

Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults

NICE guideline

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If you wish to comment on this version of the guideline, please be aware that all the supporting information and evidence is contained in the full version.

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Introduction

This guideline makes recommendations for the diagnosis and management of children, young people and adults with attention deficit hyperactivity disorder (ADHD). The guideline does not cover: the separate management of comorbid conditions and the management of children younger than 3 years.

ADHD is a heterogeneous behavioural syndrome that is characterised by the core symptoms of inattention, hyperactivity and impulsivity. There are two main sets of diagnostic criteria in current use, the International Classification of Mental and Behavioural Disorders 10th Revision (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders fourth edition (DSM-IV). ICD-10 has a narrower diagnostic category that includes those with more severe symptoms and impairment. DSM-IV has a broader more inclusive definition that includes a number of subtypes. Although ICD-10 excludes any comorbidity, for this guideline comorbidities are accepted as a common aspect of the diagnosis and treatment of ADHD.

There is a continuity on all symptoms of ADHD with the normal population, and there is significant overlap with a number of other related conditions and comorbidities; therefore ADHD is not a categorical diagnosis. Not all of the symptoms of inattention, hyperactivity and impulsivity are present in every individual but for a child to be diagnosed with ADHD the symptoms with which they present need to be associated with at least a moderate degree of impairment. In children with ADHD common comorbidities include disruptive behaviour disorders, mood disorders, anxiety disorders, learning disorders and communication disorders. For the sake of clarity and reliability, the guideline development group has examined the validity of the diagnosis of ADHD, and advice is given on the diagnosis in the guidance below.

Prevalence estimates depend on diagnostic criteria. Using narrow criteria (hyperkinetic disorder in ICD-10), hyperkinetic disorder in children and young people is estimated to be around 1–2% in the UK. Using broader criteria

(ADHD in DSM-IV criteria), ADHD is estimated to affect 3–9% of school-age children and young people in the UK, and about 2% of adults worldwide.

ADHD in general is a persisting problem. Of those with a sustained diagnosis, the majority go on to have significant problems in adulthood, including continuing ADHD, a range of personality disorders, emotional and social problems, substance misuse, unemployment and involvement in crime.

It should be noted that the terms 'children' and 'young people' as used in this guideline correspond to those of primary-school age and those of secondary-school age respectively, but these categories are necessarily flexible and clinicians should always use their judgment regarding an individual's developmental, as opposed to, chronological age.

The guideline will assume that prescribers will use a drug's Summary of product characteristics to inform their decisions for individual patients.

At the time of publication ([Month], 2008), methylphenidate, atomoxetine and dexamfetamine did not have UK marketing authorisation for the treatment of adults with ADHD. Informed consent should be obtained and documented.

NICE has also developed technology appraisals on:

- Methylphenidate, atomoxetine and dexamfetamine for attention deficit hyperactivity disorder in children and adolescents (review of technology appraisal 13) (NICE technology appraisal guidance 98)
- Parent-training/education programmes in the management of children with conduct disorders (NICE technology appraisal guidance 102).

Technology appraisal guidance 102 included many children and young people with ADHD and is therefore relevant to them. This guideline incorporates recommendations from both technology appraisals.

Person-centred care

This guideline offers best practice advice on the care of children, young people and adults with attention deficit hyperactivity disorder (ADHD).

Treatment and care should take into account individuals' needs and preferences, and in the case of children, those of their parents or carers. All people with ADHD, including children, should have the opportunity to be involved in decisions about their care and treatment in partnership with their healthcare professionals. Where a child is not old enough or does not have the capacity to give consent to treatment, healthcare professionals should follow the Department of Health guidelines – 'Reference guide to consent for examination or treatment' (2001) (available from www.dh.gov.uk). Healthcare professionals should also follow a code of practice accompanying the Mental Capacity Act (summary available from www.publicguardian.gov.uk). If the person is under 16, healthcare professionals should follow guidelines in 'Seeking consent: working with children' (available from www.dh.gov.uk).

Good communication between healthcare professionals and people with ADHD is essential. It should be supported by evidence-based written information tailored to the person's needs. Treatment and care, and the information provided about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. Families and carers should also be given the information and support they need.

The care of young people in transition between paediatric and adult services should be planned and managed according to the best practice guidance described in 'Transition: getting it right for young people' (available from www.dh.gov.uk).

Adult and paediatric healthcare teams should work jointly to provide assessment and services to young people with ADHD. Diagnosis and

management should be reviewed throughout the transition process, and there should be clarity about who is the lead clinician to ensure continuity of care.

Key priorities for implementation

- During assessment of a child or young person with ADHD, and throughout their care, healthcare professionals should make all efforts necessary to:
 - enable the child or young person (of whatever age) to give their own account of how they feel; this account should be recorded in the notes
 - engage the child or young person and the family/carer in treatment decisions
 - take into account their expectations about treatment so that meaningful and properly informed consent is given before treatment is started. [1.1.1.2]

- Specialist ADHD teams for adults and children should jointly develop age-appropriate training programmes on the diagnosis and management of ADHD for mental health, paediatrics, social care, educational and primary care providers who may have contact with people with ADHD. [1.1.3.1]

- For the diagnosis of ADHD or hyperkinetic disorder to be made, and for this guideline to be considered appropriate, symptoms of ADHD (DSM-IV) or hyperkinetic disorder (ICD-10) should be sufficient to reach a formal diagnosis in DSM-IV or ICD-10 (except that the ICD-10 exclusion on the basis of a pervasive developmental disorder being present, or the time of onset being uncertain, is not recommended). In addition, the level of impairment resulting from symptoms of hyperactivity and inattention should be:
 - at least moderately clinically significant on the basis of interview and/or direct observation in multiple settings, and
 - pervasive, that is, occur in all important settings including social, familial, educational and/or occupational settings.[1.3.1.4]

- Following diagnosis, healthcare professionals should undertake a comprehensive assessment of comorbidities, parental mental health, and the child or young person's social, familial, and educational circumstances and physical health and status prior to the commencement of treatment. [1.4.1.1]
- The parents of pre-school children with a diagnosis of ADHD should be offered a referral to a parent-training programme as the first-line treatment. [1.5.1.2]
- If the child or young person diagnosed with ADHD has moderate symptoms and impairment, the parents should be offered referral to a group parent-training programme, either alone or as part of a combined intervention including a group treatment programme for the child or young person. [1.5.2.4].
- In children with severe symptoms of ADHD (hyperkinetic disorder) and severe impairment, medication should be offered as the first-line treatment. Families should also be offered a group-based behavioural training programme. [1.5.3.1]
- When a decision to treat children or young people with medication has been made, methylphenidate should normally be used as the first-line drug treatment. [1.5.5.3]
- Following a decision to initiate medication in adults with ADHD, methylphenidate should normally be used as the first-line drug treatment. [1.7.1.3]
- For adults with ADHD stabilised on medication who have persisting functional impairments associated with ADHD, a course of either group or individual cognitive behavioural therapy (CBT) to address their functional impairment should be considered. [1.7.1.6]

- Teachers who have received some training about ADHD and its management should provide behavioural interventions within the classroom to help children with ADHD. [1.5.2.3]
- The elimination of artificial colouring and additives from the diet is not recommended as a generally applicable treatment for ADHD. [1.4.2.2]
- Drug treatment for children and young people should always form part of a comprehensive treatment plan that includes psychological/behavioural and educational advice and interventions. [1.5.4.2]

1 Guidance

The following guidance is based on the best available evidence. The full guideline ([add hyperlink]) gives details of the methods and the evidence used to develop the guidance.

