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Physical activity promotion in socially disadvantaged groups: principles for action

PHAN Work Package 4
Final Report

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ABSTRACT

Over the past few years, physical activity promotion has increasingly been recognized in Europe as a priority for public health action and many countries have responded through the development of policies and interventions supporting physical activity. The WHO Regional Office for Europe undertook a project focusing on this public health challenge to support and further enhance evidence and networking. Since the accumulation of evidence shows that low levels of physical activity are often found in socially disadvantaged groups, one substantial element of the project was the development of guidance on promoting physical activity within disadvantaged communities, with a focus on the role of healthy environments.

This report presents the main conclusions of the project and provides – based on a review of evidence, case studies and national policies – suggestions for national and local action on interventions and policy formulation to support physical activity in socially disadvantaged groups. Acknowledging that the evidence base needs to be further strengthened, the report also identifies evidence gaps to be targeted by future research.

The report arises from the Physical Activity and Networking (PHAN) project co-funded by the Health Programme of the European Union. It was developed in close collaboration with the European network for the promotion of health-enhancing physical activity (HEPA Europe).

Keywords

EDUCATION FOR HEALTH

HEALTH PROMOTION

OBESITY - PREVENTION AND CONTROL

PHYSICAL FITNESS

SOCIAL CLASS

SOCIOECONOMIC FACTORS

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Abbreviations

CPD	continuing professional development
EU	European Union
GAPA	Global Advocacy for Physical Activity, the Advocacy Council of the International Society for Physical Activity and Health
HEPA Europe	European network for the promotion of health-enhancing physical activity
IMPALA	Improving infrastructures for leisure-time physical activity in the local arena
IPAQ	International Physical Activity Questionnaire
MIMoSA	Migrants' Inclusion Model through Sport for All
NCD	noncommunicable diseases
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NOPA database	WHO European database on nutrition, obesity and physical activity
PHAN	Networking for Physical Activity (project)
SDG	socially disadvantaged groups
SES	socioeconomic status
SMART	specific, measurable, achievable, realistic and time-bound
UNECE	United Nations Economic Commission for Europe

1. Introduction

1.1 Background

The effects of physical activity go well beyond preventing overweight and obesity, also benefitting physical and mental well-being. Evidence shows that heart disease and type 2 diabetes can be reduced by up to 50% and significant reductions can be achieved for hypertension and some forms of cancer (WHO, 2009). Physical activity also helps to decrease stress reactions, anxiety and depression. Inactivity has been estimated to contribute to a mortality burden comparable with tobacco smoking (Wen and Wu, 2012). It has also been estimated that within the WHO European Region almost one million deaths per year are attributable to insufficient levels of physical activity (WHO, 2009), and in high-income countries physical inactivity is now considered one of the major causes of death. Irrespective of age, sex, socioeconomic status (SES) and ethnicity, people are healthier if they achieve the public health recommendations on physical activity levels, and evidence indicates that – compared to inactivity – even modest levels of physical activity are beneficial for health and life expectancy (Hallal et al., 2012).

The European Union (EU) is committed to achieving a high level of health protection for its citizens. Promoting the Health in All Policies approach – and thereby strengthening the stewardship role of the health sector in work with other sectors towards the provision of healthy environments – is an important element in a comprehensive public health strategy. Since the 2006 WHO European Ministerial Conference on Counteracting Obesity, the promotion of physical activity has increasingly been recognized in Europe as a priority for public health action. In response, many Member States have begun to develop interventions to tackle the issue.

The WHO Regional Office for Europe also stresses the importance of physical activity for health. Through the production of guidance, tools and platforms for networking, WHO provides direct support to Member States and international organizations in the development of evidence-based policies and interventions aimed at providing environmental conditions that support and facilitate physical activity through all the settings of daily life. Establishing guidance and advice based on practice examples, enabling a transfer of knowledge between countries, is a crucial component of this.

As a follow-up to the Ministerial Conference on Counteracting Obesity, the WHO European Action Plan for Food and Nutrition Policy 2007–2012 (WHO, 2008a) – in which the promotion of physical activity is also emphasized – was endorsed by Member States at the 57th Regional Committee in September 2007. The document *Steps to health: a European framework to promote physical activity for health* (WHO, 2007a) was also launched in 2007 as a blueprint for countries seeking to invest in physical activity promotion. This framework offers guidance for European policy-makers and leaders from different sectors with influence on the promotion of physical activity.

The European Commission has supported complementary activities with WHO in relation to the Ministerial Conference on Counteracting Obesity, including a joint WHO/EU project entitled “Monitoring progress on improving nutrition, physical activity and prevention of obesity”; this evaluated the stage of policy development, the actions carried out to implement the policies, and the implementation status of key commitments contained in the European Charter on Counteracting Obesity (WHO, 2007b), the Second WHO European Action Plan

for Food and Nutrition Policy (WHO, 2008b) and the EU White Paper on nutrition and obesity. The project developed an online database for the use of policy-makers and Member States in monitoring their nutrition, physical activity and obesity policy implementation and in making comparisons between countries (WHO, 2012a). Furthermore, representatives of the European Commission (DG SANCO and/or DG EAC) have participated at the annual meetings of the European network for the promotion of health-enhancing physical activity (HEPA Europe) since 2007.

1.2 The PHAN project

The Networking for Physical Activity (PHAN) project coordinated by WHO and co-funded by the EU in the framework of the Health Programme 2008–2013 (Grant agreement 2009 52 02) aims at the promotion of networking and action on healthy and equitable environments for physical activity. It represents a response by WHO and the EU to the scientific evidence indicating that physical inactivity is a leading risk factor for ill health.

Based on a review of recent actions and policy developments in Europe, the PHAN project aims at providing Member States with intelligence, guidance, tools and examples of good practice, and at developing an international platform for information exchange and networking on physical activity promotion. Specific objectives for the project were to:

- identify good practice examples and develop guidance on the promotion of physical activity in socially disadvantaged groups (SDG) to address inequalities;
- engage young people in developing guidance on the promotion of physical activity in their everyday lives, and to collect and analyse available approaches to promote physical activity in youth;
- strengthen information exchange on experiences with tools for integrating physical activity into planning and economic assessments, and to foster exchange with non-health sectors;
- further develop and refine the tools for planning and economic assessment of physical activity, based on experiences of their practical application;
- strengthen networking and exchange on physical activity promotion through HEPA Europe.

The PHAN project was based on and supported the implementation of the following international policy tools and activity networks:

- the Children's Environment and Health Action Plan for Europe (WHO, 2004a), and specifically its Regional Priority Goal (RPG) II, which commits Member States to "advocating, supporting and implementing child-friendly urban planning and development as well as sustainable transport planning and mobility management, by promoting cycling, walking and public transport, in order to provide safer and healthier mobility within the community" (Paragraph 14c);
- the EU White Paper outlining a strategy for Europe on nutrition, overweight and obesity-related issues (European Commission, 2007), which stresses the importance for Member States and the Commission to take proactive steps to reverse the decline of physical activity levels observed in recent decades, including interventions that involve other sectors such as transport, urban planning and education, and different levels of administration;

- the European Charter on Counteracting Obesity (WHO, 2007b), which recommends that "Action against obesity should be linked to overall strategies to address noncommunicable diseases and health promotion activities [as well as to the broader context of sustainable development]. Improved diet and physical activity will have a substantial and often rapid impact on public health, beyond the benefits related to reducing overweight and obesity" (Paragraph 2.3.2), and suggests that action should be focused on vulnerable population subgroups and people of lower SES;
- *Closing the gap in a generation*, a report by the Commission on Social Determinants of Health (2008), which indicates that social determinants have a great impact on health and well-being and recommends the promotion of physical activity through investment in active transport and good environmental design;
- the EU physical activity guidelines (European Commission, 2008), approved by the EU Working Group on Sport and Health and EU sport ministers, which recommends a minimum of 60 minutes of daily moderate-intensity physical activity for children and young people and a minimum of 30 minutes of daily moderate-intensity physical activity for adults, including seniors, and advocates a cross-sectoral approach;
- the Toronto Charter for Physical Activity (GAPA, 2010a), which defines physical activity as a powerful investment in people, health, the economy and sustainability, and suggests guiding principles for population-based approaches, together with a compilation of physical activity investments that work (GAPA, 2010b);
- the Amsterdam Declaration of the Transport, Health and Environment Pan-European Programme (UNECE, 2010), a joint initiative of the WHO Regional Office for Europe and the United Nations Economic Commission for Europe (UNECE), bringing together the transport, health and environment sectors to foster integration and development of sustainable urban transport through the promotion of active mobility;
- the Parma Declaration on Environment and Health and Commitment to Act (WHO, 2010), produced at the Fifth Ministerial Conference on Environment and Health, at which Member States committed to act on socioeconomic and gender inequalities in the human environment and health, and especially to protect children and other vulnerable groups;
- the Rio Political Declaration on Social Determinants of Health (WHO, 2011a), which promotes intersectoral action and Health in All Policies as adequate approaches to counteract inequalities;
- the WHO Regional Office for Europe's Action Plan for Implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016 (WHO, 2011b), focusing on preventive action and advocating health-supportive environments;
- HEPA Europe, an international collaborative project on the promotion of health-enhancing physical activity, coordinated by a WHO secretariat (HEPA Europe, 2012), which is active in collecting best practice examples, analysing policies and developing guidance, and supporting Member States in developing, implementing and evaluating strategies for physical activity and sport promotion. HEPA Europe carries out various activities, focusing among others on children and young people, inequalities and healthy environments;
- the recently adopted WHO European policy for health and well-being, Health 2020 (WHO, 2012b), which aims to significantly improve the health and well-being of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality.

1.3 Physical activity promotion in SDG

The PHAN project built on the intense collaboration between WHO and the EU through its Health Programme and complemented it in specific aspects, such as involving young people in physical activity promotion, collaborating with local authorities and developing assessment tools. The project also included work related to the identification of guidance on physical activity promotion for SDG (which can be represented by socioeconomic, ethnic or other characteristics). It thus targeted one of the main risk groups identified for physical activity promotion and specifically implemented one of the requests of the European Charter on Counteracting Obesity (WHO, 2007b), which asked Member States to focus their action on vulnerable and especially economically disadvantaged groups.

This focus reflects one of the major challenges in physical activity promotion: how to promote physical activity in SDG where – as the evidence in Working Paper 1 shows – the levels of physical activity tend to be lower than in other population subgroups, and how to identify and target SDG with adequate interventions that successfully support their physical activity levels but at the same time match their specific needs and context. And, reflecting further on the concept of inequalities, whether such approaches should be directly targeted at specific population groups, or whether there are opportunities to include marginalized groups in general, untargeted interventions: this would ensure that separation is not exacerbated by parallel implementation of different physical activity promotion strategies for different population groups.

While the successful promotion of recreational or transport-related physical activity in SDG is not easy to achieve, there is no alternative to tackling the challenge. Evidence from around the world indicates that physical activity levels[1] tend to be lower in disadvantaged population groups (see Working Paper 1), which means that they are at higher risk of ill health (including cardiovascular effects, type 2 diabetes, obesity and other health outcomes). Adding to this burden are the potential multiplicative effects when low levels of physical activity are combined with other health challenges and with a reduced awareness of health issues, which is often found in SDG. In consequence, low levels of physical activity are one of many threats to the health status of SDG, and thus have a strong impact on the health system and health budget (Wen and Wu, 2012). In Europe, physical inactivity is estimated to cause 5.5% of coronary heart disease, 6.8% of type 2 diabetes, 9.3% of breast cancer, 9.8% of colon cancer and 8.8% of all-cause mortality (Lee et al., 2012). Eliminating physical inactivity on global scale would lead to estimated gains of 0.68 years life expectancy (0.63 for Europe). Through adequate interventions focusing on target groups, physical activity levels can be increased to provide benefits on three levels:

- individual fitness, quality of life and well-being, health and increased life expectancy;
- public gains due to the reduction of health care expenses and increased productivity;
- reduction of existing inequalities in both physical activity levels and health across population subgroups.

A number of studies have shown that interventions targeting such groups and promoting physical activity are very difficult to implement and do not always achieve the desired results (Currie et al., 2012; see also Working Paper 1). Public health agencies have been identified as

[1] The project focused on physical activity levels associated with recreational and transport-related activity taking place in the private and public space as a way of spending free time and a means of transportation. It excluded physical activity in occupational settings, which is not a free choice, nor necessarily health-enhancing.

the key actors in such interventions and should ensure that strategies to reduce inequalities in physical activity are implemented (Heath et al., 2012). One substantial element of the PHAN project, therefore, was the identification of good practice examples and development of guidance on physical activity promotion in SDG to address existing inequalities in physical activity between diverse population subgroups. The extended focus on the relative contribution of healthy environments reflects an acknowledgment that – as well as individual factors affecting physical activity – the social and environmental context has a direct impact on physical activity levels (Bauman et al., 2012).

An international project group on physical activity promotion in SDG was established, bringing together experts from various countries and a working group formed within HEPA Europe (see Annex 1). The project group, coordinated by a WHO secretariat, was then requested to work on the following tasks:

- synthesis of existing evidence on the determinants of physical activity in SDG and the potential underlying mechanisms;
- compilation and review of existing strategies, initiatives and programmes targeting physical activity promotion in SDG, with a focus on the role of healthy environments;
- identification of elements of good practice and development of policy guidance for promoting physical activity in SDG, with a focus on the role of healthy environments, and for evaluating such interventions.

For the purposes of the project, the following definition of "social disadvantage" was applied (see Annex 2 for further information on methodology).

Social disadvantage relates to socioeconomic aspects (including income, employment, education and SES) as well as to sociocultural aspects (such as gender, ethnicity, religion, culture, migrant status, social capital), sociogeographical aspects (such as living in a deprived neighbourhood) and age. SDG may be affected by more than one of these dimensions.

This project report, summarizing the conclusions of the PHAN work on physical activity promotion in SDG, focuses on the question of what successful interventions to promote physical activity in SDG might entail and what policy context might be conducive to such interventions, aiming at providing general principles for action. Based on a review of evidence, a compilation and analysis of case studies, an assessment of the coverage of SDG in physical activity promotion policies and the results of the project meeting discussions, it derives the key principles of how to approach SDG and provide physical activity opportunities matching the situation, needs and interests of the respective target groups. Recommendations on successful intervention principles are especially relevant as there is evidence that some physical activity promotion projects and campaigns have had opposite effects, increasing inequalities in physical activity levels due to unequal uptake of and participation in such interventions (Allebeck, 2008; Lorenc et al., 2012). See Annex 3 for further information on tools and frameworks available to facilitate evaluation of interventions.

2. Social determinants and physical activity: review findings

A review of evidence was carried out to summarize the current knowledge from scientific and grey literature and to identify and describe the impact of social disadvantage on physical activity levels, as well as the causal mechanisms linking them. The final evidence review report can be found in Working Paper 1.

2.1 The relationship between SES and physical activity

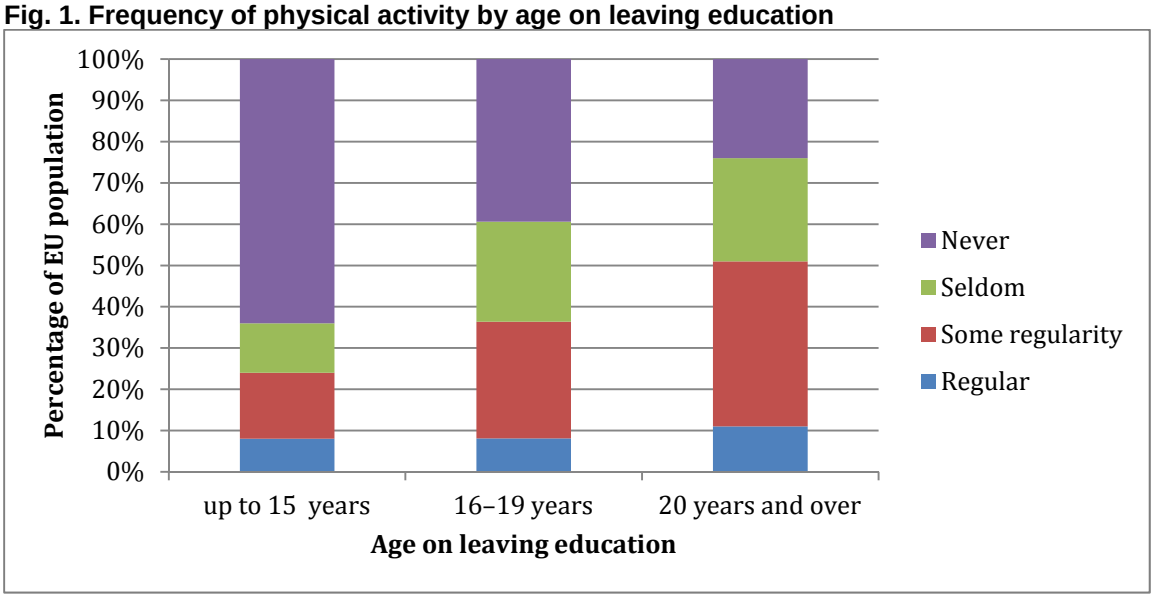
Regardless of the measure used, European adults of low SES are generally less active during leisure time than those of high SES, although there are some exceptions among countries in transition in Europe. The relationship between SES and physical activity is less consistent among young people: in some cases the findings are similar to those on adults and in other studies no socioeconomic differences are evident. It has been suggested that socioeconomic background may be less relevant as an indicator of leisure activity choice among adolescents and that young people may make physical activity-related decisions based rather on individual choice, intrinsic motivation, or the peer group's interests.

Social class does not fully explain the disproportionate amount of inactivity observed among some ethnic groups. There is evidence that social and environmental barriers to physical activity are important and need to be more clearly understood. In addition, there are relatively few European studies of physical activity and ethnicity in the published literature and the relevance of non-European studies might be somewhat limited because of cultural, social or environmental differences.

Associations between physical activity and education tended to be stronger and more resistant to ethnic variation than those for income or occupational social class categories (see Fig. 1 showing the responses to a Eurobarometer self-assessment questionnaire on frequency of exercise, stratified by education leaving age). Regardless of socioeconomic indicator, higher levels of leisure time or moderate/vigorous activity were consistently found in those at the top versus those at the bottom of socioeconomic strata. Gradients were less frequent, but this is likely to be a result of crude socioeconomic position or physical activity measurement, or because those in the middle of the socioeconomic scale have relatively similar physical activity levels.

Work-related physical activity was reported as a separate outcome in only one study. The authors rated the quality of evidence as "moderate" and stated that the evidence for a socioeconomic effect could be described as "consistent" but not strong.

Fig. 1. Frequency of physical activity by age on leaving education



Source: Eurobarometer, 2010.

2.2 Personal, social and environmental influences

Physical activity interventions that address personal, social and environmental barriers among target groups are more likely to be successful. There are clear indications that environments which are conducive to physical activity are health enhancing, but few prospective studies have validated the potential of environments to moderate the relationship between SES and physical activity. Physical and structural changes are costly and time consuming, and tend to assume lower priority in low-resource areas with many pressing needs.

2.3 Key principles for promoting physical activity in SDG

The authors of the reviewed literature make a range of consistent and/or frequently repeated suggestions on how to maximize the chances of success of physical activity interventions targeting SDG.

2.3.1 Involve the target community in all aspects of the programme

Studies published in Europe, the United States and Australia state that any attempts to promote physical activity among people from disadvantaged backgrounds or diverse cultures have to be community driven, owned and embedded if they are to be successful and maintained. Physical activity interventions should be built into the culture of the target communities and be part of a coherent and consistent web that incrementally builds norms of activity.

2.3.2 Culturally sensitive programmes are most likely to be successful

Cultural sensitivity is a common theme emerging from the studies reviewed. Specific cultural norms, values and traditions facilitating physical activity are often not recognized and are missed intervention opportunities. Studies give examples of the norm of movement to music in African-American and Latino/Hispanic communities, the encouragement to “be strong at an early age” among Native Americans and the desirability of social engagement for seniors. Cultural factors have indeed been harnessed in physical activity promotion efforts among African Americans, such as using churches as settings, and focusing on community unity and “common good” messages. Other examples are given for Latino/Hispanic populations, where gender is an important consideration, or Asian groups, where the theme may be a focus on

martial arts and collectivist values. However, the generalizability of such interventions may prove challenging when considered in the context of a population's education, economics, cultural health beliefs and practices, and how these differ between and among diverse groups.

2.3.3 Develop and maintain partnerships and adopt an ecological approach

Key success factors in servicing the needs of disadvantaged communities involve engaging and retaining multiple partners that can support the delivery of programmes in the longer term. Environmental approaches, for example, are most often outside the control of the health, physical activity and sport sectors. Interventions of this type require a multidisciplinary approach, significant funding and long-term commitment to programming and evaluation. Evaluating interventions that address environmental issues is difficult, however, as it may take years to observe improvements in physical activity as a consequence of manipulations to environmental factors.

2.3.4 Examine "real-world" interventions: measure long-term reach, adoption and maintenance

Ensuring that interventions are culturally sensitive and involve the target group at all stages means that gold standard randomized controlled trials are impossible. There is a balancing act between making local adaptations to a programme and ensuring that the intervention maintains the integrity and key criteria that made it effective in the first place. The trade-off is between initial selectivity, which improves retention and homogeneity (internal validity), and inclusivity, which preserves relevance to the reference population (external validity).

The majority of studies are from the United States and have been short term in duration, with little follow-up, evaluation or measurement of sustainability. The short-term nature of programmes is a particular problem for the evaluation of environmental impacts where it takes a number of years to reconcile health outcomes and increases in physical activity levels. While it is vital that studies in disadvantaged populations adopt a longer-term approach to evaluation, this is very difficult to achieve for many local actors and needs a specific research agenda.

2.3.5 Improve the recruitment of SDG to physical activity research studies

In order to ensure adequate minority representation in physical activity studies and improve generalizability, it is recommended that researchers draw samples from geographic areas in which substantial numbers of one or more minority groups reside and oversample to produce proportions beyond their levels of representation in a population. Subgroup-specific data are needed when ethnicity could modify the outcome and answer the question of whether the results are applicable to diverse groups.

