Norway and Health
an introduction
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Preface

There has been a growing interest in the Norwegian health and care services abroad. This booklet outlines the structure of the system and some key factors that shaped it into what it is today. It is meant as a rapid reader for visitors to our country who have an interest in health systems.

The Norwegian traditional political tenet holds that society is collectively responsible for the welfare of its citizens. Thus, an overarching aim is to provide services of high quality, available within acceptable waiting times and distances, reaching out to everyone regardless of their financial situation, social status, age, gender and ethnic background.

During the last five decades, Norway has undergone a substantial socio-economic transformation, and is now among the wealthiest nations in the world. This development has been of great significance to the health of the nation, the services provided and the public expectations to the health services.

A national health system is the result of a dynamic interplay between health needs, public expectations, professions, interest groups and available resources. As all these elements change over time, the system is in constant evolution.

One major concern in Norway as an egalitarian society is the growing disparity in health between social groups, in spite of universal access to care and services. A comprehensive policy on social determinants of health is developed in order to reduce social inequalities in health.

The principal elements of the structure and activities are outlined here. There have been many contributors, and a special note of gratitude goes to Lal Manavado, who initiated this project and contributed extensively throughout the process.

We hope this booklet will give you a quick overview that you will find interesting, informative and useful as a first introduction to health in Norway.

Bjørn Guldvog, Acting Director-General of Health
Oslo, November 2012
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1 International cooperation on health

Norway is an active participant in the international efforts to enhance global public health. Over the years, Norway has seen the World Health Organization (WHO) as the central arena for international health. Karl Evang, former Norwegian Director General of Health, was one of the founders of the organization in 1948, while former Prime Minister Gro Harlem Brundtland served as Director General of WHO from 1998 to 2003. The Former Norwegian Director General of Health, Bjørn-Inge Larsen, was a member of the Executive Board of WHO from 2010 to November 2012. Acting Director-General, Bjørn Guldvog, is the Norwegian Board Member for the remainder of the term, which expires in May 2013.

Prime Minister Jens Stoltenberg (2005-) has been actively involved in United Nations (UN) reform and the intensified campaign to meet the Millennium Development Goals 4 and 5 by 2015. In 2006, then Minister of Foreign Affairs (now Minister of Health and Care Services) Jonas Gahr Støre, initiated a process in collaboration with six other Ministers of Foreign Affairs of looking at health and diplomacy, to explore the areas where foreign affairs cover global health issues. This embraces threats like pandemics, trade issues like patent rights and the cost of essential treatment in poor countries, as well as ethical recruitment of health personnel, and reconstruction of failed states and humanitarian assistance in emergencies.

Mention must also be made of regional health cooperation. Collaboration with the Nordic and Baltic States, as well as Russia, is given high priority. The latter in particular has seen a dramatic upturn since the early 1990s. Many health projects and programs related to tuberculosis control, prevention of HIV infections, child health care and prevention of lifestyle-related disease, have been carried out.

The European Union (EU) plays a significant role in European health cooperation, and through the European Economic Area (EEA) Agreement Norway is involved in a variety of EU activities. A large number of EU directives are implemented in Norway. Most directives are related to food safety. Other areas of cooperation include health preparedness, patients’ rights in cross-border health care, medical equipment and pharmaceuticals. Additionally, participation in EU programmes is an important part of the cooperation. Norway also takes part in several health related committees and EU agencies, e.g. the European Medicines Agency (EMEA), European Centre for Disease Prevention and Control (ECDC), European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the European Food Safety Authority (EFSA).
2 Norway, the nation

Norway is a founding member of the UN, the North Atlantic Treaty Organization (NATO) and the Council of Europe, but not a member of the EU. Norwegian voters turned down EU membership by narrow margins in 1972 and 1994. However, Norway is part of the EU internal market, and has an extensive cooperation on most policy areas through the EEA Agreement.

2.1 Geography

Norway is located in Northern Europe, bordering the North Sea and the North Atlantic Ocean. Half the country lies north of the Polar Circle. It borders Sweden, Finland and the Russian Federation.

The country is divided into 19 regional authority areas, counties (fylker), which in turn are divided into more than 430 local authority areas, municipalities (kommuner). The capital is Oslo. The Norwegian climate is temperate and wet along the coast, modified by the North Atlantic Current. The inland climate is dry, and cold in winter. The terrain is mostly high plateaus and mountains broken by fertile valleys. The coastline is deeply indented by fjords. About two-thirds of the country consists of mountains, and there are some 50,000 islands along the coastline.

Norway has rich resources of petroleum, natural gas, hydropower, fish, timber, and minerals like iron, copper, lead, zinc, titanium, pyrites and nickel. As for land use, only 3 percent of the land is arable, while 27 percent of the land is forests and woodlands.
Figure 1 Neighbours and communications

Illustration by Egil Sire
2.2 Demography

Norway has a population of 5.0 million (2012).

