Attention Deficit Hyperactivity Disorder: Information for Nurse led ADHD Clinics and School Nurses

- What is ADHD?
- What causes ADHD?
- The role of the specialist and school nurse in ADHD care
- Obtaining an assessment and diagnosis for ADHD
- Characteristics of ADHD
- Comorbid conditions
- How to treat ADHD
The emerging paradigm of integrated services across health, social care and education and integrated commissioning of services will inevitably impact service design and delivery for those professionals working with patients living with and requiring treatment for Attention Deficit Hyperactivity Disorder.

This booklet is designed to help nurses working in the assessment and treatment of childhood and adult ADHD in clinical settings and school and occupational settings. New nurse led services feature in coproduced and redesigned pathways, planning for professional development, inter agency working and efficient and cost effective service delivery.

The NHS states ADHD affects approximately 5% of the population. In 2018 ADHD is underdiagnosed in the UK with less than 3% diagnosed and less than 1% of the childhood population receiving medication as part of their treatment plan. ADHD is now recognised as a lifespan condition with increasing numbers of patients still requiring medical support and treatment in adulthood.

Stigma and misunderstanding may have prevented many parents and adults seeking a diagnosis and support. Pathways and service models are variable across the UK and many experience serious delays in providing access to assessment, diagnosis and treatment. Research suggests that undiagnosed, untreated ADHD increases the risk of mental health problems such as anxiety, depression, addiction, eating disorders, self-harm, attempted suicide and personality disorder.
The health outcomes and long term health care costs for undiagnosed and untreated ADHD are now better understood. The early identification, intervention and assessment diagnosis is therefore a new priority in service design and delivery of ADHD in community paediatrics and CAMHS.

Scientific research on neurodevelopmental conditions and innovation in service design and delivery has created a growing need for a unique specialised nurse & GP workforce, requiring new knowledge of the causes, diagnostic protocols and lifespan treatment of ADHD. GP Hubs and Nurse led clinics now play a crucial role in safe, cost effective, pre and post diagnostic pathways across the UK.

The 2018 updated NICE Guidelines state that patients with ADHD should have a comprehensive, holistic and shared treatment plan that addresses the psychological, educational, behavioural and occupational needs. Therefore multidisciplinary teams of professionals are collaborating to ensure that growing numbers of patients are able to access assessment, diagnosis through efficient, responsive and cost effective pathways. The UK is now seeing post titration models of health care devolving from secondary specialist care to primary care settings with GP Practices and nurse led services trained to provide medication reviews and support post diagnosis interventions and signposting.

This pamphlet is designed to inform GP Practice Nurses, GP’s and Nurse Led ADHD and Neurodevelopmental Clinics, many of whom are responsible for service design and coproduction of pathways and professional development of those nursing professionals working in ADHD and Neurodevelopmental clinical services.

This pamphlet also aims to reduce the delays and the anxiety experienced by patients when seeking health care and guidance on how to live successfully with ADHD. Improving patient experience of health care that enables them to become actively engaged and responsible in self-care, achieves better outcomes and reduced health care costs.
In the UK there is wide variation in multi-agency collaboration and in some NHS Trusts and alternative health care providers, both CAMHS and Community Paediatric Services may be responsible for childhood ADHD services. Many adult mental health services are now devolving care back to GP’s after diagnosis, with nurses and pharmacists actively involved in medication reviews and post-diagnostic treatment planning.

NHS Guidelines state clearly that treatment should be multi-modal, providing psycho-educative approaches to empower patient self-care, psychological therapies, parent skills training and peer group support. Particular emphasis should be given to periods of transition – especially when transitioning from children’s to adult services. Multi-agency transition planning should start one full year before such a transition.

New models of care also offer the opportunity to provide more user-friendly environments for young people to access adult ADHD services such as local GP surgeries and specialist hubs away from psychiatric hospital clinics with the opportunity to create lifespan services. Research evidence suggests that transition from CAMHS to AMHS is a critical juncture affecting the health and life chances of young people aged 16. A lifespan service would ensure a seamless and appropriate pathway to meet the changing needs of the patient.
Integrated services and commissioning necessitate that any service design is created to ensure that inter agency collaboration simplifies and improves health care. Referrers such as schools, colleges, universities, GP’s or other areas of secondary care, including accident and emergency services, need to be trained on how to identify patients who may have ADHD and how to make appropriate referrals. Information sharing protocols must be agreed and all agencies must understand their own role in meeting the needs of the patient with ADHD.

