Overweight and obesity: reducing the burden

B

This section of the toolkit looks at ways of reducing the burden of overweight and obesity through prevention and management. It considers the broad principles involved and some of the evidence supporting particular approaches.

Tackling overweight and obesity

The two broad approaches to tackling overweight and obesity are through:

- **Prevention –** interventions aimed at preventing overweight developing in the first place, from childhood onwards, and
- **Weight management –** interventions aimed at weight reduction or weight control in people who have become overweight or obese.

Both approaches should be undertaken in a range of settings, through a number of partner agencies, and should be working in a coordinated way across the whole system.

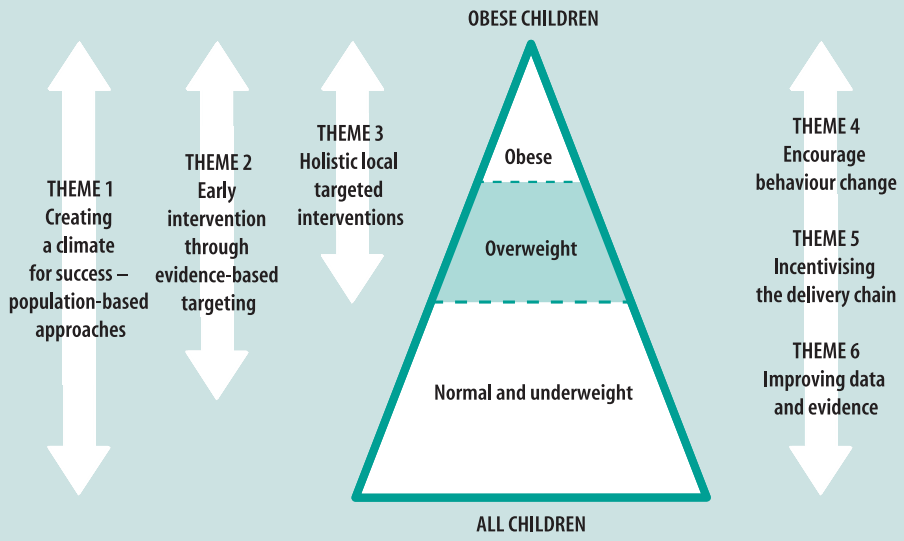
Public Service Agreement (PSA) on obesity

The government has prioritised action to tackle obesity, with a focus on tackling obesity in children. The Public Service Agreement (PSA) on obesity, published in 2004, aims to **halt the year-on-year rise in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole**.[1] This target is jointly owned by the Department of Health, Department for Education and Skills and the Department for Culture, Media and Sport. The government will deliver the PSA target with action on six fronts (see Figure 6 on the next page) ranging from general preventive interventions targeting the whole population and individuals at increased risk (see page 37) to holistic targeted interventions aimed at secondary prevention and treatment. For more information, see www.dh.gov.uk/obesity.

Achieving lifestyle change – the 'Three E's model'

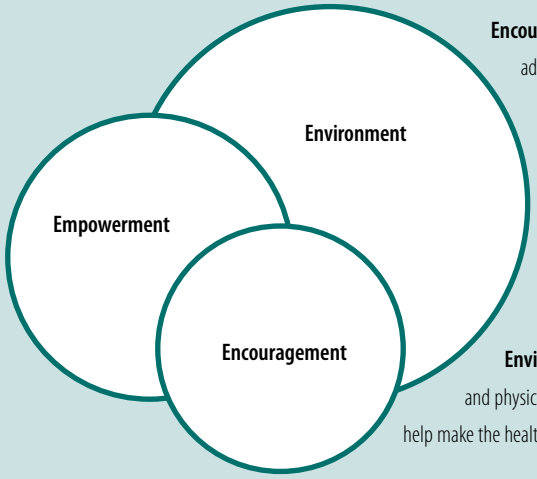
Any attempt at lifestyle modification must consider a holistic approach. A simple model for considering ways to support change in behaviour is shown in Figure 7 on the next page.

Figure 6 Department of Health approach for delivering the PSA target on obesity



Source: Department of Health, unpublished

Figure 7 The 'Three Es model for lifestyle change'



Encouragement: simple exhortation – adverts, leaflets, one-to-one advice, campaigns, etc. Encouragement is a useful trigger for people to make healthy choices, but is unlikely to be effective or sustainable across the whole population without ....