Life expectancy at birth

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>71</td>
<td>77</td>
</tr>
<tr>
<td>2009</td>
<td>79</td>
<td>83</td>
</tr>
</tbody>
</table>

Age structure  Percent
0-15 years  20
16-66 years  67
67 years and over  13

Population growth Rate

<table>
<thead>
<tr>
<th>Rate</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth rate</td>
<td>12.5 births/1,000 population</td>
</tr>
<tr>
<td>Death rate</td>
<td>9.4 deaths/1,000 population</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>2.8 deaths/1,000 live births</td>
</tr>
<tr>
<td>Female fertility rate</td>
<td>1.88</td>
</tr>
<tr>
<td>Male fertility rate</td>
<td>1.70</td>
</tr>
</tbody>
</table>
2.3 Government

Norway, officially the Kingdom of Norway, is a constitutional monarchy with a parliamentary system of government. Norway adopted its constitution in 1814, and the King was given executive powers. Today, these are effectively exercised by the government, headed by the Prime Minister. In 1898, all men were granted suffrage, followed by all women in 1913. In terms of government, the social democratic Labour Party has played a defining role after the Second World War.

Norway is a unitary state, but the counties, or the provincial councils and the local authorities, have a great deal of political autonomy. They also set their own tax range within limits prescribed by Parliament. Representatives to the provincial and local councils are elected every four years by proportional representation. A representative, usually from the largest political party or coalition, is chosen as chair of the council, and he or she is also the mayor of the local authority area.
2.4 Economy

The Norwegian economy may be described as welfare capitalism, featuring a combination of free market economy and government interventions and regulations. The government heavily regulates key areas, such as the petroleum sector, education and health. International oil prices are important as oil and gas account for a third of Norwegian exports. Surpluses from the gas and oil exports are kept in a Government Pension Fund, which is invested abroad. In early 2012, the size of the fund was approximately USD 575 billion (Norwegian Bank Investment Management, 2012).

The Norwegian progressive tax system is based on indirect taxes such as value-added tax (VAT), personal income tax and corporate tax, including employers’ social security contributions.

Food processing, shipbuilding, pulp and paper products, metals, chemicals, timber, mining, textiles, aquaculture and fishing are among the most important other industries. Barley, other grains, potatoes, beef, milk, and fish are among the principal agricultural products of the country.

2.5 Health

Selected data on the population’s health:

In 2010, cancer and cardiovascular diseases accounted for over 60 per cent of deaths. Cancer is the primary cause of death for people under 70 years of age, while cardiovascular diseases, such as heart attack, are the primary killers for people 70 years and over. This trend is unchanged over the past decade.

Owing to decreasing mortality, the number of elderly has risen considerably. This has brought a high prevalence of dementia, cancer, heart and lung insufficiencies and musculoskeletal illness among the elderly.

Estimates of prevalence of mental disorders in Norway vary considerably, according to methods and diagnostic criteria used. Approximately 15-20 percent of the adult population are thought to have some kind of mental health problem, about three percent are estimated to have a serious mental disorder. More than 400,000 children have parents with diagnosable mental disorders. The rate of suicide is fairly low in comparison with other Northern European countries. Nevertheless, suicide is one of the most important causes of death for people between 10 and 45 years of age, being responsible for 19 percent of all deaths in this age group. Mental disorders are the reason for 15.3 percent of all sick leave from work. Of the population aged 16-67 years, three percent receive disability
pensions based on a psychiatric diagnosis, constituting one third of all people on disability pension.

The medical and social challenges posed by substance abuse weigh heavily in Norway. In addition to structural policies that regulate price and availability of alcohol, much is invested in prevention through the municipal health services. A National Action Plan on Alcohol and Drugs (2007-2012) has been adopted in order to meet the increasing challenges. Main goals include better quality and increased competence, more accessible services and increased social inclusion, formal cooperation, increased user influence and greater attention to the interest of children and family members.

It is estimated that there in 2008 were somewhere between 6600 and 12300 “problem users” of heroin, in addition to somewhere between 3400 and 6400 experimental or sporadic users. 6000 persons were enrolled in medical (methadone) assisted rehabilitation programs in 2010.

In 2011 the equivalent of 6.6 litres of pure alcohol were sold per inhabitant aged 15 or more. This represents an increase of one litre since 2000. However, statistics show a decrease in consumption among youth over the last decade. In 2011, 24,000 patients received treatment for substance abuse.

As for infectious diseases, 250 to 350 cases of tuberculosis are diagnosed every year. Active tuberculosis among native Norwegians is rare, while immigration in recent years has led to an increase in the prevalence of the disease.

In 2011, 269 new cases of HIV infection were reported, against 258 cases the previous year. As per October 2012, only 146 cases have been reported. The decline can be explained by a reduction in the number of asylum seekers and family unifications from high endemic countries, and a decrease in the number of men having sex with men (MSM) diagnosed with HIV the same year. However, from 2003, there has been a marked increase in contamination among MSM, similar to the situation in other parts of Europe.

Each year, 400,000 to 450,000 accidents occur that require medical attention. About 53,000 of these require hospitalization. In 2010, accidents accounted for 1941 deaths.