Over reliance on a purely medical model of support for those with ADHD, may increase dependencies and negatively impact on outcomes, resulting in increased costs for health services. Education and occupational knowledge and support will ensure appropriate contextual accommodations.

The patient must be at the centre of health care planning and be given the knowledge and skills for optimum self-care. Local support groups and peer support forums, including on line communities, can benefit patients who may experience isolation or lack of confidence when living through periods of difficulty and challenge.
ADHD is a thoroughly researched condition recognised by the NHS in the UK and guidelines are available on the diagnosis and treatment of ADHD from the National Institute of Health and Care Excellence. In Scotland this appears in the Scottish Intercollegiate Guidelines Network.

It is estimated that approximately 5% of children have ADHD and while it is considered a lifespan condition, by adulthood, many people have learned to live happy, healthy and successful lives using a range of interventions and strategies. These include medication, daily exercise, healthy nutrition, stress management strategies and what are known as ‘executive functioning skills’ to help them plan and organise their lives, especially in school and in the workplace.

ADHD has three main attributes:

- **Hyperactivity** – lots of energy and feeling the need to move about or fidget and sometimes resulting in poor sleep
- **Impulsivity** – an inability to self regulate thoughts, feelings and actions
- **Inattention** – difficulty concentrating and remembering information
Many clinicians now include the following in their diagnostic assessment:

1. Low emotional resilience and predisposition to other mental health difficulties

2. Poor executive functioning skills – an inability to organise and plan thoughts, emotions and actions that can impair daily functioning

Children and adults with ADHD will have varying degrees of these difficulties and will not all present the same symptomology. Some express sub types with two of the three core characteristics. The reclassification of ADHD from a behavioural disorder to a ‘neurodevelopmental’ disorder reflects the evidence that not all children or adults with ADHD display inappropriate or distressed behaviours.

The three core characteristics of ADHD are evident in all young children. A childhood assessment for ADHD is necessary when the characteristics are severe and above what is considered normative - measured using a variety of rating scales. Increasingly objective computer based cognitive functioning tests such as QB Test and QB Check are employed across the NHS to distinguish between cognitive functioning and observed behaviours.

In adulthood, a detailed history of the patient that includes their experiences in childhood is an essential part of any ADHD diagnostic assessment.
ADHD is a lifespan neuro-diverse condition. Childhood ADHD is a neurodevelopmental disorder affecting approximately 5% of the population. In 2013 DSM5 reclassified ADHD as a neurodevelopmental condition as distinct from a ‘behavioural’ disorder reflecting both the developmental delay typical of ADHD and recognising that children with ADHD do not always display distressing behaviours.

Distressing behaviours in children are now seen as a ‘stress response’ to environmental stimuli that can overwhelm a child. Challenging behaviours are distinct ‘learned behaviours’ that can be ‘stress response’ behaviours, or contextually and situational inappropriate behaviour, or the direct result of poor socialisation.

ADHD presentation in children must be evident across at least two domains – home and school. There can sometimes be conflicting views between home and school due to misconceptions of what ADHD is and is not. Subjective opinion obtained from observations should be investigated further if there is divergence of presentation across domains.
What causes ADHD?

While genetic in origin, research suggests that environmental factors such as parenting, education, traumatic experiences, brain injury, epilepsy, and comorbid cognitive impairments such as dyslexia, autism, dyspraxia, dyscalculia and Iren’s syndrome, will ultimately determine the severity of ADHD across the lifespan. Genetic factors are at the root of ADHD; however environmental factors invariably determine outcomes across a range of life chances and health. Therefore a comprehensive assessment by a trained clinician, psychiatrist or specialist paediatrician will be required to discern how ADHD is impacting on the patient’s quality of life and daily functioning so the most appropriate treatment can be prescribed.

