NORWEGIAN MINISTRY
OF HEALTH AND CARE SERVICES

NCD-Strategy

2013 – 2017

For the prevention, diagnosis, treatment and rehabilitation of four noncommunicable diseases: cardiovascular disease, diabetes, COPD and cancer.



All pull together

One thing we know – we must all pull together. If we do, we are sure to win!

The man behind this optimistic message is Klaus Hanssen. He was chairman of the National Anti-Tuberculosis Association about a hundred years ago. The efforts of the voluntary organisations were vital in stopping communicable diseases. The organisations carried out both preventive and palliative work. They educated nurses and health visitors. They founded public health clinics and promoted public information in the form of periodicals, films, exhibitions and brochures. This commitment was the beginning of what gradually became a public responsibility and that is the basis for today's welfare state.

A hundred years ago, public health work was decisive in curbing communicable diseases. Today's public health work is decisive in curbing the noncommunicable national health problems and lifestyle diseases. Today, many of us become ill as a result of tobacco, an unhealthy diet, physical inactivity and alcohol. More people contract cardiovascular disease, diabetes, chronic lung disease and cancer.

In order to meet these challenges, we must prevent more and capture disease at an early stage – where people live. Those who need help in living with a chronic disease must receive support and guidance in their local environment, and hospitals and specialists must collaborate more seamlessly on what is offered locally. That is why we are implementing the Coordination Reform and strengthening local authority health services.

But these challenges cannot only be met in hospitals or doctors' surgeries.

These are challenges that we must meet in all sectors of society.

The municipalities already have a statutory responsibility for public health policy where we live. This is not only the responsibility of the medical officer for health. Those responsible for planning and building, industry and transport must also think health in everything they do. The local authority's vision may be better health for residents, but this is of little use if the woodland near residential areas where children play is rescheduled for commercial development, or if the new nursing home is built beside a motorway where nobody dares to go for a walk.

In both the private and voluntary sector, there are people and organisations that are very important for public health work. For those in industry, both the companies and the employees will benefit if they make provision for physical activity and healthy food in the canteen. Football teams can make sure that hungry little players taking part in organised events get smoothies and sandwiches instead of cola and brownies. Supermarkets can offer healthy options and make the path to the checkout something other than a narrow corridor of crisps and chocolate.

Last, but by no means least: the patient organisations are important players when it comes both to prevention and to improving health services.

A hundred years ago, it was the poor who bore the greatest burden of illness. This is still the case. For this reason, public health work is not just to improve the health of the whole population, but also to reduce social inequalities. This is no small job.

But Klaus Hanssen was absolutely right.
If we all pull together, we are sure to win!



Jonas Gahr Støre
Minister of Health and Care Services

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.

This 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

Tobacco

The key objectives of *A future without tobacco; National strategy for combating the harmful effects of tobacco 2013–2016* are preventing young people from starting to use smoking and smokeless tobacco, offering help to quit using tobacco and protecting the population and society from tobacco-related injuries. In this strategy, we put forward the key measures for achieving these goals and otherwise refer to the tobacco strategy for more details.

Goals

- children and young people who were born after 2000 must not take up smoking or smokeless tobacco
- the proportion of children and young people (aged 16–24) who smoke every day shall be less than six per -cent
- the increase in the daily use of smokeless tobacco among children and young people (aged 16–24) shall be halted
- the proportion of daily smokers in the population shall be below ten per cent
- the proportion of the population using smokeless tobacco shall be below eight per cent
- no children shall be subjected to passive smoking
- the proportion of pregnant women who smoke in late pregnancy shall be below four per cent

Measures

- maintain a high level of excise duty on tobacco products
- develop legislation to introduce a licensing scheme for the sale of tobacco, prohibit self-service, make more arenas tobacco free and strengthen protection against passive smoking.
- continue the focus on national tobacco campaigns
- continue and develop measures aimed at children and young people, especially on the internet and new media
- continue and develop professional help for those who wish to stop using tobacco

Diet

In recent years, work on diet and nutrition has mainly been based on the *Norwegian action plan on nutrition (2007–2011)*, on which 12 ministries worked, and is continued in the *Public health report*.

Goals

- increase the proportion of the population that knows and follows the national dietary guidelines
- maintain the high level of awareness of the Keyhole label and increase the proportion of the population that knows what it stands for
- make it easier for all population groups to choose healthy foods
- reduce people's salt consumption
- help children and young people to establish good eating habits

Measures

- continue the campaign Small change – big difference
- continue and develop work on the Keyhole label
- implement the measures of the salt strategy, especially in partnership with the food industry
- facilitate the provision of healthy meals in kindergartens and schools
- have a long-term ambition to extend the free fruit and vegetables scheme to cover all pupils in primary and lower secondary schools
- follow up on measures to limit the marketing of unhealthy food and drink to children and young people, including the work of the food industry committee (MFU)
- consider the need for a specific strategy for correct nutritional competence in municipalities

Physical activity

Work to increase physical activity among the general population is cross-sectoral and based on furthering the *Action plan on physical activity (2005–2009)*, on which eight ministries worked. The Public health report provides a good basis for reinforcing this work.