In 2010, the birth rate among teenagers is reduced by more than half since the 1990s. In 1990, the birth rate among teenagers (15-19 years) was 17.1 per 1,000 women, compared to 7.1 in 2010. In the same age group, the number of abortions per 1,000 women was 14.1. The age group 20-24 years has the highest rate of abortion, with 29.2 terminations per 1,000 women.
3 Health: Financial and human resources

In 2009, the Norwegian per capita total health expenditure of USD 5,352 ranked second among the OECD countries (OECD Health Data, 2011). The period between 2000 and 2009 saw a variation in the health expenditure as GDP ratio ranging from 8.4 percent to 10.0 percent, peaking in 2003, decreasing to 9.6 percent in 2009.

In 2009, the total health expenditure, public and private, was 230.5 billion Norwegian kroner (Statistics Norway). Norway has one of the largest shares of public financing of health services per capita in the world. As Figure 3 below shows, public expenditure on health is currently 7.9 percent of GDP, while private expenditure amounts to 1.7 percent. The largest part of public health expenditure is incurred by the curative care provided in hospitals. At the local level most public health expenditure is related to care services. In 2009, 3.3 percent of total health expenditure was spent on prevention and administration.

Figure 3 Total expenditure on health in per cent of gross domestic product for a selected group of OECD countries. http://www.ssb.no/english/subjects/09/01/helsesat_en/

3.1 Manpower

Norway, like other European countries, is facing an increasingly ageing population. From 2020, a strong growth in the percentage of the population over
80 years is projected. This will cause a significant increase in demand for health care services. Projections show that there will be a growing shortage of health care personnel in the future. In particular we see an increasing shortage of primary health care personnel, such as nurses and health care workers. We also see a dramatic decrease in the number of applicants for the health programs at the secondary level in the education system. In combination with high demand, this causes a serious deficit for most personnel groups at this level. For personnel at the university level, projections show a minor deficit for physicians and dentists, but a surplus of psychologists.

The health authorities have been active, both on the national and international arena, in order to seek a better balance between demand and supply of health care personnel. Important issues are capacity and skills mix on the domestic level, and fair treatment and understanding of the needs in poorer countries in limiting the recruitment from abroad.

3.2 Registration/licensing of personnel

The Health Care Personnel Act sets out the regulations with regard to the authorisation and licensing of health personnel. The Norwegian Registration Authority for Health Personnel (SAFH) is responsible for granting professional authorisation needed for working within the regulated health personnel categories. Authorisation represents full and permanent approval, while a license imposes one or more limitations with respect to duration, independent or supervised practice, et cetera.

www.sak.no

Following the EEA Agreement, Norway adheres to the EU directive on recognition of professional qualifications, also in the case of health care personnel. Furthermore, according to the Health Personnel Act, an applicant from a country outside the EEA may also be authorised if she or he has passed a foreign examination that is recognised as equivalent to the Norwegian requirement, or has otherwise proven to possess the necessary skills.

At present, employment in 29 health professions requires prior authorisation. A peculiarity in Norway is doctors’ licence, which expires routinely at 75 years of age, and can be renewed on application and an approved health certificate.
Table 1 Persons aged 15-66 with health care education, by category of personnel. 2011

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical and dental secretary</td>
<td>19761</td>
</tr>
<tr>
<td>Auxiliary nurse, care worker and health worker</td>
<td>127353</td>
</tr>
<tr>
<td>Child care worker</td>
<td>19260</td>
</tr>
<tr>
<td>Occupational therapist and physiotherapist</td>
<td>17849</td>
</tr>
<tr>
<td>Midwives and public health service nurses</td>
<td>9438</td>
</tr>
<tr>
<td>Nurse</td>
<td>113618</td>
</tr>
<tr>
<td>Social educator</td>
<td>14541</td>
</tr>
<tr>
<td>Child welfare officer</td>
<td>11625</td>
</tr>
<tr>
<td>Social worker</td>
<td>16616</td>
</tr>
<tr>
<td>Pharmacist and dispensing pharmacist</td>
<td>4915</td>
</tr>
<tr>
<td>Physician</td>
<td>13541</td>
</tr>
<tr>
<td>Specialised physician</td>
<td>14396</td>
</tr>
<tr>
<td>Dentist</td>
<td>6308</td>
</tr>
<tr>
<td>Psychologist</td>
<td>6730</td>
</tr>
</tbody>
</table>
The health administration can be divided into three parts; the national, provincial and local levels.

### 4.1 Health at the national level

**The Ministry of Health and Care Services** formulates and implements the national health policy with the help of several subordinate institutions. [www.hod.dep.no](http://www.hod.dep.no)

**The Norwegian Directorate of Health** is a specialized agency under the Norwegian Ministry of Health and Care Services. It is responsible for the compilation of various ordinances, national guidelines and campaigns. It also advises the ministries concerned on health policy and legislation.