Empowerment: education and personal/community development – the development of knowledge, life skills and confidence, to enable people to make healthy choices. Its effectiveness can be greatly boosted by ....

Environment: making changes to the social, cultural, economic and physical surroundings within which people live, work and play – to help make the healthy choices the easy choices.

Source: Maryon-Davis, 2005 [2]

In the model shown in Figure 7, **encouragement** refers to simple methods of encouragement to support individuals to change their lifestyle, eg to eat lower-calorie foods or to take more exercise. This approach would include encouragement in clinical situations as well as the simple, persuasive messages of effective media campaigns. **Empowerment** refers to the process of providing knowledge and skills, including life skills, to help an individual make healthy changes (ie an educational approach) that might include, for example, an awareness of basic nutritional principles, food-shopping skills, cooking skills, and building confidence and self-esteem. Encouragement can only be effective in a context of empowerment. **Environment** refers to the totality of the cultural, social, physical and economic environments required to facilitate improvements in lifestyle factors such as diet and physical activity, ie to make the healthy choices the easier choices. Encouragement and empowerment together can achieve little without a conducive total environment. Any steps to assist behaviour change should be taken in partnership with the individual.

In terms of the Three E's model (shown in Figure 7), lifestyle interventions to control obesity in the primary care setting are mainly concerned with individual encouragement and empowerment (the technique of motivational counselling, for example, includes both elements), but should also attempt to create a less 'obesogenic' environment, particularly by influencing the individual's immediate family.[2]

Preventing overweight and obesity

Overweight and obesity are largely preventable through lifestyle changes.[3] Thus the best long-term approach to tackling overweight and obesity is prevention from childhood. Preventing overweight and obesity in children is critical, particularly through improving diet and increasing physical activity levels. Action therefore needs to take a lifecourse approach starting from birth. (Breastfed babies may be less likely to develop obesity later in childhood.[4])

The National Heart Forum's *young@heart* initiative has highlighted the links between overweight and obesity in children and subsequent development of diabetes and coronary heart disease. A lifecourse approach is required which focuses on ensuring good infant feeding and nutrition during pregnancy as well as working with adolescents to support the healthy physical development of future mothers.[5]

There are two complementary approaches to preventing overweight and obesity:

- the **whole-population approach,** which aims to reduce the average risk of becoming overweight or obese across the whole population, and
- the **individuals-at-risk approach,** which aims to identify those at increased risk of becoming overweight or obese and offer them appropriate advice on how to reduce the risk.

PREVENTING OVERWEIGHT AND OBESITY IN WHOLE POPULATIONS

At a population level, the intervention strategies required to prevent overweight and obesity involve broad strategies to:

- improve the nutritional balance of the average diet, with an emphasis on lower-calorie alternatives, and
- increase community-wide levels of physical activity.

The recommendations for promoting a healthy balanced diet are presented in *Choosing a better diet: A food and health action plan*[4] and also in the NICE guideline *Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children*.[6] They are based on the recommendations of the Committee on Medical Aspects of Food and Nutrition Policy (COMA), the Scientific Advisory Committee on Nutrition (SACN), and the World Health Organization (WHO). As well as promoting lower-calorie alternatives (ie reducing total fat and sugar consumption), action to prevent overweight should include encouraging people to eat more fruit and vegetables as this not only offers a way of stoking up on less calorie-dense food but also has important health benefits particularly in terms of helping to prevent the main co-morbidities of obesity – namely cardiovascular disease and cancer. A reduction in salt is also important. Salt is often used to make fatty foods more palatable, so cutting back on salt will help people to cut back on fats, and also contribute to lowering high blood pressure, which is another co-morbidity of obesity. This advice on healthy eating is reflected in the *National food guide*, in '*The Balance of Good Health*' (see Figure 8).