1.1 *Prerequisites of treatment and care for all people with ADHD*

To provide effective care for people with ADHD, services should be person-centred, comprehensive, and address the wide range of personal, social, educational and occupational needs of the individual. Services and care should be efficiently organised in an integrated way and should ensure that all healthcare and educational professionals who provide help and care for people with ADHD are adequately trained in the diagnosis and management of ADHD and associated impairments.

1.1.1 Information, consent, the law and support for all people with ADHD and their carers

Many children and young people with ADHD, their parents, carers, and adults with the disorder experience a range of difficulties, due to the symptoms and impairments associated with ADHD, and as a result of current practice within health and education. Stigma is also an important aspect of the experience, particularly for children and young people with ADHD. The following good practice points have been developed on the basis of accounts of the experience of people with ADHD and their families, which were gathered during the preparation of this guideline.

1.1.1.1 When working with people with ADHD and their families and carers, healthcare professionals should develop a trusting relationship with them by:

- providing relevant, age-appropriate information (including written information) at every stage of assessment, diagnosis and

treatment, which should cover diagnosis, support and self-help, pharmacological and psychological treatment, and the proper use and likely side effects of medication

- being respectful of the individual's and family's knowledge and experience of the illness
- being sensitive to the issues of stigma and shame in relation to mental illness.

1.1.1.2 During assessment of a child or young person with ADHD, and throughout their care, healthcare professionals should make all efforts necessary to:

- enable the child or young person (of whatever age) to give their own account of how they feel; this account should be recorded in the notes
- engage the child or young person and the family/carer in treatment decisions
- take into account their expectations about treatment so that meaningful and properly informed consent is given before treatment is started. [Key priority]

1.1.1.3 Healthcare professionals working with children and young people with ADHD should:

- be familiar with local and national guidelines on confidentiality and the rights of the child
- be able to adequately assess the young person's understanding (including Gillick competence¹), parental consent and responsibilities, child protection issues, and the use of the Mental Health Act and of the Children Act (1989).

1.1.1.4 Healthcare professionals working with children and young people with ADHD should anticipate major life changes, ensure adequate personal and social support during times of increased need, and

¹Also known as the Fraser competence rule after the judge presiding over the original case.

consider the possible need for psychological treatment at those times.

1.1.1.5 Adults with ADHD should be given written information about local and national support groups, voluntary organisations for adults with ADHD, and other sources of advice and advocacy.

1.1.1.6 At a local level, healthcare and educational services should ensure that written materials about the characteristics and basic behavioural management of ADHD is available to teachers.

1.1.1.7 Healthcare professionals should ask families and carers about, and discuss concerns regarding, the impact of ADHD on themselves and other family members, including other children. Healthcare professionals should also:

- offer family members/carers an assessment of their personal, social and mental health needs
- provide verbal and written information and advice about ADHD and its treatment
- provide information about self-help and support groups for families/carers and encourage participation where appropriate
- consider providing self-instruction manuals for parents based on positive parenting and behavioural techniques.

1.1.2 The organisation and planning of services

The organisation of services should be improved to provide care for people with ADHD; paediatric, child and adolescent mental health, and adult mental health services should be better integrated.

1.1.2.1 Mental health trusts, and children's trusts that provide mental health services for children, should consider developing a multidisciplinary specialist team and/or clinic with specific expertise in the diagnosis and management of ADHD for children, and another for adults. These teams should:

- provide diagnostic, treatment and consultation services for people with ADHD who have complex needs, or when general psychiatric services are in doubt about the diagnosis
- develop systems of communication and protocols for information sharing among paediatric, child and adolescent mental health and adult mental health services for people with ADHD, including arrangements for transition between child and adult services
- develop local protocols for shared care arrangements with primary care providers, and clear lines of communication between primary and secondary care
- ensure age-appropriate psychological services are available for people with ADHD and their parents/carers, as recommended in this guideline.

The size and whole-time commitment of such teams should depend upon local circumstances such as the size of trust, the population covered, and the estimated referral rate for people with ADHD.

1.1.3 Training

Healthcare and educational professionals need training to better address the needs of people with ADHD.

- 1.1.3.1 Specialist ADHD teams for adults and children should jointly develop age-appropriate training programmes on the diagnosis and management of ADHD for mental health, paediatrics, social care, educational and primary care providers who may have contact with people with ADHD. [Key priority]
- 1.1.3.2 Adult psychiatrists, other adult mental health professionals, child psychiatrists and paediatricians should ensure that they undertake training so that they are able to diagnose, and provide basic treatment for, people with ADHD.

- 1.1.3.3 The Department for Children, Schools and Families should consider enhancing the education of trainee teachers in the area of ADHD.

Care pathway for the treatment and care of people with ADHD

The following recommendations in sections 1.2–1.7 are in a care pathway that covers treatment and care across the lifespan and sets out the sequence for how children, young people and adults should receive help, treatment and care, proceeding from the community (including primary care and education), through to secondary and tertiary services. The majority of the recommendations in sections 1.2–1.5 necessarily describe the approach for children but some of these also apply to adults (this is made clear in the recommendations). The pathway also covers transition between child and adult services (section 1.6) and specific treatment for adults (section 1.7), including those who were diagnosed with ADHD in adulthood for the first time.

Specific recommendations on the use of drugs, monitoring side effects, improving treatment adherence and discontinuation appear after the care pathway in section 1.8.

1.2 *Identification, pre-diagnostic intervention in the community and referral to secondary services*

1.2.1 Identification and referral in children and young people

- 1.2.1.1 Universal screening for ADHD in primary and secondary educational settings should not be undertaken.
- 1.2.1.2 When children with disordered conduct and possible ADHD are referred to the school Special Educational Needs Coordinator (SENCO), they should assess the child and contact the parents; consideration should be given to referring the parents to a local parent-training programme.