Its administrative activities involve management of grants for service projects and research, the Norwegian Patient Registry and the implementation of certain statutes, while it executes diverse projects designed to promote public health and improve living conditions in general. [www.helsedirektoratet.no](http://www.helsedirektoratet.no)

**The Norwegian Board of Health Supervision** is an independent authority responsible for the general supervision of the health services of the country. Its central office directs its regional units set up at the province level. The county medical officer, who reports to the provincial governor, directs the unit as one of his or her responsibilities. These supervisory authorities are concerned with quality, legal aspects, complaints and the task of ensuring adequate and equitable health services. [www.helsetilsynet.no](http://www.helsetilsynet.no)

**The Norwegian Institute of Public Health** (NIPH) is a main source of medical information and advice. The institute is responsible for six out of seven national health registries. The Cancer Registry is a separate administrative unit. The registries are used for research and surveillance purposes. NIPH has the responsibility for ensuring good utilisation, high quality and easy access to the data in the registries, as well as assuring that health information is treated in accordance with privacy protection rules.
The seven central health registers have been established in accordance with the Personal Health Data Filing System Act. They are:

1. The Cause of Death Registry
2. The Cancer Registry of Norway
3. The Medical Birth Registry of Norway
4. The Norwegian Surveillance System for Communicable Diseases (MSIS)
5. The Tuberculosis Registry
6. The Childhood Vaccination Registry (SYSVAK)
7. The Norwegian Prescription Database
   www.fhi.no

The Cancer Registry of Norway is a governmental institute for population based cancer research. The registry has recorded cancer cases nationwide since 1953. A computerized population registry combined with the matching of information from several sources has resulted in accurate and complete cancer registration. This information is used in research projects to establish new knowledge about cancer causes, progression, diagnosis and effect of treatment.
   www.kreftregisteret.no

The Norwegian Medicines Agency is the administrative organ for drugs approval. It authorises and monitors the use and sale of pharmaceuticals, as well as the proper and economical use of them. It licenses the importers of pharmaceuticals and their local distributors. The agency is also responsible for the classification of pharmaceuticals, the drugs and doping list, standardisation, pharmaceutical post-marketing control, medical post-marketing control, monitoring of adverse drug reactions, supervision of pricing, and the determination of the pharmaceuticals to be included in the national subsidy list.
   www.legemiddelverket.no

The Norwegian Radiation Protection Authority (NRPA) is the technical authority on radiation and nuclear safety, on which it is consulted by various home authorities. It administers statutes concerned with radiation and nuclear safety, and supervises the medical, industrial and research activities that involve the emission of radiation.
NRPA monitors natural and man-made radiation at the work place and in the environment, and it also manages the national nuclear emergency preparedness plan.
   www.nrpa.no

Several Norwegian public institutions collect information for statistical purposes, but Statistics Norway (SSB) is the central body responsible for collecting, analys-
ing and disseminating official statistics, including statistics on health. According to the Statistics Act of 1989, Statistics Norway has the authority to decide what should be official statistics and is responsible for organising all official statistics in Norway.

www.ssb.no/english

The Norwegian Patient Registry (NPR) is part of the Norwegian Directorate of Health, and is responsible for providing data for planning, evaluation and financing for publicly funded specialized health care. The NPR covers nearly all in-patient and out-patient hospital care. The registry includes activities and waiting lists. Data on specialized treatment for substance abuse and additional data on accidents are also provided. Data on the patient's age, sex, place of residence, hospital and department, diagnose(s), medical and surgical procedure(s), dates of admission and discharge as well as date of procedure are included in the registry.

NPR also has data on all episodes of care in the publicly financed independent specialist health service in Norway, based on ICD-10 diagnosis and codes for medical and surgical procedures. Patients are identified with a unique personal identifier. Episodes of care are reported from 554 specialists who work as private practitioners in the somatic sector, and from 679 psychiatrists and psychologists working in mental health care in 2011. Specialists working independently performed about 28 percent of all publicly financed out-patient consultations in 2011 for both somatic and mental specialized health care. Reports from somatic hospitals in 2011 contain information about 880,000 hospital stays, 400,000 day care episodes and 5 million out-patient episodes. As regards the mental health sector, there were 128,000 unique adult patients treated for mental health problems and nearly 25,000 adult patients treated for drug addiction (heroin and other) in 2011.
4.2 Health at the provincial level

The provincial authorities represented by the county council do not deal with health matters, except for dental health care (see paragraph 5.8). Public hospitals and specialist services are organized in “health enterprises”, see below. The chief state representative of a province is the governor, who is appointed by the central government. He or she is assisted by an executive board of civil servants, including the county medical officer and the dental surgeon of the province.

4.3 Health at the local level

Local authorities, the municipalities, through their council and administration, represent the ground level of the administrative hierarchy. They are entrusted with the provision of a wide variety of primary health services.
5 Primary health services

The primary health services in the present form were established through the *Norwegian Primary Health Services Act of 1982*. The responsibility for the primary health services was given to the 430 local authorities. The municipalities are to provide for care and treatment for all persons within their respective borders, including health promotion and prevention, emergency care and immigrant health care.

5.1 Scope

The services include general practice, pregnancy and antenatal care, health clinics for mother and child, school clinics, mental health care, nursing homes, rehabilitation, physiotherapy, communicable disease control, preventive medicine, environmental health and health promotion. The municipalities are assigned components of the national emergency preparedness plan, and provide for prisoners, refugees and asylum seekers located in the area.

