establishment of the NIS in 1967 (which was incorporated into the NAV in 2006) was an important step towards achieving universal coverage of welfare services.

While economic growth until the 1970s was just below the OECD average, the economy grew much faster after the discovery of petroleum resources in the North Sea. The role of hospitals widened with increasing provision of specialized services and a growing provision of ambulatory care services. The three-tier hospital structure, consisting of central, regional and national (i.e. specialist) hospitals, was developed with the aim of increasing efficiency. The 1969 Hospital Act made counties responsible for planning, building and

managing hospitals in their geographical areas (they retained this responsibility until 2002; see section 2.4). At the same time, central government gained control of two large tertiary level hospitals.

One of the main difficulties with regard to primary care was in achieving sufficient coverage of physician services as required by the Practitioners Act of 1912. The Municipalities Health Services Act of 1982 made municipalities responsible for all primary care services, marking the end of the district medical officer system (Schjøtz, 2003). The responsibilities of municipalities have since then been further expanded to include environmental health services, nursing homes (since 1988) and the care of people with developmental disabilities (since 1992). In 2001, the regular general practitioner (RGP) scheme was introduced, giving individuals the right to choose a regular GP (i.e. sign onto the list of the GP of their choice; see sections 2.9.2 and 5.1.2). From 2012 municipalities have been given a larger financial responsibility for patients ready for discharge from hospitals (coordination reform; see section 6.1.5).

The second part of the twentieth century can be described as a period of continual public sector reforms. Similar reforms, often seeking to achieve an optimum balance between the state and local government, have also been taking place in the health sector and continued into the early 2000s (see section 2.4). More emphasis, through action plans and legislation, has been placed on changes in the delivery and organization of health care. For example, in 1998, a four-year action plan for the elderly set out objectives for the development of local nursing and care services, and in 1999, a seven-year action plan for mental health was adopted with the aim of improving the organization and provision of mental care services. Since 2001, 29 defined health personnel groups have been regulated by the Health Personnel Act of 1999 (in force since 2001). In the same year, both the Patients' Rights Act and Mental Care Act came into force. In 2002, the Norwegian Hospital Reform was implemented and responsibility for hospital care was transferred from the counties to the five RHAs. The reform divided the country into five health regions (now four).

Since 2008, increased reform efforts have been devoted to improving coordination between the municipal level and the RHAs (coordination reform). Increased attention has also been directed towards quality of care and patient safety issues. These most recent issues are described in more detail in section 6.1.

## 2.3 Organization

### 2.3.1 Central governance of the health system

The Ministry of Health sets national health policy, prepares major reforms and proposals for legislation, monitors their implementation and assists the government in decision-making. As the owner of the RHAs, which in turn own the hospital trusts, the ministry has direct responsibility for the provision of specialist care. It is also responsible for overseeing the provision of all other types of care and their coordination.

The ministry has administrative responsibility for a number of subordinate agencies (Table 2.1).

### 2.3.2 Regional health authorities and hospital trusts – specialized health care

There are four RHAs in Norway: Northern Norway RHA (Helse Nord), Central Norway RHA (Helse Midt Norge), Western Norway RHA (Helse Vest) and, the largest, South-Eastern Norway RHA (Helse Sør Øst), covering approximately 55% of the population.

The RHAs are responsible for the provision of specialized care, including in both somatic and mental health institutions, as well as other specialized medical services, such as laboratory, radiology and ambulatory services, and special care for persons with drug and alcohol addictions. The RHAs own the health trusts; there are currently 27 health trusts, out of which 21 are hospital trusts (there are also four pharmacy trusts, a trust for pre-hospital services and an IT trust – Helse Vest IKT).

**Table 2.1****Agencies subordinate to the Ministry of Health and Care Services**

<b>Name of agency</b>	<b>Key responsibilities</b>
Directorate of Health (Directorate)	<ul style="list-style-type: none"> <li>• Implements national health policy through integrated and targeted activities across services, sectors and administrative levels</li> <li>• Advises central authorities, municipalities, RHAs and the voluntary sector</li> <li>• Is responsible for direct payments to various health service providers (e.g. through the system of activity-based financing and the HELFO)</li> <li>• Prepares ordinances, national guidelines and campaigns</li> <li>• Is responsible for the work of the Health and Social Services Ombudsmen (POBO)</li> </ul>
National Board of Health Supervision (National Board)	<ul style="list-style-type: none"> <li>• Provides general supervision of health and social services at national and local levels (through Offices of the County Governors)</li> <li>• Monitors the population's need for health and social services</li> </ul>
National Institute of Public Health (NIPH)	<ul style="list-style-type: none"> <li>• Provides monitoring, expertise and research in the areas of epidemiology, infectious disease control, environmental medicine, forensic toxicology and drug abuse</li> </ul>
Norwegian Medicines Agency (NoMA)	<ul style="list-style-type: none"> <li>• Supervises new and existing medicines and the supply chain, including production, trials and marketing</li> <li>• Grants/withdraws market authorizations</li> <li>• Monitors and ensures cost efficient, effective, documented use of medicines</li> <li>• Regulates prices and trade conditions for pharmacies</li> <li>• Provides advice on reimbursement of drugs outside specialist care</li> </ul>
Norwegian Radiation Protection Authority	<ul style="list-style-type: none"> <li>• Monitors the use of radioactive substances and fissile material</li> <li>• Coordinates contingency plans against nuclear accidents and radioactive fallout</li> <li>• Monitors natural and artificial radiation in the environment and workplace</li> <li>• Disseminates information about the occurrence, risk and effects of radiation</li> <li>• Provides assistance to all ministries on matters related to radiation, radiation protection and nuclear safety</li> </ul>
Norwegian Biotechnical Advisory Board	<ul style="list-style-type: none"> <li>• Evaluates the social and ethical consequences of modern biotechnology and supports usage that promotes sustainable development</li> </ul>
Norwegian System for Patient Injury Compensation (NPE)	<ul style="list-style-type: none"> <li>• Handles compensation claims for patients who have sustained an injury while receiving health-care services</li> <li>• Collects and collates data on such injuries with the aim of providing a statistical basis for quality improvement and injury prevention work</li> <li>• Works to inform the public, patients and health service workers about the patient injury compensation scheme</li> </ul>
Norwegian Registration Authority for Health Personnel (SAK)	<ul style="list-style-type: none"> <li>• Provides work authorizations/licences for 29 categories of health-care personnel</li> </ul>
Norwegian Knowledge Centre for the Health Services (NOKC)	<ul style="list-style-type: none"> <li>• Provides decision-makers and health personnel with synthesized research evidence on the effects of health interventions</li> <li>• Promotes and monitors patient safety and quality of services</li> </ul>

Source: Agencies' websites.

### **2.3.3 Counties – dental care and public health**

In the area of health care, counties are mainly responsible for the provision of statutory dental care (see section 5.12). They also have some responsibilities with regard to general public health (see section 5.1). Overall, their role in the provision of health-care services is limited.

### **2.3.4 Municipalities – primary care**

Municipalities are responsible for the provision and funding of primary care, including rehabilitation, physiotherapy and nursing, and after-hours emergency services. They are also responsible for a wide range of public health and preventive measures (see section 5.1).

There is no direct command and control line from central authorities down to the municipalities and the latter have a great deal of freedom in organizing primary care services. However, some responsibilities have been retained at the central level, mainly to maintain equal access to public services. For example, all decisions regarding GP funding continue to be determined by the central government (see section 3.7.2).

### **2.3.5 Private health-care sector**

Several private actors are involved in the provision of health-care services. Their involvement at the level of primary care is substantial: the majority of GPs are self-employed but are in most cases fully embedded in the public system through contracts with the municipalities (see section 5.3). On the other hand, private profit-making providers play a small role in the provision of specialist care: less than 2% of hospital beds are in private for-profit hospitals (for day-care surgery the percentage is slightly higher). Other services provided by for-profit institutions include long-term nursing care (about 10% of nursing homes in 2010), some support services such as radiology and laboratory services (80% and 60% of GP referrals for, respectively, radiology and laboratory services were made to for-profit facilities in 2010) (Directorate of Health, 2012b).

Not-for-profit agencies typically include hospitals or institutions set up as foundations that, in principle, are financed and seen as an integral part of public health services, e.g. the Diaconal hospital foundation in Oslo, which is owned by the Norwegian Church.



### 2.3.6 Patient organizations

Patients are associated in a number of organizations, ranging in size and the degree of their professional organization (Winblad & Ringard, 2009). The majority of organizations are related to particular diseases or disease groups. The Norwegian Patient Association, founded in 1985, has a broader scope. It works to inform individual patients and their relatives about their legal rights and to promote patient rights through the public consultation processes organized by the authorities and through lobbying at the national level.

### 2.3.7 Associations of health-care professionals

More than half of Norway's employees are associated in trade unions (1.7 million in 2012 according to Statistics Norway (2013f)). The majority of unions are grouped in four confederations: LO, UNIO, YS and Akademikerne. Associations for health care workers can be found in all four confederations. The main associations are the Norwegian Medical Association (approximately 27 000 members), the Nurses Union (90 000), the Dental Association (6300) and the Psychological Association (7000). All these organizations function both as trade unions and professional associations. As trade unions, they aim to safeguard the financial, political and professional interests of their members. As professional associations, they are involved in matters concerning a wide range of professional issues, such as national health policy, education and ethics.

### 2.3.8 Provider organizations

Health-care providers are associated in two organizations: Spekter and the Norwegian Association of Local and Regional Authorities (KS). Within health care, Spekter represents both public and private hospitals. Together with the four confederations of trade unions, it plays an important role in the national salary negotiations for the employees it represents (see section 3.7.2). It also participates in the development of the legal framework regulating general employment conditions. The KS is the only employers' association and interest organization for the municipalities, counties and local public enterprises in Norway. Its main tasks are to advocate the interests of its members to the central government (including collective bargaining on behalf of its members), parliament, labour and other organizations; to advise and inform its members about all matters and developments of importance to local government; and to facilitate the exchange of experience between its members. Since 2006, all municipalities and counties, as well as approximately 500 public enterprises, have been members.

### 2.3.9 Policy process

Ideas for new policies may originate both inside and outside the political system. For ideas that are more controversial or may result in substantial changes, the government often appoints a special commission of experts to elicit their opinion on the topic. The commission delivers an official report (i.e. Norwegian Official Report, known by the abbreviation NOU) to the government. The responsible ministry (the policy process is similar for all sectors and in the case of health policies the responsible ministry is the Ministry of Health) considers the issue and may either decide to pursue the idea further and submit it for public consultation or to abandon it. During the consultation process, the ministry sends a draft of the policy to individuals and organizations that are likely to be affected by the policy. After the consultation process, the ministry decides whether or not to continue its work on the draft. If the decision is affirmative, a draft is considered by the Council of State (i.e. the Cabinet). The policy is subsequently submitted to parliament either as a proposition (in the case of the state budget or legislative acts, a bill) or as a report (i.e. a White Paper). The parliament sends it to one of its standing sub-committees, which in turn delivers its recommendation to the parliament for consideration in a plenary discussion. The parliament may accept the proposal (which leads to its enactment if it is an act, or adoption in the case of a White Paper), propose amendments, or reject it. If the policy is accepted, the ministry becomes responsible for its implementation and evaluation.

## 2.4 Decentralization and centralization

Scandinavian health-care systems are often characterized as being run according to a decentralized national health service (NHS) model: funding is raised by taxation and the main actors are public (Rice & Smith, 2002; Magnussen, Vrangbæk & Saltman, 2009). In Norway, county – and especially municipal – governments play an important role in the allocation of resources and the provision of care. While in the second part of the twentieth century, a substantial amount of devolution of power from the central to the municipal level took place, both decentralization and centralization tendencies can be observed in the 2000s.

The funding system for municipalities was changed in 1986 when about 50 different earmarked grants were replaced by block grants (Ministry of Local Government and Regional Development, 2005). This gave municipalities

a greater degree of autonomy in the global transfer from the state. The municipalities also have a right to levy taxes on the population in order to finance their activities (see section 3.3.3).

The 2002 reforms shifted responsibility for specialist care from the counties to the state. The country was divided into (initially five) RHAs and hospitals were organized as hospital trusts, which were established at the same time (Hagen & Kaarbøe, 2006; Magnussen, Hagen & Kaarbøe, 2007). Other centralization tendencies included shifting the responsibility for alcohol and drug treatment from the counties to the national level in 2004 and the reduction of the number of RHAs from five to four in 2007. Moreover, a number of new bodies were set up at the national level (the Directorate of Health, NIPH and NoMA were established in 2001–2002), often by merging smaller administrative bodies into larger ones.

On the other hand, some further decentralization measures can be observed since the early 2000s. For example, the 2002 reform brought decentralization of the hospital management process (day-to-day running of the enterprises is the responsibility of the general manager and executive board) (Johnsen, 2006) and the liberalization of the pharmaceutical market started in 2001 with the new Pharmacy Act (see section 2.8.4).

## 2.5 Planning

The National Health Plans (NHPs), published since the 1980s, are the key strategic planning tools in the health-care sector. The latest plan was published in 2011 (see section 7.1). The plans present the current status of the health-care system, including the key challenges, and suggest policy goals and measures aimed at meeting them (Nylenna, 2007). Their planning horizon is normally four years, which is longer than the planning horizon of the annual health-care budgets. As broad policy statements, NHPs are not formally evaluated.

The National Council for Quality Improvement and Priority Setting in Health Care (see section 2.7.3) advises the government on public health issues and on issues of relevance to the health system as a whole, such as the establishment of a national system for the introduction of new technologies in hospitals (see section 6.1.6).

### 2.5.1 Planning of human resources

The Ministry of Health is responsible for the planning of human resources for health. The Directorate of Health assists the ministry in matters relating to health-care personnel. In addition, the hospital trusts and municipalities have a responsibility to plan, recruit and retain human resources.

The Ministry of Health provides input regarding personnel and skill needs to the Ministry of Education, which is responsible for determining the educational capacity for different health personnel groups. This input is partly based on a model framework (called Helsemod) for estimating future supply and demand for 20 different groups of health-care personnel. This model is developed by Statistics Norway in cooperation with the Directorate of Health. It takes into account a number of demand factors (demographic trends, economic growth, planned political reforms, patterns of consumption of health-care services) and supply factors (workforce participation, working hours, student admissions, study completion rates, exit through injury or death) (Rø, 2012).

### 2.5.2 Planning and distribution of infrastructure

The overall responsibility for the planning of infrastructure and capital investment in public health-care providers lies with the RHAs for specialist care and the municipalities for primary care. Both the RHAs and the municipalities have a wide authority to plan their own infrastructure. RHAs have to consult the Ministry of Health for major investments in infrastructure (e.g. the building of new hospitals) (see section 4.1).

## 2.6 Intersectorality

Traditionally, there have been no direct mechanisms to ensure that health is taken into account by ministries other than the Ministry of Health. However, various ministries are indirectly involved in issues of relevance to the health-care system. For example, the Ministry of Labour is involved through the NIS and occupational health activities (see section 5.1.5); the Ministry of Education is involved through planning of the health workforce and provision of health education (see section 2.5.1); the Ministry of Finance, through taxation, influences “unhealthy behaviours”, such as tobacco and alcohol consumption; and the involvement of the Ministry of Agriculture and Food is through policies and measures related to food and water safety.

National strategies and national action plans encompassing more than one policy area have become increasingly important. Strategies and action plans are developed through cooperation and coordination between the ministries. Each involved ministry is then given responsibility for implementing and monitoring a specific part of the plan. A recent example is the National Strategy for Prevention of Infections in the Health Service and Antibiotic Resistance (2008–2012) which was the result of cooperation among the following five ministries: the Ministry of Labour, the Ministry of Fisheries and Coastal Affairs, the Ministry of Agriculture and Food, the Ministry of the Environment and the Ministry of Health, and encompasses various sectors and administrative levels. Intersectoral cooperation is also seen as an important tool in the efforts aimed at tackling inequalities in health (see section 2.6.1).

### **2.6.1 Inequalities in health**

Health inequalities are currently high on the policy agenda in Norway. Focus on inequalities started in 2003, with the publication of a White Paper on public health policies (Ministry of Health, 2003b), which included a specific chapter on the issue. The National Strategy to Reduce Social Inequalities in Health (published as a White Paper in 2007) was the second big step in addressing health inequalities in Norway (Ministry of Health, 2007a) as it was the first report based on the cross-sector reporting system that monitors measures aimed at reducing social inequalities. The key actors working on health inequality issues are the Ministry of Health, the Directorate of Health and the NIPH.

The 2011 Public Health Act, which is one of the key components of the coordination reform, aims explicitly to contribute to societal development that promotes health and reduces social inequalities in health (see sections 5.1 and 6.1). The municipalities, counties and central authorities are seen as important actors in achieving this goal. The Act emphasizes intersectoral cooperation through “health in all policies” initiatives. The recent White Paper on public health has a broad scope and is oriented on the social determinants of health and their distribution across society (Ministry of Health, 2007a).

## 2.7 Health information management

### 2.7.1 Information systems

Various types of health data are collected by national registers. These central registers cover the entire population and include a wide range of data (Table 2.2). Information from these registers is analysed and published, including as a part of public statistics. In 2012, there were 15 central registers. None of the registers require patients' consent in order to collect data and reporting is mandatory for health-care providers. The quality of data in these registers is in general considered to be high (NIPH, 2009).

Statistics Norway is the central body responsible for collecting, analysing and disseminating official statistics. According to the Statistics Act of 1989, Statistics Norway has the power to decide what should be collected in the official statistics and is responsible for organizing all official statistics in Norway. Statistics Norway is also the primary provider of statistics to international collaborators such as Eurostat and WHO.

The NIPH bears responsibility for ensuring the high quality of and easy access to data in most of the registers, as well as for assuring that the privacy of individual data is protected (according to the Personal Health Data Filing System Act of 2001).

In addition to the central registries there are several medical databases (*kvalitetsregistre*) that collect information about health outcomes and other information related to specific treatments or diagnoses – these data are used to assess effectiveness of different (primary or specialist) treatments or health-care institutions following an episode of care. In December 2012 there were about 200 medical databases, of which 33 had the status of an official national database. These databases have been set up by initiatives from individuals, hospitals or educational institutions, and they provide valuable information for assessing the effects of different treatments and benchmarking production units down to the ward level. They are also used for quality assurance, research and improvement of services. In 2010, a pilot project was launched by the Ministry of Health with the aim of modernizing and coordinating the mandatory national clinical and health registries maintained by the NIPH. The project is coordinated with the National Strategy for Health Registries (see section 6.1.4).

**Table 2.2**

## Overview of national health registries

<b>National health registries</b>	<b>Year established</b>	<b>Bodies responsible for collection and analysis</b>	<b>Types of data</b>
Cause of Death Registry	1925/1951	NIPH (collection); Statistics Norway (analysis)	All deaths as reported in doctors' death certificates
Medical Birth Registry of Norway	1967	NIPH	All births in Norway
Register of Pregnancy Termination	1979/2007	NIPH	All hospital-induced abortions
Surveillance System for Communicable Diseases (MSIS)	1977	NIPH	About 60 different communicable diseases
The Central Tuberculosis Registry	1962	NIPH	Data on tuberculosis – a part of MSIS (2002)
Immunization Registry	1995	NIPH	Vaccinations in the childhood immunization programme
Surveillance System for Antimicrobial Drug Resistance (NORM)	2003	NIPH (collection); University Hospital North Norway (analysis)	Data about antibiotic resistance of microbe isolates
Norwegian Surveillance System for Infections in Hospitals (NOIS)	2005	NIPH	Surgical site infections in patients having undergone one of six common surgical procedures
Prescription Database (NorPD)	2004	NIPH	Data on prescribed drug use in humans and animals
Cancer Registry of Norway	1952	South-Eastern RHA (collection); Cancer Registry of Norway (analysis)	Information on all persons diagnosed with cancer in Norway
Norwegian Patient Registry (NPR)	1997/2007	Directorate of Health	Information on all inpatient and outpatient care, and substance abuse treatment
Information System for the Nursing and Care Sector (IPLoS)	2006	Directorate of Health (collection); Statistics Norway (analysis)	Patient information on local nursing and care services
ePrescription	2008	Directorate of Health (collection); Ergo Group (analysis)	Electronic prescriptions between doctors and pharmacies
Registry of the Armed Forces Medical Services	2005	Ministry of Defence (collection); Armed Forces Medical Services (analysis)	Health information on personnel serving in the armed forces
Norwegian Cardiovascular Disease Registry	2010	NIPH	Inpatient and outpatient visits for patients with cardiovascular disease

Source: NIPH website ([www.fhi.no](http://www.fhi.no)) and websites of individual registries.

### The Electronic Health Library

The Electronic Health Library ([www.helsebiblioteket.no](http://www.helsebiblioteket.no)) is a publicly funded online service for health-care professionals and students. It provides free access to point-of-care tools, guidelines, systematic reviews, clinical guidelines, scientific journals and a wide variety of other full-text resources on a wide range of topics (Nylenna et al., 2010).

## 2.7.2 Health technology assessment

The NOKC is responsible for the assessment of health technologies in Norway. It uses a health technology assessment (HTA) process originally established by the Norwegian Centre for Health Technology Assessment (SMM), which has been part of the NOKC since 2004.

The process includes an assessment of the documentation on clinical and cost-effectiveness. The selection of topics is based on the following criteria: the burden of disease; variation in clinical practice; economic consequences; relevance (for policy-makers); and the availability of at least some information on the topic (although it was realized that topics with little or no documentation may also be important) (Mørland, 2009). The number of HTA reports has grown substantially since the establishment of the NOKC, from an average of 5 per year between 1997 and 2003 to between 20 and 30 per year currently (NOKC, 2013).

Initially, the key task of the SMM was to assess the clinical effectiveness of medical technologies for clinicians (Mørland, 2009). With rising health-care expenditure, the importance of cost-effectiveness has increased and the user base of HTAs has expanded from the micro level (clinicians) to the meso level (managers). Furthermore, at the national (macro) level, evidence-based policy-making has become more prominent, as demonstrated through the work of the National Council for Quality Improvement and Priority Setting in Health Care (see section 2.7.3) (Mørland, Ringard & Røttingen, 2010).

HTA will also play an important role in the national system for the introduction of new technologies, which is currently being established following a recommendation from the National Council for Quality Improvement and Priority Setting in Health Care. The new system will be supported by rapid/mini-HTA reports (produced at the level of local hospitals), as well as “full-fledged” HTA reports prepared by the Norwegian Medicines Agency (NoMA) and the NOKC. The aim of the mini-HTA reports is to ensure that patients have fast access to new and effective hospital treatments and that inefficient or dangerous treatments can be quickly removed. The establishment of the new system was given high priority by the government and it was launched in early 2013 (see section 6.1).



### 2.7.3 Priority setting

Discussions on priority setting (i.e. how best to allocate scarce resources) within the health-care system began in Norway in the 1980s and a framework for priority setting was developed over the next two decades. The last version of the guidelines (Ministry of Health, 1997), introduced three core criteria: severity of the condition; expected outcome of the intervention; and a reasonable cost-effectiveness ratio for the intervention. These three criteria have since then been codified and included in the Patients' Rights Act of 1999.

The National Council for Quality Improvement and Priority Setting in Health Care, originally established in 2000 and then restructured in 2007, is an advisory body for priority setting. Its establishment reflects the government's ambition to: clarify the roles and responsibilities of actors involved in priority setting; improve interaction between various levels of decision-making; and promote transparency with respect to priority-setting decisions. The council is made up of 26 people in leading positions in hospitals, primary health care, national health authorities, and professional and patient organizations, and it meets five times a year. It has an advisory function in issues pertaining to quality and priorities in the health services but cannot issue instructions on how to follow up on any of its recommendations (Ringard, Larsen & Norheim, 2012). Topics for discussion may be brought forward by individual Council members, the Secretariat (located within the NOKC) or the public (Mørland, Ringard & Røttingen, 2010; Ringard, Larsen & Norheim, 2012).

## 2.8 Regulation

### 2.8.1 Regulation and governance of third-party payers

The key third-party payer in the Norwegian health-care system is the NIS. Since 2009 the health-care part of the NIS budget has been under the responsibility of the Ministry of Health. It is administrated by the Directorate of Health (i.e. HELFO) and is regulated by the 1997 National Insurance Act.

Other third-party payers are the providers of voluntary health insurance (VHI). The activity of private for-profit VHI is regulated in the general insurance legislation (the current law dates from 2005). For more information on VHI, see section 3.5. Except for the NIS and VHI providers there are no other third-party payers that are responsible for health-care provision in Norway.

## 2.8.2 Regulation and governance of providers

### **Governance and regulation of specialist care**

The Ministry of Health is responsible for statutory specialist care. It owns the RHAs, which are separate legal subjects, governed by independent boards. The activity of the RHAs is regulated in the 1999 Specialist Care Act, the 2001 Health Authorities and Health Trusts Act, and through the general meeting (“foretaksmøte”) between the minister and representatives of the RHAs. The RHAs own health trusts. The latter are independent legal entities with their own responsibilities as employers. They have an executive board and a general management with clear powers of authority.

The ministry provides instructions to the four RHAs through an annual “letter of instruction”. The letter is prepared individually for each RHA and is published immediately after the parliament’s decision on the national budget. The document contains tasks and specific requirements for the RHAs to follow. For example, the 2013 letter of instruction to the South-Eastern RHA contains information on the total budget placed at its disposal and some notes on specific uses of this allocation, including comments on the areas of services the ministry would like the RHA to focus more on in the coming year (Ministry of Health, 2013b).

The Directorate of Health also issues an annual circular letter to the RHAs. The letter is based upon the national budget and is intended to supplement the letter of instruction from the ministry. For example, the circular letter of 2013, which is addressed to all four RHAs, contains recommendations on issues relating to quality of care, priority setting and the implementation of e-health measures (Directorate of Health, 2013b).

### **Governance and regulation of primary and county level care**

The governance of the municipalities and counties is in practice shared between a number of different ministries, such as the Ministry of Health, the Ministry of Labour and the Ministry of Local Government and Regional Development. The municipalities have a great deal of freedom in organizing health services. There is no direct command and control line from central authorities down to the municipalities (Johnsen, 2006). The main task of the central government is to assure the high quality of services across the municipalities through funding arrangements and legislation (e.g. the 2011 Municipal Health and Care Act).

The Directorate of Health issues an annual circular letter to the municipalities (similar to the one issued to RHAs). The circular letter of 2013 contains, for instance, recommendations on issues of quality of care, priority setting, and the implementation of different issues falling within the responsibility of the municipalities (Directorate of Health, 2013b).

### **Quality and patient safety**

The 1999 Specialist Care Act states that every hospital must have a quality assurance commission as part of its mandated system of internal control. Some institutions may also have quality subcommittees for each department. These commissions promote quality standards but are not responsible for ensuring that quality standards are met. The sole responsibility in this area rests with the hospital's management and staff, from the physician and nurse handling the patient, through to the chief of department and up to the hospital's director.

The 2011 Municipal Health and Care Act includes a similar requirement for primary health-care providers. Each municipality must ensure that services are provided in a coordinated manner and that health-care personnel have the necessary competence. Every institution that provides health and care services is also expected to work systematically to improve the quality of services and patient safety.

Systematic quality assurance is a legal requirement in Norway. Supervision of providers is consequently increasingly targeted at establishing whether systems of internal control have been implemented and whether they are functioning as required. The National Board of Health Supervision, together with its 19 County Medical Offices, has overall responsibility for the supervision and monitoring of health services in Norway. Its activities are governed by the Supervision of Health Services Act of 1984. The system audit is based on NS-ISO 10011 (1992) guidelines for auditing quality systems. The audit's focus is on: how the provider ensures an appropriate quality of service; what routines and procedures are in place; and how these are implemented and monitored in order to ensure continuous compliance and, when necessary, improvement (National Board of Health Supervision, 2002).

Both private and public hospitals are, according to the Specialist Care Act of 1999, obliged to report serious events (e.g. unexpected deaths) to the National Board of Health Supervision. From 1 July 2012, a new National Reporting and Learning System (NRLS) has been in place at the NOKC. Hospitals and other providers of specialized care are obliged to report serious adverse events as well as events that could have resulted in patient harm (i.e. near misses) caused by the delivery of health care or where injury was inflicted on one

patient by another. The NRLS was set up to provide advice to the hospital reporting the incident and will also make national analyses and issue warnings and recommendations based on analyses of the reported events. Providers of primary care are currently excluded from this system.

National campaigns are another tool for improving patient safety. In January 2011, the Ministry of Health launched the Norwegian patient safety campaign “In Safe Hands”. This three-year campaign aims to reduce patient harm, and involves both specialist and primary health-care services. All health-care trusts are expected to implement all the interventions prescribed by the campaign, within the campaign period. Primary health-care providers are invited to implement all relevant interventions. The goal is to involve 25% of all municipalities by the end of 2013. The campaign will be followed by a five-year patient safety programme starting in 2014 (see section 6.2).

The 2011 Municipal Health and Care Act gave the Directorate of Health the sole responsibility to develop, disseminate and maintain national clinical guidelines. National guidelines are not legally binding but provide normative guidance on recommended courses of action. The RHAs, municipalities and management of health-care institutions are responsible for facilitating the implementation of national guidelines. There are currently 400 guidelines for GPs, local health centres, nursing homes, hospitals, etc. (for very specific interventions). These are distributed to health-care personnel in print and are also available online via the Electronic Health Library (see section 2.7.1).

### **2.8.3 Regulation of human resources**

The Norwegian Registration Authority for Health Personnel (SAK) was established in 2001 (according to the provisions of the Health Personnel Act of 1999) and is responsible for the licensing and authorization of health-care personnel (currently 29 categories). While licences impose one or more limitations with respect to duration, independent or supervised practice, an authorization represents a full and permanent approval. If the National Board of Health Supervision finds serious failure or indefensible neglect of duty it may issue a warning or, in particularly serious circumstances, withdraw the licence or approval (National Board of Health Supervision, 2002).

In general, except for GPs, there is no relicensing of health-care personnel in Norway (GPs are authorized as medical doctors and licensed as GPs when they complete their specialization in general practice; all other medical specialists are authorized). GPs are required to apply for recertification every five years to retain their licence. In order to get relicensed, the GP has to document a

minimum level of service in general medicine, and various other activities such as the completion of mandatory courses (e.g. in acute medicine) (see section 4.2.2).

Foreigners seeking to practise in one of the regulated professions in Norway (i.e. the 29 professions mentioned above) must have their education recognized by the Directorate of Health (for medical specialists) or SAK (for other health-care professionals). In the case of professions not regulated by law, the Norwegian Agency for Quality Assurance in Education (NOKUT) assesses foreign qualifications (diplomas and grades) to compare whether they are equivalent to qualifications awarded in Norway.

## 2.8.4 Regulation and governance of pharmaceuticals<sup>1</sup>

### Regulation of pharmaceutical products

The pharmaceutical sector is one of the most regulated sectors in Norway. The Norwegian Medicines Agency (NoMA) is in charge of granting/withdrawing marketing authorizations and market vigilance. The regulation of pharmaceuticals is harmonized with relevant EU regulations (Norway is part of the EEA). There are thus four procedures applicants may use when applying for marketing authorization: the national procedure; mutual recognition procedure; decentralized procedure; or centralized procedure. The majority (approximately 60% in 2012) of applications are currently handled through the mutual recognition or decentralized procedures (NoMA, 2013).

