

# **Joint Action on Chronic Diseases and Promoting Healthy Ageing Across the Life Cycle**

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## **Good Practice in the Field of Health Promotion and Primary Prevention**

### **Norway Country Review**

**Prepared by the the Norwegian Directorate of Health**



## Authors

Henriette Øien, Head of Department of Primary Prevention,

Astrid Nylenna, MD/senior advisor, Department of Primary Prevention, Norwegian Directorate of Health



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## Background

JA-CHRODIS is a European collaborative initiative that brings together over 60 partners from 26 European Union Member States. The collaborative partners are from areas including the national and regional departments of health and research institutions. They work together to identify, validate, exchange and disseminate good practice approaches for chronic diseases across EU Member States, and facilitate the uptake of these approaches across local, regional and national borders. The focus of JA-CHRODIS is on health promotion and primary prevention, with an additional focus on the management of diabetes and multi-morbid chronic conditions. One of the key deliverables will be a 'Platform for Knowledge Exchange', which will include both an online help-desk for policy makers and an information portal which provides an up-to-date repository of best practices and the best knowledge on chronic care.

Work Package (WP) 5 focuses on these objectives in relation to the package's theme: *Good Practice in the Field of Health Promotion and Primary Prevention*. Furthermore, **the objectives of WP 5 are to promote the exchange, scaling up, and transfer of highly promising, cost-effective and innovative health promotion and primary prevention practices for older populations**. This will involve the identification, review, and validation of health promotion and primary prevention interventions for **cardiovascular diseases, stroke, and type 2 diabetes and their modifiable behavioural and social risk factors**. WP 5 will not only take into account lifestyles and health-related behaviours, but also the wider social and economic determinants that influence them.

The following **Country Review** provides an **overview of the health promotion and primary prevention situation and approaches for cardiovascular disease, stroke and type 2 diabetes in Norway**. This review outlines relevant policies; implementation mechanisms; good practices, and whether and how they have been identified; and forecasting and cost-effectiveness studies that have been undertaken on the topic in Italy. The authors of this report have also identified current gaps and needs of promotion and primary prevention of chronic diseases. The information in this report will contribute to subsequent WP tasks, namely the identification, exchange and transfer of promising practices to promote health and prevent strokes, cardiovascular disease and type 2 diabetes in Norway.

# The Health Promotion and Chronic Disease Prevention Landscape

## The Norwegian health management system

The text about the Norwegian health system is from "Norway and health- and introduction", a publication from the Norwegian directorate of health:

<http://helsedirektoratet.no/publikasjoner/norway-and-health-an-introduction/Publikasjoner/Norway%20and%20Health%20rev2012.pdf>

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 variation in the health expenditure, with the GDP ratio ranging from 8.4 percent to 10.0 percent, peaking in 2003, and 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. Public expenditure on health is currently 7.9 percent of the 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. The health administration can be divided into three parts; the national, provincial and local levels.

### 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 the 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 of ensuring good utilisation, high quality and easy access to the data in the registers, as well as ensuring 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 Register
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 Register (SYSVAK)
7. The Norwegian Prescription Database

[www.fhi.no](http://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](http://www.kreftregisteret.no)

**The Norwegian Medicines Agency** is the administrative organ for drug 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](http://www.legemiddelverket.no)

**The Norwegian Radiation Protection Authority (NRPA)** is the technical authority on radiation and nuclear safety, on which it receives consultation from 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](http://www.nrpa.no)

**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; and 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 regarding 880,000 hospital stays, 400,000 day care episodes and 5 million out-patient episodes. In regards to 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.

**Statistics Norway (SSB)** Several Norwegian public institutions collect information for statistical purposes, but Statistics Norway (SSB) is the central body responsible for collecting, analysing 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](http://www.ssb.no/english)

## 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 chapter 2 Municipality's responsibility page 19). Public hospitals and specialist services are organised 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.

## Health at the local level

Local authorities (the municipalities), through its council and administration, represent the ground level of the administrative hierarchy. It is entrusted with the provision of a wide variety of primary health services.

## 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. According to the act, the municipalities are to provide for care and treatment of all persons within its boundaries, including health promotion and prevention, emergency care and immigrant health care.

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. They are assigned components of the national emergency preparedness plan, and provide for prisoners, refugees and asylum seekers located in the area.

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 organisation 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.

Primary health services are financed through grants from the national government, local tax revenues, and reimbursements from the National Social Security System and through out-of-pocket payments. Services of the pre- and antenatal clinics, youth clinics, school clinics, and all consultations for children under 16 years of age are free (changed from 12 years).

### **The general practitioners' scheme**

In 2002, the national authorities introduced a regular general practitioners' scheme, giving individuals the right to choose one general practitioner as their family doctor. In 2008, about 3,800 physicians were enlisted in this scheme. They are private practitioners who enter into a contractual agreement with the municipality, and are required to have a regular clientele not exceeding 2,500 persons. In addition to consultation fees, 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 in another municipality. If dissatisfied, they may change their physician up to two times within a calendar year.

### **The health clinics**

The health clinics comprise four units. Pregnancy clinics and clinics for mother and child provide antenatal services and child health services that extend up to pre-school age. A public health nurse runs the clinics with a physician at hand for consultation when indicated. Midwives, physiotherapists, psychologists and other professionals may also be engaged in 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.

### **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
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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.

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 of age, and 6 % are under 18. Sixteen percent receive institutional care, the rest receive various types of home-services. These services employ 126,200 person-years.

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.

### **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 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 services within 30 days (stated by the Patients' Rights Act), and within 10 days for substance use patients below the age of 23 years.

### **Public dental health services**

The Public Dental Health Services (PDHS) were established in 1950. Local government is responsible for planning and funding 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.

### **Specialist health care services**

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

### **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, polyclinics 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.

### **Allocations**

The Norwegian health system is, as mentioned, 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 those allocations. In consultation with the boards of management of its health enterprises, each regional health enterprise then determines how funds are to be distributed among them. The allocations to health enterprises are accompanied by operational directives from regional health authorities on goals to be reached. The in-house pharmacies of the state-owned hospitals are administered by four separate Regional Pharmacy Enterprises. 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 the Parliament. Since 2008, the share of activity-based funding has been 40 percent, and 60 percent block grants.

### **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.

### **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 the local, regional and national level.

### **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. The Public Health 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 information and data available to monitor public health and health determinants at the local level.

### **Principles of public health**

The Public Health 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 of 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.

### **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

## **Main current policies**

### **The Coordination Reform**

*Proper treatment – at the right place and right time*

The following text in this section on “The Coordination Reform” contains excerpts taken directly from the following document:

*Summary in English: Report No. 47 (2008–2009) to the Storting [Parliament]*

The Coordination Reform: Proper treatment – at the right place and right time

St.meld. nr. 47 (2008–2009)

<http://www.regjeringen.no/en/dep/hod/documents.html?id=313901>

### **The Coordination Reform**

Coordination has been recognised for many years as a problem within the health and care services, and many good development activities are underway. The services are of high quality and most patients are well taken care of. Users, patients, relatives and the services themselves nevertheless report that coordination remains a major problem. So better coordination should be one of the health and care sector’s most important areas to develop ahead. The strong initiative for better coordination will run parallel to development activities and efforts to improve quality at the individual service sites.

The Coordination Reform points out three primary challenges in the Norwegian health services and recommends five primary steps to face them. The goal is for the patient to receive the proper treatment – at the right place and right time. The three major challenges are:

- Patients' needs for coordinated services are not being sufficiently met.
- In the services there is too little initiative aimed at limiting and preventing disease.
- Population development and the changing range of illnesses among the population.

## Challenges and recommended measures

### ***Challenge 1: Patients' needs for coordinated services are not being sufficiently met.***

There are few systems oriented towards cohesion in those services that should meet patients' needs for coordinated services. But we have many systems involving the various partial services, for example division into organisational units and separate systems for rights, financing and ICT. There are also differing perceptions as to the goal of health services: the specialist health care services are largely concerned with the goal of medical healing, while the municipal health services are far more focused on patient functioning and coping. Differing perceptions of goals affect which issues to emphasise, which can lead to coordination problems.

Much has improved, yet feedback from patients and users indicates that coordination is often poor. This is perhaps the greatest challenge facing our health and care services. Poorly coordinated services indicate an inefficient use of resources.

### ***Challenge 2: In the services there is too little initiative aimed at limiting and preventing disease.***

The health services place greater emphasis on treating illnesses than on services aimed at coping with and reducing the development of chronic diseases. Prevention and early intervention efforts often lose out in the battle for resources, where the more specialized services tend to prevail. We need better systems for analysing and determining where and how our resources should be invested in the chain of prevention, diagnostic work, treatment and rehabilitation.

### ***Challenge 3: Population development and the changing range of illnesses among the population***

As in other Western European countries, the demographic and epidemiological patterns in Norway are undergoing great change. There are more and more elderly and increasing numbers of people with chronic and complex illnesses. Chronic obstructive pulmonary disease, diabetes, dementia, cancer and mental disorders are all increasing sharply. These are large patient groups with a growing need for coordination. These challenges will call for more efficient management of services, and politicians will face some hard decisions on setting priorities.

The changes will create major challenges in terms of maintaining and refining Norway's central welfare schemes, so in addition to the Coordination Reform, the Government is carrying out both pension reform and the reform of the Norwegian Labour and Welfare Organisation (NAV). These three reforms are necessary for ensuring the sustainability of the Norwegian welfare system and the Norwegian National Insurance Scheme for future generations.

The challenges must be approached with the willingness and ability to work out new solutions. If not, the choice will be between the lesser of two evils: we would either see development that

threatens society's sustainability, or it would become necessary over time to take prioritising decisions that conflict with the basic values of the Norwegian welfare model.

### **Key steps for proper treatment – at the right place and right time**

The Coordination Reform recommends five key steps for dealing with the three major challenges. Equal access to good, equitable and balanced health and care services, regardless of personal finances and place of residence, will continue to be the most important underpinning of Norway's welfare model. The measures in the Coordination Reform are in part structural and in part related to framework conditions; the organisational development of services needs to undergo change, and framework conditions must be established that encourage the profession to cooperate better and provide services in accordance with political objectives. The Government returns to the Storting with its final proposal once the report to the Storting has been discussed.

The key steps are:

- A clearer role for the patient
- A new municipal role emphasising prevention, early intervention efforts, low-threshold initiatives and interdisciplinary measures
- Changing the funding system so that municipal co-funding of the specialist health care services is a vital element
- Developing the specialist health care services to enable them to apply their specialised competence to a greater extent
- Facilitating better-defined priorities
- Additionally: ICT, R&D, competent health care professionals

#### ***Key step 1: A clearer role for the patient***

The services lack cohesion, so the patient's opportunity to participate is mostly limited to individual services. More involvement from patients and their organisations should be encouraged in efforts to implement structures and systems for more cohesive patient pathways. Good, cohesive patient pathways should increasingly become a common frame of reference for all stakeholders within the health and care services. The pathway approach will help to orient all systems and services toward assisting the individual with coping with life or restoring functioning. The Government recommends that patients with needs for coordinated services should be assigned one person as a contact point for all the services. This is to be a mandatory scheme for the municipalities. Creating a framework in which the public must take responsibility for its own health will become a more prominent component of health policy.