- 1.2.1.3 Because referral from the community to secondary care may involve a wide range of health, educational, and social care professionals (such as GPs, general paediatricians, educational psychologists, SENCOs, social workers and others), and care pathways vary from one locality to another, the GP should be informed when children and young people are referred to secondary care, irrespective of who makes the referral, the GP should be informed.
- 1.2.1.4 When a child or young person presents in primary care with problems with behaviour and attention that suggest a possible diagnosis of ADHD, primary care practitioners should assess the child and parents to determine the severity of the problems and the extent to which they pervade different domains and settings.
- If the child's behavioural and/or attentional problems are severe, referral should be made to secondary care (either a child psychiatrist, paediatrician, or specialist ADHD child and adolescent mental health services [CAMHS] practitioner) for assessment.
 - If the child's attentional and/or behavioural problems are mild to moderate:
 - a period of watchful waiting may be considered
 - the parents should be considered for referral to a parent-training programme (this should not wait for a formal diagnosis of ADHD)
 - if the problem persists with evidence of at least moderate impairment, the child should be referred to secondary care for assessment.
- 1.2.1.5 Group-based parent-training/education programmes are recommended in the management of children with conduct disorders [NICE 2006]. This should include all children with suspected ADHD.

1.2.1.6 Primary care practitioners should not undertake the initial diagnosis or start drug treatment for children or young people with suspected ADHD.

1.2.1.7 If a child or young person is currently being treated in primary care with methylphenidate, atomoxetine, or dexamfetamine, or any other psychotropic medication for a presumptive diagnosis of ADHD and has not been assessed by a specialist in ADHD in secondary care, the child should be referred as a matter of clinical priority for assessment by specialist services.

1.2.2 Identification and referral in adults

1.2.2.1 Adults presenting in primary care or general psychiatric services without a childhood diagnosis of ADHD should be referred for assessment of possible ADHD if there is evidence of the following:

- typical behavioural manifestations of ADHD (hyperactivity/impulsivity and/or inattention)
- behavioural manifestations that began in early childhood, have been persistent throughout life and are not explained by other psychiatric or personality disorder diagnoses (although there may be other coexisting psychiatric problems)
- psychological, social, and/or occupational impairment resulting from or associated with the persistent behavioural manifestations.

1.3 *Diagnosis*

ADHD is a valid clinical condition that can be distinguished from co-existing disorders (although it is most commonly comorbid) and the normal spectrum. ADHD differs from the normal spectrum because there are high levels of symptoms of hyperactivity/impulsivity and/or inattention that result in significant clinical, psychosocial and educational and/or occupational impairments that occur across multiple domains and settings and persist over time.

- 1.3.1.1 There is no specific biological test for ADHD, so the diagnosis should be made on the basis of a full developmental and psychiatric history, observer reports and examination of the person's mental state.
- 1.3.1.2 A diagnosis of ADHD should not be made on the basis of rating scales or observational data alone.
- 1.3.1.3 The diagnosis of ADHD should only be made by specialist psychiatrists or paediatricians following a full clinical and psychosocial assessment of the child, young person or adult; this should include all relevant domains and settings that the individual inhabits.
- 1.3.1.4 For the diagnosis of ADHD or hyperkinetic disorder to be made, and for this guideline to be considered appropriate, symptoms of ADHD (DSM-IV) or hyperkinetic disorder (ICD-10) should be sufficient to reach a formal diagnosis in DSM-IV or ICD-10 (except that the ICD-10 exclusion on the basis of a pervasive developmental disorder being present, or the time of onset being uncertain, is not recommended). In addition, the level of impairment resulting from symptoms of hyperactivity and inattention should be:
- at least moderately clinically significant on the basis of interview and/or direct observation in multiple settings, and
 - pervasive, that is, occur in all important settings including social, familial, educational and/or occupational settings. [Key priority]
- 1.3.1.5 ADHD should be considered in all age groups (children, young people and adults), with symptom criteria adjusted for age-appropriate changes in behaviour.
- 1.3.1.6 In determining the clinical significance of impairments resulting from the symptoms of ADHD in children, the views of the child should be taken into account, wherever this is possible.

1.4 *Post-diagnostic assessment and advice*

1.4.1 Post-diagnostic assessment of children and young people

Comprehensive assessment is needed as people with ADHD have many associated problems, and impairments due to symptoms are always present in multiple settings, such as social, familial, educational and/or occupational settings.

1.4.1.1 Following diagnosis, healthcare professionals should undertake a comprehensive assessment of comorbidities, parental mental health, and the child or young person's social, familial, and educational circumstances and physical health and status prior to the commencement of treatment. [Key priority]

1.4.1.2 Following diagnosis, a clinical assessment should include a full physical examination for features of associated conditions, such as macro/microencephaly, dysmorphic features, neurocutaneous markers.

1.4.2 Post-diagnostic dietary advice for children and young people

Diet may be important for children with ADHD, particularly in pre-school-age children.

1.4.2.1 Healthcare professionals should stress the value of a good and balanced diet, nutrition, and exercise.

1.4.2.2 The elimination of artificial colouring and additives from the diet is not recommended as a generally applicable treatment for ADHD. [Key priority]

1.4.2.3 Clinical assessment for ADHD should include enquiry about foods or drinks that have been noted to influence an individual child's hyperactive behaviour. If there is a clear link, healthcare professionals should:

- advise that a food diary should be kept
- if the diary supports a relationship between specific foods and behaviour then offer referral to a dietician.

Further management, such as specific dietary elimination should be jointly undertaken by the dietician, mental health specialist or paediatrician, parent, and child. Dieticians should be competent to advise families on how elimination of the suspected foods should be achieved.

- 1.4.2.4 Dietary zinc and fatty acid supplementation regimens are not recommended for the treatment of ADHD.

1.4.3 Post-diagnostic advice for parents and pre-school professionals

After diagnosis of children, parents and pre-school professionals may benefit from advice about behaviour and general care

- 1.4.3.1 Following a diagnosis of ADHD, healthcare professionals should ensure that general advice is given to parents and carers of all children with ADHD about positive parent–child contact, clear and appropriate rules about behaviour, and the importance of structure in the child's day.
- 1.4.3.2 Following diagnosis of ADHD for a child of pre-school age, and with the parent or carer's consent, healthcare professionals should contact the child's nursery or pre-school class, advise them about the child's diagnosis and determine whether special educational needs are likely to be present.

1.5 *Post-diagnostic treatment for children and young people*

1.5.1 Treatment for pre-school children

Parent training is the first-line treatment and help for parents of pre-school children. These programmes are the same as those that help the parents of

other children with problems of conduct. If more help is needed the child can be referred to a tertiary service.

