

PUBLIC HEALTH GUIDANCE

SCOPE

1 Guidance title

Managing overweight and obesity among children and young people: lifestyle weight management services

1.1 *Short title*

Overweight and obese children and young people: lifestyle weight management services

2 Background

- a) The National Institute for Health and Clinical Excellence (NICE) has been asked by the Department of Health (DH) to develop guidance on managing overweight and obesity in children and young people through lifestyle weight management services.
- b) This guidance will support a number of related policy documents including:
 - ‘Achieving equity and excellence for children’ (DH 2010a)
 - ‘Equity and excellence: Liberating the NHS’ (DH 2010b)
 - ‘Fair society, healthy lives: strategic review of health inequalities in England post 2010’ (The Marmot Review 2010)
 - ‘Healthy child programme: from 5–19 years old’ (DH 2009a)
 - ‘Healthy child programme: pregnancy and the first 5 years of life’ (DH 2009b)
 - ‘Healthy child programme: the two year review’ (DH 2009c)
 - ‘Healthy lives, healthy people: our strategy for public health in England’ (DH 2010c)

- 'Healthy lives, healthy people: a call to action on obesity in England' (DH 2011a)
 - 'Improving outcomes and supporting transparency. A public health outcomes framework for England 2013–2016' (DH 2012)
 - 'National child measurement programme' (DH 2011b).
- c) This guidance will provide recommendations for good practice, based on the best available evidence of effectiveness and cost effectiveness. It is aimed at commissioners, health professionals and providers of weight management services. It will also be of interest to managers in local authorities, schools and early years' settings, as well as to young people, their parents, carers and families.
- d) The guidance will complement NICE guidance on: obesity; behaviour change; maternal and child nutrition; prevention of cardiovascular disease and promoting physical activity. For further details, see section 6.

This guidance will be developed using the [NICE public health programme process](#).

3 The need for guidance

- a) Around three out of every ten boys and girls aged 2 to 15 years in England in 2010 were either overweight or obese¹ (NHS Information Centre 2012). The proportion that are overweight has remained largely unchanged since the mid-1990s. However, there has been a stark rise in childhood obesity (NHS Information Centre 2012) – by around one percentage point every 2 years up to 2007 (DH 2011a). Although this increase now appears to be levelling off, in 2010 around 17% of boys and just under 15% of girls were classed as obese (NHS Information Centre 2012).
- b) The 'National child measurement programme' (NCMP), part of the 'Healthy weight: healthy lives' strategy, aims to identify the prevalence of childhood obesity locally to help plan and deliver local support services (DH 2011b). Schoolchildren in reception (aged 4–5 years) and in year 6 (aged 10–11 years) have their height and weight measured (NHS Information Centre 2011). In the school year 2010/11, the NCMP showed that around 23% of children in reception and 33% in year 6 were either overweight or obese, and around 9% and 19%, respectively, were obese (NHS Information Centre 2011). The NCMP shows that obesity prevalence rises with increasing socioeconomic deprivation and is more prevalent in urban, compared with rural, areas. Obesity is also more prevalent among children from black, Asian, 'mixed' and 'other' minority ethnic groups than among their white counterparts (NHS Information Centre 2011).

¹Several classification systems are used in the UK to define 'obesity' and 'overweight' in children. The 'National child measurement programme' (NCMP) and 'Health survey for England' use a gender-specific BMI chart (UK 1990 chart for children aged over 4 years). Children over the 85th centile, and on or below the 95th centile, are 'overweight'. Children over the 95th centile are 'obese'. In clinical practice, however, the 91st and 98th centiles may be used to define 'overweight' and 'obese' respectively.

- c) Most of the longer-term health consequences of obesity such as type 2 diabetes, cardiovascular disease and some cancers are seen in adults. However, over the last decade, it has become increasingly common for children to develop type 2 diabetes (Diabetes UK 2011). Being overweight as a child has been associated with the development of cardiovascular risk factors in childhood or early adulthood (Craig et al 2008; Logue and Sattar 2011). Childhood obesity is also associated with an increased prevalence of asthma (Figueroa-Munoz et al. 2001) and with sleep-associated breathing disorders including sleep apnoea. In addition, overweight and obese children are likely to experience bullying and stigma (Griffiths et al. 2006) which can impact on their self-esteem. Some of these issues and conditions may, in turn, affect their performance at school (Caird et al. 2011).

