# TOOL E1 Clinical care pathways

<table>
<thead>
<tr>
<th>For:</th>
<th>Healthcare professionals, particularly primary care clinicians</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About:</strong></td>
<td>This tool contains guidance from the National Institute for Health and Clinical Excellence (NICE) and the Department of Health. It provides clinical care pathways for children and adults.</td>
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<tr>
<td><strong>Purpose:</strong></td>
<td>To provide healthcare professionals with the official documents that clinicians should be using to assess overweight and obese individuals.</td>
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<tr>
<td><strong>Use:</strong></td>
<td>To be used when in consultation with an overweight or obese patient.</td>
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<tr>
<td><strong>Resource:</strong></td>
<td>Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children. NICE guideline on obesity.</td>
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## NICE guideline on obesity

NICE has developed clinical care pathways for children and adults for use by healthcare professionals. Further details can be found in Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children. In addition, a summary of NICE recommendations and the clinical care pathways can be found in: Quick reference guide 2: For the NHS, which can be downloaded from the NICE website at www.nice.org.uk.
Management of overweight and obesity in children

Assessment and classification

- **Determine degree of overweight or obesity**
  - Use clinical judgement to decide when to measure weight and height.
  - Use BMI relates to UK 1990 BMI charts to give age- and gender-specific information.
  - Do not use waist circumference routinely; however, it can give information on risk of long-term health problems.
  - Discuss with the child and family.

- **Consider intervention or assessment**
  - Consider tailored clinical intervention if BMI at 91st centile or above.
  - Consider assessing for comorbidities if BMI at 99th centile or above.

- **Assess lifestyle, comorbidities and willingness to change, including:**
  - Presenting symptoms and underlying causes of overweight or obesity
  - Willingness to change
  - Risk factors and comorbidities - such as hypertension, hyperlipidaemia, dyslipidaemia, type 2 diabetes, psychological dysfunction, exacerbation of asthma
  - Psychological distress - low self-esteem, bullying
  - Family history of overweight, obesity and comorbidities
  - Lifestyle - diet and physical activity
  - Environmental, social and family factors
  - Growth and pubertal status

- **Consider referral to a specialist**
  - If the child has:
    - Significant comorbidity or
    - Complex needs such as learning or educational difficulties.

**General principles of care for children and young people**

- Offer regular long-term follow-up by a trained professional.
- Ensure continuity of care through good record keeping.
- Coordinate care around the individual and family needs of children and young people.
- Comply with national core standards as defined in the Children’s NHSExec Framework and Wales.
- Aim to create a supportive environment that helps children and their families make lifestyle changes.
- Make decisions on management in partnership with the child and family, and tailor to their needs and preferences.
- Address lifestyle within the family and in social settings.
- Encourage parents (or carers) to take the main responsibility for lifestyle changes for children, especially children younger than 12 years, that take the age and maturity of the child, and the preferences of the child and the parents into account.

**Assessment in secondary care**

- Assess comorbidities and possible etiology.
- Carry out investigations such as:
  - Blood pressure
  - Fasting blood profile
  - Fasting insulin and glucose levels
  - Liver function tests
  - Endocrine investigations
- Take into account the degree of overweight or obesity, the child's age, comorbidities, family history of metabolic diseases and possible genetic causes.

**Specialist management**

- Drug treatment (see page 15 for details).
- Surgery (see page 16 for details).
- Make arrangements for transitional care when young people move to adult services.

**The first steps in managing overweight and obesity**

- **Comorbidities and risk factors**
  - After the initial assessment, use clinical judgement to decide how far to investigate.
  - Manage comorbidities when they are identified; do not wait for the child to lose weight.

- **Readiness to change**
  - If a child or family is unwilling to make changes, give them:
    - Information about the benefits of losing weight, healthy eating and increased physical activity
    - Details of someone they can contact when they are ready to change.
  - Stress that obesity is a clinical term with health implications, rather than a question of how a person looks.

- **During the consultation**
  - Assess the child and family's view of the diagnosis, and why they have gained weight
  - Ask about their diet and activity levels, and their beliefs about eating, activity and weight
  - Be aware that children and families from some ethnic and socioeconomic backgrounds may be at greater risk from obesity, and may have different attitudes and beliefs about weight management
  - Find out what they have already tried and what they learned from this
  - Assess their readiness to make changes and confidence in making changes.