Perceptions of trust and mistrust – and of being treated like a "guinea pig" – can be a key barrier to the engagement of disadvantaged communities in physical activity research. Trust can be built through community involvement, particularly by using outreach workers from the targeted population. Racial/ethnic matching of project staff and participants is invoked as necessary to recruitment nearly as often as is community involvement. Recruitment through existing community structures also proved successful.

2.4 Overall conclusion of the evidence review

The review uncovered evidence of the existence of disparities in physical activity across different social class groups and ethnic groups within countries in Europe.

- Lower income groups and those from ethnic minority backgrounds are most at risk of leisure-time physical inactivity.
- Studies vary considerably in relation to the population characteristics analysed and the methods employed for measuring physical activity and social class.
- Little European research has been undertaken on the possible mechanisms behind social class differentials in physical activity.
- The environment is an important contributor, but few prospective studies exist to verify relationships or to help elucidate the relative importance of environmental versus individual factors in determining physical activity among Europeans.
- There is a dearth of well-designed intervention studies targeting physical activity in disadvantaged groups in the published literature worldwide – and in particular for Europe – leading to a significant gap in the evidence base.

Given that SDG have lower levels of physical activity and higher levels of ill health than the general population, the rationale for focusing physical activity promotion efforts on these groups cannot be disputed. By its nature, work with disadvantaged groups has to be local and focused. Funding for community-based projects in Europe is often short term and piecemeal, and it is not surprising that physical activity projects are often not evaluated and that results are rarely published. Researchers will need to be proactive in helping to overcome the considerable barriers to working with hard-to-reach populations, including difficulties of recruitment, retention, programme tailoring and flexible delivery, as well as partnership working to make a difference in getting people more active.

3. Examples of interventions promoting physical activity in SDG

Selected case studies on interventions to promote physical activity in specific target groups were reviewed to complement the evidence review on physical activity promotion in SDG. The review encompassed a variety of elements in 29 case studies collected from nine Member States, including target groups covered, interventions and approaches applied, actors involved, outcomes expected, and the results and their evaluation (see Annex 4 for an overview of the chosen case studies).

3.1 Summary of case study review

This summary presents the key findings based on an in-depth review and analysis of the case studies. The full review report, explaining the selection and review process, can be found in Working Paper 2. Methodological details can be found in Annex 2.

3.1.1 Target groups covered

- The case studies tended to reflect projects that touched on several areas of disadvantage, indicating that social disadvantage is often represented by an overlay of individual dimensions.
- Target groups fell more or less evenly into the three dimensions of disadvantage (excluding age): socioeconomic (22 case studies), sociogeographic (21) and sociocultural (15).
- Targeting areas of socioeconomic deprivation often led projects to engage with black and minority ethnic populations.
- It was not always clear from the case studies how populations were classified and identified. Only three case studies employed recognized processes and tools to enable them to identify their populations of interest.
- The case studies covered all age groups, from early years (0−6 years), through childhood and adolescence (6−18 years), adults of working age (18−60 years), and adulthood and older adulthood (40−65 years and over).

3.1.2 Interventions and approaches applied

- A variable amount of active engagement of the target group before the project started was evident. Very few projects tried to establish at the outset what the target group felt was important and would make a difference before designing the intervention. In the majority of cases, the target audience was not involved in the design of the programme.
- The case studies were examined with reference to community-wide, mass media and information approaches; behavioural and social approaches; and environment and policy approaches (CDC, 2012). All interventions were judged by the reviewers to have included behavioural and social approaches.
- Use of peers and local people as delivery agents, mentors and role models was widespread, with examples of non-professionals being recruited. The value of recruiting local people in encouraging behaviour change was noted.
- A variety of intervention approaches were evident, ranging from prescriptive to tailored. Prescriptive approaches were those where there was little or no deviation from a defined and structured intervention. Tailored projects were considered to be those that were completely flexible and that perhaps enabled participants to set their own goals.
- Projects that were able to offer a “menu” of options that could be customized to meet individual needs were seen to be helpful by participants.

- Interventions tailored to the individual needs of the target group and with individual goals seemed to work well. There was evidence that the harder a population is to reach, the more intense the level of support within the intervention needs to be.
- The use of prompts and incentives came through as a key lesson from the case studies, but it was difficult to identify their use within projects.
- A wide range of projects provided physical activity opportunities close to the target group and at no cost, focusing on high levels of accessibility in both spatial and financial terms and reflecting social and cultural norms of the respective target group.
- Descriptions of planned exit strategies were rare, although it cannot be assumed that because case studies did not specifically refer to planned exit strategies they did not exist within the projects.

3.1.3 Actors and networks involved

- There were many examples of proactive engagement of actors and stakeholders. A mixture of new and existing partnerships was reported, and projects were seen to enhance and cement existing cross-sectoral partnerships. Projects were positive initiators and supporters of partnerships, and some case studies identified clear roles for each partner. Reporting on partnerships across the case studies indicated wide support for multiagency, multidisciplinary approaches.
- Partnerships were drawn from across local and national political systems and the education, employment, health, police, private, transport and voluntary sectors. Local civil society was also very important in supporting projects.
- There was evidence of funding from the private sector to support projects, but the detail was not sufficient to evaluate effectiveness. It may be that in some cases the projects would not have happened without commercial funding. Funding sources varied widely, and funding streams ranged from €500 to millions of euros.
- The duration of projects varied: some were pilots, but some had become mainstreamed (up to 10 years in duration).
- It was difficult to paint a clear picture of the level at which projects were delivered from the information provided. Some were initiated at national level but delivered locally; some were locally developed and funded; others were local but drew on national resources.

3.1.4 Objectives and outcomes expected

- The level of information available from the case studies made it difficult to draw conclusions about what constitutes effective and successful practice. Generally, while outcomes were indicated, there was a lack of relevant outcome data.
- Many projects were aspirational in what they wanted to achieve, and there was evidence that some predicted outcomes were unrealistic and sometimes not justifiable.
- Some of the main outcomes presented might have been better expressed with SMART (specific, measurable, achievable, realistic and time-bound) objectives.
- All interventions aimed at achieving increased physical activity to improve physical and mental health. Other health-related outcomes were cited. Beyond this, projects also had in mind wider non-health outcomes such as improving employability and building social capital.

3.1.5 Results of interventions and evaluation

- The diversity and differing quality of information available from the case studies made it difficult to draw general conclusions about successful practice. Many interventions were

aspirational in what they wanted to achieve, but were unable to demonstrate success in meeting these aspirations.
- Evaluations offered in the case studies ranged from highly structured and well-designed randomized controlled trials to practically no evaluation at all.
- There was some evidence of attempts to promote sustainability, particularly through empowering local communities and volunteers to take the lead.
- Unintended outcomes, both positive and negative, arose within projects.
- Some positive examples of where lessons learned could be transferred within and between countries were found. Where countries are prepared to review their own demographic, political and cultural situations, there will be elements or, indeed, entire projects within the case studies that could be transferred.
- Authors of some of the case studies were able to publish materials from their projects, some in peer-reviewed journals.

3.2 Studies using physical activity to address social challenges

Case studies were excluded from the review when the promotion of physical activity in selected disadvantaged groups was not a measured priority outcome but rather a means of achieving other objectives. As these case studies were still related to the PHAN objectives and provided interesting results on their own, they were examined separately to avoid any loss of potentially important information. In this context, two distinct groups were identified from the set of excluded studies:

- projects specifically using physical activity and sport as a diversionary strategy among adolescents to prevent offending and substance misuse;
- projects looking at physical activity as a social inclusion strategy for people with disabilities.

Although these case studies were not analysed in detail, they generated interest as they indicated a constructive application of physical activity interventions as a solution for challenges related to inequalities.

3.2.1 Physical activity and sport as a diversionary strategy

These projects mainly used outreach or youth workers to take the sport (often football) into local deprived communities ("street sport"), rather than the target group going to sports and leisure centres. Most projects focused on young people and adolescents and worked with small numbers at each session. The target population often included offenders, young people excluded from mainstream education or travelling communities, who are particularly hard to reach. These interventions were often reported as being highly successful thanks to the relationships formed between deliverer and client, the small numbers involved at each session and the fact that no cost was involved as the sports were taken to the deprived area. In several of the projects those who were originally "clients" volunteered to be "deliverers", having gained experience and knowledge through the project. One project from Spain also used sport as a means to help integrate the immigrant population into society by engaging them through sports clubs and teams locally, rather than as an antisocial diversion project.

3.2.2 Physical activity as a social inclusion strategy for people with disabilities

The effectiveness of physical activity promotion in this regard was noted, the main benefit being the provision of access to physical activity opportunities previously closed to these groups. Specific outcomes focused on encouraging independent living, raising self-esteem

and building social skills, and on using physical activity to help develop gross and fine motor skills, coordination and balance. A spectrum of disability was covered (including autism, learning difficulties, cerebral palsy, severe and enduring mental health problems) and many of the projects targeted children in a school setting, which involved parents, or in an environment that was safe and familiar to them. Project leaders noted positive feedback from participants, particularly in relation to their enjoyment of taking part in activities. As a result of one project (in Italy), new clubs were created for tennis, basketball and bowling.

3.3 Overall conclusions and lessons learned from case studies

The 29 case studies selected and reviewed provided a range of indicators of success and challenges in addressing physical activity among SDG within different cultural, political and economic environments. An overall evaluation of the work undertaken to date allows the main points to be consolidated in a holistic way, summarizing the key lessons that can be learned. It also includes a list of elements of good practice that appear to be effective in promoting physical activity in SDG.

- There is evidence of a significant level of activity across the European Region in promoting physical activity in socially disadvantaged areas: this is extremely encouraging. The call for case studies attracted 95 submissions, which far exceeded expectations. Of these, 91 were eligible for consideration against an agreed set of selection criteria, and 29 case studies were selected for subsequent review and analysis.
- This review had limitations that have undoubtedly had an impact on the findings. Most notably, there was inconsistency across all the case studies in the level of detail provided, particularly around outcome data. For future work, it is important to build in additional time for review to allow the project team to contact the case study authors to clarify any key issues or tackle omissions.
- Physical activity was recognized as a vehicle with broader influence than on purely health-related factors: its value extends to having a positive effect on wider outcomes relating to social disadvantage such as social inclusion, integration of migrant populations and employability.
- Physical activity promotion in SDG can work with local and simple measures (for example, making physical activity sites such as swimming pools available only to Muslim women at a certain time) that enable such projects to be free or low cost in order not to create economic barriers to participation.
- The case studies suggested that partnership working and collaboration is effectively the norm. Actors and stakeholders were drawn from across a broad range of sectors, most commonly health, transport, employment and education. There was also close working with the justice system on projects that fulfilled a diversionary strategy. The private sector had some involvement, but more rarely.
- Although environmental issues were not highlighted as a principal issue in this review, a number of case studies (16) included action in this area, covering modifications to the physical or social environment or environmental policy context. This reflects the evidence that there is a role for the environment in promoting physical activity. The projects aiming at the most significant changes, however, tended to be those delivered at regional or national level, which had longer time frames and were comparatively well funded. The corollary is that the smaller the number of participants being targeted, the less likely there was to be any significant environmental change.
- A number of monitoring systems appeared to be in place to examine how a set of processes defined at the beginning of the project was carried through. Far fewer were

present around evaluation, however, in order to test that the results occurred as a result of the interventions. This highlights the clear need to establish appropriate monitoring and evaluation processes at the beginning of a project, based on stated, measureable and achievable outcomes.

While the review had enormous breadth, there was inadequate depth to make definitive statements about what works or does not work. Given the current level of information on interventions to promote physical activity in SDG, the PHAN project could not draw reliable and evidence-based conclusions about what constitutes effective practice. Case studies conveyed what went well in their projects, but this was often not matched with results data; this identified a lack of evaluation of effectiveness as one of the main gaps in practice. Nevertheless, much information and practical experience can be shared as points of learning for future projects, which has thus largely informed the guidance provided in Chapter 6 of this project report.

4. National policies promoting physical activity and SDG coverage

The review of existing policies and strategies addressing physical activity promotion with particular coverage of SDG was based on two approaches. The first consisted of reviewing the information in the WHO European database on nutrition, obesity and physical activity (NOPA) (WHO, 2012a). The second approach complemented this analysis, using a questionnaire sent out to the physical activity and nutrition focal points of the WHO European Region Member States in order to map and analyse existing policies promoting physical activity in SDG.

Within the NOPA database 127 documents were identified relating to physical activity for the 27 EU Member States. In line with the selection criteria (see Annex 2 for full details of methodology) 31 policy documents were selected for further analysis. Policies focusing on physical activity and targeting one or more groups that could be considered socially disadvantaged according to the PHAN project definition were available from 23 countries.

No documents were identified for Cyprus (no documents at all in the NOPA database), Greece (no documents relating to physical activity in the database), Italy or Romania (available documents did not match the inclusion criteria). The analysis excluded legislation documents and policies that were older, had a focus more specific than physical activity or addressed SDG to a lesser extent. The final review report including the list of policy documents selected for content analysis is available as Working Paper 3.

In 24 cases the document coverage was national (77%). Coverage was subnational for six documents (19%) from Belgium and the United Kingdom, which both have decentralized structures. One supranational document from the Nordic Council of Ministers was included for Denmark, Finland and Sweden (3%).

Of the 18 countries responding to the questionnaire, 17 stated they had national policies or regulations addressing physical activity in general terms. Only eight countries stated that they had national policies or regulations that "specifically addressed the promotion of physical activity in SDG". One country reported being uncertain: as the response presented no evidence of documents targeting the socially disadvantaged, for the purposes of the analysis it was categorized as not having such policies or regulations in place. The total number of countries reporting an absence of policies targeting SDG was therefore 10. On scrutiny of the responses from these countries, however, it appeared that physical activity promotion policies in Andorra and Belgium, while not actively indicating the existence of such targeted policy documents, did cover the area of SDG at least to some extent. If these are included, of the 18 responding countries, 10 can be interpreted on the evidence of the questionnaire as having policies targeting the disadvantaged. The full analysis report on the questionnaire responses is available as Working Paper 4.

4.1 Summary of national policy review

The following section summarizes the key findings of these two complementary methods. The information presented below is based on a combination of both review approaches. Where results refer to only one, this is mentioned in the text.

4.1.1 Policies addressing physical activity for SDG

- The integration into national policies of physical activity promotion in SDG differed in levels of detail and coverage. As identified by the responses to the questionnaire, most

countries had national policies or regulations addressing physical activity in general terms, but only half had physical activity policies specifically targeting SDG.

- The analysis of the policies contained in the NOPA database provided additional information on the definition of disadvantaged groups: while some policy documents did not mention disadvantage directly in any of their described objectives, instead specifying target groups such as children, young people, adults and elderly people, other documents did define certain groups as disadvantaged (as outlined above: see 1.3) and described actions and objectives for these. Viewed in the context of strong supporting evidence, therefore, it seems that policies to increase levels of physical activity in SDG are underexploited as a tool to address health inequalities across Europe.
- Some policies had quantified and specific objectives relating to certain target groups, recommending levels and actions to reach the aim set by the policy. The Dutch policy document *The power of sport* (Ministry of Health, Welfare and Sport, 2008), for example, provides quantitative levels of the population engaging in exercise to be achieved by 2012, with a baseline value for 2005. Target groups are adults and young people. The document also mentions a range of suggested measures, such as – for the target group of young people – community sports fields, multifunctional accommodation for school and sport and cycle paths.
- While the role of the social and physical environments in regard to physical activity promotion was mentioned by several policy documents, there was no specific reference to any individual target group in the context of environmental or infrastructural measures.

4.1.2 Policy reach and relevance – sector involvement

- Both reviews showed that most policy documents targeting physical activity and the disadvantaged related to the interests of a number of different policy sectors and varied in focus and level of detail.
- The majority of the policy documents were considered to link the three sectors of physical activity, sport and health, while only few (including examples highlighted from Belgium, Germany and San Marino) linked physical activity solely to health, without relating to sport. The link between physical activity and nutrition was also very often present in these policies.
- Information about policies linking environmental and planning elements to physical activity was only provided by the countries responding to the questionnaire. Respondents linked physical activity and environment and planning in only six policy documents (19%), while five policy documents (16%) related the transport and mobility sectors to concerns over physical activity in SDG.
- Beside sector specific policies, a few countries had government programmes that covered several topics alongside physical activity.
- In summary, it is therefore strongly indicated that physical activity, health and sport policies are often closely linked and that physical activity is also regularly seen to relate to the social goals of a country, as with Germany's IN FORM initiative (Federal Ministry of Food, Agriculture and Consumer Protection and Federal Ministry of Health, 2008). Documents seeking to improve health in SDG through physical activity and/or sport, however, do not sufficiently link to a wider spectrum of public policy. The emphasis seems to be on person-centred approaches, while wider and more holistic strategies are less frequently considered.

4.1.3 Terms used for SDG (based on the review of policies in the NOPA database)

- In the keyword search (see Annex 2 on methodology), "socioeconomic" and "disadvantage" each appeared in 16 documents (52%), "vulnerable" in 14 documents (45%), "deprived" in 12 (39%), "inequalities" in nine (29%) and "marginalized" in seven (23%).
- Screening of the policy documents showed that four (13%) did not contain any of the established keywords, but that other terms were used instead, such as "weaker social groups" and "social groups most at risk".
- Some policy documents defined the particular target groups considered to be disadvantaged. For example, in Hungary's policy document *Sport XXI: national sports strategy 2007–2020* (Parliament of Hungary, 2007) these are defined as "children and young ones living in disadvantaged towns and villages, people with disabilities, women and the Romany". Nevertheless, in many cases vague terms were used, such as "at risk", "least advantaged", "marginalized", "underrepresented" or "hard-to-reach" groups, "weaker social groups" and "groups of social exclusion".

4.1.4 Identification of target SDG and measurable objectives

- The identification and definition of groups more likely to be socially disadvantaged varied significantly: most policy documents referred to blanket terms and did not specify the SDG in detail.
- For all target groups identified, only a few documents mentioned specific, time-bound and measurable objectives for physical activity levels to be reached.
- All 31 policy documents identified within the NOPA database as relevant for the purpose of this project targeted children and/or young people. These two groups were mostly mentioned together or defined by one of the terms. Other targeted groups were addressed as follows by the policies.

    - Elderly people were mentioned by 23 documents (74%).
    - Adults were specified as a target group by 20 documents (65%).
    - Gender, mainly referring to girls and women, was addressed in 17 documents (55%).
    - Geographically disadvantaged groups were addressed in 16 documents (52%).
    - Lower SES groups were specified as a target in 16 documents (52%).
    - Ethnic minorities were mentioned in 14 documents (45%), although that focus did not seem to relate to increasing physical activity levels as such, but more to social integration via sport.
    - People suffering from chronic diseases and overweight were described as risk groups in 14 documents (45%), although the objectives stated for this target group were more related to their status of disease.
    - Only seven documents (23%) outlined specific, time-bound and measurable objectives for physical activity levels of children and young people.
    - One document (3%) addressed inequalities, stating that the existing differences between different social groups meeting the defined objectives for physical activity would at most be 20% in 2021, with 2006 as a baseline.

- These results were mostly confirmed by the review of the answers to the questionnaire: an examination of the responses from the 10 countries where policy documents specifically sought to promote physical activity in SDG showed that such groups were

defined using a wide variety of terminology. Terms such as “low-income families”, “individuals on income support” or “those from disadvantaged areas” appeared in at least half the country responses. This reinforces the view that economic deprivation for individuals or groups is recognized as defining risk or priority. Other groups were also identified as targets in the questionnaire responses.

- Age and social disadvantage were often referred to in combination to define disadvantage: a document might target children, young people or the elderly in socioeconomically deprived circumstances.
- Social exclusion was also seen as defining disadvantage and the term was present in at least two country responses.
- Physical and/or mental disability was mentioned in four responses and once in terms of the physical incapacity that often accompanies old age.
- Migrants were an identified target in several policy documents.
- In two cases priority was linked to gender, with women and girls regarded as disadvantaged in their capacity to engage in physical activity.
- It appeared that low levels of physical activity in many individuals were associated with a constellation of social disadvantage.

4.1.5 Suggested actions and objectives targeted at potential SDG

- In general it was difficult to make a distinction between value statements and actual intentions for action in the policy documents. Actions were mostly described in terms of proposed measures; fewer had a strong focus on implementation.
- The examples of actions related to children and young people were often connected to schools, physical education and sports. Some documents also had other foci, such as the English strategy document *Be active, be healthy – a plan for getting the nation moving* (Department of Health, 2009), which emphasizes the contribution play and active travel to school can make to increasing physical activity levels in children.
- Actions related to adults were connected to workplaces, knowledge, sporting opportunities and occasionally environment.
- Actions related to gender, ethnicity or lower SES, or to elderly, chronically ill or geographically disadvantaged people were less detailed in general. In many cases actions to address geographical disadvantage were focused on access to sport facilities.
- Several examples of actions were aimed at the physical environment but these did not usually target specific groups. One mentioned the importance of supporting environments for non-organized forms of sport such as running and cycling paths, open sports grounds, cross-country ski trails and barrier-free sport facilities.

4.1.6 Monitoring (based on the review of policies in the NOPA database)

- Three-quarters of the documents addressed monitoring of physical activity levels.
- Germany’s IN FORM initiative (Federal Ministry of Food, Agriculture and Consumer Protection and Federal Ministry of Health, 2008) states that children’s and adolescents’ physical activity patterns will be monitored via the Health Survey for Children and Adolescents.
- The Nordic Council of Ministers has developed a common Nordic system for monitoring diet, physical activity and overweight. The ambition is to collect data every second year and to identify aspects such as gender, predefined age groups and social strata. Physical activity levels will be measured based on the short version of the International Physical Activity Questionnaire (IPAQ). To strengthen research and scientific cooperation the

countries plan to identify challenges in monitoring vulnerable groups and work on identifying determinants such as district and traffic planning (Nordic Council of Ministers, 2006).
- The Northern Irish strategy has developed a scheme providing the rationale and monitoring of each action for specified target groups (Department of Culture, Arts and Leisure, 2009).