The recommendations of the Coordination Reform:

#### **Patient pathways**

- Patient participation should be maintained and further developed.
- Involvement from patients and their organisations should be encouraged in efforts toward more cohesive patient pathways; they should also influence how this is to be accomplished.
- More systematic efforts in analysing and describing good patient pathways, which can promote measures for improved coordination.

#### Contact point for the patient

- The municipalities should be required to ensure that patients with needs for coordinated services are assigned one person as a contact point for all the services.

#### Review of the statutory framework

- Review the statutory framework to determine how patients and their organisations should assume a clearer role in patient pathways.

### ***Key step 2: New role for municipalities in future***

Changing the municipalities' role in the coordinated health and care policy should be considered so that they can fulfil the aims of prevention and early intervention while addressing the needs of patients with chronic diseases. The Coordination Reform presumes that the municipalities will play the largest part in meeting the growth in demand for health services. The municipalities should ensure that the patient receives the best effective health care service through cohesive patient pathways. The municipalities must view the health and care sector in context with other areas of society – and coordinate services that take into account the distinctive features and characteristics of various personnel groups. Patients' needs should be identified as early as possible so that services can be called in. This also applies to measures for people who have lost or are at risk of losing contact with the workforce due to health problems. The report to the Storting discusses, at an overall level, tasks for which the municipalities can take responsibility. The Government will detail the extent to which these duties can most effectively be carried out by the municipalities. Once the Storting has processed the report, the Government will take a position concerning tasking and implementation times.

Plans call for a system of binding agreements between municipalities and regional health authorities regarding distribution of duties and cooperation.

The recommendations of the Coordination Reform:

#### Future municipal tasks

- To a greater degree, the municipalities should fulfil the objectives of prevention and early intervention in the course of a disease.
- Submit recommendations for a new joint health and social services act. Municipal tasks and resource needs should be clarified relating to current tasking, new service provisions and reassignment of tasks from the specialist health care services.
- Emphasis should be placed on the extent to which the relevant tasks can be carried out most effectively in the municipalities.
- Further review is needed regarding how large a population base is necessary to ensure that transferring tasks to the municipalities results in health-related and socio-economic improvements.

#### Binding system of agreements between municipalities and health authorities

- A system of agreements on distribution of tasks and cooperation between municipalities/cooperating municipalities and health authorities should be legally established.



- The agreements should govern how the specialist health care services are to decentralise outpatient clinics, assist with expertise and knowledge transfer, internships, use of general practitioners, etc.
- The ministry is to provide guidelines and assistance.
- Systems for user involvement should be developed.
- Examine more closely how the system of agreements can bring civil society and non-governmental organisations into the processes.
- Examine more closely how the authorities should follow up the system of agreements.

#### Reinforcing preventative health work

- Measures should reduce and minimise the risk of illness and loss of function.
- Municipal plans should be made for prevention efforts.
- The municipalities should receive more information and guidance as to cost-effective measures that have socio-economic impact.
- Consider establishing a programme for evaluating preventative measures.
- The ministry will develop an information system for the use of specialist health care services at the municipal level.
- In the national budget for 2010, NOK 230 million is proposed for the municipalities' unrestricted income for preventative health services.
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#### Better medical services in the municipalities

- The growth in medical resources should primarily be in the municipalities. Increase the investment in prioritised groups and general practitioners' public duties.
- Consider increasing the number of hours the municipalities can require medical practitioners to dedicate to public medical work.
- The ministry will assess the need for medical resources in the municipal health care services and in the specialist health care services.
- There is a need for research into general practice.
- Establish stronger and clearer management of medical practitioners in the following areas:
  - general practitioners' public duties that can be required of medical practitioners
  - curative work – to ensure that the practices of regular general practitioners (RGP) are in accordance with health policy priorities
  - follow up as to whether the medical practice is in accordance with national requirements and expectations for good medical practice
- Regulations and central agreements should be reviewed in the following areas:
  - function and quality requirements for regular general practitioner activities
  - legal provisions which strengthen the position of the municipalities to direct and prioritise medical resources, and which ensure that regular general practitioners coordinate with others
  - legal provisions regarding list size
  - financing system for regular general practitioners' activities and public medical work should be reviewed
- Cooperation across ministries in the following areas:
  - review of pricing system for regular general practitioners, aimed at supporting politically prioritised tasks and avoiding unintended incentives



- a working group will review recruitment challenges and financial and administrative consequences
- Dialogue with relevant organisations regarding the development of coordination between administrative and agreement measures

### ***Key step 3: Financial incentives***

The most important financial instruments are municipal co-financing of the specialist health care services and municipal financial responsibility for patients ready for discharge. The intent is for the financial schemes to encourage the municipalities to assess whether positive impacts on health can be achieved by using resources differently, for example through more appropriate use of the hospitals.

Municipal co-financing of the specialist health care services will entail changing the financial parameters for the specialist health care services. The recommended financing system for the specialist health care services must support the objectives of the Coordination Reform. Activity-based financing should continue to be an important element of financing. The rate would be reduced from 40 to 30 per cent, given the heavier emphasis on prevention and early intervention efforts.

### ***Key step 4: Enabling the specialist health care services to apply their specialized competence more***

A more correct distribution of tasks between the municipalities and the specialist health care services would pave the way for the specialist health care services to concentrate more on specialised health services. Greater attention to cohesive patient pathways can help patients in need of specialised services more easily find their way to the service providers with the appropriate expertise.

### ***Key step 5: Facilitating better-defined priorities***

Due to inadequate cohesion, the authorities do not have a sufficiently coordinated decision-making system for the health and care services. Efforts must be made to focus more prioritising decisions on cohesion in the patient pathways, rather than partial services. The Norwegian Council for Quality Improvement and Priority Setting in Health Care (2007) plays an important role in developing more cohesive priorities. The National Health Plan should be further developed into a more operative tool for setting priorities in the coordinated health and care services.

### **The path ahead – dialogue with the stakeholders**

The ministry will attach importance to dialogue with all relevant stakeholders in order to reach a mutual understanding of the challenges we face in implementing the Coordination Reform. Relevant stakeholders are patient and user organisations, volunteer organisations, private players, ethnic-minority communities, and the Sámi Parliament.

For certain areas, the Coordination Reform recommends measures that are to be introduced or it discusses main guidelines for further development activities. For other areas, outlines for solutions are discussed without specifically choosing particular solutions.

The report is based on the fact that a larger portion of the increase in the health and care sector's overall budget comes in the form of unrestricted income to the municipalities. Measures that entail budgetary consequences will be re-examined by the Government in connection with the annual budget proposals.

Report No. 47 to the Storting (2008-2009) *The Coordination Reform, Proper treatment – at the right place and right time* was submitted to the Storting on 19 June 2009. The outcome of the Storting's treatment of the report will determine how the Coordination reform is followed up.

## OECD report

The OECD Reviews of Health Care Quality evaluated Norway in 2014. They concluded: "Broadly this is a positive story, but challenges do lie ahead for Norway. Norway is putting in place measures to respond to these challenges, notably with the 2012 Coordination Reform, but still has some way to go before the fruits of such labour are truly felt across the health system. Norway's ambitious reform agenda must now be balanced by structured efforts 'on the ground'. Attention should now turn to putting in place appropriate data infrastructures, promoting meaningful engagement between key stakeholders, and by balancing a generous health budget that allows for important investments in developing new structures and services with attention to getting the most out of existing services."

OECD (2014), "Assessment and recommendations", in OECD, OECD REVIEWS OF HEALTH CARE QUALITY: NORWAY 2014: RAISING STANDARDS, OECD Publishing.

DOI: [10.1787/9789264208469-4-en](https://doi.org/10.1787/9789264208469-4-en)

Link to the report: [http://www.oecd-ilibrary.org/social-issues-migration-health/oecd-reviews-of-health-care-quality-norway-2014\\_9789264208469-en](http://www.oecd-ilibrary.org/social-issues-migration-health/oecd-reviews-of-health-care-quality-norway-2014_9789264208469-en)

## The Norwegian Public Health Act

The following text in this section on "The Norwegian Public Health Act" contains excerpts taken directly from the following:

*The Norwegian Public Health Act*

ACT 2011-06-24 no. 29 - Public Health Act

Act entered into force on 1 January 2012, cf. Section 34.

Link to the Norwegian Public Health Act (folkehelselov):

<http://www.regjeringen.no/en/dep/hod/documents/regpubl/stmeld/2012-2013/meld-st-34-20122013-3/12.html?id=745967>

### § 1 Purpose

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 conditions, and contribute to the prevention of mental and somatic illnesses, disorders or injuries.

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 in a proper and sufficient manner. The Act shall facilitate long-term, systematic public health work.

## § 2 Scope

This Act applies to municipalities, county authorities and central government authorities. What has been stipulated for county authorities in this Act also applies to the City of Oslo.

Chapter 3 of this Act also applies to public and private entities and property when there are aspects that directly or indirectly influence health.

The King may issue regulations on the application of this Act on Svalbard and Jan Mayen and stipulate special rules in consideration of local conditions. The King may determine whether and to what extent the provisions stipulated in this Act should apply to Norwegian ships in foreign trade, Norwegian civil aircraft in international traffic and installations and vessels employed on the Norwegian continental shelf.

This Act applies to health personnel, public servants and private actors if so stipulated pursuant to Sections 28 and 29.

## § 3 Definitions

The following definitions apply in this Act:

- a. public health: the state and distribution of health in a population
- b. public health work: society's efforts to influence factors that directly or indirectly promote the health and well-being of the population; prevent mental and somatic illnesses, disorders or injuries; or that protect against health threats; as well as efforts seeking a more equal distribution of factors that directly or indirectly affect health.

## Chapter 2 Municipality's responsibility

### §4 Municipality's responsibility for public health

The municipality shall promote the population's health and well-being, and good social and environmental conditions; contribute to the prevention of mental and somatic illnesses, disorders or injuries; contribute to reducing social inequalities in health and contribute to the protection of the population against factors that may have a negative impact on health.

The municipality shall promote health within the duties and means that are assigned to the municipality, including local development and planning, administration and the provision of services.

The municipality shall contribute to ensuring that health considerations are safeguarded by other authorities and entities. This contribution shall be made, for example, through advice, statements, cooperation and participation in planning. The municipality shall facilitate cooperation with the voluntary sector.