There is no distinct biological marker to identify ADHD. Research suggests a complex interplay between numerous gene variants and environmental factors that delay development in the brains of children and impact on the regulation of neurotransmitters noradrenalin and dopamine. Structural and functional differences in the brains of those with ADHD are also evident.
Characteristics of ADHD

Hyperactivity
- Fidgets
- Inability to sit still
- Running or climbs excessively
- Difficulty engaging quietly in activities
- Moves excessively
- Excessive talking

Impulsivity
- Fails to consider consequences
- Blurs out answers
- Interrupts others
- Difficulty taking turns
Inattentiveness

- Does not listen
- Careless mistakes
- Difficulty sustaining attention
- Easily distracted
- Does not follow directions
- Loses things
- Disorganised
- Forgetful
School nurses play a valuable role in gathering information to support a diagnostic assessment. School nurses require training in understanding and identifying ADHD.

Poor behaviour is not always a sign of ADHD. Poor behaviour in school is often the result of children learning how to behave inappropriately in a school context. Learning is a trial and error process involving family and school to socialise the child to support their healthy psychological, social and intellectual development.

When the child appears not to be responding to what is asked of them, we have to ask ourselves what is the child’s behaviour communicating to us that they are not able to put into words? Sometimes children with learning difficulties become very frustrated, and lack self esteem because they find the school work more difficult than their classmates. This is known as ‘learner anxiety’ and this is most often the cause of any inappropriate behaviour.

School nurses should discuss the following with the child’s parents and teacher, and ask for a meeting with the school Special Educational Needs and Disabilities Co-ordinator (SENDCo). This role could alternatively be called the school Additional Learning Needs Co-ordinator (ALNCo).
Is the child paying attention and able to concentrate?

Is the child showing any delay in learning?

Is the child forgetting things?

Is the child appearing tired or daydreaming in class?

Is the child unable to be still when it is required?

Is the child unable to organise and plan their school work properly?

Does my child find it difficult making and keeping friends?

Have these difficulties been occurring for more than six months?

Is the child having difficulty with sleeping?

Note: These characteristics and concerns must be evident in both the home and school.
Some ADHD specialists refer to ADHD as a disorder of ‘self-regulation’. Self-regulation requires that a person have intact executive functions. Executive function refers to brain functions that activate, organise, integrate and manage other functions. It enables individuals to account for short and long-term consequences of their actions and to plan for those results. It also allows individuals to make real-time evaluations of their actions and make necessary adjustments if those actions are not achieving the desired result. This is hard to do when working memory, time management and organisation skills are affected by ADHD. Here is a list of executive functioning skills:

1. **Self-awareness**: Simply put, this is self-directed attention.
2. **Inhibition**: Also known as self-restraint – the ability to ‘not’ speak or act but to stop and think before speaking or acting.
3. **Non-Verbal Working Memory**: The ability to hold things in your mind. Essentially, visual imagery — how well you can picture things mentally.
4. **Verbal Working Memory**: Self-speech, or internal speech. Most people think of this as their “inner monologue.”
5. **Emotional Self-Regulation**: The ability to take the previous four executive functions and use them to manipulate your own emotional state. This means learning to use words, images, and your own self-awareness to process and alter how we feel about things.
6. **Self-motivation**: How well you can motivate yourself to complete a task when there is no immediate external consequence.
7. **Planning and Problem Solving**: Experts sometimes like to think of this as “self-play” — how we play with information in our minds to come up with new ways of doing something. By taking things apart and recombining them in different ways, we’re planning solutions to our problems.
How might poor ‘executive functioning’ present?

- Shutting down due to feeling overwhelmed by the amount of information
- Being unable to filter what’s important and what’s unimportant to focus on
- Being unable to motivate themselves
- Getting distracted by other things
- Being unable to do things well consistently
- Requiring somebody else to initiate and/or organise their tasks
- Forgetting the steps needed to complete a task
- Expressing an emotion every single time it is felt
- An inability to imagine how to get from start to end
- Not knowing where to start
- Forgetting the steps needed to complete a task
Children with ADHD appear to be developing more slowly than their peers. Some scientists estimate that this can be as much as one third of their chronological age. Children with ADHD can be seen as poorly behaved because their brains are developing at a slower pace than those of other children their age, so they appear immature which may be interpreted as difficult behaviour.

As the human brain reaches full maturity in adulthood, many young people transition successfully, achieving in education, employment and realizing their potential. Choices about what occupation suit them and how to navigate relationships become easier, underpinned by a clear understanding of how ADHD impacts on their choices and lifestyle. Relapses at times of crisis may require additional support and access to psychological therapies or other support networks.