Figure 8 **The Balance of Good Health**

Reproduced with kind permission of the Food Standards Agency

The Government recommends that all healthy individuals over the age of five years eat a healthy balanced diet that is rich in fruits, vegetables and starchy foods. The *Balance of Good Health* shown in Figure 8 is a pictorial representation of the recommended balance of the different food groups in the diet. It aims to encourage people to choose the right balance and variety of foods to help them obtain the wide range of nutrients they need to stay healthy. A healthy balanced diet should:

- include plenty of fruit and vegetables – aim for at least five portions a day of a variety of different types
- include meals based on starchy foods, such as bread, pasta, rice and potatoes (including high-fibre varieties where possible)
- include moderate amounts of milk and dairy products – choose low-fat options where possible
- include moderate amounts of foods that are good sources of protein, such as meat, fish, eggs, beans and lentils, and
- be low in foods that are high in fat, especially saturated fat, sugar and salt.

The recommendations for active living throughout the life course are presented in *Choosing activity: A physical activity action plan,*[7] which aims to promote activity for all, in accordance with the evidence and recommendations set out in the Chief Medical Officer's report, *At least five a week*.[8] Further recommendations to support practitioners in delivering effective interventions to increase physical activity have been developed by NICE.[9] Action to prevent overweight should include encouraging everyday activity such as stair-climbing, building in a walk or getting off a bus or train a stop earlier. It should also include advice to decrease sedentary behaviour.

Table 7 Government recommendations on diet and physical activity

STANDARD POPULATION DIETARY RECOMMENDATIONS

Note: Standard UK population recommendations on healthy eating are based on the recommendations of the Committee on Medical Aspects of Food Policy (COMA), the Scientific Advisory Committee on Nutrition (SACN) and the World Health Organization (WHO).

Variable	Recommendation	Current levels	
Total fat [4]	Reduce to no more than 35% of food energy	35.3% [10]	
Saturated fat [4]	Reduce to no more than 11% of food energy	13.3% [10]	
Total carbohydrate [4]	Increase to more than 50% of food energy	48.1% [10]	
Sugars (added) [4]	No more than 11% of food energy (no more than 10% of total dietary energy)	12.7% of food energy [10]	
Dietary fibre [4]	Increase the average intake of dietary fibre to 18g per day	13.8g per day [11]	
Salt [12]	*Adults:* No more than 6g of salt per day	9.5g per day [13]	
	Infants and children: Daily recommended maximum salt intakes:	*Boys*	*Girls*
	0-6 months – less than 1g per day	Breast milk will provide all the sodium necessary. [14]	
	7-12 months – maximum of 1g per day	0.8g per day [14]	
	1-3 years – maximum of 2g per day	1.4g per day [15]	
	4-6 years – maximum of 3g per day	5.3g per day [16]	4.7g per day [16]
	7-10 years – maximum of 5g per day	6.1g per day [16]	5.5g per day [16]
	11-14 years – maximum of 6g per day	6.9g per day [16]	5.8g per day [16]
Fruit and vegetables [4]	Increase to at least 5 portions of a variety of fruit and vegetables per day	2.8 portions per day [11]	
Alcohol [17]	*Men:* A maximum of between 3 and 4 units a day	*Men:* 18.1 mean units per week [18]	
	Women: A maximum of between 2 and 3 units a day	*Women:* 7.4 mean units per week [18]	

The consumption of alcohol has not been included in the government's dietary recommendations even though a reduction in alcohol consumption may be important for preventing overweight and obesity. Excessive alcohol consumption is associated with excessive calorie intake, raised blood pressure, increased risk of liver cirrhosis and some cancers in the long term.

PHYSICAL ACTIVITY RECOMMENDATIONS

Population	Recommendation
Children and young people [8]	**For general health benefits from a physically active lifestyle, children and young people should achieve a total of at least 60 minutes of at least moderate intensity physical activity each day.** At least twice a week this should include activities to improve bone health (activities that produce high physical stresses on the bones), muscle strength and flexibility. The PSA target for the Department for Culture, Media and Sport and the Department for Education and Skills is to increase the percentage of schoolchildren doing 2 hours' high-quality PE each week to 85% by 2008.[1]
Adults [8]	**For cardiovascular health, adults should achieve a total of at least 30 minutes of at least moderate intensity physical activity a day, on 5 or more days a week.** More specific activity recommendations for adults are made for beneficial effects for individual diseases and conditions. All movement contributes to energy expenditure and is important for weight management. **To prevent obesity, in the absence of an energy intake reduction, 45-60 minutes of moderate intensity physical activity on at least 5 days of the week may be needed.** For bone health, activities that produce high physical stresses on the bones are necessary. The PSA target for the Department for Culture, Media and Sport is to achieve a 3% increase by 2008 in the proportion of adults from priority groups achieving at least 30 minutes of moderate-intensity sport and recreational physical activity on at least three days a week. Priority groups are defined as women, black and ethnic minorities, people with a limiting disability and people from lower socioeconomic groups.[1]
Older people [8]	**The recommendations for adults are also appropriate for older adults.** Older people should take particular care to keep moving and retain their mobility through daily activity. Additionally, specific activities that promote improved strength, coordination and balance are particularly beneficial for older people.

