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

## **The Netherlands Country Review**

# Prepared by the National Institute of Public Health and Environment

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## **Table of Contents**

Background3
The Health Promotion and Chronic Disease Prevention Landscape4
Policy and stakeholders4
Laws and regulations6
Financing6
Programmes and strategies
Implementation
Monitoring
Identifying and Promoting Good Practices of Health Promotion Interventions12
Forecasting Studies
Cost-Effectiveness Studies
Gaps and Needs in the Prevention of Chronic Diseases (Cardiovascular Diseases and Type 2 Diabetes)
Annex Detailed description of the criteria of the different assessment (recognition)

Euro Health Net

This Country Review has been developed based on the questionnaire 'Good practice in the field of Health Promotion and Primary Prevention' developed by Cristina Chiotan and Ingrid Stegeman, EuroHealthNet, as part of Work Package 5, Task 1 of JA-CHRODIS.



## **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 the Netherlands. 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 Netherlands. 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 the Netherlands.



# The Health Promotion and Chronic Disease Prevention Landscape

### **Policy and stakeholders**

In the Netherlands, health promotion and primary prevention policy is organised at different national and local levels.

#### National level

- The *Ministry of Health, Welfare and Sport* bears overall responsibility for public health at a national level. It formulates policy objectives relating to prevention and health promotion and bears financial responsibility for the breakdown of the national budget to the local governments and national stakeholders, i.e. health promotion institutes.
- Next to the Ministry of Health, Welfare and Sport, other ministries (for instance the Ministry
  of Infrastructure and the Environment; the Ministry of Education; the Ministry of Social
  Welfare and Employment; and the Ministry of Economic Affairs) play a role in the financing
  and performance of health promotion and primary prevention in the Netherlands. Crossgovernmental actions particularly take place in respect to health protection.
- There are several *national health promotion institutes* in the Netherlands that focus on a specific theme, including accident and injury prevention, nutrition, sport and physical activity, migrant health, sexual health, sexually transmitted infections and AIDS, and mental health and addiction. They derive part of their income from government funding and specialise in research, consultancy and the development of educational materials and health promotion programmes.
- The Centre for Healthy Living is part of the National Institute for Public Health and the Environment (RIVM). This centre promotes the use of the most appropriate lifestyle interventions by presenting available interventions, planning instruments, communication materials as well as information on the quality, efficiency and coherence of health promotion interventions.
- **Research** on prevention and health promotion that is financed by the government is allocated to the Netherlands Organisation for Health Research and Development, universities sometimes in co-operation with municipal public health services as well as funding parties, such as disease-specific funds.
- The *Health Care Inspectorate* monitors the performance of the community health services and the quality of care.
- The *Council for Public Health and Health Care* is an independent advisory body which advises the government on public health and care.
- Disease specific funds or charities such as the Dutch Heart Foundation and the Diabetes
  Foundation also have health promotion goals and activities in their programmes. To have
  more impact, the different disease specific funds have joined forces in a collaboration
  named Collaborating Health Funds.





Commercial parties (including public-private partnerships) also play a role in the financing
and performance of health promotion and primary prevention. Examples are the food
industry, supermarkets, and sport centres.

#### **Local level**

All Dutch municipalities have the task to protect, control and promote the health of their inhabitants. To carry out these tasks, the municipalities have a **community health service**. The local authorities bear responsibility for appropriation and performance. The public health, prevention and health promotion tasks are primarily carried out by one of the 25 **community health services**, each serving a particular region including more than one of the 403 **municipalities** in the Netherlands. Community health services carry out a wide range of public health related activities. The range of duties differs between the community health services, because every municipality gives its own assignments to the community health services, specified in the municipal memoranda about local policy on community health. They can, for instance, develop and implement health promotion programmes that are tailored to the needs of local communities. Nevertheless, all community health services also have a number of uniform tasks. These tasks include:

- youth health care
- environmental health
- socio-medical advice
- periodic sanitary inspections
- public health for asylum seekers
- medical screening
- epidemiology
- health education
- community mental health

Most Dutch residents are registered to one of the *general practices*. However, irrespective of registration, all residents have access to health care. There are no co-payments for General Practitioner visits. In the last decade, collaboration among general practices has increased, moving to larger teams and organisational networks. Furthermore, collaborations with other health disciplines, such as physical therapists, psychologists, and community nurses are increasing. Next to self-management of patients as an important focus in general practices, primary prevention is increasingly seen as one of the tasks of the general practitioner. However, in practice, primary prevention gets limited attention.



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### Laws and regulations

- In the Netherlands, public health, prevention and health promotion are enshrined under the **Public Health Act**. This law specifies the tasks of the municipal public health services. Furthermore, the Public Health Act states that both the national government and the municipalities have to formulate a public health strategy every four years. The Health Care Inspectorate monitors the effective implementation of the Public Health Act and the interaction between national and local health policy.
- The government is going to transfer responsibility for the youth care system to the municipalities as of 2015. This includes various forms of youth care, including provincial youth care and care for young people with intellectual disabilities, as well as paediatric mental health care. The new system is laid down in the Youth Act, which has been passed by parliament and will enter into force on 1 January 2015. The municipalities have to create access to youth services, for example through a neighbourhood youth care team, which may refer parents and children to paediatric mental health care. In addition, a referral can always be obtained from the child's GP, paediatrician or other consultant.
- Long-term care for the elderly, chronically ill and disabled is financed under the *Exceptional Medical Expenses Act*. Everyone living or working in the Netherlands is automatically insured under this Act.
- In addition, the **Social Support Act** ensures that people with a disability receive assistance, such as home help or a wheelchair. Municipalities are responsible for implementing the Social Support Act and are free to decide how they do so.
- The Health Insurance Act states that every person who lives or works in the Netherlands is legally obliged to take out standard health insurance to cover the cost of, for example, consulting a general practitioner, hospital treatment and prescription medication. They may also opt to take out additional insurance to cover costs not included in the standard package.

## **Financing**

In 2012, total health expenditure in the Netherlands was €83.4 billion; which is 14% of the GDP. The budget comes from the health insurance, exceptional medical expenses, government (taxes), out-of-pocket payments, complementary health insurance, and other payments. The majority of the budget





goes to hospitals and specialists, care for the elderly, care for the disabled, or not specified. Furthermore, smaller budgets are allocated for paramedical and dental care, medicines, mental health care, and general practitioners.

The majority of the budget for prevention and health promotion comes from the government, the health insurance, and a small part from commercial parties, such as the food industry and public-private partnerships. Preventive activities in the context of treatment, nursing, care or welfare support, as well as the medicines and medical devices used for these purposes, are to be financed from health insurance premiums. Different ministries bear financial responsibility, which breaks down to local authorities, research institutes, municipal public health services, etc. (i.e. the Ministry of Economic Affairs, Agriculture and Innovation is responsible for food quality; the Ministry of Social Affairs and Employment promotes health and safety in the workplace; and the Ministry of Health, Welfare and Sport funds activities in health protection, the prevention of disease and general health promotion).

In 2012, €2.5 billion of the total health care budget was allocated to prevention; which is 3% of the total budget. Including expenditures outside the healthcare system, the expenditures on prevention and health promotion are larger. Of these total expenditures only 2007-figures are available. In 2007, total expenditures on prevention and health promotion were estimated at €13 billion. €10 billion were expended outside the healthcare system, i.e. health protection such as traffic safety and prevention of air pollution. Thus, in 2007, €3 billion of the total health care budget was allocated to disease prevention and health promotion. About €2.5 billion went to disease prevention, i.e. allocated to food and product safety, protection against infectious diseases, the national screening programmes (such as breast cancer screening), preventive medication, and several research programmes. Furthermore, €500 million went to health promotion.