- 1.5.1.1 Drug treatment is not recommended as first-line treatment of pre-school children with ADHD.
- 1.5.1.2 The parents of pre-school children with a diagnosis of ADHD should be offered a referral to a parent-training programme as the first-line treatment. [Key priority]
- 1.5.1.3 Group-based parent-training/education programmes are recommended in the management of children with conduct disorders [NICE 2006], and this should include all children with ADHD.
- 1.5.1.4 Individual-based parent-training/education programmes are recommended in the management of children with conduct disorders only in situations where there are particular difficulties in engaging with the parents or a family's needs are too complex to be met by group-based parent-training/education programmes. [NICE 2006], and this should include all children with ADHD as parent-training programmes are effective in reducing problem behaviours and disordered conduct that are often associated with ADHD.
- 1.5.1.5 Individual parent-training programmes for parents of children diagnosed with ADHD may also be considered as an alternative when viable group interventions are difficult to achieve because of low participant numbers.
- 1.5.1.6 When individual parent-training programmes for pre-school children with ADHD are undertaken, the skills training stages should include working with the parents and the child together.
- 1.5.1.7 It is recommended that all parent-training/education programmes, whether group- or individual-based, should:

- be structured and have a curriculum informed by principles of social-learning theory
- include relationship-enhancing strategies
- offer a sufficient number of sessions, with an optimum of 8–12, to maximise the possible benefits for participants
- enable parents to identify their own parenting objectives
- incorporate role-play during sessions, as well as homework to be undertaken between sessions, to achieve generalisation of newly rehearsed behaviours to the home situation
- be delivered by appropriately trained and skilled facilitators who are supervised, have access to necessary ongoing professional development, and are able to engage in a productive therapeutic alliance with parents
- adhere to the programme developer's manual and employ all of the necessary materials to ensure consistent implementation of the programme. [NICE 2006]

In addition, consideration should be given to including both parents in parent-training programmes wherever this is feasible.

- 1.5.1.8 Programme providers should also ensure that support is available to enable the participation of parents who might otherwise find it difficult to access these programmes. [NICE 2006]
- 1.5.1.9 If overall treatment, including parent-training programmes, has not been effective in managing ADHD symptoms and any resulting impairment for pre-school children, healthcare professionals should consider a referral to tertiary services for further care.
- 1.5.1.10 If overall treatment, including parent-training programmes, has been effective in managing ADHD symptoms and any resulting impairment for pre-school children, healthcare professionals should carry out an assessment to ascertain the extent of any residual comorbidities. They should also monitor for the recurrence of

ADHD symptoms and impairment that may occur following the child's entry to school.

1.5.2 Treatment for school-age children with moderate ADHD

Group-based parent-training programmes should be tried first for school-age children with moderate ADHD. For younger children this may include group treatment for the children as well. For older age groups, individual psychological treatment may be more acceptable. Drug treatments should be tried next for those with moderate ADHD.

1.5.2.1 Drug treatment is not indicated for all school-age children. It should be reserved for those with moderate ADHD symptoms and impairment who have refused, or whose symptoms have not responded sufficiently to, parent-training programmes or individual psychological treatment, if this has been provided.

1.5.2.2 Following diagnosis of a school-age child with ADHD, healthcare professionals should, with the parents' or carers' consent, contact the child's school, and advise on:

- the diagnosis and severity of symptoms and impairment
- the treatment plan
- any special educational needs.

They should offer information on classroom strategies on learning and behaviour.

1.5.2.3 Teachers who have received some training about ADHD and its management should provide behavioural interventions within the classroom to help children with ADHD. [Key priority]

1.5.2.4 If the child or young person diagnosed with ADHD has moderate symptoms and impairment, the parents should be offered referral to a group parent-training programme, either alone or as part of a combined intervention including a group treatment programme for the child or young person. [Key priority]

- 1.5.2.5 When using group treatment for the child or young person in conjunction with a parent-training programme, particular emphasis may be given in the group treatment on targeting a range of areas in functioning, including social skills with peers, problem solving, self-control, listening skills, and dealing with and expressing feelings; active learning strategies should be used and rewards included for achieving key elements of learning.
- 1.5.2.6 For older adolescents with moderate ADHD symptoms and impairment, individual psychological interventions should be considered as these are more likely to be effective and acceptable than parent training.
- 1.5.2.7 For children and young people (including older age groups) with ADHD and a learning disability, a parent-training programme should be offered to parents on either a group or individual basis, whichever is preferred following discussion with the parents and child.
- 1.5.2.8 When parents with children diagnosed with ADHD undertake parent-training programmes, the professional delivering the sessions should consider contacting the school and providing the child's teacher with written information on the areas of behavioural management of ADHD covered in these sessions. This should only be done with parental consent.
- 1.5.2.9 Following successful treatment with a parent-training programme and prior to considering discharge, the child and family should be reviewed for any other remaining problems such as anxiety, aggression and learning difficulties.
- 1.5.2.10 Following treatment with a parent-training programme, children with persistent ADHD combined with significant impairment should be offered drug treatment.

1.5.3 Treatment for school-age children with severe ADHD (hyperkinetic disorder)

The first-line treatment for school-age children and young people with severe ADHD should be with medication. If parents reject this, a psychological treatment may be tried but parents should be advised about the benefits and superiority of drug treatment for this group.

- 1.5.3.1 In children with severe symptoms of ADHD (hyperkinetic disorder) and severe impairment, medication should be offered as the first-line treatment. Families should also be offered a group-based behavioural programme. [Key priority]
- 1.5.3.2 Drug treatment should only be initiated by an appropriately qualified healthcare professional with expertise in ADHD and should be based on a comprehensive assessment and diagnosis. Continued prescribing and monitoring of drug therapy may be performed by general practitioners, under shared care arrangements (NICE 2006).
- 1.5.3.3 If medication is not accepted as a treatment option by the child or young person with severe symptoms of ADHD, or their parents, healthcare professionals should advise parents about the benefits and superiority of drug treatment for this group. If medication is still not accepted then a group parent-training programme should be offered.
- 1.5.3.4 If a group parent-training programme is effective for children and young people with severe symptoms of ADHD who have refused drug treatment, healthcare professionals should assess for possible comorbidity and develop a longer-term care plan.
- 1.5.3.5 If a group parent-training programme was not effective for a child or young person with severe symptoms of ADHD and impairment, and if drug treatment has not been accepted, re-discuss the possibility

of drug treatment or other psychological treatment, highlighting the clear benefits and superiority of drug treatment in this context.

