

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

SCOPE**1 Guideline title**

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

1.1 Short title

ADHD

2 Background

- (a) The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has commissioned the National Collaborating Centre for Mental Health to develop a clinical guideline on attention deficit hyperactivity disorder for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health and Welsh Assembly Government (see Appendix). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness.
- (b) The Institute's clinical guidelines will support the implementation of National Service Frameworks (NSFs) in those aspects of care where a Framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisals published by the Institute after an NSF has been issued will have the effect of updating the Framework.
- (c) NICE clinical guidelines support the role of healthcare professionals in providing care in partnership with patients, taking account of their individual needs and preferences, and ensuring that patients (and their carers and families, where appropriate) can make informed decisions about their care and treatment.

3 Clinical need for the guideline

- a) Attention deficit hyperactivity disorder (ADHD) is among the most commonly diagnosed behavioural disorders in children and young people. It is defined by the 'core' signs of inattention, hyperactivity and impulsiveness. There are two main sets of diagnostic criteria in current use, the Diagnostic and Statistical Manual of Mental Disorders fourth edition (DSM-IV) and International Classification of Mental and Behavioural Disorders 10th revision (ICD-10). The DSM-IV criteria define ADHD broadly to include three subtypes: a combined subtype in which all three core signs are present; a predominantly inattentive subtype in which inattention is present but not hyperactivity or impulsiveness; and a predominantly hyperactive–impulsive subtype in which hyperactivity and impulsiveness are present but not inattention. A related condition is hyperkinetic disorder; the ICD definition states that abnormal levels of inattention, hyperactivity and impulsivity should be present for at least 6 months. Also, a combined subtype of ADHD needs to be present for this definition, together with stricter requirements for pervasiveness across situations, and exclusion of comorbidity.
- b) It is acknowledged that comorbidity is the norm rather than the exception for children with ADHD. Common comorbidities include oppositional defiant disorder (ODD), conduct disorder (CD), learning disorders, anxiety, depression, epilepsy, tic disorders and Tourette's syndrome. About 50% of children with ADHD also have ODD and/or CD. The diagnostic criteria for ADHD exclude children with pervasive developmental disorders, such as Asperger syndrome.
- c) Various genetic and environmental risk factors for ADHD have been identified. Hereditary aspects, neuroimaging data and responses to pharmacotherapeutic agents support the suggestion that ADHD has a biological component. However, there is a continuing debate over the causes of ADHD.

- d) ADHD affects children, young people and adults in different ways and to different degrees, but the consequences of severe ADHD can be serious for both the individual and their family and carers. Children with ADHD often have low self-esteem and can develop emotional and social problems. The secondary effects of ADHD can be extremely damaging. For example, some children and young adults with ADHD self-harm accidentally and many later have an increased risk of automotive accidents. Moreover, affected children are often exposed to years of negative feedback about their behaviour and suffer educational and social disadvantage. A sizeable proportion of children referred for hyperactivity disorders continue to have problems into adulthood, including emotional and social problems, substance misuse, unemployment, and involvement in crime.
- e) Estimates of the prevalence of ADHD vary widely within and between countries. It is estimated to affect 3–9% of school-aged children and young people in the UK, and about 2% of adults worldwide would meet the DSM-IV diagnostic criteria for ADHD. Prevalence estimates for hyperkinetic disorder are around 1–2% in the UK.
- f) Diagnosis of ADHD is about three to four times more common in males than in females, although this gender imbalance may be inflated to some extent by referral biases (that is, more boys are sent for clinical assessment of ADHD than girls).
- g) The prescribing of stimulant drugs for ADHD reflects the increased frequency of diagnosis of this condition. In 1998 there were about 220,000 prescriptions in England for stimulant drugs (methylphenidate and dexamfetamine) at a net ingredient cost of about £5 million; in 2004 this number had almost doubled to 418,300 at a cost of almost £13 million.
- h) In addition, the use of CNS stimulants has been controversial and there are concerns about prescribing such medication to children. Further

anxieties surround the potential for their inappropriate prescription, abuse and release onto the black market.

