NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Attention deficit hyperactivity disorder: diagnosis and management

Topic

This guideline will update and replace the NICE guideline on attention deficit hyperactivity disorder (CG72) as set out in the update decision.

For more information about why this guideline is being developed, and how the guideline will fit into current practice, see the context section.

Who the guideline is for

The guideline is for:

- people using services, their families and carers and the public
- primary, community and secondary health and social care professionals who have direct contact with, and make decisions about the care of, children, young people and adults with ADHD.

It may also be relevant for people working in:

- education services
- voluntary sector organisations
- young offender institutions.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the Welsh Government, Scottish Government, and Northern Ireland Executive.

Equality considerations

NICE has carried out an equality impact assessment during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

1 What the guideline is about

1.1 Who is the focus?

Groups that will be covered

- Children, young people and adults with a diagnosis of attention deficit hyperactivity disorder (ADHD). This includes people with a comorbid condition, such as:
  - a defined neurological disorder
  - a mental health disorder
  - another neurodevelopmental disorder.

1.2 Settings

Settings that will be covered

- All settings where NHS or social care is provided or commissioned.

1.3 Activities or aspects of care

Key areas that will be covered

Areas from the published guideline that will be updated

1 Post-diagnostic advice (general).

2 Non-pharmacological interventions, including:
  - cognitive therapies
  - behavioural therapies
  - parent and carer training programmes
  - family interventions

- neurofeedback (using electroencephalogram [EEG] biofeedback to train the brain towards better functioning)
- physical therapies
- daily activity scheduling and organisational skills
- play-based therapies.

3 Pharmacological interventions (including starting treatment, length of treatment, managing side effects, stopping treatment and sequencing). Specific pharmacological treatments considered will include:
- methylphenidate
- dexamfetamine
- lisdexamfetamine dimesylate
- atomoxetine
- guanfacine
- clonidine
- antidepressants (tricyclics, selective serotonin reuptake inhibitors, monoamine oxidase inhibitors)
- antipsychotics
- mood stabilisers (carbamazepine, valproate, lamotrigine, buspirone)
- bupropion
- nicotine (as skin patches)
- modafinil
- melatonin.

4 Combining non-pharmacological and pharmacological interventions (including dietary interventions combined with pharmacological treatment).

5 Improving adherence to interventions.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if 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.

Areas not in the published guideline that will be included in the update

1 Identification of people who may have ADHD (risk factors).

Areas that will not be covered

1 Managing comorbid conditions.

Areas from the published guideline that will not be updated

1 Identification and pre-diagnostic intervention in the community, and referral to secondary services.
2 The diagnosis of ADHD.
3 The clinical and cost effectiveness of dietary interventions for ADHD (this section of CG72 was updated separately and published in February 2016 on the NICE website).
4 Training healthcare and education professionals.
5 Transition to adult services.

Recommendations in areas that are not being updated may be edited to ensure that they meet current editorial standards, and reflect the current policy and practice context.

1.4 Economic aspects

We will take economic aspects into account when making recommendations. We will develop an economic plan that states for each review question (or key area in the scope) whether economic considerations are relevant, and if so whether this is an area that should be prioritised for economic modelling and analysis. We will review the economic evidence and carry out economic analyses, using an NHS and personal social services (PSS) perspective, as appropriate.

1.5 Key issues and questions

While writing this scope, we have identified the following key issues, and key questions related to them:

Identification of people who may have ADHD (risk factors)

1 Which groups are at high risk of developing ADHD?

Post-diagnostic advice

2 What are the information and support needs of adults with ADHD and their family and carers after diagnosis?

3 What is the most effective method of providing information and support for adults with ADHD and their family and carers after diagnosis?

4 What are the information and support needs of children and young people with ADHD and their family and carers after diagnosis?

5 What is the most effective method of providing information and support for children and young people with ADHD and their family and carers after diagnosis?

Non-pharmacological interventions

6 What is the most clinically and cost-effective non-pharmacological treatment, and combination of treatments, for people with ADHD?

7 What is the most clinically and cost-effective length of non-pharmacological treatment for people with ADHD?

8 What are the adverse effects of non-pharmacological treatment for people with ADHD?

9 What is the most clinically and cost-effective sequence of non-pharmacological treatment for people with ADHD when treatment is ineffective or treatment is not tolerated?

Pharmacological interventions

10 What is the most clinically and cost-effective pharmacological treatment, and combination of treatments, for people with ADHD?

11 What is the most clinically and cost-effective length of pharmacological treatment for people with ADHD?

12 What is the most clinically and cost-effective method for starting pharmacological treatment for people with ADHD?

13 What are the safety issues around starting pharmacological treatment for people with ADHD?

14 What is the most clinically and cost-effective method for stopping pharmacological treatment for people with ADHD?

15 What is the most clinically and cost-effective method for managing side effects of pharmacological treatment for people with ADHD?

16 What is the most clinically and cost-effective sequence of pharmacological treatment for people with ADHD when treatment is ineffective or treatment is not tolerated?

Combined interventions

17 What is the clinical and cost-effectiveness of combined non-pharmacological and pharmacological interventions for people with ADHD?

Improving adherence to treatment

18 What is the most clinically and cost-effective intervention for supporting treatment adherence (non-pharmacological and/or pharmacological) in adults with ADHD?

19 What is the most clinically and cost-effective intervention for supporting treatment adherence (non-pharmacological and/or pharmacological) in children and young people with ADHD?

The key questions may be used to develop more detailed review questions, which guide the systematic review of the literature.