## §5 Overview of public health and health determinants in the municipality

The municipality shall have sufficient overview of the population's health and the positive and negative factors that may influence this. This overview shall be based i.a. on:

- a. information that the central government health authorities and county authorities make available in accordance with Sections 20 and 25,
- b. knowledge from the municipal health and care services, cf. Health and Care Services Act Section 3-3 and
- c. knowledge of factors and development trends in the environment and local community that may influence the health of the population.

This overview shall be in writing and identify the public health challenges in the municipality, including an assessment of the impact and the causal factors. The municipality shall in particular pay attention to development trends that may create or maintain social or health-related problems, or social inequalities in health.

The Ministry may prescribe, by regulations, detailed provisions relating to the requirements for the municipality's overview.

## §6 Goals and planning

The overview in accordance with Section 5, second paragraph shall be included as a basis for work on the municipality's planning strategy. A discussion of the municipality's public health challenges should be included in the strategy, cf. Section 10-1 of the Planning and Building Act.

In its work on the municipal master plan pursuant to Chapter 11 of the Planning and Building Act, the municipality shall define the overall goals and strategies for public health that are appropriate for meeting the challenges facing the municipality based on the overview in accordance with Section 5, second paragraph.

## §7 Public health measures

The municipality shall implement the measures that are necessary for meeting the municipality's public health challenges, cf. Section 5. This may, for example, encompass measures relating to childhood environments and living condition factors, such as housing, education, employment and income, physical and social environments, physical activity, nutrition, injuries and accidents, tobacco use, alcohol use and use of other psychoactive substances.

The municipality provides information, advice and guidance on what individuals themselves and the population can do to promote health and prevent illness.

## The Norwegian Health and Care Services Act

A new act on health and care services was also enacted on Jan 1<sup>st</sup> 2012. It states:

### Health-promoting and preventative efforts

#### Section 3-3: Health-promoting and preventative efforts

When providing health and care services the municipality must promote health and seek to prevent disease, injury and social problems. This should be done through, among other things, information, advice and guidance.

The health and care services must contribute to the municipality's public health work, including the overview of the level of health and the factors influencing health pursuant to Section 5 of the Public Health Act.

The health and care service shall work towards the implementation of welfare and activity initiatives for children, the elderly, the disabled and others who are in need of such services.

## Public Health Report

Meld. St. 34 (2012–2013) Folkehelsemeldingen

The following section is taken directly from Section 4 and 5 from:

<http://www.regjeringen.no/en/dep/hod/documents/regpubl/stmeld/2012-2013/meld-st-34-20122013-3/12.html?id=745967>

### A more health-promoting society

The government will base the new public health policy on the premise that public health will be taken into consideration in all policies, and that good conditions for promoting health and well-being will be created. The principle of health in all policies involves more than the health policy alone – it also involves the development of health-promoting policies in all sectors.

Determinants of health can be presented in a causal chain, which extends from general social conditions to individual characteristics. This is illustrated in Figure 3.2. At the start of the causal chain are general social conditions such as economic development, environmental conditions, and political governance. Next in the chain are living and working conditions and social conditions such as social capital, as well as networks and relationships. Towards the front of the chain are individual lifestyles and health-related behaviours that have a more immediate impact upon health, but which are also shaped by conditions within society and the environment.

The overall health situation of a local municipality, county, or country is not simply the sum of individual choices and genetic factors. There are broad geographical and social inequalities in health. Societal conditions create these inequalities – inequalities which we can influence through planning, management, and initiatives. The population's health and social inequalities are closely related to welfare developments and differences in living conditions and income. Norway has a well-functioning civil society with high levels of participation in voluntary work, a diverse culture and generally high level of well-being. Norwegian society is characterised by a high level of trust between the country's citizens, authorities, and democratic institutions.



Figure 4.1 Determinants of health<sup>1</sup>

<sup>1</sup> Dahlgren, G., Whitehead, M. (1991). Policies and strategies to promote social equity in health. Stockholm: Institute of Futures Studies

The government's policy for the further development of the universal welfare is one of the main ways in which a sense of social community and inclusion can be strengthened. This is also recommended in a report on social exclusion published by the World Health Organization. The Norwegian welfare model makes a considerable contribution to ensuring that there is a high level of labour force participation. There is good access to free education, unemployment is low, social security is good and cultural activities are accessible to most people. Policies to promote equality and combat discrimination also help to promote inclusion. The public health policy shall build upon the Norwegian welfare model with universal schemes for kindergartens, education and health services, employment initiatives, an accessible cultural policy, and active collaboration with and support for the voluntary sector. In addition, consideration for public health shall take greater precedence in municipal and regional development, industrial policy, local community efforts, and transport and communication policy. The health of the population and how well health is distributed shall be given greater attention in the planning of a more health-promoting society. In order to prevent lifestyle diseases, it will be strategically important to make healthy choices more readily available and limit the accessibility of unhealthy products. Initiatives targeted towards children and young people shall be prioritised.

The government will:

- Continue its policy towards an equitable society and prevent children from living under poor living conditions and low incomes

- Submit a White Paper to Parliament on the living conditions of individuals with disabilities
- Submit a White Paper to Parliament on gender equality from a life course, ethnicity, and class perspective
- Help to raise awareness and increase knowledge of the relationship between social support, social capital, and health
- Help to make sure that public health considerations are given greater precedence in the development of local environments and communities
- Present a strategy for active outdoor lifestyles that will facilitate outdoor activities for everyone and outdoor activities in the local community. Help to ensure that outdoor recreation areas across the country are mapped and valued
- Continue and further develop measures to protect and develop particularly important outdoor recreation areas by prioritising this in the local community
- Place more emphasis on preserving important green areas for recreation and outdoor activities near residential areas
- Work to provide more environmentally friendly and healthier transport and transport solutions through the National Transport Plan Follow-up the consultation with proposals for national targets for water in order to implement the World Health Organization and UNECE's Protocol on Water and Health
- Work to introduce a 'smiley programme' in the hospitality industry
- Implement EU's new food information programme with more stringent requirements for the labelling of nutritional content and country of origin
- Invite the hospitality industry to collaborate on the possible introduction of the labelling of the energy and nutritional content in foods and drinks
- Aim to create a national centre for nutrition, physical activity and health in kindergartens and schools in order to contribute to increased well-being and concentration, and to strengthen students' ability to learn
- Create a cross-sectoral group of experts in order to summarise knowledge of antibiotics and antibiotic resistance
- Develop better management data for the operation and maintenance of public buildings
- Review environmental health regulations and further develop environmental health management in line with the Public Health Act
- Maintain a long-term ambition to expand the programme for free fruit and vegetables to all students in primary and secondary schools
- Consider how the school day can be organised so that students get at least one hour of physical exercise every day
- Implement a physical activity campaign to increase the population's understanding of the importance of physical activity and the health consequences of physical inactivity, as well as increase awareness of what is necessary in order to achieve health benefits for the individual
- In future budgets, evaluate whether it is possible to reorient health-related excise duties in a manner that contributes to improved public health
- Further develop and follow-up tobacco prevention work through a National strategy to combat harm caused by the consumption of tobacco 2013 – 2016
- Further develop and follow-up an alcohol policy based on pricing initiatives and regulations to restrict availability, cf. White Paper no. 30 (2011 – 2012)
- Collaborate with the food industry and retail companies with the aim of entering into a binding agreement for the regulation of marketing of unhealthy foods and beverages to



children and young people, and if this is not possible, introduce legislation against such marketing

### **Increased emphasis on prevention in the health and care services**

The government will further develop health and care services in line with the objectives of the Coordination Reform and new challenges associated with lifestyle-related illnesses, an ageing population, more people living with chronic conditions, and challenges relating to mental health and substance abuse. This means that preventive measures will have a more clearly defined role in the health and care services. Health clinics and school health services shall be further developed and strengthened. It is necessary to strengthen the entire health care service's work with lifestyle changes, learning and coping, to strengthen the work with quality and patient safety, to evaluate the use of screening, and to strengthen the health care service's advisory role towards other sectors in order to support cross-sectoral public health work.

The government will:

- Further develop the municipal health and care services into a more interdisciplinary and integrated service in line with the intentions of the Coordination Reform
- Further develop and strengthen health clinics and school health services
- Continue to focus on healthy lifestyle initiatives and offer learning and support services within local authorities
- Establish more low-threshold services for pregnant women, mothers and parents who struggle with drug addiction and mental disorders
- Consider clearer requirements for the quality assurance and evaluation of national screening programmes
- Ensure that health enterprises give attention to the preventive work within the specialist health service
- Collaborate with The Norwegian Association of Lokal and Regional Authorities and the municipal sector regarding how the preventive work can be strengthened in the municipal health and care service
- Prepare an action plan for the prevention of suicide and self-harm

The health and care services' role in the preventive work is central to the Coordination Reform. The aim is that initiatives shall be implemented earlier, either in the form of preventive measures or early treatment. The health and care services' responsibility for preventive efforts is emphasised in the Health Care Act, the Specialist Health Services Act, and the Public Health Act. The service has three main roles relating to the preventive work:

- Prevention as an integrated part of the health care service
- Health checks, health education and lifestyle changes, and information, advice and guidance to prevent social problems



- Provide support to cross-sectoral work through overviews and knowledge of health challenges, causal relationships and initiatives

The specialist health service also has a responsibility to develop knowledge and competence in collaboration with local authorities and other partners.

## National strategy to reduce social inequalities in health

Report No. 20 (2006–2007) to the Storting

[http://ec.europa.eu/health/ph\\_determinants/socio\\_economics/documents/norway\\_rd01\\_en.pdf](http://ec.europa.eu/health/ph_determinants/socio_economics/documents/norway_rd01_en.pdf)

This Report to the Storting lays down guidelines for the Government and Ministries' efforts to reduce social inequalities in health over the next ten years. The strategy traces out the main framework and shall govern the Ministries' work on:

- Annual budgets
- Management dialogues with subordinate agencies, regional health enterprises, etc.
- Legislation, regulations and other guidelines
- Interministerial collaboration, organisational measures and other available policy instruments

## Equal health and care services– good health for all, National strategy for immigrant health 2013–2017

Link to the document, only in Norwegian:  
[http://www.regjeringen.no/pages/38431748/Likeverdige\\_tjenester.pdf](http://www.regjeringen.no/pages/38431748/Likeverdige_tjenester.pdf) **Objectives and Action**

The government wants:

- Health professionals at all levels should have knowledge of different immigrant groups' prevalence of diseases and the cultural challenges associated with ensuring immigrants equal health care services.
- Health professionals at all levels shall facilitate good communication with patients with different linguistic backgrounds. This requires, among other things, having an overview of the interpretation needs, and use of qualified interpreters.
- Health and social services should have access to up to date knowledge on immigrants' health and use of health services, and use this knowledge in the development of services.