- **Explanation**
  - Give children and their families information on any tests.
  - Offer another consultation if needed to explore treatment options or discuss test results.

Note: Please refer to the NICE guidelines for page references.
Management of overweight and obesity in adults

Assessment and classification

Determine degree of overweight or obesity
- Use clinical judgement to decide when to measure weight and height
- Use BMI to classify degree of obesity (see table 1, below) but use clinical judgement
- BMI may be less accurate in highly muscular people
- For older adults, risk factors may be of concern at lower BMI
- For older people, risk factors may become important at higher BMI
- Use waist circumference in people with a BMI less than 35 kg/m² to assess health risks (see table 2, bottom left)
- Biobrnessance is not recommended as a substitute for BMI
- Tell the person their classification, and how this affects their risk of long-term health problems

<table>
<thead>
<tr>
<th>Classification</th>
<th>BMI (kg/m²)</th>
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<tbody>
<tr>
<td>Healthy weight</td>
<td>18.5-25.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0-29.9</td>
</tr>
<tr>
<td>Obesity I</td>
<td>30.0-34.9</td>
</tr>
<tr>
<td>Obesity II</td>
<td>35.0-39.9</td>
</tr>
<tr>
<td>Obesity III</td>
<td>40.0 or more</td>
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Formulae
- BMI = weight (kg) / height² (m²)
- Waist circumference is measured at the level of the umbilicus, above the iliac crest

Assess lifestyle, comorbidities and willingness to change, including:
- Presenting symptoms and underlying causes of overweight or obesity
- Dietary behaviour
- Risk factors and comorbidities - such as type 2 diabetes, hypertension, cardiovascular disease, dyslipidaemia, osteoarthritis and deep vein thrombosis, and blood pressure
- Lifestyle - diet and physical activity
- Psychosocial distress
- Environmental, social and family factors, including family history of overweight and obesity and comorbidities
- Willingness and motivation to change
- Potential of weight loss to improve health
- Psychological problems
- Medical problems and medication

Consider referral:
- For assessment of the underlying causes of overweight or obesity
- If the person has complex disease states or needs that cannot be managed in primary or secondary care
- If conventional treatment has failed
- If considering inpatient therapy for a person with a BMI more than 50 kg/m²
- If specialist interventions (such as a very-low-calorie diet for extended periods) may be needed
- If surgery is being considered

Specialist assessment and management
- Assessment and management as needed
- Surgery and follow-up (see pages 23-24 for details)

Table 1 Classifying overweight and obesity

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Table 2 Assessing risks from overweight and obesity

<table>
<thead>
<tr>
<th>BMI classification</th>
<th>Waist circumference</th>
<th>Low risk</th>
<th>High risk</th>
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<tr>
<td>Overweight</td>
<td>Low</td>
<td>84-102 cm</td>
<td>High</td>
</tr>
<tr>
<td>Obesity I</td>
<td>High</td>
<td>103 cm or higher</td>
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For men, waist circumference of less than 94 cm is low, 94-102 cm is high and more than 102 cm is very high.
For women, waist circumference of less than 80 cm is low, 80-88 cm is high and more than 88 cm is very high.

General principles of care for adults
- Offer regular long-term follow-up by a trained professional
- Ensure continuity of care through good record keeping
- Make the choice of any intervention through negotiation with the person
- Take the weight-management programme to the person's preferences, initial fitness, health status and lifestyle
- In specialist settings, ensure there is equipment for treating people who are severely obese, such as special seating, and adequate weighing and monitoring equipment
- Hospitals should have access to specialist equipment for general care of people who are severely obese, including large sliper covers and beds

A guide to deciding the initial level of intervention to discuss

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Box: General advice on healthy weight and lifestyle
- Diet and physical activity
- Diet and physical activity, consider drugs
- Diet and physical activity, consider drugs, consider surgery

The first steps in managing overweight and obesity

Comorbidities and risk factors
- After the initial assessment, use clinical judgement to decide how far to investigate
- Manage comorbidities when they are identified, do not wait for the person to lose weight