1.6 Main outcomes

The main outcomes that will be considered when searching for and assessing the evidence are:

1 Quality of life
2 ADHD symptoms
3 Functional status (a person's ability to do everyday tasks and activities)
4 Associated mental health problems
5 Peer relationships
6 Family relationships
7 Academic outcomes, including school learning and progress
8 Care needs
9 Self-esteem

10 Perceived control of symptoms

11 Risky behaviour

2 Links with other NICE guidance, NICE quality standards, and NICE Pathways

2.1 NICE guidance

NICE guidance that will be updated by this guideline

- Attention deficit hyperactivity disorder: diagnosis and management (2008) NICE guideline CG72

- Methylphenidate, atomoxetine and dexamfetamine for attention deficit hyperactivity disorder (ADHD) in children and adolescents (2006) NICE technology appraisal guidance 98

  It is proposed that this guideline will update all recommendations from TA98, subject to a review proposal by the technology appraisals programme.

NICE guidance about the experience of people using NHS services

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to ADHD:

- Patient experience in adult NHS services (2012) NICE guideline CG138
- Service user experience in adult mental health (2011) NICE guideline CG136
- Medicines adherence (2009) NICE guideline CG76

NICE guidance that is closely related to this guideline

- Transition from children's to adults' services (2016) NICE guideline NG43
- Hypertension in adults: diagnosis and management (2011) NICE guideline CG127

NICE guidance in development that is closely related to this guideline

NICE is currently developing the following guidance that is closely related to this guideline:

- The safe use and management of controlled drugs. NICE guideline. Publication expected March 2016.
- Mental health problems in people with learning disabilities. NICE guideline. Publication expected September 2016.
- Mental health of adults in contact with the criminal justice system. NICE guideline. Publication expected November 2016.

2.2 NICE quality standards

NICE quality standards that may need to be revised or updated when this guideline is published

- Attention deficit hyperactivity disorder (2013) NICE quality standard 39

2.3 NICE Pathways

When this guideline is published, the recommendations will update the current NICE Pathway on attention deficit hyperactivity disorder. NICE Pathways bring together all related NICE guidance and associated products on a topic in an interactive topic-based flow chart.

Other relevant NICE guidance will also be added to the NICE Pathway.

3 Context

3.1 Key facts and figures

Attention deficit hyperactivity disorder (ADHD) is characterised by symptoms across 2 domains: inattention, and hyperactivity or impulsivity. ADHD does not have any specific cause but various genetic and environmental risk factors may be involved in its development. For the purposes of this guideline, the term ADHD will cover both attention deficit hyperactivity disorder and hyperkinetic disorder.

Research indicates that at least 70% of people with ADHD have at least 1 other comorbidity. Common comorbidities in children and young people are disorders of mood, conduct, learning, motor control and communication, and anxiety disorders; common comorbidities in adults include personality disorders, bipolar disorder, obsessive-compulsive disorder and substance misuse.

Estimates of the prevalence of ADHD vary widely depending on the diagnostic criteria used. ADHD is estimated to affect 1–2% of children and young people in the UK if using the narrower ICD-10 diagnostic criteria but 3–9% of school-aged children and young people in the UK using the broader criteria of DSM-5. Studies of clinic-based diagnoses suggest that ADHD is 9 times more common in boys and men, although this gender imbalance is suggested to be a result of more boys being referred and then diagnosed.

ADHD affects children, young people and adults in different ways and to different degrees, and the consequences of severe ADHD can be serious for both the person and their family and carers. Children with ADHD often have low self-esteem and can develop other emotional and social problems.

The secondary effects of ADHD can also be damaging. Some children and young people with ADHD are at higher risk of accidental harm as a result of increased risk-taking. Moreover, children with ADHD are often exposed to years of negative feedback about their behaviour and this can result in poor educational attainment and social disadvantage. Many children referred for hyperactivity disorders continue to have problems into adulthood, including emotional and social problems, substance misuse, unemployment and involvement in crime.

The prescribing of stimulant drugs for ADHD reflects the increased frequency of diagnosis of this condition. The number of prescriptions for methylphenidate in the UK has increased from 420,421 in 2007 to 793,749 in 2014. The use of central nervous system stimulants has been controversial and there are concerns about prescribing them to children. Further anxieties surround the

potential for their inappropriate prescription, abuse and unauthorised trading or illegal selling.

3.2 Current practice

There are 2 main sets of diagnostic criteria for ADHD in use: the International Classification of Mental and Behavioural Disorders 10th Revision (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5).

The ICD-10 definition refers to hyperkinetic disorder, primarily evidenced by high abnormal levels of hyperactivity, and a combined subtype in which hyperactivity, impulsivity and inattention need to be present. This diagnosis is narrower than the DSM-5, including only people with more severe symptoms and impairment. ICD-10 also excludes any comorbidity, but for the purposes of this guideline coexisting conditions are accepted as a common aspect of the diagnosis and treatment of ADHD.

Eighteen symptoms are used in the DSM-5 and are divided into 2 domains: inattention, and hyperactivity or impulsivity. At least 6 symptoms in 1 domain are required for diagnosis. Both ICD-10 and DSM-5 require 6 months of symptoms. A significant proportion of adults may either not have had their ADHD diagnosed during childhood or adolescence or it may have been incorrectly diagnosed as another condition, for example as a mood or anxiety disorder. Changes in the DSM-5 have been made to facilitate application across the lifespan; including that ADHD symptoms must be present before age 12 years rather than 7 years.

For NICE's current advice on the diagnosis and management of ADHD, refer to existing NICE guideline on attention deficit hyperactivity disorder (CG72).

4 Further information

This is the final scope, incorporating comments from registered stakeholders during consultation.

The guideline is expected to be published in: February 2018.

You can follow progress of the guideline.

Our website has information about how NICE guidelines are developed.