The recommended levels of activity can be achieved either by doing all the daily activity in one session, or through several shorter bouts of activity of 10 minutes or more. The activity can be lifestyle activity (activities that are performed as part of everyday life), or structured exercise or sport, or a combination of these.[8]

National action

Examples of current **national action** to help tackle overweight and obesity include the following.

Diet and nutrition

- Sure Start – action to encourage more women to breastfeed and to continue for at least six months.
- Healthy Start – to ensure children in low-income families have access to a healthy diet, and to increase support for breastfeeding.
- The 5 A DAY programme – to increase access to and consumption of fruit and vegetables. The programme includes:
  - the School Fruit and Vegetable Scheme, which provides a free piece of fruit or vegetable each school day to over 2 million 4-6 year old children
  - local community initiatives, and
  - the 5 A DAY logo for use on food and drink packaging.
- Food throughout the school day:
  - the Food in Schools Programme – promoting a 'whole-school approach' and encouraging greater access to healthier choices within schools
  - transforming school meals – action to transform school meals with healthier, nutritious food following tough new minimum nutritional standards
  - action to improve training opportunities for school caterers
  - Ofsted to make an assessment of school food as part of their routine evaluation of school performance
  - the School Food Trust – action to promote healthier menus in schools, by championing best practice and providing support to schools facing the change process
  - National Healthy School Standard – using a 'whole-school approach' to develop healthy behaviours in young people. (The standard includes a healthy eating theme.)
- Work with the food industry to address the amount of fat, salt and added sugar in the diet. Action includes:
  - food labelling – to ensure accurate and informative food labelling by providing the food industry with guidance on clear food labelling
  - signposting the nutrient content of food on packaging labels using a multiple traffic light system to ensure consumers have 'at a glance' information about the nutritional content of foods.
- Promotion of foods to children – action to redress the imbalance in the way foods are currently promoted to children.

Physical activity

- Local Exercise Action Pilots – to test the effectiveness of different PCT-led community approaches to increasing physical activity levels.
- Pedometers – The government will distribute 100,000 pedometers to PCTs across the country, as part of the National Step-O-Meter Programme (NSP). It is also piloting the use of pedometers in schools.
- The national PE, School Sport and Club Links strategy – to enhance the take-up of sporting opportunities by 5-16 year olds so that the percentage of schoolchildren in England who spend a minimum of 2 hours each week on high-quality PE and school sport increases to 75% by 2006 and 85% by 2008.

- One of the targets of the Public Service Agreement for the Department for Culture, Media and Sport is, by 2008, to increase the number of people who participate in active sports at least 12 times a year by 3%, and to increase the number who engage in at least 30 minutes of moderate-intensity sport at least three times a week by 3%.
- National Healthy School Standard – action to promote a whole-school approach to increasing physical activity, including development of a school physical activity strategy.
- Making the Case for Play and Developing Provision for Children's Play – enhancing children's and young people's access to good play experiences.
- Work to improve access and safety in public places to encourage physical activity – including the cross-governmental initiative Cleaner, Safer, Greener Communities.
- Green Gyms – providing people with opportunities to increase their levels of physical activity through involvement in practical conservation activities.
- Walking the Way to Health Initiative – which aims to get more people walking in their own communities. It is estimated that, since 2000, the initiative has encouraged over one million people to walk more. Pedometers are promoted to raise people's awareness of the amount of physical activity they undertake.
- Well@Work pilots – to test ways of making workplaces healthier and more active, involving 47 workplaces (private, public and voluntary sector) across England.
- Department for Transport travel planning – action to encourage schools, workplaces and communities to consider sustainable travel options which also increase physical activity.
- By 2008, most people will have, within 20 minutes' travel time from their home, a good multi-sports environment such as a school, sports club or leisure centre.
- Sports facilities programmes such as Active England, the New Opportunities for PE and Sport initiative and the Community Club Development Programme are supporting the development of over 4,000 new or refurbished sports facilities.
- More playing fields have been created than lost.
- The National Sports Foundation will fund a range of projects to benefit grassroots sport.