### **Programmes and strategies**

The *National policy document on health* 2011, entitled 'Health close to people', sets out the ambitions of the government's health policy for four years, from 2011 to 2015. This document builds on the results of the *Public Health Status and Forecasts Report* 2010, published by the National Institute for Public Health and the Environment (RIVM). The National policy document on health presents five spearheads on health: overweight and obesity, diabetes, depression, smoking and (excessive) alcohol consumption. Next, the government places great emphasis on exercise and physical activity.

The government's vision in regards to public health considers three main themes:

- 1) confidence in health protection:
  - a healthy start: family and school
  - living in a healthy neighbourhood
  - work is healthy and healthy working can be improved
- 2) care and sport in the neighbourhood:
  - healthcare providers active in prevention
  - screening, health checks and prevention of specific conditions
- 3) personal lifestyle decisions:
  - basic protection at required standard





- availability of healthy food
- food and product safety
- a healthy environment

In January 2014, the Ministry of Health, Welfare and Sport launched the *National Prevention Programme (NPP)*. This programme, entitled 'All about health', runs until 2016 and is a joint effort by six ministries, municipalities, businesses and civil society organisations. The National Prevention Programme encompasses a wide range of activities, from promoting health and preventing illness at home, school and work, and making prevention more prominent in health care, to maintaining the current, high level of health protection. The NPP contains three main objectives:

- 1) health close by
- 2) prevention prominent in healthcare
- 3) maintaining health protection

Municipalities will be encouraged to scale up neighbourhood approaches to improve vulnerable people's health. At school, the NPP-target is to create 850 'healthy schools' by 2015, resulting in lower rates of childhood obesity, fewer teenagers smoking or binge drinking and more young people getting enough exercise. The NPP also targets the workplace. Ensuring that employees are fit and that they stay healthy can be achieved through, for instance, raising awareness of health and safety at work and creating conditions that make it easier for workers to combine work with informal home care duties.

In order to maintain the current high level of health protection and stay alert to new risks, the National Prevention Programme will also devote attention to such issues as antimicrobial resistance, zoonosis (animal diseases that can also infect humans), changes to the national vaccination programme, food safety and hearing damage.

**Type 2 diabetes is a spearhead in the Dutch health policy** as well as (youth) **overweight and obesity** as a risk factor for diabetes and cardiovascular diseases. From 2009 to 2013, the **National Diabetes Action Programme** was initiated in order to improve effective prevention, good care and reducing the increasing costs of diabetes. One of the instrumental goals to achieve this was focused on prevention, advice, early diagnosis and lifestyle interventions for high-risk groups. One of the results of this programme is a specific section about indicated prevention in the standards of diabetes care.

Several organisations and programmes exist in the Netherlands aiming at the prevention and care of childhood overweight and obesity as well as the prevention of related chronic diseases. The chain approach for childhood overweight and obesity is to be optimized with the help of prevention and care specialists, policy-makers, health insurers and the research field. The *Partnership Overweight Netherlands* is a cooperation of several stakeholders, including the Ministry of Health, Welfare and Sport, the Healthy Weight Covenant, local authorities which are taking part in its JOGG programme (based on EPODE), the Health Care Insurance Board, the Dutch Care Institute, the Netherlands Diabetes Federation and the Vital Blood Vessels platform, an alliance of 25 organisations concerned with cardiovascular health.

In the last few years, the Ministry of Health, Welfare and Sport initiated incentive programmes to promote physical activity in the municipalities, with an aim to have better sports facilities in the





communities and more collaboration with primary health care. An example of this is the implementation programme *Sport and physical activity in the neighbourhood*.

The issue of the prevention of *health inequalities* has been present on the Dutch political agenda since the end of the 1980s thanks to the construction of two investigative commissions initiated by the Ministry of Health, Welfare and Sport as a part of the *Program Committee on Socioeconomic Health Differences*. Since then, the issue of health inequalities has been integrated into the overall health strategy. A particular feature of the situation in the Netherlands is a national strategy with the aim to reduce health inequalities in large cities. The main target of this policy is to bridge the health gaps in terms of average life expectancy and avoidable inequalities. Different actions to address health inequalities are implemented at a local level, with different levels of effectiveness and impact. The National Institute for Public Health and Environment (RIVM) is responsible for monitoring the progress of the achievement of the target to extend healthy life expectancy of the lower income groups by 25% of the current difference (3 years) by 2020.

In 2007, the Dutch government launched the **Dutch District Approach** with the aim to improve the living conditions of the 40 most deprived districts of the Netherlands. The aim of the interventions was to improve employment opportunities, educational levels, housing conditions, the physical environment, safety levels, and social cohesion. Each district developed a set of locally tailored interventions and implemented these activities from mid-2008 onwards. Examples of implemented interventions include the renovation of the housing stock, programmes to reduce unemployment, the creation of playgrounds, programmes to reduce neighbourhood nuisance and disorder, and activities to increase the social cohesion. The mix, content and intensity of interventions differed per district. Although improving the health of residents was initially not an explicit target of the District Approach, such a comprehensive policy initiative (addressing problems with employment, education, housing, the physical environment, safety, and social cohesion) is a perfect example of the type of policy recommended for tackling socioeconomic health inequalities. This comprehensive set of policies could also improve the health of the residents of the target districts, because they would improve both the living conditions and the socioeconomic opportunities of the residents. In other words, they address "social determinants of health" - a term used to refer to conditions in which people are born, grow, live, work and age.

Incentives programme Healthy in the City As mentioned earlier, in January 2014 the National Prevention Programme (NPP) 'Everything is Health" started. In this programme, one of the main targets is the reduction of health inequalities. More specifically, as differences between socioeconomic groups in life expectancy are expected to incline in the coming years, the long-term goal of the NPP is to achieve differences in life expectancy in 2030 that will be equal or reduced compared to the current differences. An important practical mean based on the NPP is to focus on ways to improve the health of inhabitants of neighbourhoods with the largest inequalities. This resulted in the selection of 100 municipalities that will be actively approached. The support of these selected municipalities in developing action on health inequalities at a local level is enabled by a national incentives programme "Healthy in the City" (acronym in Dutch: GIDS). This programme aims to promote and support a local, cross-governmental approach of health inequalities. For the programme, 44 million euro is available for the next 4 years; 10 million per year will directly flow to the municipalities. These municipalities will receive tailored support in the action on health inequalities in order to develop a coherent, integrated approach of health inequalities within their local context. Key elements are securing accessible provision of (health) services within the





neighbourhood, promoting healthy behaviour, stimulating a healthy built environment and participation in the society.

International cooperation with respect to health inequalities was created by participation in the joint action between the EU and Member States, called "Equity Action". This joint action aimed to reduce health inequalities by helping to improve policies at the national and regional level and harness the contribution of stakeholders (for more information, see www.equityaction-project.eu). It started in February 2011 and ran for three years, until February 2014.