Goals

- increase the proportion of young people, adults and the elderly who follow the national recommendations on physical activity
- acilitate opportunities for physical activity and an active lifestyle
- increase knowledge about the national recommendations for physical activity among the general population
- increase people's knowledge about the significance of physical activity for promoting quality of life and health and for preventing disease

Measures

- implement an information campaign about physical activity in 2014
- collaborate on the implementation of the Ministry of the Environment's outdoor activities strategy
- consider how the school day could be organised so as to give pupils at least one period of physical activity every day
- work on environmentally and health-friendly transport, including through the implementation of the *National transport plan 2014–2023*, *National walking strategy* and *National cycling strategy*
- continue measures for increased physical activity and activity-promoting residential and local environments, including by means of subsidy schemes for municipalities and the voluntary sector

Alcohol

The strategy for work on alcohol is laid down in Report No. 30 (2011–2012) *Look at me! A holistic substance abuse policy.* Here, we present the most central issues and measures relating to increased risk of developing the four diseases that this strategy covers.

Goals

- halt the increase in alcohol consumption
- reduce the incidence of alcohol-related disease
- increase people's knowledge about the correlation between alcohol and health

Measures

- maintain and continue universal measures such as the licensing system, the the alcohol wholesale monopoly "Vinmonopolet", the prohibition on advertising, age limits and a high level of excise duty
- continue and develop subsidy schemes for the municipalities and voluntary sector for developing local authority services, prevention and competence raising
- continue work on responsible alcohol handling in municipalities and on licensed premises, so as to ensure good management of the licensing system
- continue various measures aimed at children and young people, including in schools
- continue and develop the campaign Alcohol and Health

Common opportunities and challenges for the health and care services

The health and care services have important tasks to perform in the prevention, diagnostics, treatment and rehabilitation of cardiovascular disease, diabetes, chronic lung disease and cancer.

The role of the health and care services is based on health and care policy as this is described in Report No. 47 (2008–2009) *The coordination reform. The right treatment – at the right place – and the right time,* Report No. 16 (2010–2011) *National Health and Care Plan 2011–2015*, Report No. 10 (2012–2013) *Good quality – safe services*, Report No. 9 (2012–2013) *One patient – one record*, Report No. 29 (2012–2013) *Tomorrow's care,* and Report No. 34 (2012–2013) *Public health report. Good health – shared responsibility.*

The health and care services must work in a more unified, coordinated and inter-disciplinary manner. Collaboration with users and dialogues with other players must be improved. A combined range of services shall handle prevention, early diagnosis, systematic follow-up and treatment and rehabilitation. The aim is to prevent disease occurring, halt the progress of disease and equip the patient as fully as possible to live with his or her disease. With advanced illness or with several chronic diseases simultaneously, the aim is for relief, care, nursing and if necessary palliative treatment at the end of life.

It is vital to support patients' self-care and coping skills, including through nearness to services, patient education and greater user participation. Professional work must be further developed by means of collaboration between service levels and by the transfer of experience and guidance from the specialist health services to the municipalities. The starting point for this is the statutory collaboration agreements between the municipalities and the health trusts and the specialist health services' obligation to give the municipalities guidance. By means of following up on the report *Tomorrow's care* the health and care services' users shall be given new opportunities to better manage their daily lives. This report provides the basis for further development of nursing, both for those who need relief and care and those who need daily assistance.

Many people with cardiovascular disease, diabetes, chronic lung disease and cancer have more than one diagnosis. Most deaths result from cardiovascular disease. This also applies to those with chronic mental disorders. Discovering and treating simultaneous anxiety, depression, diabetes and/or COPD is therefore important for reducing the proportion of patients who die of cardiovascular disease. We do not currently have guidelines for early diagnosis, secondary prevention, treatment or rehabilitation for patients with several simultaneous diseases. This means that disease-specific treatment is usually prioritised over a more holistic approach, which would have given considerably greater health benefits.

The background to the Coordination Reform is the recognition that the structure of the health services has not sufficiently been adapted for patients with chronic diseases. The health services place great emphasis on diagnosing and treating disease and major complications, and not enough on promoting health and preventing health problems. As a consequence of this, treatment in the specialist health services occurs when chronic diseases are well advanced, instead of preventing and limiting them through primary prevention and early intervention.

The quality of the work to develop good patient careers for people with chronic diseases will be a marker for how well we succeed with the Coordination Reform. The Directorate of Health has been given the task of monitoring whether we succeed in this.

Awareness of prevention and early intervention is an expression of the fact that the authorities and services must build a holistic perspective for the health and care services. The focus on prevention is not counter-productive to the treatment and follow-up of patients and users with established chronic diseases. Tobacco, an unhealthy diet, physical inactivity and health-damaging alcohol consumption not only increase the risk of disease, but also have a negative effect on the prognosis of those who are affected by these diseases.