All pharmaceutical companies must apply for a marketing authorization in order to sell their products on the Norwegian market. The application (national procedure) is filed to the NoMA and is normally valid for five years. The application must contain information on the quality, safety and (medical) efficacy of the product. A marketing authorization will not be issued if the potential risks associated with using a product outweigh its potential benefits. Since 2012, the total time limit for the national procedure has been harmonized with the decentralized procedure and is set to 210 calendar days (excluding “clock stop”).

The NoMA decides on the classification of pharmaceuticals. There are four prescription groups of pharmaceuticals: group A (narcotic drugs, e.g. morphine), B (addictive medicines, e.g. valium), C (other prescription-only drugs) and F (over-the-counter (OTC) drugs) (see section 5.6).

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<sup>1</sup> Based on PHIS (2011) unless otherwise stated.

### **Pharmacovigilance**

The NoMA is responsible for the detection and monitoring of adverse reactions of all medicinal products approved in Norway. It also contributes to the European Medicines Agency's Pharmacovigilance Risk Assessment Committee (PRAC).

A pharmaceutical company that markets medicines in Norway (i.e. the marketing authorization holder, MAH) has the primary responsibility for the effects and safety of their medicinal products, and must ensure that it has an appropriate system of pharmacovigilance and risk management in place for those products. In order to fulfil these requirements, the MAH must ensure that all information relevant to assessing the potential risks and benefits of their products is periodically reported to the authorities through periodic safety update reports (PSUR) and continuously through expedited reporting of individual case safety reports (ICSRs). According to the 1992 Medicinal Products Act, physicians and dentists must also report adverse drug reactions to the NoMA.

### **Patent protection**

Norway is a signatory of the 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which regulates pharmaceutical patent protection between countries. Patent protection is normally granted for 20 years, which is the same as in the EU. Patents can cover: the active substance; how the active substance is produced; medical preparation (when the active substance is not new but the application is); and new medical uses (i.e. new indications) for existing drugs and formulations (e.g. tablets). A generic product cannot be put on the market if the patent has not expired (even if the market authorization period has expired).

### **Advertising**

The advertising of pharmaceuticals is regulated in the 1992 Medicinal Products Act and is monitored by the NoMA. Direct advertising to patients is only allowed (including advertising on the Internet) for OTC pharmaceuticals. Promotion of OTC drugs outside pharmacies is restricted and staff handling these medicines are neither allowed to give patients any kind of recommendation nor to engage in marketing the products. Promotion of OTC drugs within the outlets is also restricted. Advertising to health-care professionals cannot be combined with handing out objects, gifts, services, awards or other items of economic value. Any supply of free medicine samples to doctors is strictly regulated.

### **Regulation of pharmacies and wholesalers**

The activities of pharmacies are regulated by the 2000 Pharmacy Act, which came into effect in 2001, and its associated amendments and regulations. The Act liberalized the pharmaceutical market: limitations on the ownership of pharmacies were removed (since 2001 anyone, not just pharmacists, can own a pharmacy although only pharmacists can run pharmacies), as were the limitations on establishing new pharmacies (until 2001 the NoMA regulated the number of pharmacies).

Each pharmacy must have two separate licences: one licence to own the pharmacy (the proprietor's licence) and the other to run the pharmacy (the operating licence). Only pharmacies or medicinal outlets (controlled by pharmacies) may carry out the retail sale of pharmaceutical products (although there may be exceptions, e.g. for pharmaceuticals intended for scientific use). Pharmacy chains are allowed.

Generic substitution has been allowed in Norway since 2001. Pharmacies are not allowed to substitute therapeutically (i.e. dispense a medicine with equal therapeutic benefits), but they are allowed to substitute with parallel imported medicines. The NoMA evaluates new medicines on the Norwegian market in terms of their substitutability and publishes a "substitution list", which is updated monthly.

There are a few Internet pharmacies in Norway. Internet pharmacies are only allowed to sell OTC pharmaceuticals. Mail orders for prescription-only medicines are allowed only in the geographical district of the pharmacy, while there are no such restrictions for OTC drugs. Claw-backs are not used in Norway.

### **Counterfeit drugs**

In 2012, the Ministry of Health submitted the Norwegian version of EU Directive 2011/62/EU, amending Directive 2001/83/EC on the Community code relating to medicinal products, to a national consultation process. The two EU directives aim to prevent the entry of falsified medicinal products into the market. Following the consultation in early 2013, the ministry proposed to the parliament to harmonize the 1992 Medicinal Products Act with the above EU regulations.

### **Policies to improve cost effective use of pharmaceuticals**

There are policies to improve the cost effective use of pharmaceuticals for doctors, pharmacists and patients. In general, doctors are obliged to prescribe the cheapest equivalent product unless there are serious medical reasons for

prescribing a more expensive alternative. “First-choice schemes” exist for some therapeutic equivalent medicines as an alternative to therapeutic reference pricing. The prescribing party must prescribe the first-choice product unless there are medical reasons for not doing so. First-choice schemes promote the use of generics because off-patent active ingredients are often selected as the preferred product. International non-proprietary name (INN) prescribing is allowed but doctors are not obliged to prescribe by INN and currently there is not much INN prescribing in Norway. However, the NoMA is working to increase INN prescribing (the new system for electronic prescribing is expected to facilitate this).

Pharmacists are obliged to inform patients if there is a cheaper generic alternative available. If the product is reimbursed and the patient does not want to switch to the cheaper alternative, he or she will have to cover the price difference between the two alternatives out of pocket, unless the doctor puts a reservation on the prescription saying that substitution should be avoided for medical reasons. Pharmacies have financial incentives for generic substitution as higher margins can be earned on selling generic drugs (see “Pricing of prescription pharmaceuticals” below).

Rational use of medicines by patients is promoted by the state, the NoMA, patient associations and doctors. Information is available in the form of printed materials such as brochures and on the Internet. In 2009, the NoMA conducted a campaign to improve the understanding of generic substitution among prescribers and patients. Generic substitution is also indirectly promoted through reimbursement policies, such as the stepped price model (see “Pricing of prescription pharmaceuticals”).

### **Pricing of prescription pharmaceuticals**

Manufacturers’ prices are not regulated and wholesalers are free to negotiate mark-ups with the manufacturers. The NoMA is responsible for setting maximum pharmacy purchase prices (PPPs). All suppliers of prescription medicines must apply for a maximum price, whether or not they are seeking reimbursement for the product. Medicines can only be sold at or below the maximum price level.

An international price referencing system has been used since July 2002 to set maximum prices for both new and existing medicines. Prices are based on the average of the three lowest PPPs in Austria, Belgium, Denmark, Finland, Germany, Ireland, the Netherlands, Sweden and the UK. If a medicine is marketed in fewer than three of the reference countries, the mean price is taken of the countries where a market price exists.



Pharmacy mark-ups for prescription products (both reimbursed and non-reimbursed) are fixed at 7% for medicines with a PPP up to Nkr 200 (€27) and at 4% of the price above Nkr 200. There is also a flat rate add-on of Nkr 22 per pack (€3), plus value added tax (VAT) (25%). An additional flat rate add-on of Nkr 10 (€1) is applied to addictive products (narcotic and psychotropic substances).

Generic prices cannot exceed the maximum market price of the original branded product. In 2005, a stepped price model was implemented in Norway, in order to reduce the public expenditure on generic drugs (i.e. drugs covered by HELFO). Under this scheme, a maximum reimbursement price is set for both branded and generic pharmaceuticals included in the scheme. The maximum reimbursement price level is automatically reduced in stages (steps) following patent expiry. The size of the price cuts depends on annual sales prior to the establishment of generic competition and time since competition was established. There are no regulations of pharmacy mark-ups within the step-price system. Pharmacies therefore have a financial incentive to carry out generic substitution and to dispense the cheaper product. Since 1995, there has been no price control on OTC medicines.

### **Public reimbursement of pharmaceuticals**

There are four reimbursement categories for pharmaceuticals (see Table 2.3). Schedule 2 is in essence a “positive list” system (the so-called “blue list”), based on a list of medicines that can be reimbursed for specified diagnoses (see also section 3.3.1).

Reimbursement decisions for non-hospitals medicines are made by the NoMA. When applying for reimbursement, pharmaceutical companies need to follow the Norwegian guidelines for pharmacoeconomic evaluations. The guidelines ask for: an explanation of the choice of comparison; the time frame of the analysis; data collection methods; analysis methods; and costs. Cost-effectiveness analysis is well established in Norway and the use of quality-adjusted life years (QALYs) as a parameter is increasing. No maximum willingness to pay per QALY has been defined. For products associated with a substantial cost to the public budget, decisions on reimbursement are taken by the Ministry of Health. The HELFO decides on reimbursement for individual patients for pharmaceuticals without general reimbursement or indications not covered by general reimbursement (see Schedules 3a and 3b in Table 2.3).

**Table 2.3**

## Reimbursement categories for pharmaceuticals

Reimbursement category	Reimbursement rate (%)	Description
Schedule 2	62	For medicines on the reimbursement list, which are reimbursed in case of specified diagnoses in the list and only for long-term (> 3 months) treatment.
Schedule 3a	62	For medicines other than those under Schedules 2, 4 and 3b. In this case, reimbursement can be granted upon submission of an individual application and only for long-term (> 3 months) treatment.
Schedule 3b	62	For medicines used to treat rare diseases, which are reimbursed upon submission of an individual application and only for long-term (> 3 months) treatment.
Schedule 4	100	For medicines used to treat serious contagious diseases such as tuberculosis, syphilis or HIV/AIDS.

Source: PHIS (2011).

Pharmaceutical and therapeutic committees in hospitals have traditionally decided on the inclusion of medicines in the hospital pharmaceutical formulary for internal use, but this may change with the system for the introduction of new technologies from 2013 (see section 6.1.6). There are no countrywide medicines lists for inpatient care.

### 2.8.5 Regulation of medical devices and aids

The market for medical devices and aids, including manufacturing and technical market access, is regulated by the Directorate of Health, according to the 1995 Medical Devices Act. The EU Medical Device Directive (Council Directive 93/42/EEC of 14 June 1993) is also applied. The Directorate maintains two official registers: a register of medical devices and a reporting system for technical failure and adverse events.

### 2.8.6 Regulation of capital investment

Investment decisions are taken by the RHAs (specialist care) and the municipalities (primary care), and coordination of capital investments is low both across different levels of care and geographically (see section 4.1.1).

## 2.9 Patient empowerment

### 2.9.1 Patient information

The availability of patient information in Norway is good and significant improvements have been made in this area in recent years. A substantial amount of information is provided on the Internet and information technology (IT) use is very high in Norway (see section 4.1.4).

The new Internet portal ([www.helsenorge.no](http://www.helsenorge.no)), launched in late 2011, contains information on statutory benefits and serves as a guide to the public health-care services. Information is currently available in Norwegian and selected information is also available in seven other languages. Users have access to several self-service options, for example, they can access information on their user-fees, electronic prescriptions and vaccinations, and can change their GP. The portal also contains information on prevention, health, wellness, illness, treatment and patients' rights, with the aims of helping people take better care of their own health and encouraging more active involvement in the health system. It also contains information on quality indicators to support patients in choosing hospitals (this information was previously provided by Free Hospital Choice Norway). About 30 different indicators are included, covering areas such as cancer treatment, delivery and psychiatric care.

Free Hospital Choice Norway, established in 2003, is an information service that aims to assist patients with their choice of hospitals either online ([www.fritttykehusvalg.no](http://www.fritttykehusvalg.no)) or through a free telephone line operated by the Directorate of Health in cooperation with the RHAs. This service provides information about patient rights and some quality indicators, in particular waiting times and other information relevant to the patient's choice of hospital, such as types of treatment offered and quality indicators at the hospital level.

In addition, information services are provided via the telephone lines and web sites of various public health institutions, such as smoking information centres, poison information centres, mental health information centres, substance abuse centres, etc. The majority of these information services are run by the Directorate of Health.

Patients are entitled (according to the 1999 Patients' Rights Act) to access their medical records and, upon request, they are also entitled to a free copy of them plus a brief and simple explanation of the medical terms used. This

access may be denied in special circumstances (e.g. if absolutely necessary in order to avoid endangering the patient's life or if it may cause serious damage to the patient's health).

### 2.9.2 Patient choice

As in most European countries, statutory coverage in Norway is obligatory and opting out is not permitted. There is no choice of the statutory benefits package. Patients can choose their provider (GP, specialist and hospital for elective care) and participate in treatment decisions.

#### Choice of provider

Patients are in general free to choose their GP. In 2001, the RGP scheme was introduced and all citizens who are registered in the National Population Register are entitled to a regular GP. Regular GPs must give citizens on their list an appointment as soon as they need one. Switching is possible up to twice a year, provided that the new GP has space on his or her list. Although participation in this scheme is voluntary, it is strongly encouraged – patients who do not have a regular GP will be responsible for finding a GP who can give him or her an appointment and will also have to pay a higher fee for the service. Virtually all patients participate in this scheme.

In order to access specialist care (i.e. privately practising specialists or hospitals), patients need a referral from their GP. Patients who have received a referral may obtain information from the free hospital choice telephone service about waiting times for privately practising specialists within their home region. This information is, however, not made publicly available on [www.frittsykehusvalg.no](http://www.frittsykehusvalg.no) (see section 2.9.1).

According to the Patients' Rights Act of 1999, patients have the right to choose any public hospital across the whole country. Patients cannot choose the level of hospital treatment (secondary or tertiary). In 2004, the Patients' Rights Act was amended to extend the free choice of hospital to include private hospitals that have entered into an agreement with the RHAs. New patient groups, such as psychiatric patients (since 2004) and patients in need of treatment for alcohol and substance use (since 2005), have also been granted a legal right to choose a hospital/institution. The general right to choose a hospital is limited for patients in non-voluntary/forced psychiatric care.

The evidence on uptake of choice in Norway remains limited. In a study on patient choice in 2004, it was found that about 34% of respondents, irrespective of diagnosis, had participated in the decision about where to receive treatment

(Ringard, 2012a). In a more recent study of 13 different treatments, it was found that 15% of respondents had chosen the hospital. For patients who had chosen hospitals, the main source of information was their GP (for 71% in 2010). The web sites and telephone services were used by less than 10% of patients who chose a hospital (Auditor General, 2011a).

Norway has separate waiting-time guarantees for selected patient groups (for example, patients in need of mental health care) and normative course times for cancer treatment. Such guarantees are also available in Finland, Sweden and Denmark. Norway also has a system of individual waiting-time guarantees for patients. Prioritization guidelines have been developed to help hospital physicians determine the appropriate waiting time for each patient. Such formalized prioritization mechanisms relating to waiting times at the individual level are not used in the other Nordic countries (Finland, Sweden and Denmark have general targets or guarantees for maximum waiting times that include all patient groups for specialist care) (Hem, Kalseth & Wilson, 2011).

If waiting-time guarantees are breached, patients in Norway have the additional right to travel to another country for treatment and to receive this at the state's expense, but only if the service cannot be provided by any other hospital in Norway within a given time frame or the required medical treatment is not available due to a lack of competence or adequate diagnostic tests. Applications for treatment, due to a breach of the waiting-time guarantee in Norway, is handled by HELFO's Patient Referral Unit, while a request for treatment abroad due to lack of competence must be approved by one of the RHA's offices of the National Network for Foreign Treatment (Hem, Kalseth & Wilson, 2011) (see also section 2.9.6).

### **User involvement in treatment decisions**

According to the 1999 Patients' Rights Act, the patient is entitled to participate in the implementation of his or her health care. This includes the patient's right to participate in choosing between available and medically sound methods of examination and treatment. The form of participation shall be adapted to the individual patient's ability to give and receive information. If the patient is not competent to give consent, the patient's next of kin is entitled to participate, together with the patient. The patient shall have the information that is necessary to obtain an insight into his or her health condition and the content of the health care. The patient shall also be informed of possible risks and side-effects. Upon referral from a GP, the patient is also entitled to have his or her health condition re-evaluated by the specialist health service (i.e. a second opinion). This right can be exercised only once for the same condition.

### 2.9.3 Patient rights

In Norway, the debate over patient rights began in the 1970s (see Kjøenstad, 1999 and 2007; and Skaset, 2003, for an overview). The key legal act governing patient rights in Norway is the 1999 Patients' Rights Act. The Act was partly a simplification and consolidation of the existing legislation, and partly an implementation of new rights. The Act has been amended several times, further strengthening patient rights in Norway (Winblad & Ringard, 2009). Patient rights guaranteed in the Act can, according to Molven (2006), be divided into three main groups:

- Rights to become a patient: all members of the Norwegian population have a right to health care when certain criteria are met; the health system (municipalities, health trusts) and individual care providers are responsible for providing adequate health care; health services must meet minimum standards of adequate quality and safety (the definition of "adequate standard" will vary with time due to developments in medicine, changes in ethical values and prevailing best practice within a certain field); the patient's entitlement to health care in the specialist health-care services extends to the right to have care delivered within a specific, individually determined, time limit; budgetary concerns and providers' priorities cannot be the reason to withhold health-care treatment.
- Rights as a patient: patients have the right to participate in the treatment process, be informed, make their own decisions and have access to information recorded about them; patients also have the right to confidential treatment of personal information and to a free choice of hospital.
- Procedural rights: the right to have decisions reviewed and reversed; and the right to demand that decisions/actions taken by health-care workers and hospitals are corrected.

#### Physical access

The goals of assuring accessibility and non-discrimination on the grounds of physical disability have high priority in Norway. The government has published several projects and action plans on universal design of the physical environment in order to assure the same level of accessibility across the country. The current plan is for the 2009–2013 period (Ministry of Children and Equality, 2009) and also applies to the health-care sector. The government's ambition is for Norway to fully implement the principles of universal design by 2025.

### 2.9.4 Complaint procedures (mediation, claims)

Patient rights in Norway are well-defined legal rights and can be actionable against specific parties. There are several mechanisms in place for patient complaints.

Patients can make a complaint if they think that they have not received health services to which they are entitled, or if they disagree with the assessment of their treatment needs. Complaints should be addressed to the person or body who took the disputed decision. If the complaint is not upheld, it will be referred to the county office of the National Board of Health Supervision. Decisions made at county level can be appealed at the national level (the central office of the board). The board has the powers to issue warnings to health personnel and to revoke licences/authorizations. The assessment by the county office does not give any automatic right to compensation or to a new course of treatment (National Board of Health Supervision, 2013).

Patients can also claim their rights in civil courts, which can compel hospitals and physicians to comply with the Patients' Rights Act (MacKenney & Fallberg, 2004; Winblad & Ringard, 2009). The vast majority of complaints are brought to the county office of the National Board of Health Supervision and only a few cases are brought to the courts (National Board of Health Supervision, 2013).

According to the Patients' Rights Act, every county must have a Health and Social Services Ombudsman (POBO), whose purpose is to safeguard patients' rights, interests and legal rights in relation to primary and specialist health care, and to improve the quality of the health service. The ombudsman can provide information, advice and guidance to anyone who requests it on matters that are included in the remit of his or her work as an ombudsman. The ombudsman determines whether or not a request provides adequate grounds for investigation. If the ombudsman decides not to handle the case, the person who made the request must be notified and be given a brief explanation for this decision (Molven, 2012).

#### **Compensation**

A provisional system of patient compensation was first established in 1988. Initially, the scheme regulated claims against public hospitals but, from 1992, municipal health services, emergency wards and public GPs have also been included. The system was made permanent through the 2001 Patient Injury Act. From 2009, the Act has been expanded to handle compensation claims free

of charge for patients who have sustained an injury while accessing statutory health-care services. Since the same year it has also encompassed harm caused by private for-profit providers (e.g. dental care services for adults).

In order to be eligible for compensation, four conditions must be fulfilled: the injury must have been caused by the treatment and, specifically, by failings in the treatment provided; it must have caused financial loss; and it must have occurred no more than three years before the claim is made. The Norwegian System for Patient Injury Compensation (NPE) plays an active part in the handling of such cases and in establishing possible grounds for liability (they do not apportion blame but find out whether or not the patient is entitled to compensation). In cases of harm due to vaccination, the burden of proof is shifted and lies in all respects with the NPE.

Decisions made by the NPE are binding for the hospital authorities and municipalities, but can be appealed by a complainant to the Patients' Injury Compensation Board. The board's decision can also be brought before the civil courts by the patient. The system, including the assessed compensations (by the NPE, board or court), is financed by contributions from both hospital owners and municipal authorities.

### **2.9.5 Public and patient participation**

Participation in the health-care sector may take place either on a collective or on an individual level (Winblad & Ringard, 2009). Lobbying of patient organizations is an important form of collective participation (see section 2.3.6). Norwegian patients are also granted several different individual "voice" mechanisms, such as the different forms of formal complaint procedures (see section 2.9.4) and choice of provider (see section 2.9.2).

An important guarantee for patient and user participation in primary care is found in the 2011 Municipal Health and Care Act. Municipalities are obliged to take the opinion of patients and users into account when discussing how care is to be organized. They must also establish a system for gathering information about patient experiences of their services.

Within specialist care, similar arrangements have been put in place in order to secure patient participation at the RHA as well as hospital trust levels. However, these arrangements are voluntary. Patient representatives act, on a regular basis, as important advisors to boards and administration.



Surveys of public satisfaction with providers of care are not carried out regularly. Information on patient satisfaction, however, is collected systematically (every year) for somatic hospital patients (so-called “PasOpp” surveys). For other patient groups (e.g. cancer patients) data collection is carried out more sporadically. Surveys of hospital patients focus on general user satisfaction, but also on more specific topics such as satisfaction with communication, the standard of care facilities, etc. (section 7.3.1 contains detailed information on patient satisfaction/experiences). The NOKC is responsible for collecting and analysing the data. Information on patient satisfaction is fed back to hospitals and also made publicly available as a quality indicator on [www.helsenorge.no](http://www.helsenorge.no). Information on patient-reported outcome measures (PROMs) is not collected in a systematic manner in Norway.

## 2.9.6 Patients and cross-border health care

Cross-border health care has not been an important issue on the policy agenda in Norway. The number of hospital contacts made by foreigners is reported on an annual basis by the Norwegian Patient Register – it is very small compared to the total number of patients treated within the system (Directorate of Health, 2012d). Foreign patients must, unless they come from other Nordic countries or hold a European Health Insurance Card, cover all treatment costs.

Norwegian patients have for some time been entitled to go abroad in order to receive treatment (see section 2.9.2). The number of such cases is small. In 2012, the four offices dealing with applications for treatment abroad (there is one office in each RHA) received approximately 400 applications, of which almost 75% were approved; 60% of these patients were treated in a Scandinavian country. Many of those who are allowed treatment abroad are children or adolescents. About 25% have a type of cancer and there is a group of patients with rare diseases as well. It is also possible for patients with chronic diseases (e.g. rheumatism, psoriasis, asthma) to apply for treatment abroad (University of Oslo, 2013).

Since 2011, there has been a new reimbursement scheme for health-care services provided in the EEA. The scheme is administered by the HELFO. Reimbursement is only available for services that would have been covered (wholly or partially) had they been provided in Norway. The purchase of certain medicines and medical equipment is also covered by the scheme. The service must be necessary due to illness, injury, disability, family planning, pregnancy,

childbirth or abortion. In 2012, reimbursement was given on 7600 applications, totalling NKr 21.5 million (€2.9 million). The majority of reimbursements were given to physiotherapy and dental care.

There are no official figures on the number of Norwegians travelling abroad to receive treatment and care at their own expense.

## 3. Financing

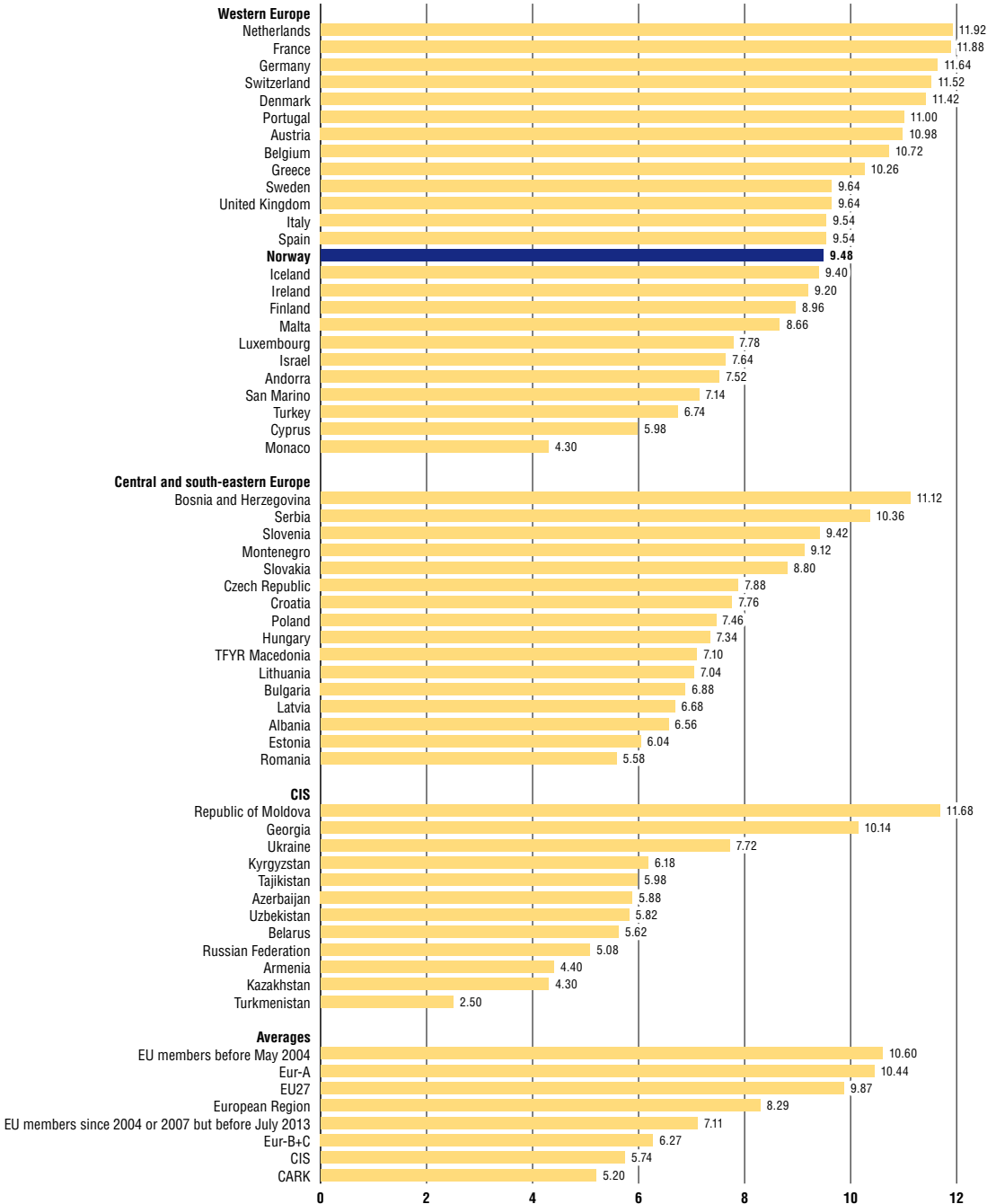
In 2010, health-care expenditure accounted for approximately 9.5% of Norway's GDP, placing it in 16th place in the WHO European region in terms of the share of GDP spent on health. However, it must be emphasized that Norway has one of the highest values of GDP per capita in the world (85% higher than the EU27 average) and thus its per capita health expenditure is higher than in most countries.

Public sources account for more than 85% of total health expenditure and comprise financing from the central and local governments and the NIS. The vast majority of private health financing comes from households' out-of-pocket (OOP) payments. Outpatient pharmaceuticals and dental care attract the highest share of private financing. The role of VHI in health-care financing is negligible. However, the number of Norwegians holding private health insurance policies has increased substantially over the past decade.

Somatic specialist care is financed partly through block grants (60%) and partly through activity-based financing from the central government to the RHAs (40%), with the latter component based on diagnosis-related groups (DRGs). Other types of specialist care are financed through global budgets. Primary care is financed from municipal taxes, block grants from the central government and earmarked grants for specific purposes. A major source of financing of primary care is also the NIS (through fee-for-service payments and reimbursement of user fees). The financing structure is aimed at both containing costs and giving providers sufficient flexibility to assure the best mix of services for patients. These goals are reflected in the recent financing reforms, such as the 2012 reform, which made municipalities responsible for patients ready for hospital discharge and for a part (20%) of the activity-based component in the funding system for acute care (with the additional 20% of the DRG price coming from the state).

**Fig. 3.1**

Health expenditure as a share (%) of GDP in the WHO European Region, 2010



Source: WHO Regional Office for Europe (2013).

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition).

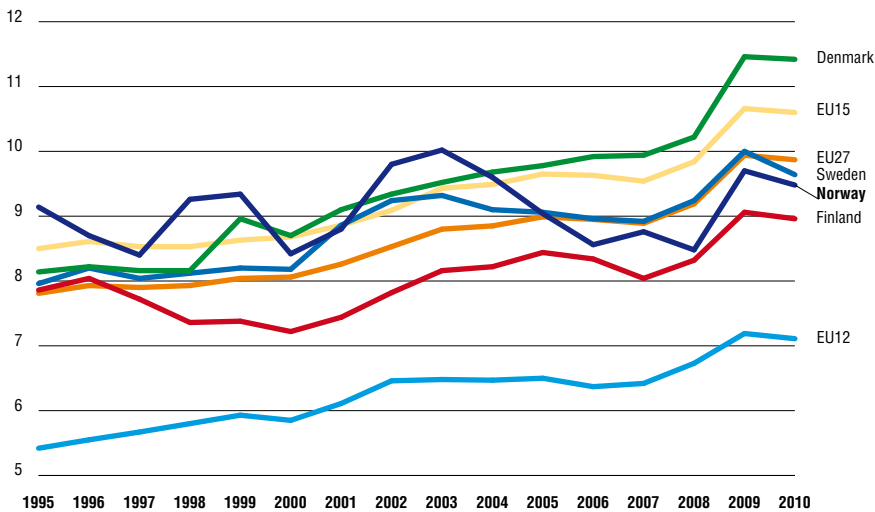
### 3.1 Health expenditure

In 2010, Norway’s GDP was almost NKr 2500 billion (€323 billion) or NKr 510 544 (€65 371) in per capita terms, placing it among the richest countries in the world (see section 1.2). In the same year, Norway was in 16th place in the WHO European region in terms of the share of GDP spent on health (9.5%) (Fig. 3.1).

Over the past 10 to 15 years there have been some fluctuations in the share of GDP spent on health – it ranged from 8.4% in 1997 to 10% in 2003. Since the mid-2000s, Norway spent a smaller share of its GDP on health than Denmark, Sweden and the EU15 (EU members before May 2004) on average (Fig. 3.2).