Readiness to change
- If the person is unwilling to make changes, give them:
  - Information about the benefits of losing weight, healthy eating and increased physical activity
  - Details of someone they can contact when they are ready to change
- Stress that obesity is a clinical term with health implications, rather than a question of how a person looks
- During the consultation:
  - Assess the person's view of the diagnosis, and why they have gained weight
  - Ask about their diet and activity level, and beliefs about eating, activity and weight
  - Be aware that people from some ethnic and socioeconomic backgrounds may be at greater risk from obesity, and may have different attitudes and beliefs about weight management
  - Find out what they have already tried and what they learned from this
  - Assess readiness to make changes and confidence in making changes

Explanation
- Give people information on any tests
- Offer another consultation if needed to explore treatment options or discuss test results

Note: Please refer to the NICE guidelines for page references.
Care pathways from the Department of Health

Care pathway for the management of overweight and obesity

This booklet offers evidence-based guidance to help primary care clinicians identify and treat children, young people (under 20 years) and adults who are overweight or obese. The booklet includes:

- Adult care pathway
- Children and young people care pathway
- Raising the issue of weight in adults
- Raising the issue of weight in children and young people.

The Raising the issue of weight tools provide tips on how to initiate discussion with patients. (See Tool E5 for more on this.)

The pathways are also available as separate laminated posters (see pages 198-200).

To access these materials, visit www.dh.gov.uk or order copies from:

DH Publications Orderline
PO Box 777
London SE1 6XH
Email: dh@prolog.uk.com
Tel: 0300 123 1002
Fax: 01623 724 524
Minicom: 0300 123 1003 (8am to 6pm, Monday to Friday)
Adult care pathway
Laminated poster – available from Department of Health Publications (see page 198)

**Assessment of weight/BMI in adults**

- BMI >30 or >28 with related co-morbidities or relevant ethnicity?
  - No
    - Offer lifestyle advice, provide *Your Weight, Your Health* booklet and monitor
  - Yes
    - Raise the issue of weight
      - No
        - Provide *Why Weight Matters* card and discuss value of losing weight; provide more help/support
      - Yes
        - Ready to change?
          - No
            - Previous literature provided?
              - No
                - Repeat previous options and, if available, refer to specialist centre or surgery
              - Yes
                - Offer future support if/when ready
          - Yes
            - Recommend healthy eating, physical activity, brief behavioural advice and drug therapy if indicated, and manage co-morbidity and/or underlying causes. Provide *Your Weight, Your Health* booklet

**Maintenance and local support options**

**ASSESSMENT**

- BMI
- Waist circumference
- Eating and physical activity
- Emotional/psychological issues
- Social history (including alcohol and smoking)
- Family history
  - eg diabetes, coronary heart disease (CHD)
- Underlying cause
  - eg hypothyroidism, Cushing’s syndrome
- Associated co-morbidity
  - eg diabetes, CHD, sleep apnoea, osteoarthritis, gallstones, benign intracranial hypertension, polycystic ovary syndrome, non-alcoholic steato-hepatitis
Children and young people care pathway
Laminated poster – available from Department of Health Publications (see page 198)

Children and Young People Care Pathway
(Primary Care)

Assessment of weight in children and young people

Raise the issue of weight

Child and family ready to change?

No

Yes

Recommend healthy eating, physical activity, brief behavioural advice and manage co-morbidity and/or underlying causes. Provide Your Weight, Your Health booklet

Progress/weight loss?

No

Yes

Maintenance and local support options

Provide Why Weight Matters card and discuss the value of managing weight; provide contact information for more help/support

Previous literature provided?

No

Yes

Offer further discussion and future support if/when ready

Re-evaluate if family/child ready to change

Repeat previous options for management or if appropriate and available, consider referral to paediatric endocrinologist for assessment of underlying causes and/or co-morbidities or Referral for surgery

ASSESSMENT

- Eating habits, physical patterns, TV viewing, dieting history
- BMI – plot on centile chart
- Emotional/psychological issues
- Social and school history
- Level of family support
- Stature of close family relatives
  (for genetic and environmental information)
- Associated co-morbidity
  eg metabolic syndrome, respiratory problems, hip (slipped capital femoral epiphysis) and knee (Blount’s) problems, endocrine problems, diabetes, coronary heart disease (CHD), sleep apnoea, high blood pressure
- Underlying cause
  eg hypothyroidism, Cushing’s syndrome, growth hormone deficiency, Prader-Willi syndrome, acanthosis nigricans
- Family history
- Non-medical symptoms
  eg exercise intolerance, discomfort from clothes, sweating
- Mental health

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