4.1.7 Local implementation of national policies (based on responses to the questionnaire)

- Based on the respondents' answers there seems to be wide variation in how policies are implemented locally. Not every country provided an answer, and some responses were difficult to interpret.
- The available information does, however, indicate that implementation of national policies though local or regional activity is an established strategy. It could be achieved through applying mandatory national standards or processes, awareness raising and/or financial support.

4.1.8 Data and their exploitation (based on responses to the questionnaire)

- Respondents to the questionnaire were asked whether any national data on physical activity levels, sports or active transport were gathered, and whether they could be broken down by social or demographic determinants within the definition of social disadvantage used in the PHAN project.
- Of the 18 countries covered by the analysis, 11 stated that these data were available at the national level and that they were both amenable to disaggregation by relevant social variables and publicly accessible.
- Nine of these eleven countries reported the existence of policy documents promoting physical activity in the socially disadvantaged. Such a strong correlation between these factors is open to differing interpretations. It may be that where data are present to highlight an issue (and possibly quantify inequalities between different population groups) this will have an impact on policy-making and drive policy formulation in that area. It is also possible that the existence of a policy will drive the development of data sources and monitoring as the respective question will be in the spotlight. Either, or indeed both, may be true.
- Eight of the eleven respondents who said that socially disaggregated data were available believed that analysis of the data was used to inform national policy decision-making and development, and a few offered further details regarding its use. The remaining three did not know.
- Where respondents reported the existence of socially disaggregated data that could be linked to physical activity levels, they were asked to indicate which policies had benefitted from analysis of the data. Four of the eleven stated that such data had been beneficial in this regard. Only two countries provided detail and one expressed the view that provision of further detail would "go beyond the scope of the questionnaire".

4.2 Conclusion on policy findings

The policy documents included in the analysis were quite diverse in focus and level of detail. Most policies addressed sport and physical activity, while others focused on nutrition and physical activity, health-enhancing physical activity, general public health, obesity, health inequalities, urban planning and transport.

While most countries reported the existence of policy documents that targeted physical activity, just over half had documents specifically addressing physical activity in SDG. The indication here is that an opportunity to promote greater health and greater equality in health may be underdeveloped in many countries of the European Region. Helping to address this issue offers a challenge but also an opportunity.

Both reviews revealed many different terms for SDG and diverse ways of integrating them in physical activity policies. Social disadvantage, as expressed by respondent countries, extends to a wide range of characteristics. Examples of physical activity policy documents addressed groups considered to be disadvantaged whether defined by socioeconomic, sociocultural or sociogeographical aspects. The most consistently applied definitions of social disadvantage related to the economic circumstances of individuals or groups, assessed by a variety of criteria. Disability and ethnic or migrant status also featured as indicators of social disadvantage. Children and young people were addressed by many documents and the school setting was also covered. More than half of the documents focused on adults, elderly people and gender. Adults were addressed in relation to the work setting, sporting opportunities and the environment. Age – in combination with other issues – was, however, seen to be a more complex determinant of social disadvantage than might be expected: children, young people and the elderly were each presented as disadvantaged in ways that had an impact on their capacity to participate in physical activity. The elderly were not always presented as a single homogeneous group in this respect. Older age is clearly often seen as a proxy for mental and physical disability and illness. Extending this principle to all disadvantaged groups, the different characteristics inherent within a specific group may require the application of a different policy approach or approaches.

Specific, time-bound and measurable goals were rare for all target groups; this precludes measurement of the policy effect. Actions were described in all documents, but in very different levels of detail and not for all target groups. In many cases it was not clear whether a proposed measure was an action or just the recognition of an issue. Some instances only contained value statements or context descriptions mentioning certain groups, such as women. It is worth noting, however, that although some policy documents described actions addressing the improvement of the physical environment without mentioning specific SDG, even when actions are not directly aimed at a specific group, they may nevertheless increase physical activity levels.

Overall, the intensity of the focus on SDG varied widely between the policy documents. Monitoring in general was mentioned in most documents and some countries provided good examples on how to integrate SDG.

A shortcoming of the policies is the difficulty of separating the targeted actions to increase physical activity from those aiming at social integration, especially in relation to sport as physical activity promotion. Sometimes both are integrated in the objective.

It is possible to identify three broad approaches adopted to promote physical activity though national policy or regulation: environmental and organizational; social and behavioural; and informational (Heath et al., 2012; CDC, 2012). The policy survey review indicated that environmental and organizational approaches are frequently used, perhaps because they change something very tangible, irrespective of whether they deliver higher levels of physical activity. Similarly, there were indications of wide use of informational approaches. These approaches may be effective but may also confer political advantage because they

demonstrate that something is being done. Social and behavioural approaches were evident in some countries but it may be that such approaches are subsumed within other policies targeting inequalities. This is not, however, to diminish their importance, particularly as part of a package of measures that combine different approaches to stimulate physical activity and sport in disadvantaged groups.

Greater participation in physical activity in the disadvantaged is likely to result from recognition among the target group(s) of the benefits for health and well-being; from the existence of facilities for sport or simply for unstructured/informal physical activity; from imaginative approaches that remove physical, social, economic and similar impediments; and – critically – from the motivation to participate and remain engaged over time. All this implies that the most effective strategies to increase physical activity are likely to be holistic, tackling the problem from various angles using a combination of approaches. Despite difficulties in interpretation there do appear to be opportunities to exploit more multidisciplinary and intersectoral policy approaches in addressing this important challenge, as requested by Heath et al. (2012).

5. The role of healthy environments in physical activity promotion

5.1 Summary of evidence on healthy environments

In theoretical terms, healthy environments are considered a key factor in the promotion of physical activity (Cavill et al., 2006). Summarizing the relevant content of the previous chapters, the role of healthy environments is reflected on three levels.

- Methodological considerations: environment and policy actions have been identified as one of the classic intervention areas alongside media and communication, and behavioural and social approaches. Within the 29 reviewed case studies, more than half reported changes to the environment or infrastructure as an integral part of their project. Environmental approaches did not, however, represent the sole driver for any of the case studies. This indicates that environmental interventions are used rather to support, enhance or enable the effectiveness of other interventions, and that a combination of approaches is likely to yield the best effects.
- Evidence and research findings: abundant evidence from the research community indicates that, in Europe, people who live in disadvantaged neighbourhoods generally tend to be less active. In parallel, more disadvantaged population groups have less free time and poorer access to leisure facilities, or live in environments that do not support physical activity.
- Policy analysis: in general terms, policies on physical activity most often relate to sport or health policies. Connections to other sectors, however – especially the transport and environment sectors and their policies – are made as well, indicating that the mutual benefits of converged approaches to health, equality and environmental sustainability may be underexploited.

There are clear indications that environments which are conducive to physical activity are health enhancing. It is increasingly recognized that physical activity interventions that promote combined change at the environmental, policy and individual levels have the greatest chance of success. However, only a few prospective studies have assessed the potential of environments to moderate the relationship between SES and physical activity. Researchers are still trying to understand the complex relationship between environment characteristics and physical activity in disadvantaged populations or neighbourhoods, and how this can best be applied to interventions. In recent years, scholars have therefore called for a broader ecological approach to understanding the correlates of physical activity and the role of both the immediate and the wider physical environment in predicting it. The PHAN project results indicate that the role of the social and physical environment in regard to physical activity promotion is mentioned by several policy documents; however, they tend to be very general and vague on the implementation of these interventions and on the target population.

The main challenge regarding the relevance of healthy environments for physical activity promotion in SDG is that its impact is difficult to prove because environmental approaches are usually part of multidisciplinary approaches. Thus, it is difficult to account for the relative contribution of environmental intervention aspects in any success achieved. The challenge of evaluating environmental interventions has also been shown, as it may take years to observe improvements in physical activity as a consequence of manipulations to environmental factors. It is therefore very hard, given the available evidence, to provide quantitative proof of the impact of environmental interventions on physical activity promotion in SDG.

Environmental approaches are also challenging to implement for the actors involved, who most often come from health, physical activity and sport sectors. Making changes to environment or infrastructure is often difficult, if not impossible, because of a lack of mandate (for example, urban planning related to transport, green spaces and so on usually lies within the remit of other sectors). Mutual gains for all relevant sectors need to be identified: for example, that promotion of active travel not only increases physical activity levels and improves health but can also address traffic problems and the growing pressure to reduce greenhouse gas emissions from transport. The financial aspect of making changes to existing infrastructure is another issue, which would need to be addressed by highlighting the economic advantages of increasing physical activity levels. Finally, since environmental intervention is most often part of larger approaches, the coordination aspect of the many actors involved makes it hard to modify environmental conditions quickly and in a way that best supports the other approaches within the intervention project.

5.2 Suggested environmental factors in physical activity interventions

Despite these challenges, various examples of environmental intervention can be found in the case studies, indicating at least some of the potential areas for environmental action to promote physical activity in SDG. Annex 4 gives a brief overview of all 29 case studies discussed in the project.

- The perception and cleanliness of physical environments could be modified to increase their acceptance and recreational use. Such intervention can be achieved through simple local maintenance measures such as removing waste (Case Study 26 from Hungary) as well as urban-scale approaches (Case Studies 23 and 24 from Scotland and Norway). It could also relate to the improvement of perceived safety in outdoor areas (Case Study 11 from Scotland).
- Access to recreational or sport settings could be increased or improved to benefit from existing infrastructure and make them more effectively used. Such intervention has been taken by Wales (Case Study 2), for example, extending access to school premises for physical activity pursuits (enabling geographical and financial accessibility), or Germany (Case Study 9), offering women-only swimming classes for Muslim women (enabling sociocultural accessibility).
- New physical activity-supportive environments could be established, enabling the implementation of physical activity as an option for both leisure and transport. This approach is regularly applied by the case studies, as in Scotland (Case Study 11), aiming at increasing active transport levels through environmental modifications, or Finland (Case Study 27), trying to increase general physical activity levels through improved environmental conditions in deprived areas.
- Environmental assets or environmental interest could be used to engage people in activities such as nature conservation (Case Study 4 from Scotland) or gardening (Case Study 2 from Wales).
- Physical activity could be applied in outside environments as a part of prescribed treatment for people with chronic conditions (Case Study 20 from Spain) or based on pre-arranged activities such as walking programmes (Case Studies 25 and 12 from England and Scotland).

These interventions are derived from the review of case studies but are much in line with the results of a recent global review of physical activity interventions, recommending “creation and improvement of access to places for physical activity with informational outreach activities, community-scale and street-scale urban design and land use, active transport policy

and practices, and community-wide policies and planning" (Heath et al., 2012). In addition, they reflect the finding by Pratt et al. (2012) that provision of equal access to facilities and safe public spaces is often the first step in physical activity promotion for SDG.

It is clear that the intervention mechanisms described above hardly vary from interventions that would be applied to promote physical activity within the whole population. The differences in delivery, therefore, mostly relate to the target groups and/or target areas, with a large number of environmental case studies focusing on deprived neighbourhoods and city quarters rather than identifying target population groups. Compared with projects pursuing non-environmental interventions only, however, the case studies indicate that significant environmental changes tend to be associated with regional or national projects rather than local initiatives. The smaller the number of participants targeted, the less likely it seems that environmental changes are part of the intervention planned. This might be because environmental interventions often carry a high price tag and have therefore a more challenging cost–benefit ratio.

The overall difficulty in identifying the most appropriate target groups for given environmental modifications is also well reflected in the policy documents analysed. While many policies or action plans include the dimension of environmental approaches, they rarely identify the population groups most in need of such interventions or expected to benefit most.

In summary, the PHAN project indicates that there is much to gain from implementing environmental approaches for physical activity promotion in SDG, but that – in practical terms – both implementation and evaluation are difficult. Further work is necessary both to assess the impact environmental interventions can have and to establish which interventions provide the best outcomes.

6. Guidance on interventions promoting physical activity in SDG

6.1 Suggested elements of good practice for interventions

The assessment of good practice to be derived from the case studies was based on both the material at hand and the experience and expert opinions of the project group. Conclusions focus mainly on suggested elements of good practice ("Dos") but also include some guidance on what not to do in order to reach the objective set ("Don'ts") (Table 1). The conclusions are broken down into the following three dimensions, which include key questions to be asked throughout the process.

- How to target and include SDG:
  - How should target SDG be defined?
  - How can SDG be included in the development of physical activity projects?

- How to deliver successful interventions:
  - What interventions can successfully promote physical activity in SDG?
  - What measures can ensure that interventions are delivered effectively?
  - How can successful networking and collaboration be arranged?

- How to define and monitor realistic objectives and targets:
  - What objectives and targets should be set?
  - How can the success of interventions in disadvantaged groups be monitored?
  - What kind of evaluation is necessary?

Table 1 Suggestions for good practice in interventions promoting physical activity in SDG

How to target and include SDG		
Key question	**Do:**	**Don't:**
How should target SDG be defined?	• define by common indicators based on national statistics: socioeconomic, sociocultural and sociogeographic • reflect that defining SDG requires local municipality knowledge • distinguish between individual socioeconomic disadvantage and infrastructural disadvantage • consider that the definition will be very context specific	• assume homogeneity within any given SES group • call the group "socially disadvantaged" (avoid stigmatization) • focus only on one indicator of socioeconomic position or one dimension
How can SDG be included in the development of physical activity projects?	• apply participatory approaches throughout all stages of intervention • empower – give SDG a role and ownership of the process • reach target groups through community leaders, community settings and local organizations • undertake qualitative research on which SDG to include in projects • make projects easily accessible, relevant, attractive and interesting for the target group • reflect, before developing interventions, on whether SDG should be included in general population interventions or targeted specifically	• focus only on the individual level • invite participants only after the programme has been designed • force participation

Table 1 contd

How to deliver successful interventions		
Key question	**Do:**	**Don't:**
What interventions can successfully promote physical activity in SDG?	• make concrete suggestions for interventions, such as those concerning school infrastructure and curricula, provision of information material in different languages, parental involvement, improvement of environment, primary care setting interventions and similar. • use characteristics of interventions targeted at SDG, including those that: • are related to settings in which the target group is mixed with general populations • ensure equitable access and are easily accessible, without barriers to participation of distance, cost or social/cultural values • focus on social needs and integration in the daily routine and are sustainable • understand and meet the demand • address income inequalities • involve multiple partners • are evidence based and use mixed methods	• separate SDG from general population facilities • address only SDG • force participation • use only media campaigns
What measures can ensure that interventions are delivered effectively?	• make interventions easy accessible (including financial and social access dimensions) • be clear on determinants, and clearly define concepts • use multisectoral approaches and financial support • measure, monitor and evaluate work throughout the project • set realistic and measurable goals and reflect on them at all stages • listen to target group's opinions: consult throughout the process • monitor the appropriateness of activities throughout the project • use partnerships: involve professionals, peers, institutions from different levels and local leaders • ensure local and national policy support • apply mixed methods	• offer courses for a limited time period • use a top-down approach • only focus on lifestyle change
How can successful networking and collaboration be arranged?	• undertake stakeholder/partner analysis prior to the project • include all stakeholders involved • use partners from different ministries and at different levels, and from nongovernmental, private sector and media organizations • clarify roles and responsibilities • create common interest and illustrate potential benefits of networking from the beginning • involve parents if children are a target group • monitor the stakeholder/network involvement throughout the process	• expect other sectors to have the motivation/time to be involved • promote it as a purely academic/research programme • ignore the needs and objectives of partners • forget the physical activity strategy and European guidelines • blame someone for being guilty

Table 1 contd

How to define and monitor realistic objectives and targets		
Key question	**Do:**	**Don't:**
What objectives and targets should be set?	• set targets/objectives that focus on increasing physical activity levels • set targets that focus on empowerment by increasing health knowledge and self-efficacy; fighting sedentary behaviour; improving physical condition and health; increasing awareness of opportunities for physical activity and active transport; and increasing social interaction • set objectives that are specific to the population group, realistic and measurable • set targets/objectives that focus on a range of physical activity outcomes, not just one • set targets that people demand/are interested in	• focus only on single, specific health outcomes (such as losing weight) • focus on intensity of physical activity
How can the success of interventions in disadvantaged groups be monitored?	• be clear to participants on the intended outcomes and the need to measure these • define indicators and monitor them regularly, possibly by establishing a monitoring group • include both objective and subjective physical activity assessment methods • implement a baseline measurement against which to compare results • be aware that many interventions require mid- or long-term follow-up to show effects • clearly define the target group and aim to facilitate monitoring • integrate religious, social or cultural dimensions	• expect programme managers to monitor outcomes without support and advice • expect monitoring to be done for free/without an identified budget • monitor only areas where success is expected • rely only on subjective physical activity self-reports • focus only on short-term success • exclude secondary outcomes
What kind of evaluation is necessary?	• encourage active participation of the target group in evaluation • use quantitative and qualitative criteria to evaluate the intervention (project evaluation) • set criteria to evaluate the overall programme, including processes, collaboration and organization (programme evaluation), reflecting the complex nature of physical activity interventions • evaluate at different levels, including individual, target group and community • consider using the REAIM framework (measuring Reach, Efficacy/Effectiveness, Adoption, Implementation, Maintenance) • evaluate cost–effectiveness if feasible • evaluate the transferability of the study to a larger group • continue to evaluate throughout different stages of the intervention • use external and internal evaluation • use evaluation to refine the intervention and provide feedback to participants	• ignore evaluation • evaluate only part of the process (for example, only recruitment)

6.2 Examples of good practice interventions

In general, the case study review showed that interventions are being developed to promote physical activity in SDG in many European countries. The magnitude of action varies across countries, which indicates that the level of action and – possibly – awareness is not yet advanced in all EU Member States.

The case studies discussed by the PHAN project revealed a wide range of innovative and recommendable approaches for action. Nevertheless, they most often did not match all the requirements necessary to be classified as evidence-based good practice. The main reason is that there was inconsistency across all case studies in the level of detail provided, particularly around outcome data, their monitoring and evaluation. The added value of the interventions often remained unclear to some extent: success was often deduced from rather qualitative statements of participants or the retention rate throughout the project, which is not very helpful in scientific terms.

On a positive note, the review proved that working in partnership and collaboration with many stakeholders is effectively the norm. Many interventions brought together a broad range of sectors, most commonly health, transport, employment and education. Environmental approaches were not a lead component but were included as an intervention area in about half the case studies discussed, indicating that there is a role for the environment in promoting physical activity in SDG.

The following section provides practical examples of what seems to work in physical activity promotion targeting SDG. It should be emphasized that some of the good practice lessons learned have resource implications that should be considered prior to adoption.

6.2.1 Identification of target groups

The case studies reviewed often identified three or more levels of disadvantage for their respective target group (for example, see Case Study 3 from Israel). This indicates that social disadvantage is multilayered; thus, the identification of target groups is a very important part of the process.

- The intervening actors must be aware of the diverse mix and overlaps of disadvantage that may affect the target group and must adapt the intervention to match this context.
- The most relevant dimensions for consideration refer to marginalization in terms of socioeconomic, sociocultural, and sociogeographic disadvantage.

Some case studies noted the value of doing outreach work to engage with the target audience in their own environments but few showed that a needs assessment had been completed prior to the design of the interventions (Case Study 29 from Scotland reported needs assessment as part of the project implementation).

- Where feasible, participation of the target group should be secured as early as possible in order to:
    - assess the needs and requests for physical activity promotion activities
    - develop the interventions together with the target group.

The case study review showed that interventions targeting disadvantaged areas often develop into projects for marginalized population groups, frequently based on ethnic or socioeconomic measures.

- The interaction between area effects and target individuals or population groups needs to be acknowledged.
- Interventions in disadvantaged neighbourhoods cannot remain at a locality level but must also include elements addressing the specific situation of the residents in that area.

In many case studies the reason the specific target group had been identified was not evident, nor was it clear whether the chosen group was indeed in greater need than other population groups.

- The choice of target group for specific interventions must be explained using data and physical activity information, and the reason for giving this group priority over other potential choices should be clarified.
- This requirement reinforces the necessity of carrying out a needs assessment prior to developing the intervention.

6.2.2 Interventions and approaches

All interventions reviewed had health and physical activity behaviour changes at their core; environmental interventions were less common and most often served as contributing mechanisms rather than the main focus. Most case studies showed the benefits of tailored, person-centred approaches, allowing for personal goal-setting and flexibility in relation to the type and intensity of intended outcomes as well as the degree of support desired.

- It seems advisable to focus interventions on behavioural and/or awareness and motivational changes within individuals. Even though interventions are usually taking place as group activities – which is a social and motivational benefit – the interventions should enable individual participants to set their own goals in a flexible way, reflecting their own capacities and preferences.
- Environmental interventions (enabling physical activity within the daily surroundings or through active transport, and so on) may not work as the main focus but seem crucial as contextual offers for physical activity, facilitating the exertion of activities once the interest or motivational stimulus is provided.
- Interventions on behaviour change therefore also need to include the dimension of equal access to and opportunities to take advantage of physical activity-supportive settings or environments. Case Study 20 (Spain) is interesting in this context because the environment was used as the main intervention by prescribing defined walks to patients.

A wide range of interventions reviewed by the PHAN project offered physical activity opportunities free of charge or at reasonable cost, taking place in the immediate living environment of the target groups. The provision of such offers is not exclusively linked to a socioeconomic targeting approach but is also found in relation to area-based interventions targeting, for example, neighbourhoods (Case Studies 6 and 28 from England and Finland) or specific ethnic groups or minorities (Case Study 9 from Germany).

- Access to physical activity opportunities as well as to targeted interventions and programmes is a relevant aspect to consider while developing intervention projects. Although free or low-cost offers do not provide a guarantee that the target group will engage in the proposed project, it is clear that – especially for SDG with low SES – costs and distance play a role, and can thus become an obstacle to participation.

- Similarly, social and cultural obstacles should be considered to ensure equal accessibility, especially when inclusive physical activity interventions (aiming at target groups being physically active together with other population groups) are not possible due to certain social, religious or cultural values that make separate interventions necessary.