1.5.4 Baseline pre-drug assessment

Baseline measures of height and weight, and a range of other parameters, should be taken before starting drug treatment. It should be ensured that medication is safe for the child before prescribing.

1.5.4.1 Prior to initiating drug treatment, children and young people should have a full physical and psychiatric baseline pre-treatment assessment. This should include:

- standard symptom and side-effect rating scales
- inquiry about family history of cardiac disease
- full history and physical examination, including assessment of exercise syncope, undue breathlessness and other cardiovascular symptoms
- ECG if there is past medical or family history of serious cardiac disease or sudden death in young family members, or an abnormal cardiac examination
- height and weight plotted on a growth chart
- full psychiatric assessment
- identification of risk for substance misuse and drug diversion.

1.5.4.2 Drug treatment for children and young people should always form part of a comprehensive treatment plan that includes psychological/behavioural and educational advice and interventions. [Key priority]

1.5.5 Choice of drug for children and young people with ADHD

The first-line drug used in pharmacological treatment of ADHD as this has the largest evidence base. Atomoxetine is useful as a second-line drug for those who do not respond to, or have problems with, methylphenidate, and as a first-line agent in some instances. Antipsychotics are not recommended in the treatment of ADHD.

1.5.5.1 Where drug treatment is considered appropriate, methylphenidate, atomoxetine and dexamfetamine are recommended, within their licensed indications, as options for the management of ADHD in children and adolescents (NICE, 2006).

1.5.5.2 The decision regarding which drug to use should be based on the following:

- the presence of comorbid conditions (for example, tic disorders, Tourette's syndrome, epilepsy)
- the different adverse effects of the drugs
- specific issues regarding compliance identified for the individual child or adolescent, for example problems created by the need to administer a mid-day treatment dose at school
- the potential for drug diversion (where the medication is forwarded on to others for non-prescription uses) and/or misuse
- the preferences of the child/adolescent and/or his or her parent or guardian. (NICE 2006).

If there is a choice of more than one appropriate drug, the product with the lowest cost (taking into account the cost per dose and number of daily doses) should be prescribed (NICE 06).

1.5.5.3 When a decision to treat children or young people with medication has been made, methylphenidate should normally be used as the first-line drug treatment. [Key priority]

1.5.5.4 When prescribing methylphenidate for the treatment of children or young people, modified release (MR) preparations should be considered for convenience, improving adherence, reducing stigma (because the child does not need to take medication at school), reducing the problems schools have in storing and dispensing a controlled drug, and because of and because of its smoother pharmacokinetic profile. Alternatively, immediate release (IR) preparations should be considered if more flexible dosing regimens

are required, or sometimes during the initial titration to ascertain correct dosing levels.

1.5.5.5 Atomoxetine is generally used as a second-line treatment, but may be considered as a first-line treatment in the following circumstances:

- comorbid tics or Tourette syndrome
- comorbid anxiety disorder
- comorbid stimulant substance misuse.

1.5.5.6 If methylphenidate at the maximum tolerated dose is ineffective, or if the child or young person is intolerant to methylphenidate prescribed at low or moderate doses, atomoxetine should be considered as a second-line treatment.

1.5.5.7 Children and young people being treated with atomoxetine should be closely observed for agitation, irritability, suicidal thinking or behaviours, and unusual changes in behaviour, especially during the initial few months of a course of drug treatment, or at times of dose changes (either increases or decreases). Parents and/or carers should also be warned about, and asked to report on, the potential emergence of suicidal thinking and related behaviours, and of the potential damage to liver function in rare cases (usually manifested as abdominal pain, unexplained nausea, malaise, darkening of the urine or jaundice), with atomoxetine.

1.5.5.8 Antipsychotics are not recommended in the treatment of ADHD.

1.5.6 Non-response to treatment

If there has not been a good enough response to psychological treatments, methylphenidate and atomoxetine, undertake a comprehensive review of why this might have happened. The following options should then be considered: higher doses of methylphenidate or atomoxetine; switching to dexamfetamine; further/alternative psychological treatments; or referral to regional specialists for alternative drug treatment.

- 1.5.6.1 If there has been an inadequate response to treatment with methylphenidate and atomoxetine, then there should be a further review of the following: diagnosis; assessment of comorbidities; response to drug treatment, occurrence of side effects and compliance; effects of stigma on treatment acceptability; school problems; motivation of child and parents; diet; and review of uptake and use of psychological treatments for parents and child.
- 1.5.6.2 Consider the use of a higher dose of a licensed medication. This may include exceeding 'British national formulary' (BNF) recommendations: methylphenidate can be increased up to 0.7 mg/kg body weight/dose (with up to three doses a day); or atomoxetine may be increased up to 1.8 mg/kg body weight per day. Side effects should be more intensively monitored.
- 1.5.6.3 In children and young people with ADHD unresponsive to a maximum tolerated dose of methylphenidate and atomoxetine, dexamfetamine should be considered.
- 1.5.6.4 Further treatment should follow referral to regional specialist treatment centres and may include the use of bupropion, clonidine, imipramine or combination treatments, including psychological treatments for both parent and child.
- 1.5.6.5 For clonidine, it is advised that a cardiovascular examination and electrocardiogram (ECG) should be conducted before commencing treatment.

1.6 Transition to adult services

Young people receiving treatment and care from CAMHS or paediatrics for ADHD should normally be transferred to adult services if they continue to have significant symptoms of ADHD or other comorbidities that require treatment. Transition should be planned in advance by both referring and receiving services. If needs are severe and/or complex, use of the Care Programme Approach should be considered.

- 1.6.1.1 At age 17, a young person with ADHD in receipt of treatment and care from CAMHS or paediatric services should be re-assessed to establish the need for continuing treatment into adulthood. If services are deemed to be necessary, arrangement should be planned for a smooth transfer to adult services at 18 years of age. Precise timing of arrangements may be varied locally, subject to agreement between all trusts involved.
- 1.6.1.2 In the transition of young people with ADHD between children's and adult services, a formal meeting involving CAMHS, paediatrics (if appropriate) and adult psychiatric services should be considered and full information provided to the young person regarding adult services. Where necessary, the Care Programme Approach should be used.
- 1.6.1.3 After transfer to adult services, healthcare professionals should carry out a comprehensive assessment of young people with ADHD that includes their personal, educational, occupational, and social functioning, and the assessment of any comorbidities, especially drug misuse and personality disorder.

1.7 Treatment of adults with ADHD

For adults with ADHD, drug treatment should be initiated first unless the person would prefer a psychological approach. Methylphenidate is the first-line treatment. If methylphenidate is ineffective or unacceptable, then either atomoxetine or dexamfetamine should be tried. If there are residual impairments despite some benefit from drugs, consideration should be given to adding CBT. There is the potential for drug misuse, especially in some settings, such as prison.