**Fig. 3.2**

Trends in health expenditure as a share (%) of GDP in Norway and comparator countries, 1995–2010

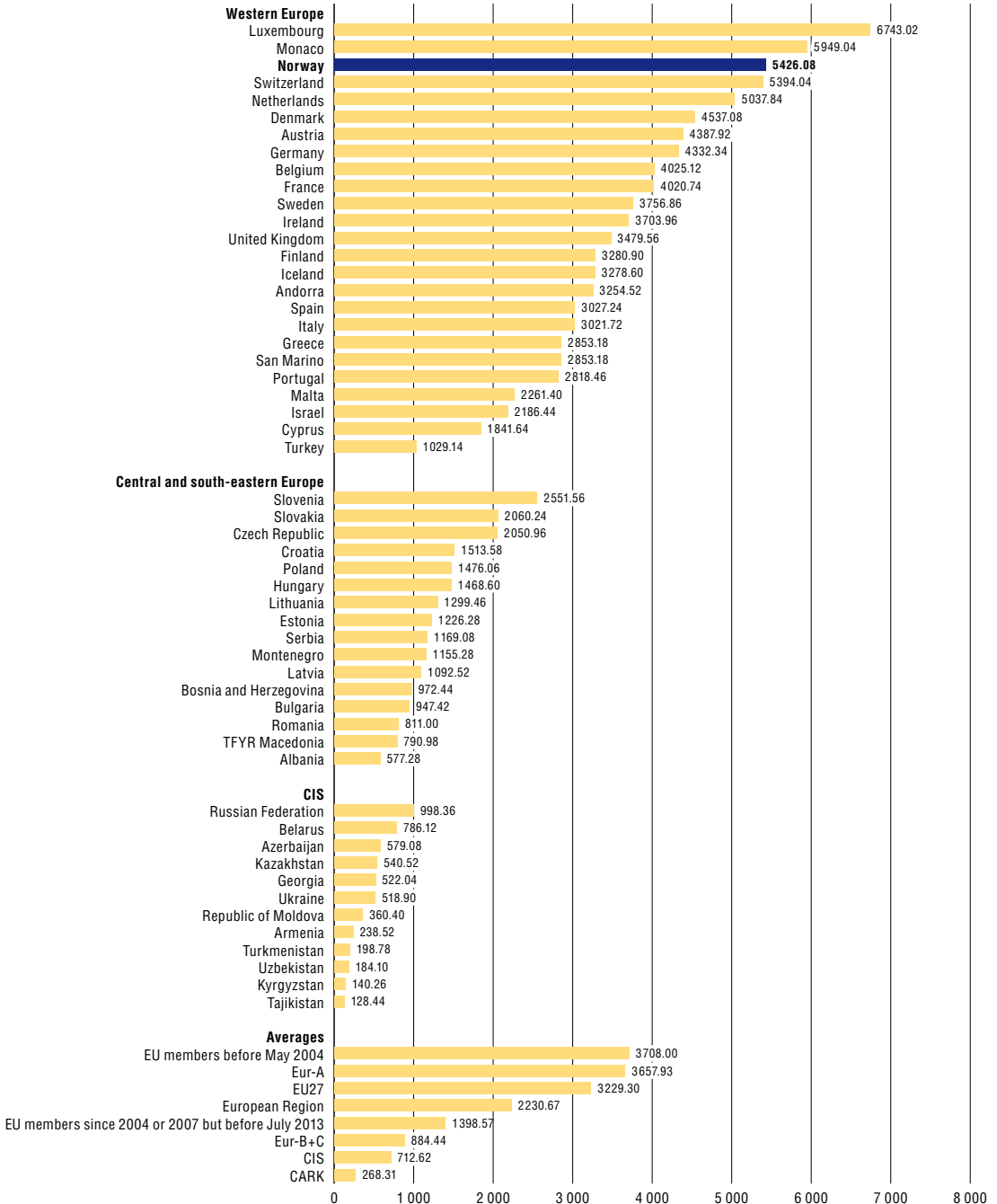


Source: WHO Regional Office for Europe (2013).

When looking at these figures it is important to remember that Norway has a higher GDP per capita than the neighbouring countries. According to Statistics Norway (2012f), in 2011, GDP per capita in Norway was between 40% and 50% higher than in Denmark and Sweden, and more than 85% higher than the EU27 average.

**Fig. 3.3**

Health expenditure in PPP per capita in the WHO European Region, 2010



Source: WHO Regional Office for Europe (2013).

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition).

When comparing health expenditure adjusted for purchasing power parity (PPP), Norway ranked third in the WHO European Region, after Monaco and Luxembourg, and ahead of other Nordic countries (Fig. 3.3). When broadening the comparison to include non-European OECD countries, the only other country with PPP health expenditure per capita higher than Norway is the United States (OECD, 2012b).

Between 1997 and 2002, the annual per capita growth rates in health spending in Norway were high, between 2% and 7.5% (Statistics Norway, 2012f). Between 2002 and 2009, the annual average growth rate in health expenditure per capita was 2.4% (OECD, 2012b).

**Table 3.1**

Trends in health expenditure 1995–2010, selected years

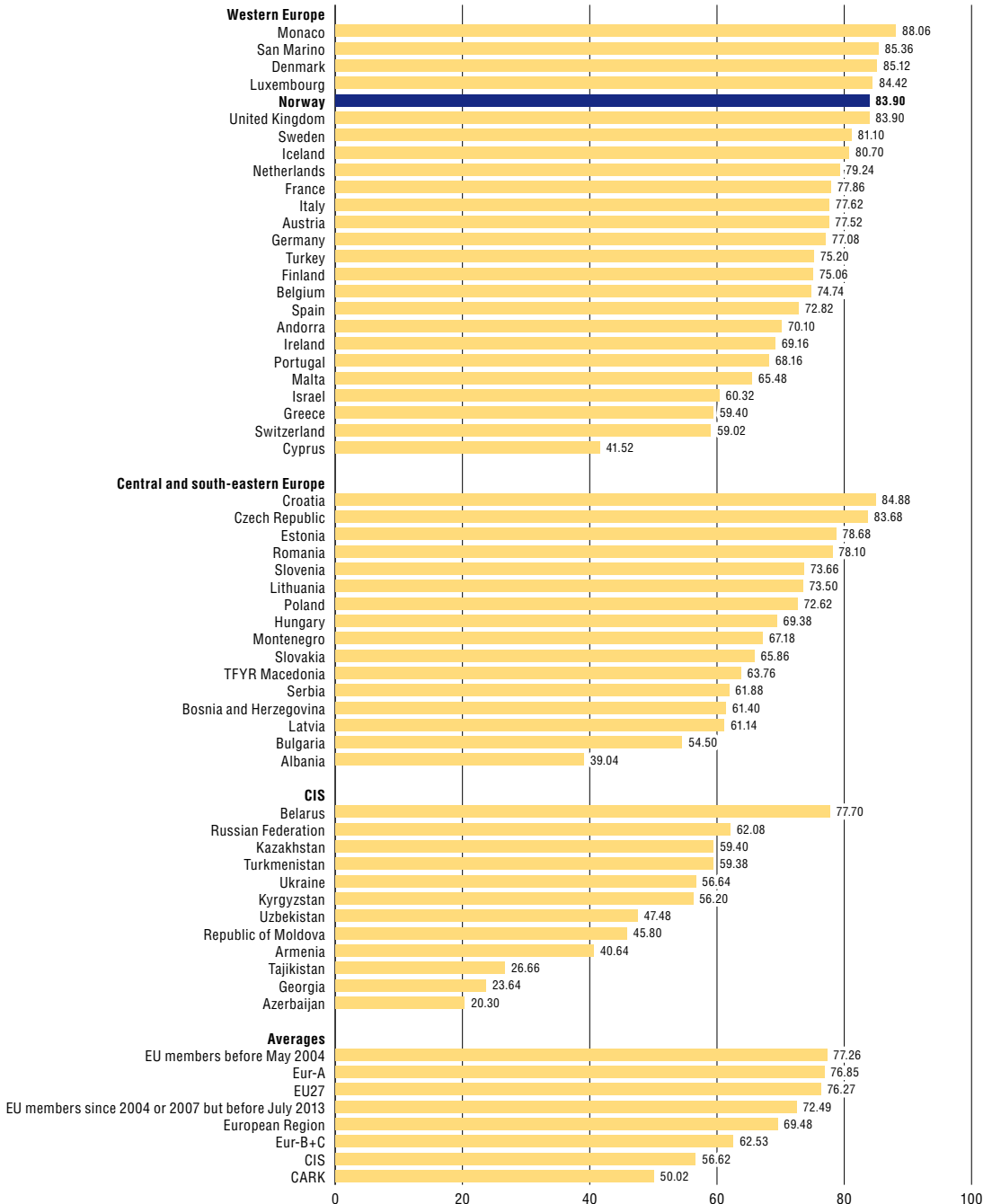
	1995	2000	2005	2010
Total health expenditure (US\$) (per capita at PPP) <sup>a</sup>	2.155	3.042	4.304	5.426
Total health expenditure as % of GDP <sup>b</sup>	n.a.	8.4	9.0	9.5
Mean annual real growth rate in total health expenditure (2005 prices) <sup>c</sup>	n.a.	2.6	2.3	0.5
Mean annual real growth rate in GDP <sup>d</sup>	4.2	3.3	2.6	0.7
Public expenditure on health as % of total expenditure on health <sup>e</sup>	75.9	76.2	77.8	83.9
Private expenditure on health as % of total expenditure on health <sup>f</sup>	19	17	16	16
Government health spending as % of total government spending <sup>g</sup>	14	16	18	17
Government health spending as % of GDP <sup>h</sup>	7	7	8	8
OOP payments as % of total expenditure on health (in million constant 2005 US\$) <sup>i</sup>	18	17	16	15
OOP payments as % of private expenditure on health <sup>j</sup>	98.4	98.3	98.6	95.2

Sources: <sup>b, c</sup> and <sup>d</sup> Statistics Norway (2012f); <sup>a, f, g, h</sup> and <sup>i</sup> WHO Regional Office for Europe (2013); <sup>e</sup> and <sup>j</sup> World Bank (2013). n.a. = not available.

Table 3.1 also demonstrates that there has been an increase in the share of public spending on health as a percentage of total health expenditure (THE). The share of public spending on health in THE in Norway, at 84% in 2010, is similar to the levels observed in other Nordic countries and the United Kingdom (Fig. 3.4). One reason for this continuous growth may be the fact that Norway has been less affected by the economic downturn of the early 1990s and the most recent economic crisis that started in 2008. Another reason might be the strong political commitment to secure sufficient funding for health care, given the increasing proportion of older people in the population, the increasing use of new technologies and higher expectations of the population.

**Fig. 3.4**

Health expenditure from public sources as a percentage of total health expenditure in the WHO European Region, 2010



Source: WHO Regional Office for Europe (2013).

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition).



In terms of the composition of health-care expenditure, in the 1980s and 1990s, the share of hospital care in THE saw a declining trend, partly offset by a rising share of ambulatory, pharmaceutical and other components of care. This suggests a substitution towards these less costly components of health care, possibly in response to spending constraints imposed on hospitals and technological developments, and is also reflected in trends in the average length of stay in hospitals and in the number of hospital beds (van den Nord, Hagen & Iversen, 1998). These trends have continued in the 2000s (see section 4.1.2).

The latest data on health expenditure by service programme are available for 2010. In that year, curative specialist care accounted for approximately 46% of THE. It was followed by long-term nursing care (27%), which is the highest among European OECD countries (OECD, 2012b). About 11% of the total expenditure was spent on medical goods dispensed to patients (i.e. pharmaceuticals, medical devices and equipment). Similar patterns were observed in 2007–2009 and can also be observed in the estimates for 2011 and 2012 (Statistics Norway, 2013d). Comparing expenditure on various service programmes as shares of THE shows that the contribution of private financing is most pronounced for pharmaceuticals and other medical non-durables and for outpatient curative care (Table 3.2).

**Table 3.2**

Public spending on health by service programme, 2010

	% of public expenditure on health	% of total health expenditure
<b>Services of curative care (HC.1)</b>	<b>46</b>	<b>45.8</b>
Inpatient curative care (HC.1.1)	30	25.5
Day cases of curative care (HC.1.2)	2	1.8
Outpatient curative care incl. services of curative home care (HC.1.3–1.4)	14	18.5
<b>Services of rehabilitative care (HC.2)</b>	<b>2</b>	<b>1.9</b>
<b>Services of long-term nursing care (HC.3)</b>	<b>29</b>	<b>27.4</b>
Inpatient long-term nursing care (HC.3.1)	17	17.0
Long-term nursing care: home care (HC.3.3)	12	10.4
<b>Ancillary services to health care (HC.4)</b>	<b>8</b>	<b>6.9</b>
Clinical laboratory and diagnostic imaging (HC.4.1, HC.4.2)	4	3.9
Patient transport and emergency rescue (HC.4.3)	3	3.0
<b>Medical goods dispensed to outpatients (HC.5)</b>	<b>8</b>	<b>11.2</b>
Pharmaceuticals and other medical non-durables (HC.5.1)	5	7.4
Therapeutic appliances and medical equipment (durables) (HC.5.2)	3	3.9
<b>Prevention and public health services (HC.6)</b>	<b>3</b>	<b>2.5</b>
<b>Health administration and health insurance (HC.7)</b>	<b>1</b>	<b>0.6</b>
<b>Total current expenditure on health</b>	<b>96</b>	<b>96.3</b>
<b>Capital formation of health care provider institutions (HC.R.1)</b>	<b>4</b>	<b>3.7</b>
<b>Total</b>	<b>100</b>	<b>100</b>

## 3.2 Sources of revenues and financial flows

There are two main sources of health-care revenues: the general tax system and households' OOP payments. Taxes are levied by the state (with state taxes accounting for the majority of tax revenues), counties and municipalities. A part of the general tax revenues is made up of national insurance contributions, which contribute to the financing of the NIS (of which the health-care part is administered by the HELFO; see section 2.1). The role of VHI in health-care financing continues to be negligible. Fig. 3.5 provides an overview of the main financial flows in the system.

Public sources account for the vast majority of health expenditure (approximately 85%) and consist of transfers from general government (73%) and NIS contributions (12%). Private sources (mainly in the form of OOP payments) account for approximately 15% of health expenditure. The split between public and private sources of health revenues has been relatively stable since the 1980s (Table 3.3).

**Table 3.3**

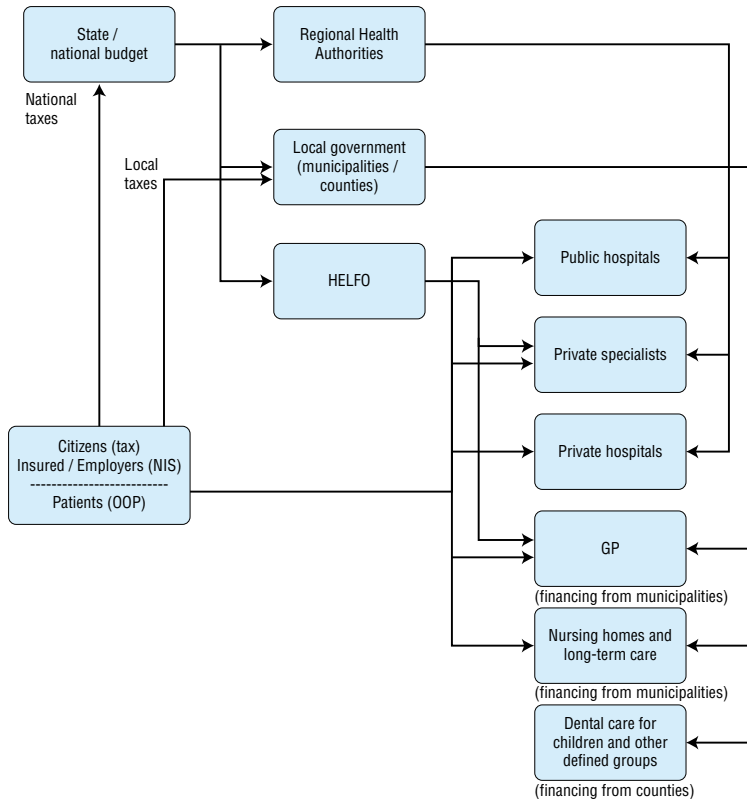
Sources of health-care revenues as a percentage of total expenditure on health according to source of revenue, 1980–2010, selected years

	1980	1990	1995	2000	2005	2009	2010
<b>Public sources</b>							
General government					68	72	73
Social security fund	85.1	82.8	84.2	85.0	15	12	12
<b>Total public</b>	<b>85.1</b>	<b>82.8</b>	<b>84.2</b>	<b>85.0</b>	<b>83</b>	<b>84</b>	<b>85</b>
<b>Private sources</b>							
OOP payments	14.9	14.6	15.2	14.5	17	15	n.a.
Other private sources	0	2.6	0.6	0.5	0	1	0
<b>Total private</b>	<b>14.9</b>	<b>17.2</b>	<b>15.8</b>	<b>15</b>	<b>17</b>	<b>16</b>	<b>n.a.</b>

Sources: Data for 1980–2000 from Johnsen (2006); data for 2005–2010 from OECD (2013b).

Note: n.a. = not available.

**Fig. 3.5**  
Main financial flows in the Norwegian health-care system



### 3.3 Overview of statutory financing system

The scope of the statutory coverage, as well as the criteria for co-payments and the safety net, are determined by parliament. Small adjustments are made from year to year. Decisions on the scope of coverage are supported by HTA and decision-support processes (see sections 2.5 and 2.7.2). There have been no major changes in the scope of coverage in recent years and the discussions have been focused instead on the level of co-payments and the safety net. Ongoing discussions are focused on priority setting, which may involve exclusion from coverage or increasing the level of co-payment for some treatments (for example, coverage of in vitro fertilization has been changed several times) (Lindahl & Squires, 2011).

### 3.3.1 Coverage

#### **Breadth: who is covered?**

Every person residing in Norway is entitled to publicly funded health-care services. This entitlement is included in health-care legislation on care financed by the municipalities (the Municipal Health and Care Act of 2011) and specialist care (the Specialist Care Act of 1999) and social insurance legislation (the National Insurance Act of 1997). These acts also delineate the scope of coverage (see below).

Residents from the EEA and EU have in principle the same entitlement to health services as Norwegians, and are reimbursed according to EEA regulations and bilateral agreements. Foreigners outside the EEA normally have to pay the full cost for services received (if there is no bilateral agreement).

Everybody, regardless of citizenship or residency status (including undocumented immigrants), has access to acute emergency care. Pregnant women and children also receive access to immunization and primary healthcare, regardless of their citizenship and residency status.

#### **Scope: what is covered?**

There is no approved list of benefits provided by the statutory health-care system in Norway. In practice, the statutory health system covers:

- approved prescription drugs, i.e. drugs included on the “blue list” approved by the NoMA;
- preventive services including: check-ups, screening and the immunization of infants and school children; preventive mental health services (mostly for children and youths); public health initiatives or campaigns to promote a healthy lifestyle and reduce social health disparities (depending on the municipality);
- primary care, including services by GPs, physiotherapists, and chiropractors;
- most specialist ambulatory and hospital care; however, certain treatments, such as plastic surgery, must be medically essential for the patient to qualify for public coverage;
- emergency care, including emergency after-hours specialist care;
- nursing care;
- dental care (mostly for children and some other groups);
- medical eye-care (glasses are usually excluded).

Non-medical eye-care, adult dental care and complementary medicine are not covered from public sources.

In addition, the NIS covers many risks related to the loss of income. Persons insured under the NIS are entitled to retirement, survivors' and disability pensions, basic benefits and attendance benefit in case of disability, rehabilitation or occupational injury. There are also benefits for single parents, cash benefits in case of sickness, maternity, adoption and unemployment, as well as funeral benefits.

### **Depth: how much of benefit cost is covered?**

Cost-sharing requirements are moderate in the Norwegian health system, with OOP payments accounting for around 15% of THE. However, for certain types of services, the extent of cost-sharing is substantial.

All inpatient care in public hospitals or private hospitals contracted by the RHAs, including day-care and same-day surgery in hospitals (and pharmaceuticals), is free of charge. Certain preventive services, such as child immunizations are also free from cost-sharing. Home-based services, including home nursing, are mainly free of charge for the users.

GP and outpatient specialist visits require flat fee co-payments (in 2012, NKr 180 (€24) and NKr 307 (€41) per visit, respectively), as do physiotherapy visits (amount of co-payment varies), prescription drugs on the "blue list" (up to NKr 520 (€70) per prescription), outpatient hospital care, and radiology and laboratory tests (NKr 218 (€29) and NKr 47 (€6), respectively). Long-term institutional care for older or disabled people requires high cost-sharing; co-payment levels are income tested.

There are exemptions from cost-sharing provisions for certain diseases and groups of people. Children under the age of 7 are exempt from cost-sharing for treatment administered by a physician or physiotherapist, essential drugs and travel expenses. Children under the age of 16 receive free physician treatment and access to essential drugs on the "blue list" and children under the age of 18 are exempt from cost-sharing for psychotherapy and dental treatment. Since 1 January 2003, those who receive minimum retirement or disability pensions can receive their essential drugs and nursing requisites free of charge. Pregnant women receive free medical examinations during and after pregnancy, and residents eligible for minimum retirement pension or disability pensions receive free essential drugs and nursing care. Individuals suffering from specified

communicable diseases, including HIV/AIDS (acquired immunodeficiency syndrome), receive free medical treatment and medication. No charges are due in the case of occupational injury or disease.

A cost-sharing ceiling was introduced in the early 1980s. The ceiling is set by the parliament each year (Nkr 1980 (€265) in 2012). This personal contribution applies to all money spent on treatment by physicians and psychologists; important (i.e. “blue-list”) or expensive drugs; and transportation expenses related to examination and treatment. When the ceiling (*egenandelstak*) has been reached, an exemption card for health-care services is issued, which entitles the holder to free treatment and benefits for the remainder of the calendar year. Cost-sharing for children under the age of 16 is included with one parent’s ceiling. In 2010, almost 1.2 million people were covered by *egenandelstak 1* (Directorate of Health, 2012b).

A second cost-sharing ceiling (*egenandelstak 2*) applies to physiotherapy, dental treatment that is eligible for reimbursement, fees for accommodation in rehabilitation centres, and treatment abroad. This ceiling is also set every year by the parliament (Nkr 2560 (€342) in 2012). At the end of 2010, 46 000 Norwegians were covered by *egenandelstak 2*” (Directorate of Health, 2012b).

*Egenandelstak 1* and *egenandelstak 2*” are not related to individual income – everybody pays the same amount before an exemption card is granted. Municipal services, such as home care for the elderly and disabled, and inpatient care of the elderly in nursing homes, are among the services that are not included in the ceiling for cost-sharing. These social care services are usually subject to considerable OOP expenses. Residents in nursing homes typically pay between 75% and 85% of their income to the municipalities.

Taxpayers who incur extra expenses due to long-term illness, which amount to at least Nkr 9180 per year (€1228), were until 2013 entitled to deduct the amount of these expenses from their before-tax income (there is no maximum limit for the deduction). About 64 000 taxpayers were entitled to such deductions in 2009 and the average amount of the expenses was Nkr 21 900 (€2930). Due to concerns about its redistributive effects and high administrative costs, the tax deduction scheme is currently being phased out and will be completely discontinued from the 2015 tax year (Ministry of Finance, 2011).

### 3.3.2 Collection

#### **Central and local taxation and National Insurance contributions**

As mentioned in section 3.2, taxes are collected by the central government (around 86% of the total tax income), municipalities (12%) and counties (2%). The total tax-on-GDP ratio in 2010 for Norway, at 42.8%, was slightly higher than the weighted EU average, but lower than in Denmark (48.2%) and Sweden (46.4%) (OECD, 2013b).

According to the structure of tax revenues, the Norwegian tax system is characterized by a relatively high level of direct taxes. In 2010, direct taxes accounted for 49% of total tax revenue or 21% of GDP and consisted mainly of personal income and corporate income taxes (each contributing approximately 10% of GDP). The high revenue from corporate tax includes a special tax on petroleum income. A wealth tax is also collected (Eurostat, 2012). Indirect taxes accounted for 28% of total tax revenue or 12% of GDP in 2010 and comprised mainly VAT, set at 25% (8% of GDP), excise duties and consumption taxes, plus other taxes on products and production. Social contributions (of the employers, employees and the self- and non-employed) accounted for 22% of total tax revenue or 10% of GDP. According to the type of tax base, labour taxes are the most significant, accounting for 41% of total tax revenue (17% of GDP). Capital and consumption taxes account for, respectively, 32% and 27% of total tax revenue (or 13% and 12% of GDP) (Eurostat, 2012).

Income from labour and pensions is taxed at progressive rates (with marginal tax rates reaching 55%). No income tax is levied on incomes lower than Nkr 39 950 per year (2013) (€5356). The remaining forms of income are usually taxed at a flat rate (e.g. capital income from individuals is taxed at a uniform rate of 28%). The tax system for personal taxpayers as a whole is progressive (i.e. the average tax rate increases in line with income) (Ministry of Finance, 2012a).

All persons who are either residents, or are working as employees in Norway or on permanent or movable installations on the Norwegian Continental Shelf, must be insured under the NIS. The same applies to persons living in Svalbard (Spitsbergen) and Jan Mayen who are employed by a Norwegian employer or who were insured under the National Insurance Act prior to their stay in these areas. Insurance is also compulsory for certain categories of Norwegian citizens working abroad. Contributions payable by employees are computed on gross salary and pension income. In 2011, the contribution rates were: 7.8% for the employees, 11% for the self-employed and 4.7% for pensioners. There is an

exemption for incomes up to Nkr 39 950 (€5356) from the contributions. The contributions payable by individuals are not deductible for income tax purposes. NIS rates paid by the employers vary regionally and range from 0% to 14%.

According to the EEA agreement, Norway follows EU regulations with regard to social security. Employees, the self-employed and freelancers are all members of the social security system. Those who do not fulfil these requirements can apply for voluntary membership in the NIS if their stay in Norway exceeds three months.

Collection of taxes (including the NIS contributions) is split between the Tax Administration (Skatteetaten) (which collects income and wealth tax, NIS contributions, VAT and inheritance tax) and the Norwegian Customs (responsible for collecting custom duties and other taxes). Both organizations are subordinated to the Ministry of Finance.

### 3.3.3 Pooling of funds

#### **Allocation from collection agencies to pooling agencies**

The Ministry of Finance allocates resources for different functions (e.g. social protection, education, health) following a parliamentary budget process. The government outlines its budgetary plans each October for the following year and the parliament usually approves the budget in December. No part of tax or NIS contribution revenues is specifically earmarked for health care; however, the share of tax revenue allocated to health has been relatively stable over the years, at about 16–17% of total public expenditure between 2006 and 2011 (Statistics Norway, 2013d). The amount allocated to health forms the budget of the Ministry of Health.

#### **Allocation of resources to purchasers and providers**

The Ministry of Health distributes its budget among the RHAs, municipalities, counties and the HELFO, which purchase services from health-care providers. For most types of care, purchasing and provision are integrated (see section 2.8.1). For example, long-term care (LTC) facilities are owned by the municipalities and health-care personnel working in these facilities are employed by the municipalities.

According to the law, all public services must be carried out within the approved annual budget. For government operations, this is set out in section 75 of the Constitution; for municipality and county operations in the Local Government Act of 1992; and in the Health Authorities and Health Trusts Act of 2001 for the RHAs. However, there has been a tendency for the parliament



to vote for an increase in the level of funding above that outlined in the budget proposal (through the revised national budget) (Lindahl, 2012). This has especially been the case for the RHAs but the latter have been balancing their budgets in recent years and it has in the past been suggested that the budget is soft, and there are, as yet, no formal penalties for overspending (Tjerbo & Hagen, 2009). The Ministry of Health provides directives for principles for budget and accounts to the municipalities, counties and RHAs.

Funds for hospital care are allocated to the four RHAs through a combination of block grants and activity-based funding, which in 2012 for somatic specialist care accounted for, respectively, 60% and 40% of RHA funding (Lindahl, 2012). Other types of specialist care are financed mainly through block grants. The size of the block grant is contingent on the type of service provided by the RHA: somatic care is given the highest weight (73% in 2010), followed by psychiatric care (18%), ambulance/patient transport (6%) and substance abuse treatment (3%). Further, the size of the block grant depends on a number of other factors, including the number of inhabitants living in the region and the demographics of the population. These variables are given different weights for each type of service provided. For example, for somatic care, age is given a weight of 58%, and health and mortality variables are given a weight of 42% (Magnussen, 2010). Through the activity-based funding, parts of the allocation are made contingent on how many patients are treated. Calculation of the activity-based reimbursement is based on a DRG system (see section 3.7).

Block grants from the government are the main source of funding to the municipalities and counties (Ministry of Finance, 2011). Prior to 1986, municipalities received a number of block grants as sector transfers, with some earmarking. Since 1986, this system has been replaced by a single block grant transfer. The state has a distribution formula (called the General Purpose Grant Scheme), which determines the amounts that are distributed to the municipalities and counties. The amounts are calculated using a weighting system (with age being the most important weight) to compensate for local variations in demand for services and cost differences.

The amount of funds allocated to the HELFO is decided through the annual budget process in the parliament as part of discussions over the NIS expenses. The allocation is made on the basis of estimates (*overslagsbevilgninger*) rather than in the form of hard budgets and may be adjusted at the end of the year depending on the actual amount spent. Funds are first transferred to the budget of the Ministry of Health and passed on to the HELFO (see Chapter 5 in Ministry of Finance, 2011).

### 3.3.4 Purchasing and purchaser–provider relations

Integrated purchaser–provider relations had been the dominant feature of the Norwegian health-care system. However, in the last two decades, attempts have been made to introduce a more clear-cut purchaser–provider split.

Purchaser–provider separation was first introduced for nursing and care services in the early 1990s and it followed models initially tried out in Sweden (Martinussen & Magnussen, 2009). Contracts between municipalities and private providers are considered an important tool for guaranteeing good quality of services and also for securing good cooperation with other parts of the health system. A survey conducted in 2004 showed that 40 of the then 431 municipalities (all with more than 10 000 inhabitants, together representing about 48% of the total population) had introduced a purchaser–provider model. However, only 7 out of 44 purchasers knew the price of the services when they placed orders with the providers (Johnsen, 2006).

Municipalities also have contractual relationships with GPs, as part of the RGP scheme (see section 5.3). The municipality has, if it is specified in the contract, a right to order a GP to do municipality health-care work (but only up to a maximum of 7.5 hours a week). Virtually all GPs belong to the RGP scheme.

Within specialist care, the health trust model is at least in theory based on a purchaser–provider division since the RHAs purchase services, while the health trusts provide specialist health services (Martinussen & Magnussen, 2009). However, the RHAs own the health trusts and are therefore responsible for the state's provider function. The regions can purchase health services from a variety of providers including private hospital providers; providers of radiology and laboratory units; private specialists; and rehabilitation units. Even though a purchaser–provider split is allowed, an integrated organization of health care has been favoured – it has been motivated by the dispersion of the population and concerns about costs and lack of expertise in commissioning (OECD, 2012b).

