SCOPE

1 Guideline title

Attention deficit hyperactivity disorder: diagnosis 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 a heterogeneous behavioural syndrome and its diagnosis does not imply any specific cause. However various genetic and environmental risk factors have been implicated in its development. ADHD is characterised by the 'core' signs of inattention, hyperactivity and impulsiveness. 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). The ICD-10 definition makes reference to hyperkinetic disorder, primarily evidenced by high abnormal levels of hyperactivity, and a combined sub-type in which hyperactivity, impulsivity and inattention need to be present, together with stricter requirements for pervasiveness across situations, and exclusion of comorbidity. The DSM-IV criteria describe ADHD more 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. Both ICD-10 and DSM-IV require 6 months duration of symptoms. The identification of ADHD in adults, and the diagnostic criteria that should underpin case recognition, are less clear and lead to uncertainties in practice.

b) ICD-10 and DSM-IV adopt a different approach to comorbidity. In ICD-10, secondary complications to hyperkinetic disorder include dissocial behaviour and low self-esteem. In DSM-IV common comorbidities include: disruptive behaviour disorders, mood disorders, anxiety disorders, learning disorders and communication disorders. ADHD is not diagnosed if symptoms of inattention and hyperactivity occur exclusively during the course of a pervasive developmental disorder or a psychotic disorder, but the problems may still need to be recognised and treated. It seems likely that a similar pattern of
comorbidities pertains to adults with ADHD, although definitive research in this area is lacking.

c) A number of 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 additional emotional and social problems. The secondary effects of ADHD can be damaging. For example, some children and young adults with ADHD are at increased risk of accidental harm 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 may 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 hyperkinetic disorder/ADHD vary widely within and between countries. Prevalence estimates for hyperkinetic disorder in children and young people are around 1–2% in the UK. ADHD is estimated to affect 3–9% of school-aged children and young people in the UK, and about 2% of adults worldwide (using DSM-IV diagnostic criteria). These differences are, at least in part, explained by differences in diagnostic criteria used in different countries.

f) Studies of clinic based diagnoses suggest that ADHD is nine times more common in males, although this gender imbalance is inflated to some extent by referral bias; epidemiological studies suggest that prevalence is only two to four times greater in males.
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 cost of about £5 million; in 2004 this number had almost doubled to 418,300 at a cost of almost £13 million.

h) 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 unauthorised trading and/or illegal selling.

4 The Guideline

a) The guideline development process is described in detail in two publications that 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 and related diagnoses: hyperkinetic disorder (ICD-10) will be considered, along with the three DSM-IV ADHD subtypes.

b) The management of common 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 healthcare professionals who have direct contact with, and make decisions concerning, the care of children, young people and adults with ADHD.

b) This is an NHS guideline. It will comment on the interface with other services such as social services, the voluntary sector and young offender institutions, but it will not include recommendations relating to the services exclusively provided by these agencies; except insofar as
the care provided in those institutional settings provided by healthcare professionals, funded by the NHS. Recommendations in the guideline will nevertheless map onto the tiered model of CAMHS services specified in the NSF for children and utilised in the NICE guideline on depression in children. Where it may have a positive contribution to the health of a child with ADHD, the guideline will also include some recommendations for staff in the education services, either directly (where this is appropriate) or indirectly through collaborative working with CAMHS professionals.

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, specificity and reliability of existing diagnostic criteria (ICD-10 and DSM-IV) in children, young people and adults, and to determine/specify the criteria that should be used to determine the circumstances in which this guideline should be used.

c) Assessment both before and after diagnosis.

d) Early identification of ADHD in children at risk, and identification of factors that should lead to investigation into the possibility of ADHD.

e) Pathways to treatment.

f) Identification and management of risk.
g) The appropriate use of pharmacological interventions, for example initiation and duration of treatment, management of side effects and discontinuation. Specific pharmacological treatments considered will include:

- methylphenidate and dexamfetamine (currently licensed for treatment of ADHD in children and young people)
- atomoxetine (currently licensed for treatment of ADHD in children, and in adults if treatment was initiated in childhood)
- 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.

h) All common psychological interventions currently employed in the NHS for example, family interventions, cognitive-behavioural treatments, and parent training.

i) Combined pharmacological and psychological treatments.

j) Other physical treatments, including dietary elimination and supplementation.

k) Treatment approaches for adults with ADHD (including longer-term outcomes and transitions from child to adult healthcare).

l) Sensitivity to different beliefs and attitudes of different races and cultures, and issues of social exclusion.
m) 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 not normally available in the NHS.

4.4 Status

4.4.1 Scope

This is the final scope.

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


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 guidelines manual’.

This booklet is available from the NICE website (www.nice.org.uk/guidelinesmanual). 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 diagnosis and treatment of attention deficit hyperactivity disorder in children, young people and adults; where evidence for treatment effectiveness is available. Treatment should include the effectiveness of methylphenidate and other pharmacological and psychological interventions in combination or separately.