With respect to the issue of *healthy ageing*, the Netherlands is a leading member of the *European Innovative Partnership on Active and Healthy Ageing*. It has five accredited Reference Centres and the 'Medical Delta' enjoys a high international reputation for its work in *preventing falls* among the elderly. In the Netherlands, the focus of policy on healthy ageing primarily lies in *stimulating economic and voluntary participation in society and self-reliance*. The Ministry of Social Affairs and Employment – in cooperation with the OECD – is the leading ministry regarding *Ageing and Employment Policies* [OECD report 'Ageing and Employment Policies: Netherlands 2014']. Furthermore, the Netherlands is a partner in the '*Joint Programming Initiative* (JPI) "More Years, Better Lives – The Potential and Challenges of Demographic Change" 2014'. This programmes seeks to enhance coordination and collaboration between European and national research programmes related to demographic change.

Regarding gender-specific health policies, an objective of the NPP is to *promote gender-aware care*. Taking gender differences into account (from diagnosis to treatment) may have a significant preventive effect and help to reduce healthcare costs. The Directorate of Emancipation (Ministry of Education) is encouraging the adoption of gender-aware care alongside an alliance of field parties, including researchers, physicians, health insurers and women's advocacy groups. Co-ordination with other (prevention) activities in the domains of school, work, neighbourhood and care will be sought wherever possible. An alliance of organisations concerned with gender and health has been formed, with specific attention to encouraging social participation among unskilled and/or functionally illiterate women. In the *LGBT and Gender Equality Policy Plan of the Netherlands 2011 – 2015*, the cabinet advocates LGBT (lesbian women, gay men, bisexual women and men and transgender people) and gender equality. The Netherlands will continue to actively work to improve the position of women and girls in the world and particularly *sexual and reproductive health* and rights of women and girls.

## **Implementation**

The performance of health promotion is primarily at a local level: in the healthcare setting, *school*, *work*, *or neighbourhood*, preferably in co-operation. Several stakeholders play a role in the performance of health promotion at school, work, or neighbourhood, including health promotion professionals, teachers and employers.

Prevention in the *primary healthcare* setting includes, for instance, early detection of (early stages of) chronic diseases, and life style advice. Prevention of chronic diseases forms an increasing part of medical guidelines. *Youth health care* (performed by the community health services) provides preventive care for all children aged between 0 and 19 years. Until the age of 4, children visit child





health centres for check-ups. After the fifth birthday, the preventive check-ups are taken over by school doctors and nurses. The most important tasks of preventive health care are the monitoring of growth and development; early detection of health problems (or risks) or social problems; screening and vaccination; and providing advice and information concerning health. Specialized physicians and nurses provide this care. When treatment is necessary, the child health centre will refer to other primary health care providers, mostly GPs.

### Monitoring

No systemic monitoring of health promotion and prevention programmes takes place in the Netherlands. However, at different levels, the output is monitored:

- The *Health Care Inspectorate* monitors the performance of the municipal public health services.
- The Public Health Status and Forecasts Report is based on the most recent national and local monitoring by Statistics Netherlands and the community health departments (see further).
- The research program of The Netherlands Organisation for Health and Research (ZonMw) stimulates and funds the evaluation of preventive programmes and interventions. This research programme is enshrined in the Public Health Act. Every four years a new research programme for prevention needs to be initiated.
- Implementation and effectiveness of local health promotion interventions are monitored by the *Dutch Recognition System:* an assessment system for the quality and effectiveness of interventions on health promotion, youth (health) care, youth welfare, physical activity, sport and the social sector.
- At local level the community health services monitor the health status of their inhabitants every four years. There are specific monitors for youths and adults.



# Identifying and Promoting Good Practices of Health Promotion Interventions

The RIVM (National Institute for Public Health and the Environment) Centre for Healthy Living (CGL) supports the delivery of efficient and effective local health promotion in the Netherlands. It promotes the use of the most appropriate lifestyle interventions (health promotion and primary and secondary prevention) by clearly presenting available interventions, planning instruments, communication materials and links to relevant Dutch knowledge and support organisations on the portal <u>Loketgezondleven.nl</u>. This portal also presents information on the quality, effectiveness and feasibility of health promotion interventions.

#### Database with lifestyle interventions

Organisations working in the field of health promotion interventions can request to have their intervention included in the database with health promotion (lifestyle) interventions. In 2014, the database contained 1900 interventions. The Centre for Healthy Living promotes gathering interventions, for instance by holding workshops. The uptake of interventions is stimulated by the Dutch Research Foundation (ZonMw) and the Ministry of Health, Welfare and Sport. Every organisation with a grant for research or implementation of a lifestyle intervention needs to enter their intervention in the database of Loketgezondleven.nl.

#### Procedure for selecting best practices

To identify and select best practices, the Centre for Healthy Living developed an assessment system for interventions, i.e. the Dutch Recognition System. The aim of the recognition system is to gain a better view into the quality and effectiveness of health promotion interventions and to increase the quality of professional practice in health promotion. Organisations are supported to submit an intervention using a standard submission form. Inclusion criteria for submitting are the availability of:

- a manual of the intervention
- a process evaluation
- the material for the next two years
- a contact person for questions about the implementation of the intervention

The registration desk of the Centre for Healthy Living checks the criteria for inclusion, the completeness and quality of the submitted forms, and provides initial feedback to improve the submission if necessary. They also check the relevance of the intervention. Then there are two types of possible assessment (see Figure 1, next page):

1. An assessment of the description of the objective, target group, approach and boundary conditions by professional practitioners or other experts from the sector concerned. This happens in the form of a peer review by practice panels. Based on this, interventions can receive the assessment 'Well Described'.



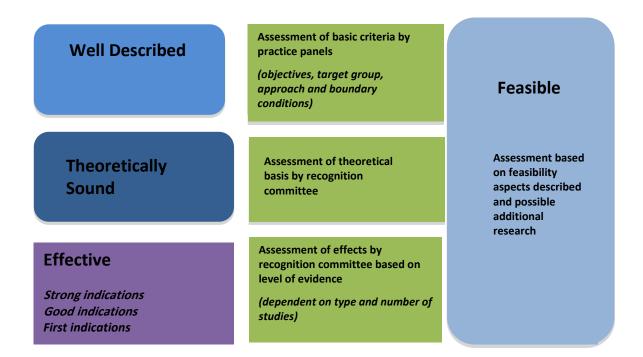


2. An assessment of the theoretical basis and/or effectiveness of the intervention by an independent expert committee. Interventions that are assessed as good by the Recognition Committee receive a recognition of 'Theoretically Sound' or 'Effective' There are several subcommittees for different types of interventions, for example youth health care and health promotion for adults and elderly.

For both types of assessment, an evaluation for **Feasibility** is also possible, i.e. strong and weak features with respect to the feasibility of the interventions. Interventions that are assessed to be feasible are easy to adapt to another context.

Detailed description of the criteria of the different assessment levels is presented in the annex.

Figure 1 Levels of assessment according to the Dutch Recognition System



#### Promotion of the best practice in the database Loketgezondleven.nl

All health promotion interventions requesting publication or assessment are presented in the intervention database Loketgezondleven.nl, including the level of assessment. When searching for health promotion interventions on a specific theme, the interventions with the best available evidence will be presented at the top of the list. In the database, interventions or best practices can be searched by the level of assessment or by using key words on the topic, target group, setting or by using free text words. Table 1 shows the amount of assessed interventions and their assessment level, dated at June 2014. There are currently approximately 244 interventions, which have been assessed by the committee or practice panel. These are the interventions which are recommended for use.