Prevention in the health and care services can be divided into three levels. Initiatives to prevent children and young people establishing unhealthy lifestyles. Initiatives to prevent healthy people with an increased risk of disease becoming ill. Initiatives to reduce risk factors among those who are ill, and thereby limit disease development, complications and unnecessary suffering and prevent premature death. Early diagnosis, rapid and adequate treatment and targeted rehabilitation are also vital for the achievement of the goal of a 25 per cent reducation in premature death from these diseases by 2025.

The overall goals in this part of the strategy are based on the intentions of increased prevention side by side with the care of those who have become ill.

Goals

- promote a healthy lifestyle among children and young people
- greater emphasis on prevention
- earlier interventionsi
- greater user participation
- a more interdisciplinary approach and better collaboration between the different parts of the health and care services
- more flexible use of health personnel competence
- establish specialised health services closer to where people live, in the form of decentralised/ambulatory specialist health services
- designate more tasks to municipalities and give them more resources to perform them
- ensure that services also map/screen/monitor groups at risk

Measures

- continue and strengthen preventive work among children and young people, including through financial facilitation for strengthening child health clinics and school health services
- the Directorate of Health shall prepare national professional guidelines for child health clinics and school health services
- the Directorate of health has been given the task of preparing a common guideline describing how common central issues connected with prevention, diagnostics, treatment and rehabilitation of cardiovascular disease, diabetes, chronic lung disease and cancer can be properly handled
- in accordance with its statutory role, the Directorate of Health shall prepare and revise national professional guidelines for cardiovascular disease, diabetes, COPD and cancer. These shall be knowledge-based, financial and administrative consequences shall be assessed and they shall include a plan for implementation in the health and care services. The implementation of the guidelines must be achievable by the use of available resources
- simpler, shorter versions of the guidelines for cardiovascular disease, diabetes, COPD and cancer should be prepared for patients and their families
- implement the *National strategy for immigrant health 2013–2017*
- contribute to a regional and local authority exchange of information and experience, such as dissemination of the Northern Norway Regional Health Authority's regional action plan for diabetes

Early diagnosis and primary prevention

If the goal of a 25 per cent reduction in premature death from the NCD diseases is to be achieved by 2025, it is essential to identify risk groups. It is vital for surviving disease that a diagnosis is made as early as possible. In the case of type 2 diabetes, COPD and cancer, it has been found that diagnosis is often late. Up to half of those who have mild to moderate type 2 diabetes or COPD remain undiagnosed. The diagnosis is often made when patients are admitted to hospital with complications. In the case of COPD, the patient will by then have lost almost half of his or her lung function. In the case of diabetes, there are often irreversible complications with consequences for treatment effectiveness and prognosis.

There are well-established methods for early disclosure of the early stages or actual contraction of disease. Screening is a mass survey of all or part of the population, the aim of which is to reveal the early stages or actual contraction of disease early enough to reduce morbidity and mortality. For national screening programmes to have an effect, there must be adequate and clinically satisfactory methods that are sensitive and reliable and have a low risk of side effects, as well as high participation levels. It must also be possible to offer treatment. In Norway there is national screening of new-born babies for a number of diseases, as well as mammography screening, screening for cervical cancer and a pilot project for screening for colorectal cancer.

There are also various forms of screening-like activity in a number of arenas, without these being assessed and established as national screening programmes. Health tests offered to the public by commercial companies, in the form of blood tests, diagnostic imaging and other means of revealing health risks and diseases, are on the increase but are difficult to keep an overall view of. The challenge is to handle this in a way that is in the best interests of the individual. The increased use of such testing services may be appropriate, but may draw unfortunate attention to health and disease and could lead to unnecessary concerns about future illness and death. They may also lead to more healthy persons approaching the health services, with the consequence that access is reduced for patients with more serious and chronic diseases.

Case-finding is a method of identifying people at high risk and with early signs of disease, so that they can be offered preventive measures, investigation and the correct treatment as early as possible. Based on age, weight, body mass index (BMI), waist measurement, smoking habits, trade or profession, family pressures and symptoms, and with the aid of blood tests and if necessary measurement of lung function, early diagnosis of COPD, diabetes, high blood pressure and high cholesterol can easily be made.

The risk of cardiovascular disease, diabetes, chronic lung conditions and cancer increases with age. It is therefore particularly important that preventive measures are also aimed at age groups where the risk increases and more will become ill.