## 3.4 Out-of-pocket payments

### 3.4.1 Cost-sharing (user charges)

Cost-sharing has been a long-standing feature of the Norwegian health-care system (since the early 1980s). The main aim has been to reduce the growth in public spending and to free up resources for high-priority areas. Another aim has been to curb demand from people with minor health-care problems (Ministry of Health, 2005a).

Most publicly funded health services require cost-sharing, with inpatient care being the only type of care for which no cost-sharing is required (see section 3.3.1). Cost-sharing usually takes the form of co-payments and their level is set nationally. Exceptions are applied for certain diseases and groups of people and the HELFO provides subsidies for prioritized patients (see section 3.3.1). General dental care for adults is one area where private participation in costs is very high (approximately 70% of total spending on dental care) (Jensen, 2013). Most adult patients bear 100% of the costs of dental care. However, persons under 18 years old are entitled to free public dental care. LTC is another type of care that is subject to high co-payments.

An overview of user charges for various types of health services is provided in Table 3.4.

**Table 3.4**  
Overview of user charges for health services

Health service	Type of user charge in place	Exemptions and/or reduced rates	Cap on OOP spending	Notes
GP visit	Co-payment	Exemption for children under 16	<i>Egenandel 1</i>	–
Outpatient specialist visit	Co-payment	Exemption for children under 16 or 18 (psychologist care)	<i>Egenandel 1</i>	Only for contracted specialists; otherwise full fee
Outpatient prescription drugs and medical equipment	Co-payment	Exemption for children under 16	<i>Egenandel 1</i>	Only drugs included in the “blue list”; otherwise full fee
Inpatient stay	–	–	–	–
Radiology and laboratory tests	Co-payment	–	<i>Egenandel 1</i>	–
Dental care	Full user fee for adults	Exemption for: children under 18; young adults (19–20 years old); older people in nursing and LTC institutions; disabled persons	<i>Egenandel 2</i>	Only a few predefined diseases covered
Physiotherapy	Co-payment	–	<i>Egenandel 2</i>	Only for contracted physiotherapists; otherwise full fee
Rehabilitation	Co-payment	–	<i>Egenandel 2</i>	Clinics need to be approved in advance
LTC	Co-payments	–	Co-payment levels are related to income	Home-based care, including nursing care
Home-based care, including nursing care	–	–	–	–

### 3.4.2 Direct payments

Full fees have to be paid for health-care services provided by non-contracted private providers and for goods and services excluded from the statutory coverage. No information on the extent of these payments is available.

### 3.4.3 Informal payments

Informal payments play no part in the funding of health care in Norway.

## 3.5 Voluntary health insurance

### 3.5.1 Market role and size

As all Norwegian inhabitants are covered by the public insurance system, VHI has traditionally not played a significant role. In 2011, private expenditure on VHI reached Nkr 1.7 billion (€0.2 billion), which represented about 0.69% of THE in that year (Finansnæringens hovedorganisasjon, 2012).

The most common VHI schemes provide supplementary cover, offering shorter waiting times for publicly covered elective services and specialist consultations in private facilities (Lindahl & Squires, 2011). Jumping waiting lists seems to be the major reason for purchasing VHI policies in Norway. In 2011, about 5% (or 300 000) of Norwegians were enrolled in a “waiting time scheme” (Finansnæringens hovedorganisasjon, 2012). This represents a substantial growth of the VHI market in terms of the number of customers: in the early 2000s only around 30 000 people had some form of VHI policy (Johnsen, 2006). Since 2007, a proportion of the NIS revenues has been used to support faster access to hospital services for people in formal employment (see section 6.1.1 on the “Quicker Back” project). This might have reduced demand for VHI.

### 3.5.2 Market structure

#### VHI buyers

Companies are the main buyers of VHI. Almost 90% of VHI enrollees receive coverage through their employer (Berge & Hyggen, 2010). As a result, group contracts clearly dominate – they are ten times more common than individual contracts (23 065 individual VHI contracts were purchased in 2011 compared to 210 944 group contracts) (Finansnæringens hovedorganisasjon, 2012).

The following population groups seem to be more likely to purchase VHI coverage: those with higher incomes; blue-collar workers compared to white-collar workers (as they are more likely to work for smaller employers or be self-employed); the less-well educated (more likely to be a blue-collar worker) (Sagan & Thomson, forthcoming).

### **VHI sellers**

There are eight companies selling VHI in Norway, all of them profit-making private companies. All, except for one, offer a broad range of insurance products apart from VHI policies. The VHI market is broadly speaking divided into two segments: group VHI (80% of the market) and individual VHI (20% of the market). In 2010, the largest company in the group insurance market had a market share of about 40%, while the remaining 60% was divided between five other companies (Berge & Hyggen, 2010). There are fewer providers in the individual insurance market; in 2009 the two largest companies had a market share of approximately 80%.

### **3.5.3 Market conduct**

Private insurers are not integrated with health-care providers. VHI policies mainly offer access to ambulatory care in semi-private or private hospitals. One insurer offers policies that provide access to treatment in both the private and public sectors. Treatments that are not covered by the statutory system and OOP payments are not covered. Emergency care is excluded.

### **3.5.4 Public policy**

Although the introduction of tax incentives was debated in the past (2003), there are currently no individual tax incentives to take up VHI (Berge & Hyggen, 2010). Regulation of the VHI market is described in section 2.8.1.

## **3.6 Other financing**

There are no other major sources of financing. Less significant sources of financing are: private organizations and individuals, for example, private grassroots initiatives; collecting money for local hospitals to enable them to purchase special equipment or establish a particular unit; or for medical science projects (for instance, infant mortality studies). In areas such as rehabilitation

and substance abuse treatment, some providers rely on sponsorship from private charitable organizations. Nevertheless, these are rather ad-hoc initiatives that do not have fundamental financial significance for the health-care system.

## 3.7 Payment mechanisms

### 3.7.1 Paying for health services

#### **Public health services**

The majority of public health services are provided at the municipal level (see section 5.1). Public health services for pre-school and school children are provided in special settings (municipal health centres, health centres in schools), mainly by specially trained salaried nurses. In addition, contracted GPs are obliged to provide up to 7.5 hours a week of municipal health services (see “Primary care” below for more information on how GPs are remunerated).

#### **Primary care**

Primary care services (including primary emergency care) provided by GPs are financed from three sources: the municipalities (capitation, approximately NKr 400 (€54) per patient); patients (co-payments); and the HELFO (fee-for-service; FFS). Capitation payments amount to about 30% of GPs’ incomes, while the other two sources provide the remaining 70%. GPs may also be salaried and employed by the municipality, in which case the municipality receives a subsidy (FFS) from the HELFO.

Other primary care services, for example, services provided by contracted primary care psychologists and physiotherapists, are funded by the HELFO (FFS) and patients (co-payments). They are contracted by the municipalities but, as they are usually self-employed, they normally receive the funding (FFS) directly from the HELFO. Privately practising midwives contracted by the municipalities also receive funding (FFS) directly from the HELFO. Midwives employed in municipal health centres receive a salary.

Primary rehabilitation is financed from the municipalities’ ordinary budgets but there may also be cost-sharing arrangements with the state for patients with extra needs. When the cost for a single patient exceeds a certain amount in a calendar year (NKr 895 000 (€119 726) in 2012), the state will cover 80% of the additional expenses and the municipality the remaining 20%.

Statutory dental care (for children and young adults) is financed from block grants from the counties. Adult dental care is mainly financed from OOP payments and, for certain conditions, subsidies (FFS) from the HELFO are also available.

## **Specialist health care**

### ***Somatic care***

Hospital financing evolved from per diem reimbursement (1970–1980), through block grant financing (1980–1997), to (since 1997) mixed financing consisting of block grants (currently 60% of hospital financing for somatic care) and activity-based funding (40%) (Nerland, 2001; Biørn et al., 2003; Johnsen, 2006). The mixed financing is organized as follows:

1. Since the 2002 reform, the RHAs and health trusts have been financed by block grants from the state (prospective payment schemes), together with only a small fraction of OOP payments for ambulatory care and laboratory/radiology services from the patients. The block grant contribution is allocated from the RHAs to the health trusts based on their resource needs. The RHAs are free to set up their own system to fund the health trusts and other institutions.

2. Activity-based financing of hospitals relating to somatic care (for both public hospitals and private hospitals contracted by the RHAs) is built on active transfer of patient information from the hospitals to the Norwegian Patient Register. This information comprises data on diseases and surgical procedures according to the international classification systems and is collected three times a year. The Norwegian Patient Register collates the information and transfers it to the Ministry of Health. A Nordic DRG system is used to classify patients and DRG weights are based on national average costs.

In 2012, municipalities were made responsible for co-financing part of the somatic non-surgical specialist health-care services provided in hospitals and for patients ready for discharge (see section 6.1.5). The rate of co-financing has been set at 20% of the DRG rate (another 20% comes from the state). This municipal co-financing will form part of the activity-based financing received by the RHAs (Pedersen, 2012). Unused money can be retained by the municipality.

### ***Mental health care***

Specialized mental health services are financed by block transfers from the state to the RHAs and by earmarked funding, for instance, through the Escalation Plan for Mental Health that lasted from 1998 to 2009. A similar Escalation Plan has been in effect since 2005 for treatment of alcohol and drug addiction. The

RHAs in turn finance their mental health institutions through block grants. So far, there is no activity-based funding in place for this area, although some FFS arrangements have been established for mental health-care services provided within ambulatory care.

### ***Other specialized care***

Privately practising specialists under contract with the RHAs are funded from three different sources: operating grants from the RHAs; reimbursement from the HELFO (FFS); and co-payments from patients.

Services provided by laboratory and radiology units owned by the health enterprises are financed on a FFS basis (paid by the HELFO to the RHAs) for outpatients and activity-based financing (DRGs) for inpatients. Private laboratories are subject to a different set of tariffs and are paid for directly by the HELFO, according to their agreements with the RHAs.

### ***Pharmaceutical care***

In the outpatient sector, prescription drugs included in the “blue list” are financed in part from patient co-payments and in part by the HELFO. Prescription drugs not included in this list and non-prescription drugs are paid for in full by the patients. Pharmaceuticals in hospitals and nursing homes are free of charge to the patients and are paid for by, respectively, the RHAs and the municipalities.

## **3.7.2 Paying health workers**

Norwegian health-care personnel are mainly salaried employees. However, there are important exceptions, such as GPs (see section 3.7.1).

Salaries of public health-care personnel are usually set through negotiations between the state, municipalities (represented by the Norwegian Association of Local and Regional Authorities (KS)), health enterprises (represented by an organization negotiating wages on their behalf (“Spekter”)), and their counterpart member organizations for the employees, such as the Medical Association of Norway, the Nurses Association of Norway and the Dentist Association (see section 2.3.7). The income base for GPs (capitation rate) is negotiated centrally and is the same throughout the country. Income negotiations for the per capita reimbursement are made between the Norwegian Medical Association and the KS. GP unions and the state negotiate the FFS rates and the level of patient co-payments. FFS and co-payments received by privately practising specialists contracted by the RHAs are also negotiated centrally and are uniform throughout the country.



In 2011, physicians employed by the RHAs earned NKr 63 300 (€8168) per month on average (including compensation for working overtime and non-regular hours, etc.). The average for nurses was NKr 34 800 (€4490) per month. In comparison, the average monthly salary in 2011 for all employees in Norway was NKr 38 100 (€4916) (Statistics Norway, 2012b).



## 4. Human and physical resources

Several trends can be discerned in both the infrastructure and organization of the hospital sector. The number of hospital beds has been declining since the late 1980s within both acute and psychiatric care. The average length of hospital stay has also declined, often thanks to the introduction of new treatment options and modalities. There has also been a deliberate shift towards more outpatient and day-care treatment. However, at the same time, bed occupancy rates are high and this is reflected in long waiting times for elective care. The number of long-term beds has remained stable despite the current government's ambition to increase this. At the same time, municipalities have managed to increase the provision of home-based services.

Municipalities are responsible for investment in infrastructure such as primary care and LTC facilities, while the RHAs (since 2002) are responsible for investment in the hospital infrastructure within their geographies. Large infrastructure projects, such as the Norwegian Health Network, are the responsibility of the central government.

The availability and use of IT continue to increase within the health-care system as well as in other parts of society. Several national strategies for a more digitalized health-care system have been launched and implementation of these strategies is now starting to gain momentum. All primary care physicians are now using electronic patient records (EPRs) and the use of other IT tools in primary care is very high. All RHAs use EPRs. Introduction of some types of e-solutions, such as e-referrals from GPs and electronic hospital discharges, has been more difficult due to the lack of coordination between the two levels responsible for provision of care. Electronic booking of doctor consultations is not yet in general use. Ongoing e-health projects include the introduction of electronic medical records on the national scale.

The number of practitioners in most health personnel groups, including physicians and nurses, has been increasing in the last few decades and the number of health-care personnel per 100 000 inhabitants is high compared to other EU countries. A significant proportion of medical personnel come from abroad and Norway has long pursued an active policy of recruiting foreign health-care personnel. In 2011, the government adopted WHO's ethical code of practice for the recruitment of international health-care personnel, which discourages active recruitment from poor countries with shortages of health-care personnel.

## 4.1 Physical resources

### 4.1.1 Capital stock and investments

#### Current capital stock

In 2012, there were 21 public hospital trusts in Norway, with over 100 hospital facilities. One hospital trust can cover a vast geographical area (e.g. in Nordland county, the distance between hospitals is more than 500 kilometres). Hospitals are mainly situated in urban areas but some smaller local hospitals are located in remote areas. The number of hospitals is positively correlated with the population density, with the greatest number of hospitals in the South-Eastern RHA. However, the average number of beds per 100 000 inhabitants, at 347, is lower in the most populous South-Eastern RHA than in the other RHAs (Table 4.1). The size of the hospital trusts varies, the smallest being Sunnaas trust with 159 beds and the largest Oslo University Hospital with almost 2000 beds (both in the South-Eastern RHA). Six trusts have more than 1000 hospital beds, 8 have between 500 and 1000 beds, and 8 have fewer than 500 beds.

**Table 4.1**

Hospital beds by RHA, 2011

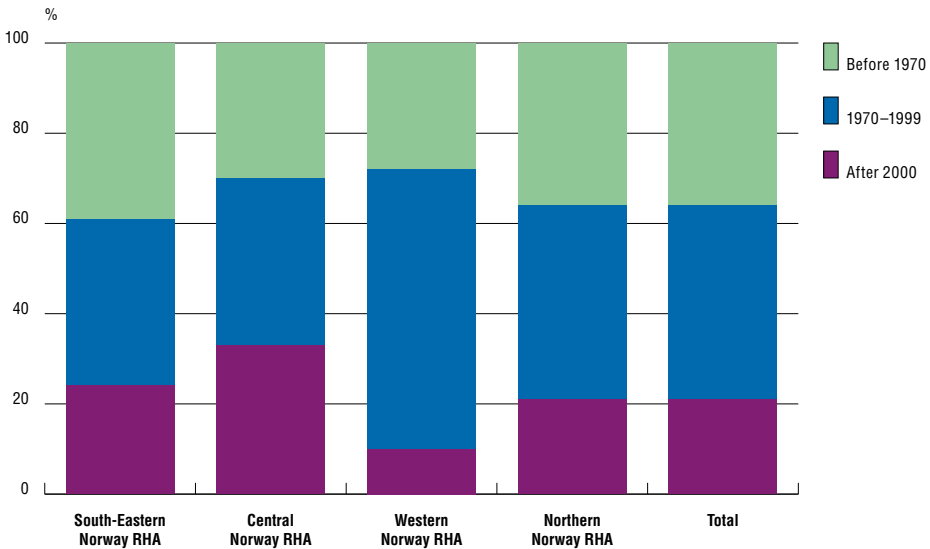
	South-Eastern	Western	Central	Northern
Total number of beds (range)	9528 (159–1978)	3978 (345–1424)	2534 (213–1080)	2041 (219–925)
Number of hospital trusts <sup>a</sup>	9	4	4	4
Beds in private institutions <sup>b</sup>	902	678	10	41
Number of beds per 100 000 inhabitants <sup>c</sup>	347	387	373	436

Source: Statistics Norway (2013h).

Notes: <sup>a</sup> Non-hospital trusts (e.g. pharmacy trusts) are not counted; <sup>b</sup> Beds in private, non-commercial hospitals operating on the basis of long-term agreements with the RHAs; <sup>c</sup> Own calculations based on the number of inhabitants per RHA reported in section 2.3.

The age and condition of hospitals vary across the country (Auditor General, 2011b). Hospital trusts report to the RHAs on the condition of their facilities on an annual basis and reporting on capital stock and investments is also part of the RHAs’ annual reporting to the Ministry of Health. According to a survey conducted in 2009, the average age of the hospital buildings was approximately 40 years and 21% of hospital buildings were built after 2000 (Fig. 4.1). The same survey revealed that there were large variations in the condition of the facilities. On a scale from 0 to 3, where 0 means “no symptoms of poor condition” and 3 means “drastic symptoms of poor condition”, 10% of the building stock scored 3, and 40% scored 2. Only 20% of the building stock had no symptoms of poor condition. There were also clear regional differences, for example, the Northern and Western RHA trusts had 60% of the building stock in the lower part of the scale (i.e. scoring 2 and 3) (Auditor General, 2011b).

**Fig. 4.1**  
Age of hospital facilities, by year built, 2009



Source: Auditor General (2011b).

The report from the Auditor General, which was delivered to the parliament, also includes a response from the Minister of Health. Thus, it feeds straight back to the decision-making and planning processes and to future investment strategies.

### **Investment funding**

Overall responsibility for the planning of infrastructure and capital investments in public health-care providers lies with their respective owners: central government in the case of hospitals; and municipalities in the case of primary care providers.

Each of the four RHAs has a wide authority to plan and manage its own infrastructure according to its needs. Health trusts follow accrual accounting principles and are expected to cover the annual depreciation costs within their annual budgets. If they enter into contracts with private service providers, the contracts must take into account the contractee's needs for capital investment. Decisions over capital investments in hospitals are taken by their boards (Solumsmoen & Aslaksen, 2009). Health trusts finance investments from their general incomes. In the case of large capital investment projects, they may apply to the Ministry of Health for special investment grants. The RHAs may finance investments in the health trusts by borrowing (debt financing). RHAs are not allowed to borrow money in the private market but can borrow money from the Norwegian Central Bank. As the owner of the hospitals, the ministry shares responsibility for the control and monitoring of investments in health enterprises. In addition, the ministry has the authority to approve larger building projects in accordance with special regulations (for such projects 30% of the funding has to come from the RHA).

The state's block grant transfers are the principal source of financing for the municipalities, including the funding of capital investment. The municipalities are free to distribute this funding according to their priorities. Unlike the RHAs, the municipalities may borrow money in the private sector to finance capital investments (and money from the block transfers can be used to cover the interests and repayments). Investment decisions are taken by the Local Municipalities Councils.

A system of investment grants to municipalities' assisted living and nursing homes was created in 2008. Subsidy from the government covers 20% (assisted living home) or 30% (nursing home) of the construction costs and is seen as an essential tool for achieving the government's goal, expressed in the Care Plan 2015, of establishing 12 000 new care places between 2006 and 2015 (see section 5.8) (Ministry of Health, 2006).

### 4.1.2 Infrastructure

In 2011, there was a total of 20 778 beds in the specialist health-care sector (Directorate of Health, 2012c). Beds in public health-care institutions accounted for 78% of all beds (16 282 beds). During the last 20 years there has been a steady decline in the total number of hospital beds. The number of acute hospital beds declined by 37% between 1990 and 2010, the number of general hospital beds by 29% and the number of psychiatric hospital beds by 7% (Table 4.2).

**Table 4.2**

Number of hospital beds per 100 000 inhabitants, 1990–2010, selected years

Indicators (per 100 000)	1990	1995	2000	2005	2010
General hospital beds	467	402	381	404	330
Acute care hospital beds	378	330	312	291	237
Psychiatric hospital beds	89	71	70	100	82
Nursing and elderly home beds	n.a.	n.a.	n.a.	944	892

Source: WHO Regional Office for Europe (2013).

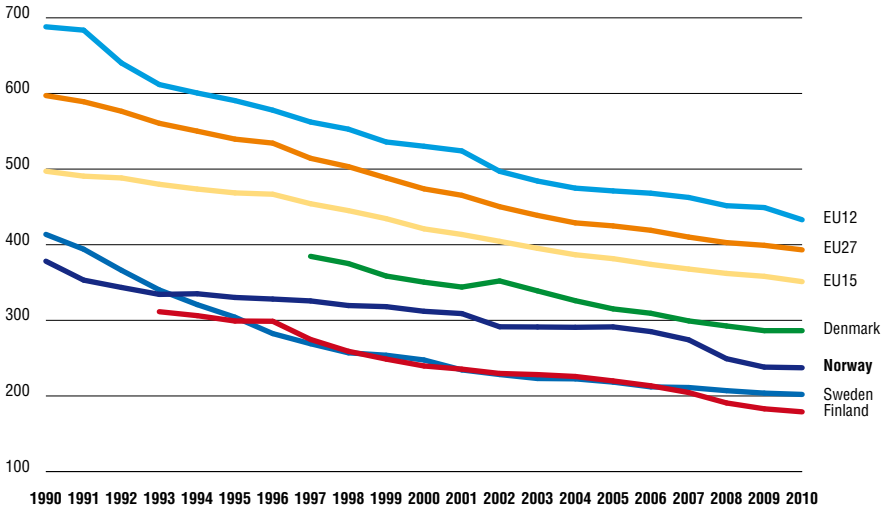
Note: n.a. = not available.

The decline in the number of acute care hospital beds reflects the government's efforts to improve resource allocation, for example, by shifting inpatients to outpatient settings and to day-care surgery (see section 5.4.1). While this downward trend in the number of beds has also been observed in other countries (Fig. 4.2), Norway started from a relatively low level and, in 2010, the number of acute hospital beds in Norway, at 2.4 per 1000 population, was well below the EU27 average of 3.9.

Trends in operating indicators in acute hospitals, such as average length of stay (ALOS) and occupancy rate, may reflect the decline in the number of acute beds. ALOS declined by over 40% between 1990 and 2010, and at 4.5 (2010) is much lower than the EU27 average of 6.6 (2009) (Fig. 4.3). The bed occupancy rate increased by over 20% and, at over 93% (2010), is significantly higher than the EU27 average of 76% (2009) (Fig. 4.4).

**Fig. 4.2**

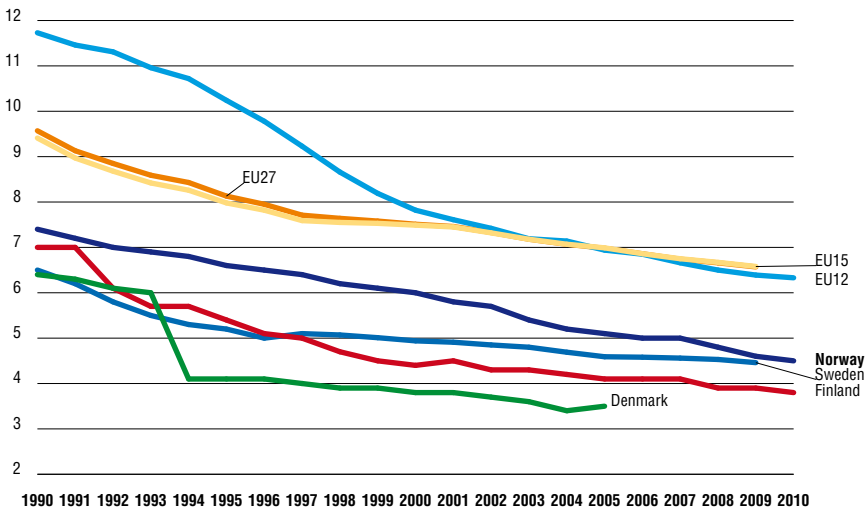
Acute care hospital beds, per 100 000 inhabitants, in Norway and comparator countries, 1990–2010



Source: WHO Regional Office for Europe (2013).

**Fig. 4.3**

Average length of stay, acute hospitals, in days, in Norway and comparator countries, 1990–2010



Source: WHO Regional Office for Europe (2013).

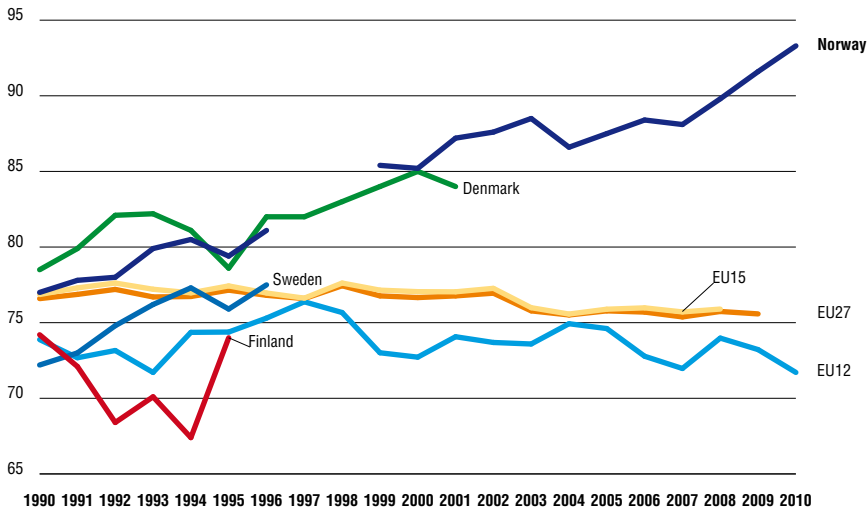


The long waiting times for hospital treatment in Norway compared to other countries may be a symptom of the high bed occupancy rates. According to a 2010 OECD survey, 50% of respondents in Norway had to wait more than four weeks for a specialist consultation (third highest score after Canada (59%) and Sweden (55%)) and 21% of respondents had to wait four months or more for elective surgery (third highest score after Canada (25%) and Sweden (22%)) (OECD, 2012b).

Partly in response to this problem, the coordination reform (see section 6.1.5) includes several measures aimed at further reducing the ALOS (Ministry of Health, 2009b). These measures include: shifting elderly patients from hospitals to nursing homes or to home-based care services; lowering the rates of unnecessary admissions (reducing the number of referrals by primary care doctors); increasing the share of outpatient care provided by hospitals (Rønningsen, Myrbostad & Bergsland, 2012); and improving hospital planning, for example, by reducing the time patients spend in hospital before an operation. It also gives municipalities clearer responsibility for the provision of follow-up care for patients ready to be discharged from hospitals by making them responsible for co-financing of the specialist health-care services and for the financing of care for patients ready for discharge.

**Fig. 4.4**

Bed occupancy, acute care, in %, in Norway and comparator countries, 1990–2010

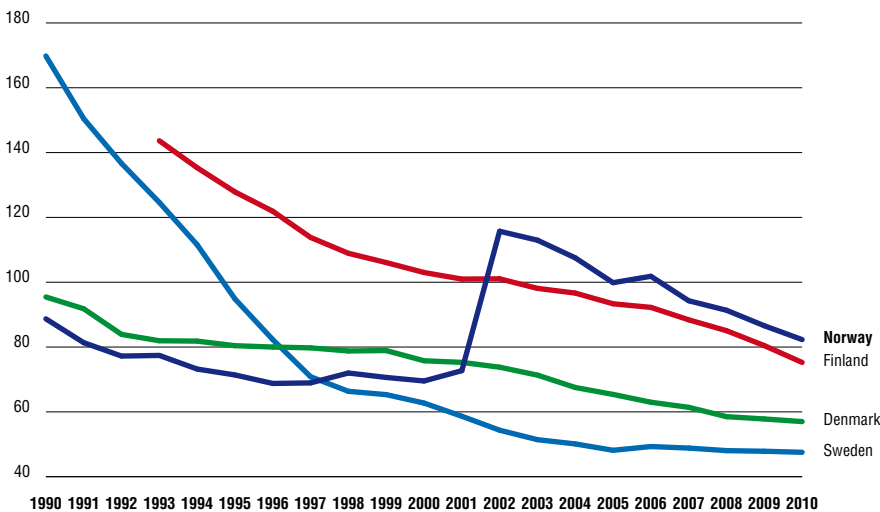


Source: WHO Regional Office for Europe (2013).

The reduction in the number of beds in psychiatric hospitals was relatively small between 1990 and 2010 (Fig. 4.5), compared to reductions that occurred for other types of beds, as substantial reductions had already taken place in the 1970s and 1980s (reflecting the shift towards deinstitutionalization of mental care).

**Figure 4.5**

Psychiatric hospital beds, per 100 000 inhabitants, in Norway and comparator countries, 1990–2010



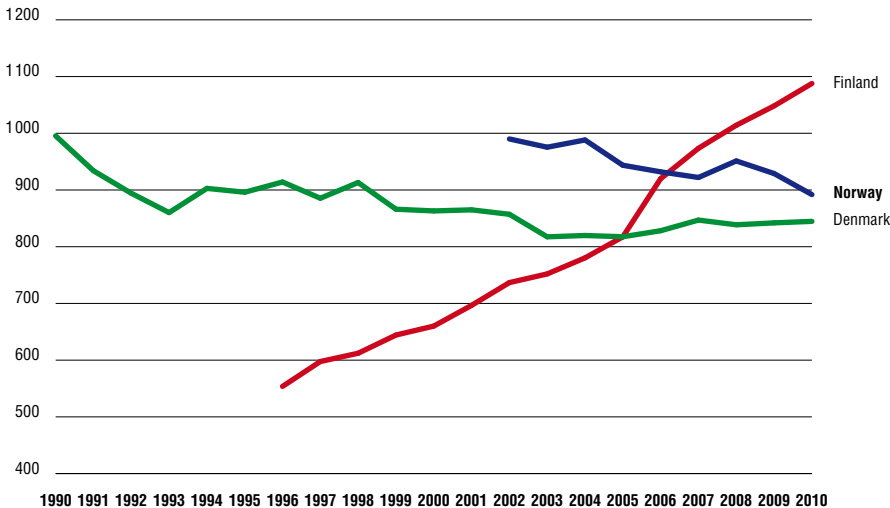
Source: WHO Regional Office for Europe (2013).

Note: According to the definitions provided by WHO-HFA (2013), there was a break in the time series for Norway in 2002 (hospitals were transferred from the counties to central government in 2001). No averages are available for the EU countries.

In 2011, there were almost 1000 nursing homes in Norway (Statistics Norway, 2012e). The number of single-occupancy rooms increased from 82% in 1996 to 97% in 2011 and as a result of converting rooms from double to single occupancy there has been a slight decrease in the number of beds (Fig. 4.6). At the same time, the number of recipients of nursing care has increased and this has been accommodated by the increase in the provision of non-institutionalized care (at home and day-care facilities) (this increase is not reflected in Fig. 4.6). In the future, the number of beds in assisted living and nursing homes is likely to increase, as the government has allocated a special subsidy to significantly increase the number of care beds by 2015 (see sections 4.1.1 and 5.8).

**Fig. 4.6**

Nursing and elderly home beds, per 100 000 inhabitants, in Norway and comparator countries, 1990–2010



Source: WHO Regional Office for Europe (2013).