Table 1 Total number of assessed interventions	
in the Dutch portal Loketgezondleven.nl June 2014)	
Strong indications of effectiveness	5
Good indications of effectiveness	22
First indications of effectiveness*	1
Theoretical Sound	136
Well Described	80

<sup>\*</sup> The assessment of this level started this year

#### List of recommended interventions for diabetes and other chronic diseases: Overview

The database contains lists of recommended interventions for several topics, for example type 2 diabetes, interventions for low-income groups, chronic diseases, the elderly, community interventions, overweight, alcohol, depression, primary school interventions, etc. The recommended interventions are provided from the 244 interventions with an assessment level. These lists of recommended interventions are part of online manuals for healthy municipalities that support local professionals and local policy makers in their local work on health promotion.



## **Forecasting Studies**

Since 1993, the National Institute for Public Health and Environment (RIVM) presents a **Public Health Status and Forecast Report (PHSF)** every four years. This report, including digital information presented on websites, gives an overview of the current state of public health in the Netherlands, including an estimation of the future situation in ten to twenty years. It gives an overview of health and disease, risk factors, care and prevention in the Netherlands. The report represents the most consistent and reliable sources of information available. Statistics are in turn based on national and local monitoring by Statistics Netherlands and the municipal health departments.

How healthy are the Dutch, both now and in the future? Are there major differences between population groups, regions or neighbourhoods? As a country, how do we compare with our neighbours and what can we conclude from this? What have all our efforts concerning prevention and care actually achieved, also in terms of the constantly increasing costs? Will health care remain affordable for our rapidly ageing population? These are the kind of questions that are discussed in the PHSF.

The most recent report and website (PHSF 2014: 'A healthier Netherlands') were published in 2014. Some of the main results are:

- Life expectancy is still rising. The current life expectancy for men (79 years) will increase by 3 years, to 82 years, in the forthcoming 15 years (2030). For women, life expectancy will increase by 2 years, from 83 years in 2012 to 85 years in 2030.
- The number of people with chronic diseases will increase from 5.3 million in 2011 (32% of the population) to 7 million in 2030 (40%). However, more than around 65% of the adult population with a chronic disease is in the workforce, compared to 80% of the adult population without a chronic disease. Moreover, there is no difference in working participation and good self-perceived health for adults with a chronic disease without disabilities compared to adults without a chronic disease.
- Health inequalities are large: health expectancy among low educated people is 6 years shorter than life expectancy among high educated people. For life expectancy with good self-perceived health, the difference between high and low educated people is even higher at 19 years.
- In addition to forecasting based on trends (estimates of trends in the future based on trends in the past), the PHSF 2014 presents foresight as well. A participatory process in which stakeholders were involved from a broad range of sectors (health professionals, insurance companies, patient organizations, national and local policy makers) results in four perspectives on public health, based on societal challenges:
  - o 'In the Best of Health': To keep people healthy as long as possible and cure illness promptly.
  - o 'Everyone Participates': To support vulnerable people and enable social participation.
  - o 'Taking Personal Control': To promote individual autonomy and freedom of choice.
  - 'Healthy Prosperity': To keep health care affordable.

These four perspectives make explicit the diversity in visions that exists on the notions of health and care. They have helped us discover strategic opportunities and options for the future, which may help policy makers in their political discussions and the policy making process.





Target groups for the report are national and local policy makers, health professionals and students. The Ministry of Health, Welfare and Sport has commissioned the report, and uses it as a primary source for writing policy notes and drawing policy priorities. In a four-year prevention cycle, the national policy document on health – which sets out the governmental health policy ambitions – is based on the PHSF of the previous year; i.e. 'Health close to people' (2011) was based on the 2010 PHSF ('Towards better health').

In addition to a national Public Health Status and Forecast Report, about half of the municipal public health services have written a *regional Public Health Status and Forecast Report*, which serves as an important source for local health policy. In the above-mentioned four-year prevention cycle, the local health policy documents — which set out the local health policy ambitions — is written two years after the national PHSF is presented. The local notes are based on the local PHSF — if available — but also on other local health reports, as well as on the national PHSF as a benchmark and the national health policy note.

Furthermore, several thematic forecasting studies have been presented in the Netherlands since 2000, although not always including future trend scenarios. An example is a report on the health status of the elderly ('Healthy ageing in the Netherlands', 2011). This report may serve as input for national and local health promotion policy, as well as health promotion practice, focused on preventive health care services for the elderly. Some of the main results were:

- Between 2010 and 2050 the number of people aged 65 years and older in the Netherlands will increase from 2.6 million to 4.5 million. At that point, this age group will comprise of one quarter of the Dutch population, with 40 percent being over 80 years of age.
- One-half of the Dutch elderly who live independently suffer from one or more chronic diseases. From the age of 75 years onwards, the risk of morbidity and disability clearly increases, while perceived health status and physical well-being decreases. The most common diseases in old age are coronary heart disease, stroke, arthritis and diabetes, which also cause the greatest loss of healthy life years.
- Older people who are ill do not necessarily experience limitations in their daily functioning.
   Two thirds of the elderly who suffer from chronic diseases are not limited physically, and more than half of these feel healthy.
- More than one quarter of elderly people provide informal help to friends and one third are active in organised volunteer work.
- Effective preventive measures aimed at maintaining the health and autonomy of elderly people have multiple goals. First, to prevent illness and disease and to postpone death. Second, to optimise the functioning of the elderly as they age, such as providing guidance and support in how to do this or by changing elements in the environment. Important target groups for preventive interventions are the elderly aged 75 years and over, (single) older women, those with a low educational level, ethnic minority elderly and elderly caregivers.

In 2007, a thematic forecasting report on diabetes was presented: 'Diabetes until 2025. Prevention and healthcare in coherence'. The main results were:

• The number of diagnosed diabetes patients in the Netherlands has risen from 160,000 in 1990 to 740,000 (95% confidence interval 665-824 thousand) in 2007. Extrapolating this trend will lead to more than 1.3 million people with diagnosed diabetes in 2025. Different factors may contribute to this increase. About half of the increase can be explained by the increasing number of people with overweight and obesity, and other risk factors for





- diabetes, i.e. theoretically avoidable. The other half of the increase can be explained by more intensive screening and by ageing of the population.
- The effects of prevention may be optimized by increasing the reach and efficacy of preventive interventions.
- The effects of care may be optimized by increased use of a combined care package including medication, lifestyle interventions, self-management, and education. This is important regarding the prevention of cardiovascular diseases as a complication of diabetes.
- Cooperation between prevention and healthcare is needed.
- Risk factors for diabetes cannot be excluded from risk factors for other chronic diseases such as cardiovascular diseases.

This report was one of the sources of input for diabetes policy registered by the Ministry of Health, Welfare and Sport. From 2009 to 2013, the National Diabetes Action Programme was initiated in order to improve effective prevention, good care and reducing the increasing costs of diabetes. It was coordinated by the Dutch Diabetes Federation. Diabetes is a spearhead in Dutch policy notes, including the National Policy Document on Health (2011) and the National Prevention Programme (NPP) (2014).

In 2014, a report on the health status of youth was published ('Growing up healthy: Youth Health Survey', 2014). This report may serve as input for national and local youth health promotion policy, as well as youth health care practice. Some of the main results were:

- In general, Dutch youth are healthy. Youth health has not changed considerably in the last decade. However, some health aspects have changed either in a positive or negative way. For instance, adolescents smoke and drink less, but the number of E.R. admissions due to extreme alcohol use has increased. The number of overweight children has stabilized in the past few years, but remains at a high level.
- Children growing up in low socio-economic circumstances more often engage in unhealthy behaviours or have psychosocial problems compared to children growing up in high socioeconomic circumstances.