Goals

- improve the identification of high-risk groups for future disease
- reduce the proportion of undiagnosed cardiovascular disease, diabetes, COPD and cancer
- better and more frequent offers of help in changing lifestyle, aimed at high-risk groups and patients throughout the health and care services

Measures

- the Directorate of Health shall prepare an overall national strategy and governing structure for the national screening programmes
- continue collaboration with the National Association for Public Health, the Norwegian Diabetes Association, the Norwegian Heart and Lung Patient Organisation and the Cancer Society
- stimulate the establishment of more healthy lifestyle centres and corresponding services in local authority health and care services
- the Directorate of Health shall continue the work of educating counsellors to help users give up tobacco
- consider introducing methods and/or systems for case-finding or health checks in local authority health and care services
- stimulate increased awareness of better offers of help from the specialist health services in changing lifestyles
- monitor the offers of health tests from commercial sources and create systems for handling offers that do not have a satisfactory clinical standard

Secondary prevention

Even where disease has already arisen, measures to counter tobacco, unhealthy diet, physical inactivity and dangerous alcohol consumption are equally important in preventing the further development of disease and premature death. Today's health and care services are good at disease-specific treatment of symptoms, but there is room for improvement. There is considerable improvement potential for preventing risk factors.

Goals

- offers of help and advice with lifestyle changes from the health and care services
- patients shall be assessed for comorbidity: other chronic diseases, mental disorders and alcohol or drug problems
- offers of secondary prevention in accordance with national guidelines for each individual disease

Measures

- enable all parts of the health and care services to integrate secondary prevention in treatment offered to patients with cardiovascular disease, diabetes, chronic lung disease and cancer
- consider increased use of health personnel other than doctors in work on changing lifestyles, in both the specialist health services and the local authority health and care services

Treatment, follow-up and rehabilitation

The course of illness and treatment for patients with cardiovascular disease, diabetes, COPD and cancer is known. The aim of treatment is to improve symptoms, prevent deterioration and maintain the best possible quality of life. These diseases require commitment and continuity from the time of diagnosis and throughout treatment. This has been facilitated through the Health and Care Services Act, partly by means of financial incentives such as co-finance with municipalities. Building good structures and competence, both in local authority health and care services and in specialist health services, involves a number of challenges.

Many countries, such as Denmark, the Netherlands and the United Kingdom, have chosen a nationally adapted quality model based on the Chronic Care Model for better health and care for the chronically ill. The model is primarily based on the general practitioner as coordinator of a proactive team for the chronically ill. The model allows for parts of the systematic follow-up and many of the measures, such as patient education, exercise and motivational interviews, to be performed by personnel other than doctors.

The model has a strong user orientation. It is a requirement that the patient/user is involved in the treatment and has good access to the services. The individual patient is offered patient education and a specific follow-up plan.

Good collaboration between the specialist health services and local authority health and care services is especially important for patients with chronic diseases such as cardiovascular disease, diabetes, COPD and cancer. To improve collaboration both within and between the local authority health and care services and the specialist health services, there is a need for good ICT solutions with tools to support decision making that are based on national guidelines. Annual check-ups represent an important element of follow-up with these patients. Using standardised, ICT-based annual check-up forms, it is also possible to obtain quality indicators for national quality registers and the primary health service.

Many patients deteriorate and require hospital admission. Part of this can be achieved through local authority 24-hour immediate assistance, which is now being established throughout the country.

Rehabilitation is important for these disease groups. The effect of a more comprehensive rehabilitation programme in the specialist health services may decline after 3 to 6 months and must be followed up with offers where the patient lives. Rehabilitation and exercise schemes such as "heart trim", COPD and diabetes schools and group programmes for persons with cancer have been shown to arrest disease development, improve quality of life and reduce hospital admission.

By means of the new report *Tomorrow's care* the health and care services' users shall be given new opportunities to manage their everyday lives better, in spite of their diseases or functional disability. Special initiatives have therefore been established to stimulate activation measures in collaboration with the voluntary sector.

Goals

- better offers of services in the local authority health and care services in line with the Coordination Reform
- strengthen active care in the local authority in line with Report No. 29 (2012–2013) *Tomorrow's care*
- collaboration and the mutual exchange of competence within the services and between the specialist health services and local authority health and care services
- good patient careers in all parts of the health and care services
- adequate and qualitatively appropriate services for those who need relief, care, nursing and if necessary palliative treatment at the end of life
- better use of new technology in prevention, treatment and rehabilitation

Measures

- systematic activities to implement and update existing guidelines for cardiovascular disease, diabetes, COPD and cancer
- stimulate better education of patients and their families in all parts of the health and care services
- investigate the adaptation of the Chronic Care Model for Norway
- further develop care offers that maintain learning and coping functions and rehabilitation
- ensure the necessary competence by means of education
- support more interdisciplinary efforts by simplifying how the division of new and adapted work between professional groups can be done
- establish local authority 24-hour immediate assistance
- establish systems that ensure collaboration and the mutual exchange of competence between the specialist health services and local authority health and care services
- prepare a clinical checklist for good patient careers
- work at making all those with NCD diseases aware of the recommendations of the clinical guidelines for annual check-ups
- make better use of existing health and quality registers and develop more quality indicators
- stimulate the development of activities at centres for the elderly and seniors in line with Report No. 29 (2012–2013) *Tomorrow's care*
- continue and develop collaboration with the National Association for Public Health, the Norwegian Diabetes Association, the Norwegian Heart and Lung Patient Organisation and the Cancer Society.
- ensure that offers of palliative treatment, nursing and care in local authority health and care services are in line with Report No. 29 (2012–2013) *Tomorrow's care*
- stimulate increased use of welfare technology in line with Report No. 29 (2012–2013) *Tomorrow's care*
- consider different model trials for the use of welfare technology, common patient records, user diaries and own-care measures to ensure continuity in follow-up for the individual