Note: No averages are available for the EU countries. Data for Sweden were omitted due to changes in the methodology and therefore low comparability.

### 4.1.3 Medical equipment

Medical equipment is financed in the same way as capital investments (see section 4.1.1). Following the 2002 health-care reform, one central purchasing unit, Helseforetakenes Innkjøpsservice (HINAS), was established by the RHAs in 2003 to coordinate procurement on behalf of public health trusts (its services are not available to privately owned hospitals and health-care units operated by local municipalities). It was expected that a single entity would be in a better position to negotiate more economically advantageous contracts than each enterprise could achieve on its own (Auditor General, 2012). A common procurement policy is not applied to all purchases but only to those that are large enough, in both sum and volume, to represent a possible gain if conducted on a national scale. A recent report (Bjørnstad, 2011) from the South-Eastern RHA, the largest RHA, concluded that HINAS had been of considerable importance in the procurement of technical aids for patients (HINAS accounted for 70% of purchases) but had not been sufficiently involved in purchasing medical technical equipment for the hospitals. Although HINAS is usually in charge of larger orders, decisions on “big-ticket” purchases may still be taken by the national authorities. For example, the procurement, location and funding of

the first positron emission tomography (PET) machine in 2004 was decided by the parliament. To improve coordination of major investments in medical equipment and inpatient drugs, the Ministry of Health has recently established a national system for the introduction of new medical technologies in hospitals (see section 6.1.6).

Limited national information is available from hospitals and primary care facilities on existing medical equipment and its use, and it is therefore difficult to assess whether it is available in sufficient quantities. Information on diagnostic imaging technologies is available from the Norwegian Radiation Protection Authority (Table 4.3). According to OECD data, Finland had approximately 20 magnetic resonance imaging (MRI) scanners and 21 computer tomography (CT) scanners per 1 million inhabitants, which is similar to the ratios observed in Norway (OECD, 2012a).

**Table 4.3**

Availability of diagnostic imaging technologies, 2011

Technology	Total number	Number per 1 000 000 population
MRI scanners	153	22
CT scanners	130	21
PET scanners	6	1.2

*Source:* Personal communication from Norwegian Radiation Protection Authority.

*Notes:* Total numbers (including all private diagnostic imaging laboratories in Norway); one of the PET scanners is operated by a private hospital (Almén et al., 2010).

#### 4.1.4 Information technology

##### IT use by households

Computer use is very high in Norway. According to data from a survey conducted in early 2012 (Statistics Norway, 2012c), 95% of the respondents had used a computer in the last three months prior to the survey. Almost everyone under 55 years old and 74% of people aged between 65 and 74 years old had recently used a computer (the 2011 figure in the latter group was 67%). General Internet access is also very high. According to the same survey, all households with children and 90% of households without children had access to the Internet at home. Only 4% of the population between 16 and 74 years of age had no access to the Internet. The Internet is mainly used for reading newspapers, searching for information on goods and services, and for Internet banking.

Internet use for health purposes has, according to surveys studied by Wangberg et al., increased from 19% of respondents in 2000 to 67% in 2007 (Wangberg et al., 2009). The Internet is most commonly used for reading about health or illnesses and its importance as a source of health information is increasing. The Internet is also increasingly used for ordering OTC medicines and other health-related products. Forty-four per cent of those having used the Internet for health purposes reported having searched for lifestyle-related information.

### **IT use in the health system**

The use of IT in the health-care sector has been strongly promoted by the Norwegian government. Between 1997 and 2008, four action plans for IT development in the health sector were published. The fourth and current one, “Teamwork 2.0” (2008–2013), highlighted the priority areas and goals for the next five years, including the development of e-health tools, such as e-prescriptions and EPRs. Other documents on e-health include the “Strategy for ICT in the Public Sector 2003–2005” and the 2006 White Paper “An Information Society for All” (Doupi, Renko & Giest, 2012).

The level of IT use in the Norwegian health system varies and is most advanced at the level of primary care. In terms of IT infrastructure, 98% of GP practices use a computer and 87% of practices have an Internet connection (2009 data). The storage of electronic patient data is common practice and almost all GP practices store at least one type of individual patient data. Most GP practices have (98%) and use (93%) a computer in the consultation room for consultation purposes with patients. Decision support systems were also used in the majority (93%) of practices. The use of electronic exchange of patient data is also high. In 2009, 35% of practices exchanged medical data with other care providers or professionals, and 88% of GP practices received laboratory results in a digital form. Electronic exchange of administrative data was also high with, respectively, 25% and 19% of practices exchanging such data with other care providers and reimbursing entities. Since 1 January 2010, all GPs are obliged to file for reimbursements electronically (Doupi, Renko & Giest, 2012). EPRs were introduced in the early 1980s and are now used by all GPs (Ministry of Health, 2012). E-prescriptions were piloted in 2010 and implemented nationally in 2011 with full rollout expected to be achieved by the end of 2013 (Directorate of Health, 2012e). The use of e-referrals to specialist and hospital care is still relatively poor. In 2007, only 8% of referrals were sent electronically. The number had increased to between 40% and 50% in 2011, but there are still substantial differences between RHAs and between hospitals (Directorate of Health, 2012d).

The use of e-tools in hospitals is less common than in general practice but has been improving. Electronic exchange of discharge summaries was used in 50% of cases in 2007. In 2012, one region (Northern RHA) had implemented it for all hospitals (80% in others). EPRs are used in all hospitals. There are no electronic appointment booking systems for elective hospital care and currently no plans to introduce such systems (Directorate of Health, 2012d).

Norway, like other Nordic countries, has traditionally promoted telemedicine applications as a tool to improve equality of access to health care, especially in remote areas with dispersed populations, such as the northern region of Norway. Although it is not widespread, the use of telemedicine is increasing. The Norwegian Centre for Integrated Care and Telemedicine at the University Hospital of North Norway in Tromsø is the academic research centre for telemedicine in Norway. Norway was also an early promoter of telemedicine applications. For example, a fee schedule for telemedicine that made all telemedicine services reimbursable by the NIS was implemented in mid-1996 (Castro, 2009). Newer applications include teleradiology (for use in consultations between hospital and the primary care sectors and to obtain second opinions, including in emergencies) and videoconferencing in the area of psychiatry and cancer care. In some areas, telemedicine is also used in the area of radiology and dialysis, enabling patients to avoid long journeys for consultation and assessment.

The Norwegian Health Network (Norsk Helsenett, [www.nhn.no](http://www.nhn.no)) was founded in 2009 in order to provide an efficient and secure electronic exchange of patient information via a health communication network between all relevant parties within the health and social services sectors and to enable establishment of cooperation between administrative levels and across regional borders. Currently, all public hospitals and pharmacies, and 365 municipalities (covering over 90% of the population) are connected to this network ([www.nhn.no](http://www.nhn.no)).

## 4.2 Human resources

### 4.2.1 Health workforce trends

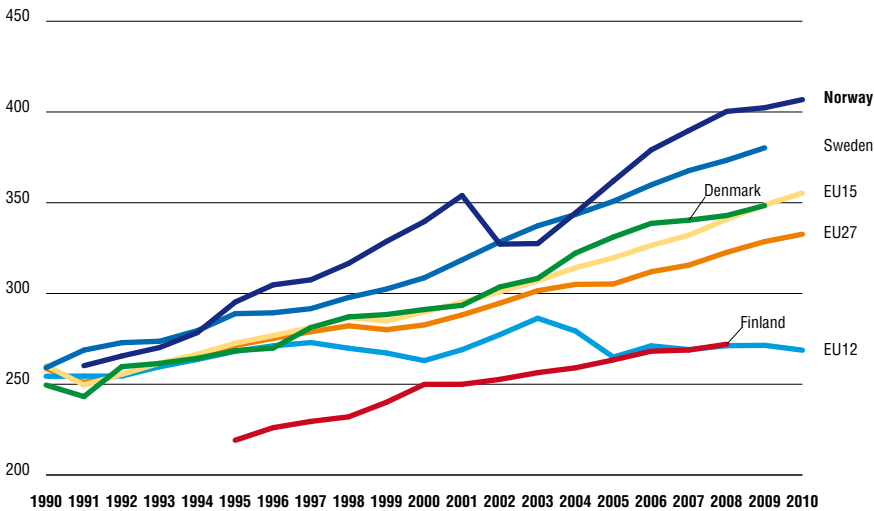
#### Doctors

In 2010, at 407 physicians per 100 000 inhabitants, Norway had the highest physician coverage among the Nordic countries and also compared to the EU average (Figs. 4.7 and 4.9). Between 1990 and 2009, the number of physicians in Norway increased by 84%, faster than in any other country in Europe (Statistics

Norway, 2012b). The reason behind this was increased funding for medical training and increased intake of medical students, following a shortage of physicians in the 1990s (Mundal, 2011).

**Fig. 4.7**

Number of physicians per 100 000 inhabitants, in Norway and comparator countries, 1990–2010



Source: WHO Regional Office for Europe (2013).

Note: There was a break in the time series for Norway in 2002 due to a change of data source (administrative registers from 2002 and the Norwegian Medical Association in the earlier years).

According to Statistics Norway data, there were 22 489 physicians in Norway in 2009. Of these, 87% worked within and 13% worked outside the health-care sector (for example, in public administration, education, social services). The number of specialists increased by nearly 38% between 2000 and 2009. In 2009, 9444 (42% of all physicians) had a specialization. Of these, 13% specialized in psychiatry, 8% in anaesthesiology, while specialists in obstetrics and gynaecology accounted for 6% (each) of the total number of specialists (Mundal, 2011).

According to WHO-HFA data, there were 3909 GPs in Norway in 2009 (WHO Regional Office for Europe, 2013). In that year, 74% of GPs were self-employed (compared to 51% in 1990); 14% were salaried (compared to 38% in 1990); 9% were employed temporarily as interns; and 3% were self-employed and not contracted by a municipality (Mundal, 2011).

There are no official statistics on the number of physicians according to their place of work, but this can be approximated by looking at the distribution of physician man-years. In 2009, the majority of physician man-years (72%) took place in specialist care, mainly in specialist hospitals (79%) and mental health institutions (14%), reflecting the continued importance of institutionalized mental care in Norway (see section 5.11). In municipal care, which accounted for 28% of physician man-years, the majority of physician man-years (82%) took place in general practice (Table 4.4).

**Table 4.4**

Number of physician man-years in specialist and municipal health care, 1990–2009

	1990	1995	2000	2005	2007	2009	% Change 1990–2009 <sup>a</sup>
Specialist health care (total)	5 680	6 700	9 004	10 425	10 999	11 698	106
General hospitals	4 576	5 402	7 073	8 199	8 640	9 290	103
Other somatic institutions	21	79	74	84	89	71	238
Private practice	285	277	546	558	561	572	101
Mental health institutions	742	886	1 141	1 411	1 532	1 581	113
Private practice in psychiatry	56	56	170	173	177	184	229
Municipal health care (total)	3 218	3 500	3 809	4 219	4 396	4 637	44
General practice	n.a.	2 816	3 102	3 502	3 645	3 817	36
Nursing and care services	n.a.	201	230	275	320	383	91
Health clinics and school health	n.a.	213	228	214	207	210	-1
Other	n.a.	271	250	230	224	226	-17
<b>Total</b>	<b>8 898</b>	<b>10 200</b>	<b>12 813</b>	<b>14 644</b>	<b>15 395</b>	<b>16 335</b>	<b>84</b>

Source: Mundal (2011).

Note: <sup>a</sup> Or % change 1995–2009 if 1990 data were not available. n.a. = not available.

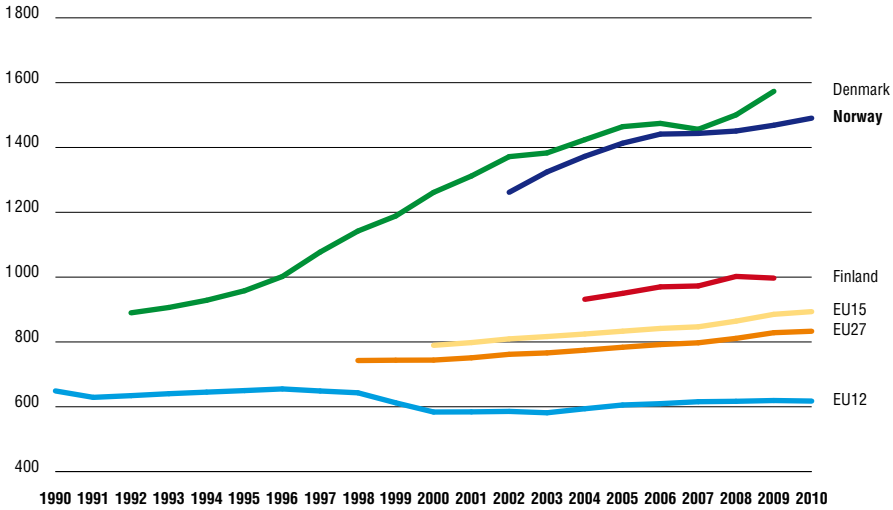
## Nurses and midwives

The number of nurses per 100 000 population in Norway, at 1490 in 2010, is significantly higher than the EU average of 833 (Fig. 4.8). There are no official statistics on the number of nurses working in specialist and primary care.

Nurses account for a third of health-care personnel in specialist health care. The number of nurses in specialist health care increased by 70% between 1990 and 2007, while the number of auxiliary nurses working in specialist care decreased by 33%. Employment of nurses is also significant within mental health care, where nurses account for nearly 20% of all health employees (Mundal, 2011; Directorate of Health, 2012b).



**Fig. 4.8**  
 Number of nurses per 100 000 inhabitants, in Norway and comparator countries, 1990–2010

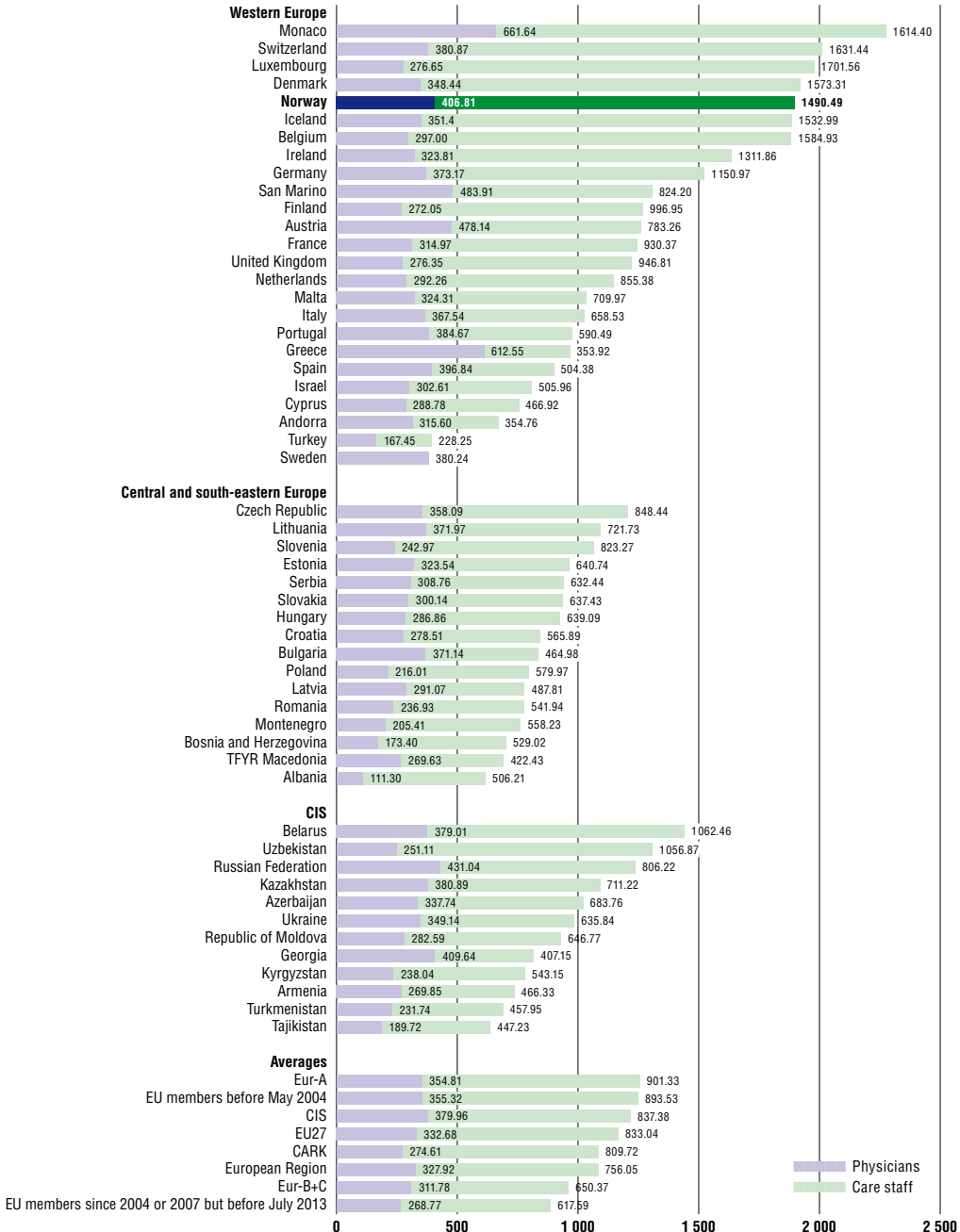


Source: WHO Regional Office for Europe (2013).

Put together, the number of physicians and nurses per 100 000 inhabitants was higher in Norway than in most countries in the WHO European Region (Fig. 4.9).

**Fig. 4.9**

Number of physicians and nurses per 100 000 inhabitants, in the WHO European Region, 2010 or latest available year



Source: WHO Regional Office for Europe (2013).

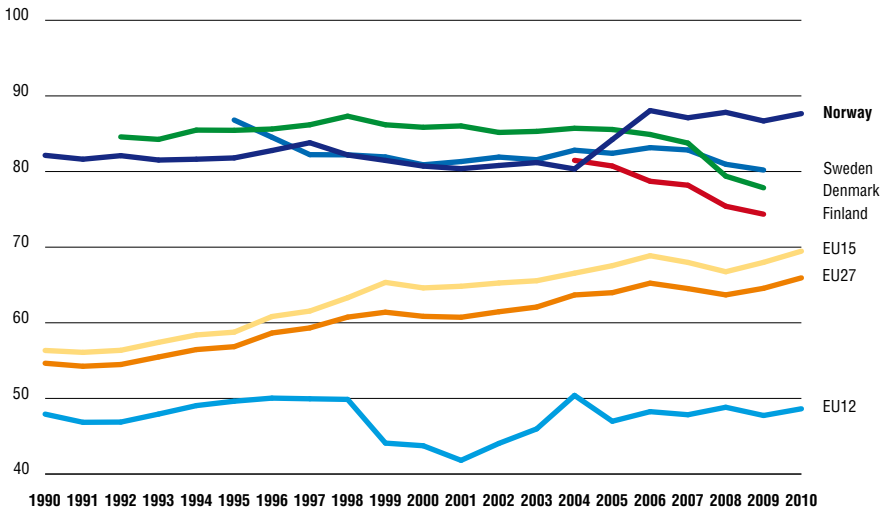
Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition).

**Dentists**

The number of dentists in Norway increased significantly between 2004 and 2010. The number of dentists per 100 000, at 88 in 2010, was slightly higher than in other Nordic countries and much higher than the EU27 average (66) (Fig. 4.10). In 2011, the majority of dentists (over 70%) worked in the private sector (Mundal, 2011; Statistics Norway, 2012g).

**Fig. 4.10**

Number of dentists per 100 000 inhabitants, in Norway and comparator countries, 1990–2010



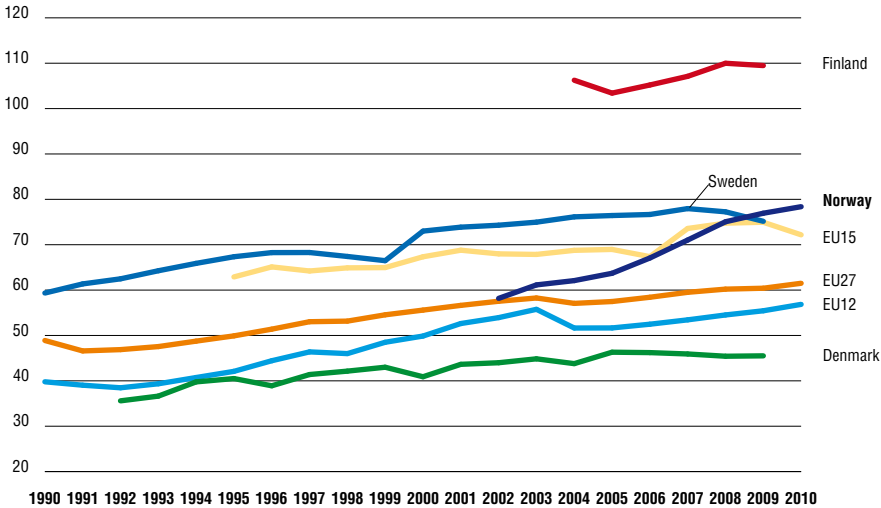
Source: WHO Regional Office for Europe (2013).

**Pharmacists**

In 2010, there were 78 pharmacists per 100 000 inhabitants in Norway. This is somewhat higher than the EU27 average of 62 (Fig. 4.11).

**Fig. 4.11**

Number of pharmacists per 100 000 inhabitants, in Norway and comparator countries, 1990–2010



Source: WHO Regional Office for Europe (2013).

**Other health-care professionals**

Another significant (in terms of numbers) group of health workers in Norway is auxiliary health-care personnel (auxiliary nurses, care workers and health workers) (Table 4.5).

**Table 4.5**

Health workers by personnel group 2000–2010, selected years

	2000	2005	2010	% Change 2000–2010
Physician	7 205	8 613	10 983	52
Specialized physician	8 246	10 584	12 265	49
Dentist	4 075	4 313	4 822	18
Psychologist	3 734	4 844	6 631	78
Pharmacist and dispensing pharmacist	2 537	3 021	3 884	53
Midwife	2 418	2 563	2 871	19
Nurse	65 553	77 231	90 838	39
Public health nurse	6 126	9 140	12 543	105
Occupational therapist and physiotherapist	3 053	3 276	3 888	27
Child care worker	9 486	11 952	14 739	55
Child welfare officer	10 448	13 312	15 764	51
Social worker	5 001	6 761	9 729	95
Medical and dental secretary	7 395	8 986	13 312	80
Auxiliary nurse, care worker and health worker	7 337	11 255	15 971	118
Social educator	77 295	83 553	90 995	18
Licensed medical student	376	405	382	2
Health-care education <sup>a</sup>	21 961	27 198	42 113	92
<b>Total</b>	<b>242 246</b>	<b>287 007</b>	<b>351 730</b>	<b>45</b>

Source: Statistics Norway (2012e).

Note:<sup>a</sup> Includes persons in health-care education at secondary and university levels.

#### 4.2.2 Professional mobility of health workers

Several western European countries, including Norway, rely more than others on health professionals from abroad to make up for shortfalls in the number of health-care professionals (Johnsen, 2006). The Norwegian Labour and Welfare Service (currently part of the NAV), has since 1998 occasionally recruited nurses from other countries on behalf of the Norwegian employers. More health-care workers come to work in Norway than the other way round; likely reasons for this are the good economic situation, higher salaries and better job security in Norway compared to their home countries (Buchan, 2006). Mutual recognition of professional qualifications is defined in EU-Directive 2005/36/EC, which Norway has adopted.

In 2011, a total of 28 200 educated health professionals were immigrants or foreign citizens on a short-term stay, an increase of nearly 9% compared to 2010. One third of these immigrants were nurses, and one in four of these were from Sweden (Statistics Norway, 2012f). This is in part because of geographical proximity and also due to a 30-year-old agreement on free movement of nurses within the Nordic countries. Immigration is particularly important in the

recruitment of GPs, especially for the less central municipalities, with around 20% of GPs having an immigrant background. A quarter of the immigrant GPs are from other Nordic countries (Vold, 2011). The number of foreign dentists is increasing in both the private and public dental health services (there was an increase of almost 34% in 2007–2011). In 2011, one in four dentists had an immigrant background (Statistics Norway, 2012b).

In 2011, Norway decided to apply the new voluntary code of practice on the ethical recruitment of international health personnel adopted by WHO in 2010. This code discourages countries from actively recruiting health-care personnel from poor nations facing critical staff shortages.

### 4.2.3 Training of health workers

#### Training of medical doctors

Medical study programmes are offered at four public universities in Norway (Oslo, Bergen, Trondheim and Tromsø), with a total educational capacity of 600 students in 2012. The curricula of the medical faculties are not subject to detailed regulation and may differ, especially as regards teaching methods and the organization of study programmes. Coordination of medical education is done through formal and informal cooperation between the medical faculties (Brenne, 2003).

Admission to the programme is based on grades from the upper secondary school diploma and the admission criteria are the same at all four medical faculties. The programme takes six years or 360 European Credit Transfer and Accumulation System (ECTS) points (390 including the elective semester) and grants the Candidate of Medicine degree.

Until 2013, medical school graduates had to perform an 18-month internship before becoming fully licensed physicians. These internships used to be assigned by lottery. Although this was thought to assure a good geographical distribution of the best physicians, the increasing number of graduates compared to training positions has made it increasingly difficult for the government to guarantee a six-month maximum waiting time for obtaining a trainee position. Since 2013 the administration of internships has therefore been changed: doctors qualify directly after completing the six years of medical school, then apply for positions and the hospital trusts are responsible for selection and recruitment (Skinningsrud, 2011; Directorate of Health, 2013a).

There are 30 basic medical specialties (including psychiatric specialties) and eight medical and five surgical sub-specialties. The average minimum time required to complete a specialty is five years but it can take much longer in practice (on average nine years), with large variations between the specialties (Brenne, 2003). Specialization is usually in the form of training on the job. Within the Norwegian Medical Association there is one committee for each basic specialty and sub-specialty, which evaluates whether the candidate has met the requirements to become a specialist. Specialist titles are formally awarded by the Health Directorate. Except for specialists in general medicine, there is no requirement for doctors to take part in continuous medical education (see section 2.8.3).

### **Training of nurses**

Two types of nurse are distinguished in Norway: registered nurses (RN) and practical nurses (PN) (classified as health workers, see Table 4.5). There are 27 educational institutions in Norway offering basic RN education, mainly university colleges. Some colleges offer decentralized (e.g. web-based training or training in local educational institutions) or part-time programmes. The minimum requirement for entering the RN programme is a general study competence, which usually means that the applicant has completed three years of upper secondary education. Since the 1994 Competence Reform, persons born before 1978 who have taken a certain set of courses at the upper secondary school level, and those with extended work experience, are also qualified to apply.

The basic RN degree takes three years or 180 ECTS points and nurses completing it are awarded a Bachelor's degree and authorized to practise. Half of the study time is devoted to clinical training, organized by the RHAs and the municipalities.

Following the Bachelor's degree, RNs can subsequently pursue a Master's degree or enter a specialization programme in nursing (60–90 ECTS points), for example, in intensive care or operating theatre nursing. Specialization is not part of the Bologna system; however, these programmes are now being included in Master's degree programmes at university colleges (Råholm et al., 2013). Nurses undergoing full-time specialist education are usually paid an allowance by their employer for the duration of their studies and, in exchange, commit to work for the same employer for a certain number of years after finishing the specialization.

PNs, on the other hand, obtain a certificate upon completion of vocational training in upper secondary school. The body responsible for authorization of PNs is the SAK.

### **Training of other health-care professionals**

A degree in dentistry (Master in Dentistry) is awarded after five years of study. The first two years of this programme are integrated with the medical study programme. Dental specialization programmes are offered at the University of Oslo and last three or five years (longer for oral surgery and oral medicine) (University of Oslo, 2011).

In order to be admitted to study psychology, applicants must complete a one-year university study programme in professional psychology. A degree in psychology (Candidate in Psychology) is awarded after six years of study (including the one-year programme).

Studies in pharmacology are divided into a three-year Bachelor's and a two-year Master's degree. The Master's programme usually includes six months' practical training in a hospital or community pharmacy.

#### **4.2.4 Career paths of physicians and other health workers**

Physicians and nurses can pursue a clinical career (with or without managerial responsibility), an academic career or a combination of both (in which case they usually base their research on clinical practice). Most physicians and a large number of nurses choose to continue their studies in order to qualify as specialists after receiving their authorization to practise. For nurses, an academic career is more difficult to combine with clinical practice.

Until recently, there was only one public university programme offering education in health sector management. Since 1986, the Centre for Health Administration, which is connected to the medical faculty at the University of Oslo, has offered a full-time programme targeted at experienced health-care personnel. This programme has now developed into an 18-month degree (Master of Health Administration). More than 700 students have graduated between 1986 to 2012, most of them physicians (University of Oslo, 2013).

Since the 2002 reform, there has been an increased focus on leadership training within the public hospital sector. In 2002, the Centre for Health Administration started to recruit students for a new study programme offering Bachelor's and Master's degrees in health management and health economics. Other university institutions and private institutions today offer health management training programmes.



According to a recent study (Spehar & Kjekshus, 2012), nurses have gained access to more managerial positions over time, but their impact in decision-making remains comparatively low, as these positions are generally at a lower level and consequently less influential.



## 5. Provision of services

Public health services are delivered at the local and national levels. They are integrated with curative services at the municipal level, but are run by separate institutions at the national level. During the past decade, the government has launched a number of national public health programmes and strategies focusing on risk factors, such as smoking, alcohol consumption, diet and physical activity.

Primary care is provided at the municipal level, mostly by self-employed physicians and as part of municipal public services (nursing homes and home-based services). GPs act as gatekeepers, referring patients to more complex care. Inpatient specialized care is mainly provided by hospital trusts owned by the RHAs. Hospitals also provide outpatient specialist care in their outpatient departments. A deliberate substitution policy has been pursued since the late 1980s, with the aim of replacing relatively expensive inpatient care with less costly outpatient and day care and bringing care closer to patients' homes.

Access to pharmaceuticals (including innovative therapies) is good. Patient co-payments on pharmaceuticals are capped and certain population groups are exempt from cost-sharing. Since the 2000 Pharmacy Act came into force, which liberalized the pharmaceutical market, the number of pharmacies has grown significantly. Medicines have also become substantially less expensive in recent years and consumption has grown, although it is still much lower than in Sweden and Finland.

At the primary care level, emergency or acute primary care services are in most municipalities provided by regular GPs (within office hours) and on-call GPs (outside office hours), supported by telephone services. Hospitals receive emergency cases in Accident and Emergency departments.

Rehabilitation is provided at both primary (physiotherapy, occupational therapy, etc.) and secondary (specialized rehabilitation) levels. Municipalities as well as the RHAs are responsible for the coordination of rehabilitation services and all RHAs and most municipalities have established designated coordination units. Long-term care is provided in three types of setting: patients' homes, nursing homes or sheltered homes run by the municipalities. Development of sheltered housing and nursing homes is encouraged by the state through the provision of earmarked funding. In nursing homes, there has been a deliberate shift towards increasing the amount of single-occupancy accommodation to make it more home-like. Palliative care services are provided at all levels of care but the availability of palliative care seems to be moderate. In the area of mental care, there has been a shift towards deinstitutionalization. Statutory dental care services are provided for children and adolescents; adults see private dentists and pay the full fee.