- 1.7.1.1 In adults, drug treatment for ADHD should be initiated only under the guidance of a psychiatrist or specialist with training in the diagnosis and treatment of ADHD.

- 1.7.1.2 Prior to initiating drug treatment, adults should have a full physical and psychiatric baseline pre-treatment assessment. This should include:
- standard symptom and side-effect rating scales
 - inquiry about family history of cardiac disease and a physical examination including the cardiovascular system
 - an ECG if there is past medical or family history of serious cardiac disease or an abnormal cardiac examination
 - full psychiatric assessment
 - risk for substance misuse and drug diversion.
- 1.7.1.3 Following a decision to initiate medication in adults with ADHD, methylphenidate should normally be used as the first-line drug treatment. [Key priority]
- 1.7.1.4 In adults unresponsive or intolerant to an adequate trial of methylphenidate, either atomoxetine or dexamfetamine may be considered.
- 1.7.1.5 When an adult is prescribed atomoxetine, they should be warned of potential damage to liver function in rare cases (usually manifest as abdominal pain, unexplained nausea, malaise, darkening of the urine or jaundice). Younger adults should also be warned of the potential of atomoxetine to increase agitation and anxiety, and lead to self-harming behaviour in a few individuals, especially in the first few weeks.
- 1.7.1.6 For adults with ADHD stabilised on medication who have persisting functional impairments associated with ADHD, a course of either group or individual CBT to address their functional impairment should be considered. [Key priority]
- 1.7.1.7 For adults with ADHD, CBT may be considered when:

- the individual has made an informed choice not to have drug treatment
- stimulant medication has proved to be ineffective or the person is intolerant to medication
- engagement with services or acceptance of the diagnosis has proved problematic, and engagement with other treatments needs to be enhanced.

1.7.1.8 Psychological interventions may be considered as the first choice for treatment of ADHD in people where there may be concern about prescribing and/or potential for misuse, such as in prison services.

1.7.1.9 Drug treatment for ADHD comorbid with substance misuse should only be provided by an appropriately qualified healthcare professional with expertise in both conditions.

1.8 *How to use medication*

When prescribing drugs, good knowledge of the drugs and different preparations is essential. Clinicians should start with low doses and titrate upwards, monitoring effects and side effects carefully. Higher doses may need to be prescribed to adults. There are ways in which adherence can be improved in children and young people; these may also be of use in adults.

1.8.1 **General principles for the use of medication in children, young people and adults**

1.8.1.1 Prescribers should be familiar with the pharmacokinetic profiles of the full range of MR and IR preparations available to ensure that treatment regimens can be effectively tailored to the individual needs of the child, young person or adult.

1.8.1.2 In the titration phase of treatment, doses should be gradually increased until there is no further improvement (symptom reduction, behaviour change, improvements in education and/or relationships) and as long as side effects are tolerable.

- 1.8.1.3 Routine monitoring of side effects should include the use of standard checklists appropriate to the drug concerned.
- 1.8.1.4 If adverse effects become troublesome dose reduction should be considered.
- 1.8.1.5 Titration should be slower if the person has tics or seizures.

1.8.2 Initiation and titration of methylphenidate, atomoxetine and dexamfetamine in children and young people

- 1.8.2.1 During the titration phase, symptoms and adverse effects should be recorded at each dose change on standard scales (for example, Conners' 10-item scale) by parents and teachers and progress reviewed regularly (for example, by telephone contact) with a specialist clinician.
- 1.8.2.2 For methylphenidate:
- Initial treatment should begin with low doses (10–18 mg per day).
 - Dose of the drug should be titrated against symptoms and side effects over a period of 4–6 weeks.
 - MR preparations should be given as a single dose in the morning.
 - IR preparations should be used in two or three divided doses.
- 1.8.2.3 For atomoxetine:
- Initial treatment should begin with a total daily starting dose of approximately 0.5 mg/kg in children and young people up to 70 kg body weight. In children and young people over 70 kg body weight, the initial total daily dose should be 40 mg.
 - The dose should be increased after 7 days to 1.2 mg/kg per day in those less than 70 kg and up to a maintenance dose of 80 mg per day in those over 70 kg.

1.8.2.4 For dexamfetamine:

- Initial treatment should begin with low doses of 5 mg per day.
- The dose of the drug should be titrated against symptoms and side effects over a period of 4–6 weeks.
- Treatment should be given in divided doses (2.5 mg at breakfast and then at lunch) increasing to a maximum of 20 mg per day.
- For children of 6–18 years, up to 40 mg per day may occasionally be required.

1.8.3 Initiation and titration of methylphenidate, atomoxetine and dexamfetamine in adults

1.8.3.1 In order to optimise drug treatment, the initial dose should be titrated over 4–6 weeks against symptoms and adverse effects (refer to the BNF and the Summary of product characteristics).

1.8.3.2 During the titration phase symptoms and adverse effects should be recorded at each dose change on standard scales (for example, DSM-IV checklist and functional impairment scales) by the individual and whenever possible by a carer (spouse, parent and/or close friend). In the titration phase, progress should be reviewed regularly (for example, by telephone contact) with a specialist clinician (for example, psychiatrist or nurse specialist).

1.8.3.3 For methylphenidate:

- Initial treatment should begin with low doses (10–18 mg per day).
- IR preparations should be given up to four times a day.
- MR preparations should be given twice daily.
- The dose of the drug should be titrated against symptoms and side effects over a period of 4–6 weeks.
- The dose should be increased according to response up to a maximum of 100 mg per day.

1.8.3.4 For atomoxetine:

- Initial treatment should begin with a total daily starting dose of approximately 0.5 mg/kg in adults up to 70 kg body weight. In those over 70 kg body weight, the initial total daily dose should be 40 mg.
- The dose should be increased after 7 days to 1.2 mg/kg per day in those less than 70 kg and up to a maintenance dose of 80 mg per day in those over 70 kg.

1.8.3.5 For dexamfetamine:

- Initial treatment should begin with low doses of 5 mg per day.
- Treatment should be given in divided doses.
- The dose of the drug should be titrated against symptoms and side effects over a period of 4–6 weeks.
- The dose should be increased according to response up to a maximum of 50 mg per day.

1.8.4 Monitoring side effects and the potential for misuse in children, young people and adults

1.8.4.1 In children and young people taking methylphenidate, atomoxetine, or dexamfetamine, height should be measured monthly during the titration phase and then at 6-monthly intervals and weight should be measured monthly.

1.8.4.2 If there is evidence of weight loss with any treatment in adults, consider monitoring body mass index and change medication if weight loss is persistent.

