NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Physical activity and the environment update

June 2016

Topic

This guideline will replace the NICE guideline on physical activity and the environment (PH8). Some recommendations from PH8 will be updated and some new areas will be considered. Some recommendations in PH8 will not be updated but will be included in the final guideline. For more information see section 1.3 and the review decision.

This guideline will also be used to develop the NICE quality standard for physical activity: encouraging activity in the general population.

The guideline will be developed using the methods and processes outlined in Developing NICE guidelines: the manual. NICE worked with Public Health England to develop this scope.

For more information about why this guideline is being developed, and how the guideline will fit into current practice, see the context section.

Who the guideline is for

- Local authorities, including departments responsible for public health, social care, planning and development management, transport, sport, recreation, leisure and public open spaces.

It will also be relevant for:

- Others responsible for open spaces. For example, public, private, community and voluntary sector organisations who manage open spaces in workplaces, NHS grounds, community-owned gardens and playing fields.
- Public, private, voluntary and community organisations working to ensure people with restricted mobility can access built and natural environments and use those environments to be physically active.

It may also be relevant for members of the public.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the Welsh Government, Scottish Government, and Northern Ireland Executive.

Equality considerations

NICE will carry out an equality impact assessment during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

The guideline will look at inequalities relating to factors that reduce people's ability to be physically active in the built and natural environment. This will include age, disability (including sensory or learning disabilities) and other additional needs.

1 What the guideline is about

1.1 Who is the focus?

Groups that will be covered

- Everyone, with particular consideration of those who are less able to be physically active.

1.2 Settings

Settings that will be covered by the update

- Built environment including roads, pavements, the external areas of buildings and open 'grey' space, such as urban squares and pedestrianised areas.
- Natural environment, including 'green' and 'blue' spaces. Green spaces include: urban parks, open green areas, woods and forests, coastland and countryside, and paths and routes connecting them. Blue spaces include: the sea, lakes, rivers and canals.

Settings that will not be covered by the update

- Building interiors (recommendations from PH8 will still apply).
- School playgrounds (recommendations from PH8 will still apply).
- Residential settings, such as prisons and care homes.

1.3 Activities, services or aspects of care

Key areas that will be covered

Areas from the published guideline that will be updated

Interventions in the built or natural environment that encourage and support physical activity among all population groups will include:

1 Transport interventions:
  - re-allocating road space to support physically active modes of transport such as cycling and walking
  - planning and providing walking and cycling networks and infrastructure links within existing networks
  - public transport provision, networks and links
  - parking restrictions
  - pedestrian crossings
  - traffic-calming measures to restrict vehicle speeds
  - road-user charging schemes.

2 Design and accessibility of public open spaces (built and natural environment):
   - access to open spaces by public transport, on foot, by bicycle or using other forms of active transport.
   - connections between open spaces through traffic-free networks of footpaths, trails or cycle routes
   - maintenance and management, conservation or landscaping of open spaces
   - facilities in open spaces such as accessible toilets, shelter, signage, accessible parking
   - safety of open spaces, for example through layout, lighting or security.

Areas from the published guideline that will not be updated

1 Design and refurbishment of building interiors (recommendations from PH8 will still apply).
2 Design of school playgrounds (recommendations from PH8 will still apply).

Recommendations from PH8 in areas that are not being updated may be edited to ensure that they meet current editorial standards, and reflect the current policy and practice context.

Areas not covered by the published guideline that will be included in the update

1 Interventions that enable people with restricted mobility to be physically active by ensuring their local environments are accessible and can be used by all groups. People with restricted mobility include those who use wheelchairs or adapted cycles and those with sensory or learning impairments that affect their mobility.

Areas that will not be covered

1 Interventions to increase physical activity as part of managing chronic or other conditions.
2 Interventions that aim to change individual behaviour by providing and encouraging people to take up activities that take place in the built or

natural environment. For example, exercise classes, green gyms and organised walks.

3 Areas covered by NICE's guideline on walking and cycling.

1.4 Economic aspects

We will take economic aspects into account when making recommendations. We will review the economic evidence and carry out further economic analyses if needed. We aim to capture both health and non-health benefits if the data permits (ideally using a cost–benefit analysis). We may also carry out a cost–utility analysis to aid comparisons with other interventions.

1.5 Key issues and questions

While writing this scope, we have identified the following key issues, and key questions related to them:

1 Which interventions in the built or natural environment are effective and cost-effective at increasing physical activity among the general population?

1.1 Which transport interventions are effective and cost effective?

1.2 Which interventions related to the design and accessibility of public open spaces in the built and natural environment are effective and cost effective?

2 Does the effectiveness and cost effectiveness of these interventions vary for different population groups (particularly those less able to be physically active)?

3 Are there any adverse or unintended effects?

3.1 How do these vary for different population groups (particularly those less able to be physically active)?

3.2 How can they be minimised?

4 Who needs to be involved to ensure interventions are effective and cost effective for everyone?

5 What factors ensure that interventions are acceptable to all groups?

The key questions may be used to develop more detailed review questions, which guide the systematic review of the literature.

1.6 Main outcomes

The main outcomes that will be considered when searching for and assessing the evidence are:

1 Measures of physical activity:
   - total physical activity
   - total sedentary time
   - active travel
   - physical activity in everyday life (such as measures of walking or active play).

2 Intermediate outcomes:
   - changes to road environment
   - changes to urban planning
   - changes to transport
   - public transport use
   - changes to the infrastructure for both green and blue spaces
   - access to and use of natural environment including green and blue space
   - access to grey space.

3 Adverse or unintended outcomes such as accidents or falls.

Evidence on the context in which interventions are delivered and any adverse events associated with them will also be considered if available.