4 The Guideline

- a) The guideline development process is described in detail in two publications which are available from the NICE website (see 'Further information'). *The guideline development process: an overview for stakeholders, the public and the NHS* describes how organisations can become involved in the development of a guideline. *Guideline development methods: information for National Collaborating Centres and guideline developers* provides advice on the technical aspects of guideline development.
- b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health (see Appendix).
- c) The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

The recommendations in this guideline will address the following:

- a) The treatment of children aged 3 years and older, young people and adults with a diagnosis of ADHD. The three subtypes of this condition will be considered, together with hyperkinetic disorder.
- b) The management of comorbidities in children, young people and adults with ADHD as far as these conditions affect the treatment of ADHD.

- c) The specific management of ADHD in those individuals who also have:
- a learning disability
 - a defined neurological disorder.

4.1.2 Groups that will not be covered

The guideline will not cover:

- a) the separate management of comorbid conditions
- b) the management of children younger than 3 years.

4.2 Healthcare setting

- a) The guideline will cover the care provided by primary, community and secondary care healthcare professionals who have direct contact with, and make decisions concerning, the care of children, young people and adults.
- b) This is an NHS guideline. Although it will comment on the interface with other services such as social services, educational services, the voluntary sector and young offender institutions, it will not include recommendations relating to the services exclusively provided by these agencies.
- c) The guideline will include:
 - care in general practice and NHS community care
 - hospital outpatient and inpatient care
 - primary/secondary interface of care
 - transition from childhood services to adult services.

4.3 Clinical management

Areas that will be covered by the guideline

- a) The full range of care routinely made available by the NHS.
- b) Validity and reliability of existing diagnostic criteria, and criteria that can be used to determine the circumstances in which the guideline should be used.
- c) Early identification of ADHD in children in primary care, and identification of factors that should lead to investigation into the possibility of ADHD.
- d) Pathways to treatment.
- e) Identification and management of risk.
- f) Appropriate use of pharmacological treatments including:
 - methylphenidate and dexamfetamine (currently licensed for treatment of ADHD)
 - atomoxetine (a serotonin and noradrenaline re-uptake inhibitor; currently licensed for treatment of ADHD).
 - tricyclic and other antidepressants.
 - bupropion
 - nicotine (as skin patches)
 - clonidine
 - atypical antipsychotics (particularly risperidone)
 - modafinil.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only where clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's Summary of Product Characteristics to inform their decisions for individual patients.

- g) Psychological interventions, for example, family interventions, cognitive and behavioural treatments, child therapy, supportive therapy, parent training, school-based interventions, and referral to other therapies.
- h) Combined pharmacological and psychological treatments.
- i) Other physical treatments, including dietary elimination and supplementation.
- j) Treatment approaches for adults with ADHD (including longer-term outcomes and transitions from child to adult healthcare).
- k) Sensitivity to different beliefs and attitudes of different races and cultures, and issues of social exclusion.
- l) The role of the family or carers in the treatment and support of people with ADHD (with consideration of choice, consent and help), and support that may be needed by carers themselves.

Areas that will not be covered by the guideline

- a) Treatments that are not normally available on the NHS.

4.4 Status

4.4.1 Scope

This is the first draft of the scope, which will be reviewed by the Guidelines Review Panel and the Institute's Guidance Executive.

The guideline will incorporate the following relevant technology appraisal guidance issued by the Institute:

'Guidance on the use of methylphenidate (Ritalin, Equasym) for attention deficit/hyperactivity disorder (ADHD) in childhood' *NICE technology appraisal guidance* no. 13

Previous recommendations made in other guidelines may be updated by this guideline, based on the most up-to-date evidence for this particular population.

4.4.2 Guideline

The development of the guideline recommendations will begin in March 2006.

5 Further information

Information on the guideline development process is provided in:

- 'The guideline development process: an overview for stakeholders, the public and the NHS'
- 'Guideline development methods: information for National Collaborating Centres and guideline developers'.

These booklets are available as PDF files from the NICE website (www.nice.org.uk/guidelinesprocess). Information on the progress of the guideline will also be available from the website.

Appendix – Referral from the Department of Health and Welsh Assembly Government

The Department of Health and Welsh Assembly Government asked the Institute:

To prepare a guideline for the NHS in England and Wales on the effectiveness of methylphenidate and other pharmacological and psychological interventions in combination or separately for the treatment of attention deficit hyperactivity disorder. The guideline should apply to the treatment of children, young people and adults where evidence for treatment effectiveness is available.