5.2 Roles

The municipal council plans and implements these services through a director of primary health services. A municipal medical officer is appointed to advise the local council on health issues. In scarcely populated areas, some municipalities jointly establish and run all or a part of their primary health services.

The municipal medical officer is concerned with public health in the municipality. He or she provides information on available services, prevention of diseases, health promotion and organization of services. He or she also works to ensure that the building and operation of industrial installations, commercial and other activities pose no threat to public health.

Health personnel are either contracted to provide services, or employed by the municipality. The former is true for most of the general practitioners, while nurses and midwives usually are employees of the municipalities.

5.3 Financing

Primary health services are financed through grants from the national government, local tax revenues, reimbursements from the National Social Security
Scheme and out-of-pocket payments. Services of the pre- and antenatal clinics (health stations), youth clinics, school clinics, and all consultations for children below 12 years of age are free of charge.

5.4 **The general practitioners’ scheme**

In 2002, the national authorities introduced a general practitioners’ scheme, giving individuals the right to choose one general practitioner as family doctor. In December 2011, about 4,200 physicians were included in this scheme. They are private practitioners who enter into a contractual agreement with the municipality, and are required to have a set clientele not exceeding 2,500 persons. In addition to consultation fees, part of which is covered by the National Social Security Scheme, they receive a regular monthly capitation allowance for each person on the list from the municipality. It is part of the agreement that they also serve in health clinics, school clinics, local authority nursing homes, prison health service and emergency units on a part-time salaried basis. Patients may choose a practitioner anywhere, also outside the municipality of residence. If dissatisfied, they may change their physician up to twice within a calendar year.

5.5 **The health clinics**

Health clinics are fundamental in preventive health care. They provide services for mothers and children up to pre-school age. Public health nurses run the clinics with a physician at hand for consultation when needed. Midwives, physiotherapists, psychologists and other professionals may also be engaged at these clinics. The services provided include assessments, follow-ups, referrals, vaccinations, counselling, home visits and provision of information and cooperation with other social services for more comprehensive service packages.

Youth clinics provide integrated individual prevention services, covering physical and mental health assessment and advice, nutrition, physical fitness, sexual hygiene, problems of adolescence, contraception, family problems, and rehabilitation of the disabled and the chronically ill.

School health services serve school children and youth under 20 years of age. The school clinics provide vaccinations, health promotion and social and psychological support in the school environment.

The clinics for school children are usually located at schools, while the youth clinics are strategically located elsewhere in the municipality. They have flexible hours of consultation.
5.6 Health and care services for the elderly and disabled

The most important services are:

- Institutional care (nursing homes) and community care housing
- Home care services: home-help and community nursing, meals on wheels
- Respite services for care-giving persons and families
- Day care and activity centres

On the community level, there has been a shift away from institutional to home-based care. These services are intended for the whole population, irrespective of age, gender, socioeconomic status and other differences.

5.6.1 Users

The services have about 266,000 users. This represents an increase of 5% since 2007. In recent years, there has been a considerable rise in the number of younger users. Thirty-six percent are under 67 years of age. About 25% are under 50 years old, and 6% are under 18. Sixteen percent receive institutional care, the rest receive home-services of different sorts. These services employ 126,200 person-years.

5.6.2 Personnel

The growing population of the elderly demands new ways of thinking and training of new skills. Towards year 2020 efforts will be intensified to train personnel and invest in appropriate buildings and technology. Special attention is given to patients with dementia. At present, about 66,000 people suffer from this condition, a number that will probably double during the next 35 years.

5.7 Primary mental health services and drug treatment

The municipalities play a key role in the provision and coordination of services for people with mental health problems. During the period of the National Action Programme 1999 - 2008, the number of mental health workers in the municipalities was increased substantially and in 2011 about 12,000 professionals were working in these services.

Referral to specialised drug treatment is performed either by the general practitioners or by the social welfare system. The referrals have to be dealt with by the IST services within 30 days (stated by the Patients’ Rights Act), within 10 days
for substance use patients below the age of 23 years.

5.8 Public dental health services

The Public Dental Health Services (PDHS) were established in 1950. Local government is responsible for planning and funding of the service. All children aged 0-18 years receive free treatment, except for orthodontic care, for which parents have to pay a partial fee according to the degree of malocclusion.

5.8.1 Oral health care system

Oral health care in Norway is divided into a public and a private sector. The Norwegian public dental care system was formalized in 1950, and is regulated through The Oral Health Service Act of 1983. The Public Dental Service (PDS) is country-wide and organized and funded by the counties. About 20% of the population received oral health care from public dental clinics in 2011. Oral health care for adults is mostly provided for by private dental care providers.

In the public clinics, all oral health care and treatment is provided free of charge to children and young people aged 0-18 years, mentally ill persons both living in institutions and at home, groups of elderly and long-term care patients living in institutions or receiving care at home, and other groups to whom the county give priority. Youth aged 19 and 20 pay 25% of fixed fees set by the Ministry of Health and Care Services. The public clinics can also treat patients that do not belong to these groups if capacity allows. These patients pay fees set by the PDS.