A range of case studies showed the value of "non-professionals" (such as peers and local people) as delivery agents, mentors, and role models (Case Study 19 from Ireland showed peer mentors being used). Trained facilitators within given peer groups seemed to be effective in liaising with the target groups and were assessed as enabling a more effective outreach. This approach also enables access to target group-specific settings that may be difficult for individuals not belonging to the population group.

- Inclusion of the target group should be considered not only during the design of the intervention but also – or especially – during the implementation phase.
- Peer group facilitators may have crucial relevance, especially in relation to sociocultural or religious minorities, for making the intervention acceptable and feasible to the target group, and are thus a precondition for successful implementation.
- It is important to plan and allocate resources for the use of peers and local project staff.
- It seems recommendable to provide appropriate training (primarily around health behaviour change) to develop skills and confidence among peer supporters or mentors, and to provide continuing support and supervision if the potential of this asset is to be fully realized (Case Study 19 from Ireland also covered the need to allocate time to train this group of peer workers).

The review of case studies showed that it is useful to have a repertoire of retention strategies to support participants in continuing their active engagement throughout the project time period and despite the motivational downtimes that tend to appear.

- Practical guidance drawn from across the case studies include the need for regular prompts and direct/personal communication, the potential use of incentives and especially the continuity of support provided through the peers, counsellors or project staff.

6.2.3 Actors and networks engaged

Most case studies reported strong benefits of partnerships and collaborations, which were often established in the very first phase and expanded during the project. In particular, interventions aimed at connecting different sectors that might otherwise have less interaction. The sectors most often referred to were health, education, transport and employment.

- Interventions benefit from partnership approaches that support implementation and are helpful in overcoming potential obstacles.
- The case study experiences suggest, however, that respective roles and responsibilities of the different actors involved should be clarified at an early stage. A steering group to coordinate efforts and address any emerging issues seems recommendable as well.
- Partners and stakeholders can be from any background. The selection depends on the planned intervention and the long-term objective. In many cases it may be useful to include public authorities (especially if the intention is to establish certain services or programmes as public programmes in the future), while other interventions can be fully handled by community-based organizations and similar. Potential collaboration with the

social welfare sector, dealing with socially excluded groups by default, needs to be considered.
- Interventions benefit from being backed up by a policy or action plan. This helps to ensure both funding and longer-term commitment from relevant partners, and that the intervention is supported until the end.

Case Studies 12 and 27 (Scotland and Finland) provided good insights into networking and partnership approaches and commented on their relevance as contributing factors to the success of the project.

6.2.4 Objectives and desired outcomes

All case studies included an increase of physical activity in the participants as a main objective, but many also reported a range of wider non-health outcomes, most often related to general well-being, social integration and employability (such as Case Study 1 from Germany, which provided an example of employability as an intended outcome, reflected in the delivery of the intervention in job centre settings). Indirect objectives reported were the improvement of knowledge, attitudes and self-efficacy, as well as more healthy lifestyles (healthy eating, mental well-being, smoking cessation and so on). Street sport interventions (see 3.2.1 above) offering sport and leisure activities also tended to include other factors such as crime or substance abuse prevention.

- When developing interventions, organizations should consider a wider frame of objectives rather than just the increase of physical activity and sports activities. Some of these may be used for promotion and positioning of the intervention (as with integration and employability, for example) while others may be more indirect objectives not directly conveyed.
- Project staff, facilitators and peers need to be educated on the wider frame of objectives in order to adapt their support and advice function.
- Increased physical activity can be considered the main objective but the benefits associated with it should also be reflected and exploited.

The case studies showed that it is important to set realistic objectives and choose outcomes relevant to the target group: a mismatch of these will negatively affect the work. It is necessary to be clear from the outset about the desired outcomes and the steps required to achieve them. Objectives should be SMART.

- Objectives and outcomes should already be identified as part of the recommended needs assessment during the selection of the appropriate target group, and should be developed in communication with that group.
- The outcomes should be designed in such a way that they can be monitored and quantified.

6.2.5 Monitoring and evaluation

A major weakness of the case studies was that while a wealth of data was provided through monitoring, little evaluation took place. In particular, the achievement of outcomes was often not supported by evidence. Case Study 2 (Wales), however, applied a randomized controlled trial design and an economic analysis, indicating that such approaches can be transferred to physical activity promotion.

- There is a strong need to establish good monitoring and evaluation processes so that data can be collected against agreed outcomes.
- An evaluation plan should include a strategy for disseminating findings so that learning can be shared more widely and the participants understand the purpose of the evaluation exercise.

Many case studies reported problems with funding of adequate monitoring and evaluation schemes as a result of a low budget, as well as problems identifying results due to the short project period.

- Evaluation schemes should be part of the proposal for funding and increase the relevance of adequate outcomes to be evaluated.
- Sound evaluation helps in identifying and communicating the benefits achieved by the interventions and should thus be considered an important prerequisite in obtaining further funding.

Several case studies, however, were also creative in assessing their impact in the given context. Case Study 16 (Scotland) undertook a return on social investment assessment; this introduces an interesting development for the evaluation of SDG projects in general. Case Study 21 (Scotland) used a pre and post methodology to identify the effects of the work.

7. The role of healthy environments in interventions promoting physical activity in SDG

Environmental changes rarely represent the exclusive content of physical activity promotion interventions aimed at SDG. Instead, environmental interventions are considered most effective as part of multidisciplinary approaches where the environmental changes support or enhance other intervention activities, or where they provide the context for a certain intervention to occur. As discussed, environmental modifications are often part of interventions addressing geographical target areas rather than specific target groups. The target area in this context can be a deprived neighbourhood, but smaller target areas such as individual places (school grounds, swimming pool, street sections, parks or green spaces and so on) can also be considered.

One key feature of environmental interventions relates to the condition of the respective environmental feature, taking into account factors such as attractiveness, cleanliness, safety and security, or accessibility. This is especially relevant in deprived areas where the conditions of the physical environment may not always be adequate.

A second feature concerns the availability of physical activity-enhancing environments. This refers to the number of such settings within a given (deprived) area and the distances people need to cover to make use of them. Again, current evidence indicates that the availability of such environmental settings, especially in deprived areas, is much lower than in well-off areas.

A third feature involves the type of physical activity supported by the respective environment. Physical activity promotion can be achieved through the provision of adequate environments that allow recreation or leisure activities, such as playgrounds, open green spaces and parks, sport halls and so on, but also pleasant urban settings or forests that are inviting for walks and general outdoor activities. It can also be achieved through the provision of infrastructure allowing for active transport activities, such as sidewalks, cycling lanes and similar. By default, such interventions tend to target settings rather than specific target groups.

Environmental approaches, therefore, often come as area-based interventions that may be connected with a variety of disadvantaged target groups (depending on the respective project objectives) to form a multidisciplinary project. Area-based interventions to promote physical activity in SDG can also, however, come without the identification of specific target groups and focus on deprived areas only.

In summary, the case studies and evidence compiled seem to suggest that there is indeed a role for the environment in promoting physical activity in SDG, but that any environmental modification must be accompanied by other activities aiming at, for example, awareness raising or behavioural change. In the majority of cases, however, environmental modifications are used to provide contextual offers for non-environmental physical activity promotion activities, enabling the exertion of activities once the interest or motivational stimulus is provided. To that extent, environmental changes may strongly support and improve the effectiveness of other interventions on physical activity promotion in SDG.

8. Guidance on policies promoting physical activity in SDG

8.1 Suggested elements of good practice for policies

The review of existing policies presented in Chapter 4 showed that most countries of the EU have a policy focusing on physical activity and targeting one or more groups that could be socially disadvantaged as defined for the scope of the PHAN project. The policy documents are, however, quite diverse in focus and level of detail, and often lack a clear definition of the target group and objective. There seems to be a gap between the existing evidence and practice, often resulting in missing implementation strategies. As the review made clear, the promotion of physical activity, in particular in SDG, falls under the remit of many different players and sectors, going far beyond physical activity experts. Many policies address sport and physical activity, while others focus, for example, on the link between nutrition and physical activity.

In most countries there is no overt linkage of documents seeking to improve health in SDG through physical activity and/or sport to a wider spectrum of public policy. The emphasis is on person-centred approaches, while wider and more holistic approaches are less frequently employed.

It therefore seems important to consider content, sectoral coverage and ownership of policies when recommending strategies to be adopted at the European level for the physical activity promotion in SDG. Strategies need to be addressed to a wide variety of sectors and stakeholders involved in effective physical activity promotion. Public health, sport and physical activity professionals are only some of the key players: urban planning, transport and education are among the other sectors that can play a critical role in enabling physical activity but have not yet been sufficiently recognized and involved in policy-making for physical activity promotion in SDG.

Six elements are considered especially relevant for effective physical activity policies focusing on SDG. These have been identified through the reviews of existing policies (via analysis of the NOPA data and questionnaire responses) and the work of the PHAN working group. Although some of the recommended elements apply to policy formulation and implementation in general, they are nevertheless considered essential to the success of strategies on physical activity promotion in SDG. Other recommended elements focus on physical activity in SDG in particular and therefore need special attention from key actors working in this field. A summary is provided in Table 2 below.

Table 2 Suggestions for good practice in policies promoting physical activity in SDG

Policy element	Physical activity promotion in general	Physical activity promotion in SDG
Sectors and institutions involved	• Involvement of different sectors/actors in the preparation, formulation and implementation of the policy is necessary, including various sectors of national government (different ministries/subnational authorities), nongovernmental, private sector and media organizations, associations, education institutions and employers. • Roles should be understood and individual expertise exploited, especially in the planning stages of policy formulation. • Policies should take stock of the experiences of local actors ("bottom-up experience"). • Existing policies should be used, facilitating collaboration between sectors in order to ensure that all sectors take responsibility. • More information should be shared with and capacity-building increased for local players.	• Cooperation between social affairs and sport, physical activity and health sectors needs to be strengthened for policy formulation. • Collaborative mechanisms for policy development and review – such as committees at state level to support the importance of physical activity in SDG in state politics – should be established. • Desirable outcomes of policies targeting physical activity in SDG should be aligned with agendas/objectives of other relevant sectors (with main stakeholder groups and subgroups working on specific risk areas).
Targeting and outreach	• Target groups should be identified through existing data.	• Disadvantaged population groups should be clearly identified by the policy: each target group needs a tailored solution. • The policy should provide a specific definition of the various target groups. • Reference should be made to existing policy documents targeting SDG. • Target groups identified by other sectors' policies (education, social support and similar) should be combined with a physical activity promotion target group. • Physical activity offers that are easily accessible in both spatial and financial terms should be promoted. • The diversity of settings and living conditions of SDG needs to be taken into consideration by the policy.
Goals and objectives	• Policies need to have set targets, with long-term objectives and key milestones by years. • Policies need detailed implementation plans as well as a clear definition of the body/bodies responsible for implementation (at national, regional or local levels and within different sectors). • Clear distinction of physical activity objectives as independent purpose or as a means to reach other objectives (in particular social benefits).	• Physical activity goals need to be clearly specified by the policy for particular population groups and time periods. • Expected outcomes need to be defined on a macro societal level, including: o increasing physical activity levels among SDG; o reducing inequalities in physical activity levels between social groups. • Policies should include three coordinated and aligned timeframe horizons (short, medium and longer term). This is particularly important as changes in physical activity levels among SDG are not expected to be easily modified in the short and medium term.

Table 2 contd

Policy element	Physical activity promotion in general	Physical activity promotion in SDG
Budget	• There is a need for a specified budget allocated to implementation of the policy. • Policies should make reference to proper resources and longer-term funding (needs and sources of funding). • Measures addressed by policies should take into account the maintenance costs of the elements included. • Policies need long-term investment in evaluation and surveillance.	• Options for using funds across sectors should be explored. • As interventions in the field of physical activity promotion in SDG may lie within the competency of sectors outside those benefiting (and also address their goals), whether funds from one sector can be used in another should be explored.
Training	• Capacity-building and training on social inclusion and cultural sensitivity for stakeholders from all sectors should be put in place to ensure better policy formulation, acceptance and implementation.	• Action plans should cover capacity-building needs of the implementing staff. • Training needs for policy acceptance and implementation should be noted, including: o training of physical education teachers and coaches to be socially and culturally sensitive and to broaden their views on sport and physical activity; o communication with and education of the target population, with the possibility of using the built environment for physical activity promotion; o reducing gaps in language (professional terminology).
Evaluation and surveillance	• Policies should include strategies for monitoring and evaluation from start to finish. • Stakeholders' involvement as well as outcomes should be monitored.	• Policies should enable surveillance or monitoring strategies to measure physical activity by: o measuring changes in physical activity and physical activity determinants at the local level; o monitoring changes in target groups, with social cost–benefit analysis; o identifying national definitions of specific social disadvantage indicators within their respective physical activity monitoring system. • Each country should collect physical activity data that can be disaggregated to reflect social disadvantage aspects.

8.2 Examples of good practice for policies

8.2.1 Sectors and institutions involved

The policy review indicated that national policy documents on physical activity promotion are most often associated with the health and sports sectors. Other sectors (such as social, transport, environment and urban planning) are less frequently referred to. The review also showed, however, that involvement of different sectors from the beginning of the policy formulation process is of crucial importance. Respective roles and competencies should be defined and exploited at the earliest planning stages. The review and the expert group's opinion converged in the observation that disadvantaged groups can be addressed by many different political players, going far beyond physical activity experts: thus, stronger collaboration between the sectors of social affairs, sport and physical activity, education, transport, urban planning, environment and health is essential to the promotion of physical activity in SDG. Actors dealing with unemployment, for example, are not necessarily involved in health or physical activity issues and might not be aware of possible synergies. To facilitate the inclusion of the physical activity promotion policy in relevant state policies and programmes, collaboration could be institutionalized through the establishment of interdisciplinary committees.

The desirable outcomes of physical activity promotion policies for SDG should be aligned with the agendas and objectives of other relevant sectors (such as health, education and welfare) in order to create stronger commitment and to increase funding opportunities and strategic direction. Where possible, physical activity promotion could be included in existing policies as a means to reduce health inequalities or to promote both physical activity and health in SDG. Aligning these objectives with existing policy commitments would help to share responsibility among a wider range of sectors, improving the chances of actual implementation.

Strategies likely to have an impact on the promotion of physical activity in SDG rely on knowledge and expertise about local social disparities, available mechanisms and key players. Physical activity promotion policies should therefore take stock of the experience of local actors ("bottom-up experience"), who often have to implement the policies and can therefore frequently highlight possible implementation gaps. The inclusion of physical activity or sport science experts (in addition to health experts) in urban planning decision-making processes should be encouraged at the local level in order to align the development of the built environment with the promotion of physical activity. Local tools should be developed to integrate physical activity in urban planning of deprived areas. More information and increased capacity-building should also be provided for local players.

Policy examples including multisectoral action

The Flemish *Action plan to promote healthy dietary habits and regular physical activity* (Ministry for Health, 2004) suggests action in a range of settings – including schools, active transport and workplaces – and thus covers a variety of sectors.

The Welsh policy document *Climbing higher: the Welsh Assembly Government strategy for sport and physical activity* (Welsh Assembly Government, 2005) indicates targets for infrastructural and environmental/leisure-related action, indicating opportunities to promote physical activity through the provision of, for example, sports facilities, nature and walking cycle paths.

8.2.2 Targeting and outreach

Although the policy documents reviewed often used blanket terms when addressing socially disadvantaged populations, to be most effective policies should provide a specific definition of the various target groups, making the application of the policy and its monitoring and evaluation easier. SDG should clearly be identified, as each target group needs a tailored solution. Identification and prioritization of target groups should also be evidence based and documented.

As stated above (see 8.2.1), where possible, reference should be made to existing policy documents from all relevant sectors targeting SDG in order to align priorities and actions. Target groups covered by the plans and policies of other sectors (such as education, urban planning, social welfare and so on) should be combined with physical activity promotion target groups.

Especially when targeting low-income population groups, policy-makers should reflect that locations, venues and facilities for physical activity must be easy to access in terms of both distance and finance. Social and cultural standards and values are also key aspects for consideration when targeting ethnic or religious population groups. The relevance of such geographical, financial and social barriers must thus be recognized at the beginning of the policy planning and formulation process.

The diversity of settings and living conditions of SDG is immense and makes the formulation of specific guidance complicated. Risk groups not only vary from country to country but also differ between urban and rural settings and between different geographical exposures within a country, among other factors. In addition, the concept of social disadvantage is dynamic over a life's course, changing with personal developments and external conditions.

As the reviews showed, the most consistently applied definitions of social disadvantage relate to the economic circumstances of individuals or groups, assessed by a variety of criteria (see 4.2.2 above). Age, in combination with other issues, is seen as a complex determinant of social disadvantage, which is clearly often compounded by mental and physical disability and illness. Poverty, lower educational attainment, social isolation and so on are also combining factors. The different characteristics inherent within a specific group may require the application of a different policy approach or policy approaches.

Policy example making detailed reference to target groups

Within its policy document *Sport XXI: national sports strategy 2007–2020* (Parliament of Hungary, 2007), Hungary defines disadvantaged groups as "children and young ones living in disadvantaged towns and villages, people with disabilities, women and the Romany". One of the main goals of the policy is to reduce inequalities and contribute to the integration of SDG in relation to sport. There is a specific section on equal opportunities. Schools are emphasized as a useful setting. Lowering the costs of physical activity is exploited as a change of paradigm.

Policy example aligning physical activity policies with existing policy documents targeting SDG

The German IN FORM initiative (Federal Ministry of Food, Agriculture and Consumer Protection and Federal Ministry of Health, 2008) promoting healthy diets and physical activity includes a measure to develop group-specific concepts to target inactive groups, taking into account "sociocultural aspects like the needs of people with low SES or women with a migrant background". German classes for migrants, for example, include a Nordic walking module.

8.2.3 Goals and objectives

The review found that time-bound and measurable goals were rare in policies and programmes promoting physical activity in SDG, leading to difficulties in evaluating the policy. Physical activity goals or targets need therefore to be clearly specified for particular population groups and time periods. Policies on physical activity promotion in SDG should include three coordinated and aligned timeframe horizons (short, medium and longer term), acknowledging that changes in physical activity levels are not likely to occur swiftly. Quantitative targets of better health, better social inclusion and similar are considered strong drivers for intervention programmes as well as facilitating access to related funding.

When discussing an increased physical activity level for SDG, the outcomes of the policy should be put in a broader social context. Policies can, for example, aim at increasing physical activity levels among target populations or at reducing inequalities in physical activity levels between social groups.

Although policies have the aim of setting targets and objectives rather than providing detailed implementation plans, the challenges facing implementation should be considered during the policy development phase. Policies should provide some indication of how these targets could be achieved (including possible actors, data required and so on). For example, as mentioned above (see 8.2.1), implementation of policies promoting physical activity in SDG usually takes place at the local level. Considering the implications of this at the policy formulation stage can help to increase successful implementation drastically. In general, a policy should be closely followed up by a detailed implementation plan, including a clear definition of the bodies responsible for implementation, which should be shared between national, regional and local levels and different sectors. While the analysis of case studies on physical activity promotion in SDG indicates that there is much to gain from the use of peers and local facilitators when targeting hard-to-reach groups, policies seldom explicitly refer to key actors and players.

Policy examples setting quantified and specific objectives relating to physical activity improvement in specific target groups

The Dutch policy document *Time for sport* (Ministry of Health, Welfare and Sport, 2005) sets the following objectives for 2012, using 2005 figures as a baseline:

- at least 70% of adults (18+) to do the recommended amount of exercise (2005 = 63%);
- at least 50% of young people (aged 4–17) to do the recommended amount of exercise (2005 = 40%);
- no more than 5% of adults in the Netherlands to be inactive (2005 = 6%).

The Irish action plan document *Building sport for life* (Irish Sports Council, 2009) sets key targets to increase adult participation in sport from 33% to 45% by 2020 and to reduce the proportion of sedentary adults from 18% to 13% by targeting low activity groups.

8.2.5 Budget

In order for the policy to be implementable and efficient, it needs to be allocated a specified budget. The policy itself should make reference to proper resources and longer-term funding, including information about budget needs and sources of funding. As interventions in the field of physical activity promotion in SDG may lie within the competency of sectors outside those benefiting (while also addressing the goals of these sectors), it may be possible to allocate funds from one sector to another: this should be fully explored.

In addition, policies often include a set of measures or actions to be applied without outlining the costs that maintaining such measures would entail. For example, the construction of a children's playground in a socially disadvantaged living environment needs not only initial funds for its construction but also maintenance funds to keep it safe and clean. These costs are seldom included in initial policy or programme budgets. A policy also needs investment to ensure adequate evaluation and surveillance of the project and its outcomes.

As projects that address social inequalities are often viewed favourably in applications for funding opportunities, it is possible to promote physical activity not solely from a public health perspective but also in combination with broader social goals.

Policy example outlining financial implications of a suggested policy

Within the Czech policy document *National programme for the development of sport for all* (Government of the Czech Republic, 2000), one recommended action is to "gradually introduce a third hour of gymnastics in addition to the maximum number of lessons at the second level of elementary schools and in secondary schools". This measure assumes that the gradual introduction of the third hour from 2001 would see the whole process completed by 2003. The programme includes the estimated costs of such an intervention and estimates that a full introduction of the third hour in 2003 would represent an increase of CZK 286 million in addition to payroll costs (without valorization).

8.2.6 Training

As the promotion of physical activity in SDG falls under the remit of various actors – going far beyond physical activity specialists – policy formulation, promotion, implementation and evaluation require capacity-building at various levels and within several sectors. Physical activity policies themselves should therefore cover the need for capacity-building and recognize the importance of networking and fundraising skills.

Better training of physical education teachers and coaches to be socially and culturally sensitive and to broaden their views on sport and physical activity is essential for successful policy acceptance. Main suggestions are to improve skills for dealing with SDG among professional or volunteer groups (such as sport and social technicians, health workers and so on) and to increase social inclusion and cultural sensitivity among stakeholders from all sectors.