Other national initiatives

- The new GP contract – Participating practices are required to offer relevant health promotion advice to patients as part of the Quality and Outcomes Framework (QOF) incentives.
- The new pharmacy contract – A substantial public health role has been built into the new pharmacy contract. Community pharmacies are to offer weight reduction programmes, with signposting to other services and the potential to refer people to personal health trainers.[19]
- The new dental contract – Specific functions in relation to dental public health have been included in the contract, including offering relevant health promotion advice to patients.

Local action

Diet and nutrition

There is a wide range of potentially effective population-based interventions in a variety of settings, from promoting breastfeeding by new mothers to campaigns to persuade shopkeepers to stock fruit and vegetables in areas where access would otherwise be difficult (so called 'food deserts').

For a fuller discussion of the options see page 63 and **Tool 16.**

Physical activity

Population-based approaches at local level range from targeting children at home and school by promoting active play and building more physical education and sports sessions into the curriculum and after school, to targeting adults in the workplace by providing facilities such as showers and bike parks to encourage walking or cycling to work.

For a fuller discussion of the options see page 63 and **Tool 16.**

The whole-population approach: advantages and barriers

Advantages of the whole-population approach include:

- Large numbers of people can benefit.
- The lifestyle changes required are modest and achievable.
- Many different sectors and agencies can play a part.
- It may be relatively low-cost.

Barriers include:

- People are often resistant to changes in lifestyle.
- The main determinants are often beyond an individual's scope for control.
- The process may be very long-term.

The effectiveness of population approaches to prevent overweight and obesity

The National Institute for Health and Clinical Excellence (NICE) has recommended evidence-based effective population approaches to prevent overweight and obesity following a comprehensive review of the best available evidence of effectiveness, including cost-effectiveness. They have published reviews[6] on the evidence of effectiveness of prevention interventions targeted at:

- the general population
- children
- adults
- black, minority ethnic groups
- vulnerable groups, and
- vulnerable life stages.

Tool 13 *Evidence of effectiveness* provides summaries of these evidence reviews.
See also **Tool 14** *Evidence of cost-effectiveness*.

Derek Wanless, in his report *Securing good health for the whole population*[20] recommended that interventions should be evidence-based, but that the lack of conclusive evidence should not, where there is a serious risk to the nation's health, be used as an excuse for inertia. In *Choosing health,*[21] the Department of Health acknowledged the lack of investment in public health research and has pledged to increase support for investigations into the effectiveness (and cost-effectiveness) of different preventive strategies.

It is important to remember that a lack of strong evidence of effectiveness does not necessarily mean evidence of ineffectiveness – it simply means that more research is needed and better methods for evaluating interventions need to be developed.

PREVENTING OVERWEIGHT AND OBESITY IN INDIVIDUALS AT RISK

This approach focuses on people known to be at a higher risk of becoming overweight or obese than the general population. A list of categories of individuals who are considered to have a higher risk is given on page 60. In practice it means targeting healthy eating and physical activity interventions at low-income individuals and families, or people from vulnerable ethnic communities. Examples include health promotion through Sure Start children's centres and ethnic minority community programmes. In primary care it may mean giving advice on nutrition and exercise to help prevent overweight or obesity in individuals with co-morbidities such as high blood pressure, insulin resistance or diabetes.[22]

The individuals-at-risk approach: advantages and barriers

Advantages of the individuals-at-risk approach are:

- Resources can be focused on those most likely to benefit.
- People who are at risk are usually more motivated to make lifestyle changes.
- It is easier to attribute effects to efforts.
- The evidence of effectiveness is stronger than for the whole-population approach.
- Performance management and remuneration systems can be set to encourage the adoption of the at-risk approach.