In Norway there is no public regulation of dental fees in the private sector. This leads to variations in how much patients must pay when a disease qualifies for reimbursement from the National Insurance Scheme (NIS). The reimbursement is based on fixed prices set by the national health authorities. These prices are in general lower than the fees applied by dentists, both in the public and the private sector, meaning the patient pays the difference.

5.8.2 Education and training

To enter dental school in Norway, applicants must have a general matriculation standard. This means completed higher secondary school, with advanced courses in mathematics, physics and chemistry. Dentistry is a five year master’s degree, and is only offered at three public universities: Bergen, Oslo and Tromsø. There are no private dental schools. Approximate number of candidates at each university per year is 48, 65, and 40, respectively.
6 Specialised health care services

Specialist health care services include hospitals for patients with somatic or mental disorders, out-patients departments, centers for training and rehabilitation, institutions for drug addicts, centres for re-education for chronically ill patients and disabled, pre-hospital services and private specialists, laboratories and x-ray facilities.

Figure 5 The four health regions

Illustration by Egil Sire

6.1 Health enterprises

Major reforms in the specialised health care services were instituted by The Regional Health Authorities Act of 2002. Five regional health enterprises (later reduced to four through a merger) were set up to administer services within each region, with appointed boards responsible for governance and results.
Following the reform, responsibility for all the public hospitals, policlinics and the district psychiatric centres in the country was transferred to the state, and the system of enterprise ownership and management was established.

The services include all hospital services, ambulance services, emergency call systems, laboratories, in-house pharmacies and some medical rehabilitation facilities.

Each regional health enterprise directs a set of subordinate units, mostly hospitals, known as health enterprises. Most public hospitals are part of this system. Private specialist health service facilities may be invited as partners to the system on a contractual basis.

Each enterprise is directed by a board of management, appointed by the owner, the minister of health, serving a two-year term. The boards are supposed to run the enterprises like businesses, in particular guarantee solvency.

### 6.2 Allocations

The Norwegian health system is a tax-based system covering all inhabitants. In consultation with the health authorities, the government makes annual budget allocations for each regional health enterprise. The Ministry of Health and Care Services issues operational directives on general goals to be achieved with the approved budgets.

In consultation with the boards, each regional health enterprise determines how funds are to be distributed among the health enterprises of the regions. The allocations to health enterprises are accompanied by operational directives from regional health authorities on goals to be reached.

In June 1997, Norway introduced the activity-based funding system for the somatic hospital-based health services based on the DRG (Diagnose Regulated Groups) system. The share of activity-based funding is decided by Parliament. Since 2008, the share of activity-based funding has been 40 percent, and 60 percent has been block grants.

### 6.3 Patients’ rights

The Patients’ Rights Act stipulates the right to become a patient and receive necessary treatment, as well as several procedural rights.
• All members of the Norwegian population have a right to health care when certain criteria are met
• The health system as such (municipalities, enterprises) and the individual care provider 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, change in ethical values and the prevailing best practice within a certain field
• The patients’ entitlement to necessary health care in the specialist health care services extends to the right to have care delivered within a specific time limit
• Budgetary concerns and providers’ priorities cannot be reason to withhold health care treatment.

People have several explicit rights as patients, which are based on the principle of patient autonomy and the right to necessary health care:

• 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
• The Patients’ Rights Act also stipulates free choice of hospital. The patients cannot, however, choose the type of treatment or how specialized the treatment should be.

6.4 Priority-setting

Priority in the health sector is also regulated by law. It defines necessary care by taking into account the seriousness of the condition in case and the expected benefit from treatment. There must be an acceptable cost-benefit ratio. The National Council for Quality and Priority-setting advises the Government and the health establishments on issues such as distribution of and access to services, new technology and national guidelines.

6.5 Coordination

A new reform was implemented from the 1 January 2012, The Coordination Reform, aiming at better collaboration between the specialist services and the
municipal health services. The municipalities are given a new and more central role and responsibility both for public health and health care services. The three key documents for the implementation of the reform are the new law on health and care services in the municipalities, the new Public Health Act and the whitepaper The National Health and Care Plan.

6.6 Safe use of pharmaceuticals

Studies have shown that up to 20 percent of patients do not receive correct medication. Errors may occur in all situations in which pharmaceuticals are being handled: during prescription (at physician level), dispensing (in the pharmacy) and at the patients’ point of actual use.

Many patients, especially in the older age-groups, suffer from a multitude of diseases requiring complex drug treatment (“poly-pharmacy”). This increases the risk of drug related problems, like interactions, as well as incorrect use of the medication. In addition, studies have shown that inadequate training of health care personnel, lack of routines, improper instructions or unclear responsibilities increase the risk of incorrect use of pharmaceutical drugs.

Correct use of pharmaceutical drugs is promoted through a wide range of recommendations, covering efforts such as paediatric formulations, improved dispensing systems and electronic prescriptions.

6.7 Specialised mental health services and drug treatment

Specialised mental health care is provided by the health enterprises. This includes care for patients with serious mental health problems and drug or alcohol problems (dual diagnoses).