Increasing shared knowledge among sectors about their activities and priorities helps with gaining commitment to shared interests and making better use of information and resources. There is a need to reduce gaps in terminology, making a common language more understandable. Policies on physical activity promotion can only be effective, however, if the target population is informed about the possibilities, using resources and environments suitable for increasing their level of physical activity.

Policy examples incorporating training

While the case study review indicates that training, awareness raising and education are key components of interventions, they are hardly mentioned as independent tasks in the policy documents identified in the NOPA database (see Chapter 4), although it can be assumed that many physical activity promotion activities will automatically include informational components.

Examples taken from the national responses to the policy questionnaire include the provision of quality standards on physical activity in nurseries and day care homes (Netherlands) and the implementation of public awareness activities on physical activity based on education, training, health checks and dissemination of booklets (Romania).

8.2.7 Evaluation and surveillance

Policies and their implementation need to be regularly monitored and assessed. For policies requiring the support of various stakeholders and sectors there is a particular need to monitor the stakeholders' involvement as well as to assess the planned outcomes. Monitoring, surveillance and evaluation need to be robust and embedded from the start of the policy.

Policies targeting physical activity promotion in SDG need to ensure the availability and functionality of reliable surveillance and monitoring systems so that physical activity levels can be measured in both the general population and the target groups. Changes in physical activity levels and physical activity determinants need to be measured at the local level in order to have sufficient information to define sensible target groups and required measures. Countries should define specific indicators of social disadvantage within the respective physical activity monitoring systems.

Measurement of inequalities in physical activity should be not only part of the policy implementation process but also one of the first steps in framing the problem and informing the policy development process.

Policy examples incorporating approaches to monitoring physical activity levels

The policy document *Nordic Plan of Action on better health and quality of life through diet and physical activity* developed by the Nordic Council of Ministers (2006) includes monitoring of diet, physical activity and overweight. The ambition is to collect data every second year and to cover aspects such as gender, predefined age groups and social strata. Physical activity levels are measured, based on the short version of the IPAQ. To strengthen research and scientific cooperation the countries identify the challenges in monitoring vulnerable groups and work on identifying determinants such as district and traffic planning.

The Irish action plan document *Building sport for life* (Irish Sports Council, 2009) includes a scheme providing the rationale and monitoring of each specific target for identified target groups.

8.3 Suggested policy actions

The review of existing policies in EU Member States and the identification of the key elements necessary for successful policy formulation and implementation highlighted several theoretical and methodological approaches, all of which could be used for the promotion of physical activity in SDG.

8.3.1 Physical activity for SDG embedded into other equity-focused policies

Following the approach of aligning policy outcomes with the agendas of other sectors, national physical activity policies should be included as one key element within wider national commitments aiming at the reduction of health inequalities. One such example is policies promoting sport as a means to integrate an immigrant population into the wider society by engaging them through sports clubs and teams locally. Environmental justice or equity policies also represent an opportunity for integrating physical activity promotion in SDG.

As described above (see 8.1), policies aiming at the promotion of physical activity in SDG also need clearly defined target groups, set objectives and benchmarks. Physical activity policies would certainly benefit from incorporation in national policy frameworks, making the collection of data on physical activity by SDG mandatory and thereby supporting a better formulation for policy targets and goals.

8.3.2 A physical activity policy as a "superpolicy"

Based on the evidence that physical activity promotion can reduce health risks and promote social cohesion, well-being and so on, physical activity policies should be designed to target several issues of societal importance. For this purpose, the policy should simultaneously use environmental, organizational, informational, social and behavioural approaches for the promotion of physical activity. This suggests that the most effective strategies to increase physical activity are likely to be holistic, tackling the problem from various angles using a combination of approaches.

8.3.3 Specific policies targeting specific problems

This approach assumes that a predictor for policy impact is the degree of specificity of policy objectives. In the case of physical activity promotion in SDG, this implies formulating a specific policy to enhance physical activity levels among a predefined group of individuals living in disadvantaged conditions.

8.3.4 "Physical activity proof"

An additional approach to enable minimum levels of physical activity among different population groups and to promote physical activity among populations at risk is to ensure that all national, regional and local policies include – where possible – strategies to support physical activity, or at least do not lead to reductions in physical activity levels. This approach is based on the assumption that physical activity can be affected by multiple factors (such as behavioural, environmental and organizational) and that therefore several policies can support or hinder physical activity (for example, urban planning policies).

Policy example of physical promotion embedded into other equity-focused policies

The Spanish strategy document *Inverting the trend towards obesity* (Ministry of Health and Consumer Affairs, 2005) targets inequalities between different social groups in a general sense. Within this, the promotion of physical activity in SDG is part of a concerted attack on the wider determinants of inequality. Wider participation in sport is seen as promoting social inclusion, and there are indications that informational, environmental, organizational, social and behavioural approaches are applied simultaneously. In the context of social inclusion, there is specific mention of a need to reach and integrate immigrant groups, using sport as a vehicle.

Policy example of a "superpolicy"

One of the main priority areas of the policy document *Nordic Plan of Action on better health and quality of life through diet and physical activity* (Nordic Council of Ministers, 2006) is targeting action to vulnerable groups. The plan has a specific goal for 2011 and vision for 2021 to reduce inequalities in physical inactivity. Furthermore, urban planning is mentioned as a means to ensure that all population groups have the opportunity to be physically active "independent of age and physical capacity, SES, ethnic background, and cultural circumstances". Active transport, playgrounds and schools are mentioned as important focus areas. Furthermore, a Nordic catalogue of initiatives to reach socially vulnerable groups and ethnic minorities is mentioned.

Policy example addressing physical activity and SDG in the transport and urban setting

The Luxembourg Government's document *Action plan for the promotion of healthy nutrition and physical activity* (Ministry of Education et al., 2006) mentions public support to promote active travel from home to school for children and development of proposals for facilities and infrastructure in schools and childcare facilities.

9. The role of healthy environments in policies promoting physical activity in SDG

As mentioned above (see 8.1), physical activity promotion largely relies on the cooperation and commitment of a variety of sectors. Safe, equitable and healthy built environments are prerequisites for population-wide active transport, leisure-time activities and sport. Thus, the greatest potential for physical activity promotion might be the establishment of supportive and physical activity-inducing policies in the non-health sectors such as transport, urban planning, education, social support and so on (Pratt et al., 2012).

Although the importance of the built environment has been widely acknowledged, the policy review showed that policies on physical activity overtly relate to the transport and environment sectors in only a few cases. The review also indicated that environmental and organizational approaches are frequently used, perhaps because they change something very tangible (for example, staircase use increasing physical activity in workplaces and cycling facilities promoting active transport). These policies do not, however, make any concrete reference to whether they deliver higher levels of physical activity.

Where altering living environments is mentioned by policies, specific reference to any particular target group is often missing. There is, however, sufficient evidence showing that in cities SDG are typically exposed to more transport-related health risks such as air pollution, injury risk and noise, since poorer residential areas are often located closer to busy roads and lack adequate transport infrastructure. Low-income groups worldwide also tend to use more of their disposable income for travel and face higher barriers to accessing vital economic and social opportunities and services when public transport and active transport routes are slow, inefficient or unsafe.

Support for urban environments that promote physical activity in leisure time, active transport and a reduction in car use therefore seems particularly relevant to SDG. The removal of current environmental barriers to walking and cycling, as well as access to transit and public transport, also improves health equity. These barriers have a particular impact on the independent mobility of children, older people, people with physical disabilities and women, who in many settings tend to move more locally, in and around their own neighbourhood and community.

Little reference is made to the role played by housing policies in the promotion of physical activity in SDG. This leads to the assumption that health and housing policies do not yet systematically consider the impact of urban environmental risks on the inhabitants – in particular on children's health and development and on other risk groups – and incorporate that knowledge into the planning and renovation of housing environments.

Policies reviewed for the PHAN project also seldom make the link between environmental justice or equity policies and the opportunity to promote physical activity in SDG. Developing perspectives on the mutual benefits to health, equality and environmental sustainability that emerge from policies tackling inactivity through active transport approaches and environments conducive to physical activity suggest that such convergences are underexploited. The living environments of socially disadvantaged populations often correlate with environmental areas requiring the support of equity policies. In addition, land-use patterns and transport systems that enable access by active transport and public transport

may have other cascading benefits for social welfare, including greater urban vitality and economic productivity.

Based on the results of the review and on current knowledge about the role of built environments for physical activity promotion, the following guidance has been produced, in particular for policies targeting SDG.

- Physical activity should be considered in urban and regional development plans and policies. Local policies should include setting approaches (to green spaces, infrastructure and mobility) that promote environments conducive to physical activity.
- In national housing policies, the importance should be emphasized of improving conditions in residential areas by ensuring that housing is maintained and the environment around buildings is safe and suitable for pedestrians.
- Policies addressing social inequalities, and in particular policies reflecting the needs of SDG for physical activity promotion, should link to environmental policies aiming at reducing environmental inequalities.
- Policies related to urban or built environments should seek to support and enhance physical activity and active transport in SDG by developing tools to integrate physical activity opportunities in the urban planning of disadvantaged areas.
- Physical activity specialists should be consulted in urban planning decision-making processes and relevant environmental actors should take the physical activity promotion needs of SDG into account.
- In national health policies and strategies, the importance of the built environment and of urban planning in facilitating physical activity should be emphasized. By promoting the Health in All Policies approach and highlighting the mutual gains of active mobility enabled through adequate environmental conditions, the health sector can take a stewardship role in work with other sectors towards the provision of healthy environments. This is an important element in a comprehensive public health strategy.

Policy examples including reference to healthy environments

The Czech Republic underlined the importance of supporting non-organized forms of sport such as "running and cycling paths, open sports grounds, cross-country-ski trails, barrier-free sport facilities" within its policy document *National programme for the development of sport for all* (Government of the Czech Republic, 2000).

The Flemish *Action plan to promote healthy dietary habits and regular physical activity* (Ministry for Health, 2004) describes how promotion of staircase use and cycling as transport can increase physical activity in the work setting.

10. Overall conclusions on physical activity promotion in SDG

10.1 General conclusions

The range and diversity of examples provided in the report show that promotion of physical activity in SDG is a very complex issue. No "unique disadvantaged group" can be targeted, nor can a "unique physical activity" be promoted. Both differ depending on the situation and on each other. Thus, physical activity promotion in SDG is not very different from physical activity promotion in the general population, which is also usually targeted at specific population groups: targeting is a typical requirement for successful physical activity promotion. In the case of physical activity promotion in SDG, however, targeting and implementation are likely to be different and more intense.

The main difference when looking at physical activity promotion specific to SDG, therefore, is the "how": it matters greatly how targets are identified, how interventions are delivered, and how much the efforts to reach the respective target group can be increased. In this context, it is important that there is recognition among policy-makers and programme developers that they may need more intensive support at all stages, reflected in project duration, funding and capacity-building needs, for example. Nevertheless, it is only consistent to expect that the benefits of engaging SDG in physical activity are potentially greater than for other target groups.

There is a high risk that one-dimensional campaigns focusing on information and awareness may actually increase inequalities between SDG and the population as a whole, as these are much more successful in non-disadvantaged population groups characterized by higher education and self-efficacy. This contributes to the difference in how physical activity promotion is carried out, and suggests that interventions for SDG need to combine a variety of strategies that go beyond information provision. In addition, there is an increasing need to consider contextual dimensions for physical activity – in other words, removing potential obstacles that may be caused in relation to person characteristics or geographical and residential location.

SDG are affected by a variety of life challenges; physical activity levels may not be their priority. Low activity levels may, however, actually add to their disadvantage. Therefore, the wider benefits of physical activity and the consequences of inactivity should also be highlighted in promotion strategies, featuring positive outcomes such as social connectedness, social inclusion, active mobility, employability and productivity (as featured in several case studies). If a physically active life could be shown as a means to improve and increase other desirable outcomes, this opens up unexplored opportunities for physical activity promotion. It is therefore important to acknowledge that physical activity in SDG may be an outcome to be pursued in its own right, as well as a means for achieving other outcomes. Clearly, both approaches are relevant and useful.

Both literature and case studies on physical activity promotion tend to deal with SDG in a rather exclusive way, making target group-specific recommendations and developing target group-specific interventions. While this may be necessary when specific population groups cannot participate in general population-based measures, it may have negative side effects if considered the standard approach. To the broadest extent possible, therefore, physical activity promotion activities for SDG should aim at opening up existing activities and offers and adapting these to include disadvantaged groups, rather than establishing separate interventions. Thus, a two-pronged approach to physical activity promotion in SDG is

desirable, combining whole population approaches where possible with targeted interventions when necessary.

10.2 Key principles for targeted interventions

Each type of intervention needs a specific target group and each target group may react differently to given interventions. In addition, the wide range of dimensions of potential disadvantage (including age, sex, income, education, employment and culture) leads to a diversity of target group features; it is impossible to deal with all of these on a general level. As a result, no generalized principles and "one size fits all" conclusions can be derived from this project. Instead, the PHAN project enables the identification of guidance on adequate processes and intervention elements that could be beneficial for the development of policies and interventions to promote physical activity in SDG.

- Interventions need to be clear about the target group addressed and the expected physical activity-related outcome, based – if possible – on a needs assessment. In this context, it is important to reflect the various levels of potential disadvantage and to avoid vague targeting such as "the unemployed" or "the disadvantaged". As far as possible, the targeting process should use evidence-based material and make the decisions transparent, documenting both magnitude and type of disadvantage in health and other terms (such as economic impacts).
- Defining and reaching the respective target groups may be the key to successful physical activity promotion in SDG. Additional emphasis is needed and greater efforts are required in this area. All targeting and evaluation efforts are meaningless if the intervention fails to attract and motivate the identified target group.
- Integration of peers and local facilitators ("local champions") is strongly recommended when working with specific SDG. Examples show that awareness raising and recruitment of intervention participants are crucial for success and can best be undertaken by facilitators trusted by the target group. The same applies to the development and implementation of intervention activities, which should be discussed and designed with the respective target group directly. Finally, local facilitators – whom the participants can relate to and approach more openly – add value to programme implementation and increase the empowerment derived from a high level of ownership within the target group.
- Evaluation is critical to show the benefits of the intervention. Nevertheless, it should be acknowledged that improvements in health can only be achieved in the longer term, and are therefore beyond the duration of most interventions.
- Evaluation should not only address the monitoring of processes, participation or satisfaction with the intervention but also include objective physical activity or health measures. Factors to be reflected in the evaluation should include both physical activity level changes in the intervention participants and the differences in comparison to other population groups, indicating the intervention's contribution to a reduction of inequalities in physical activity. In general terms, surveillance and information on physical activity levels in SDG are crucial to raise awareness of policy-makers in this important area.
- The duration of the intervention – often related to the funding period – must realistically match the intervention and its objectives. A half-year intervention may be successful in teaching target groups how to swim or establishing a cycling network. Triggering behavioural changes as a result of interventions, however, may call for much longer intervention periods if a reliable and meaningful evaluation is to be completed.
- Environmental modifications – such as provision of new or improvement of existing green spaces – will attract some population groups but hardly achieve effects in the hard-

to-reach groups where physical activity levels are lowest. Rather than standalone measures, therefore, environmental action should be applied in the framework of multidisciplinary and intersectoral interventions to support other interventions and provide physical activity opportunities in parallel to behavioural, social or information-related measures.

- As contextual dimensions are especially relevant in removing obstacles to physical activity in SDG, person-centred interventions alone are likely to be less successful and should thus – as in the case of environmental modifications – not be applied in isolation. More holistic and socioecological approaches that integrate group dynamics, social factors and environmental or infrastructural dimensions should therefore be considered to provide added value to the person-centred messages.
- Easy access to physical activity opportunities is crucial for such activities to be incorporated in daily life. Although free or low-cost physical activity opportunities are no magic bullet to raise physical activity levels in SDG, it is clear that easy access to such opportunities (in spatial and financial terms, but also reflecting social and cultural dimensions) is fundamental for a wide range of SDG and especially those from a low socioeconomic background, from different cultures or from deprived neighbourhoods.

10.3 Key principles for policy action and formulation

Existing policy documents promoting physical activity in SDG are quite diverse in focus and level of detail and often lack a clear definition of both the target group and the objective. There seems to be a gap between the existing evidence and policy formulation, expressed by a lack or ambiguity of implementation strategies for the existing policies. Promotion of physical activity – in particular for SDG – falls under the responsibility of many different sectors, making common efforts and synergies necessary. The emphasis in policies seems to be rather on person-centred approaches, while wider and more holistic approaches are less frequently considered. The PHAN project identified key elements that should be taken into consideration for the development of policy guidance on physical activity promotion in SDG.

- The overall societal context of policies for physical activity promotion in SDG needs to be well defined and formulated. An explanation of why policies should aim at increasing physical activity levels in SDG or at reducing inequalities in physical activity levels between social groups should be provided.
- Physical activity goals and target groups (or target areas) need to be clearly specified in policies, as well as intervention durations. Quantitative targets for SDG of physical activity levels, better health, better social inclusion and similar are considered a strong driver for intervention programmes as well as for related funding. The clearer the policy, the more effective and targeted the interventions can be.
- Effective strategies to increase physical activity in SDG are likely to be holistic, tackling the problem from various angles using a combination of approaches, and making use of the resources, competencies and experiences of multiple sectors. Promotional policies should thus especially seek to support multidisciplinary approaches and collaboration of different actors. General strategies to reach the objectives and goals outlined should be described in the policy.
- Policies seeking to improve health in SDG through physical activity and/or sport should be clearly linked to a wider spectrum of public policy: instead of focusing on person-centred approaches (especially sports policies), they should emphasize the relevance of wider and more contextual approaches.

- Policies promoting and supporting a shift to active transport (walking and cycling) combined with improved land use can yield much greater improvements in physical activity rates than behavioural and/or informational approaches alone.
- Policies related to urban or built environments should seek to support and enhance physical activity and active transport in SDG by integrating physical activity opportunities in urban planning, especially of disadvantaged areas.
- Strategies promoting physical activity should be screened for their distributional effects to ensure that they are not increasing inequalities in physical activity levels through unequal uptake or awareness or through any barriers restricting the participation of specific groups.
- The important role of local governments in policy formulation and implementation must be recognized, and partnerships and networking with regional governments and local associations and agencies must be promoted. Strategies likely to have an impact on the promotion of physical activity in SDG rely on knowledge and expertise about local social disparities, available mechanisms and key players.

10.4 Key principles for research

- In general terms, more research must be done on physical activity promotion in SDG as there is a strong need for action, and because targeted intervention might have the largest benefits. This need could be fulfilled by both target research projects and research on the whole population if data on social disadvantage are collected in parallel, enabling targeted analysis and comparison.
- Well-designed intervention studies targeting physical activity in SDG worldwide – and especially in Europe – are particularly needed.
- Quantification of the relative contribution of social disadvantage to low physical activity levels and identification of causal mechanisms are yet to be explored: it remains unclear how the impact occurs.
- More prospective studies on the impacts of environmental modifications are necessary to assess their relative contribution to physical activity promotion in SDG.
- The diversity of SDG and the wide range of physical activity options mean that individual research tends to be specific to a certain context characterized by the target group and the respective intervention. More research is needed to assess whether – and under what circumstances – findings of individual studies can be generalized and applied to other target groups in other situations.
- Research into physical activity promotion is often based on specific interventions designed to serve research purposes. Instead, research institutions might more fruitfully monitor and evaluate real-world interventions taking place on the ground. This is an especially promising area of future work, as many local actors do not have adequate budgets for and experience in evaluation.
- The lack of coherence in outcomes, measuring and reporting makes comparison and strategic assessment difficult. Evaluation has therefore been identified as one of the major gaps of evidence related to physical activity levels in SDG. Research actors as well as donors need to emphasize the relevance of adequate evaluation of their work, which should incorporate socioeconomic as well as demographic variables to assess distributional effects. A framework needs to be developed for consistent evaluation and reporting of physical activity promotion in SDG.
- Data on physical activity in SDG are mostly related to active transport or leisure activities. Little information is available on physical activity levels related to work conditions or activities in the home, which may also vary between different target groups and personal characteristics.

- As obesity is a major public health concern, a wide range of data collection strategies and surveillance approaches on physical activity levels are currently being implemented. To make such data meaningful from the perspective of SDG, a minimum set of social determinants (such as age, sex, nationality and employment or education) should be integrated into data collection protocols. The data should be available to policy-makers and research work on data analysis should inform policy-making.
- Comparative research should be undertaken on the advantages and disadvantages of physical activity promotion approaches aiming at including SDG in general interventions versus those focusing exclusively on SDG.

In more strategic terms, further projects addressing the promotion of physical activity in SDG should aim to identify specific target groups and select those that seem to be of the highest relevance for targeted action. A review of interventions for these defined groups could provide more detailed information on what physical activity strategies work best, and would – thanks to the reduced diversity of target groups – enable a better assessment of the potential transferability of the interventions to other settings or other target groups.

Furthermore, it would be worthwhile for future projects to narrow the work down to – or work separately with – specific physical activity dimensions. Such an approach would allow recommendations to be made on individual dimensions of physical activity promotion in SDG, such as transport-related or leisure-related physical activity. This would facilitate the development of more specific and detailed guidance on the most suitable interventions to increase physical activity levels in SDG. In this context, it may be relevant to note that the recent *Lancet* Series on physical activity (2012) indicates that transport-related environmental interventions seem especially promising.

11. Other physical activity promotion projects and campaigns

Many projects and campaigns at the international and national levels target the promotion of physical activity. Most aim at the formulation of guidelines presenting key elements for successful physical activity policies and plans. Nine projects and campaigns were analysed for comparison with the guidance formulated by the PHAN project. While most of their guidelines and recommendations address the entire population, some specifically address identified risk groups as defined above (see 1.3) or make particular reference to target risk groups.