**Psycho-educative support for parents, children and adults**

Learning that you have a lifespan neuro-diverse condition can be both difficult and a relief for the patient and their family. Equally, understanding ADHD, and how it can impact on your life, education, employment and relationships is an essential part of any treatment plan. Knowledge and skills on self management and self care will enable the patient to make lifestyle choices and acquire the skills necessary to reduce the risk of poor health outcomes. Age appropriate information leaflets and guidance on useful websites and support groups should be available at your clinic.
ADHD can also be associated with other neurodevelopmental conditions as detailed below. Autistic Spectrum Disorder and dyslexia are the most common co-occurring conditions for those with ADHD. Traits of other neurodevelopmental conditions may be evident but remain sub threshold for an additional diagnosis.
Research suggests that as many as 33% of those with ADHD will have at least one co-occurring neurodevelopmental condition and approximately 18% will have two co-occurring neurodevelopmental conditions. Dyslexia is the most common at 40% but children and adults may display traits of other sub threshold characteristics of autism, dyspraxia, dyscalculia and speech and language difficulties. Difficulty with sleep is very common in patients with ADHD which further impairs cognitive functioning and general physical health. Post pubescent children with ADHD often display oppositional behaviour which is a common occurrence in neuro-typical teenagers in this stage of neurological maturation.

Children with ADHD have an increased risk of developing comorbid conduct disorder and oppositional defiant disorder. CD and ODD are distinct psychiatric diagnoses that can be mistaken by schools and parents for ADHD, trauma or age related social and emotional difficulties. Historic stigma and stereotypes pertaining to ‘challenging behaviour’, can result in many parents and referrers mistaking CD and ODD for ADHD.

**The ADHD Iceberg**

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<thead>
<tr>
<th>What people see</th>
<th>Inattention</th>
<th>Hyperactivity</th>
<th>Impulsivity</th>
<th>Anxiety</th>
<th>Poor memory</th>
<th>Bipolar</th>
<th>Depression</th>
<th>Difficulty falling asleep</th>
<th>Difficulty concentrating</th>
<th>Impaired sense of time</th>
<th>Disorganization</th>
<th>Emotionally reactive</th>
<th>Difficulty planning</th>
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<tbody>
<tr>
<td>What people don’t see</td>
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Assessing, diagnosing and treating patients with both autism and ADHD can be complex and requires a greater level of expertise in choosing and trialling the most appropriate treatment for that individual patient. Many services offer a combined neurodevelopmental pathway for diagnosis and treatment as a part of the diagnostic assessment for ADHD to discern and inform treatment and patient care.

The prevalence of mental health difficulties such as addiction, self-harm, anxiety, depression, attempted suicide and increased risk of adverse responses to life cycle events is higher in the ADHD population. This increased risk should be factored into pathway design and treatment protocols to ensure that ADHD clinics can offer access to psychological therapies and multi agency interventions to ensure that we treat the person, not just the ‘medical condition’. Research suggests that 67% of patients with ADHD will experience at least one comorbid cognitive impairment or mental health difficulty. Comorbidities should be factored into treatment plans. Social prescribing emphasises the benefits of healthy lifestyle choices and the particular benefits of daily exercise, nutrition, good sleep and daily stress reduction strategies that support ADHD related dopaminergic and noradrenergic functioning.

**Key Steps:**

- Know the pathways in the area your clinic serves.
- School nurses and teachers know what ADHD is and how to complete an accurate feedback assessment.
- Parents are given guidance on how to accurately complete ADHD rating scales.
- Identify risk factors — family history of neurodevelopmental conditions; preterm birth, perinatal trauma, epilepsy, sleep disorder, anxiety disorder, PTSD, behaviour disorders.
Assessing children for ADHD

Children often lack the self-awareness or the vocabulary to communicate when they are experiencing mental distress or learning impairment. Children will communicate mental distress through behaviours such as avoidance, anger, tearfulness, sleeplessness, separation anxiety from primary carers such as mum and dad, problems with food and withdrawing from social interaction. School staff must to be trained and skilled to identify learning impairment. Schools and families must also be skilled in enabling children with ADHD related learning impairments and emotional dysregulation to learn ‘how’ to communicate their needs and develop emotional resilience. Many schools now offer parent skills programmes and parent peer support programmes to improve collaboration and care of children with additional needs.