Barriers include:

- There may be an element of 'victim-blaming' – placing all the responsibility on the 'at-risk' individual.
- People may feel stigmatised and experience negative body image.
- Weighing and measuring can be sensitive procedures.
- One-to-one or group work is usually resource-intensive.
- Pressure on time allocated for appointments can lead to unsatisfactory consultations for both primary care workers and patients.
- Language and cultural obstacles.

Psychological influences

A number of psychological issues impact on overweight and obesity. These can include low self-esteem and poor self-concept and body image (see pages 25 and 29). When taking an individual approach, it is important to consider personality, socioeconomic status and culture. It is important to tackle the *behaviour* which increases overweight and obesity, and programme designers should be very careful not to inadvertently stigmatise individuals.[23] Studies have shown that overweight and obesity are frequently stigmatised in industrialised societies, and they emphasise the importance of family and peer attitudes in the generation of psychological distress in overweight and obese children.[24] When working with children, it is particularly important to work with the whole family, not just the child.[24] Children often do not make their own decisions about what and how much they eat. Their parents will influence what they eat and any of the parents' own food issues (such as over-eating, anorexia or body image) can impact on the food available to the child and to the child's subsequent relationship with food. In many cases children may be quite happy being overweight and not experiencing any psychological ill-effects from it, until they are taken by their parents to seek treatment, when they may begin to feel that there is something wrong with them, triggering emotional problems.[25]

For more information

At least five a week: Evidence on the impact of physical activity and its relationship to health. A report from the Chief Medical Officer
Department of Health (2004).
London: Department of Health.
Available from: www.dh.gov.uk/assetRoot/04/08/09/81/04080981.pdf

Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling. Public Health Intervention Guidance no. 2
National Institute for Health and Clinical Excellence (NICE) (2006).
London: NICE.
Available from: www.publichealth.nice.org.uk/page.aspx?o=PHI002

Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children
National Institute for Health and Clinical Excellence (NICE) (2006).
London: NICE.
Available from: www.nice.org.uk/guidance/CG43

More information on obesity – Choosing health. Resource pack
Department of Health (2004).
London: Department of Health.
Available from: www.dh.gov.uk/assetRoot/04/07/60/80/04076080.pdf

Tackling child obesity – first steps
The Audit Commission, the Healthcare Commission and the National Audit Office (2006).
London: The Stationery Office.
Available from: www.nao.org.uk/publications/nao_reports/05-06/0506801.pdf

Managing overweight and obesity through primary care

The aim of managing overweight and obesity through primary care is to achieve and maintain weight loss by promoting sustainable changes in lifestyle.[26] Primary care provides a potentially ideal setting for weight management interventions for adults.[2] About 75% of the population see their GP in the course of one year and about 90% in five years.[27] Contact rates with community pharmacists are even higher.[27] Community pharmacists are ideally placed to reach certain groups, such as young men, who are known, on average, to visit their GP less frequently than other population groups. Primary care practitioners, particularly GPs, practice nurses, health visitors, community nurses, community dietitians, midwives and community pharmacists, are potentially well placed to detect and manage obesity in high-risk patients.

In order to provide a structured approach in the prevention and management of overweight and obese patients, clinical guidance has been developed. In England, the National Institute for Health and Clinical Excellence (NICE) has published national guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children.[6]

Evidence-based recommendations are provided on the clinical management of overweight and obesity in the NHS, and advice is offered on the prevention of overweight and obesity that applies in both NHS and non-NHS settings. The NICE guideline on obesity also provides guidance on the use of the anti-obesity drugs orlistat and sibutramine, and on the place of surgical treatment.

Other guidance focuses primarily on the management of overweight and obesity in the primary care setting. For example, in the UK the Department of Health,[28] the National Obesity Forum (NOF)[26] and PRODIGY Knowledge[29] have provided guidance for the management of *adult* overweight and obesity in primary care. The Scottish Intercollegiate Guidelines Network (SIGN)[30] has also developed guidelines but these are currently under review. In addition, the Department of Health,[28] SIGN[31] and the Royal College of Paediatrics and Child Health (RCPCH) and NOF[32] have produced guidance for the management of obesity in *children and young people* in primary care.

Such guidance also includes obesity care pathways which offer a flowchart of the decisions to be made and the care to be provided for an overweight or obese patient, in a stepwise sequence. In summary, the obesity care pathways include two key stages:

- assessment (weight, risk factors and current health), and
- management (weight and risk factors).