11.1 Comparison of projects and campaigns

11.1.1 The IMPALA project

The EU co-funded (DG SANCO) project "Improving infrastructures for leisure-time physical activity in the local arena – IMPALA" (IMPALA, 2011) aimed to identify, implement and disseminate good practice in the development of local infrastructures for leisure-time physical activity. The project analysed national policies, mechanisms and instruments used in the development of such infrastructures and prioritized three types:

- sports facilities (such as gyms, swimming pools and sports grounds);
- leisure-time infrastructures providing specific opportunities for sports and physical activity (such as parks, playgrounds and cycle paths);
- urban and natural spaces suitable for use in sports and physical activity (such as streets, public places, forests and beaches).

The IMPALA project identified four key dimensions for the formulation of guidelines:

- planning, which requires availability of data on infrastructures and physical activity behaviour – procedures should also consider relevant perspectives, including those of end-users, public administration and similar;
- building, including assessment of the built environment and approaches for assessing types, qualities, quantities and locations of infrastructure;
- financing, for which identification of existing financing models, shared financing and public–private partnerships is recommended, with a particular need to check funding sources and possibilities at different levels – local, regional, national, EU, third sector and private sector – and to measure the quality of current funding in the local arena;
- management, through which infrastructures for physical activity should be opened to broad user groups and should therefore be multifunctional.

The IMPALA recommendations address the entire population rather than specific risk groups. They also concentrate solely on the policy dimension, unlike the PHAN project, which focuses on both identifying good practice examples and developing guidance on policy actions. Similarly to the PHAN project, however, the IMPALA recommendations are categorized by steps of the policy formulation and implementation process. This emphasizes the need to approach the process systematically, stressing the importance of considering the actors responsible, funding sources required and populations targeted. The IMPALA recommendations also recognize the need to involve the target population in the policy formulation process and to strengthen policy actions aiming at planning and maintaining built environments for physical activity.

11.1.2 The MIMoSA project

The goal of the MIMoSA (Migrants' Inclusion Model through Sport for All) project was to build and strengthen a transnational network and to create a model of social inclusion and empowerment for migrants (including refugees, women requesting asylum, Roma and asylees). The project created a methodology guide (MIMoSA, 2012), outlining specific recommendations and practical advice for improving social inclusion of target populations often considered marginalized within the sports world at both professional and amateur levels.

The MIMoSA recommendations for effective policy formulation promoting physical activity among migrant groups are characterized by the four different policy-maker/stakeholder target groups addressed. The same advice can, however, be directed to different target groups.

- National sports associations and federations and anti-racism and migrant associations should:
    - recognize the importance of social inclusion work by increasing research, sponsoring common strategies among various work sectors and underlining in by-laws that the mission of the organization is active involvement for social inclusion through sports;
    - develop a strategy to coordinate structural policies in all sectors of involvement by creating specific posts of responsibility within key organizations integrating sports and migrants;
    - share leadership by providing support to initiatives promoted by communities of migrants;
    - lobby for additional information about the benefits of sports for cultural integration and health;
    - strengthen intercultural dialogue and increase training for sports managers, facilities directors and similar;
    - raise awareness by dedicating spaces within sites or in-house publications to the promotion of activities, projects and initiatives on the topic of sports and social inclusion;
    - remove barriers by sponsoring campaigns to affect public opinion regarding these forms of discrimination;
    - intensify policy evaluation through SWOT (strengths, weaknesses, opportunities and threats) analyses, for example.

- Sports clubs and local headquarters of sports associations and federations should:
    - promote sensitization through, for example, training courses, games and creation of networks to increase the understanding and knowledge of sport clubs managers and similar on the topics of sports and cultural inclusion;
    - increase the participation of migrants in sports activities through specific courses, free classes and better information;
    - ensure that the infrastructure is known and can be used by different migrant groups with different cultural traditions and languages (including offering separate showers and changing rooms and information in various languages);
    - share leadership by including people from different ethnic backgrounds on boards of directors and organizing specific training courses to update and increase experience in various areas;
    - increase funding to ensure that activities are accessible to migrant groups and support this work with the help of volunteers.

- European institutions should:
    - strengthen research on the presence of free sports infrastructures in various parts of Europe, and collect data on the participation of migrants and ethnic minorities in sports;
    - study and sponsor common training models on the topic of interculturalism and globalism that could be common to every country of the EU;
    - support structural funds for national associations and promote better coordination between the various sectors involved in physical activity promotion and migrant integration.

- Local authorities should:
    - promote the design of an egalitarian and democratic space through networks that include the migrant community and associations of civil society, young and older people;
    - encourage the creation of specific training courses for public employees, in partnership with associations involved in aspects linked to migration and intercultural pursuits;
    - increase the dialogue between various migrant groups, sports and cultural associations and individual citizens through events and activities;
    - intensify relationships with universities and research centres to establish means and procedures for the evaluation of projects financed by the public administrations.

The MIMoSA project focused on physical activity in SDG and in particular on the migrant population, but unlike the PHAN project formulated its recommendations to address the different actors or stakeholders involved in the development and implementation phases of policies. The key guidance identified could, however, be addressed to different actors, showing that policy formulation and implementation fall under the responsibility of various sectors and stakeholders. The MIMoSA recommendations underline the synergetic effect of social actions aiming at the promotion of physical activity and social integration. Activities, interventions and policies initiated by one sector (for example, social services) could therefore positively support the activities of another (such as health) and vice versa.

11.1.3 NICE guidance

The United Kingdom's National Institute for Health and Clinical Excellence (NICE) produced a public health guidance document on physical activity, play and sport for preschool and school-age children in family, preschool, school and community settings (NICE, 2009). Its recommendations on effective ways to prevent, diagnose and treat disease and ill health are addressed to all those who have a direct or indirect role in – and responsibility for – promoting physical activity for children and young people. This includes those working in the National Health Service (NHS), local authorities and the wider public, and the education, private, voluntary and community sectors. The guidance is grouped into several key priority areas, each outlining the target population and main actors addressed and making specific recommendations.

- Deliver a national campaign to promote physical activity among children and young people:
    - create a long-term strategy that is intersectoral and integrated into other national health campaigns;
    - develop it in consultation with target groups;

  - ensure the campaign addresses any concerns of parents and carers;
  - develop resources to promote the campaign at local level.

- Establish a high-level policy and strategy to raise awareness of the importance of physical activity:
  - ensure there is a coordinated local strategy to increase physical activity;
  - ensure physical activity initiatives are regularly evaluated;
  - identify a senior council member to be a champion for children and young people's physical activity.

- Develop physical activity plans:
  - identify groups of children and young people who are unlikely to participate in at least one hour of moderate to vigorous physical activity a day and involve them in design and planning;
  - consult with children and young people to better understand the factors that help or prevent them from being physically active.

- Plan the provision of spaces and facilities:
  - ensure facilities are suitable for children and young people, particularly those from SDG;
  - provide children and young people with places where they feel safe taking part in physical activities;
  - make school facilities available before, during and after school;
  - actively promote public parks and facilities;
  - town planners should ensure open spaces;
  - ensure that spaces meet recommended safety standards.

- Develop local transport plans:
  - ensure that local transport plans acknowledge any potential impact on opportunities for children and young people to be active;
  - work with schools to develop, implement and promote school travel plans.

- Respond to children and young people:
  - consult with and involve children and young people in decision-making processes.

- Provide leadership and instruction:
  - ensure informal and formal physical activity sessions for children and young people (including play) are led by staff or volunteers who have achieved the relevant sector standards or qualifications for working with children;
  - use community networks and partnerships to encourage, develop and support local communities and volunteers involved in providing physical activities for children and young people;
  - provide regular and relevant development opportunities for employees and volunteers.

- Offer training and continuing professional development (CPD):
  - establish CPD programmes for people involved in organizing and running formal and informal physical activities;
  - train people to deliver physical activity CPD programmes;
  - monitor and evaluate the impact of training on practitioner performance.

- Deliver multicomponent school and community programmes:
    - identify education institutions willing to deliver multicomponent physical activity programmes involving school, family and community-based activities;
    - identify families, community members, groups and organizations and private sector organizations willing to contribute.

- Provide facilities and equipment:
    - ensure opportunities, facilities and equipment are available and accessible to encourage children to develop movement skills, regardless of their ability or disability.

- Support girls and young women:
    - consult with girls and young women to find out what type of physical activities they prefer;
    - actively involve them in the provision of a range of options in response.

- Develop active and sustainable school travel plans:
    - continue to encourage a culture of physically active travel (such as walking or cycling);
    - develop a school travel plan that has physical activity as a key aim, in line with existing guidance, and integrate it with the travel plans of other local schools and the local community;
    - ensure schools provide suitable cycle and road safety training for all pupils.

The NICE guidance organizes its recommendations by key priorities identified as necessary elements of efficient policy-making. These categories comprise the types of policy recommended for supporting physical activity as well as the facilities required and the sectors involved in the policy development process (including national policies, transport plans, training and facilities). The document provides specific tools for action, but keeps its recommendations as general conclusions. Although not targeting any SDG group in particular, it emphasizes the importance of addressing physical activity at various policy levels, similarly to the PHAN project. It recommends the development of national high-level policies and campaigns promoting physical activity as well as specific policies targeting local situations and responsible sectors (such as education and transport).

11.1.4 EU physical activity guidelines

In 2008 the EU Working Group on Sport and Health approved a document outlining physical activity guidelines (European Commission, 2008), which was then confirmed by the sport ministers of the EU Member States. The guidelines recommend a minimum of 60 minutes of daily moderate-intensity physical activity for children and young people and a minimum of 30 minutes of daily moderate-intensity physical activity for adults, including seniors.

Implementation of the guidelines is described as best achieved by cross-sectoral action: a range of sectors and stakeholders is identified, including sport, health, education, transport, environment, urban planning and public safety, working environments and services for senior citizens. The document claims that “guidelines for the development and implementation of policies inducing people to move more should be based on the following quality criteria that have [been] shown to increase the potential for effective policy implementation”. Key questions to be addressed within each of the criteria are also listed.

- Developing and communicating concrete goals:
  - What are the precise targets that should be achieved by the policy action?
  - What are the target groups of these policies and in which settings are they approached?

- Planning concrete steps of the implementation process:
  - What is the precise time frame for the policy implementation process?
  - What are concrete milestones and deliverables?

- Defining clear responsibilities and obligations for implementation:
  - Who is providing strategic leadership?
  - Is there any legislative support for the policy actions?

- Allocating appropriate resources:
  - Who has organizational capacities and qualified personnel needed to implement the policy action – or who can develop such capacities?
  - How can necessary financial resources for implementation of policy actions be secured?
  - How do different sources of funding (national budget, regional and local budgets, private enterprise) relate to each other?

- Creating a supportive policy environment:
  - What policy areas and main policy actors can support the policy action?
  - What policy alliances can be built to advocate the action and to tackle potential political barriers?

- Increasing public support:
  - How can the interest of the population or particular target groups in the policy actions be increased?
  - How can the media be involved?

- Monitoring and evaluating the implementation process and its outcomes:
  - What are key indicators of effective implementation?
  - What are the expected outcomes and how can these outcomes be measured?

Although the EU guidelines do not address the need for specific interventions in SDG, they raise the issue of setting objectives and criteria for target group selection and highlight the need for monitoring and evaluation, similarly to the PHAN project. The document goes on to indicate the relevance of equity, stating that central governments should consider “equal access to sport and physical activity for everyone, regardless of social class, age, gender, race, ethnicity and physical capacities”. Another reflection of equity in physical activity opportunities is identified as the need to address social and environmental barriers to participation, “in particular with regard to underprivileged social groups”. Consequently, the guidelines often refer to the relevance of social equity and fairness to increasing physical activity levels for all population groups. The recommendation to create supportive policy environments also reflects the PHAN guidance on multisectoral action, tackling physical activity promotion in SDG through a variety of combined interventions on different levels and by different actors.

11.1.5 WHO guide to increasing levels of physical activity

The WHO document *A guide for population-based approaches to increasing levels of physical activity* (WHO, 2007c) assists WHO Member States and other stakeholders in the development and implementation of a national physical activity plan. It also provides guidance on policy options for effective promotion of physical activity at the national and subnational levels. The guidance includes general principles and examples of possible areas of action for the promotion of physical activity and is based on evidence and current practice as reported by key informants and on a review undertaken by WHO. The guide lists important elements of successful policies and plans with key recommendations for effective physical activity policy formulation (summarized below).

- High-level political commitment:
    - political commitment from government and/or high-ranking officers within ministries of health, education and/or sports is crucial.

- Integration in national policies:
    - a national policy in which physical activity has a central place may foster the implementation of a national physical activity plan;
    - this should include a formal statement that defines physical activity as a priority area, states specific goals and provides a strategic plan for action.

- Identification of national goals and objectives:
    - goals of physical activity policies should adapt to national priorities and needs.

- Overall health goals:
    - enhancing physical activity should be integrated in the context of overall health goals such as the reduction of noncommunicable diseases (NCD) and the achievement of mental and social well-being.

- Objectives:
    - goals set by the policies should be complemented by a set of specific objectives;
    - these should include measurable targets and short-, medium- and long-term objectives.

- Funding:
    - allocation of financial resources to implement physical activity policies and plans is the basis for any actions towards the promotion of physical activity and indicates the degree of national and organizational commitment.

- Support from stakeholders:
    - a network of relevant stakeholders (including ministries, private sector organizations, nongovernmental agencies, sports associations, schools, employers, parents and local community groups) and effective collaboration are both necessary for implementing physical activity programmes in specified settings (such as schools, communities or workplaces);
    - they are also needed to disseminate health messages on physical activity through relevant media (including television, radio and newspapers).

- Cultural sensitivity:
    - national policies and plans on physical activity should be socially inclusive and participatory.

- Integration of physical activity within other related sectors:
    - national policies and plans on physical activity should be coherent with – and complementary to – national policies and action plans addressing other areas such as child health, smoking, diet and environment, if these exist.

- A coordinating team:
    - a national action plan on physical activity requires leadership and multisectoral coordination;
    - where possible, this could draw on existing mechanisms or structures; otherwise, a coordinating team could be established with relevant stakeholders.

- Multiple intervention strategies:
    - national policies and plans on physical activity should comprise multiple strategies aimed at supporting the individual and at creating a supportive environment;
    - combinations of different actions and programmes are likely to be needed in different settings to reach and target populations.

- Target whole population as well as specific population groups:
    - a national action plan should include large-scale interventions to reach the whole population and enhance physical activity at the population level;
    - in addition, some interventions (for example, exercise programmes and educational counselling) may be tailored to specific population groups, such as children, older people or people with disabilities or at risk of developing NCD.

- Clear identity:
    - a national action plan and the strategies it includes can be linked by developing a clear programme identity.

- Implementation at different levels within “local reality”:
    - although a national action plan should be focused on achieving increased levels of physical activity in the whole population it must consider implementation from the perspective of subnational, regional/state and local levels.

- Leadership and workforce development:
    - leadership may come from individuals within leading agencies (such as high-ranking officers in ministries) as well as from local programme coordinators in the intervention settings, including communities, workplaces and schools.

- Dissemination:
    - wide dissemination of the national action plan and associated programmes and strategies is necessary to reach and promote physical activity in a large proportion of the population.

- Monitoring and evaluation:
    - evaluation and continuing monitoring of the process and outcomes of actions for physical activity promotion are necessary in order to examine programme success and to identify target areas for future plans of action.

- National physical activity guidelines:
    - national guidelines or recommendations on physical activity for the general population or specific population groups (such as children, adolescents, adults and older people) are important to educate the population on the frequency, duration, intensity and types of physical activity necessary for health.

The WHO guide's recommendations are similar to those of NICE (see 11.1.3) and the PHAN project. In addition, it stresses the need to increase the dissemination of not only existing policies and action plans on the promotion of physical activity but also existing knowledge on the impact of physical activity on health, distribution of levels of physical activity among the population and the impact of targeted interventions promoting physical activity.

11.1.6 *Steps to health*

The WHO Regional Office for Europe's *Steps to health: a European framework to promote physical activity for health* (WHO, 2007a) provides Member States, experts and policy-makers with guidance on designing and implementing physical activity-promoting policy and action, as part of a national public health agenda and through multisectoral cooperation. Its guidelines can be categorized by the following key dimensions necessary for successful formulation and implementation of physical activity policies and action plans, including specific recommendations for each.

- National and local action:
    - a focused national commitment should ensure that capacity is built up in terms of human resources, organizational structure and appropriate regulations, including legislation;
    - it is also of the utmost importance that national guidelines and case studies of how to mobilize local communities should be developed, based on the national situation and traditions but taking account of local circumstances and priorities;
    - there is a need for close cooperation between the local/regional and national levels – policies need to be based on both national and local data and costs.

- Involvement of different sectors:
    - physical activity policies need the support of various sectors – health, transport, urban planning and environment are key players;
    - urban planning, housing and environmental policies should give stronger consideration to factors enabling physical activity.

- Different settings:
    - physical activity needs to be sufficiently recognized and promoted by different key sectors – schools/kindergartens and workplaces play an important role;
    - there is a need to strengthen the health mandate of schools, to ensure that facilities in and around schools are safe and to provide incentives and facilities for being physically active in schools;
    - workplaces can also play an active role in promoting physical activity.

- Role of networks and alliances:
    - the health and other sectors should promote strong networks and alliances at all levels, as well as between levels, to improve physical activity and quality of life;
    - these should develop synergistic ways of working to maximize the mutual benefit of such work, creating a "win-win" approach.

- Setting goals and measuring successes:
    - all programmes for physical activity should ideally be given SMART goals based on a baseline analysis;
    - evaluation must always be a planned and integrated part of programmes and be given adequate resources.

The WHO framework focuses its recommendations around the level of policy actions (national, local and specific setting like schools and occupational setting) and the key sectors involved (transport, health, urban planning and so on), a focus largely reflected by the PHAN project conclusions and suggested priority actions. Using key settings – such as cities, local governments, schools and workplaces – provides the opportunity of integrating and merging sector-specific policies, programmes and public education aimed at encouraging physical activity. Such whole-of-community approaches, addressing settings where people live, work and recreate, have the opportunity to reach out to or mobilize large numbers of people.

11.1.7 Toronto Charter

The Toronto Charter for Physical Activity (GAPA, 2010a) is a call for action and an advocacy tool to create sustainable opportunities for physically active lifestyles for all. The Charter outlines actions based on nine guiding principles and is a call for all countries, regions and communities to strive for greater political and social commitment. These principles are consistent with WHO's 2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases (WHO, 2008c) and Global Strategy on Diet, Physical Activity and Health (WHO, 2004b), as well as with other international health promotion charters.

To increase physical activity and decrease sedentary behaviour, the Toronto Charter encourages countries and organizations to:

- adopt evidence-based strategies that target the whole population as well as specific population subgroups, particularly those facing the greatest barriers;
- embrace an equity approach aimed at reducing social and health inequalities and disparities of access to physical activity;
- address the environmental, social and individual determinants of physical inactivity;
- implement sustainable actions in partnership at national, regional and local levels and across multiple sectors to achieve the greatest impact;
- build capacity and support training in research, practice, policy, evaluation and surveillance;
- use a life-course approach by addressing the needs of children, families, adults and older adults;
- advocate to decision-makers and the general community for an increase in political commitment to and resources for physical activity;
- ensure cultural sensitivity and adapt strategies to accommodate varying "local realities", contexts and resources;

- facilitate healthy personal choices by making the physically active choice the easy choice.

Based on these nine principles, the Charter calls for concerted action across four key areas. This action should involve governments, civil society, academic institutions, professional associations, the private sector and other organizations within and outside the health sector, as well as communities themselves.

- Implement a national policy and action plan:
    - a national policy and action plan provides direction, support and coordination of the many sectors involved, and is a significant indicator of political commitment;
    - it also assists in focusing resources as well as providing accountability.

- Introduce policies that support physical activity:
    - a supportive policy framework and regulatory environment are required to achieve sustainable changes in government and society;
    - policies that support health-enhancing physical activity are needed at national, regional and local levels.

- Reorient services and funding to prioritize physical activity:
    - successful action to promote physical activity requires a reorientation of priorities in favour of health-enhancing physical activity;
    - reorienting services and funding systems can deliver multiple benefits, including better health, cleaner air, reduced traffic congestion, cost saving and greater social connectedness.

- Develop partnerships for action:
    - actions aimed at increasing population-wide participation in physical activity should be planned and implemented through partnerships and collaborations involving different sectors – and communities themselves – at national, regional and local levels.

11.1.8 GAPA publication on NCD prevention

GAPA (Global Advocacy for Physical Activity, the Advocacy Council of the International Society for Physical Activity and Health) also produced a complementary publication to the Toronto Charter called *Non communicable disease prevention: investments that work for physical activity* (GAPA, 2010b). This document identifies seven "best investments for physical activity" that are supported by good evidence of effectiveness and have worldwide applicability.

- "Whole-of-school" programmes:
    - schools can provide physical activity for the large majority of children and are an important setting for programmes to help students develop the knowledge, skills and habits for life-long healthy and active living;
    - a "whole-of-school" approach to physical activity involves prioritizing regular, highly-active, physical education classes; providing suitable physical environments and resources to support structured and unstructured physical activity throughout the day (such as play and recreation before, during and after school); supporting walk- and cycle-to-school programmes; and enabling all these actions through supportive school policy and engaging staff, students, parents and the wider community.

- Transport policies and systems that prioritize walking, cycling and public transport:
    - "active transport" is the most practical and sustainable way to increase physical activity on a daily basis.

- Urban design regulations and infrastructure that provide for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course:
    - national, regional and local urban planning and design regulations should require mixed-use zoning that places shops, services and jobs near homes, as well as highly connected street networks that make it easy for people to walk and cycle to destinations;
    - access to public open space and green areas with appropriate recreation facilities for all age groups is needed to support active recreation.

- Physical activity and NCD prevention integrated into primary health care systems:
    - health care systems should include physical activity as an explicit element of regular behavioural risk factor screening for NCD prevention, patient education and referral;
    - positive messages about physical activity are important for primary and secondary prevention.

- Public education, including mass media to raise awareness and change social norms on physical activity:
    - public education can involve print, audio and electronic media, outdoor billboards and posters, public relations, point of decision prompts, mass participation events, mass distribution of information as well as new media such as text messaging, social networking and other uses of the internet.