Cardiovascular disease

Cardiovascular disease is the disease group that causes most deaths in Norway and often involves chronic health problems and loss of functional ability. 35 per cent of all deaths are due to cardiovascular disease. Over the last 40 to 50 years, deaths from heart attack have fallen by 80 per cent in the 40 to 70 age group. A further reductio is possible. After a heart attack, heart failure can develop. The treatment of risk factors, continuous and coordinated follow-up and help with self-care and rehabilitation are vital for quality of life and survival.

Stroke is the third most common cause of death in Norway. 75 per cent of cases occur after the age of 70. Men are more at risk than women, but the gender difference is becoming smaller and smaller. This is partly due to the fact that as many women now smoke as men and that the incidence of overweight, diabetes and physical inactivity is now approximately evenly divided between the genders. There are many reasons for the reductionin the number of deaths from cardiovascular disease. The composition of the diet, especially the reduced consumption of saturated fat, and the reduction in the number of daily smokers are both of significance. A major key factor is the progress in acute treatment, follow-up and rehabilitation of both heart attacks and strokes, as well as the early treatment of high blood pressure and raised levels of lipids in the bloodstream.

Primary prevention/risk intervention

In many parts of the world there is discussion regarding where to place the threshold for starting treatment of high blood pressure and raised levels of lipids in the bloodstream. If the threshold is too low, the consequence is making patients of healthy people with a relatively low risk of future illness and premature death.

The Norwegian national guidelines for primary prevention of cardiovascular disease emphasise general advice about giving up tobacco, losing weight and the treatment of diabetes and auricular fibrillation. Only people with a high risk of disease and premature death shall be treated with medicines. A risk calculator (NORISK) based on age, gender, smoker status, blood pressure and lipids in the blood is used.

Secondary prevention

Heart attacks and strokes often occur suddenly due to blood clots or damage to blood vessels. Half have no symptoms beforehand. In the event of alarm symptoms, such as chest pains, paralysis or speech or vision disturbances, acute action with a rapid emergency call and admission to hospital for assessment and treatment are decisive.

The new national cardiovascular register may help to improve quality in the specialist health services by registering the time sequence. Early rehabilitation can reduce disability where damage has occurred. Even for those who are already ill, primary preventive measures such as giving up smoking, physical exercise and dietary advice are decisive for quality of life, progress of the disease and survival.

Goals

- Norway shall be a pioneer in the prevention of cardiovascular disease
- Norway shall be a pioneer in the treatment of cardiovascular disease
- Norway shall develop good opportunities for rehabilitation close to where users live
- the user perspective is basic to prevention, treatment and rehabilitation

Measures

- adequate education of patients with cardiovascular disease and their families, including through support to the National Association for Public Health's Heartline
- guidelines for primary prevention of cardiovascular disease are to be revised and implemented
- guidelines for treatment and rehabilitation of strokes are to be revised and implemented
- help ensure that as many as possible with COPD, diabetes or overweight are assessed for cardiovascular risk
- help ensure that as many as possible are offered help to quit smoking, if necessary with medicines as support
- continue efforts to train school pupils and others in basic cardiopulmonary resuscitation
- the Directorate of Health shall, in collaboration with the regional health authorities, implement a national

information campaign about strokes in 2014
- continue initiatives to reduce response times
- work to ensure that patients with persistent symptoms are offered rehabilitation
- continue exercise, educational and coping skills initiatives

Diabetes

There are two types of diabetes. Type 1 diabetes usually arises at a young age and is not associated with lifestyle/overweight but is caused by the body itself destroying the cells that produce insulin. About 28,000 people in Norway have type 1 diabetes. The disease cannot be prevented, but complications and premature death can be postponed or prevented with good treatment, good follow-up and the patient's own efforts.

Type 2 diabetes normally arises in adults and is associated with physical inactivity and overweight (especially fat around the waist). Tobacco use is significant for the prognosis. The incidence is increasing. The greatest increase is among young adults. It is estimated that about 340,000 people in Norway have the disease. As many as 100,000 of these may have the disease without knowing it. The health costs of diabetes were approximately NOK 4.1 billion in 2011. People with diabetes have a lower life expectancy than the average population.

Diabetes is a chronic disease. Treatment is intended to prevent or postpone complications such as visual impairment, kidney damage, reduced immune defences, foot sores and damage to the nervous system. Better control of blood sugar with the aid of the right diet or medicine, increased physical activity and even a small weight loss can prevent these developing. Two out of three patients with diabetes have at least one complication.