The specialised treatment system for drug users is part of the Specialised Health Care System. The Regional Health Authorities are responsible for Interdisciplinary Specialised Treatment (IST), giving treatment to patients with alcohol problems, illicit substance use and misuse of prescribed drugs.

Medication assisted treatment (MAT) was started on a national scale in 1998. The expansion has been quite rapid, approximately 500 new patients each year. By the end of December 2011, there were approximately 6500 patients in MAT with methadone or buprenorphine.
7 Public health and health promotion

The general level of health in Norway is high by international standards. However, the socioeconomic distribution of health still poses serious challenges for Norwegian public health policies. Thus, for instance, although life expectancy for Norwegian men in general is among the best in the world, a male university teacher can statistically expect to live some ten years longer than a male chef. Inequalities among female employees are smaller, but still substantial.

7.1 Norwegian public health act

The new Public Health Act was introduced in Norway from 1 January 2012. The purpose of this act is to contribute to societal development that promotes public health and reduces social inequalities in health. Public health work shall promote the population's health, well-being and good social and environmental living conditions, and contribute to the prevention of mental and somatic illnesses, disorders and injuries.

The act establishes a new foundation for strengthening systematic public health work in the development of policies and planning for 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 level.

7.1.1 Multiple stakeholders

The municipalities, county authorities and central government authorities are all important actors in the efforts to promote public health and reduce social inequalities in health. This act shall ensure that municipalities, county authorities and central government health authorities implement measures, and coordinate their activities in the area of public health work. Participation and collaboration with the voluntary sector are important aspects of good public health work. The central health authorities have a duty to support the public health work of the municipalities by making available information and data to monitor public health and health determinants at local level.
7.1.2 **Principles of public health**

The act is based on five fundamental principles that shall underpin policies and action to improve population health. The principles are:

- **Health equity**: Health inequities arise from the societal conditions in which people are born, grow, live, work and age – the social determinants of health. Social inequities in health form a pattern of a gradient throughout society. Levelling up the gradient by action on the social determinants of health is a core public health objective.
- **Health in all policies**: Equitable health systems are important to public health, but health inequities arise from societal factors beyond health care. Impact on health must be considered when policies and action are developed and implemented in all sectors.
- **Sustainable development**: Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
- **Precautionary principle**: An action or policy might have a suspected risk of causing harm to the public or to the environment. The absence of scientific consensus about the health impact of an action or policy cannot justify not preventing potential such harm.
- **Participation**: Public health work is about transparent, inclusive processes with participation of multiple stakeholders. Promotion of participation by civil society is key to good public health policy development.

7.2 **Strategy to reduce social inequalities in health**

A 2007 public health white paper, National strategy to reduce social inequalities in health, made the reduction of such health inequalities the central concern of Norwegian public health policy for ten years to come. The strategy was built on the principle that the way to change the social distribution of health is to change the social distribution of health determinants, which are ultimately to be found “upstream”, in the social distribution of resources. More specifically, the strategy operates with four priority areas:

1) Reducing social inequalities that contribute to inequalities in health – including factors such as income, childhood, education, employment and work environment
2) Reducing social inequalities in health-related behaviour – such as nutrition, physical activity, smoking and substance abuse – and in the utilisation of health services
3) Targeted initiatives to promote social inclusion
4) Developing knowledge and cross-sectoral tools

7.3 Tobacco use and tobacco control

Approximately 5,100 people die from smoking related diseases every year (in particular cardiovascular diseases, cancer and lung diseases), representing 13 percent of all deaths in Norway.

Historically, smoking peaked in Norway around 1970. Since then, there have been comprehensive plans for tobacco control and a designated government agency. Smoking prevalence has declined significantly, while the use of smokeless tobacco has risen since 2000.

7.3.1 Strong legislation

The Norwegian Tobacco Act entered into force in 1975, requiring health warnings on tobacco packaging, an age limit and a ban on advertising of tobacco products. Today Norway is still considered a country with strong tobacco legislation. The EU Directive 2001/37/EC concerning the manufacture, sale and presentation of tobacco products is implemented in national legislation. Like Sweden, Norway has an exception from the EC ban on the sale of tobacco for oral use (moist snuff). The age limit for buying tobacco is 18 years. Since 1988, there has been legal protection from exposure to tobacco smoke in workplaces, only allowing separate smoking rooms. Since 2004, Norway has a complete ban on smoking in bars and restaurants. In 2010 a retail display ban concerning tobacco products was introduced, and as of 1 July 2011 all cigarette packages are required to have pictorial warnings.

The main elements of a national tobacco strategy are to prevent the uptake of tobacco use by young people, motivate to and offer help for tobacco cessation, and protect the population from exposure to tobacco smoke and tobacco use.