1.8.4.3 Strategies to reduce weight loss or manage decreased weight gain include:

- Offering stimulant medication either with or after food, rather than before meals.

- Scheduling additional meals/snacks early morning or late evening when stimulant effects have worn off.
 - Obtaining dietetic advice and prescribing high calorie foods.
- 1.8.4.4 If growth (reduction in expected height) is affected significantly by stimulants or atomoxetine, consider a planned break in medication over school holidays to allow 'catch-up' growth to occur.
- 1.8.4.5 For methylphenidate, dexamfetamine and atomoxetine routine blood tests and ECG are not recommended unless there is a clinical indication.
- 1.8.4.6 Routine liver function tests are not recommended for people taking atomoxetine.
- 1.8.4.7 For children and young people taking methylphenidate and dexamfetamine, healthcare professionals and parents should monitor changes in potential for misuse and drug diversion, which may come with changes in circumstances and age.
- 1.8.4.8 In adults, all medications prescribed and the use of non-prescribed substances should be closely monitored throughout treatment.
- 1.8.4.9 In young people and adults, sexual dysfunction (dysmenorrhoea, erectile dysfunction and ejaculatory dysfunction) should also be monitored as a potential side effect of atomoxetine.
- 1.8.4.10 For methylphenidate, dexamfetamine and atomoxetine, a sustained resting tachycardia, arrhythmia or systolic blood pressure of greater than the 95th percentile (or a clinically significant increase) measured on two occasions should prompt a medical referral and dose reduction.
- 1.8.4.11 If psychotic symptoms emerge following the introduction of methylphenidate and dexamfetamine, atomoxetine should be considered as an alternative.

1.8.4.12 If seizures are exacerbated in a child with epilepsy or de novo seizures emerge following the introduction of methylphenidate or atomoxetine, the medication should be discontinued immediately. In this case, dexamfetamine may be considered as an alternative.

1.8.4.13 If tics emerge, consideration should be given before medication is reduced or stopped to whether:

- tics are drug related (tics naturally wax and wane), and
- tic-related impairment outweighs the benefits of ADHD treatment.

If tics are clearly stimulant related, consider substitution with atomoxetine.

1.8.4.14 In adults, anxiety symptoms including panic may be precipitated by stimulants, particularly in adults with a history of coexisting anxiety. Where this problem persists, low doses and/or combined treatment with an antidepressant used for the treatment of anxiety is recommended.

1.8.5 Improving treatment adherence in children and young people (may be relevant to adults)

For children and young people with ADHD, the strategies outlined in the recommendations below should be considered to improve treatment adherence (similar strategies may be considered for adults, adapted for age).

1.8.5.1 Communication between prescriber and child should be improved by educating parents and/or carers and ensuring there are regular three-way conversations between prescriber, carer and child. Clear instructions in picture/written format should be offered, which could include information on dosage, duration, side effects, schedule, whether or not supervision is necessary and how this should be done.

1.8.5.2 Peer support groups for parents and the child should be offered.

- 1.8.5.3 Simple drug regimens, such as once-daily long-acting doses where possible, are recommended.
- 1.8.5.4 Healthcare professionals should encourage children (and parents) to learn to take their medication and be responsible for their own health.
- 1.8.5.5 Healthcare professionals should advise parents to provide their child with visual reminders to take medication regularly (for example, alarms, clocks, pill boxes, notes on calendars/fridges, and so on).
- 1.8.5.6 Healthcare professionals should advise that taking medication should be incorporated into daily routines (for example, before meals or after brushing teeth, and so on).
- 1.8.5.7 When necessary, healthcare professionals should help parents develop a positive attitude and approach in the management of medication which might include praise and positive reinforcement.

1.8.6 Duration, discontinuation and continuity of treatment in children and young people

Healthcare professionals should check each year whether the child continues to require drug treatment and should try to tailor the long-term pattern of use to the child's needs, preferences and circumstances.

- 1.8.6.1 Following an adequate treatment response, medication should be maintained for as long as it remains clinically effective. This should be reviewed yearly, and include a comprehensive assessment of clinical need, benefits and side effects, taking fully into account the view of the child or young person, as well as that of parents and teachers, and how these views may differ. When deciding on the need for continued treatment, the effect of missed doses, planned dose reductions and brief periods of cessation should be taken into account.

1.8.6.2 Although drug holidays are not routinely recommended, consideration should be given to having parent and child work collaboratively with the healthcare professional to find the best pattern of use, which may include periods without drug treatment.

1.8.7 Duration, discontinuation and continuity of treatment in adults

1.8.7.1 Following an adequate treatment response, medication should be maintained for as long as it remains clinically effective. This should be reviewed yearly, and include a comprehensive assessment of clinical need, benefits and side effects. In deciding on the need for continued treatment, take into account the views of spouse or partner, parents or friends where this is possible and acceptable; and the effect of missed doses, planned dose reductions and brief periods of cessation, and preferred pattern of use, should be reviewed.

1.8.7.2 An individualised treatment approach is important for adults, and healthcare professionals should regularly review the need to adapt patterns of use, including the effect of medication on comorbidities and mood changes.

2 Notes on the scope of the guidance

NICE guidelines are developed in accordance with a scope that defines what the guideline will and will not cover. The scope of this guideline is available from www.nice.org.uk/guidance/index.jsp?action=download&o=34227

The guideline covers the treatment of children aged 3 years and older, young people and adults with a diagnosis of ADHD and related diagnoses:

hyperkinetic disorder (ICD-10) is considered, along with the three DSM-IV ADHD subtypes, the management of common comorbidities in children, young people and adults with ADHD as far as these conditions affect the treatment of ADHD, the management of ADHD in those individuals who also have a learning disability or a defined neurological disorder.

The guideline does not cover the separate management of comorbid conditions nor management of children younger than 3 years.

How this guideline was developed

NICE commissioned the National Collaborating Centre for Mental Health to develop this guideline. The Centre established a Guideline Development Group (see appendix A), which reviewed the evidence and developed the recommendations. An independent Guideline Review Panel oversaw the development of the guideline (see appendix B).

There is more information in the booklet: 'The guideline development process: an overview for stakeholders, the public and the NHS' (third edition, published April 2007), which is available from www.nice.org.uk/guidelinesprocess or by telephoning 0870 1555 455 (quote reference N1233).

3 Implementation

The Healthcare Commission assesses the performance of NHS organisations in meeting core and developmental standards set by the Department of Health in 'Standards for better health', issued in July 2004. Implementation of clinical guidelines forms part of the developmental standard D2. Core standard C5 says that national agreed guidance should be taken into account when NHS organisations are planning and delivering care.