Overall, there is little information on the accessibility, affordability and quality of various types of care. Quality standards (including educational standards) and guidelines are missing for some types of care and payment for services is not usually linked to quality (however, this last point may change in the future). There are geographical differences in access, with people living in rural and more remote areas having to travel longer distances to access care. Despite the high ratios of health-care professionals to the size of the population, waiting times for elective care are long and constitute an important barrier to accessing care.

## 5.1 Public health

Various governmental and non-governmental actors are involved in public health activities. The overall responsibility for public health rests with the Ministry of Health. Various central bodies, including the Directorate of Health, the NIPH and the National Board of Health Supervision (see section 2.3) are involved in the implementation and monitoring of the national public health policies. The current public health strategy (in place for 10 years) is contained in the White Paper entitled "Prescriptions for a Healthier Norway: a broad policy for public health" (Ministry of Health, 2003b).

Public health activities are mainly carried out at the municipal level. These activities include: promotion of the population's health and well-being; prevention of mental and somatic illnesses, disorders and injuries; and assuring good social and environmental conditions. The actual provision of services is

carried out by GPs, the Municipal Medical Officers (one in each municipality), at municipal health care centres/clinics, in schools and nursing homes, etc. Municipalities are also expected to monitor the health status of their population and factors that may influence this; such information provides the basis for their public health strategies. Finally, the municipalities are responsible for implementing measures in sectors other than health (for example, housing, education or employment) that are necessary in order to meet its public health goals (see section 2.6). Counties also conduct monitoring and strategic planning in their geographical areas and are responsible for the administration and provision of public health services in high schools. The Public Health Act introduced on 1 January 2012 established a new foundation for strengthening systematic public health work in the development of policies and planning, through better coordination of public health work horizontally across various sectors and actors, and vertically between authorities at the local, regional and national levels (see section 6.2).

### **5.1.1 Communicable disease control functions and surveillance of disease outbreaks**

The NIPH runs the Norwegian Surveillance System for Communicable Diseases (MSIS) and contributes to international surveillance in collaboration with the European Centre for Disease Prevention and Control and WHO. The MSIS distinguishes between three groups of diseases: A (e.g. cholera, hepatitis); B (gonorrhoea, HIV and syphilis); and C (genital chlamydia and influenza-like diseases). Reports on group A diseases from medical microbiological laboratories and doctors are sent to the NIPH immediately after detection with full patient identity. Copies of the notifications are also sent to the Municipality Medical Officer in the patient's municipality of residence. The patient's identity is not disclosed in reports on group B and C diseases and the reports are less frequent. Early warning notification (i.e. immediate notification outside the regular written notification system) is required in isolated cases of selected group A diseases. The warning must be delivered to the local Municipality Medical Officer, who will then immediately notify the NIPH and the County Physician. This applies both within and outside the hospital setting. If there is suspicion or a confirmation of an infectious disease that can be transmitted in food or water, the Municipality Medical Officer must also notify the local Food Safety Agency.

### 5.1.2 The organization of preventive services

The Norwegian Childhood Immunization Programme began in 1952 and currently offers free childhood vaccinations against 10 different diseases: diphtheria, tetanus, whooping cough, infection with *Haemophilus influenzae* type B (Hib), pneumococcal disease, poliomyelitis, measles, mumps, rubella (German measles) (MMR) and human papilloma virus (HPV). Some children are also offered vaccination against hepatitis B and tuberculosis. Children usually receive their first vaccinations at 3 months and follow the programme until they are 15 or 16 years old (10th grade). Booster doses of vaccines are administered once school age is reached. It is important to note that vaccination is not compulsory, but the coverage is well above 90% for most of the vaccines included in the programme (NIPH, 2013c). Municipalities are responsible for delivering the vaccines included in the immunization programme.

Rubella vaccine for adults is offered free of charge to women of childbearing age who do not have immunity against rubella. Influenza and pneumococcal vaccines are recommended to risk groups, including pregnant women and people over 65 years old. Vaccines are mainly provided by GPs. Since the 2006–07 season, influenza vaccine has been free of charge for populations at risk, but patients must pay for the administration of the vaccine. Patients must also pay for the pneumococcal vaccinations.

### 5.1.3 National public health programmes

The government has over the past decade made a significant effort to promote healthy dietary habits and physical activity, as well as to reduce the consumption of tobacco, alcohol and other drugs. These efforts have often been defined in a number of strategies and national action plans. Examples of such national programmes include: the National Strategy for Tobacco Control (2006–2010); the Norwegian Action Plan on Nutrition 2007–2011, “Recipe for a healthier diet”; the Norwegian Action Plan on Physical Activity 2005–2009; and the Norwegian Action Plan on Alcohol and Drugs 2007–2010.

### 5.1.4 National screening programmes for the whole or part of the population

There are currently two national cancer screening programmes in Norway: for breast cancer, targeting women aged 50–59; and for cervical cancer, targeted at women aged 25–69 (they are recommended to have a smear test every three years). Both were started in 1995 and are administered by the Cancer Registry

of Norway. A pilot study on screening for colorectal cancer started in 2012 in the South-Eastern RHA for women and men aged 50–74. It is financed from the state budget.

### **5.1.5 Occupational health and safety**

A special state agency, the Labour Inspection Authority, which is part of the Ministry of Labour, is responsible for the surveillance (e.g. through inspections at workplaces) and maintenance of occupational health and safety standards. According to the 2005 Working Environment Act, which regulates occupational health, employers are responsible for ensuring that health and safety standards are met at workplaces and must have written objectives for health, environment and safety activities.

### **5.1.6 Work absenteeism**

Norway has by far the highest rate of work absences of full-time employees among the OECD countries (see section 1.4). In order to reduce work absenteeism due to sickness; increase the employment rate among employees with functional impairment; and increase the actual retirement age, inclusive workplace agreements between employers, employees and the NAV have been put in place since the early 2000s. The current agreement covers the period from 1 March 2010 to 31 December 2013. Companies that sign the agreement are giving special and exclusive rights to their employees, for example, the right to take sick leave without prior consent from the NAV. A regular contact person at the NAV helps employers follow up on employees who are on sick leave. Occupational health services provided by the enterprises are refunded at a special rate under the NIS to help bring employees on prolonged sick leave back to work and get them off disability benefits. For employees of companies that have signed the agreement, the right to take sick leave without a physician's certificate is extended to eight calendar days per absence with a total upper limit of 24 days per year (see section 6.1.1).

## **5.2 Patient pathways**

The first contact with the health-care system is usually through the patient's regular GP. There are also emergency centres in all municipalities with on-call physicians who serve as first contact physicians (see section 5.3). Physicians in the municipalities (regular GPs and the on-call physicians in emergency

centres) act as gatekeepers to specialist care. In the case of medical emergencies (e.g. traffic accidents), patients may also be sent directly to the emergency department at the nearest hospital.

Regarding elective care, the regular GP either makes an appropriate appointment for the patient (e.g. with a private specialist who has an agreement with a hospital trust, a radiology centre or a hospital) or provides a referral so that the patient can arrange his or her own appointment. This system is uniform throughout the country; neither the municipalities nor the RHAs have the right to change it – for instance, they cannot levy extra charges on patients or challenge the gatekeeping role of the physicians.

### Box 5.1

#### Patient pathways

A 60-year-old woman with a slight limp and pain in the hip would typically take the following steps:

- She visits her regular GP with whom she is registered; the GP examines her, makes a tentative diagnosis of arthritis and refers her for a radiology examination. Co-payments are due for most outpatient consultations.
- After receiving the radiology examination results, the GP refers her to an orthopaedic department, usually at a public hospital in the region, for examination and, subsequently, an operation. The GP prescribes any necessary medication before, but not during, hospitalization.
- She will have to wait several months for elective surgery. She has free access to any public hospital in Norway, and her GP might advise her to seek treatment in a hospital with a shorter waiting list. If she cannot get treatment within the individual waiting time set by the first hospital, she can contact the HELFO, which will assist her in finding an alternative public or private hospital. She can also decide to go to a private hospital, but she would need to pay for the treatment out of pocket.
- Following surgery and rehabilitation at the hospital she is released back home, where she might need home care (home nursing and/or home assistance). If this is prescribed by the hospital or her GP, it will be provided by the municipality free of charge.
- The GP is responsible for any further follow-up such as providing a referral to a physiotherapist (a small co-payment would then have to be paid for physiotherapy).
- A follow-up hospital visit is likely to take place in order to check the result of the treatment.
- The HELFO covers part of the costs incurred at the GP surgery, part of the travel costs, part of the cost of specialist examinations, all inpatient and rehabilitation costs at the hospital and part of the cost of physiotherapy.



### 5.3 Primary/ambulatory care

In 1984, the municipal councils were made responsible for the financing and provision of primary care with financial support from the state. While these responsibilities are set out in the 2011 Municipal Health and Care Act, municipalities are free to organize the provision, including whether to hire GPs as public employees or sign contracts with private physicians.

Most GPs are self-employed and work under contract with the municipalities (see section 4.2.1). A typical practice usually consists of two to six physicians and auxiliary personnel. Most GPs specialize in general/family medicine.

Most GPs (97% in 2009; Mundal (2011)) participate in the RGP scheme and are obligated to give priority to the patients on their lists (see section 2.9.2). They normally have between 1200 and 1500 patients on their lists. Most patients (99%) participate in this scheme.

GPs have a key role in the health system as gatekeepers for the patients with regard to accessing specialist care (see section 5.2). Their responsibilities include: making primary diagnoses; treating simple everyday problems; issuing sickness certificates; prescribing drugs; issuing referrals to physiotherapists, chiropractors and nursing homes; and referring patients to specialist care (i.e. hospitals and privately practising specialists) when necessary. Only physicians or ambulance services can refer patients for emergency hospital consultation or for admission to hospital. GPs are also obliged, through their contracts with municipalities, to serve as on-call physicians in the local emergency centres (see section 5.5). Moreover, they play an important role in health promotion and public health (see section 5.1).

The geographical distribution of primary care physicians is fairly good but there are some reasons for concern. A general population survey conducted in 2010 found that the proportion of the population reporting having waited between two and five days to access a GP was larger in Norway than in other European countries (Skudal et al., 2010). On the other hand, Norway had a larger proportion of the population having a regular GP (and thus a higher degree of continuity of care) compared to other countries. At the same time there were some concerns raised with respect to the quality of the services provided by GPs, especially regarding communication, patient involvement and whether the physician spends sufficient time in consultations. Except for some occasional surveys, such as the one described above, there is no regular national monitoring of access and quality of primary care.

## 5.4 Specialized ambulatory care/inpatient care

Inpatient specialized care is mainly provided by the hospital trusts owned by the RHAs. It is also provided by a few privately owned non-commercial and commercial hospitals under contracts with the RHAs. Hospitals also provide outpatient specialist care in their outpatient departments (called polyclinics). There are outpatient departments for somatic care, mental health care, and alcohol and substance abuse treatment. These departments also provide laboratory and radiology services. Outpatient specialist care is also provided by self-employed privately practising specialists (e.g. obstetricians, specialists in internal medicine, etc.), mostly working in their own practices under a contractual agreement with one of the RHAs.

Medical services of the highest complexity are provided in university hospitals. In addition, there are about 30 different highly specialized services defined as “national services”, such as heart transplantation and care for patients with haemophilia, each of these being normally provided in only one university hospital. Each region has at least one university hospital located in a large city with a university. There are also 45 national highly specialized competence centres, mostly located in university hospitals, which mainly conduct activities related to professional development, competence evaluation and counselling, but sometimes also manage the process of patient treatment in the area of their competence.

The specialist care sector also has a guiding role towards municipal health services (at no cost to the municipalities). For example, GPs may elicit advice from the specialists regarding patients’ health and follow-up. In some areas, especially geriatric care and cancer treatment, specialist mobile teams, comprising various specialists, have been established by the hospitals. They provide guidance and care to patients at home or in other settings within the community.

Specialist care is concentrated in urban, i.e. more densely populated areas, and people living in rural areas have to travel longer distances to access specialists or hospitals (Ringard, 2010; Mundal, 2011). The relatively low number of acute hospital beds per 100 000 inhabitants, compared to other countries in Europe, high occupancy rates and long waiting times (see section 4.1.2) all point towards problems with accessibility of elective hospital care in Norway. Payment for hospital care is not linked to the quality of services and there are still relatively few quality indicators measured at national level. For

some services, such as secondary prevention of cardiovascular diseases and smoking cessation initiatives, hospitals are paid extra as an incentive to provide such services (Lindahl, 2012).

### 5.4.1 Day care

A deliberate substitution policy has been pursued since the late 1980s with the aim of replacing relatively expensive inpatient care with less costly outpatient and day care, and bringing care closer to patients' homes. Different treatments are now provided as day care, including somatic care (e.g. surgery), psychiatric care (e.g. treatment of eating disorders) and treatment of drug and alcohol addiction (Directorate of Health, 2012d), and the shift towards substitution is reflected in shorter hospital stays and a decline in the number of acute hospital beds (see section 4.1.2). The ratio of outpatient (i.e. day-care and outpatient contacts) to inpatient contacts has also increased, from 4:1 in 1990 to 6:1 in 2011 (Directorate of Health, 2012d).

A recent example of the substitution policy can be found in the area of dialysis treatment. In some municipalities the provision of dialysis treatment is now being carried out on an outpatient basis, although this is done in close cooperation with the local hospital (for instance in nursing homes).

## 5.5 Emergency care

Provision of pre-hospital emergency medical services (EMS) in Norway is shared between municipalities and hospital trusts. At the primary care level, emergency or acute primary care services in most municipalities are provided by regular GPs (within office hours) and on-call GPs (outside office hours) supported by telephone services. On-call services in smaller municipalities are often organized jointly in an emergency ward at one local hospital and cover the combined area of all the participating municipalities. In very sparsely populated areas, pre-hospital EMS may be provided within municipal home nursing facilities or (e.g. in Northern Norway) with the support of telemedicine. In the case of emergencies requiring the involvement of specialist health services, emergency centres collaborate with Emergency Medical Communication Centres (AMKs; see below). In urban areas there are designated emergency wards operated on a 24/7 basis by the municipality. These are usually staffed with full-time physicians and nurses who provide advice, assess the situation

and direct the patient to other types of care when needed. In less urgent cases outside GP office hours, patients who live in urban areas may also seek help at local emergency centres operating between 4pm and 8am.

The ultimate responsibility for ambulance services rests with the RHAs. These services are provided by hospital trusts or by private sub-contractors. In order to reduce response times, ambulances may be located in decentralized ambulance units in the hospitals or in the community. Highly specialized ambulances, including air ambulances, are staffed with physicians (e.g. anaesthesiologists) in addition to emergency medical technicians.

Accident and emergency departments (AEDs) are hospital departments where emergency cases are received. They exist in all hospitals that provide emergency care. An AED is manned by physicians, registered nurses and other health-care personnel. They usually have observational beds, where patients may be observed for several hours before being admitted to hospital or discharged, depending on their condition. A special feature of the Norwegian system is that patients are not allowed to seek treatment at an AED directly (see section 5.3). The AEDs communicate with ambulance services and other health resources involved in pre-hospital emergency care in order to provide advice and to ensure that necessary preparations are made to receive patients at the hospital.

There are two kinds of communication centre supporting the provision of emergency care services in Norway. At the level of primary EMS, patients can call their local on-call emergency wards through dedicated telephone lines (normal 8-digit telephone numbers). The centres are usually staffed with nurses. While larger centres operate on a 24/7 basis, smaller centres can only be accessed within set times (e.g. from 4pm until 8am). The centres are connected to a digital radio system that is used to mobilize GPs or ambulances.

At the level of specialized care, there are 19 AMKs (2012), covering one or more hospital catchment areas (Directorate of Health, 2012a). AMKs receive calls to the toll-free emergency number (113) and may provide advice on emergency medical procedures to callers and mobilize other resources (such as ambulances). These are staffed with nurses and ambulance coordinators.

**Box 5.2****Patient pathway in an emergency care episode**

In Norway, a man with acute appendicitis on a Sunday morning would take the following steps:

- The man (or someone else) calls the on-call GP service (ward or centre). His call will be answered by a nurse who decides, possibly after consulting a GP, that the patient needs to be further examined (note that the diagnosis is not yet made).
- The patient arrives at the emergency ward/centre. The GP on duty diagnoses acute appendicitis and refers the patient to the AED.
- If needed, the patient is transported to the AED by an ambulance.
- At the AED, a specialized nurse does the triage and estimates the urgency of the case. The patient will also be seen by a physician from the hospital department where he will be treated. The waiting time depends on the level of urgency.
- A surgeon performs surgery on the patient.

Another possibility is that the GP on duty travels to the patient's home, makes a diagnosis and calls an ambulance, which will take the patient to the hospital.

Several trends have been observed in the area of EMS in recent years. The focus seems to be on realizing efficiencies by seeking greater centralization (e.g. increased collaboration between municipalities with the aim of having fewer and larger emergency centres and AMKs); increased specialization of ambulance staff (e.g. increasingly complex treatment is being provided by ambulance staff, placing greater demands on their skills, communication and data transmission systems); better use of existing emergency care resources (e.g. within the AEDs there has been a trend towards establishing observational beds); and improved communication between various public safety services (a new joint digital radio communication system for police, health services, and fire and rescue services, called “Nødnett”, is currently being implemented; the building of the network started in 2008 and completion is expected in late 2015) (Directorate for Emergency Communication, 2013).

There are ongoing discussions regarding quality within the ambulance services. There have, according to Langhelle et al. (2004), been discrepancies throughout the country in terms of formal training, staffing and coverage of the ground ambulance system. There are no national requirements for education, competence, readiness, response times or medical standards. Nevertheless, all RHAs have certain minimum requirements with respect to the formal qualifications of their employees. The ambulance service has not been subject

to government guidelines or regulations. Emergency medicine is not a certified medical specialty, but training in advanced out-of-hospital emergency medicine is traditionally attached to the specialty of anaesthesiology (Langhelle et al., 2004).

## 5.6 Pharmaceutical care

Norway is a net importer of pharmaceuticals. In 2011, imports of medicinal products amounted to Nkr 10.9 billion (€1.4 billion) and exports to Nkr 4.0 billion (€0.5 billion) (LMI, 2013). All major pharmaceutical companies are represented in Norway, but only a few have established their own manufacturing units in the country. The five largest (in terms of market share) in 2012 were: Pfizer (9.8%), MSD Norway (7.4%), Novartis (7%), GlaxoSmithKline (5.7%) and Astra Zeneca (5.1%). In the same year, there were 10 domestic pharmaceutical manufacturers in Norway, the largest being GE Healthcare, Nycomed Pharma and Fresenius Krabi (PHIS, 2011; LMI, 2013).

There are three wholesalers in the market, all three belonging to leading European pharmaceutical distribution companies: Norsk Medisinaldepot (with a market share of 47.6%), Apokjeden AS (28.9%) and Boots Norge AS (23.7%). Each of the wholesalers is vertically integrated with their own pharmacy chain. In general, only community and hospital pharmacies are allowed to dispense medicines. Of the total number of pharmacies (674), 33 are public hospital pharmacies. There are approximately 7300 inhabitants per pharmacy. In addition, medicines are dispensed by small outlets belonging to the pharmacies (there are more than 1000 such outlets). Grocery stores, petrol stations, etc., are allowed to distribute a restricted list of OTC medicines (PHIS, 2011).

According to the 2010 Patients W.A.I.T. (Patients Waiting to Access Innovative Therapies) indicator, which provides a benchmarking analysis of the waiting times registered in 15 European countries, access to innovative therapies was good in Norway. Norwegian doctors were able to prescribe 64% of the new medicines (the range for other countries was between 39% and 86%) and the average time interval between market authorization and “access date” was 196 days in Norway, compared to 88 days in Austria (fastest) and 392 days in Belgium (slowest) (EFPIA, 2010).

Pharmaceuticals in hospitals and nursing homes are free of charge to patients. Patient co-payments on outpatient pharmaceuticals are capped and certain population groups are exempt from cost-sharing (see section 3.4.1).

Although private financing accounts for 27% of the total expenditure on outpatient pharmaceuticals, the average household spends a smaller share of its income (0.8%) on pharmaceuticals than on, for instance, alcohol and tobacco (2.6%). This may be an indirect indication that medicines are rather affordable (LMI, 2013).

Several trends indicate that access to medicines has improved in Norway in recent years. First, medicines in Norway have become substantially less expensive in recent years. In the period from 2000 to 2011, medicine prices fell by an average of 2.4% annually in nominal terms (LMI, 2013). A pricing survey conducted in 2010–2011 showed that prices of non-generics in Norway were among the lowest in western Europe (LMI, 2013). Second, while Norway used to have the lowest density of pharmacies in Europe, the number of pharmacies has grown significantly since the 2000 Pharmacy Act liberalized the pharmaceuticals market (see section 2.8.4).

Since 2000, there has been an increase in the consumption of pharmaceuticals. In 2000, the total pharmaceutical consumption was 68.7 million packs or 1754 million defined daily doses (DDDs). In 2009, the same figures were 86.3 million packs or 2558 million DDDs (PHIS, 2011). However, in terms of DDDs per capita, consumption is much lower than in Sweden and also substantially lower than in Finland (LMI, 2013).

The generics share of the pharmaceutical market increased strongly between 2000 and 2008 (this is likely the result of the 2000 Pharmacy Act; see section 2.8.4), but has been stable in recent years. In 2011, sales of generic medicinal products accounted for 41.5% of total sales, measured in terms of volume, compared to 23.6% in 2001 (LMI, 2013).

## **5.7 Rehabilitation/intermediate care**

Provision of rehabilitation care has a long tradition in Norway and the approach to rehabilitation has evolved over time from a narrow (medical) focus on restoring lost functions to a more comprehensive approach incorporating non-medical (e.g. social, economic) factors and involving comprehensive cooperation between several sectors and areas of care. Rehabilitation is defined as “planned processes with explicit ends and means, where several providers cooperate within a limited amount of time” (Ministry of Health, 2011b).

Rehabilitation is provided at both the primary (physiotherapy, occupational therapy, etc.) and secondary (specialized rehabilitation) levels. As in other countries, Norway has in the last two decades also developed some intermediate rehabilitation services based on shared care between specialized and primary health care (Johansen, et al., 2012).

Primary care rehabilitation is provided in the community – in patients' homes, schools and institutions run by the municipalities (e.g. nursing homes). Services are provided by medical doctors, physiotherapists, nurses and midwives. Primary rehabilitation is available for somatic as well as psychiatric patients, and can be accessed through a referral from a primary care physician.

Secondary rehabilitation services are provided in hospitals – in dedicated rehabilitation departments or other units, such as rheumatological or neurological departments. Rehabilitation, especially postoperative rehabilitation, may also be provided in private rehabilitation institutions contracted by the RHAs; this is free of charge if the patient is referred by a GP or a hospital. In 2011, over 30 000 patients received rehabilitation care in hospitals (50% as outpatients or day-care patients) and the average waiting time was two months. Nearly as many patients (25 000) received treatment in private institutions (mainly in an inpatient setting). Waiting time differed according to “point of referral”: 22 days for patients referred from another hospital and 73 days for patients referred from primary care (Directorate of Health, 2013c). Rehabilitation services for patients with specific conditions are also available in specialist hospitals (children's hospitals treating pulmonary conditions, asthma and allergy) and competence centres (e.g. competence centres on rare diseases).

Municipalities as well as RHAs are responsible for the coordination of rehabilitation services. This has been done by establishing designated “coordination units” and, in 2010, all RHAs and 76% of all municipalities reported having a “coordination unit” (Directorate of Health, 2012b). The unit facilitates cooperation between health-care providers, the NAV and its local offices and user organizations. Coordination activities include the registration of rehabilitation needs; designing and following individual holistic rehabilitation plans (ensuring interdisciplinary approaches); and initiating, administrating and monitoring interdisciplinary rehabilitation groups, which constitute the core of cooperation between different service providers.

There are, according to the National Strategy on Rehabilitation 2008–2011, several challenges within the rehabilitation sector (Ministry of Health, 2007b). The key challenges are: assuring sufficient resources to allow the maintenance of an adequate capacity of rehabilitation care; development of



individual rehabilitation programmes in a way that provides equitable access to services; ensuring sufficient cross-sector cooperation and coordination across administrative levels and professional groups; eliciting the active participation of users.

## 5.8 Long-term care

The organization and provision of LTC is the sole responsibility of the municipalities and LTC is often administratively integrated with health and social services at the local level. In smaller municipalities these services are often organized within the same department (often called the Department of Health and Social Care). Overall, municipalities have a high degree of freedom in deciding how LTC services should be organized. The basic guiding principle for the provision of LTC is that services and individualized support should be arranged in a way that enables people to stay in their own homes as long as possible.

LTC is provided in three types of setting: patients' homes, nursing homes and sheltered houses run by the municipalities. Nursing homes are designed for residents who require a high degree of medical care (e.g. patients suffering from dementia illnesses or heart and lung diseases) and help with daily activities. There are also short-term rehabilitation departments within the nursing homes, where patients can stay, for instance, after a hospital discharge. Sheltered houses offer residents the same services as home care and are often located close to municipalities' long-term nursing homes. The division between nursing homes and sheltered houses is not clear-cut. Some sheltered houses are organized with services resembling those provided in nursing homes; others are more like private homes. In addition, there are elderly day-care centres within nursing homes. An average resident of a sheltered house will have fewer caring needs than the resident of a nursing home. The majority of nursing and sheltered homes are owned by the municipalities. Some nursing homes are owned and managed by voluntary organizations but staffed by health-care professionals and funded by the municipalities. A few nursing homes are organized and operated as commercial enterprises (Pedersen, 2012).

None of the LTC settings is specifically reserved for older people. Eligibility criteria are set by the municipalities. Decisions on eligibility are taken by the provider or an independent unit within the municipality's health-care system and are based on an assessment of needs, irrespective of any potential help that may be forthcoming from the patient's relatives. The assessment includes

recommendations from the patient's GP with regard to the appropriate level of care. Processing of applications and planning of LTC services is supported by two central information systems: IPLOS (providing a standardized set of information about any seeker or recipient of health or social help in the nursing and social care sector) and KOSTRA (a municipal government reporting system containing information on resources used in various areas of care, including LTC).

Since the mid-1990s, there has been a clear rise in the number of users of nursing and care services provided by the municipalities, especially home care. The number of people receiving care at home grew from 162 000 in 2002 to 177 000 in 2011 (Statistics Norway, 2012d). On the other hand, the number of residents in sheltered homes has, most likely due to a constant number of beds, remained stable since the early 1990s (Directorate of Health, 2012b). However, the development of sheltered housing and nursing homes is encouraged by the state through the provision of earmarked funding. In 2011, there were approximately 44 000 residents in sheltered homes (Directorate of Health, 2012b). The number of places in nursing homes decreased slightly in the past two decades: in 2010 there were 43 500 people living in nursing homes compared to almost 45 600 in 1992. This is partly the result of a deliberate process of increasing the amount of single-occupancy accommodation (to make it more home-like); in 2009, almost 97% of rooms in nursing homes were for single occupancy (Statistics Norway, 2012d).

Quality regulations exist in the area of LTC but do not provide legal requirements for staff-to-patient ratios; neither do they specify the qualifications required for carers (workers). There is currently a shortage of adequately trained staff (OECD, 2012b).

## 5.9 Services for informal carers

The responsibility for supporting people with particularly comprehensive caring needs lies with the municipalities (Ministry of Health, 2011a). A person who wants to be an informal carer for a close relative may be paid for the care work by the municipality. In order to receive such pay, the carer must commit to carry out care services at home, and both the user and the municipality must agree that this is the best solution for the person in need. Another precondition is that the person in need would otherwise be eligible for care provided by the municipality if informal care were not available. Decisions are taken on a case-by-case basis by the municipality.

The number of persons receiving monetary compensation for care work has increased over the past decade. In 2004, a total of 7470 persons were paid to look after their close relatives, while in 2010 this number was almost 9300 (Statistics Norway, 2012e). The majority (70%) of caregivers were between 27 and 59 years old, and 82% of them were women. On average the informal caregiver received NKr 5700 (€730) per month in 2010, compensating on average for 10.6 hours per week. The likelihood of being granted economic compensation for informal care varies according to the age of the user and the size of the municipality (Ministry of Health, 2011a).

In 2010, the Ministry of Health appointed an expert committee to investigate how, and to what extent, families with members in need of comprehensive care could be better economically compensated for providing care. The report published by the expert committee in late 2011 (Ministry of Health, 2011a) recommended changes in the current model, including a standard national tariff for the economic compensation of carers. The Ministry of Health put forward these proposals in a White Paper to the parliament in the spring of 2013 (Ministry of Health, 2012).

## 5.10 Palliative care

Since the early 1980s, a number of official reports and national plans, closely linked to cancer care and national cancer strategy, have promoted the gradual development of palliative care in Norway. The latest strategic policy document is the National Action Programme for Cancer Palliative Care published in 2007.

Palliative care services are provided at all levels of care. Palliative care for patients staying at home is provided by GPs and within municipal home care services. These may be assisted by hospital-based specialist palliative care teams (outpatient care). Each team must have at least one consultant and one full-time nurse, and include a social worker, physiotherapist and pastoral worker. Services provided by these teams must, in order to be reimbursed, include systematic symptom assessment; follow-up of family members; and cooperation with primary care services. All main hospitals have multidisciplinary palliative care teams providing ambulatory services in hospital departments and surrounding municipalities. Specialist palliative care is also provided in: inpatient settings; designated inpatient units in municipal nursing homes; and specialist palliative care inpatient units in larger hospitals (providing care to patients with the most complex needs). Tertiary palliative care is provided in university hospitals. Each of the four university hospitals has a comprehensive palliative care programme

comprising an ambulatory team, outpatient clinic and inpatient unit (only the university hospital in Tromsø does not have an inpatient unit). The latter are linked to Regional Centres for Service Development (focused on education, research, quality of care and coordination of services in their respective regions).

In many parts of Norway, there are networks of specially trained nurses (i.e. resource nurses) in cancer care and palliative care. They work in hospitals, nursing homes and community home care, and have defined functions and responsibilities as regards clinical work, education and system improvement. The networks have regular meetings and run a training programme in oncology and palliative care. Resource nurses based in the communities work in cooperation with GPs and nursing home physicians, and represent a local link to the hospital-based specialist palliative care teams. Many communities have nurses specialized in oncology working in home care and often also serving as a resource nurse for palliative care.

In 2012, all except one local health trust had a hospital-based specialist palliative care team (a total of 38 teams) and 16 hospitals also had a palliative care inpatient unit (a total of 95 beds). A total of 38 nursing homes throughout the country had palliative care units (with at least four beds), with a total of 235 beds. In addition, 68 nursing homes had between one and three beds dedicated to palliative care (99 beds in all). These nursing home services and facilities vary as regards size and volume, from palliative care units run in close cooperation with hospitals to single beds in small municipalities. The treatment and care varies accordingly and this is reflected in the levels of competence of local medical and nursing professionals.