Diabetes often causes heart disease. The combination of diabetes and tobacco is the most dangerous. Studies have shown that 50 to 60 per cent of those who are admitted to Norwegian hospitals with acute heart attacks have either known or unknown type 2 diabetes. One particular characteristic of type 2 diabetes is that the incidence among certain immigrant groups is significantly higher than in the rest of the population. It has been shown that 90 per cent of Pakistani women in Oslo have an increased risk of type 2 diabetes. Other immigrant groups also have a higher incidence. The incidence of diabetes in pregnancy is also higher in some immigrant groups.

The goals and measures of the *National strategy for diabetes (2006–2011)* are continued.

Goals

- Norway shall be a pioneer in the prevention of type 2 diabetes.
- the proportion with unknown type 2 diabetes shall be reduced
- the development of complications from diabetes shall be reduced
- Norway shall be a pioneer in good, equal follow-up and treatment of diabetes
- diabetes care shall have strong user-orientation
- increased attention to immigrant groups and others with a high risk

Measures

Norway shall be a pioneer in the prevention of type 2 diabetes. To succeed in this, preventive measures aimed at known risk factors such as an unhealthy diet, overweight, physical inactivity and tobacco must be pursued. This applies to both measures aimed at the population and measures in all parts of the health and care services, as is described earlier in this strategy.

The proportion with unknown type 2 diabetes shall be reduced. Early diagnosis is decisive for the progress of the disease and survival and the key measures are:

- continuation of the work on information about the symptoms of diabetes, aimed at the general public, including on www.helsenorge.no and in collaboration with the Norwegian Diabetes Association
- ensuring that the national diabetes guidelines are implemented and updated
- preparing special user versions of the diabetes guidelines
- assessing better methods and new measures for the quick identification of new cases

The development of complications from diabetes shall be reduced.

1. adequate education of patients with diabetes and their families, including through support to motivation groups and the Diabetes Line
2. increase the fulfilment of goals for blood sugar, blood pressure and cholesterol levels in accordance with national guidelines

Norway shall be a pioneer in good, equal follow-up and treatment of diabetes.

- develop quality indicators for diabetes
- better reporting of data to the National Diabetes Register/NOKLUS
- ensure good teaching between hospitals by exchanging information and experience, such as with regional action plans, as has been done by the Northern Norway Regional Health Authority
- work to achieve good patient careers at all phases of the disease
- develop a pilot for local authority follow-up services for adults with type 2 diabetes

Diabetes care shall have strong user-orientation. Diabetes requires a high level of patient commitment and self-treatment.

Key measures include:

- good education from the time of diagnosis for the rest of the patient's life
- better patient education and offers of exercise and help with learning and coping skills early in the course of the disease
- consider models for education in the local authority health and care services
- stimulate increased collaboration with user organisations and peer work

Increased attention to immigrant groups and others with a high risk. The National strategy for immigrant health 2013–2017, Equal health and care services– good health for all refers to more measures for immigrant groups with diabetes.

- develop new guidelines for diabetes in pregnancy
- continue the collaboration with various immigrant organisations and the Norwegian Diabetes Association
- increase competence and awareness, especially among health personnel who treat immigrants

Chronic lung disease

The chronic lung diseases asthma and chronic obstructive pulmonary disease (COPD) are both very common among the population and are among the most common causes of admission to Norwegian hospitals. Deaths from asthma have decreased in recent decades, while those from COPD are still increasing. For both these conditions, lifestyle is important. Asthmatics who smoke are more likely to develop COPD. Children who grow up with parents who smoke develop asthma more often than others and smoking blocks the effect of the most important form of treatment for asthma – inhalation steroids.

The use of tobacco is the cause of 70 to 80 per cent of all COPD. Giving up smoking is the only and most important treatment that affects mortality from COPD. Physical activity and diet are important for the function and quality of life of patients with asthma and COPD.

There are good guidelines for the treatment of these diseases, but they are not well enough implemented.

Chronic obstructive pulmonary disease (COPD)

About 400,000 people in Norway have COPD and there are 30–40,000 new cases each year. According to the Hordaland Survey, a up to 75 per cent of those with COPD are undiagnosed. About 2,000 people die from COPD in Norway each year. 18 per cent of the population over 40 have COPD. About 40,000 people have serious COPD that requires regular contact with the health and care services. Tobacco is the most important cause of COPD, but other causal factors include exposure to dust and gases at work, genetics and previous asthma. Smoking habits are reflected in mortality and could also explain the social inequality of incidence.

COPD also puts patients at risk of developing the other non-communicable chronic diseases. There is higher mortality from heart disease than from pulmonary failure with COPD. The incidence of diabetes is higher with COPD. There are six times as many cases of lung cancer among people with COPD than the general population. Because of breathing difficulties, patients with COPD are often socially isolated. They move around less and become overweight at an early stage of the

disease. In serious cases of the disease, malnutrition is often a problem. COPD is associated with anxiety, depression and musculoskeletal disorders.