NICE has developed tools to help organisations implement this guidance (listed below). These are available on our website (www.nice.org.uk/CGXXX).

[NICE to amend list as needed at time of publication]

- Slides highlighting key messages for local discussion.
- Costing tools:
 - costing report to estimate the national savings and costs associated with implementation
 - costing template to estimate the local costs and savings involved.
- Implementation advice on how to put the guidance into practice and national initiatives that support this locally.

- Audit support for monitoring local practice.

4 Research recommendations

The Guideline Development Group has made the following recommendations for research, based on its review of evidence, to improve NICE guidance and patient care in the future.

4.1 *Grounds for diagnosis of ADHD in adult life*

What is the prevalence of inattention, impulsivity, and hyperactivity/restlessness in males and females in the adult population; how far do the core symptoms of inattention, impulsivity, and hyperactivity/restlessness cluster together; to what extent are they comorbid with other forms of mental disturbance; and to what extent are they associated with neuropsychological and social impairment? (This would be best conducted as an epidemiological survey).

Why this is important

There is evidence that ADHD symptoms can persist into adult life and be associated with impairment, but there are no clear conclusions about the level of ADHD symptoms in adults that should be considered as grounds for intervention, or about whether the symptoms take a different form in adulthood. The costs to society and to the affected individuals and their families make it pressing to know whether, and how far, services should be expanded to meet the needs of this group.

4.2 *Discontinuation of medication*

Are there benefits or disadvantages to the extended/long-term use of medication (methylphenidate) compared with discontinuation of medication at 18 months? To what extent does continuing medication beyond 18 months alter quality of life, core ADHD symptoms, associated symptoms including emotional lability, potential adverse effects of continued medication, and neuropsychological function? (This would be best conducted as a medication discontinuation randomised controlled trial.)

Why this is important

Medication is often given for periods of years, without good evidence at present of whether prolonged therapy is effective or safe.

4.3 *Effectiveness of group-based parent training*

Are group-based behavioural parent-training methods more effective than medication in the treatment of school-age children (including young people) with ADHD in terms of symptom counts, quality of life assessment, and health economic evaluation? (This would be best evaluated by a head-to-head randomised controlled trial.)

Why this is important

The evidence for the effect of group-based parent training is largely based on studies of younger children yet they are an important part of the regime that is provided and their cost effectiveness is not clear for older children and adolescents.

4.4 *Effectiveness of non-pharmacological approaches used with adults with ADHD*

Are non-pharmacological treatments (including focused psychological treatments and supportive approaches such as coaching), more effective than the use of drug treatment (methylphenidate) in terms of symptom counts, quality of life, and health economic evaluation, drug misuse and other comorbidities, and use of health, forensic and criminal justice services, in the treatments of adults with ADHD? (This would be best conducted as a randomised controlled trial.)

Why this is important

Currently there is good evidence of the effectiveness of methylphenidate on symptoms and their associated impairments. However, there is insufficient evidence as to whether non-pharmacological approaches could have specific advantages in some important aspects of the life of a person with ADHD. Given the strong association of ADHD in adults with drug misuse, personality

disorder and involvement in the criminal justice system, a health economic approach would be essential.

4.5 *Effect of providing training in behavioural management of ADHD for teachers*

Does the training of teachers to undertake behavioural management of children with ADHD in the classroom in primary and secondary schools improve ADHD symptoms and academic attainment, the teacher's experience of stress in the classroom, and the impact of ADHD on other pupils in the classroom when compared with education as usual? (This would be best conducted as a randomised trial.)

Why this is important

Secondary school is typically a different environment from primary in matters concerning the organisation of the daily timetable and expectations for increasing independence of pupils. These may impact harshly on young people with ADHD, but the effect of understanding and modifying the impact has not yet been researched. The potential for teachers taking a more active role in behavioural management of primary and secondary school children with ADHD shows some significant promise in at least one trial. The benefits of examining primary and secondary education, both compared with education as usual, and examining the broader impact on the child, the teacher, and the wider classroom would significantly improve future versions of this guideline.

5 Other versions of this guideline

5.1 *Full guideline*

The full guideline, 'Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults', contains details of the methods and evidence used to develop the guideline. It is published by the National Collaborating Centre for Mental Health, and is available from www.nccmh.org.uk, our website (www.nice.org.uk/CGXXXfullguideline) and

the National Library for Health (www.nlh.nhs.uk). **[Note: these details will apply to the published full guideline.]**

5.2 Quick reference guide

A quick reference guide for healthcare professionals is available from www.nice.org.uk/CGXXXquickrefguide

For printed copies, phone the NHS Response Line on 0870 1555 455 (quote reference number N1XXX). **[Note: these details will apply when the guideline is published.]**

5.3 'Understanding NICE guidance'

Information for patients and carers ('Understanding NICE guidance') is available from www.nice.org.uk/CGXXXpublicinfo

For printed copies, phone the NHS Response Line on 0870 1555 455 (quote reference number N1XXX). **[Note: these details will apply when the guideline is published.]**

We encourage NHS and voluntary sector organisations to use text from this booklet in their own information about ADHD.

6 Related NICE guidance

Published

Drug misuse: Psychosocial interventions. NICE clinical guideline 51 (2007). Available from www.nice.org.uk/CG51

Parent-training/education programmes in the management of children with conduct disorders. NICE technology appraisal guidance 102 (2006). Available from www.nice.org.uk/TA102

Methylphenidate, atomoxetine and dexamfetamine for attention deficit hyperactivity disorder (ADHD) in children and adolescents (review of technology appraisal 13). NICE technology appraisal guidance 98 (2006). Available from www.nice.org.uk/TA98

Under development

NICE is developing the following guidance (details available from www.nice.org.uk):

- ASPD: Antisocial personality disorder. NICE clinical guideline (publication expected December 2008).
- BPD: Borderline personality disorder. NICE clinical guideline (publication expected December 2008).

7 Updating the guideline

NICE clinical guidelines are updated as needed so that recommendations take into account important new information. We check for new evidence 2 and 4 years after publication, to decide whether all or part of the guideline should be updated. If important new evidence is published at other times, we may decide to do a more rapid update of some recommendations.

Appendix A: The Guideline Development Group

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Appendix B: The Guideline Review Panel

The Guideline Review Panel is an independent panel that oversees the development of the guideline and takes responsibility for monitoring adherence to NICE guideline development processes. In particular, the panel ensures that stakeholder comments have been adequately considered and responded to. The panel includes members from the following perspectives: primary care, secondary care, lay, public health and industry.

[NICE to add]

[Name; style = Unnumbered bold heading]

[job title and location; style = NICE normal]