Short version of Meld. St. 6 (2012–2013) A Comprehensive Integration Policy Diversity and Community :

[http://www.regjeringen.no/upload/BLD/IMA/integreringsmelding\\_mangfold\\_eng.pdf](http://www.regjeringen.no/upload/BLD/IMA/integreringsmelding_mangfold_eng.pdf)

Examples of actions:

- introduce *Jobbsjansen* (Job opportunity) to give immigrants who are not participating in the labour market, particularly women, better opportunities to find employment

- present a comprehensive action plan to improve the use of immigrants' resources and skills in the labour market
- introduce a new grant scheme with development funds to strengthen the local municipalities' provision of the introductory programme and Norwegian language and social studies tuition
- consider amending the Introduction Act to improve the quality of Norwegian language tuition and the introductory programme, as well as ensuring improved coordination with compulsory and post-compulsory education and training, and NAV's (Norwegian Labour and Welfare Service) initiatives to increase employment.

(examples from LIVING CONDITIONS AND PARTICIPATION IN SOCIETY, page 9)

## NCD strategy

In May 2012, the World Health Assembly (WHA) adopted the goal of reducing premature death from the NCD diseases by 25 per cent by 2025. Norway then became the first country to launch a national NCD strategy in 2013.

The following text in this section on "NCD strategy" contains excerpts taken directly from the following document:

*NCD-Strategy 2013 – 2017: For the prevention, diagnosis, treatment and rehabilitation of four noncommunicable diseases: cardiovascular disease, diabetes, COPD and cancer.*

Norwegian Ministry of Health and Care Services

[http://www.regjeringen.no/pages/38449517/ncd\\_strategy\\_060913.pdf](http://www.regjeringen.no/pages/38449517/ncd_strategy_060913.pdf)

## Introduction

In 2009, almost 8,000 people in Norway died of cardiovascular disease, diabetes, chronic lung disease and cancer before the age of 75. Together, these national health problems mean a great deal of suffering for many people, as well as significant health and care expenses for society. A significant part of today's health budget is used on these four diseases.

We have chosen to create a common strategy for prevention, diagnosis, treatment and rehabilitation for these four major public health issues, which have been defined by the World Health Organisation (WHO) as Noncommunicable Diseases (NCDs). These diseases have much in common, and there is great potential for preventing these diseases, the suffering they create and the early deaths that they cause. The causes of these diseases are partly common to all, partly disease-specific and partly unknown. The people who are affected by them often have several of the diseases and several of the risk factors. It has been well documented that tobacco, an unhealthy diet, physical inactivity and the damaging use of alcohol are central risk factors for all these diseases. Health and the distribution of health in the population are also linked to living conditions, social differences and how we organise society.

Preventive measures at a population level are largely the same for all these diseases. There are also many common challenges and solutions in the health and care services, in terms of prevention, diagnosis, treatment and rehabilitation.

Norway's NCD strategy is largely based on existing national action plans, strategies and guidelines. The measures are being implemented within current budgets. The ambition is that the strategy shall help Norway to achieve its goal of a 25 per cent reduction in premature deaths from these diseases

by 2025, as laid down in Report No. 34 (2012–2013) *Public health report. Good health – shared responsibility*. The strategy shall also help to ensure that all those who are affected suffer as little as possible and have the progress of their diseases limited, so that they can live a good, long life in spite of their diseases.

We wish to see more cohesive and unified efforts at all levels in the work on these diseases. At the same time, the efforts that are specific to each disease shall be maintained. The strategy is therefore divided into a joint section with common challenges and measures, and a section with specific challenges, goals and measures for each disease group. The five main initiatives of the strategy are:

- continuing and developing the primary preventive
- activities, as described in the Public health report
- giving increased priority to the work of early diagnosis
- giving increased priority to secondary prevention
- ensuring patient careers with good quality at all stages of treatment and follow-up
- reinforcing the roles of users and patients and getting them more actively involved in the treatment of their own diseases

## Background

We are faced with a global trend of increasing premature death from cardiovascular disease, diabetes, chronic lung disease and cancer. On a global basis, these diseases are the cause of two thirds of all deaths and for every fourth death of those aged under 60. This is a global challenge and many of the forces that affect development are international. International collaboration is therefore also needed, in addition to national measures.

In May 2012, the World Health Assembly (WHA) adopted the goal of reducing premature death from the NCD diseases by 25 per cent by 2025. The WHO has identified four overall indicators and goals needed for achieve this. The incidence of high blood pressure shall be reduced by 25 per cent. The use of tobacco shall be reduced by 30 per cent. Salt consumption shall be reduced by 30 per cent, and the proportion of people who are physically inactive shall be reduced by ten per cent. The international goals and measures are described in more detail by the WHO in: *Global Action Plan for the Prevention and Control of Noncommunicable chronic diseases (NCDs) 2013–2020* and WHO Europe: *Action Plan for implementation of the European strategy for the Prevention and Control of Noncommunicable diseases 2012–2016*.

Norway is a significant driving force in this work and supports the global objective.

## Tobacco

In 2012, 16 per cent of the population (aged 16–74) were daily smokers. This corresponds to 650,000 people. 40,000 of these are under 25, which indicates that the reduction in the proportion of smokers is primarily due to reduced recruitment and to a lesser extent to existing smokers giving up. The use of smokeless tobacco in the adult population is approximately 9 per cent. This corresponds to approximately 350,000 people. Daily use of smokeless tobacco is most common in men aged under 45, while most female users are under 25.

## Diet

There has been a positive development in the Norwegian diet over a long period, but there are still some major issues. Consumption of fruit and vegetables has increased, but still only about 20 per cent of the adult population eat the recommended quantities of these. Consumption of sugar has gone down, but is still high in some groups, especially among children and young people. Even though consumption of carbonated drinks has fallen, it still stands at more than 60 litres of sugary drinks per person per year. Consumption of sweets has increased considerably over the last 30 years and averaged 14 kilos per person in 2011. Consumption of saturated fat has been decreasing over a long period, but has now started to increase again. The Norwegian diet still contains too much saturated fat, salt and sugar, and too little of foods such as wholemeal grain products, fish, vegetables and fruit.

### ***Overweight and obesity***

Based on the Health Study in Nord-Trøndelag County (HUNT), it is estimated that the proportion of overweight persons in the population has trebled over the last 20 years. Two thirds of all those aged over 20 are overweight and about 20 per cent of the population is obese. There has also been a steady increase in the proportion of children and young people who are overweight over the last 30 years. A study of children's growth carried out for the National Institute of Public Health (FHI) in 2012 shows that this trend may be reversing. About 16 per cent of Norwegian eight year olds are now overweight or obese, compared with about 20 per cent previously.

### ***Physical activity***

Only 20 per cent of the adult population fulfils the recommendation of at least 30 minutes of moderate physical activity every day. Around three million people have an activity level that is too low. It is primarily people's everyday activity that has gone down. Some immigrant groups are more inactive than the majority population. For children, the recommendation is 60 minutes of moderate physical activity every day. More than 90 per cent of six year olds satisfy this recommendation, but the activity level decreases with age. Among nine year olds, the proportion is 86 per cent of boys and 70 per cent of girls. The corresponding figures for fifteen year olds are 58 and 43 per cent respectively.

### ***Alcohol***

Since 1990, there has been a significant increase in the total consumption of alcohol in Norway, even though we still drink less than in many other countries. In 2011, the registered alcohol consumption was 6.62 litres of pure alcohol per person. This is an increase of 35 per cent over 20 years. The unregistered consumption the same year is estimated to be about 1.5 litres per person. It is primarily consumption of wine and the total consumption of those aged over 50 that are increasing. Consumption among young people has gone down somewhat in recent years.

### ***Social inequalities in health***

There is a clear correlation between living conditions and health. Life expectancy in Norway has increased for all groups. The highest increase has been among those with a high level of education and high income. There are great differences in both clinical burden and premature death. The reasons for the social inequalities in health are complex, and some factors appear to have an effect throughout life. Overall, cardiovascular disease, together with lung cancer and COPD account for more than 60 per cent of the differences in premature death. Smoking habits are probably the most

important cause, but differences in diet, overweight and physical inactivity also make a significant contribution.

### **Groups at risk**

Some groups within the population have a particularly high risk of developing one or more of the four NCD diseases that are covered by this strategy. These require special attention and specific measures. For some, the increased risk comes primarily because, to a greater extent than others, they use tobacco, are overweight, have an unhealthy diet, are too physically inactive and/or have a high alcohol consumption. It has been shown for example that there is a correlation between mental disorders and these risk factors. It has been shown that the mentally ill with cardiovascular disease do not receive as good treatment and follow-up as the rest of the population. For others, the increased risk is more closely linked with genetics, or a combination of genetics and lifestyle. Some immigrant groups have an increased incidence of diabetes. This applies especially to women. These immigrant groups have a genetic disposition to diabetes, but many also have an increased incidence of one or more of the risk factors. These issues are discussed in more detail in *Equal health and care services– good health for all, National strategy for immigrant health 2013–2017*, which was presented in August 2013.

### **Broad approach**

If the four NCD diseases are to be prevented, measures must be introduced at community, group and individual levels. Equalising living conditions is a priority area. The challenges, opportunities and effective solutions for these diseases for the health and care services have a number of common traits. Primary preventive measures aimed at the general population will not in themselves be sufficient to help to achieve the goal of reduced mortality by 2025. For Norway to achieve the reduction in mortality a combination of cross-sectoral measures, measures aimed at the general population and specific measures by the health and care services, aimed at persons who already have one or more of these risk factors or diseases, will be vital. A significant proportion of those who are affected by these diseases will not be restored to full health. But health and care services that give a rapid diagnosis, advice and help in improving lifestyle, good treatment, good rehabilitation and continuous follow-up during stable phases can slow the development of disease and improve the quality of life and functional ability of the individual. At the same time, the incidence of complications, hospital admissions and premature death will be reduced.

### **A user-oriented service**

Individual patients and users often live for many years with their diseases and must be recognised as experts in their own lives, treated as equal partners and have an active role in the treatment and follow-up of their own conditions. If patients are to have active participation, motivation and compliance with treatment advice, it is vital that they have knowledge about their own condition and about the effects of preventive measures and treatment. The experience of individual patients can be used both in peer work and to quality-assure the service.

### **Goals**

Norway's overall goal is to reduce premature death from cardiovascular disease, diabetes, chronic lung disease and cancer by 25 per cent by 2025. This strategy is intended to help achieve this goal.