Dutch youth health care addresses the main health problems of children and adolescents. Youth health care could use its expertise by extending their focus to include high-risk groups, such as youths in disadvantaged areas. From a 'public health point of view', youth health care can contribute to youth policy-making, for instance to health policy at schools or in the community. The recent introduction of a health care consultation for adolescents (15/16 years of age), which is increasingly being implemented in the Netherlands, enables youth health care to strengthen health behaviour and school participation of children and adolescents.

### **Cost-Effectiveness Studies**

One of the websites of The National Institute for Public Health and the Environment (RIVM) consists of a literature database of economic evaluations in the field of disease prevention, health promotion and health protection (http://kosteneffectiviteit-preventie.rivm.nl/). Since 2006, the library of the RIVM delivers a monthly list of new economic evaluations published in PubMed, which has led up to nearly 3000 titles until now. For this CHRODIS project, we have consulted our database and collected 29 economic evaluations directed on the prevention of type 2 diabetes and cardiovascular diseases, overweight and obesity, smoking, alcohol misuse, physical activity and health in general. Below, we





will describe five of the most relevant economic evaluations. These economic evaluations were undertaken in the Netherlands after 2000 and were of good quality, based on the guidelines of economic evaluations (Drummond and Jefferson 1996). The described economic evaluations are all performed alongside a randomized controlled trial (RCT). This results in short-term costs and health benefits. For the calculation of long-term costs and health benefits, mathematical computer models are needed.

The RIVM has a lot of experience in calculating the long-term health benefits and costs for lifestyle interventions directed at smoking cessation, alcohol misuse and diabetes. The model used is the Chronic Disease Model, in which twenty chronic diseases are included in the field of heart disease, COPD, diabetes cancer, and musculoskeletal disorders (Hoogenveen et al. 2010; Jacobs-van der Bruggen et al. 2007).

An often used cost-effectiveness threshold for preventive interventions in the Netherlands is €20,000 per QALY (van den Berg et al. 2008). No threshold exists for intermediary outcome measures like kg weight loss. From the economic evaluations that are described below, we recalculated all prices to the 2013 Euro which makes it possible to compare interventions with the same outcome measure with each other (CBS 2014).

#### Type 2 Diabetes

An economic evaluation was performed alongside a randomized controlled trial with a 2-year follow-up directed at a lifestyle intervention to prevent type 2 diabetes and cardiovascular diseases (van Wier et al. 2013). The intervention was based on cognitive behavioural principles and consisted of up to six monthly individual 30-minute face-to-face counselling sessions with a trained practice nurse, followed by three monthly 15-minute sessions by phone. The target group of this intervention were adults aged 30-35 years old, at risk of type 2 diabetes and/or cardiovascular disease. The aim of the intervention was to improve physical activity, diet or smoking behaviour, as chosen by the participants. The control group received care as usual. A total of 622 participants were randomly assigned to either the intervention group (n=314) or the control group (n=308). The study was conducted from a societal perspective and the clinical outcome measure was the quality adjusted life year (QALY).

Compared with the control group the intervention was cost saving which means more effective and less costly. The sensitivity analysis showed the robustness of the results.

#### Cardiovascular Disease (CVD)

From a societal perspective, a cost-effectiveness analysis was performed for a lifestyle intervention for workers in the construction industry (Groeneveld et al. 2011). The intervention was directed at male workers in the construction industry aged 18-65 years old with an elevated risk of CVD. The intervention consisted of three 45 to 60 minute face-to face counselling sessions, in which the CVD-risk profile of the participants was discussed and in addition, the benefits of lifestyle changes and the willingness, readiness, and perceived confidence in the ability to change were discussed. Participants had the opportunity to choose aims for physical activity or diet. The short- and long-term goals were





discussed too. Health outcome measure was body weight. A total of 573 participants were randomly divided into the intervention group (n=293) and the control group (n=280). The follow-up time of the study was 12 months.

The incremental cost-effectiveness ratio (ICER) of the intervention compared with the control was €160/kg weight loss. The sensitivity analysis shows that when an elasticity of 0.8 was applied (100% loss of work time corresponds to an 80% reduction in productivity) the ICER was €193/kg weight loss.

#### **Smoking**

An economic evaluation was performed embedded in a 3-arm RCT directed at smoking cessation (Smit et al. 2013). A societal perspective was used. Smokers were randomized to receive multiple tailoring and counselling (n=163), multiple tailoring only (n=132), or usual care (n=119). Multiple tailoring consisted of four personalized feedback letters: at baseline, 2 days after the personally intended quit date, after 6 weeks, and after 6 months. In the multiple tailoring and counselling group, the participants received a counselling meeting with a practice nurse instead of the third letter. After 6 months, the nurse phoned the participants. Usual care consisted of standard practice, for example, a brief intervention consisting of a single recommendation to stop smoking or more intensive interventions.

Multiple tailoring was more expensive and less effective compared to usual care. Multiple tailoring and counselling showed more effectiveness and more costs compared to usual care, resulting in an ICER of €42,315 per QALY. Looking to the cost-effectiveness per abstinent smoker, the ICER of multiple tailoring compared to usual care was €5355. The sensitivity analyses showed the robustness of the results. A potential explanation for the relatively high costs per QALY was that the follow-up time period of 12 months was not long enough for the beneficial effects of the intervention on smoking abstinence to be translated into detectable changes in quality of life, as recent ex-smokers are known to suffer from withdrawal symptoms (Smit et al. 2013).

#### Alcohol

The cost-effectiveness and cost-utility of internet-based interventions for harmful alcohol use were presented in an economic evaluation (Blankers et al. 2012). The study was conducted from a societal perspective and a follow up of 6 months. Two interventions were compared to each other: Internet-based therapy (IT) and Internet-based-self-help (IS). In IS, participants acquired skills and knowledge about coping with craving, drinking lapses, and peer pressure without the support of a therapist. The IT intervention consisted of 7 synchronous text-based chat-therapy sessions of 40 minutes, with a personal (internet) cognitive behavioural therapy-trained therapist and homework. A total of 136 participants were included and randomly assigned to IT (n=68) and IS (n=68).

The ICER of IT compared to IS was €3767 per 1 additional treatment responder (no more than 14 standard units for women, or 21 units for men, per week). The ICER per QALY was €15,069. The sensitivity analyses showed more sensitivity to changes in productivity losses than to changes in intervention costs. In all sensitivity scenarios, the ICER was below €20,000.

Healthy diet: fruit and vegetable intake





In a model-based economic evaluation, the cost-effectiveness was calculated for two interventions promoting fruit and vegetable intake among schoolchildren aged 10 years old (te Velde et al. 2011). One intervention was called Pro Children and consisted of three main components: 1. The school component consisted of the provision of a piece of fruit, a carrot or a tomato for free twice a week. 2. The classroom curriculum consisted of worksheets and a web-based computer-tailored feedback tool. 3. The family component encouraged parents to be involved in the intervention. The second intervention was called Schoolgruiten. This intervention consisted of better availability and accessibility of fruits and vegetables at school through a free fruits and vegetables scheme. The schools were encouraged (not obliged) to use a curriculum. This intervention did not include a family component, nor did it include a computer-tailored feedback tool.

The ICER of the Pro School intervention, compared to no intervention, was €6874 per DALY. The ICER of the Schoolgruiten, compared to no intervention, was €12,809 per DALY. In the model, the assumption was made that 30% of the effect on consumption was permanent. The discount rate was 3% for both costs and effects. The sensitivity analysis showed sensitivity for the discount rate and the proportion of the effect that remains lifelong (the time horizon used).