- d) Up to 79% of children who are obese in their early teens are likely to remain obese as adults (Chief Medical Officer 2008). Consequently, they will be at greater risk of conditions such as type 2 diabetes, coronary heart disease and some cancers in adulthood (Foresight 2007). Studies have also shown that a child with at least one obese parent is more likely to be obese themselves, and so there is a potential intergenerational effect (Perez-Pastor et al. 2009).

- e) Unless obesity is addressed in childhood, most of the financial consequences are likely to be incurred when treating and managing the co-morbidities that arise in adulthood. However, there are examples of more contemporary costs – such as schools needing to purchase specialist classroom and gym equipment to accommodate the needs of obese and overweight children (Local Government Association 2008).

- f) 'Healthy lives: a call to action on obesity in England' (DH 2011a) states that a range of local interventions are needed to both prevent obesity and treat those who are already obese or overweight. The 'Healthy child programme for 5–19 year olds' recommends that overweight or obese children should be referred to appropriate weight management services to help them achieve and maintain a healthier weight (DH 2009a). In 2008, an estimated 314 to 375 weight management programmes for children were operating in England (Aicken et al. 2008). Some were small local schemes, others were available on a regional or national basis – such as those listed in the DH's 'Child weight management programme and training providers framework' (Cross Government Obesity Unit 2009). In addition, some adult weight management programmes may accept children and young people. Local commissioners need to be able to determine which programmes are effective and provide good value for money.

4 The guidance

Public health guidance will be developed according to NICE processes and methods. For details see section 5.

This document defines exactly what this guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on a referral from the DH (see appendix A).

4.1 *Who is the focus?*

4.1.1 Groups that will be covered

- Children and young people aged under 18 who are overweight or obese².
- The parents or carers and families of these children and young people.

² A child or young person whose weight is at or above the 98th BMI centile may be described as 'very overweight' or obese (see BMI [Healthy weight calculator](#))

4.1.2 Groups that will not be covered

- Children and young people who are a healthy weight or who are underweight.
- Young women under 18 who are pregnant.
- Adults (apart from the parents and carers of children and young people who are overweight or obese).

4.2 Activities

4.2.1 Activities/measures that will be covered

Weight management programmes which take a lifestyle approach to helping overweight or obese children and young people achieve and maintain a healthy weight.

Lifestyle approaches focus on diet, physical activity, behaviour change or any combination of these factors. They may include programmes, courses or clubs (including online services) that are:

- specifically designed for overweight or obese children and young people
- designed for the parents, carers or families of obese or overweight children and young people
- designed primarily for adults but which accept, or may be used by, children and young people
- provided by the public, private or voluntary sector, in the community or in (or via) primary care organisations.

The Programme Development Group (PDG) will take reasonable steps to identify ineffective measures and approaches.

4.2.2 Activities/measures that will not be covered

- a) Programmes which focus only on the primary prevention of overweight and obesity in children and young people, including:

- universal programmes to promote healthy eating or physical activity which are aimed at all children and young people, regardless of their weight
 - programmes which focus on policy or environmental changes in particular settings (such as early years, schools and further educational establishments).
- b) The clinical treatment of mental or physical health conditions among children or young people which may be related to being overweight or obese.
- c) Pharmacological or surgical treatment for children and young people who are overweight or obese.
- d) Complementary therapies, such as acupuncture and hypnotherapy, used to reduce or manage overweight or obesity.
- e) Programmes based on very low calorie diets or meal replacements.
- f) Assessment of the definitions of 'overweight or 'obese' among children and young people.

4.3 Key questions and outcomes

Below are the overarching questions that will be addressed, along with some of the outcomes that would be considered as evidence of effectiveness and cost effectiveness:

- How effective and cost effective are lifestyle weight management programmes in helping overweight or obese children and young people to achieve and maintain a healthy weight?
- What are the essential components of an effective and cost-effective weight management programme for overweight and obese children and young people?

Subsidiary questions

- How does effectiveness and cost effectiveness vary for different population groups? (Examples may include children and young people from different black and minority ethnic groups, from low-income groups, of different ages or genders, or with special needs.)
- What are the most effective and cost effective ways of addressing and sustaining behavioural change among overweight and obese children and young people using community-based weight management programmes?
- How does the inclusion of parents, carers and the wider family impact on the effectiveness of community-based weight management programmes for children and young people?
- What barriers and facilitators affect the delivery of effective weight management programmes for children and young people and how do they vary for different population groups?
- What are the views, perceptions and beliefs of the children, young people and their families who use weight management services?
- What are the views, perceptions and beliefs of the staff responsible for commissioning and delivering weight management services to children and young people?
- How can more overweight and obese children and young people be encouraged to join, and adhere to, lifestyle weight management programmes?