The Department of Health's care pathways are targeted exclusively at primary care clinicians in England. There is one for use with children and young people and one for use with adults.[28] (See pages 167-171 in **Tool 17**.) NICE has developed much broader clinical care pathways, one for use with children and one for use with adults.[6] These pathways focus on the assessment and management of overweight and obesity in primary, secondary and tertiary care. NICE has also taken into account the prevention and management of overweight and obesity in non-NHS settings such as schools, workplaces and the broader environment. (See pages 161-166 in **Tool 17**.) The National Obesity Forum's *Obesity care pathway and toolkit* [33] provides further information about the role of weight management through secondary and tertiary care.

Care pathways have also been produced by the National Health and Medical Research Council of Australia[34, 35] and the National Heart, Lung and Blood Institute of the US.[36, 37]

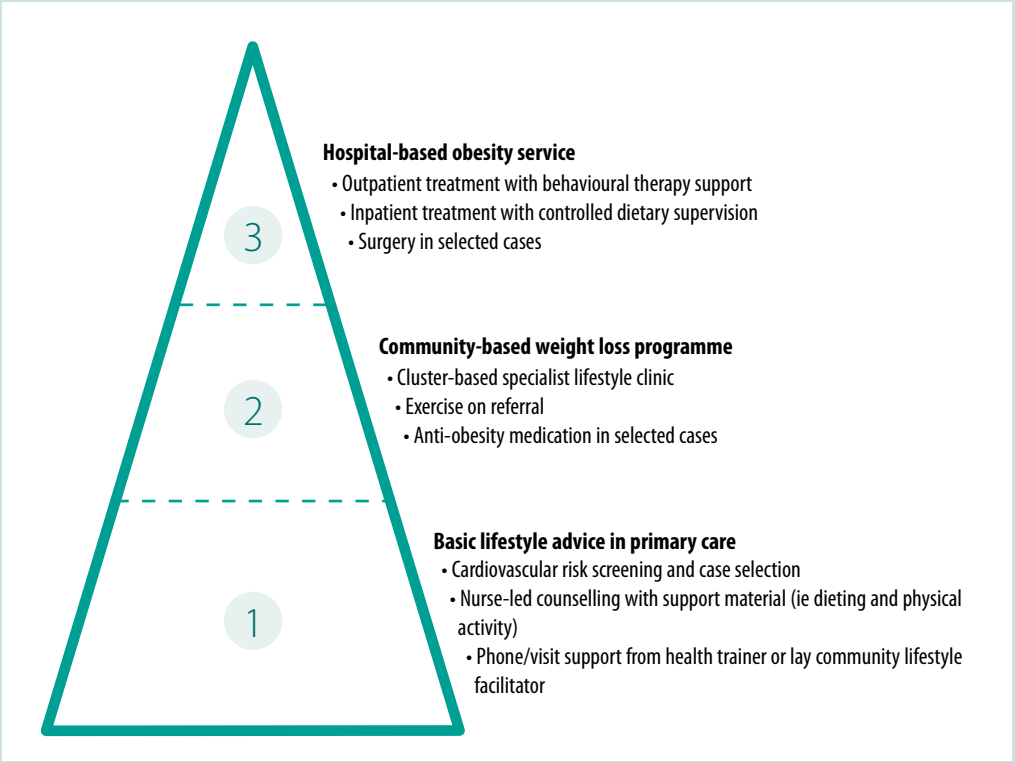
Weight management

Effective weight control usually requires a combination of some or all of the following, depending on the degree of overweight, readiness to change and response to weight management:

- dietary advice and support
- physical activity advice and support
- motivational counselling
- drug treatment
- behavioural therapy
- surgery.

A model showing how these interventions can be combined into a three-tier weight management service is shown in Figure 9 on the next page.

Figure 9 **Triple-tier service model for weight management**



Source: Adapted from Maryon-Davis, 2005 [2]

For the long-term management of obese children, NICE,[6] SIGN[31] and the Department of Health[28] have recommended that treatment should only be considered when a family is ready to change and willing to make the appropriate lifestyle changes.