The symptoms of COPD develop gradually. Many patients adapt their daily life to the symptoms and often go to the doctor late in the development of the disease. Often, no diagnosis is made until the patient becomes so ill that hospital admission is required. COPD follows smoking habits. People with drug-related or mental problems smoke more than others. Male immigrants from some countries such as Poland and Turkey have a high percentage of smokers, so COPD is expected to increase. In many other countries, few women smoke compared with Norway, so that the incidence among female immigrants will probably be lower than otherwise in the population.

Goals

- Norway shall be a pioneer in the prevention of COPD.
- the number of people with unknown COPD shall be reduced
- decrease in lung function and the development of serious disease shall be reduced
- Norway shall be a pioneer in good, equal treatment of COPD
- COPD care shall have strong user-orientation
- increased awareness of occupational COPD
- increased awareness of social inequalities in health and of people with mental disorders or drug-related problems as well as COPD
- increased awareness of immigrant groups from countries with a high percentage of smokers

Measures

Norway shall be a pioneer in the prevention of COPD. In order for Norway to succeed with this, preventive work aimed at known risk factors such as smoking, an unhealthy diet, overweight and physical inactivity must be continued. This applies to both measures aimed at the population and measures in all parts of the health and care services, as described earlier in this strategy.

The number of people with unknown COPD shall be reduced.
Early diagnosis is decisive for the progress of the disease and survival and the key measures are:

- continued work on information about the symptoms of COPD, aimed at the general public, including on www.helsenorge.no and in collaboration with the Norwegian Heart and Lung Patient Organisation
- consider better methods and new measures for quickly identifying new cases, in collaboration with the specialist environments and the Norwegian Heart and Lung Patient Organisation
- stimulate increased awareness and lung function measurement programmes in companies with possible risk of exposure
- prepare information about COPD and giving up smoking, aimed at high-risk groups

Decrease in lung function and the development of serious disease shall be reduced.
The key measures are:

- adequate education of patients with COPD and their families, including through support to the Norwegian Heart and Lung Patient Organisation's COPD Line.
- prepare user versions of the national clinical guidelines for the prevention, diagnosis and follow-up of COPD.
- systematic activities to ensure that the national COPD guidelines are implemented and updated
- education of GPs and other health personnel about COPD, performing and interpreting lung function measurements, giving up smoking and motivational interviews
- working to establish interdisciplinary COPD teams

Norway shall be a pioneer in good, equal treatment of COPD.

- prepare quality indicators for COPD
- consider the establishment of a national register for COPD in general practice
- consider the introduction of regional action plans for COPD
- further develop offers for local rehabilitation and learning and coping skills
- work to achieve good patient careers at all phases of the disease

COPD care shall have strong user-orientation.
COPD requires a high level of patient commitment and self-treatment. Key measures include:

- good education from the time of diagnosis for the rest of the patient's life
- starter courses for people with COPD at local authority learning and coping skills centres
- continue the collaboration with the Norwegian Heart and Lung Patient Organisation
- user surveys

Cancer

In 2013, there are more than 200,000 people living in Norway who have or have had cancer. About 30,000 new cases are diagnosed each year. The number is increasing. The Cancer Registry of Norway estimates that almost 40,000 people will get cancer in 2030. More people survive cancer than previously. Even so, more than 10,000 people die of cancer each year in Norway. Almost half of these die between the ages of 35 and 74. Thus cancer is the disease that makes the largest contribution to premature deaths.

The causes of cancer are complex and to some extent unknown. It is estimated however that between 30 and 40 per cent of all cancer can be prevented, if tobacco usage, an unhealthy diet, physical inactivity and the damaging use of alcohol can be successfully eliminated or reduced.

The increase in the number of cancer cases, the fact that more and more people are living with cancer and that treatment is becoming ever more interdisciplinary, advanced and costly, will make greater demands on capacity and competence in hospitals in the future. The local authority health and care services will face at least as strong challenges. In line with the Coordination Reform, these will have responsibility for more and sicker cancer patients with complex needs, as more and more treatment occurs in out-patient clinics and hospital admissions become fewer and shorter. The municipalities shall be responsible for providing an all-round service of prevention, early diagnosis, treatment, rehabilitation and follow-up, so that good patient careers can as far as possible be realised at the lowest effective level of care. Many people can live a good life with cancer, but require life-extending treatment, rehabilitation, assistance with learning and coping skills, palliative treatment, nursing and care.

Together – against cancer. National cancer strategy 2013–2017 presents five overall goals and a number of subsidiary goals. The overall goals and the most important subsidiary goals are presented in this summery of the cancer strategy.

Goals

- more user-oriented cancer care
- Norway shall be a pioneer in good patient careers
- Norway shall be a pioneer in cancer prevention
- more shall survive cancer and for longer
- the best possible quality of life for cancer patients and their families

Subsidiary goals

More user-oriented cancer care. One important goal is better information, both for individual patients and for the general population. Cancer patients shall be aware at all times who they can approach about their own disease, treatment and follow-up. Patients shall be able to actively participate in decision making about their own treatment. One important measure is to develop digital self-help tools with the opportunity to inspect ones own records and communicate with the health services. Cancer patients' experiences must be actively used to improve the quality of services. Patients shall be drawn into the work on clinical guidelines, research and innovation.