#### Literature on cost-effectiveness

- Blankers, M., U. Nabitz, F. Smit, M. W. Koeter, and G. M. Schippers. 2012. Economic evaluation of internet-based interventions for harmful alcohol use alongside a pragmatic randomized controlled trial. J Med Internet Res 14 (5):e134.
- CBS. 2014. Consumentenprijsindices (CPI) alle huishoudens, 2006=100 2014 2014 [cited 1 juli 2014]. Available from http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=71311ned&D1=0-6&D2=0&D3=(I-39)-l&VW=T.
- Groeneveld, I. F., M. F. van Wier, K. I. Proper, J. E. Bosmans, W. van Mechelen, and A. J. van der Beek. 2011. Cost-Effectiveness and Cost-Benefit of a Lifestyle Intervention for Workers in the Construction Industry at Risk for Cardiovascular Disease. J Occup Environ Med 53 (6):610-617.
- Hoogenveen, R. T., P. H. van Baal, and H. C. Boshuizen. 2010. Chronic disease projections in heterogeneous ageing populations: approximating multi-state models of joint distributions by modelling marginal distributions. Math Med Biol 27 (1):1-19.
- Jacobs-van der Bruggen, M. A., G. Bos, W. J. Bemelmans, R. T. Hoogenveen, S. M. Vijgen, and C. A. Baan. 2007. Lifestyle interventions are cost-effective in people with different levels of diabetes risk: results from a modeling study. Diabetes Care 30 (1):128-134.
- Smit, E. S., S. M. Evers, H. de Vries, and C. Hoving. 2013. Cost-effectiveness and cost-utility of internet-based computer tailoring for smoking cessation. J Med Internet Res 15 (3):e57.
- te Velde, S. J., J. Lennert Veerman, N. I. Tak, J. E. Bosmans, K. I. Klepp, and J. Brug. 2011. Modeling the long term health outcomes and cost-effectiveness of two interventions promoting fruit and vegetable intake among schoolchildren. Econ Hum Biol 9 (1):14-22.
- van den Berg, M., G. A. de Wit, S. M. Vijgen, M. C. Busch, and A. J. Schuit. 2008. [Cost-effectiveness of prevention: opportunities for public health policy in the Netherlands]. Ned Tijdschr Geneeskd 152 (23):1329-1334.
- van Wier, M. F., J. Lakerveld, S. D. Bot, M. J. Chinapaw, G. Nijpels, and M. W. van Tulder. 2013. Economic
  evaluation of a lifestyle intervention in primary care to prevent type 2 diabetes mellitus and cardiovascular
  diseases: a randomized controlled trial. BMC Fam Pract 14 (1):45.





# Gaps and Needs in the Prevention of Chronic Diseases (Cardiovascular Diseases and Type 2 Diabetes)

#### Leadership/Strategic Vision

In the Netherlands, there are no clearly identifiable leaders in the public health sector to advocate health promotion and primary prevention as a whole. However, for specific themes, for instance the prevention of obesity, leaders exist.

Policy frameworks relating to health promotion and the primary prevention of chronic diseases are available in the Netherlands, but not always on a structural basis. Examples of temporary policy programmes are the National Prevention Programme (2014-2016) and the National Diabetes Action Programme (2009-2013). There are networks (for instance the Dutch Public Health Federation) and organisations (for instance the Collaborating Health Funds) which have joined forces with the ambition to have an impact on policy for health promotion and prevention. On a structural basis, the publication of the Public Health Status and Forecast Report (PHSF), followed by the publication of the national and local health policy documents, takes place on a four-year cycle. With respect to target groups, health promotion policy is focused on youth, and not on adults or the elderly. Healthy ageing policy is directed at staying at home as long as possible, and does not focus on primary prevention or health promotion. Policy frameworks on health inequalities are available in the Netherlands, for instance the Dutch District Approach and the incentives programme Healthy in the City. The National Prevention Program also has a special focus on health inequalities.

There is no large gap on the availability of government reports on primary prevention and health promotion in the Netherlands. Every four years both the national and local governments present a policy document on health including the policy aims for the forthcoming years. However, local policy documents are not always present.

#### **Evaluation (Policy level)**

There is no structural evaluation of the implementation of primary prevention and health promotion policies and programmes in the Netherlands. Some national and local programmes have been evaluated or will be evaluated in the future on processes such as reach and feasibility. For example, the recent National Prevention Program will be evaluated. However, these evaluations are not on a structural basis. The Public Health Status and Forecast Report (PHSF) can be seen as an evaluation instrument on public health policy as a whole. However, information on differential impacts on socio-economic groups and/or regional inequalities or differential impacts on age groups is scarce.

Mechanisms to scale-up best practices and/or transfer these from one region to another are available in the Netherlands, but not on a structural basis. Examples of non-structural resources are the implementation of Healthy Schools Canteens, and the JOGG (EPODE) programme. Regarding the presentation of recommended health promotion interventions on the portal Loketgezondleven.nl, the uptake of best practices deserves attention. As mentioned above, no guidelines, legislation or structural funding exists to increase the scale of the implementation of best practices.

#### **Cross-governmental action**





Cross-governmental mechanisms are available on themes such as overweight, health inequalities or life style themes such as physical activity or alcohol consumption. However, no cross-governmental mechanisms are available for chronic diseases, i.e. cardiovascular disease, diabetes and stroke specifically.

Cross-governmental mechanisms in the Netherlands, known as 'Health in all policies' (HiAP), are recommended in Dutch health policy documents. Several national policy programmes, such as the Dutch District Approach (local 50, urban 40) and the Consortium Integrated Approach Overweight, as well as the collaboration 'Consortium Instruments for integrated action' stimulate HiAP at the local level. The Public Health Act states that HiAP is legally bound, for example, in local health promotion programmes or in the environment. However, although there are mechanisms to stimulate cross-governmental action, it is still difficult to realize collaboration with other sectors than the health sector. However, a recent initiative for cross-governmental action is the National Prevention Program, which is supported by four ministries: Health, Welfare and Sport; Infrastructure and Environment; Education; and Social Affairs. Furthermore, cross-governmental actions are present in Healthy schools and tax on tobacco. Results of former similar programmes, however, show that for cross-governmental collaboration a high level of agreement and coordination from the government in general and the Ministry of Health in particular is needed.

Health Impact Assessment Tools (HIAT) to study the impact of cross-governmental action on themes such as overweight, healthy living or lower education are used in the Netherlands. HIAT focusing on healthy living are mainly applied at a local level. Recently, a Health Impact Assessment with an equity focus (HIAef) at the national level was undertaken to determine whether the policy on sustainable employment has a potential differential impact on the health of vulnerable groups of workers. This was done within the European joint action on health inequalities "Equity Action" (www.equityaction-project.eu). However, Health Impact Assessment Tools are not used in the Netherlands specifically for cardiovascular disease, diabetes and stroke.

#### **Financing**

Financial resources for health promotion and primary prevention are limited in the Netherlands compared to financial resources for care and cure. The total budget for prevention was relatively stable in the past few years. However, the local budgets for health promotion programmes are decreasing and are often on a temporary basis. It is unclear how the local flow of money on health promotion and primary prevention will change in the forthcoming years due to decentralizing the policy of care for youths and long-term care for the elderly from the national to the local level. From the local budgets, financial resources are not earmarked for health promotion and primary prevention. The processes to allocate funding for primary prevention and health promotion differ between municipalities. Therefore, transparency of the funding processes is restricted and the size of the local budgets differs.