- Community-wide programmes involving multiple settings and sectors and that mobilize and integrate community engagement and resources:
    - whole-of-community approaches to physical activity across the life course will be more successful than a single programme to increase population levels of physical activity.

- Sports systems and programmes that promote "sport for all" and encourage participation across the life span:
    - building on the universal appeal of sport, a comprehensive sport system should be implemented that includes the adaption of sports to provide a range of activities to match the interests of men and women, girls and boys of all ages, in addition to well-coordinated coaching and training opportunities;
    - providing enjoyable physical activity needs to be an explicit priority of sports programmes.

The Toronto Charter and GAPA's supporting publication on NCD (GAPA, 2010a; 2010b) both stress the importance of designing physical activity promotion as a "whole-of-community" approach. Compared to the other programmes and publications reviewed, they focus not only on policies but also on interventions. The seven best investments are very useful categories to summarize evidence-based actions for the promotion of physical activity, and the principles formulated by the PHAN project can be structured in the same way, as

shown in Table 3 (in which the PHAN principles are listed more than once if applicable to more than one GAPA best investment). On the other hand, several investment areas identified by the GAPA project (such as integration of physical activity promotion in primary health care systems or independent application of information approaches) are not reflected in the PHAN principles.

Table 3 PHAN principles categorized by GAPA best investments

GAPA best investment	PHAN principles on physical activity promotion in SDG
"Whole-of-school" programmes	• Various case studies have applied school or other educational settings, but no action principles specific to school-based interventions have been formulated. This is likely to be a consequence of the focus of this work on SDG, which does not match well with interventions for schools or classes with a range of individual students.
Transport policies and systems that prioritize walking, cycling and public transport	• Strategies promoting and supporting a shift to active transport (walking and cycling) combined with improved land use can yield much greater improvements in physical activity rates than behavioural and/or informational approaches alone. • Policies related to urban or built environments should seek to support and enhance physical activity and active transport in SDG by developing tools to integrate physical activity opportunities in urban planning, especially of disadvantaged areas.
Urban design regulations and infrastructure that provide for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course	• Strategies promoting and supporting a shift to active transport (walking and cycling) combined with improved land use can yield much greater improvements in physical activity rates than behavioural and/or informational approaches alone. • Policies related to urban or built environments should seek to support and enhance physical activity and active transport in SDG by developing tools to integrate physical activity opportunities in urban planning, especially of disadvantaged areas. • Easy access to physical activity opportunities is crucial to incorporate such activities in daily life. • Environmental modifications – such as provision of new or improvement of existing green spaces – will attract some population groups but hardly achieve effects in the hard-to-reach groups where physical activity levels are lowest.
Physical activity and NCD prevention integrated into primary health care systems	• Various case studies have suggested the use of referral schemes to describe physical activity as a treatment for diagnosed disease outcomes, but this approach is not specific to SDG as it can be applied to any individual. Nevertheless, integration with health care system procedures is a relevant issue in the context of general quality of and access to health care services in SDG.
Public education, including mass media to raise awareness and change social norms on physical activity	• The PHAN project strongly indicates that informational approaches alone tend to be insufficient in promoting physical activity in SDG, and advocates combined approaches using direct interventions, environmental modifications and informational campaigns in parallel, bringing together various actors. As a result, no specific action principles on public awareness and information have been developed. The value of media, information and awareness campaigns as a necessary element of physical activity promotion in SDG is, however, undisputed.

Table 3 contd

GAPA best investment	PHAN principles on physical activity promotion in SDG
Community-wide programmes involving multiple settings and sectors and that mobilize and integrate community engagement and resources	• Environmental action should be applied in the framework of multidisciplinary and intersectoral interventions to support other interventions and provide physical activity opportunities in parallel to behavioural, social or information-related measures. • Person-centred interventions alone are likely to be less successful and should thus – as in the case of environmental modifications – not be applied in isolation. • Integration of peers and local facilitators ("local champions") is strongly suggested when working with specific SDG. • Documents seeking to improve health in SDG through physical activity and/or sport should be more clearly linked to a wider spectrum of public policy: instead of focusing on person-centred approaches (especially sports policies), they should emphasize the relevance of wider and more contextual approaches. • Policies to promote physical activity in SDG should seek especially to support multidisciplinary approaches and collaboration of different actors. • The important role of local governments in policy formulation and implementation must be recognized, and partnerships and networking with regional governments and local associations and agencies must be promoted.
Sport systems and programmes promoting "sport for all" and encourage participation across the life span	• Documents seeking to improve health in SDG through physical activity and/or sport should be more clearly linked to a wider spectrum of public policy: instead of focusing on person-centred approaches (especially sports policies), they should emphasize the relevance of wider and more contextual approaches.

11.1.9 Lancet Series on physical activity

In July 2012, *The Lancet* published a Series on physical activity (Lancet, 2012), including a new analysis that quantified the global impact of physical inactivity on the world's major NCD. The Series also reviewed current levels of physical activity and trends worldwide, why some people are active and some are not, evidence-based strategies for effective physical activity promotion, and how a multisector and systems-wide approach that goes way beyond health would be critical to increase population levels of activity worldwide. The review of interventions identified seven key messages for effective physical activity prevention.

- Initiatives to promote physical activity can have increased effectiveness when health agencies form partnerships and coordinate efforts with several other organizations including schools; businesses; policy, advocacy, nutrition, recreation, planning and transport agencies; and health care organizations.
- Effective public communication and informational approaches promoting physical activity include community-wide campaigns, mass media campaigns, and decision prompts encouraging the use of stairs versus lifts and escalators.
- Initiatives to increase social support for physical activity within communities, specific neighbourhoods and worksites can promote physical activity effectively.
- Comprehensive school-based strategies encompassing physical education, classroom activities, after-school sports and active transport can increase physical activity in young people.

- Environmental and policy approaches can create or enhance access to places for physical activity with outreach activities, infrastructural initiatives through urban design of land use and planning at both community and street scales, and active transport.
- To properly support initiatives for the promotion of physical activity, workforces need to be trained in physical activity and health, core public health disciplines and methods of intersectoral collaboration.
- Although individuals need to be informed and motivated to adopt physical activity, the public health priority should be to ensure that environments are safe and supportive of health and well-being.

These messages highlight a strong recommendation for informational approaches of community-wide and mass media campaigns, and short physical activity messages targeting key community sites. Behavioural and social approaches are effective, introducing social support for physical activity within communities and work sites, as are school-based strategies that encompass physical education, classroom activities, after-school sports and active transport. Recommended environmental and policy approaches include creation and improvement of access to places for physical activity with informational outreach activities, community-scale and street-scale urban design and land use, active transport policy and practices, and community-wide policies and planning. Thus, many approaches lead to acceptable increases in physical activity among people of various ages and from different social groups, countries and communities.

The PHAN project also highlighted the simple analytical device of categorizing policies by whether they address the challenge of physical activity in SDG through informational, environmental and organizational or social and behavioural approaches. This allows policies to be easily compared and contrasted. The PHAN results show that this method is also applicable to physical activity policies targeting SDG in particular.

11.2 Conclusions

The comparison of the PHAN project conclusions for efficient formulation of policies promoting physical activity in SDG with those expressed by other projects and campaigns shows that they all identify similar priorities. Most of the reviewed projects, however – with the exception of the Toronto Charter and GAPA's NCD publication (GAPA 2010a; 2010b) – concentrate on recommendations focusing on policy actions, while the PHAN project elaborated on both necessary interventions and policies for the promotion of physical activity.

Some of the projects reviewed addressed the entire population (including the IMPALA project, the Toronto Charter, the GAPA publication, the EU guidelines, the WHO guide and *Steps to health*), while others focused on specific risk groups as defined by the PHAN project (such as the MIMoSA project, addressing the migrant population and the NICE guidance, focusing on children and young people). The recommendations are, however, very similar whether they address a specific risk group or not.

Four main elements emerge from the comparison, representing important findings that could help with future guidance and recommendations on physical activity promotion in SDG.

11.2.1 Conceptual approaches of the recommendations

The comparison showed that the different projects opted for different methodological or conceptual approaches to categorize their recommendations. Four different approaches were identified, which categorized by:

- phases of project and/or policy development (the IMPALA project, the EU guidelines);
- actors (the MIMoSA project);
- priorities (the NICE guidance, the WHO guide);
- policy levels and sectors (the WHO guide, the GAPA best investments, the EU guidelines).

11.2.2 Common key areas identified

Although the programmes adopted different approaches to categorizing their recommendations, the key areas identified for successful interventions and good policy-making in physical activity promotion are very similar and correspond to the conclusions and principles formulated by the PHAN project. All projects agree on the need:

- for better data availability, not only on levels of physical activity by specific population groups but also on existing facilities enabling sport and leisure-time activity;
- to involve end-users right from the beginning of the policy development;
- to support physical activity by adequate, safe and supportive built environments (at urban planning and residential levels as well as in school and occupation settings);
- to have a strong financing scheme of the proposed policy;
- to have appropriate policy evaluation tools and competencies;
- to have well-established intersectoral mechanisms for drafting policies, sharing responsibilities and making use of existing knowledge (in particular involving the sectors of urban planning, transport, housing, education and environment).

11.2.3 Need for more research as an emerging priority

In addition to the recommendations above, which are shared by the PHAN project conclusions, the projects reviewed underlined the need to strengthen research in the area of physical activity and its impact not only on health but also on social integration, in particular in regard to migrants. More efforts should be made to increase international dialogue and to share experiences and study results in this area.

Summarizing all projects, intersectoral collaboration and participation seem to be the key factors of a successful policy targeting physical activity promotion. The necessity to adapt to local conditions, priorities, available resources and knowledge is also recognized by all projects and reflected in their formulated recommendations.

11.2.4 Physical activity and SDG

The conclusions drawn from the comparison with other projects show that the results achieved by the PHAN project are in line with current knowledge and priorities. It seems that, owing to the wide diversity of policies and interventions, overall advice on physical activity promotion in SDG cannot be formulated in a concrete way, and that guidance for addressing the general population largely applies to SDG as well. There is, however, a need to increase SDG-specific implementation of interventions and policies, especially focusing on identifying the right target populations and the key partners necessary for policy development as well as implementation. The MIMoSA project, which specifically addresses the migrant population, can be considered a valid example of how to prioritize action aiming at the support of social inclusion through physical activity and sport.

References

Allebeck P (2008). The prevention paradox or the inequality paradox? European Journal of Public Health, 18:215.

Bauman AE et al. (2012). Correlates of physical activity: why are some people physically active and others not? Lancet [Series on physical activity], 380(9838):258–271.

Cavill N, Kahlmeier S, Racioppi F, eds. (2006). Physical activity and health in Europe: evidence for action. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0011/87545/E89490.pdf, accessed 23 November 2012).

CDC (2012). Increasing physical activity [web site]. Atlanta, US Centers for Disease Control and Prevention (http://www.thecommunityguide.org/pa/index.html, accessed 23 November 2012).

Commission on Social Determinants of Health (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva, World Health Organization (http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf, accessed 23 November 2012).

Currie C et al., eds. (2012) Social determinants of health and well-being among young people: Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. Copenhagen, WHO Regional Office for Europe (Health Policy for Children and Adolescents, No. 6; http://www.euro.who.int/__data/assets/pdf_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf, accessed 12 November 2012).

Department of Culture, Arts and Leisure (2009). Sport matters: the Northern Ireland strategy for sport and physical recreation 2009–2019. Belfast, Department of Culture, Arts and Leisure.

Department of Health (2009). Be active, be healthy: a plan for getting the nation moving. London, Department of Health.

Eurobarometer (2010). Sport and physical activity. Brussels: European Commission (http://ec.europa.eu/public_opinion/archives/ebs/ebs_334_en.pdf, accessed 23 November 2012).

European Commission (2007). White Paper on a strategy for Europe on nutrition, overweight and obesity related health issues. Brussels, Commission of the European Communities (COM(2007) 279 final; http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0279:FIN:EN:PDF, accessed 23 November 2012).

European Commission (2008). EU physical activity guidelines: recommended policy actions in support of health-enhancing physical activity. Brussels, Commission of the European

Communities (http://ec.europa.eu/sport/library/documents/c1/eu-physical-activity-guidelines-2008_en.pdf, accessed 23 November 2012).

Federal Ministry of Food, Agriculture and Consumer Protection and Federal Ministry of Health (2008). IN FORM – German national initiative to promote healthy diets and physical activity [IN FORM – Deutschlands Initiative für gesunde Ernährung und mehr Bewegung] (2008). Berlin, Federal Ministry of Food, Agriculture and Consumer Protection and Federal Ministry of Health.

Flemish Ministry for Health (2004). Action plan to promote healthy dietary habits and regular physical activity [Plan van aanpak: evenwichtig eten en regelmatig bewegen bevorden]. Brussels, Flemish Ministry for Health.

GAPA (2010a). The Toronto Charter for Physical Activity: a global call for action. Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International Society for Physical Activity and Health (http://www.globalpa.org.uk/pdf/torontocharter-eng-20may2010.pdf, accessed 23 November 2012).

GAPA (2010b). Non communicable disease prevention: investments that work for physical activity. Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International Society for Physical Activity and Health (http://www.globalpa.org.uk/pdf/investments-work.pdf, accessed 23 November 2012).

Government of the Czech Republic (2000). National programme for the development of sport for all [Národní program rozvoje sportu pro všechny]. Prague, Government of the Czech Republic [Unofficial English translation on behalf of the WHO Regional Office for Europe].

Hallal PC et al. (2012). Physical activity: more of the same is not enough. Lancet [Series on physical activity], 380(9838):190–191.

Heath GW et al. (2012). Evidence-based intervention in physical activity: lessons from around the world. Lancet [Series on physical activity], 380(9838):272–281.

HEPA Europe (2012). HEPA Europe (European network for the promotion of health-enhancing physical activity) [web site] Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/physical-activity/activities/hepa-europe, accessed 23 November 2012).

IMPALA (2011). Proposed European guidelines: improving infrastructures for leisure-time physical activity in the local arena: towards social equity, intersectoral collaboration and participation. Brussels, European Commission – Executive Agency for Health and Consumers (http://www.impala-eu.org/fileadmin/user_upload/2011_IMPALA_guideline_web.pdf, accessed 23 November 2012).

Irish Sports Council (2009). Building sport for life: the Irish Sports Council's strategy 2009–2011. Dublin, Irish Sports Council.

Lancet (2012). Series on physical activity: 380(9838), 18 July 2012 (http://www.thelancet.com/series/physical-activity, accessed 14 January 2013).

Lee I-M et al. (2012). Effect of physical inactivity on major noncommunicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet [Series on physical activity], 380(9838):219–229.

Lorenc T et al. (2012). What types of interventions generate inequalities? Evidence from systematic reviews. Journal of Epidemiology and Community Health, doi 10.1136/jech-2011-201257.

MIMoSA (2012). Methodology guide: social inclusion through sports: a possible model. MIMoSA (Migrants' Inclusion Model through Sport for All) (http://www.mimosaproject.net/wp-content/uploads/2012/08/Lineeguida_ENG.pdf, accessed 23 November 2012).

Ministry of Education et al. (2006). Action plan for the promotion of healthy nutrition and physical activity [Plan d'action pour la promotion de l'alimentation saine et de l'activité physique]. Luxembourg, Ministry of Education, Ministry of Health, Ministry of Family and Integration and Ministry of Sports.

Ministry of Health and Consumer Affairs (2005). Inverting the trend towards obesity: Spanish strategy for nutrition, physical activity and prevention of obesity [Invertir la tendencia de la obesidad: estrategia para la nutrición, actividad física y prevención de la obesidad]. Madrid, Ministry of Health and Consumer Affairs.

Ministry of Health, Welfare and Sport (2005). Time for sport: exercise, participate, perform [Tijd voor sport. Bewegen, meedoen, presteren]. The Hague, Ministry of Health, Welfare and Sport.

Ministry of Health, Welfare and Sport (2008). The power of sport [De kracht van sport]. The Hague, Ministry of Health, Welfare and Sport.

NICE (2009). Promoting physical activity, active play and sport for pre-school and school-age children and young people in family, pre-school, school and community settings. London, National Institute for Health and Clinical Excellence (NICE public health guidance 17; http://www.nice.org.uk/nicemedia/live/11773/42883/42883.pdf, accessed 23 November 2012).

Nordic Council of Ministers (2006). Health, food and physical activity: Nordic plan of action on better health and quality of life through diet and physical activity. Copenhagen. Nordic Council of Ministers.

Parliament of Hungary (2007). Sport XXI: national sports strategy 2007–2020 [Sport XXI. Nemzeti sportstrategia 2007–2020]. Budapest, Parliament of Hungary [Unofficial English translation on behalf of the WHO Regional Office for Europe].

Pratt M et al. (2012). The implications of megatrends in information and communication technology and transportation for changes in global physical activity. Lancet [Series on physical activity], 380(9838):282–293.

UNECE (2010). Amsterdam Declaration: making THE link: transport choices for our health, environment and prosperity. Geneva, United Nations Economic Commission for Europe/WHO Regional Office for Europe (ECE/AC.21/4; http://www.unece.org/fileadmin/DAM/thepep/en/publications/Amsterdam%20Declaration%20final_EN.pdf, accessed 23 November 2012).

Welsh Assembly Government (2005). Climbing higher: the Welsh Assembly Government strategy for sport and physical activity. Cardiff Welsh Assembly Government.

Wen CP, Wu X (2012). Stressing harms of physical inactivity to promote exercise. Lancet [Series on physical activity], 380(9838):192–193.

WHO (2004a). Children's Environment and Health Action Plan for Europe. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0006/78639/E83338.pdf, accessed 23 November 2012).

WHO (2004b). Global Strategy on Diet, Physical Activity and Health. Geneva, World Health Organization (http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf, accessed 14 January 2013).

WHO (2007a). Steps to health: a European framework to promote physical activity for health. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0020/101684/E90191.pdf, accessed 23 November 2012).

WHO (2007b). WHO European Ministerial Conference on Counteracting Obesity: conference report. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0006/96459/E90143.pdf, accessed 23 November 2012).

WHO (2007c). A guide for population-based approaches to increasing levels of physical activity: implementation of the WHO Global Strategy on Diet, Physical Activity and Health. Geneva, World Health Organization (http://www.who.int/dietphysicalactivity/PA-promotionguide-2007.pdf, accessed 23 November 2012).

WHO (2008a). WHO European Action Plan for Food and Nutrition Policy 2007–2012. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0017/74402/E91153.pdf, accessed 23 November 2012).

WHO (2008b). Second WHO European Action Plan for Food and Nutrition Policy 2007-2012: tackling acute and chronic diseases related to food with a comprehensive approach. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0004/57559/action_plan_Leaflet_final_ENG.pdf, accessed 14 January 2013).

WHO (2008c). 2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases. Geneva, World Health Organization

(http://whqlibdoc.who.int/publications/2009/9789241597418_eng.pdf, accessed 5 February 2013).

WHO (2009). Global health risks: mortality and burden of disease attributable to selected major risks. Geneva, World Health Organization (http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf, accessed 23 November 2012).

WHO (2010). Parma Declaration on Environment and Health and Commitment to Act. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0011/78608/E93618.pdf, accessed 23 November 2012).

WHO (2011a). Rio Political Declaration on Social Determinants of Health. World Conference on Social Determinants of Health. Geneva, World Health Organization (http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf, accessed 23 November 2012).

WHO (2011b). Action Plan for Implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0003/147729/wd12E_NCDs_111360_revision.pdf, accessed 23 November 2012).

WHO (2012a). European database on nutrition, obesity and physical activity (NOPA). [online database]. Copenhagen, WHO Regional Office for Europe (http://data.euro.who.int/nopa/, accessed 23 November 2012).

WHO (2012b). Health 2020 policy framework and strategy. Regional Committee for Europe, Sixty-second session. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0020/170093/RC62wd08-Eng.pdf, accessed 23 November 2012).

Annexes

Annex 1 – List of project participants and contributors

Annex 2 – Methodology

Annex 3 –Tools and frameworks for project evaluation

Annex 4 – Overview of case studies selected for discussion within the project

Annex 1

LIST OF PROJECT PARTICIPANTS AND CONTRIBUTORS

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Annex 2

METHODOLOGY

The development of guidance on good practice for physical activity promotion in SDG, with a focus on the role of healthy environments, was coordinated by a WHO secretariat but technical work was carried out by a range of national experts. Discussion and decision-making regarding the evaluation and assessment of the compiled material and the derivation of conclusions were undertaken by experts invited to the project meetings and the project group. The working papers discussed at the two project meetings were developed by subcontracted experts who also developed – in discussion with the WHO secretariat, and integrating advice from project group members – the methodological approaches for their respective tasks. This chapter provides a short overview of the working procedures and methodologies applied in the process of compiling the information on which the final guidance and conclusion of this report are based.

Project group

The project group, established in July 2010, brought together a wide range of experts offering extensive knowledge on physical activity promotion with an interest in social patterns. The group considered geographical balance by inviting members from various EU countries in order to have equal access to knowledge and information from all parts of Europe. For each project meeting the project group invited a number of additional technical experts to draw on a wider pool of knowledge and experience.

The core project group included 10 technical experts from Finland, Germany, Hungary, Ireland, the Netherlands, Spain, Sweden and the United Kingdom (England, Northern Ireland and Scotland). All were either involved in HEPA network activities related to physical activity promotion in SDG (seven experts) or selected for their recent work in this area (three experts). Two members of WHO staff (bringing together the working areas of physical activity promotion, urban environments and transportation) provided secretariat and project coordination support.

The project group advised on coordination of the project and specific tasks such as the definition of working tasks to be subcontracted to selected experts for the preparation of meeting documents. The project group also advised on the methodology applied for the case study collection, and reviewed all working papers. Finally, the project group decided on the coverage and the limitations of the project by developing a definition of "social disadvantage" to be used within the project.