### **General measures**

- ensure a unified and broad approach to the prevention, diagnostics, treatment and rehabilitation of cardiovascular disease, diabetes, chronic lung disease and cancer over the next four years
- continue and improve measures aimed at the general population to prevent the use of tobacco, promote a healthy diet and physical activity and prevent damage from alcohol
- continue and reinforce preventive measures in the health and care services
- continue to develop the work of early identification of people with an increased risk of developing the NCD diseases
- ensure good patient careers and good follow-up
- improved coordination and collaboration within the specialist health services and between these and the local authority health and care services
- ensure user participation
- continue and develop collaboration with the voluntary sector
- develop common statistics internationally, so as to be able to measure developments over time and compare countries, as described in the *Public health report*

### **A more health-promoting society**

This part of the strategy is based on public health policy as it is described in Report No. 34 (2012–2013) *Public health report. Good health – shared responsibility*. The government's goals for public health activities are that:

- Norway shall be one of the three countries in the world with the highest life expectancy
- the population shall enjoy more years of life with good health and well-being and reduced social health inequalities
- we shall create a society that promotes health throughout the population

*The public health report* was debated in the Storting in spring 2013 and a committee unanimously backed the national goals for public health policy.

### **Cross-sectoral public health activities**

The health of the population is primarily created not in the health and care services but in society as a whole. There is a responsibility for public health activities across all sectors and social areas. This is not a new concept. In 2013 we can declare that the population has good health and that life expectancy is increasing, and this is the result of long-term and systematic activity in all sectors of society.

Cross-sectoral measures are also decisive in the prevention of the four disease groups covered by this strategy. The underlying causes of the risk factors largely originate and have their solutions outside the health sector. It is well documented that social and environmental conditions such as education and upbringing, work, housing conditions, financial security, social support and local environment are significant for the health of the population.

A public health policy council shall be established, chaired by the Minister of Health and Care Services. The purpose of the council will be to ensure political attention and to help ensure the endorsement of public health activities in all disciplines and sectors. The council shall focus on

following up on the *Public health report* and this *NCD strategy*, and shall contribute to the preparation of new reports and strategies in the field of public health.

The Public health report includes a combined strategy for creating a society that promotes health throughout the population and its main approach is health in everything we do.

Key measures include:

- contributing to the implementation of the Public Health Act in local and county authorities and nationally
- further developing local authority public health profiles
- establishing a national public health council
- stimulating the establishment of public health networks in the municipalities
- facilitating collaboration between the municipal sector and the voluntary sector in local public health activities
- making it easier to make healthy choices
- furthering the use of regulations and legislation
- in future budgets, considering the possibility of changing health policy excise duties in a way that contributes to better public health

## Elderly over 65 years in Norway - fact sheet

All information under is from the fact sheet from the National public health institute: <http://www.fhi.no/artikler/?id=74994>

The proportion of elderly in the population is increasing. Up until 2020, the proportion of 65-74-year olds will increase. After that, the proportion over 75 years will rise. The size of the different age groups in the population is important for planning future health services.

The need for medical help increases particularly after 80 years of age. In 2011, approximately 221,000 people, or 4.5 per cent of the population, are 80 years or older. In total, 742,000 people, or 15 per cent of inhabitants, are 65 years and older.

### More elderly in the population

Statistics Norway has made national population projections up until 2100. By 2100, the number of people over 65 years will be around twice as high as today. The proportion 80 years and older will increase from 4.5 to 11.7 per cent; from 221,000 to 904,000 people. These figures come from Statistics Norway's main alternative for projections of medium national growth. Four factors go into the projections: fertility, life expectancy, internal migration and net immigration.

Read more about population projections at Statistics Norway:

- Link for Population projections, 2014-2100 from SSB (Statistics Norway): [http://www.ssb.no/english/subjects/02/03/folkfram\\_en/](http://www.ssb.no/english/subjects/02/03/folkfram_en/)



In Norhealth's statistics bank you will find annual projections at the national, health region and county level up until 2040. For example, in the years ahead, the number of 65-74-year olds will increase before flattening out around 2020. After that, the number of 75-79-year olds will increase until around 2025, when the number of 80 year olds and older will begin to rise, see figure 1 of [http://www.ssb.no/english/subjects/02/03/folkfram\\_en/](http://www.ssb.no/english/subjects/02/03/folkfram_en/).

So far there are no specific strategies to target the group 65 and older, but the Ministry of health has plans to develop such a strategy, specifically targeting the work arena.

## Good Practice and Existing Databases

### Public health profiles

Norway has 5 million inhabitants spread between 19 counties and 428 municipalities.

The [Public Health Act](#) of January 2012 states that Norwegian counties and municipalities are required to have sufficient overview over health conditions and influencing factors, to:

- Contribute to societal development that promotes public health and reduces social inequalities in health.
- Ensure that municipalities, county authorities and central government health authorities implement measures and coordinate their activities in the area of public health in a proper and adequate manner.
- Facilitate long-term, systematic public health work.

As a result, the public health profiles for municipalities and counties were developed and are frequently downloaded by the municipalities. The reports are also popular with the media who use them to compare the health of the local population with the rest of Norway.

### Example of public health profiles for municipalities and counties

Link/reference to this article: <http://www.fhi.no/artikler/?id=109337>

The public health profiles have been developed to give a summary of health register data to be used by the municipalities in their efforts to gain an overview of local health status and influencing factors. This information can be used to identify and measure areas for improvement in each community. Here is an example of a report for Tromsø, a municipality in northern Norway:



## PUBLIC HEALTH PROFILE 2013

## Tromsø



The public health profile is a contribution to the municipality's efforts to gain an overview over the health status of the population and the factors that influence this, as required by the Public Health Act. The statistics are from the last available time period, October 2012, and are based on the municipal boundaries as of January 1st 2013.

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P.O. Box 4404 Blindern  
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**Editors**  
Carsten Isenhardt (editorial)  
Jørn Hovland (editorial)  
Editorial staff: Torbjørn Skjerve, public health officer  
Ingvald Hestmark, public health officer  
Ingvald Hestmark, public health officer  
Ingvald Hestmark, public health officer  
Ingvald Hestmark, public health officer

Norwegian Institute of Public Health

## Some features of municipal public health

The topics were selected to provide opportunities for health promotion and prevention. The indicators take into account the municipality's age and gender composition, but all statistics must also be interpreted with local conditions in mind.

## About the population

- Life expectancy for women is not clearly different from what is expected in the country as a whole.
- The proportion of over 85 is lower than in the country as a whole.
- The proportion of single persons is slightly higher than the proportion in the country.

## Living conditions

- The proportion with high school or higher education is higher than the country level.
- The proportion of people in low income households is lower than in the country as a whole.
- The proportion of disability pensions under the age of 65 is lower than the national level.
- The proportion of children with single parents is higher than in the country as a whole.

## Environment

- The proportion of people supplied by wastewater with 12 analyzed variables and with indicators 1 and 2 is higher than the national level. This concerns the part of the population connected to wastewater where reporting is required.
- The proportion of the population who are injured in accidents is lower than in the country as a whole, based on hospital admissions.

## Schools

- The proportion of 15th graders who stop school is lower than in the country as a whole.
- The proportion of 15th graders at the lowest level of reading proficiency is lower than in the country as a whole.
- The rate of high school dropouts is higher than in the country as a whole.

## Lifestyle

- Being obese is a bigger problem than in the country as a whole, based on the proportion of pregnant women who smoke at their prenatal check-up. This is based on figures for the rate of the population.
- Obesity seems to be a bigger problem than in the country as a whole, based on the proportion of men with BMI  $\geq 30 \text{ kg/m}^2$  at the military assessment.

## Health and disease

- The proportion of the population with psychiatric symptoms and disorders is lower than in the population as a whole, based on data from general practitioners and emergency departments.
- The proportion of cardiovascular disease is not clearly different from the country level, based on hospital admissions.
- The proportion of people with type 2 diabetes appears to be lower than the country level, based on data from general practitioners and emergency departments.
- Myocardial infarction and stroke appear to be more prevalent than in the country as a whole, based on data from general practitioners and emergency departments.

## Disease patterns reflect lifestyle, environment and living conditions

Many municipalities ask for statistics about their physical activity and other lifestyle habits. However, since it is necessary to use disease patterns and other indirect measures in the public health profile to obtain information about the lifestyle of the population.

At present, there are no national registers with reliable data on lifestyle in the public health profile. Therefore, there is a need to use disease patterns and other indirect measures in the public health profile to obtain information about the lifestyle of the population.

Several chronic diseases are largely a result of the living habits over time. We can indirectly obtain information about lifestyle in the municipality by looking at patterns of disease. Lifestyle refers to the physical activity, smoking and other health-related behaviors. Lifestyle is not only the result of personal choice. The chronic individuals may also be the result of environmental and living conditions, and disease patterns may therefore provide an indication of conditions in the municipality.

Figure 1 shows the factors that affect health. These arise from personal characteristics such as age and gender, but social conditions such as culture, employment, housing, general environment, education and social networks.

Figure 1. Factors influencing health (after Gellegren and Wiklund 1993)



The underlying factors may either promote health or increase the risk of disease. Lack of social support is a factor that increases the risk of both mental and physical health problems. On the other hand, social support promotes health and well-being, because the support of family, a best friend, colleagues and family acts as a buffer against stress.

Education is an example of a factor that has an impact on health throughout adulthood.

## Significant health disparities

Studies show that lifestyle often follows education and income levels. This means that groups with longer education and higher income have, on average, more favorable lifestyle and better health than groups with shorter education and lower income.

Reducing social inequalities in health is an important objective of public health efforts to improve living conditions, such as work and

education, in order to promote health and reduce inequalities. Promoting children from dropping out of high school will promote health because it provides greater opportunities for work and active participation in society. Working and well-being is a primary challenge in a good foundation for completion of high school.

## One initiative, multiple gains

The municipality's efforts against one risk factor may reduce the incidence of several diseases. For example, measures to combat smoking reduce the incidence of diseases such as cardiovascular disease, chronic obstructive pulmonary disease (COPD) and cancer. Likewise, efforts to promote physical activity reduce the incidence of health problems such as obesity, cardiovascular disease and type 2 diabetes. In addition, physical activity improves well-being and physical and mental health.

Prevention measures may be directed towards high-risk groups in the total population. Initiatives towards groups with particularly high risks may be effective, but measures directed at the entire population may provide greater overall gains. This is because population-oriented measures reach a large number of people with intermediate risk and because more cases of disease occur in this group than in the high-risk group. Although the individual risk is much higher in the high-risk group, more cases of disease occur in the group with intermediate risk, because this group is larger.

There is no conflict between population-oriented measures and measures directed towards high-risk groups as, they can complement each other. For example, reducing salt in processed foods lowers blood pressure in the population, and thus lowers the risk of cardiovascular disease in the general population. Health services will continue to treat individuals with hypertension to reduce their risk.

Population-oriented measures aim at "small changes among many," so that the entire population moves towards a lower risk.

## Short-term and long-term health gains

It may take many years before current prevention efforts provide results. However, some results may also come quickly. For example, physical activity is important for well-being and mental health, and reducing smoking reduces the risk of heart attack already in the first year of not smoking. Another example is injury prevention, which can quickly be demonstrated by the reduction in injury incidence.