Primary prevention is not part of the basic health insurance in the Netherlands. Therefore, health insurers do not pay for costs that are made for primary preventive tasks by health professionals. However, an exception is quit smoking advice by the general practitioner that is part of the basic health insurance. Furthermore, health insurers do pay for secondary preventive tasks, such as **influenza vaccination** among risk groups. The municipalities receive earmarked budgets for youth health care with mainly primary preventive tasks.





Policy plans and policy documents mostly include long-term health objectives to address chronic diseases. For instance, the National Prevention Programme includes health objectives to 2030. However, national and local budgetary timeframes are restricted to four years at the maximum. Therefore, financial resources do not enable long-term planning.

#### Data/Monitoring

The Netherlands have a sufficient monitoring system on chronic diseases. Several national registrations are available, including a yearly health survey from Statics Netherlands, hospital registrations, primary care registrations and mortality registrations. The Public Health Status and Forecast Report (PHSF) integrates the available information on health, diseases and risk factors of the Dutch population every four years. Self-reported data on risk factors are available on an annual or biennial basis. Most recent data are presented on websites as well (i.e. the National Public Health Compass, and Statistics Netherlands). Several data are available and presented, including stratifications by social markers, age groups, sex, regional markers, and time trends. Also, data on employment and education are available.

Although several national registrations and surveys on chronic diseases are available in the Netherlands, collaboration and coherence in data collection and comparability between different data sets is limited. There is no large comprehensive survey on chronic diseases collected on a continuing basis.

With respect to international data, the Dutch health information system is partially in accordance with EUROSTAT, European Health Interview Survey (EHIS) and WHO data reporting requirements. With respect to EHIS, starting from 2014, the Netherlands will participate in the first obligatory data collection. Furthermore, the Netherlands had been participating in a pilot on diagnosis-specific morbidity data within EUROSTAT, as well as a pilot of the European Health Examination Survey (EHES) with measurements on hypertension, cholesterol and overweight. However, obligatory data-collection rounds had not yet taken place. Furthermore, an analysis of the availability and feasibility of Dutch data was made, according to the indicators in the ECHI-shortlist.

#### Implementation

Resources for the implementation of the most effective methods of health promotion and primary prevention do not exist in the Netherlands on a structural basis. Incidentally, there are incentive programmes to implement effective methods such as the National Diabetes Plan and JOGG on the prevention of overweight among children (implementation of EPODE).

The Netherlands Organisation for Health Research and Development (ZonMw) stimulates and funds research on health promotion interventions that include implementation plans. However, the bottleneck for implementation of interventions that are part of scientific research by universities is the ownership of health promotion interventions. After publication of the articles, the intervention activities are finished and often no organisation is adopting the intervention for implementation. Furthermore, the Dutch Recognition System of the Centre of Healthy Living aims to stimulate the implementation of these effective methods. The Netherlands Organisation for Health Research and Development stimulates the use of these effective methods in some of their specific implementation programmes. However, no guidelines, legislation or structural funding exists for the implementation of best practices.





The Centre for Healthy Living has a coordination function in the Dutch health promotion field. The extent to which policies relating to health promotion and the primary prevention of chronic diseases are implemented in practice differ between municipalities. Some municipalities have implemented health promotion and primary prevention policies, such as JOGG (EPODE), but others have not. There are no legal mechanisms and policies in place to support formal partnerships between NGOs, civil society, and government to address priorities in primary prevention and health promotion.

Programmes and interventions that are sensitive to specific needs of more vulnerable groups, or target groups with respect to gender, age and other cultural, social or linguistic dynamics exist in the Netherlands, but not on a structural basis. In the best practice portal Loketgezondleven.nl these interventions are scarce and there are hardly any effective interventions for these groups.

#### **Capacity and education**

The capacity of human resources to deliver health promotion and primary prevention programmes and interventions is limited and decreasing in the Netherlands. Both in practice, and with regard to research and knowledge institutes, the capacity of human resources has decreased in the past years. There is no gap in information on health equity and socio-economic determinants of health in public health training curricula. However, the extent of information depends on the educational institute. Some universities include a large amount of information on health equity in their curriculum, others include less.

In the Netherlands, several public officials that work in sectors with an impact on health are investing in training on chronic diseases and their risk factors. Some examples are GP-assistants, nurse practitioners or diabetes nurses who are primarily trained in secondary and tertiary prevention, and health promotion workers or district nurses who are primarily trained in primary prevention. However, the capacity of education and human resources are limited.

#### **Evaluation (of programmes and interventions)**

Health promotion and primary prevention programmes and interventions are not evaluated on a systematic basis in the Netherlands. The resource capacity to evaluate the health promotion and chronic disease prevention programmes and interventions is limited. For instance, the financial budget of the Netherlands Organisation for Health Research and Development for health promotion research is small compared to the budget for research on other health topics. Furthermore, the number of interventions being requested for recognition on effectiveness or quality (approximately 250 in June 2014) is small compared to the total number of interventions in the database (approximately 1900 in June 2014) as well as the total number of interventions performed in the Netherlands (unknown, but more than 1900). The number of recognized interventions with an effect evaluation is even less (34).

Cost-effectiveness studies on health promotion and primary prevention programmes are scarce. The Dutch Recognition System on the effectiveness of health promotion interventions does not contain a cost-effectiveness indicator. Financial and human resources are often too small to be able to execute a cost-effectiveness analysis. However, on a non-structural basis, universities, knowledge institutes and research centres perform cost-effectiveness analyses, more often of interventions that are part of an RCT or a modelling study, and rarely of an intervention that has been implemented in practice.





Outcomes of evaluations and cost-effective analyses are sometimes used to inform practice, but revision of practices due to unfavourable research outcomes almost never takes place in the Netherlands.

#### Partnerships and multidisciplinary work

Health promotion and primary prevention programmes are hardly ever integrated into health care practice, such as into general practice and hospital care. However, over the last few years, there has been more attention towards prevention in health care. For example, the standards for diabetes care include aspects of primary prevention and health promotion. In addition, a GP-guideline on quitting smoking exists. Furthermore, a prevention consultation for GP-patients with cardiovascular or diabetic risk factors has been pilot-tested in several Dutch regions. However, most preventive practices can be assigned to secondary or tertiary prevention and not to primary prevention. Furthermore, the actual continued implementation of primary prevention in practice has proven to be problematic to date.

An exception on the integration of primary prevention in health care is the work of specific health promotion occupations, such as youth practitioners. Primary prevention and health promotion competencies are a very small part of the basic training curriculum of health care professionals, except the above-mentioned occupations. Secondary and tertiary prevention, however, does form an important part of the curriculum as well as for the work of health care professionals (for instance training in motivational interviewing techniques). Also, multidisciplinary teams in primary health care exist in secondary and tertiary prevention, but not in health promotion and primary prevention. In some areas, there are pilots with 'community scans': after screening, multidisciplinary teams, including GPs, physical therapists and sports therapists, together make a plan to solve the main problems in the area.

Vulnerable groups are able to make use of the health care system as a result of obligatory participation in the health insurance. Furthermore, in most municipalities, membership fees for sports are lower for people with low incomes than for people with high incomes.