The primary goal of weight management is a sustainable healthy lifestyle.[32, 33]

See **Tool 17** *Dealing with overweight and obesity – Guidance for health professionals.*

The challenge and the opportunities

One of the greatest challenges is to make therapeutic weight management in everyday primary care practicable, effective and sustainable. Research into primary care management in the UK[38] found that, although 55% of respondents believed that obesity was one of their top priorities, fewer than half had been involved in setting up weight management clinics, and the majority of general practices (69%) had not established such clinics.

The revised Quality and Outcomes Framework (QOF) for the new GP contract[39, 40] provides incentives for assessing BMI and associated risk factors, and providing appropriate advice and treatment.

Choosing health through pharmacy: A programme for pharmaceutical public health 2005-2015 [41] lists 10 key public health roles for pharmacy, one of which is to reduce obesity among children and the population as a whole. Community pharmacists and their staff will provide targeted information and advice on diet and physical activity and offer weight reduction programmes. Pharmacies will also be able to refer people directly on to 'exercise on referral schemes' rather than indirectly through GPs.[19] Overweight and obesity are issues related to inequalities, and community

pharmacies are particularly well located to assist with weight management, as many of them are based close to residential areas and have few physical and psychological barriers related to access.

The role of health trainers, as outlined in *Choosing health: Making healthy choices easier* [21] will be to provide personalised healthy lifestyle plans for individuals to improve their health and prevent disease. Health trainers will be either lay people drawn from the more disadvantaged communities, or health and other professionals specially trained in offering basic healthy lifestyles advice and motivational counselling.

The challenge is to implement effective prevention and management strategies for overweight and obesity at local level. Section C of this toolkit gives practical guidance on how to do this.

For more information

CLINICAL GUIDANCE: UK

Children and young people

Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children
National Institute for Health and Clinical Excellence (NICE) (2006).
London: NICE.
Available from: www.nice.org.uk/guidance/CG43

Care pathway for the management of overweight and obesity
Department of Health (2006).
London: Department of Health.
Available from: www.dh.gov.uk/obesity

Management of obesity in children and young people. A National Clinical Guideline
Scottish Intercollegiate Guidelines Network (2003).
Edinburgh: SIGN.
Available from: www.sign.ac.uk/pdf/sign69.pdf

An approach to weight management in children and adolescents (2-18 years) in primary care
Royal College of Paediatrics and Child Health and National Obesity Forum (2002).
London: Royal College of Paediatrics and Child Health.
Available from: shop.healthforallchildren.co.uk/pro.epl?DO=IMAGE&ID=Approach_2PAGES_TOGETHER

Adults

Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children
National Institute for Health and Clinical Excellence (NICE) (2006).
London: NICE.
Available from: www.nice.org.uk/guidance/CG43

Care pathway for the management of overweight and obesity
Department of Health (2006).
London: Department of Health.
Available from: www.dh.gov.uk/obesity

JBS 2: Joint British Societies' guidelines on prevention of cardiovascular disease in clinical practice
British Cardiac Society, British Hypertension Society, Diabetes UK, HEART UK, Primary Care Cardiovascular Society, The Stroke Association (2005).
Heart; 91; Suppl V: v1-v52.
Available from: heart.bmj.com/cgi/content/extract/91/suppl_5/v1

National Obesity Forum obesity care pathway and toolkit
National Obesity Forum (2005).
London: National Obesity Forum.
Available from: nationalobesityforum.org.uk/content/blogcategory/18/170/

National Obesity Forum guidelines on management of adult obesity and overweight in primary care
National Obesity Forum (2004).
London: National Obesity Forum.
Available from: nationalobesityforumorguk.pre-dns-change.com/content/blogcategory/31/125/

Obesity
PRODIGY Knowledge (2001).
Newcastle: Sowerby Centre for Health Informatics at Newcastle Ltd (SCHIN).
Available from: www.prodigy.nhs.uk/obesity

Obesity in Scotland. Integrating prevention with weight management. A National Clinical Guideline recommended for use in Scotland (Under review)
Scottish Intercollegiate Guidelines Network (1996).
Edinburgh: SIGN.
Available from: www.sign.ac.uk/pdf/sign8.pdf

CLINICAL GUIDANCE: INTERNATIONAL

Australia

Clinical practice guidelines for the management of overweight and obesity in children and adolescents
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