Through this design of the physical environment the municipality can encourage physical activity and social interaction between people. Planning the physical environment in terms of health promotion can contribute to better physical and mental health. Building places in the community may have an impact on mental health, which is easier to be physically active in the neighborhood in safe and exciting.

## Smoking and tobacco use

The proportion of smokers in the Norwegian population has declined, but still 15 per cent smoke daily. Smoking is the habit that has the greatest negative impact on public health. Prevalence of smoking (tobacco use) and COPD, lung cancer and cardiovascular disease are closely related to the proportion of smokers in the population. These smoking-related diseases can be reduced in the public health measures.

There are great social differences in smoking behavior. Figure 2 shows daily smoking in different educational groups, with data provided by the national Survey of Living Conditions in 2008 (SLH).

There is a higher proportion of smokers in groups with shorter education than in groups with longer education. These differences explain a large part of the social inequalities in morbidity and mortality.

Many of the people using tobacco are adults because alcoholism is a group risk. It is therefore also to prevent tobacco use among adolescents. Both smoking and alcohol consumption are harmful and carcinogenic substances and the number of cases is increasing. Initiatives in middle school may be particularly effective, and should be followed with measures in high school. Enhancement of the age limit for tobacco purchase and the establishment of smoke-free zones are appropriate measures.

## Physical activity and diet

Physical activity and a balanced diet promote health and prevent against a variety of diseases throughout life.

Several of the indicators under health and disease in the public health barometer can provide information about the population's diet and physical activity. These include indicators of obesity, high blood pressure and cholesterol, cardiovascular disease, cancer and type 2 diabetes. Regular physical activity can also improve mental health.

Figure 3 shows the proportion of the population who achieve the recommended minimum level of activity in different age groups, as measured by activity monitors. Numbers in the figure are derived from population surveys of activity in the population conducted by the Norwegian Directorate of Health in 2008 (DHS) (2,3). Adults and the elderly are recommended to be physically active for at least 30 minutes daily, while children and adolescents are recommended at least 60 minutes of daily physical activity. The figure shows that there is considerable variation between the different age groups in terms of the extent to which they achieve the recommended level of activity.

Overweight and obesity are major health problems in most countries, including Norway. Figure 4 shows the prevalence of overweight including obesity in men, measured at military recruitment, shown as an average for the period 2003-2005. When the basis for data is small, municipal values may not be displayed.

Initiatives related to diet and physical activity are not easy to do. The development of overweight and obesity can be delayed by directing measures towards children and their physical and social environment. The municipality, as the owner of schools and kindergartens, has a unique opportunity to encourage children to have positive experiences of healthy eating and physical activity. Public health efforts are therefore areas in which the municipality can make a difference through contact with children and their families.

References: 1. Dahlgrén G, Wiklund W. Policies and Strategies to Promote Social Equity in Health. Stockholm 1991. 2. Norsk aktivitetundersøkelse - caplin. Bergen: Statistisk sentralbyrå; 2008. 2008. Oslo: NHI; 2008. 3. Fysisk aktivitet blant G. 3. og 5-åringene i Norge. Resultater fra en barneundersøkelse. Oslo: Statistisk sentralbyrå; 2011. Oslo: NHI; 2011.

Figure 2: Daily smokers by educational background (country figures)



Figure 3: Proportion who achieve recommended levels of physical activity (country figures)

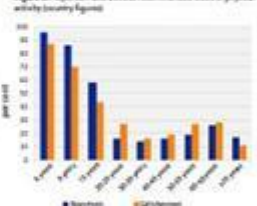
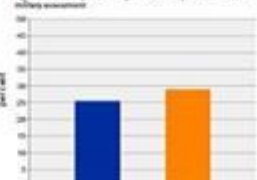


Figure 4: Overweight including obesity among men, measured at military assessments



## Public health barometers for your municipality

The public health barometer is a tool for municipalities to monitor and improve their public health. It is based on the same indicators as the national public health barometer, but adapted to the municipality's own data. The barometer can be used to monitor trends over time and to compare the municipality's performance with other municipalities.

- Lower values indicate a higher degree of risk. The municipality is in a better position than the country as a whole.
- Higher values indicate a lower degree of risk. The municipality is in a worse position than the country as a whole.
- Red indicates a high degree of risk. The municipality is in a worse position than the country as a whole.
- Green indicates a low degree of risk. The municipality is in a better position than the country as a whole.
- Yellow indicates a moderate degree of risk. The municipality is in a similar position to the country as a whole.
- Blue indicates a very low degree of risk. The municipality is in a very good position compared to the country as a whole.

Indicators: The public health barometer is based on the following indicators: 1. Population growth, 2. Population density, 3. Population with high school or higher education, 4. Population with low income, 5. Population with disability pension, 6. Population with type 2 diabetes, 7. Population with cardiovascular disease, 8. Population with cancer, 9. Population with mental health problems, 10. Population with smoking, 11. Population with physical activity, 12. Population with diet, 13. Population with overweight/obesity, 14. Population with blood pressure, 15. Population with cholesterol, 16. Population with asthma, 17. Population with allergies, 18. Population with chronic pain, 19. Population with chronic illness, 20. Population with long-term illness, 21. Population with disability, 22. Population with social isolation, 23. Population with loneliness, 24. Population with depression, 25. Population with anxiety, 26. Population with substance use, 27. Population with self-harm, 28. Population with suicide, 29. Population with violence, 30. Population with crime, 31. Population with traffic accidents, 32. Population with workplace accidents, 33. Population with leisure time accidents, 34. Population with home accidents, 35. Population with fire accidents, 36. Population with water accidents, 37. Population with other accidents, 38. Population with injuries, 39. Population with deaths, 40. Population with life expectancy, 41. Population with quality of life, 42. Population with satisfaction, 43. Population with well-being, 44. Population with happiness, 45. Population with meaning, 46. Population with purpose, 47. Population with hope, 48. Population with faith, 49. Population with love, 50. Population with compassion, 51. Population with kindness, 52. Population with generosity, 53. Population with honesty, 54. Population with integrity, 55. Population with courage, 56. Population with strength, 57. Population with resilience, 58. Population with adaptability, 59. Population with flexibility, 60. Population with openness, 61. Population with curiosity, 62. Population with creativity, 63. Population with innovation, 64. Population with leadership, 65. Population with teamwork, 66. Population with communication, 67. Population with conflict resolution, 68. Population with decision-making, 69. Population with problem-solving, 70. Population with critical thinking, 71. Population with logical reasoning, 72. Population with emotional reasoning, 73. Population with social reasoning, 74. Population with moral reasoning, 75. Population with aesthetic reasoning, 76. Population with scientific reasoning, 77. Population with philosophical reasoning, 78. Population with religious reasoning, 79. Population with spiritual reasoning, 80. Population with transcendent reasoning, 81. Population with mystical reasoning, 82. Population with esoteric reasoning, 83. Population with occult reasoning, 84. Population with paranormal reasoning, 85. Population with supernatural reasoning, 86. Population with magical reasoning, 87. Population with psychic reasoning, 88. Population with telekinetic reasoning, 89. Population with psychokinetic reasoning, 90. Population with psychomotoric reasoning, 91. Population with psychosomatic reasoning, 92. Population with psychoneurotic reasoning, 93. Population with psychopathological reasoning, 94. Population with psychiatric reasoning, 95. Population with psychological reasoning, 96. Population with psychoanalytic reasoning, 97. Population with psychotherapeutic reasoning, 98. Population with psychosocial reasoning, 99. Population with psychosomatic reasoning, 100. Population with psychoneurotic reasoning.

Indicator	Value	Score	Rank	Unit	Public health profile for Tromsø
1. Population growth	1.1	0.1	124	per cent	
2. Population density	1.1	0.1	124	per cent	
3. Population with high school or higher education	1.1	0.1	124	per cent	
4. Population with low income	1.1	0.1	124	per cent	
5. Population with disability pension	1.1	0.1	124	per cent	
6. Population with type 2 diabetes	1.1	0.1	124	per cent	
7. Population with cardiovascular disease	1.1	0.1	124	per cent	
8. Population with cancer	1.1	0.1	124	per cent	
9. Population with mental health problems	1.1	0.1	124	per cent	
10. Population with smoking	1.1	0.1	124	per cent	
11. Population with physical activity	1.1	0.1	124	per cent	
12. Population with diet	1.1	0.1	124	per cent	
13. Population with overweight/obesity	1.1	0.1	124	per cent	
14. Population with blood pressure	1.1	0.1	124	per cent	
15. Population with cholesterol	1.1	0.1	124	per cent	
16. Population with asthma	1.1	0.1	124	per cent	
17. Population with allergies	1.1	0.1	124	per cent	
18. Population with chronic pain	1.1	0.1	124	per cent	
19. Population with chronic illness	1.1	0.1	124	per cent	
20. Population with long-term illness	1.1	0.1	124	per cent	
21. Population with disability	1.1	0.1	124	per cent	
22. Population with social isolation	1.1	0.1	124	per cent	
23. Population with loneliness	1.1	0.1	124	per cent	
24. Population with depression	1.1	0.1	124	per cent	
25. Population with anxiety	1.1	0.1	124	per cent	
26. Population with substance use	1.1	0.1	124	per cent	
27. Population with self-harm	1.1	0.1	124	per cent	
28. Population with suicide	1.1	0.1	124	per cent	
29. Population with violence	1.1	0.1	124	per cent	
30. Population with crime	1.1	0.1	124	per cent	
31. Population with traffic accidents	1.1	0.1	124	per cent	
32. Population with workplace accidents	1.1	0.1	124	per cent	
33. Population with leisure time accidents	1.1	0.1	124	per cent	
34. Population with home accidents	1.1	0.1	124	per cent	
35. Population with fire accidents	1.1	0.1	124	per cent	
36. Population with water accidents	1.1	0.1	124	per cent	
37. Population with other accidents	1.1	0.1	124	per cent	
38. Population with injuries	1.1	0.1	124	per cent	
39. Population with deaths	1.1	0.1	124	per cent	
40. Population with life expectancy	1.1	0.1	124	per cent	
41. Population with quality of life	1.1	0.1	124	per cent	
42. Population with satisfaction	1.1	0.1	124	per cent	
43. Population with well-being	1.1	0.1	124	per cent	
44. Population with happiness	1.1	0.1	124	per cent	
45. Population with meaning	1.1	0.1	124	per cent	
46. Population with purpose	1.1	0.1	124	per cent	
47. Population with hope	1.1	0.1	124	per cent	
48. Population with faith	1.1	0.1	124	per cent	
49. Population with love	1.1	0.1	124	per cent	
50. Population with compassion	1.1	0.1	124	per cent	
51. Population with kindness	1.1	0.1	124	per cent	
52. Population with generosity	1.1	0.1	124	per cent	
53. Population with honesty	1.1	0.1	124	per cent	
54. Population with integrity	1.1	0.1	124	per cent	
55. Population with courage	1.1	0.1	124	per cent	
56. Population with strength	1.1	0.1	124	per cent	
57. Population with resilience	1.1	0.1	124	per cent	
58. Population with adaptability	1.1	0.1	124	per cent	
59. Population with flexibility	1.1	0.1	124	per cent	
60. Population with openness	1.1	0.1	124	per cent	
61. Population with curiosity	1.1	0.1	124	per cent	
62. Population with creativity	1.1	0.1	124	per cent	
63. Population with innovation	1.1	0.1	124	per cent	
64. Population with leadership	1.1	0.1	124	per cent	
65. Population with teamwork	1.1	0.1	124	per cent	
66. Population with communication	1.1	0.1	124	per cent	
67. Population with conflict resolution	1.1	0.1	124	per cent	
68. Population with decision-making	1.1	0.1	124	per cent	
69. Population with problem-solving	1.1	0.1	124	per cent	
70. Population with critical thinking	1.1	0.1	124	per cent	
71. Population with logical reasoning	1.1	0.1	124	per cent	
72. Population with emotional reasoning	1.1	0.1	124	per cent	
73. Population with social reasoning	1.1	0.1	124	per cent	
74. Population with moral reasoning	1.1	0.1	124	per cent	
75. Population with aesthetic reasoning	1.1	0.1	124	per cent	
76. Population with scientific reasoning	1.1	0.1	124	per cent	
77. Population with philosophical reasoning	1.1	0.1	124	per cent	
78. Population with religious reasoning	1.1	0.1	124	per cent	
79. Population with spiritual reasoning	1.1	0.1	124	per cent	
80. Population with transcendent reasoning	1.1	0.1	124	per cent	
81. Population with mystical reasoning	1.1	0.1	124	per cent	
82. Population with esoteric reasoning	1.1	0.1	124	per cent	
83. Population with occult reasoning	1.1	0.1	124	per cent	
84. Population with paranormal reasoning	1.1	0.1	124	per cent	
85. Population with supernatural reasoning	1.1	0.1	124	per cent	
86. Population with magical reasoning	1.1	0.1	124	per cent	
87. Population with psychic reasoning	1.1	0.1	124	per cent	
88. Population with telekinetic reasoning	1.1	0.1	124	per cent	
89. Population with psychokinetic reasoning	1.1	0.1	124	per cent	
90. Population with psychomotoric reasoning	1.1	0.1	124	per cent	
91. Population with psychosomatic reasoning	1.1	0.1	124	per cent	
92. Population with psychoneurotic reasoning	1.1	0.1	124	per cent	
93. Population with psychopathological reasoning	1.1	0.1	124	per cent	
94. Population with psychiatric reasoning	1.1	0.1	124	per cent	
95. Population with psychological reasoning	1.1	0.1	124	per cent	
96. Population with psychoanalytic reasoning	1.1	0.1	124	per cent	
97. Population with psychotherapeutic reasoning	1.1	0.1	124	per cent	
98. Population with psychosocial reasoning	1.1	0.1	124	per cent	
99. Population with psychosomatic reasoning	1.1	0.1	124	per cent	
100. Population with psychoneurotic reasoning	1.1	0.1	124	per cent	