2 Links with other NICE guidance, NICE quality standards, and NICE Pathways

2.1 NICE guidance that will be replaced by this guideline

- Physical activity and the environment (2008) NICE guideline PH8

2.2 NICE quality standards

NICE quality standards that may need to be revised or updated when this guideline is published

- Physical activity: encouraging activity in all people in contact with the NHS (2015) NICE quality standard QS84

NICE quality standards that may use this guideline as an evidence source when they are being developed

- Physical activity: encouraging activity in the general population. Publication date to be confirmed.

2.3 NICE Pathways

When this guideline is published, the recommendations will be added to NICE Pathways. NICE Pathways bring together all related NICE guidance and associated products on a topic in an interactive topic-based flow chart. The existing physical activity pathway will be reviewed and updated to integrate the updated recommendations.

3 Context

3.1 Key facts and figures

If adults are more physically active this can help prevent and manage many diseases and conditions including coronary heart disease, diabetes, cancer and obesity. It can also help to improve mental health (At least five a week: evidence on the impact of physical activity and its relationship to health Department of Health) and, in older people, help maintain physical and cognitive function (Start active, stay active: report on physical activity in the UK Department of Health).

Being active in childhood helps maintain a healthy weight, enhances bone and cardio-metabolic health, improves mental health, develops social skills and confidence, and improves learning and academic achievement (Rapid evidence review on the effect of physical activity participation among children aged 5 – 11 years Public Health England).

Based on cases of coronary heart disease, stroke, diabetes, colorectal cancer and breast cancer, inactivity costs the NHS in the UK an estimated £0.9 billion per year. These costs are likely to be higher if falls, hypertension and other health problems potentially linked to physical activity are taken into account (The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK Scarborough et al. 2011).

Physical inactivity costs the UK an estimated £7.4 billion a year when the costs to wider society are added to NHS costs (Everybody active, every day: an evidence based approach to physical activity Public Health England).

3.2 Current practice

The UK Chief Medical Officers issued updated UK guidelines on physical activity in 2011. These state that adults (over 19) should spend at least 150 minutes a week doing moderate-intensity activity, in bouts of 10 minutes or longer, do muscle-strengthening exercise on 2 days a week, and not sit for prolonged periods without a break.

In 2012, the Health Survey for England (Health and Social Care Information Centre) showed that 67% of men and 55% of women met these guidelines, although this decreased with age for both sexes[1]. In addition, most adults were more sedentary and did less muscle strengthening activity than recommended.

The guidelines state that children and young people aged 5 to 18 should be physically active (moderate to vigorous intensity) for at least 60 minutes and up to several hours a day. But the 2012 survey showed that only 21% of boys and 16% of girls aged between 5 and 15 did at least 60 minutes of moderately intensive physical activity a day.

The guidelines advise that children and young people should minimise the amount of time spent sedentary (sitting) for long periods. But the 2012 survey found that children aged 2–15 spent on average (excluding time at school)

[1] In the survey anyone over 16 was defined as an adult.

around 3 hours a day in the week being sedentary (around 4 hours at weekends). This increased as household income level fell.

In the early years (under 5 years), the guidelines say children should be physically active for at least 180 minutes spread throughout the day and minimise the amount of time spent being restrained or sitting for extended periods (sedentary time for this age group excludes time spent sleeping). But only 9% of boys and 10% of girls aged 2–4 met these guidelines. On average they spent around 3 hours per day sitting.

The environment can influence people's ability to be active (Changing the environment to promote health-enhancing physical activity Foster and Hillsdon 2004). For example, the design and layout of towns and cities can encourage or discourage access on foot or by bike. In addition, using public transport instead of travelling by car, may mean people build more physical activity into their daily lives (Incidental physical activity in Melbourne, Australia: health and economic impacts of mode of transport and suburban location).

But for some groups, such as those with mobility problems or other needs, the environment can make it very difficult for them to be active. For example, they may not have easy access to public transport, or may find it difficult to cross the road in the time allowed by crossing signals.

For children and young people, a range of environmental factors restrict their ability to participate in physical activities. This includes: lack of safe travel options, neglect of local play areas, fear of crime, busy roads, and parental restrictions on their independence (Children and physical activity: a systematic review of barriers and facilitators Bunton et al. 2003).

3.3 Policy

Public Health England has identified 'active environments' as a key area for improvement to support everyone to be physically active (see 'Everybody active, every day: an evidence-based approach to physical activity').

The NHS Five Year Forward View focuses on prevention and highlights the fact that many people are not physically active enough to benefit their health.

Moving more, living more (Department for Health et al.) sets out a 'national ambition' to: increase the number of adults doing the recommended amount of physical activity and to reduce the number doing less than 30 minutes per week.

Supporting people of all ages and abilities to be more physically active can help local authorities meet their public health responsibilities. Specifically, it will affect a range of indicators identified in the Public Health Outcomes Framework 2013 to 2016 and the NHS Outcomes Framework 2015 to 2016.

Increasing physical activity can also support other local policies and agendas. For example, increasing the number of people who walk or cycle as a form of travel can reduce traffic congestion and carbon emissions, and improve air quality. Increasing active travel can also play a key role in improving local economies (Growth market: the role of sustainable transport in boosting local economies Sustrans).

4 Further information

This is the final scope, incorporating comments from registered stakeholders during consultation

The scope takes Public Health England priorities into account to ensure that associated areas of work carried out by the 2 organisations complement each other.

The guideline is expected to be published in March 2018.

You can follow progress of the guideline.

Our website has information about how NICE guidelines are developed.