Palliative care nursing is not a nursing specialty in Norway. Due to the predominance of cancer patients among palliative care patients, oncology specialization is the most relevant postgraduate training in the area of palliative care. Physicians specializing in oncology have a mandatory rotation in a palliative care unit. The Nordic Specialist Course in Palliative Medicine has been running since 2003 and palliative medicine was approved as a formal competence for physicians in 2011.

According to the Quality of Death Index that measures the current environment for end-of-life care services across 40 countries (including 30 OECD countries), the availability and quality of end-of-life care in Norway was moderate (in 2010, Norway was in, respectively, 20th and 15th places out of 40 for availability and quality of palliative care) (Economist Intelligence Unit, 2010). There is also variation in the availability and quality of care across the municipalities. Community palliative care has been supported by earmarked

grants from the state budget but there is no permanent financing scheme for palliative care in nursing homes. Another barrier is that all medicines used for symptom control in palliative care are free in home-based care but must be covered by the institution for patients cared for in nursing homes.

## 5.11 Mental health care

During the 1990s, mental health became a political priority in Norway and extensive mental health strategies and policies with respect to both the organization and content of mental health care have since been formulated. More recently, the National Mental Health Programme (also called the Escalation Plan) for the period 1999–2006 (Ministry of Health and Social Services, 1998) placed an increased emphasis on municipal health-care services as well as social and occupational care services, in line with the ongoing trend away from large psychiatric hospitals to more locally based psychiatric services observed in other western countries (Bjorbekkmo et al., 2009).

Mental health services are organized at the municipal level and within specialist care. GPs play a major role in the provision of mental care services at the municipal level. They are responsible for the planning and coordination of preventive work, examination, evaluation and treatment. Since they are responsible for following up on patients on their list, they ensure continuity of care, which is particularly important for mental care patients. The GPs also constitute an important link between primary and specialized care services and refer patients to specialized care when necessary. Public health nurses and teachers play an important role in detecting problems in children and adolescents.

In 2004, the responsibility for all substance abuse treatment and rehabilitation services was transferred from the counties to the RHAs and these services are now part of specialized mental care services. This reform has been followed by a National Action Plan on Alcohol and Drugs (Ministry of Health, 2009b). Substitution treatment using methadone has been available through a nationwide programme since 1998, while buprenorphine has been available since 2001. In 2010, new national guidelines for opioid substitution treatment (OST) came into force. These guidelines aim to increase nationwide access to OST as part of comprehensive treatment and the rehabilitation process. At the end of 2011, a total of 6640 clients were on OST, 47% of whom were on methadone, with 53% receiving a buprenorphine/naloxone combination. The

number of OST clients is increasing steadily from year to year and more than 8500 opiate users have been admitted for treatment since the OST programme was initiated (EMCDDA, 2013).

Specialized mental health services have been the responsibility of the RHAs since 2002. They are provided in the following settings: highly specialized mental hospitals (including high-security departments); community mental health centres (CMHC); and privately practising psychiatrists and psychologists under contracts with the RHAs. The CMHCs are seen as the drivers of decentralization of mental care services. They provide acute services (on an inpatient, outpatient and day-care basis) and rehabilitation, and also supervise and support primary care. However, they are not perceived as competent partners by around 45% of GPs (2008) (OECD, 2013a). Specialized services for children and adolescents (0–17 years old) have traditionally been provided in designated outpatient units.

The shift towards deinstitutionalization of mental health care is reflected in the trend in the number of beds in mental care institutions (see section 4.1.2). However, the majority of beds are still located in mental hospitals (55% in 2010) (Directorate of Health, 2012b).

Although Norway has the second highest number of psychiatrists per 1000 inhabitants among OECD countries, persons who do not have a serious mental disorder face substantial waiting times unless they are willing to pay for treatment fully out of pocket. Since the implementation of the Mental Health Escalation Plan, there has been a significant increase in the number of psychologists in the municipalities, improving the capacity of specialized mental health-care services (OECD, 2013a).

## 5.12 Dental care

Dental care for adults (20 years and older) is the area of care with the highest private participation, both in terms of provision and financing. Most dentists work in private practices (around 75% of all dentists) (Jensen, 2013) and most treatments are usually paid in full out of the patient's pocket. Fees are not regulated in the private sector.

The provision of statutory dental care is the responsibility of the counties. It is carried out by salaried dentists in dental care clinics operated by the counties, also in cooperation with the municipalities. Except for orthodontic treatment, public dental care is free of charge for children and young people aged 0–18

years. Young people aged 19–20 years must pay 25% of the costs. Mentally disabled adults, the elderly and people with a long-term illness, who are either living in an institution or receiving home nursing care, pay reduced fees. People outside these groups may also access public dental care provided by the counties, but only after the needs of people in the priority groups have been met.

Standards in dental practice are monitored by the County Medical Officers, usually through designated dentists who supervise and assess the observance of dental medical standards and quality assurance programmes, etc. Guidelines for the use of dental materials were introduced by the Norwegian Directorate of Health in 2003 (Council of European Dentists, 2008). Since 2007, Norway has been involved in a Nordic project to define quality indicators for oral health care (Nihtilä, 2010).

There are regional differences in access to dental care, and especially regarding public dental care (Jensen, 2009). Measures are taken to increase access through establishing more regional specialist centres and educating more dental auxiliaries. One way to achieve this has been through a targeted recruitment campaign among pupils in the 10th grade and first-year students in high schools. The campaign was carried out by the Directorate of Health on behalf of the Ministry of Health between 2009 and 2012 (Ministry of Finance, 2012b).

### 5.13 Complementary and alternative medicine

Complementary and alternative medicine (CAM) is not referred to as “medicine” in Norwegian legislation but as “alternative treatment” and CAM users are essentially seen as consumers rather than patients entitled to patients’ rights. Patients’ rights only apply for established health services as defined in the law, which in practice means that health-care personnel must be involved in the provision of CAM treatment. The 2003 Act on Alternative Treatment of Disease and Illness introduced some restrictions on the practice of alternative treatment (e.g. regarding the advertising of such services), mainly to protect the safety of patients using such treatment. Traditionally, CAM has been viewed with some scepticism by the mainstream medical professionals. There is, however, some evidence that the attitude of medical personnel towards CAM is changing, especially among nurses and physiotherapists (Salamonsen et al., 2011).

Patients who wish to use alternative treatments usually have to pay for them in full out of their own pocket. However, it is worth mentioning that since 2001 acupuncture and homeopathic services have been exempted from VAT on services, and some other therapies have since also been exempted. All CAM treatment is exempted from VAT if it is provided by authorized health personnel.

In a survey conducted in 2007, approximately 50% of the population reported having used a CAM service provided outside or inside the health-care system “within the last 12 months”. For nearly one third of respondents, treatment was provided by a health-care professional (Fønnebø & Launsø, 2009). A survey conducted in 2008 found that 50.5% of all Norwegian hospitals offered CAM, mostly in the form of acupuncture (Salamonsen et al., 2011).

## 5.14 Health services for specific populations

All population groups, including refugees and asylum-seekers, can use health-care services within the statutory system. However, special arrangements apply to refugees and asylum-seekers when they come to Norway (i.e. during the transit phase before being moved to a reception centre) (Ministry of Justice and Public Security, 2011); during this phase the immigrants are obliged to undertake a health examination at the transit reception centre. The main purpose of this measure is the detection of tuberculosis and other diseases that may require immediate medical attention (Directorate of Health, 2010).

Undocumented immigrants (people who do not have legal residence in Norway, e.g. members of the Roma people) have been found to be severely underserved in terms of access to health services and health information. Thus, two voluntary organizations, the Norwegian Red Cross and the Church City Mission, have since 2009 been operating a health centre for undocumented immigrants in Oslo. The centre provides a range of services such as basic health services and health information to support the immigrants’ health needs. Services are provided by nurses, doctors, psychologists and physiotherapists. The centre guarantees, due to the provider’s pledge of confidentiality, not to share any information with the police or immigration authorities.



## 6. Principal health reforms

The focus of health-care reforms has seen shifts over the past four decades. During the 1970s the focus was on equality and increasing geographical access to health-care services; during the 1980s reforms were aimed at achieving cost-containment and decentralizing health-care services; and during the 1990s the focus switched to efficiency. Since the beginning of the millennium emphasis has been placed on structural changes in the delivery and organization of health care and on policies intended to empower patients and users. The past few years have seen efforts to improve coordination between health-care providers, as well as increased attention towards quality of care and patient safety issues.

### 6.1 Analysis of recent reforms

This chapter looks at reforms that were introduced between the publication of the last HiT report for Norway (Johnsen, 2006), in 2006 and the end of 2012. It also provides a brief discussion of current debates and reform proposals discussed in early 2013. Reforms are described according to where they currently are in the policy process (idea, pilot, policy paper, legislation or implementation stage) (Schlette, Blum & Busse, 2008). Where available, evaluation of the reform outcomes and changes brought about by the evaluation will also be presented. For a description of the main features of the policy process in Norway, see section 2.3.9. Earlier reforms are described in section 2.2. Table 6.1 contains a list of key reforms, adjustments, policy initiatives and ideas implemented or proposed in Norway between 2006 and 2012.

**Table 6.1**

Key health-care reforms, adjustments, policy initiatives and ideas, 2006–2012

Year	Change
2006	Changes in sick leave regulation and improving capacity of specialist care (policy initiative) Purpose/goals: To reduce absence from work by expanding capacity within specialist care
2007	Restructuring of the RHAs (adjustment) Purpose/goals: To implement a new organizational structure of specialist care by merging two of the five RHAs
2008	A new resource allocation formula for financing of the RHAs (adjustment) Purpose/goals: To provide a new and more equitable resource allocation formula for specialist care
2011	National Health Registry Project (idea) Purpose/goals: To modernize and coordinate the national clinical registries and the mandatory national health registries
2012	Coordination reform (reform) Purpose/goals: To improve coordination of care between municipalities and hospitals, and to put more emphasis on public health care (i.e. prevention and social inequalities in health care)
2013	White Paper on Quality and Patient Safety (idea) Purpose/goals: To provide a comprehensive approach to quality and patient safety issues

### 6.1.1 Changes in sick leave regulations and improving capacity of specialist care (2006)

Confronted with a surge in lost working time due to sickness absence and a high disability recipient rate (one of the highest in the OECD) (see section 1.4), in 2006, the government established a high-level expert commission, led by the Prime Minister, tasked with finding ways to reduce the number of Norwegians on sick leave. The key recommendation of the White Paper prepared by the commission was to increase the capacity of specialist care by increasing its funding (Ministry of Labour, 2006). Based on this White Paper and the “Agreement on Inclusive Working Conditions”, which has been in place since the beginning of the 2000s, in 2007 the government established a project called “Quick Return” to reduce absence from work due to sickness. The project was developed as a result of central negotiations and an agreement between the government, the trade unions and employers’ organizations. All the main players in the Norwegian labour market supported the initiative. The current agreement covers the period 2010–2013.

Special arrangements were set up within specialist care to ensure that sick employees did not have to join the ordinary waiting list for elective treatment and could access treatment faster. The RHAs also increased treatment capacity, for instance by offering treatment during weekends in public hospitals for areas such as orthopaedics, rheumatology and mental health care, and by outsourcing

services to private for-profit institutions in areas such as orthopaedics and rehabilitation. The responsibility for following up on the project has been divided between the Ministry of Labour and the Ministry of Health: the NAV was put in charge of provision of services such as medical assessment, follow-up on the patients, work-related rehabilitation and provision of services for people with mental health problems; the RHAs were made responsible for the provision of specialist services; and the Directorate of Health was charged with monitoring the implementation of the project.

Since 2007, more than Nkr 1.44 billion (€0.2 billion) has been allocated to this project (South-Eastern RHA, 2013). In an early evaluation of “Quick Return”, it was found that almost 40 000 persons had been included in the scheme between early 2007 and the end of 2008, with the majority being treated by the specialist care sector (Drangslund & Kjerstad, 2008). In 2012, the South-Eastern RHA provided services to approximately 21 400 individuals within this project. The continuation of the initiative will be considered by the government in the second half of 2013 or early 2014. A recent evaluation of the “Agreement on Inclusive Working Conditions” concludes that it has been an important tool for reducing sickness absence (the total number has gone down by 12% in the period 2001–2012), but at the same time it is emphasized that the agreement has not yet reached “its full potential” (Osborg Ose et.al, 2013).

### **6.1.2 Restructuring of the RHAs (2007)**

The key element of the 2002 hospital reform was shifting responsibility for specialist care from the counties to the state and the subsequent delegation of this responsibility to the (then) five RHAs (see section 2.2).

In February 2007, the government decided to merge the Southern and Eastern RHAs to create a single South-Eastern RHA (Ministry of Health, 2007c). The main reasons for this merger were to improve the management and coordination of specialist care in Norway in general and to improve the organization of hospital services in the Oslo area. The proposal was approved without much debate in April the same year.

The new South-Eastern RHA was formally established on 1 July 2007, becoming the largest RHA in Norway (in 2012 it had 70 000 employees and a budget of Nkr 60 billion (€8 billion)). The merger of the two RHAs has been followed by a large process of reorganization of the hospitals in the capital (the so-called “Capital-process”) starting in 2008. This process is still being implemented and is closely monitored by the Ministry of Health: hospitals have

been closed down, new “catchment areas” have been drawn up, tasks have been shifted between hospitals, departments performing the same tasks have been merged, etc.

The merger of the two RHAs and subsequent Capital-process are currently being evaluated. The evaluation programme, which was initiated in late 2012, will run for three years.

### **6.1.3 Changes to resource allocation to RHAs for specialist care (2008)**

The question of how to finance hospital services has been an important health policy topic over the past several decades and various changes to hospital financing have been introduced over the years (see section 3.7.1). Needs-based formulas for the financing of health-care services have been used since 1980 and one of their key aims has been to ensure geographical equity in service provision (Magnussen, 2010).

When the state took over the responsibility for hospitals from the counties in 2002, an initiative was also taken to better adapt the hospital financing model to the new organization. The appointed expert committee recommended that the state should not use activity-based financing in relation to the RHAs but should instead give each RHA a fixed share of the total health-care budget. A new needs-based formula for allocating resources between the (then) five RHAs was also proposed, which would result in a major redistribution of resources from the Northern Norway RHA to the Western and Central RHAs (Ministry of Health, 2003a). However, neither of these suggestions was implemented. The government retained the system of partial activity-based financing of RHAs and the proposed needs-based allocation formula was rejected as politically unacceptable at the time (Magnussen, 2010).

Efforts to limit the distributional consequences of the new allocation formula proposed in 2003, with retrospective transfers from the better-off to the worse-off RHAs, were not popular among the former. Thus, in 2008, a new expert committee was appointed to develop an allocation formula and a new solution was unanimously proposed (Ministry of Health, 2008) (see section 3.3). This formula was based on a new set of variables and means of weighting services, and included a compensation for structural cost differences between the RHAs. It was estimated that implementation of the formula within the existing budgets would lead to a redistribution of around NKr 800 million (€81 million) from the South-Eastern RHA (approximately 2.2% of its income) to the three other RHAs (Magnussen, 2010).

The committee's report was customarily sent for consultation to a number of organizations and a large public debate ensued, with a clear division between the potential winners and losers. Some geographical divisions could be observed in the parliamentary discussion on the topic. Finally, the debate got so heated that the minister of health declared that the government intended to follow the recommendations from the committee and, after presumably using the party whip, the new model was (with a few minor changes) approved by the parliament in December 2008 (Magnussen, 2010: 459).

#### **6.1.4 National Health Registry Project (2011)**

A number of mandatory national registries exist in the health-care system (see section 2.7.1). Since some of these are quite old, in 2008, the Ministry of Health established the National Health Registry pilot project to coordinate and modernize the national clinical registries and the mandatory national health registries. The purpose of the project is to assure accurate and complete information in real time in order to improve the use of data for research, health surveillance, prevention and quality assurance. As part of the pilot, a report entitled "Good health records – better health strategy for modernization and coordination of key health records and medical quality registers 2010–2020" was prepared in 2009, with a proposal for a national strategy and action plan. In the consultation, which ended in March 2010, there was broad agreement that health records were important, and further development and modernization of national health registers and clinical databases was strongly supported (see section 2.7.1). Several parties in the consultation process emphasized that in the future special attention should be paid to safeguarding individual privacy.

In the spring of 2011, the government approved a national strategy for health registries for the period 2010–2020, and the National Health Registry Project was officially launched in the fall of 2011. The project is now being implemented and the current action plan for 2012–2013 focuses in particular on issues such as coordination, management, organization and financing of registries, as well as on issues aiming to ensure privacy and the legal framework.

#### **6.1.5 Coordination reform (2012)**

Improving coordination between the health-care services has been at the forefront of the health policy agenda since 2008, but the roots of a comprehensive policy towards improving collaboration between specialist and municipal health services can be traced back even further. The first general national policy initiative in this area was taken in 2003 with the appointment

of a committee of national experts. The committee identified patient groups particularly vulnerable to coordination problems and proposed a countrywide system of agreements between hospitals and the nearby municipalities aimed at reducing unnecessary admissions and waiting times before hospital discharge, and at making transitions from hospital to home as efficient and safe as possible for the patient (Ministry of Health, 2005b).

The new Health Minister, who took office in late 2008, made improving coordination in health and LTC his primary political priority and started working out new plans under the key term “Coordination Reform”. In 2009, a White Paper called “The Coordination Reform” was put forward to the parliament (Ministry of Health, 2009b). The paper identified three major challenges: (1) insufficient coordination of care for patients who require both health and care services (e.g. patients in need of LTC are released from hospital without making sure that the needed care services are actually available in the municipality); (2) too little emphasis was placed on prevention in the overall health system; and (3) cost containment and efficiency mechanisms in the delivery of services were weak.

After extensive rounds of consultations with stakeholders and parliamentary debates, the government presented its proposal for a concrete legislative follow-up in April 2011 (Pedersen, 2012). The final legislation passed by the parliament in mid-2011 contains a long list of measures clarifying the division of labour between the municipalities and the health enterprises, and stating the various responsibilities they have as regards different groups of patients. The reform was passed with broad support in the parliament, despite reluctance from several opposition parties who argued that many municipalities were too small to shoulder the bigger administrative and financial responsibilities that would result from the reform (Pedersen, 2012). The reform comprised two key legislative acts (the Municipal Health and Care Act of 2011 and the Public Health Act of 2011), plus the National Health and Care Plan (White Paper no. 16, 2010–2011) (Directorate of Health, 2012c). In addition to the legislative work, the reform also relies on voluntary agreements between the municipalities and hospitals, as well as financial instruments to support cooperation and coordination.

The Public Health Act established a new foundation for strengthening systematic public health work in the development of health policies and planning of societal development, based on regional and local challenges and

needs. It also provides a broad basis for the coordination of public health work across various sectors and actors, and between authorities at local, regional and national levels.

The Municipal Health and Care Act introduced two key changes. In the face of some resistance from doctors' and nurses' associations, the municipalities were given full responsibility for patients ready to be discharged from hospital treatment. Secondly, a modified version of the radical and controversial idea of introducing co-financing for secondary health-care services by the municipalities was implemented. In order to help limit the risks and financial obligations for the municipalities, this co-financing was restricted to non-surgical treatment.

The Norwegian Research Council has been given responsibility for evaluating the reform. The evaluation began in the spring of 2012 and will run for three years. No results are available yet.

### **6.1.6 White Paper on Quality and Patient Safety (2013)**

In 1995, the National Board of Health issued the first National Strategy for Quality in Health Services. The current strategy covering the period 2005–2015 was developed in 2005 by the Directorate of Health (2005) and emphasizes patient safety in the delivery of services. In 2012, the Ministry of Health put forward a White Paper No. 10 (2012–13) to the parliament proposing measures to improve safety and quality of care, with more emphasis on user-oriented health-care services, systematic quality improvement and the prevention of adverse events. The following measures were proposed:

- the introduction of a five-year national patient safety programme, with the goal of reducing adverse events; improving patient safety culture; increasing involvement of local authorities; and clearer involvement of both patients and health care personnel;
- expansion of the Reporting and Learning system to include municipalities and patients;
- establishment of a permanent investigation unit within the National Board of Health Supervision that would respond quickly in cases of serious adverse events;
- to conduct a broad study of how serious incidents and suspected offences in health and care services may be followed up;
- improvement of the legal position of patients and their families in the case of an adverse event;

- to conduct a national pilot project on quality-based funding in hospitals (i.e. pay for performance (P4P)), by which a portion of hospital funding will be made dependent on how the hospital performs with respect to improving quality and safety;
- to develop and publish more quality indicators and look more closely into establishing a national registry for the municipal health and care services.

The White Paper was debated in the parliament in April 2013 and a majority of the parliamentary committee was in favour of the proposed measures. A minority of parliamentary committee members, although agreeing with the main objectives of the White Paper, proposed different means for achieving the aims. For example, it was suggested that the government should impose a deadline for when health authorities should be International Organization for Standardization (ISO) certified etc., but these suggestions were not supported by the majority (Parliament, 2013).

The White Paper also proposed the establishment of a national system for the introduction of new technologies in hospitals. The suggested measures included:

- the introduction and further development of a system for the use of technology assessment before new methods are adopted in hospitals (as recommended by the National Council for Quality Improvement and Priority Setting in Health Care; see section 2.7.3);
- to establish guidelines for a rapid assessment methodology (i.e. mini-HTAs) for new technology in hospitals;
- to develop a rapid assessment methodology for drugs funded by the specialist services;
- to change the legislation on priority setting to establish a clearer terminology relating to experimental treatment;
- to establish common national principles for the use of experimental treatments in hospitals.

These measures were endorsed by the committee. The national system for the introduction of new technologies and a database for the sharing of completed mini-HTAs were launched in the beginning of 2013 and are currently being developed through a collaborative effort between the Directorate of Health, the four RHAs, the NoMA and the NOKC.



## 6.2 Future developments

The coordination reform, which has been implemented since 1 January 2012, will continue to shape health policy discussions in the years to come. Areas such as public health, municipal and specialist health services, the role of the patient, and quality and patient safety, are also likely to receive more attention. Fundamental organizational changes are unlikely. Instead, further improvements to the existing solutions can be expected.

In the area of public health, an inter-ministerial strategy for the implementation of the Public Health Act is expected in 2013 in the form of a White Paper, as set out in the National Health Plan (2011–2015).

At the municipal level, preventive care and the RGP scheme will be further developed. An important element of this scheme, currently under implementation, is the introduction of a more binding cooperation between the GPs and the municipalities in order to encourage GPs to assume greater responsibility for services provided both to patients on their list and to the general population. Municipalities are expected to expand their provision of home care services and to increase the number of beds in nursing homes (according to the Care Plan 2015; see section 2.5).

The government has stated the intention to explore various models for financing dental care, including a ceiling for deductibles. There is also an ambition to improve the adaptation of specialist services to patients' needs. Both decentralized and centralized models of health-care provision will be considered; decentralization may be of particular interest to large patient groups with chronic diseases or complex conditions, who use health services frequently and would benefit from local provision of care. On the other hand, the opposite may apply for technologically advanced treatments. In the area of mental care, district psychiatric centres (DPCs) (see section 5.11) are to play an important role as hubs for the provision of integrated treatment in order to improve coordination, accessibility and efficiency.

The education of health-care personnel will have to be adapted to the requirements of the coordination reforms. The government has proposed ongoing assessment of the content of basic and continuing education programmes, as well as ongoing competence development within the sector. With respect to the content, the authorities have emphasized: a more process-oriented approach; the development of expertise of coordination; a focus on user participation; and more emphasis on topics such as preventive care and public

health efforts. There is also an explicit political ambition to reduce sickness absence, early retirement and disability within the services, given predicted shortages of health-care personnel (see section 4.2).

Apart from improving cooperation between specialist and municipal care within the coordination reform, the government's ambition is also to improve cooperation within specialist care (i.e. between hospitals). This is to be achieved by enhancing cooperation and distribution of tasks among hospitals. There are also plans to strengthen the provision of specialist health-care services outside hospitals, for example, by shifting some of them to municipalities (e.g. to community medical centres).

It is a political ambition to give patients and their families a more clearly defined role within the health and care systems and more influence over the design of the services they receive. Measures to achieve this include: improving patients' knowledge of services and health (for example, through further development of the content of the national web-based health portal); and increasing the potential for self-care (for example, by promoting self-help groups). The authorities have also called for a framework to allow family members to combine caregiving with employment; to divide caregiving more equally between men and women; and to give them a "voice" with regard to their own needs as caregivers.

The Ministry of Health is currently working on a new legislation, which will strengthen the position of patients and their next of kin in cases of severe incidents in the provision of services. The proposal aims to give the affected patients information about how the incident is followed up by the National Board of Health Supervision and the final decision on the matter (Ministry of Health, 2012).

## 7. Assessment of the health system

Overall, the level of financial protection of the system is good. Coverage is universal and public sources, which in Norway constitute a progressive source of financing, account for the majority (85%) of health expenditure. Moreover, various mechanisms, such as exemptions and ceilings on OOP payments, limit the financial burden of care on individuals. However, the level of protection is much lower for certain types of care (e.g. dental care for adults is virtually excluded from coverage) and may vary for various population groups.

Despite having one of the highest densities of physicians in Europe, Norway struggles to assure geographical equity of access to health care. While GPs are fairly well distributed across the country, specialist care is concentrated in the urban areas. However, the large network of ambulance transportation helps to counterbalance these geographical inequalities. Socioeconomic inequalities in access exist and seem to persist over the years but not much information is available about this.

User experiences with the health-care system seem to be average compared to other OECD countries. Coordination of hospital care with other health services and waiting times for elective care are two areas that could be improved. Avoidable admission rates for certain conditions, such as chronic obstructive pulmonary disease (COPD), are markedly higher than in other OECD countries and may be seen as an indication that the quality of care could also be improved.

Further improvements could also be made with regards to the system's efficiency and transparency, but significant progress has already been achieved in these areas in the past two decades.

Overall, the health status of the Norwegian population is very good and has improved in the last few decades. Preventive services and improvements in the quality of care may have contributed to these positive trends. Mortality rates

amenable to medical intervention are low and can be viewed as an indication of the contribution that health care makes to improving the population's health. In areas where indicators see less favourable trends (such as survival rates for colorectal cancer) measures are taken to reverse them, which demonstrates that efforts are being made to allocate resources where they are needed.

## 7.1 Stated objectives of the health system

The objectives of the Norwegian health-care system are embedded in the national legislation (see section 2.1) and in various strategy documents. Health-care coverage is universal and services offered are expected to be the same for all and of high quality (Schjøtz, 2008). The goal of ensuring “equal access to health care of good quality” is explicitly stated in the 1999 Patients' Rights Act. Access to service should be according to health needs, with equal access for equal needs, regardless of gender, social and economic background, and geographical location (Ministry of Health, 1999). The principle of equality of access is supplemented by three other principles, giving priority to: (1) those in greater health need (i.e. according to the severity of their medical condition); (2) interventions that are likely to lead to health improvement; (3) interventions where the ratio between the expected benefit and cost is reasonable (i.e. the intervention is considered to be cost-effective) (1999 Patients' Rights Act; Bringedal, 2005; Ringard, Larsen & Norheim, 2012).

The national health goals also include achieving healthy ageing (“more years with a good health for the population...”) and improving quality of life (Ministry of Health, 2003b). Special attention is paid to the health needs of particular population groups, such as newborn babies, women, cancer patients, the elderly and the working population. These objectives are embedded in both legislation and the national policy documents. The key policy documents for the period analysed in this HiT (2006 until the end of 2012) are the NHP for the period 2007–2010 and the current NHP for the period 2011–2015, plus the National Strategy for Quality Improvement in Health and Social Services (2005–2015).

The NHP 2007–2010 proposed the following six pillars for the health-care system: cohesion and interaction; democracy and legitimacy; proximity and security; stronger user role; professionalism and quality; and work and health. The key goals of the NHP 2011–2015 are to increase QALYs and reduce social inequalities in health. The aims of the National Strategy for Quality Improvement in Health and Social Services are: to achieve provision of services

that are safe and secure, effective, coordinated and integrated; to involve users and allow them to have influence; to utilize resources appropriately; and to ensure that the services are available and equally distributed.

## 7.2 Financial protection and equity in financing

### 7.2.1 Financial protection

The share of public spending in total health-care financing is relatively high in Norway compared to other countries in western Europe and to other countries in the wider WHO European region. Private expenditure accounts for about 15% of total spending; however, certain areas of care may attract a much higher share of private expenditure and patients may thus be less well-protected against the risk of ill health (see Chapter 3).

Since coverage is virtually universal, OOP spending is the result of gaps in the scope (range of benefits) and/or depth (user charges). For example, the majority of dental care services for adults are excluded (see section 3.3.1). In order to limit the financial burden of OOP payments, a ceiling for individual co-payments (uniform for all individuals) is set annually by the parliament (see section 3.4.1). Moreover, exemptions are applied for certain population groups (e.g. children) and diseases (e.g. tuberculosis).

In 2010, in a general population survey conducted by the Commonwealth Fund, 4.6% of Norwegians reported having problems paying for health care. This share was slightly smaller than in the other European countries participating in the survey (4.9% on average), including Sweden (5.2%), and much smaller than in the US (20.6%) (Skudal et al., 2010). In a 2011 Commonwealth Fund Survey of sicker adults, 7% of respondents reported having serious problems paying or being unable to pay medical bills, which was higher than 1% in the UK and 4% in Sweden but lower than in six other countries participating in the survey (Holmboe et al., 2011). Overall, it seems that the health-care system provides good financial protection for the population. However, as explained above, the level of protection may differ for various types of care and various population groups. No such analysis is currently available in this area.

## 7.2.2 Equity in financing

As explained in detail in section 3.3.2, health-care financing in Norway is overall progressive. Public spending on health is the dominant source of health-care financing and financing mainly comes from progressive taxation. The amount of redistribution through the tax and benefit system is large in Norway, making the distribution of net income largely egalitarian (Norway ranks third among the OECD countries in terms of the Gini coefficient) (see Chapter 1). Both the shares of public and private spending and the composition of tax revenues have remained relatively stable in recent years (see Chapter 3) and thus it is likely that overall progressivity of health-care financing has not changed much either. Adult dental care is one area of care where financing is clearly regressive. However, since the mid-2000s there has been a discussion about reforming the financing of dental care with the goal of ensuring more equitable access (no specific solutions have been proposed yet; see section 6.2) (Ministry of Health, 2005a). No detailed analysis on the progressivity of financing for other types of care is available.

## 7.3 User experiences and equity of access to health care

### 7.3.1 User experience

User experience and satisfaction with the health-care system, especially among patients using hospital care, are measured in several national surveys. Moreover, Norway has participated in several international surveys measuring the perception of health-care systems among the general population (see section 2.9.5).

In a Commonwealth Fund survey conducted in 2010 asking adult populations in 11 countries to assess their health systems, Norway's score was "medium" in most areas. However, Norway scored below average in several areas, which is an indication that these areas could be improved. These areas were: assessment of the general physician (including communication, patient involvement and whether the physician spent sufficient time in consultations); number of user-experienced medical errors; and assessment of hospitals at discharge. The two more outstanding areas where Norway scored higher than average were the proportion of interviewees who reported having a regular GP and those who reported having access to medical care outside normal working hours. The

former is due to the existence of the RGP scheme, while the latter is probably due to the way in which the emergency services are organized (Skudal et al., 2010).