Legend: The public health barometer is based on the following indicators: 1. Population growth, 2. Population density, 3. Population with high school or higher education, 4. Population with low income, 5. Population with disability pension, 6. Population with type 2 diabetes, 7. Population with cardiovascular disease, 8. Population with cancer, 9. Population with mental health problems, 10. Population with smoking, 11. Population with physical activity, 12. Population with diet, 13. Population with overweight/obesity, 14. Population with blood pressure, 15. Population with cholesterol, 16. Population with asthma, 17. Population with allergies, 18. Population with chronic pain, 19. Population with chronic illness, 20. Population with long-term illness, 21. Population with disability, 22. Population with social isolation, 23. Population with loneliness, 24. Population with depression, 25. Population with anxiety, 26. Population with substance use, 27. Population with self-harm, 28. Population with suicide, 29. Population with violence, 30. Population with crime, 31. Population with traffic accidents, 32. Population with workplace accidents, 33. Population with leisure time accidents, 34. Population with home accidents, 35. Population with fire accidents, 36. Population with water accidents, 37. Population with other accidents, 38. Population with injuries, 39. Population with deaths, 40. Population with life expectancy, 41. Population with quality of life, 42. Population with satisfaction, 43. Population with well-being, 44. Population with happiness, 45. Population with meaning, 46. Population with purpose, 47. Population with hope, 48. Population with faith, 49. Population with love, 50. Population with compassion, 51. Population with kindness, 52. Population with generosity, 53. Population with honesty, 54. Population with integrity, 55. Population with courage, 56. Population with strength, 57. Population with resilience, 58. Population with adaptability, 59. Population with flexibility, 60. Population with openness, 61. Population with curiosity, 62. Population with creativity, 63. Population with innovation, 64. Population with leadership, 65. Population with teamwork, 66. Population with communication, 67. Population with conflict resolution, 68. Population with decision-making, 69. Population with problem-solving, 70. Population with critical thinking, 71. Population with logical reasoning, 72. Population with emotional reasoning, 73. Population with social reasoning, 74. Population with moral reasoning, 75. Population with aesthetic reasoning, 76. Population with scientific reasoning, 77. Population with philosophical reasoning, 78. Population with religious reasoning, 79. Population with spiritual reasoning, 80. Population with

The last page includes a list of various health indicators with a barometer to compare them to the country average. The municipality/county is positioned based on the results and the colour comes from the statistical significance.

- [Public health profile for Tromsø](#) - pdf

## 2013 Indicators

Interpreted statistics and figures and diagrams for 2013 were provided for 34 indicators including:

- Population
  - Population growth
  - Percentage over age 80
  - Life expectancy, male and female
  - Single person households
  - Immigrants
- Living conditions
  - Education level
  - Low income
  - Disability pensions 18 - 44
  - Children of single parents
- Environment
  - Drinking water quality
  - Injuries/accidents
- Schools
  - Pupils enjoying school
  - Bullying in schools
  - Reading ability
  - Percentage high school drop-outs
- Health determinants
  - Smoking in women
  - Overweight in male recruits
- Health and illness
  - Mental disorders/illness, primary care
  - Mental disorders, medication
  - High blood pressure, primary care
  - Cholesterol-lowering drugs
  - Cardiovascular disease, hospital data
  - COPD/asthma, medication
  - Diabetes 2, medication
  - Diabetes 2, primary care
  - Cancer, new cases in total
  - Cancer of the bowel, new cases
  - Hip fractures, hospital data
  - Musculoskeletal symptoms, primary care
  - Vaccination coverage, MMR, 6-year-olds

## Healthy Life Center – Frisklivssentraler

A Healthy Life Center (HLC) is a resource centre which offers effective, knowledge-based programmes and methods to help people who need support in health behaviour change.

An HLC is a municipal or inter municipal public resource centre which offers guidance and follow-up, primarily for health behaviour change through physical activity, diet and tobacco-cessation. The HLC has a structured referral and follow-up system for people who need help to change unhealthy behaviours, because of increased risk for developing disease or already established diseases like type 2 diabetes, chronic obstructive pulmonary disease (COPD), high blood pressure, overweight etc. The centre also acts as a resource and nexus of contact for other health promotion initiatives within the municipality.

The HLC is part of the public health care service in the municipality. HLC programmes aim at strengthening the individual's control of his or her own health. HLCs offers participation in training groups for increased physical activity, and counselling or courses on healthy nutrition and tobacco cessation. Some HLCs also offer counselling, support and education on issues related to mental health, sleep and alcohol. In the municipality, the centre functions as a resource-, knowledge- and contact centre for behaviour change, health promotion and disease prevention.

### Basic services

The basic service offered by the HLC is a structured referral called frisklivsresept – (healthy life prescription) to one or more of the centre's basic programmes. The HLC reinforces the “bridge” between medical treatment and empowerment. A key task for the HLC is to guide the participants into suitable and feasible local low-threshold programmes that they can continue with on their own after participation in the HLC. The HLCs should provide a good overview of such programmes. Cooperation with Non-Governmental Organisations (NGOs), private and public organisations, other municipal health care services and local authorities is of vital importance in order to help people to establish independent and lasting health enhancing habits.

Motivational interviewing (MI) is a collaborative, person-centered form of guiding to elicit and strengthen motivation for change. MI is the basic method used in the HLC.<sup>4</sup>

### Results

Evaluations have shown that HLCs recruit people with low education who do not seek or participate in other services such as fitness centres on their own.<sup>1</sup> Participants at HLCs need help to find appropriate services, build motivation and to create strategies for maintaining sustainable behaviour change. Research shows that general practitioners who refer patients to HLCs are of the opinion that the HLCs offer good services. Studies indicate that participation in the programmes can lead to improved physical fitness, weight loss and improved self-perceived health, as well as maintaining health behaviour change one year after the follow-up.<sup>2,3</sup>

### Guide for establishment and management

The Norwegian Directorate of Health has published a guide for the establishment and management of the HLC. Further, the guide describes the centre's basic programme. The guide is relevant for local authorities and county councils aiming to establish an HLC or to further develop an existing

programme. They can be useful for decision-makers at the local authority and regional levels, executive personnel at the centres, managers within the health care sector, other health personnel and public health coordinators. Examples of how some centres are organised and managed locally are presented as appendices to the guide.

It is essential that the HLC is anchored in local authority plans and budgets. The establishment of an HLC will reinforce other preventive and health promotion programmes within the municipality. Like other local public enterprises, the HLC should contribute to the local public health work. The local authority has a statutory responsibility to ensure that the services provided by the HLC follow the guidelines for public health.

## References

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<sup>2</sup> Helgerud, J. and Eithun, G. Evaluering av fysisk aktivitet på resept i Nordland og Buskerud fylkeskommune. Hokksund Rehabiliteringssenter/Norwegian University of Science and Technology; 2010. Available from: <http://www.nfk.no/fil.asp?MId1=1099&FilkategoriId=271>

<sup>3</sup> Blom, E. E. "Trening på resept". Evaluering av et kommunalt, tre måneders individuelt rettet oppfølgingsprogram for pasienter som er blitt henvist til "trening på resept". En prospektiv intervensjonsstudie med ett års oppfølging. Oslo: Norwegian University of Sport and Physical Education; 2008

<sup>4</sup> Ivarsson B.H. MI - motiverende intervju: Praktisk handbook for helse -og omsorgssektoren. (Red. Barbro Holm Ivarsson). Stockholm: Gothia, 2011

## Public health development – The HUNT Study, Norway

HUNT 1 (1984-86) – HUNT 2 (1995-97) – HUNT 3 (2006-08)

This following article is cited directly from the HUNT study page: <http://www.ntnu.edu/hunt>

The Nord-Trøndelag Health Study (The HUNT Study) is one of the largest health studies ever performed. It is a unique database of personal and family medical histories collected during three intensive studies. The fundamental strategy is to earn and maintain the confidence of the population that is worked in and with, as is necessary for any successful population study. This strategy has been successful and has resulted in extraordinarily high participation rates. There is enthusiastic public and political support for HUNT and for the HUNT Research Centre. This has created a good basis for further health surveys in the county and an excellent research environment.