In the years 2000–2011 daily smoking prevalence among adults decreased from 32 to 17 percent. There has been a remarkable development among young people, where smoking prevalence dropped from 20 to 11 percent in just five years (2006–2011). However, there is a strong increase in the use of smokeless tobacco, particularly among young men.
7.4 Nutrition

In Norway, the population in general has abundant access to food and, at the outset, good opportunities to maintain a healthy and varied diet. With regards to achieving dietary goals, there has long been a positive development. Consumption of vegetables and fruits has increased considerably over time and consumption of sugar has decreased over the past ten years. From the mid-1970s to the early 1990s, total fat content and fatty acid composition have changed in a desired direction. The content of trans-fatty acids has decreased to recommended levels. In recent years, however, the decline in the dietary content of saturated fatty acids has been reversed.

While mortality from heart attack is reduced since 1970 by about 70 percent among persons below 70 years of age, the incidence of cancer, obesity and type 2 diabetes continues to increase. Diseases such as type 2 diabetes, cardiovascular diseases, and certain forms of cancer are closely linked to diet. Much remains to be done before the diets of all segments of the population meet nutritional recommendations. The diet of many young people and adults still contains too much saturated fat, red meat, salt and sugar, and too little vegetables, fruit, whole grain and fish. The consumption of dietary fibre by most people is lower than recommended, and some groups get too little vitamin D, iron and folic acid.

The work to improve the population’s diet is outlined in the national nutrition action plan Recipe for a Healthier Diet, for the period 2007-2011. The plan contains 73 specific measures that will promote health and prevent illness by changing eating habits. Five main strategies are implemented:

1. Improve the availability of healthy food products
Universal measures that make it easier for everyone to choose healthy foods is the most effective measure to improve healthy eating habits in a population.

2. Consumer knowledge
Widely distributed information and communication will help increase the public’s knowledge of food, diet and health, which in turn will serve to make it easier for consumers to make informed dietary choices.

3. Qualifications of key personnel
Policy makers and professions who directly or indirectly contribute to nutrition-related activities need to have a sound and relevant level of knowledge about nutrition, diet and food.

4. Local basis of nutrition-related activities
In recent years, local partnerships for public health have grown to become one of the most important strategies for a healthier lifestyle. Continuous, binding and systematic interdisciplinary and cross-sectoral collaboration is necessary for achieving good health.

5. Strengthened emphasis on nutrition in the health care services
Nutrition is a necessary part of prevention, treatment and rehabilitation of disease, and a basis and support for other medical treatments.

Twelve ministries have collaborated to develop the current national nutrition action plan, and they all have co-responsibility for implementing the actions. The action plan serves as a tool for decision-makers, professionals, experts and others in the public and private sectors and in the non-governmental organizations.

The main topics since 2008 have been the implementation of the Keyhole, a food label that identifies healthier food products within a product group, development of regulations of marketing of food towards children, healthy meals in kindergarten and schools, provision of vitamin D supplements to immigrant infants, nutrition among elderly, development of lifestyle intervention and capacity building of key personnel in local arenas as communities, work places and in the health system.

7.5 Physical activity
Due to lack of physical activity and unhealthy diet the incidence of obesity is increasing. Diseases such as type 2 diabetes, cardiovascular diseases and certain forms of cancer are closely linked to physical inactivity. During a relatively short period of time, society has gone through immense changes regarding physical activity. Today, we have to actively seek out and give priority to a number of activities that constituted an integral part of everyday life in the past.
The level of physical activity in the Norwegian population is low in youth and adults, see Table 2. On average, adult Norwegians are spending 62 percent of their hours awake sedentarily.

Table 2 Prevalence (%) of the population meeting current physical activity (PA) recommendations for children, youth, adults and elderly, objectively measured PA in national samples (N= 9100).

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8 Preparedness

Health and social preparedness is directed towards the protection of citizens’ health and social welfare during crises and other unexpected, extraordinary situations.

All preparedness work within the health sector is based on the principles of responsibility, similarity and proximity. The organisational unit responsible for a particular task under normal circumstances is obliged by law to prepare for the continuation of its operations during an emergency. The crisis management should be as close to the normal organisation as possible and crises should be handled as close to the scene as the situation permits.

It follows from the above mentioned principles that the responsibility for the local and regional preparedness lies with the municipalities and the health enterprises. By law they are obliged to make emergency preparedness plans and to exercise them. The aim is to build a robust, well-functioning health and social preparedness system in the municipalities and the health regions. In national crises affecting health, the Ministry of Health and Care Services delegates a coordinating responsibility of the health sector to the Norwegian Directorate of Health.
Norway’s National Strategy for Tobacco Control 2006-2010: www.helsedirektoratet.no/tobakk/english
Norwegian Directorate of Health: www.helsedirektoratet.no
Norwegian Institute for Alcohol and Drug Research, SIRUS: www.sirus.no
Statistics Norway: www.ssb.no/english/
The Cancer Registry of Norway: www.kreftregisteret.no
The Delta Centre: www.helsedirektoratet.no/deltasenteret/english
The Ministry of Health and Care Services: www.hod.dep.no
The Norwegian Board of Health: www.helsetilsynet.no
The Norwegian Government: www.government.no
The Norwegian Institute of Public Health: www.fhi.no
The Norwegian Medicines Agency: www.legemiddelverket.no
The Norwegian Radiation Protection Authority: www.nrpa.no
The Norwegian Registration Authority for Health Personnel: www.sak.no