Expected outcomes

- Weight maintenance, or changes in weight, body mass index (BMI) or waist circumference adjusted for age and gender (for example, using BMI or waist circumference z [standard deviation] scores or BMI centiles).
- Intermediate measures such as diet or physical activity outcomes.

- Validated measures of mental wellbeing, for example:
 - emotional wellbeing (including happiness, confidence and self-esteem)
 - psychological wellbeing (including autonomy, problem-solving, resilience and attentiveness)
 - social wellbeing (relationships with others, bullying or social isolation).
- Satisfaction with service, including variations according to family circumstances, attendance and adherence rates, programme duration, completion and drop-out rates, follow-up of participants, sustainability of weight changes.

Economic outcomes

Health benefits will be measured in terms of quality-adjusted life years (QALYs). This will involve estimating life expectancy at different levels of overweight and obesity, as well as estimating quality of life measures. Non-health-related benefits may also be measured.

The analysis will be conducted both from an NHS perspective and from a broader perspective that takes into account that people (and not the NHS) may pay for some private weight management services.

In addition, disaggregated information on health and non-health related costs and benefits may be captured in a cost-consequence analysis. Return on investment will also be considered. An existing economic model may be used, as appropriate.

4.4 *Status of this document*

This is the final scope, incorporating comments from a 4-week consultation, from 17 January until 14 February 2012.

5 Further information

The public health guidance development process and methods are described in '[The NICE public health guidance development process: An overview for stakeholders including public health practitioners, policy makers and the public \(second edition, 2009\)](#)' and '[Methods for development of NICE public health guidance \(second edition, 2009\)](#)'

6 Related NICE guidance

Published

[Weight management before, during and after pregnancy](#). NICE public health guidance 27 (2010).

[Prevention of cardiovascular disease](#). NICE public health guidance 25 (2010).

[Promoting physical activity for children and young people](#). NICE public health guidance 17 (2009).

[Maternal and child nutrition](#). NICE public health guidance 11 (2008).

[Physical activity and the environment](#). NICE public health guidance 8 (2008).

[Behaviour change](#). NICE public health guidance 6 (2007).

[Obesity](#). NICE clinical guideline 43 (2006).

Under development

Obesity: working with local communities. NICE public health guidance (publication expected November 2012).

Overweight and obese adults: lifestyle weight management services. NICE public health guidance (publication date to be confirmed).

Appendix A Referral from the Department of Health

The Department of Health asked NICE to:

'Develop guidance on managing overweight and obesity in children: lifestyle weight management services'.

Appendix B Potential considerations

It is anticipated that the Programme Development Group (PDG) will consider the impact of the following factors on the effectiveness, cost effectiveness and acceptability of different programmes or services:

- The target audience for example, the degree of obesity and age of the child or young person.
- The actions taken and by whom.
- The setting and context in which the programme takes place.
- The timing, frequency, and duration of the programme.
- Whether the programme is based on an underlying theory or conceptual model.
- Current practice.
- Availability and accessibility for different groups.
- The range of local opportunities available to those involved in managing obesity.
- Whether the activity is transferrable to other settings.
- Any factors that prevent – or support – effective implementation. This may include factors that influence adherence to lifestyle management programmes or the training, qualifications and any other specific characteristics of the person delivering the programme or service.
- Any barriers and facilitators to commissioning weight management services for children.
- Any trade-offs between equity and efficiency.

- Any adverse or unintended effects.

Appendix C References

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Department of Health (2010b) Equity and excellence: Liberating the NHS. London: The Stationery Office

Department of Health (2010c) Healthy lives, healthy people our strategy for public health in England. London: Department of Health

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Department of Health (2012) [Healthy lives, healthy people: Improving outcomes and supporting transparency. A public health outcomes framework for England 2013–2016](#) [online]

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Figueroa-Munoz JI, Chinn S, Rona RJ et al. (2001) Association between obesity and asthma in 4–11 year old children in the UK. *Thorax* 56: 133–7

Foresight (2007) Tackling obesity: future choices. London: Government Office for Science

Griffiths LJ, Wolke D, Page AS et al. (2006) Obesity and bullying: different effects for boys and girls. *Archives of Disease in Childhood* 91: 121–5

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NHS Information Centre (2011) National child measurement programme: England, 2010/11 school year. London: Department of Health

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Perez-Pastor E, Metcalf B, Hosking J et al. (2009) Assortative weight gain in mother-daughter and father-son pairs: an emerging source of childhood obesity. Longitudinal study of trios. *International Journal of Obesity* 33: 727–35

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