While only a small proportion of GPs have systems to measure user experience (Skudal et al., 2010), hospital patients are more regularly surveyed. The results of the 2011 hospital patient survey show that, overall, patients are satisfied with hospital care. Reported experiences of patient safety, care for next of kin, and interaction with doctors and nursing staff were good. Several aspects of hospital care, such as information prior to discharge, coordination with other health-care services and waiting time before admission were in the lower end of the scale and could be improved. At the hospital level, there were overall minor changes in patient satisfaction between 2006 and 2011 on the 22 items that were compared. Patient experience improved in two and declined in three hospitals over that period. Differences between health regions with respect to the main indicators were also generally small. The largest regional variation was found for the reported standard of care: patients in the Central and South-Eastern RHAs had a better experience of the standard of care compared to patients in the Northern and Western RHAs (Skudal et al., 2012).

As mentioned in section 4.2, waiting times for hospital care in Norway are long compared to other countries. According to a 2010 OECD survey, 50% of respondents had to wait more than four weeks for a specialist consultation (the third highest score after Canada (59%) and Sweden (55%)), and 21% of respondents had to wait four months or more for elective surgery (the third highest score after Canada (25%) and Sweden (22%)) (OECD, 2012b).

The reduction of waiting times in specialist health care has been considered a major political challenge and several policy initiatives have been explicitly targeted at reducing waiting times. One of the first such initiatives was the introduction of a free choice of hospital for elective treatment from 1 January 2001, as part of the Act on Patients' Rights. In 2004, vertical waiting-time prioritization was introduced with explicit guidelines on how patients should be prioritized within patient group, assigning certain patients maximum waiting times. According to a recent report by the Directorate of Health, the proportion of violations of maximum waiting times was reduced between 2006 and 2011 (Directorate of Health, 2012b). However, this reduction was accompanied by a reduction in the proportion of patients who were given a maximum waiting time and a small reduction in the actual waiting times.

The most recent initiative that may contribute to the reduction of waiting times is the 2012 coordination reform, which aims, amongst other goals, to slow the growth in the number of patients treated in hospital by offering patients admitted to hospitals more of their treatment in primary or intermediate care settings (Skudal et al., 2010) (see section 6.1.5).

### 7.3.2 Equity of access to health care

Access to health care for all in need is considered a basic social right in most European countries, including Norway, and assuring universal and equitable access to health care is seen as an important health policy aim (see section 7.1).

Although Norway has one of the highest densities of physicians in Europe, with its many rural and remote areas and scattered populations the country struggles to assure geographical equity in access to health care (see section 4.2). While GPs are fairly well distributed across the country, practising specialists are concentrated in the capital and other urban areas (see section 4.2) and GPs in remote communities often have to treat conditions normally dealt with in hospitals in other parts of the country. There is also evidence of geographical inequalities in access to dental care (Statistics Norway, 2012g), with the employment of public dentists being more challenging in some rural areas. The majority of the large hospitals are located in urban areas and all tertiary care hospitals are situated in the biggest cities. Urban residents from smaller cities and rural residents have to travel longer distances to access tertiary care and there was evidence that persons living closer to tertiary-level services were using them more often (Lafkiri, 2010). The large network of ambulance transportation (see section 5.5) helps to counterbalance these geographical inequalities in the distribution of hospitals (Lindahl, 2012).

The attempt to secure equal geographical access has been and still is given high political priority in Norway. Over the years several strategies have been implemented to attract health workers to northern Norway and to make them stay there. One of the most successful measures was the establishment of a new medical school in Tromsø in the early 1970s. Telemedicine applications are also promoted as a tool to improve equality of access to health care and Tromsø is the academic research centre for telemedicine in Norway (see section 4.1.4).

With regards to socioeconomic inequalities in access to health care, a 2004 study by van Doorslaer and Masseria of specialist care use in OECD countries found that specialist care is inequitable (favouring high-income groups) in all countries, except the United Kingdom, the Netherlands and Norway (results reported in de Looper and Lafortune (2009)).



Studies that take into account differences in health needs find that the use of primary health services in Norway is fairly equal among different educational groups (see e.g. Stirbu et al., 2011). On the other hand, it has been demonstrated that the use of specialized health services is more frequent among people with higher education. For example, Iversen and Kopperud (2005) found that people with higher education who lived in urban areas with greater access to publicly financed private specialists used them more frequently than people with less education who lived in rural areas with less access to publicly financed private specialists.

In a more recent study by Jensen (2009), social inequalities in the use of health care were investigated using data from the Population and Housing Census. The study showed that social inequalities in access to care are higher among the middle-aged and highest among the elderly. Moreover, the study found that individual education had greater impact on the use of specialist services than, for instance, income. This makes it harder to determine how much of the differences are due to factors such as cohort or life course.

There is evidence that the hospital choice reform affects equity (for more information on patient choice see section 2.9.2). Those having high income, higher education or being employed are more likely to have chosen a hospital. For education this relationship was found to take the form of a social gradient (Auditor General, 2011a; Ringard, 2012b). Patients reporting to have chosen a hospital face, on the other hand, shorter average waiting times than patients staying at the local hospital (Ringard & Hagen, 2011). The current government has made the topic of social inequalities one of its top priorities since 2005. In 2007, it even issued a national strategy with a focus on reducing social inequalities in health (Ministry of Health, 2007a). One important step in implementing the strategy is the newly launched Public Health Act of 2011 (Ministry of Health, 2013a) (see section 5.1). The Act places the responsibility for public health work and reducing health inequalities at the heart of the government's public health efforts nationally, regionally and locally. It is hoped that the Act will, in the long run, encourage action on social determinants of health through also involving other sectors of the society (see sections 2.6 and 6.1).

## 7.4 Health outcomes, health service outcomes and quality of care

### 7.4.1 Population health

The health status of the Norwegian population is very good by international standards and positive trends can be observed for several population health indicators such as life expectancy, mortality from cardiovascular diseases (the primary cause of mortality in Norway) and the share of daily smokers in the adult population. However, some other risk factors, such as excess weight and obesity, have seen less positive developments (see section 1.4).

It is not easy to attribute improvements in population health directly to the health system. It is likely, however, that better preventive services and improvements in the organization and quality of health-care provision have contributed to these positive trends. In the 2012 Euro Health Consumer Index, Norway (and Sweden) ranked first in terms of treatment results and third (after the Netherlands and Finland) in terms of the range of preventive services provided (Health Consumer Powerhouse, 2012). The decline in the share of daily smokers was probably affected by public health campaigns, high taxes on tobacco products and a ban on tobacco smoking in public places. Factors that have seen less positive trends will have to be monitored and may require more preventive and other measures in the future.

Changes in survival rates and mortality amenable to medical intervention may serve as an indication of the contribution that health care makes to improving population health. Health Care Quality Indicators (HCQIs) collected by the OECD show an improvement in the survival rates for breast cancer, cervical cancer and colorectal cancer in Norway between 1997 and 2009. Cancer survival rates were higher in Norway than in the OECD on average for all three types of cancer in both 1997–2002 and 2004–2009 and, except for breast cancer, improved much faster between the two periods (see Table 7.1). For cervical cancer, Norway had the highest survival rate in Europe (OECD, 2012b). The key factors likely to have contributed to these positive results are earlier diagnosis (thanks to, for example, the national screening programme; see section 5.1.4), the availability of cancer drugs and new treatment methods (see section 5.6). Survival rates for colorectal cancer are less good than for the other two types of cancer, in both Norway and the OECD region on average. However, recent efforts to improve screening in this area may lead to improvements in survival rates in the future (see section 5.1.4).

**Table 7.1**

Changes in five-year survival rates for selected types of cancer, 1997–2002 and 2004–2009

Cancer type	Five-year survival rate, 1997–2002 (I)		Five-year survival rate, 2004–2009 (II)		% change between (I) and (II)	
	Norway	OECD mean	Norway	OECD mean	Norway	OECD mean
Breast cancer	82.4	78.7	86.5	83.5	5	6
Cervical cancer	68.8	64.6	78.2	66.4	14	3
Colorectal cancer	57.0	54.6	63.1	59.9	11	10

Source: OECD (2012b).

Norway ranks well in terms of amenable mortality rates. A recent study by Joumard, André and Nicq (2010) placed Norway, with 60 amenable deaths per 100 000, in seventh place among OECD countries (after countries such as France and Sweden) with respect to amenable mortality rates.

## 7.4.2 Health service outcomes and quality of care

### Quality of preventive care

The quality of preventive care can be gauged by looking at vaccination rates. Norway's Childhood Immunization Programme (see sections 1.4 and 5.1.2) has very high vaccination rates: in 2010, vaccination rates for vaccines covered within this programme ranged between 91% and 95% (NIPH, 2013c).

### Quality of care for chronic conditions

The quality of care for chronic conditions can be examined by looking at avoidable hospital admission rates for asthma, COPD and diabetes-related complications, as these admissions potentially could have been avoided by timely access to primary or ambulatory care. Admission rates for people aged 15 years and older have been gathered as part of the OECD's HCQI project. New data will be delivered to OECD in 2013 and will enable the analysis of trends over time.

According to HCQI data, the avoidable admission rate for asthma was 47.6 per 100 000 in 2009 in Norway, lower than the OECD average of 51.8 but significantly higher than the rates in Sweden (19.3) and Denmark (36.5). The avoidable hospital admission rate for COPD in Norway, at 243 per 100 000 in 2009, was markedly higher than the rates in most of the countries included in the HCQI project. The OECD average was 198, while in France it was only 79, 137 in Sweden and 146 in Finland. The rate in Denmark was 277 (i.e. higher than in Norway). However, it is important to note that these differences might

not be caused just by variations in the quality of care but can also reflect differences in the incidence or diagnosis of COPD. The admission rate for diabetes-related complications was 46.7 per 100 000 in 2009 in Norway. This is just below the OECD average of 50.3 and is lower than in Denmark, Sweden and Finland (OECD, 2012b).

### Quality of care for exacerbations of chronic conditions

In-hospital mortality rates (deaths within 30 days of admission, adjusted for case-mix) following acute myocardial infarction, haemorrhagic stroke and ischaemic stroke, are regarded as good outcome measures of the quality of acute care.

The in-hospital mortality rates recorded in Norway are relatively good compared to the respective average OECD rates. The in-hospital mortality rate for acute myocardial infarction in Norway was 2.5% in 2009 (OECD, 2012b). This rate is similar to the rates observed in Sweden, Denmark and Iceland, and lower than the OECD average of 5.1%. The in-hospital mortality rate for haemorrhagic stroke in Norway was 11.6% in 2009. This rate is well below the OECD average, and is also lower than the rates found in Sweden and Denmark. Finland, on the other hand, had an even lower mortality rate than Norway (6.5%). The in-hospital mortality rate for ischaemic stroke in Norway was 2.8% in 2009. These are about the same level as in Denmark and Finland, but lower than the OECD average.

### Patient safety

Several patient safety indicators have recently been established in Norway as part of the OECD's HCQI project. In 2009, one patient safety indicator (obstetric trauma – vaginal delivery with instrument) was significantly better in Norway than in the other three comparator countries on average (Table 7.2). Similar values were recorded for the other three indicators.

**Table 7.2**

Patient safety indicator rates (%) in Norway and comparator countries, 2009

Indicator	Norway	Denmark	Sweden	Finland
Catheter-related bloodstream infection	0.026	0.033	0.013	0.004
Postoperative pulmonary embolism or deep vein thrombosis	0.438	0.271	0.170	0.128
Obstetric trauma – vaginal delivery with instrument	3.768	6.043	11.950	3.521
Obstetric trauma – vaginal delivery without instrument	2.021	2.582	3.342	0.633

Source: OECD (2012b).

A series of national initiatives has been introduced since the early 2000s with the aim of reducing health-care-related harm. Several recent patient safety initiatives are described in section 2.9.

### **7.4.3 Equity of outcomes**

There is not much information on whether and how health outcomes differ across different population groups in Norway. The available information points towards the existence of socioeconomic inequalities in health outcomes and these inequalities seem to persist over the years (see section 1.4).

## **7.5 Health system efficiency**

### **7.5.1 Allocative efficiency**

Overall allocative efficiency of the health system is difficult to measure. The extent of allocative efficiency, or the extent to which limited funds are directed towards purchasing an appropriate mix of health-care services, is influenced by different actors at both central and lower levels. At the central level, the amounts allocated from the Ministry of Health to the lower levels take into account population needs (approximated by demographic characteristics of the population, such as age) and the level of activity (in the case of allocations to the RHAs). There are currently no penalties for overspending and the parliament has frequently (mainly in the period between 2002 and 2009), especially for the RHAs, increased funding above what had been budgeted for (see section 3.3.3). However, the RHAs have been balancing their budgets in the past several years.

Between 2006 and 2010, marked increases in the resources allocated to various types of care could be observed (for example, much greater resources were allocated to psychiatric care for children and adolescents, treatment for alcohol and drug abuse, and ambulatory care than in the past, while the amount of resources allocated to somatic care was largely unchanged) (Directorate of Health, 2012d). These trends have been interpreted as signs of an increased political willingness to reallocate resources between different sectors of specialist care (Ringard, Larsen & Norheim, 2012).

A positive development for improving allocative efficiency in the system was the establishment of the National Council for Priority Setting in 2000 (see section 2.7.3). The council has recently advocated a more systematic use of HTAs for the introduction of new technologies within the hospital

sector. Overall, the use of HTA in the health sector has been increasing (see section 2.7.2). The attempts to introduce a more clear-cut provider–purchaser split over the last two decades (see section 3.3.4) are likely to have contributed to improving allocative efficiency in the sector. A recent survey of 10 large municipalities, all having introduced a purchaser–provider split for municipal health-care services, such as LTC services, found that these models had a positive effect on outcomes, such as dimensioning of services (Deloitte, 2012).

### 7.5.2 Technical efficiency

The overall technical efficiency of health systems is difficult to measure. Until recently, cross-national comparisons of hospital efficiency including information on Norway have been rare. An early comparative study including Norway was carried out in the late 1990s (Mobley & Magnussen, 1998). The study, which compared Norwegian hospitals to hospitals in California, showed that Norwegian hospitals were no less efficient than American hospitals at the time. A more recent cross-sectional comparison of public hospitals in Norway, Finland, Sweden and Denmark, using data from 2002, showed that the average cost–efficiency of specialist care is significantly higher in Finland than in Norway (Linna et al., 2010). A recent comparison of cost–efficiency of university hospitals in the Nordic countries found the same pattern (Medin et al., 2011).

However, as reported in section 4.1.2, there has been a clear trend towards substantially shorter lengths of inpatient stay in Norway. At the same time, the outpatient and day-care rates have increased (see section 5.4.1). Both trends may be seen as the results of a deliberate substitution policy and are likely to increase efficiency in the hospital sector. The common procurement policy for medical devices and aids in health enterprises is likely to lead to cost savings and thus improve efficiency in the hospital sector (see section 4.1.3). The 2007 restructuring of the RHAs and the ongoing “Capital-process” is also likely to lead to efficiency gains (see section 6.1.2).

A study of primary care physicians conducted in the early 2000s in 32 countries found that Norwegian GPs had fewer patient visits per day than their foreign colleagues (Groenewegen, Boerma & Sawyer, 2003). This is consistent with the results presented in a recent OECD report (2012b). In addition, large differences in cost–efficiency have been found for the 429 municipalities’ production of health services. In general, the production of health-care services was found to be less efficient than the production of other municipal services such as provision of kindergarden services. For nursing homes and

LTC, the proportion of efficient municipalities increased from 7.4% in 2009 to 9.7% in 2010. At the same time, data envelopment analyses revealed that the average municipality had the potential of increasing its efficiency by 26% (Borge & Pettersen, 2012). The introduction of a purchaser–provider split in the municipalities seems to have had unintended consequence of increasing costs due to, among other factors, increased administration costs for the purchaser and the transfer of more responsibility to providers (Deloitte, 2012).

Generic substitution for pharmaceuticals has been the rule in Norway since 2001 and cost-effective use of pharmaceuticals is strongly promoted (through various measures aimed at influencing prescribing by physicians, pharmacists and patients) (see section 2.8.4). According to a web-survey, commissioned by the Norwegian Pharmacy Association, 64% of consumers had experienced a suggestion for a generic substitution from a pharmacist in 2009 (PHIS, 2011). Extension of the “First-choice” reimbursement scheme to statins in 2005 (see section 2.8.4) has had a great impact on physicians’ prescription patterns: almost 40% of atorvastatin users switched to simvastatin in the first 13 months since the scheme was extended (Sakshaug et al., 2007).

## 7.6 Transparency and accountability

### 7.6.1 Transparency

Improving transparency of the health-care system has been a political priority over the past few decades. At the level of the patients, the 1999 Patients’ Rights Act was of great importance for increasing transparency: an entire chapter of this Act was devoted to patients’ rights to participation and information (see section 2.9). The Ministry of Health is currently working on new legislation, which is intended to strengthen the position of patients and their next of kin in cases of severe incidents in the provision of services (see section 6.2).

Transparency has also been improved through the development and public release of information about health-care quality. Traditionally, important information about differences in quality across hospital providers was only available to medical professionals who had access to data from (national) quality registers. Today, information on more than 30 quality indicators, in addition to updated information on waiting times, is publicly available at public web sites such as [www.frittsykehusvalg.no](http://www.frittsykehusvalg.no) and [www.helsenorge.no](http://www.helsenorge.no).

In the 2012 Euro Health Consumer Index, Norway scored very highly in the “Patient rights and information” category (it ranked third, together with the United Kingdom, after Denmark and the Netherlands) (Health Consumer Powerhouse, 2012). The introduction in 2001 of the patient’s right to choose a hospital has also been an important factor in the drive towards the dissemination of information about the quality of health-care processes and clinical results. A recent report, however, shows that only 9% of those considering choosing a hospital had actually visited the web page (Auditor General, 2011a) and it has been concluded that the information provided on the web page for hospital choice ([www.frittsykehusvalg.no](http://www.frittsykehusvalg.no)) needs to be improved in order to be useful for patients.

Quality is also monitored through national and international surveys of patient satisfaction and the results of these surveys are publicly available (see section 7.3.1). Continuous work on the development of standards and clinical guidelines (see section 2.8) also contributes to increasing transparency in the system as does the introduction, in 2012, of the national system for reporting adverse events (see section 2.9). Transparency around quality and patient safety issues is further promoted in a recent White Paper: “High quality – safe services” (no. 10 2012–13) (Ministry of Health, 2012) (see section 6.1.6).

### 7.6.2 Accountability

The principles of accountability differ in various parts of the system. Primary health care and public health are provided at the municipal level. Local politicians are accountable to the local citizens through elections. The municipalities are also accountable to the central government in following policies and regulations. Moreover, public auditors control municipal budgets and other fiscal matters. However, the system is largely decentralized and the significant degree of discretion enjoyed at the lower levels of the system diffuses their accountability.

GPs and private specialists constitute large groups of self-employed professionals working within general contracts and with remunerations from the HELFO, both of which are subject to auditing. The GPs are also accountable to the national and county supervision authorities (i.e. the National Board of Health Supervision with its offices in the counties). However, their relative independence compared to other medical professions may cause them to feel more accountable to their patients in terms of the quality of care, and less accountable upwards in terms of efficiency or effectiveness (Johnsen, 2006). This may be changed by the implementation of the coordination reform, which the doctors strongly opposed (see section 6.1.5).



In the area of specialist services, the board and administration of the RHAs are accountable to the Ministry of Health (see section 2.8) and the ministry has the power to make binding decisions with respect to the activities of the RHAs (this is done in the annual meetings between the ministry and the RHAs). Similarly, hospital trusts are accountable to the RHAs. Another important accountability mechanism is the inclusion of local politicians, who have to take into account local needs and the wishes of their constituencies, in the boards of both the RHAs and hospital trusts. Finally, patient representation (e.g. in the advisory boards) may also be seen as a way of increasing accountability of specialist care providers towards those using the services (see section 2.9).



## 8. Conclusions

The Norwegian Health-Care System, as we know it today, has been developed as part of the welfare state after the Second World War. In these almost seven decades the system has been developed in order to ensure that all inhabitants have access to high-quality care independently of where they live and of their socioeconomic status. In order to achieve this ambitious aim, the system has been in a continuous state of change. At the turn of the millennium, the system underwent a number of important structural reforms including: introduction of activity-based funding for hospitals (1997); enactment of the Patients' Rights Act (1999); introduction of the RGP scheme (2001); takeover of hospital ownership by the central government (2002); and restructuring of the central health administration (from 2002).

Despite these extensive reforms, semi-decentralization remained the defining organizational feature of the Norwegian health system. Although this configuration has advantages with respect to legitimacy and accountability, it also poses challenges for transparency (since municipalities enjoy a large degree of autonomy) and continuity of care (as primary and specialist care are organized at two separate administrative levels). The latter aspect has received increased political attention over the past decade and culminated in the launch of the coordination reform, which gave the municipalities responsibility for patients ready for discharge. Although this may improve the coordination of care, some smaller municipalities may struggle to shoulder the bigger administrative and financial obligations this responsibility entails.

Over the past decade, a number of public hospital trusts struggled with budget deficits and the accumulation of debts but this situation has changed and the large majority of trusts now run balanced budgets. However, this has been seen as one of the reasons for long and persisting waiting times for elective treatments. The waiting times have received a lot of political attention and various policies, such as waiting time guarantees, increased patient choice

and faster access for employees, have been introduced. In addition, attempts have also been made to increase treatment capacity through contracting with private for-profit hospitals. Despite the many efforts, hospitals still operate at their capacity limits and there are many Norwegians waiting to receive elective hospital treatment.

Substantial activities have been undertaken with respect to improving quality of health care, including quality inspections, a system for introducing medical technologies (i.e. pharmaceuticals, devices and procedures) in a safe and cost-effective manner (based on HTA), development of quality measures in primary and specialist care, modernization of health registries and clinical databases, and the introduction of a National Council with a particular focus on quality and priority-setting issues. Efforts have also been made to raise awareness of what has been described as “the backside of the quality coin” – patient safety. So far, the government has launched a national patient safety campaign and invested in a reporting system for adverse events in hospitals. The latter will in future include municipal care. Despite all these efforts, standards of care are still missing in many areas (e.g. rehabilitation), making it difficult to monitor and assure quality of care. This needs to be addressed in a systematic manner if the ambitions of the coordination reform are to be fulfilled.

Finally, significant efforts have been made to implement and improve health-care information systems. This applies to both infrastructure (e.g. a common electronic network for primary and secondary care providers) and services (e.g. countrywide introduction of e-prescriptions). There are, however, challenges waiting to be addressed. The most pressing is perhaps the development of medical records for all Norwegians that are accessible to all health-care providers. Another important task would be to further develop information services that can underpin the important work of providing seamless and high-quality services.

## 9. Appendices

### 9.1 References

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## 9.2 List of health-care acts currently in force

Year enacted	Date, number and name of the act	Short name
2011	Act 2011-06-24-30 relating to municipal health and care services	Municipal Health and Care Act
2011	Act 2011-06-24-29 The Norwegian Public Health Act	Public Health Act
2005	Act 2005-06-17-62 relating to working environment, working hours and employment protection	Working Environment Act
2003	Act 2003-06-27-64 relating to alternative treatment of disease etc.	Alternative Treatment of Disease and Illness Act
2001	Act 2001-06-15-53 relating to compensation in the event of injury to a patient etc.	Patient Injury Act
2001	Act 2001-06-15-93 relating to health authorities and health trusts	Health Authorities and Health Trusts Act
2001	Act 2001-05-18-24 relating to personal health data filing systems and the processing of personal health data	Personal Health Data Filing System Act
2000	Act 2000-06-23-56 relating to health and social emergency preparedness	Health and Social Emergency Preparedness Act
2000	Act 2000-06-02-39 relating to pharmacies	Pharmacy Act
1999	Act 1999-07-02-64 relating to health personnel etc.	Health Personnel Act
1999	Act 1999-07-02-63 relating to patients' rights	Patients' Rights Act
1999	Act 1999-07-02-62 relating to the establishment and provision of mental health care	Mental Care Act
1999	Act 1999-07-02-61 relating to specialized health services	Specialist Care Act
1997	Act 1997-02-28-19 relating to national insurance	National Insurance Act
1995	Act 1995-01-12-6 relating to medical devices	Medical Devices Act

<b>Year enacted</b>	<b>Date, number and name of the act</b>	<b>Short name</b>
1994	Act 1994-08-05-55 relating to the control of communicable diseases	Communicable Diseases Control Act
1992	Act 1992-12-04-132 relating to medicinal products	Medicinal Products Act
1992	Act 1992-09-25-107 relating to municipalities and counties	Local Government Act
1989	Act 1989-06-16 nr 54 relating to official statistics and Statistics Norway	Statistics Act
1984	Act 1984-03-30-15 relating to the public supervision of health services	Supervision of Health Services Act
1983	Act 1983-06-03-54 relating to dental health services	Dental Health Services Act

### 9.3 Useful websites

The Parliament – [www.stortinget.no](http://www.stortinget.no)

The Office of the Auditor General – [www.riksrevisjonen.no](http://www.riksrevisjonen.no)

The Government – [www.regjeringen.no](http://www.regjeringen.no)

The Ministry of Education – [www.regjeringen.no/nb/dep/kd.html?id=586](http://www.regjeringen.no/nb/dep/kd.html?id=586)

The Ministry of Finance – [www.regjeringen.no/nb/dep/fin.html?id=216](http://www.regjeringen.no/nb/dep/fin.html?id=216)

The Ministry of Labour – [www.regjeringen.no/nb/dep/ad.html?id=165](http://www.regjeringen.no/nb/dep/ad.html?id=165)

The Labour and Welfare Administration – [www.nav.no](http://www.nav.no)

The Ministry of Health and Care Services –  
[www.regjeringen.no/nb/dep/hod.html?id=421](http://www.regjeringen.no/nb/dep/hod.html?id=421)

The Directorate of Health – [www.helsedirektoratet.no](http://www.helsedirektoratet.no)

The Board of Health Supervision – [www.helsetilsynet.no](http://www.helsetilsynet.no)

The National Institute of Public Health – [www.fhi.no](http://www.fhi.no)

The Medicines Agency – [www.legemiddelverket.no](http://www.legemiddelverket.no)

The Radiation Protection Agency – [www.nrpa.no](http://www.nrpa.no)

The Biotechnology Advisory Board – [www.bion.no](http://www.bion.no)

The System of Patient Injury Compensation – [www.npe.no](http://www.npe.no)

The Registration Authority for Health Personnel – [www.sak.no](http://www.sak.no)



The Health & Social Services Ombudsman – [www.pasientombudet.no](http://www.pasientombudet.no)

The Norwegian Knowledge Centre for the Health Services –  
[www.kunnskapssenteret.no](http://www.kunnskapssenteret.no)

The National Council for Priority Setting – [www.kvalitetogprioritering.no](http://www.kvalitetogprioritering.no)

The Electronic Library – [www.helsebiblioteket.no](http://www.helsebiblioteket.no)

The Norwegian Health Economics Administration (HELFO) – [www.helfo.no](http://www.helfo.no)

The South-Eastern Regional Health Authority – [www.helse-sorost.no](http://www.helse-sorost.no)

The Western Regional Health Authority – [www.helse-vest.no](http://www.helse-vest.no)

The Central Norway Regional Health Authority – [www.helse-midt.no](http://www.helse-midt.no)

The Northern Regional Health Authority – [www.helse-nord.no](http://www.helse-nord.no)

Statistics Norway – [www.ssb.no](http://www.ssb.no)

The Norwegian Association of Local and Regional Authorities (KS) –  
[www.ks.no](http://www.ks.no)

The Employers' Association Spekter – [www.spekter.no](http://www.spekter.no)

The Norwegian Medical Association – [www.legeforeningen.no](http://www.legeforeningen.no)

The Norwegian Nurses Organization – [www.sykepleierforbundet.no](http://www.sykepleierforbundet.no)

The Norwegian Dental Association – [www.tannlegeforeningen.no](http://www.tannlegeforeningen.no)

The Norwegian Psychological Association – [www.psykologforeningen.no](http://www.psykologforeningen.no)

The Norwegian Patient Organisation – [www.pasient.no](http://www.pasient.no)

The Norwegian Cancer Society – [www.kreftforeningen.no](http://www.kreftforeningen.no)

Helsenorge.no – [www.helsenorge.no](http://www.helsenorge.no)

Free Hospital Choice – [www.frittssykehusvalg.no](http://www.frittssykehusvalg.no)

Norwegian Health Network – [www.nhn.no](http://www.nhn.no)

The Association of the Pharmaceutical Industry in Norway (LMI) –  
[www.lmi.no](http://www.lmi.no)

The Norwegian Universities and Colleges Admission Service –  
[www.samordnaoptak.no](http://www.samordnaoptak.no)



## 9.4 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources, and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: <http://www.euro.who.int/en/who-we-are/partners/observatory/health-systems-in-transition-hit-series/hit-template-2010>.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents, and published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. 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 for All Policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments. With its summer 2007 edition, the Health for All database started to take account of the enlarged EU of 27 Member States.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights, complaints procedures, public participation and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which IT systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care, dental care, complementary and alternative medicine, and health services for specific populations.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment based on the stated objectives of the health system, financial protection and equity in financing; user experience and equity of access to health care; health outcomes, health service outcomes and quality of care; health system efficiency; and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references, useful web sites and legislation.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following.

- A rigorous review process (see the following section).
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches). The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

## 9.5 The review process

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

## 9.6 About the authors

**Ånen Ringard** was employed as project manager/senior adviser at the Department for Quality and Patient Safety in the Norwegian Knowledge Centre for the Health Services (NOKC) at the time of writing this HiT on Norway. He is currently seconded to the Ministry of Health and Care Services, where he is heading the secretariat for a Royal Expert Commission on Priority Setting in Health Care. He is also affiliated, as a postdoctoral researcher, to the Health Services Research Unit (HØKH) located at the Akerhus University Hospital. Ringard holds a degree in political sciences (Cand.polit.) and a PhD in Health

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## The Health Systems in Transition reviews

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

The Health Systems in Transition (HiT) country reviews provide an analytical description of each health-care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond. The HiT profiles are building blocks that can be used:

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

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**United Kingdom (England) (2011)**  
**United Kingdom (Northern Ireland) (2012)**  
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**United Kingdom (Wales) (2012)**  
**United States of America (2013)**  
**Uzbekistan (2001<sup>g</sup>, 2007<sup>g</sup>)**  
**Veneto Region, Italy (2012)**

### Key

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

<sup>a</sup> Albanian

<sup>b</sup> Bulgarian

<sup>c</sup> French

<sup>d</sup> Georgian

<sup>e</sup> German

<sup>f</sup> Romanian

<sup>g</sup> Russian

<sup>h</sup> Spanish

<sup>i</sup> Turkish

<sup>j</sup> Estonian

<sup>k</sup> Polish

<sup>l</sup> Tajik



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

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