Several partnerships amongst health authorities and other public and private sector organisations exist in the Netherlands, for instance the Healthy Weight Covenant, partnerships on alcohol prevention, and the smoke-free alliance. With respect to health inequalities, a national health literacy alliance has been recently initiated. In areas related to the social determinants of health, an increasing number of 'social district teams' have been established. For the elderly, partnerships on the prevention of falls exist.

#### **Knowledge Development**

Several universities, knowledge centres, and municipal public health services perform research on effective primary prevention and health promotion programmes and interventions, but financial and human resources have been decreasing in the past years. Research findings and results are communicated to policy and decision makers by scientific publications and policy reports. Scientific publications and policy reports that are written by governmental orders are often performed in





consultation with policy makers. For instance, the Public Health Status and Forecast Report (PHSF) is performed in close consultation with scientific experts and policy makers. Next to research findings, factors such as financial budget, political preferences or ethical considerations play a role in policy decisions.



## **Annex** Detailed description of the criteria of the different assessment (recognition) levels

In the next pages the elaborated criteria are presented of the level of:

- 1. Well described
- 2. Theoretically Sound
- 3. Feasibility (this is not presented as separate level but is an important part for all levels)
- 4. Effectiveness



#### Criteria Well Described

Criteria Well Describ	Criteria Well Described				
1. Description	Background	<ul> <li>Nature, size, spread and possible consequences of the problem or theme are clearly described.</li> </ul>			
	Target group	<ul> <li>The target group for the intervention is clearly described on the basis of relevant characteristics; possible inclusion and exclusion criteria are stated.</li> <li>If the target group is involved in the development of the intervention then how this happens is described</li> </ul>			
	Objectives	<ul> <li>The objectives have been formulated as tangibly as possible and if relevant are distinguished in main objective and sub-objectives.</li> </ul>			
	Approach	<ul> <li>Design: the sequence, frequency, intensity, duration, timing of activities, recruitment method and location of the intervention are described.</li> <li>Content: the method of the intervention is described as completely as possible in concrete activities.</li> <li>A description is given of the parties involved in the implementation and how these parties collaborate.</li> <li>The materials needed and their availability are clearly described</li> </ul>			
2. Consistancy	Accountability: impetus (first step) for substantiation	<ul> <li>The relationship between background, objectives, target groups and approach are clearly described.</li> </ul>			
3. Implementation	Costs	The necessary costs of and/or hours needed for the intervention are stated.			
	Expertise	<ul> <li>The specific skills and vocational training of the professionals who will implement the intervention are described.</li> </ul>			
	Support needed from people	Which people are needed to support the intervention is stated and how this support can be created is described.			
	Manual	<ul> <li>The manual contains a description of the objectives, target group and materials as well as the content of the various activities.</li> </ul>			
	Support for realising the intervention	If support is offered for implementing and realising the intervention then this is described.			
	Quality control	<ul> <li>How the quality of the intervention realised must be monitored is described.</li> </ul>			



## Criteria Theoretically Sound

Criteria Theoret	Criteria Theoretically Sound			
1 Description	The same as Well described			
2 Criteria for the Theoretical underpinning/ intervention logic	<ul> <li>The problem, risk or theme is completely and clearly described with data about, for example, the nature, severity, size, spread, perception of those involved, costs and other possible consequences.</li> <li>An analysis has been made of how the problem has arisen in which the possible causal, risk, maintenance, mitigating or protective factors are described.</li> <li>The factors that will be tackled with the intervention are stated and linked to the objectives and sub-objectives of the intervention (justifying objectives).</li> <li>The effective elements (or techniques or principles) in the approach are stated and justified, in the framework of a change model or an intervention theory, or based on the results of research carried out previously.</li> <li>Target groups, objectives and working method fit together: a justification is given of how the approach chosen will be able to effectively achieve the objectives for this target group.</li> </ul>			
3. Criteria for Implementati on conditions / feasibility	<ul> <li>Where relevant, sources are stated with respect to the theoretical underpinning.</li> <li>The intervention is transferable:         <ul> <li>there is a manual or protocol for transfer.</li> <li>there is support for the introduction of the intervention (training the trainer, supervision, helpdesk, etc.).</li> <li>there is a system for implementation or an implementation plan</li> </ul> </li> <li>Data about maintenance, quality care and safeguarding are specified. (licences, monitoring system, registrations, return days) will be realised.</li> <li>The boundary conditions essential for the implementation are specified. These are the boundary conditions at the level of:</li></ul>			



#### Criteria for effectiveness

#### Criteria for effectiveness

## General criteria for all the levels of effectiveness

- The outcomes found are most relevant given the objective and the target group for the intervention.
- The changes relate the objective and the target group of the intervention:
  - The studies reveal that the intended target group has been effectively achieved.
  - The instruments used provide a reliable and valid operationalization to measure the realisation of the objectives of the intervention.
  - o Satisfactory statistical techniques have been used (if applicable).
    - The size of the effect is indicated in terms of Cohen's D or the data to calculate Cohen's D is specified.
- The size of the effects is reasonably convincing and matches the objective and the target group of the intervention.
- Possible negative effects have been stated.
- The research has been documented such that replication of the study is possible.
- The intervention has been implemented as intended. It has been demonstrated that the elements of the intervention have actually been applied.
- In the committee's opinion there are enough studies from which it is apparent that during the implementation of the intervention changes occurred in accordance with the intervention's objective.

## Strong indications

## for effectiveness

- The design of the empirical research provides for at least a strong causal level of evidence (table 2). The research has a quasi-experimental/experimental or, if that is not possible, another design (for example, repeated case studies, a study into the correlation between the extent to which the intervention is applied and the extent to which the intended outcomes have occurred, or a cohort study) of high quality. The studies have been carried out in everyday practice and have a follow-up period of at least six months.
- The number of studies can vary considerably, dependent on the quality and nature of the study. Rules of thumb for the minimum are:
  - There are at least two Dutch studies into the intervention in question with a strong or very strong level of evidence or one Dutch study into the intervention in question in combination with at least one national or international study into this or a comparable intervention with a strong or very strong level of evidence. The Recognition Committee will ultimately assess the comparability.
  - In the case of repeated case studies there are at least ten cases carried out by different treating practitioners under different conditions.

# Good indications for effectiveness

- The design of the empirical research provides for at least a moderate causal level of evidence. The research has a quasi-experimental/experimental or another design (for example, repeated case studies, a study into the correlation between the extent to which the intervention is applied and the extent to which the intended outcomes have occurred, or a cohort study). The studies have not necessarily been carried out in everyday practice or have not yet been followed up.
- The number of studies can vary considerably, dependent on the quality and nature of the study. Rules of thumb for the minimum are:
  - There are at least two Dutch studies into the intervention in question with a moderate to fairly strong level of evidence or one Dutch study into the intervention in question in combination with at least one national or



	<ul> <li>international study into this or a comparable intervention with at least a moderate level of evidence. The Recognition Committee will ultimately assess the comparability.</li> <li>For Dutch research into the intervention in question with a strong to very strong level of evidence one study is sufficient for the recognition at this level of effectiveness.</li> <li>For repeated case studies at least six cases must have been carried out by different treating practitioners under different condition</li> </ul>
First indications for effectiveness	<ul> <li>The design of the empirical research provides for at least a weak causal level of evidence. There is a baseline measurement (prior to/ at the start of the intervention) and a follow-up measurement (at the end of the intervention), without a control condition.</li> <li>There are at least two Dutch studies into the intervention in question with a weak level of evidence or one Dutch study into the intervention in question in combination with at least one national or international study into this or a comparable intervention with at least a weak level of evidence.</li> </ul>