The HUNT1 Survey was carried out in 1984-1986 to establish the health history of 75,000 people.

The HUNT2 Survey, carried out in 1995-1997, focused on the evolution of the health history of 74,000 people. This included blood sample collection from 65,000 people. The data that accompany biospecimens in the biobank are stored in secured computer systems that run complex database management and analysis software.

The HUNT3 Survey was completed in June 2008. 93,210 people were invited to participate in the study, and as of the 6th of June, 2008, 48,289 people participated (52% participation rate). The data, collected by means of questionnaires, interviews, clinical examinations and collection of blood and urine samples, will be ready for analysis in January 2009.

The Young-HUNT Study is the adolescent part of HUNT including participants aged 13-19 years. Data gathering took place in the Young-HUNT1 Survey (1995-97), the Young-HUNT2 Survey (2000-01), and the Young-HUNT3 Survey (2006-08). Data collection included self-reported questionnaires, structured interviews, clinical measurements and buccal smears.

Today, the HUNT Study is a database with information about approximately 120,000 people that integrates family data and individual data and can be linked to national health registries.

Repeated examinations and follow-up of the same population make it possible to ascertain changes in health and vital status at individual and family levels.

The HUNT Study is reinforced and supplemented by cross referencing with registries at the regional level (registries such as radial and hip fractures, venous thrombosis, lung embolism, ischemic heart disease and stroke) and with registries at the national level (The Cancer Register, The Medical Birth Register, and The National Health Insurance Register). Additionally, Statistics Norway provides necessary information from The Population Census Register and The Family Register to create a genealogical database ("family trees").

## Guidelines

The Norwegian directorate of health is responsible for developing the national guidelines.

### Individual primary prevention of cardiac disease, 2009

<http://www.helsedirektoratet.no/publikasjoner/nasjonal-faglig-retningslinje-for-individuell-primerforebygging-av-hjerte-og-karsykdommer/Sider/default.aspx>

### Diabetes, 2011

<http://www.helsebiblioteket.no/retningslinjer/diabetes/forside>

This is currently under revision.

### Stroke, 2010

<http://www.helsebiblioteket.no/retningslinjer/hjerneslag/forord-og-innledning?hideme=true#>

This is currently under revision.

Many of the national guidelines are published in the Norwegian Electronic Health Library.



## The Norwegian Electronic Health Library

The Norwegian Electronic Health Library (Helsebiblioteket.no) is a publicly funded online knowledge service for healthcare professionals and students in Norway.

Link: 02/01/2014 | Hans Petter Fosseng <http://www.helsebiblioteket.no/english>

The Norwegian Electronic Health Library is accessed online through the website [www.helsebiblioteket.no](http://www.helsebiblioteket.no). The website provides free access to point-of-care tools, guidelines, systematic reviews, scientific journals, and a wide variety of other full-text resources for health-care professionals and students.

### Free access to clinical resources

Helsebiblioteket.no provides everyone in Norway with unrestricted access to the recognized point-of-care tools: BMJ Best Practice and UpToDate, as well as the drug database Micromedex, the Cochrane Library, Guidelines International Network (G-I-N) and major medical journals such as the Annals of Internal Medicine, BMJ, JAMA, The Lancet, and the New England Journal of Medicine. Through McMaster PLUS, Norwegians can subscribe to updates or search the current best evidence research, with citations from over 120 premier clinical journals and selected evidence-based resources.

### Some resources require logging in

In addition, healthcare professionals and students can log in to get free access to bibliographic databases such as MEDLINE and PsycINFO, the drug database BNF for Children, and around 2,500 full-text journals.

### Wide selection of content

There are topic libraries for pharmaceuticals, mental health, public health, quality assurance and toxicology, and content collections for other specialties and professions such as nursing, primary care and prison health. Examples of other content for clinicians include: a catalogue of more than 400 Norwegian clinical guidelines, scoring tools and patient information leaflets. HeRA, an open research archive for hospitals, research institutes and other non-academic health institutions in Norway, is hosted by Helsebiblioteket.no.

The website integrates information sources in Norwegian and English with a bilingual search system.

### A publicly funded service

Helsebiblioteket.no was officially launched 6 June 2006 by the Minister of Health and Care Services. The Norwegian Knowledge Centre for the Health Services hosts Helsebiblioteket.no. The service is publicly funded by Norway's National Budget and the four regional health authorities.

Helsebiblioteket.no has a staff of health professionals, librarians, journalists, web editors and administrators. Helsebiblioteket.no has editorial independence, is headed by an editor-in-chief and has separated bylaws. A council representing the funding bodies gives advice about strategy and the budget. An editorial board representing users and stakeholders gives advice about editorial matters.

## Gaps and needs

### Financial incentives

Changes in the financial incentives might be helpful to aid in the process of reaching more health promoting work and primary prevention.

The economic reimbursement for general practitioners through the doctors' scheme is an agreement between the government and the Norwegian medical association. It is directed towards diagnostic work and treatment, and there is no reimbursement for primary prevention or health promoting work, meaning that there has to already be a diagnosis for certain procedures to be reimbursed.

### Competence and Personnel

Through the coordination reform and the new laws like the Public Health Act from 2012, the municipalities have more responsibility both for knowing the status of health and sickness in the population, for taking appropriate actions to help the situation and for more and more procedures moved out of the hospitals, to be taken care of in the patients' proximity. This demands high competence in the municipalities and enough – and properly educated – personnel to be able to fulfil these tasks.

A white paper on the challenges of educating the right groups and developing the right skills for the needs of the future health care system was delivered to the Storting in February 2012.

“The changes in services involve increased emphasis on health promotion, prevention of injury and illness, facilitating participation in employment, habilitation and rehabilitation, help in the user's proximity and to enable users to get the best possible overall services. This is consistent with international development. If the health and welfare services look at health, social and work-related factors in context, the individual is ensured the best possible conditions to actively participate in the community. Such an integrated approach requires collaboration across disciplines and professions, services and management levels.” (translated into English from Norwegian, from chapter 3 (3 Endringer i tjenestene for å svare på nye behov), second paragraph) found in the link to the white paper, St.meld 13 (2011-2012) Kompetanse og personell- Utdanning for velferd. Samhandling i praksis, only in Norwegian:

<http://www.regjeringen.no/nb/dep/kd/dok/regpubl/stmeld/2011-2012/meld-st-13-20112012.html?id=672836>

## Recommendations from the OECD

OECD (2014), "Assessment and recommendations", in OECD, OECD REVIEWS OF HEALTH CARE QUALITY: NORWAY 2014: RAISING STANDARDS, OECD Publishing.

DOI: [10.1787/9789264208469-4-en](https://doi.org/10.1787/9789264208469-4-en)

Link to the report: [http://www.oecd-ilibrary.org/social-issues-migration-health/oecd-reviews-of-health-care-quality-norway-2014\\_9789264208469-en](http://www.oecd-ilibrary.org/social-issues-migration-health/oecd-reviews-of-health-care-quality-norway-2014_9789264208469-en)

### In the report the OECD states in 1.8. Conclusions pg 72:

"Norway has an impressive health care system that performs well on most quality indicators. Nevertheless, the system is challenged by the same factors as other OECD countries such as the need to align its policies with the needs of an ageing multi-morbid population that forces system re-design through decisions to strengthen primary care. The present health care system though comes at a price and like other countries; Norway is required to assess the overall efficiency, the appropriateness and timeliness of the many services it provides. The three administrative levels governance model has great potential to marry patient-based health service performance with population-based health system performance on the local, county and national level. In essence, reforms in Norway try to shift care away from hospital to primary care settings.

The goals of strengthening care in primary care setting are threefold: achieving more effective, safe and patient-centred health care services, improving population health status and reducing hospital expenditure. Achieving these objectives asks for a coherent governance approach that is fuelled by good performance information systems. Norway is one of the countries capable of tackling these challenges if it masters optimising its information infrastructure. Specific attention should be given to performance measurement for the local, county and national health care system governance and with information made publicly available.

At the same time, quality assurance mechanisms in Norway are extensive and through legal requirement, they secure high quality of health care services. Quality policies traditionally focus on nurturing a culture of quality improvement, but it should be complemented by additional assurance mechanisms. There are some key opportunities to be made to increase the quality of health care in Norway.

First, national authorities might extend the formal requirement toward continuous medical education to all medical doctors and they also might want to set up a comprehensive accreditation programme as it is done in the United States, England, Australia, Denmark or France. Given the current trend to shift care toward primary care settings and away from the hospital sector, it seems critical to broaden the safety policy agenda in covering more significantly the primary health care sector. Finally, increasing incentive structures through quality contracting and targeted reimbursement would further enhance performance of health providers in the years to come."

### Contracting and paying for quality

The OECD report states in *Contracting and paying for quality* page 71



“The recent Coordination Reform in Norway has introduced economic incentives for municipalities to place more emphasis on rehabilitation interventions and on prevention. Starting in 2016, local authorities have an obligation to set up municipal emergency beds. Since 2012, local authorities also have a financial stake in the co-funding of somatic hospital services for their population” (Norwegian Ministry of Health and Care Services, 2009).

These financial mechanisms will drive more efforts to reduce avoidable hospitalisations through prevention and rehabilitation, and might also have a positive impact on the quality of care. These incentive mechanisms represent a first step towards improving the quality of care through contractual agreements between different governance levels. At present, however, quality indicators and performance play a limited role in contractual contracts between the national and local levels. With this respect, there is potential to strengthen governance by including quality and performance indicators to discuss annual contractual agreements. These performance criteria could be linked to specific payment mechanisms or budgets but the main thing seems to make quality of care an integrated part of the local, county and national governance arrangements.

Health service-based initiatives on a pay-for-performance basis should be aligned with local, county and national system goals. Examples of initiatives to introduce pay-for-performance approaches can be found in others Scandinavian countries. In Sweden for example, a pay-for-performance agreement was set up to promote patient safety in specialised health care service. A set of indicators was defined (such as pressure ulcer prevalence or compliance to basic hygiene routines) and when hospitals met the defined targets, additional funds from the national government were allocated to the region. In Denmark, financial engagement has been set up in primary care to drive improvements in integrated care and to encourage the co-ordinating role of the GP. GPs are offered financial incentives when they participate in a chronic care model for diabetes.

The national pilot scheme with quality-based funding that is going to be introduced in 2014 in the specialised health care services would certainly facilitate the process of improving the quality and the efficiency of the health care services in Norway. Approximately NOK 0.5 million is allocated to the four Regional Health Authorities depending on the results of the 29 defined indicators.”