Definition of "social disadvantage"

The first draft for a definition of "social disadvantage" for the use within the PHAN project was produced by the National Health Service, Health Scotland, in the context of development of the case study template for compiling information on interventions promoting physical activity in SDG.[1] To target appropriate projects, the template had to define clearly what

[1] The project focused on physical activity levels related to recreational and transport-related activity taking place in the private and public space as a form of spending free time and a means of transportation. It excluded physical activity in occupational settings, which is not a free choice and not necessarily health-enhancing.

would be considered; thus, a first definition was suggested and discussed within the project group. After intense discussion, the project group agreed on the following definition of "social disadvantage" to be applied to the project and especially to be used to delineate the limits of case studies to be considered.

Social disadvantage relates to socioeconomic aspects (including income, employment, education and SES) as well as to sociocultural aspects (such as gender, ethnicity, religion, culture, migrant status, social capital), sociogeographical aspects (such as living in a deprived neighbourhood) and age. SDG may be affected by more than one of these dimensions.

There was intensive discussion regarding the inclusion or exclusion of physical or cognitive disabilities and impairments in the definition. The main argument for excluding it was that the practical implementation of physical activity promotion in this specific target group tends to be of a very different nature and is widely diverse, depending on the type of constraint. It was therefore considered to be a specific dimension of physical activity promotion that could not be adequately tackled in combination with the other dimensions of disadvantage.

Evidence review

A review of evidence published in academic and grey literature was carried out to summarize current knowledge and to identify and describe the impact of social disadvantage on physical activity levels as well as the causal mechanisms linking them. The evidence review was subcontracted to the Department of Health, Sport and Exercise Science at the Waterford Institute of Technology in Ireland and was carried out in late 2010.

The final review report is based on a thorough search conducted of the Science Direct, Pubmed, SPORTSDISCUS, Cinahl (EBSCO), Psych Info and ISI web of knowledge databases. Only abstracts in English were extracted. The literature search was conducted using a combination of words in four different categories using the "AND" functions in the databases. The first category included terms such as physical activity, sport and recreation. The second category identified terms describing the target group, including disadvantage, low SES, black, ethnic minorities, indigenous, aboriginal, culturally and linguistically different (CALD), non-English-speaking background (NESB) and traveller. The third category included the term Europe and individual country names within the Europe region. To identify interventions conducted with SDG the terms interventions, strategies or programmes, sport/leisure/recreation centre, organized sport and organized activity were used.

A search of the grey literature on health, sport and community agency web sites was conducted. Health survey data from European countries were searched, where possible, to extract data on physical activity analysed by social class, education or ethnicity. Two calls for relevant literature on social disadvantage were made to the HEPA Europe network to ensure that as much published and unpublished literature as possible was retrieved from European countries. Data on the International Physical Activity and the Environment Network (IPEN) and WHO databases were also searched.

Based on these criteria, 89 studies were finally included in the analysis. These included evidence and data from all EU Member States with the exception of Romania. While there were many studies from the United Kingdom, Finland and Sweden in the published literature, it proved more difficult to locate studies from other countries that were in English and of a reasonable quality. Where no large-scale studies could be found for a given country, smaller

studies were included, although some used non-representative samples or less robust methods. Some studies described sports participation rather than physical activity behaviour, and these were included for countries where physical activity studies were not located. Where a range of studies for a country was available, those with large sample sizes and reported response rates were chosen.

Of the 89 studies, 12 related specifically to physical activity prevalence in ethnic minority groups (seven of these measured physical activity (63%) and the remainder measured sport or physical activity/sport) and all used self-reporting measures. Five studies were of children or adolescent populations and the remainder were of adults. Secondary analysis of data was employed in six studies.

The final evidence review report is available (Working Paper 1) and served as a working paper for the first project group meeting in April 2011.

Case study collection and review

Case studies were collected to gain a better understanding of physical activity projects targeting SDG, as implemented in EU countries. The case study review was subcontracted to NHS Health Scotland and was carried out from summer 2010 to early 2011.

The case study template was produced after review of around 20 existing templates (for more detail on this process see Working Paper 2), and in close collaboration with the project group and the WHO secretariat. The call for case studies was disseminated via several routes and mechanisms such as the European public health and physical activity networks, including the WHO expert group, and web postings.

A total of 95 case studies were received by the deadline of 22 October 2010. Of these, three were rejected because they were in the wrong format or did not match the criteria, and one was discovered to be a duplicate submission, resulting in the identification of a total of 91 eligible case studies for consideration. As English was the language used, there was an inherent bias towards case studies from the United Kingdom (61% were from the United Kingdom, with just over half of these from Scotland). Nevertheless, 13 Member States of the WHO European Region were represented in the submissions overall: Austria, Belgium, Finland, France, Germany, Hungary, Ireland, Israel, Italy, the Netherlands, Norway, Spain and the United Kingdom.

The 91 case studies were subjected to a review and selection process carried out by NHS Health Scotland and the project group. All reviews were based on assessment of the following **essential** criteria:

- the case studies must promote physical activity;
- they must target SDG (as defined above);
- the learning achieved must be interesting, relevant and transferable to a wider audience.

Desirable criteria for the case studies were defined as follows.

- The case study provides sufficient and appropriate data to assess the impacts and outcomes of the project. If data are not available, the case study might still be considered if it is particularly well targeted or innovative and provides useful learning.
- The intervention includes a modification to the physical environment or infrastructure.

Based on the individual evaluation results, case studies were rated and recommended for inclusion or exclusion for further work in the project. Each case study was assessed four times (by NHS Health Scotland, by two members of the project group, and by at least one member of WHO staff). The final selection included 29 case studies, with representation of nine Member States.

Initially, 19 case studies were excluded because they did not define "promoting physical activity" as the primary outcome but instead used promotion of physical activity as a vehicle to achieve other outcomes, such as increasing social capital or reducing crime or drug misuse. Although the examples provided in these case studies did not fully match the selection criteria focusing on inequalities in physical activity itself, they nevertheless indicated an interesting and socially relevant application of physical activity as a solution mechanism to social and inequality-related problems. Thus, while they were excluded from the final selection and not analysed in full detail, they were consequently reviewed and explored. A short summary of the main results can be found in Chapter 4 on national actions and examples.

Qualitative analysis of the selected 29 case studies was undertaken by a working group in NHS Health Scotland. A table with a grid of key information required from each case study was developed and filled in with case study-specific data. The table was then used to inform the final case study review report (Working Paper 2) and served as a working paper for the first project group meeting in April 2011.

Policy document analysis

A review of existing policies and strategies at the EU level was carried out to analyse to what extent SDG are targeted by physical activity promotion policies and strategies in EU Member States. The review had the further aim of exploring whether specific policy strategies focusing on SDG exist in these Member States. This policy review was subcontracted to a physical activity and public health consultant and was carried out from late 2011 to early 2012.

An online search for physical activity policy documents was conducted in the NOPA database, resulting in identification of 127 documents. The NOPA database compiles information from WHO European Member States to monitor the progress of nutrition, diet, physical activity and obesity.

For each country the policy documents were provisionally screened for relevance. A qualitative assessment of titles, tables of contents and/or summaries was conducted to create an initial list of documents for more detailed investigation. The final selection of 31 documents to include in the analysis was conducted according to the following criteria:

- the documents must be government programmes, strategies, policies or action plans with a clear link to an overall policy;
- they should have a national focus except in countries with a decentralized structure, where subnational or – if relevant – supranational documents could be included;
- they must include actions or objectives related to the promotion of physical activity in SDG;
- they should be the policy document covering physical activity most extensively by country.

Four documents were not available in English and thus were translated through Google Translate in order to represent as many Member States as possible. Unofficial translations conducted for WHO Regional Office for Europe were available for six documents from the NET-SPORT-HEALTH project,[2] and those were also included in the present analysis.

A set of keywords was established to assist the screening of the selected documents and to create an analysis grid. A short form of each word was used for the search in order to take different inflections into account. The keywords were:

- inequalities
- vulnerable
- socioeconomic
- disadvantage
- marginalized
- deprived.

An analysis grid was developed based on literature and impressions from screening the selected documents in order to standardize the analysis. The following questions were covered.

- What is the overall topic/objective of the policy document?
- What terms are used to describe the SDG?
- How is physical activity promotion in SDG integrated in the document?
- Which subgroups can be identified in the document as socially disadvantaged according to the PHAN definition?
- What actions and objectives, if any, does the policy document suggest to improve physical activity in SDG?
- Is monitoring of physical activity levels mentioned? And specifically for the different social strata?

General information about country of origin, language, issuing body, publication year and time frame was noted and the policy documents were reviewed according to the analysis grid. Focus was put on interventions promoting physical activity, while top level sport promotion was not considered in this analysis.

A summary of the main results of the policy review can be found in Chapter 4; the full report is available as Working Paper 3.

Physical activity policy survey

To better map and understand countries' policies targeting physical activity in disadvantaged social groups a policy questionnaire was developed and sent to relevant national counterparts nominated as focal points for nutrition and physical activity in the Member States of the WHO European Region.

[2] WHO (2012). NET-SPORT-HEALTH: Promoting networking, exchange and greater synergy between sport and health-enhancing physical activity sectors [web site]. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/physical-activity/activities/promoting-networking,-exchange-and-greater-synergy-between-sport-and-health-enhancing-physical-activity-sectors-net-sport-health, accessed 23 November 2012).

The questionnaire was developed by the WHO project secretariat. Of the 42 countries of the European Region sent the PHAN project policy survey,[3] 18 countries returned the survey between late 2011 and early 2012 (representing a response rate of 43%). The answers were analysed and summarized by a consultant with expertise in the fields of physical activity, SDG and environmental health.

The questionnaire comprised 10 questions focusing on "national policies and regulations" promoting physical activity, including national policies where the approach (or part of the approach) might be to support or facilitate local implementation of a national objective, plan or strategy. Reflecting PHAN's overall emphasis, the questionnaire sought information on the extent to which countries specifically addressed promotion of physical activity in the disadvantaged through national policies and similar. In addition to asking respondents to list and describe such policies, they were encouraged to supply or provide links to relevant documents. The aim here was to better understand which SDG were targeted and the mechanisms through which national policies and regulations sought to increase their physical activity levels. In addition, the questionnaire explored the reach and relevance of national physical activity policy to other policy sectors. Another set of questions dealt with data, their accessibility and the extent to which data were analysed and exploited to inform policy.

The final policy survey report is available as Working Paper 4; the main results are summarized in Chapter 4.

[3] The PHAN project is co-funded by the European Commission through its Health Programme 2008–2013. As such, it targets EU countries, EFTA countries party to the Agreement on the European Economic Area (Iceland, Liechtenstein and Norway) and Croatia. Experience from European Neighbourhood Policy countries and Western Balkan countries can, however, offer valuable information in the context of PHAN that has been deemed relevant for the target countries of the Health Programme and is therefore included in this analysis. In the context of the policy survey, questionnaires were also sent out to all other Member States of the WHO European Region, but these were not analysed within the PHAN project.

Responses were received from Andorra, Austria, Belgium, Bosnia and Herzegovina, Denmark, Estonia, Germany, Latvia, Montenegro, The Netherlands, Norway, Poland, Romania, San Marino, Serbia, Slovakia, Spain and Turkey.

Annex 3

TOOLS AND FRAMEWORKS FOR PROJECT EVALUATION

A range of tools exists to facilitate evaluation of policies, projects and initiatives in general terms.[1]

http://www.evaluationtrust.org/tools/introduction

http://www.theinnovationcenter.org/files/doc/B5/RI%20pp%2068%20Evaluation%20Methods.pdf

http://www.health.vic.gov.au/healthpromotion/evidence_evaluation/cdp_tools.htm

http://ctb.ku.edu/en/TakingActionInTheCommunity.aspx#Evaluate

http://www.jblearning.com/samples/0763738425/38425_CH18_495_544.pdf

http://international.nisb.nl/scrivo/asset.php?id=999101

http://www.euro.who.int/__data/assets/pdf_file/0006/151395/e95785.pdf

Some evaluation approaches have been designed especially to match the needs of physical activity interventions.

http://docs.health.vic.gov.au/docs/doc/Evaluation-tools-for-nutrition–physical-activity-and-obesity-programs

http://docs.health.vic.gov.au/docs/doc/Indicators-for-nutrition–physical-activity-and-obesity-programs

http://www.noo.org.uk/core/eval_collection

http://www.noo.org.uk/uploads/doc/vid_16722_SEF_PA.pdf

http://www.noo.org.uk/core/frameworks/SEF_PA

http://www.who.int/dietphysicalactivity/M&E-ENG-09.pdf

In specific cases, tools have also been developed to support equity-based evaluations.

http://www.mymande.org/?q=defining_equity_focused_evaluations

http://www.mymande.org/?q=conducting_equity_focused_evaluations

[1] Methods and approaches compiled in this section do not represent any recommendation and/or endorsement by WHO.

Annex 4

OVERVIEW OF CASE STUDIES SELECTED FOR DISCUSSION WITHIN THE PHAN PROJECT

No.	Country	Case study title	Target group criteria	Age	Brief description
1	Germany	Sports medical counselling to promote physical activity in unemployed people	Unemployed	Adults over 50	Uses a sports medical counselling approach to recruit adults over 50 in job centres into physical activity programmes with the aim of improving employability and increasing physical activity, health and social inclusion
2	Wales (United Kingdom)	Heartlinks exercise referral project	Unemployed, female, economically disadvantaged, with existing health problems and at risk of coronary heart disease	Adults (19–64) and older adults (over 65)	A large exercise referral scheme pilot using several primary care practices in deprived areas to target those who are inactive or suffer from chronic illness, who would benefit from increasing their physical activity levels
3	Israel	D-CURE project: intensive lifestyle intervention in obese Arab women	Arab women, low income, unemployed, low education, ethnic minority, religion, culture, migrant, living in deprived areas	Adults (19–64)	Focuses on recruiting Arab women from disadvantaged communities into physical and nutritional initiatives with the aim of reducing obesity-related co-morbidity
4	Scotland (United Kingdom)	Irvine green gym	Low income, unemployed, living in deprived areas	Adults (19–64) and older adults (over 65)	A community green gym initiative that encourages adults and older adults to improve their health (physical and mental) by participating in local volunteering and conservation in the outdoor environment
5	Scotland (United Kingdom)	Jump2it	Living in deprived areas	Children and young people (9–12)	A schools initiative offering a sporting role model approach to supporting health education among primary schoolchildren aged 9–12, using athletes to deliver key messages and promote participation in basketball
6	England (United Kingdom)	Dance for health	Low income, low education, living in deprived areas	All children (0–18)	Targets children in deprived areas to give them the opportunity to participate in physical activities (dance) they would not normally be able to access, working in partnership with an already long-term initiative that targets young families in deprived areas

No.	Country	Case study title	Target group criteria	Age	Brief description
7	Northern Ireland (United Kingdom)	Ulster sport outreach: sport for life (sport is for living, integration, fun and education)	Schools with high number of free meals, religion	Mostly children aged 8–9	Specifically targets schoolchildren aged 8−9 in schools with a high number of free school dinner recipients, using trained sports students as outreach workers and teachers to deliver key physical activity and diet message, with the 2012 Olympic Games as an incentive
8	Scotland (United Kingdom)	Just add water	Ethnic minority, deprived children from low-income families	Children (0–4)	Promotes swimming among preschool children in deprived areas of Glasgow with a high ethnic minority population by offering free transport and free swimming sessions
9	Germany	BIG: movement as an investment for health	Most deprived groups and non-EU migrants, females	Adults (19–64) and older adults (over 65)	Assesses organizational policies that raise barriers for Muslim women in difficult situations in deprived areas in order to promote better physical and mental health through assisted women-only swimming classes
10	Germany	Gesund sind wir stark!	Unemployed, low education, low income, Turkish migrants	Children (mainly 0–6)	A community initiative that trains immigrant Turkish women to deliver an obesity-prevention initiative to a target group of Turkish preschool children
11	Scotland (United Kingdom)	Dundee active travel	Living in deprived areas	All ages	A whole-population approach in areas of deprivation within a city, aiming to change individuals' modes of transport from sedentary to active through the promotion of walking and cycling, mainly by developing personalized travel plans and modifying the environment
12	Scotland (United Kingdom)	Highland Homeless Trust good health active referral scheme	Low income, unemployed, low social capital and homeless	Adults (19–64)	A referral-type initiative that aims to support homeless people to engage in healthy physical and nutritional initiatives to gain confidence and independence
13	England (United Kingdom)	Premier League health	Unemployed, low education, homeless, low SES	Adults (19–64)	Uses an English Premier League football club partnership to provide physical activity initiatives to improve health and fitness levels among homeless adults
14	The Netherlands	JUMP-in	Ethnic minority, living in deprived areas	Children (5–18)	A primary school-based approach for the promotion of physical activity, sport and nutrition among children in socially and economically deprived areas
15	Scotland (United Kingdom)	Girls on the move	Female, living in deprived areas	Girls (16–24)	A community project to promote different types of physical activity in socially disadvantaged girls across Scotland and to train some of these girls to become project leaders

No.	Country	Case study title	Target group criteria	Age	Brief description
16	Scotland (United Kingdom)	Walking for health	Living in deprived areas, ethnic minority groups, inactive, over 50, with chronic conditions	Adults (19–64) and older adults (over 65)	A national walking programme delivered in the local community particularly targeting older adults who are inactive and those from ethnic minority groups in deprived neighbourhoods
17	Scotland (United Kingdom)	Perth and Kinross healthy communities collaborative	Low social capital, living in rural areas	Older adults (over 65)	A community intervention that empowers local peers and carers to identify physical and social needs among isolated elderly people in their own homes or care homes and to develop and try out initiatives to meet these needs
18	Norway	PA and minority health study	Low income, low education, ethnic minority	Adults (25–60)	Targets inactive Pakistani men with low income and education, using mosques as a setting for an initiative to promote physical activity, increase fitness and reduce the incidence of diabetes
19	Ireland	Go for life fitline	Living in deprived/rural areas, older people	Older adults (over 65)	Uses a telephone-based mentoring service to target older adults from deprived neighbourhoods to raise awareness and increase levels of physical activity, and to form social links in the community
20	Spain	Programme CAMINEM	Low social capital, living in deprived areas, mostly older adults	Adults (19–64) and older adults (over 65)	Uses an exercise referral-type initiative to target socially isolated people and those with chronic illness from deprived neighbourhoods with appropriate physical activities to support health self-management
21	Scotland (United Kingdom)	Fit for girls	Ethnic minority groups, low SES, adolescent girls	Girls (11–16)	Targets adolescent girls aged 11−16 years in schools by raising awareness among school stakeholders and practitioners of the specific needs of this target group, thereby removing barriers to participation in sports and other activities
22	The Netherlands	DOiT (Dutch obesity intervention in teenagers)	Low income, ethnic minority, living in deprived areas	Children (5–18)	A schools initiative targeting low income and deprived neighbourhoods to prevent overweight/obesity in children via diet and physical activity interventions
23	Scotland (United Kingdom)	Living streets, and Benarty community forum	Living in deprived areas	Adults (19–64) and older adults (over 65)	Aims to empower residents of deprived communities to influence local councils to improve streets and pavements in order to encourage walking among the local population

No.	Country	Case study title	Target group criteria	Age	Brief description
24	Norway	Stork Groruddalen and “Jeg kan” (["I can"]	Low income, low education, ethnic minority, low social capital, living in deprived areas	Various age groups	Targets various ages of the population in areas of multiple deprivation with interventions to reduce health inequalities via increased physical activity, healthy eating and reduction of diabetes among pregnant women
25	England (United Kingdom)	The Ramblers: get walking, keep walking	Low income, ethnic minority, areas with high inactivity	All ages	Targets all age groups in areas of deprivation with a high percentage of individuals from ethnic minority backgrounds and promotes community walking in the local environment to those least active
26	Hungary	EVERY-TIME, EVERY-WHERE – walking for healthier ageing	Low income, pensioners	Adults (over 60)	Recruits low-income pensioners from communities onto walking projects with the aim of improving quality of life, social interaction and life expectancy
27	Finland	Fit for life	Low income, unemployed, migrant, living in deprived areas	Adults (over 40) and older adults (over 60)	Aims to create and promote physical activity services designed for physically inactive adults and older adults of low income/education and living in deprived areas; also aims to improve the environment to support daily physical activity
28	Finland	55+ licence to locomotion	Low income, unemployed, low social capital	Ages 55–65	Aims through physical activity to strengthen well-being, self-esteem and social capital of adults who have been unemployed for 1–5 years and are aged 55 years and over
29	Scotland (United Kingdom)	Healthy moves project	Low income, low education unemployed, living in deprived areas	Adults (19–64) and older adults (over 65)	A multiagency approach to healthier living in a very deprived area, helping to promote affordable physical activity and health living projects and working with other organizations to promote green gyms and “walkable” streets for the older population

Additional information

This final report is based on four working papers prepared for the PHAN project expert meetings held in 2011 and 2012. These working papers can be requested by e-mail (physicalactivity@euro.who.int). Note that the working papers are provided in their original format and have not been language edited.

Working Paper 1 – Evidence review

Working Paper 2 – Case study review

Working Paper 3 – Analysis of national documents on physical activity

Working Paper 4 – Member State policy survey

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
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Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

Over the past few years, physical activity promotion has increasingly been recognized in Europe as a priority for public health action and many countries have responded through the development of policies and interventions supporting physical activity. The WHO Regional Office for Europe undertook a project focusing on this public health challenge to support and further enhance evidence and networking. Since the accumulation of evidence shows that low levels of physical activity are often found in socially disadvantaged groups, one substantial element of the project was the development of guidance on promoting physical activity within disadvantaged communities, with a focus on the role of healthy environments.

This report presents the main conclusions of the project and provides – based on a review of evidence, case studies and national policies – suggestions for national and local action on interventions and policy formulation to support physical activity in socially disadvantaged groups. Acknowledging that the evidence base needs to be further strengthened, the report also identifies evidence gaps to be targeted by future research.

The report arises from the Physical Activity and Networking (PHAN) project co-funded by the Health Programme of the European Union.

It was developed in close collaboration with the European network for the promotion of health-enhancing physical activity (HEPA Europe).

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