The objective and measures aimed at more user-oriented cancer care are essentially the same as in the report on quality and patient safety *Good quality – safe services* and the report on digital services in the health and care services *One patient – one record,* and will therefore not be discussed in more detail here.

Norway shall be a pioneer in good patient careers. Cancer patients often go through complex patient careers where they move between GPs, hospitals and various local authority health and care services over many years. This presents great requirements for collaboration within the specialist health services and between the specialist health services, GPs and local authority health and care services. The cancer strategy has set a number of subsidiary goals, in order to achieve the national objectives that what is offered to cancer patients shall be organised as a holistic and coordinated patient career and that 80 per cent of all cancer patients shall commence treatment within 20 days.

The most important of these are:

- coordinator functions shall be established at all hospitals treating cancer patients
- each individual patient shall have a telephone number and person at the hospital they can contact
- standard patient careers shall be established for as many forms of cancer as possible, as part of the national treatment programmes
- the hospitals shall work systematically to achieve fast and effective investigation and diagnostics and a rapid start of treatment, including by establishing multidisciplinary teams
- breast diagnosis centres have been established at many hospitals
- diagnosis centres for prostate cancer shall be established
- the hospitals shall also ensure adequate capacity for diagnostic imaging and examination of cell and tissue samples in pathological laboratories
- work on national treatment programmes with guidelines for cancer treatment shall be continued and developed
- an overall plan shall be devised for the systematic revision and follow-up of the treatment programmes, and the local authority health and care services role shall been drawn in to a greater extent

Norway shall be a pioneer in cancer prevention. In order for Norway to succeed with this, preventive work aimed at known risk factors such as smoking, an unhealthy diet, damaging tanning habits, overweight, physical inactivity and dangerous use of alcohol must be continued to the fullest extent. This applies to both measures aimed at the population and measures in all parts of the health and care services, as described earlier in this strategy. Two important, disease-specific preventive measures against cancer are the established national screening programmes for cervical and breast cancer, as well as the pilot project for screening for colorectal cancer, and the introduction of vaccine aimed at human papilloma virus (HPV) as a vaccination programme for girls in the seventh year of school. The aim of the screening programmes is to identify pre-cancers or cancers at an early stage so as to reduce morbidity and mortality. The aim of introducing HPV vaccination is to reduce the risk of cervical cancer.

In concrete terms:

- it will be established an overall national strategy and governing structure for the national screening programmes
- stimulate an increased participation in HPV vaccination among young girls

More shall survive cancer and for longer. Cancer shall be treated with surgery, medication or radiotherapy, often in combination, over shorter or longer periods. All cancer treatment will become steadily more specialised and individualised. All forms of treatment are being continuously developed and the requirements for the quality of the treatment that is given are decisive. Ever higher standards are being set for the competence of health personnel in all parts of cancer care, as well as greater requirements for systems for evaluating the introduction of new methods and access to new equipment.

Key goals include:

- establish national requirements for quality and robustness of the hospitals treating cancer, including through establishing new quality indicators and considering new quality registers, as well as more active use of existing quality registers for checking how well the treatment programmes for cancer treatment are being followed
- the need to limit treatment methods to selected hospitals based on the need for quality of service shall be continuously assessed
- the status of cancer surgery in Norway shall be reviewed by the end of 2014
- ensure adequate capacity and competence in surgical and oncological treatment by increasing education and recruitment, so as to ensure access to specialists and other qualified health personnel in relevant clinical areas, as well as an adequate distribution of tasks
- essential treatment locations and equipment, including for radiotherapy
- facilitating a future Norwegian centre for particle therapy and establishing an agreement for such treatment for Norwegian patients abroad until such a centre exists
- ensure that Norwegian patients have access to safe, new, effective and cost-effective treatment, including through the use of a national system for introducing new methods into the specialist health services. The system covers medicines, medical equipment, procedures and diagnostic methods that are to be used in prevention, examination, diagnostics, treatment, follow-up and rehabilitation

The best possible quality of life for cancer patients and their families. Clear national objectives have been defined to ensure that cancer patients are offered better rehabilitation, and that palliative treatment is reinforced and in line with the WHO's goals for the relief of pain and other physical symptoms, as well as measures aimed at mental, social and spiritual/ existential problems.

Key goals include:

- ensuring the best possible follow-up of cancer patients
- the central role of the GP in following up on cancer patients and their families throughout the progress of the disease shall be clarified
- further work on palliative treatment and care at the end of life
- continue the implementation of the national treatment programme for palliative treatment, which provides recommendations for palliative treatment and care in both the specialist health services and local authority health and care services, as well as recommendations for how services shall be organised
- follow up on Competence Lift 2015, which involves a focus on competence-raising measures for palliative treatment and care at the end of life

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quality of life
understanding
movement
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respect
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