It is an enduring myth that all children with ADHD have behavioural difficulties – what we now term as ‘distressed behaviour’. The school workforce requires greater levels of training and expertise in the early identification of children experiencing mental distress to ensure that they are better able to identify, refer and place immediate interventions into place in the school setting while waiting for a diagnostic assessment.

Poor concentration, poor memory, impulsivity and hyperactivity and inappropriate behaviour are common in all children who are experiencing mental distress and are therefore often mistaken by schools as an indication of ADHD. Unfortunately in the UK the imperative for a referral for an ADHD assessment has more often been based on behaviour considered inappropriate to a school setting – rather than a cognitive impairment. This results in many children with ADHD and related neurodevelopmental difficulties who are able to behave appropriately in a school setting, being overlooked and not referred for an ADHD assessment. This delay increases the risk of late diagnosis, presenting later in adolescence with co morbid mental health difficulties that impact on learning, academic attainment and behaviour.
This is particularly true of girls who are more frequently diagnosed later in adolescence. Some UK ADHD clinics report that inappropriate referrals from schools can account for anything between 25% and 57% of referrals. Significant costs therefore can be incurred if partner children’s services are not trained to more accurately identify and understand the needs of children with cognitive impairments such as ADHD and therefore make appropriate and timely referrals for diagnostic assessments.

Is your clinical setting child friendly? Key to any successful pathway is creating the right environment for children with neurodevelopmental conditions. Discuss and agree with colleagues and service users about whether your assessment and treatment rooms are child friendly and explore what can be done to improve the experience of children and families using your service.

Always allow time to share information with the family and offer patient information leaflets and signpost to support agencies and reliable online resources such as:

www.adhdfoundation.org.uk

www.additudemag.com

https://www.ukadhd.com/support-groups.htm

Information on support groups across the UK can be found on:

https://www.adhdfoundation.org.uk/information/useful-contacts/

Support for clinicians can also be obtained from:

www.adhdfoundation.org.uk

www.ukadhd.com

www.ukaan.org
Assessing the symptoms of ADHD in girls requires an understanding of the developmental differences in females. Many girls are often overlooked because hyperactivity—more frequent in boys is more noticeable and hyperactivity is interpreted as inappropriate in classroom settings—even though hyperactivity, fidgeting and constant movement are the brain’s natural way of regulating dopamine.

This is one of the reasons physical exercise and structured movements in school lessons support learning. This stereotypical view of ADHD is the reason an estimated 50 to 75% of cases of ADHD in girls are missed. Diagnosis is frequently later in girls and only identified when they have presented with mental health difficulties such as anxiety, depression, eating disorders and self harm.

**Indicators of ADHD in girls (in addition to core symptoms):**

- Talking all the time even when they have been instructed to stop
- Frequent crying and hypersensitivity / anxiety and low mood
- Persistent interrupting of others
- Daydreaming, mind wandering
A single point of access and school based referral pathways can reduce waiting times with information shared with GP’s.

Schools should be trained to better identify children with neurodevelopmental conditions and to use screening tools such as QB Check and behavioural observational scales such as SNAP, SWAN, ACE and Connors.

Training to enable teachers to modify teaching and learning strategies to reduce learner anxiety and enable children to acquire skills and strategies to support poor working memory and exam performance.

Training on understanding and supporting children who display distressed behaviour would benefit the school community; including educating all children about neuro-diversity (invisible disabilities) and taking ‘strength based approach’ to neuro-diversity that emphasises intelligence and giftedness in those with learning impairments.

Schools would benefit from training on how to integrate movement into lessons that benefit all learners, and specifically more opportunity for movement and physical exercise for children with ADHD.

Training for schools on how to implement school based parent skills training to enable parents to understand the additional needs and learning difficulties experienced by their child and the role the parent must play in supporting their child’s education and emotional well-being.
ADHD in Adults

Referrals for ADHD assessment and treatment in adults are increasing in the UK as the condition becomes less stigmatised and better understood. Many adults who struggled throughout their childhood and lived with undiagnosed, untreated ADHD are at greater risk of mental health problems in adulthood. GP’s now recognise that recurring mental health problems such as anxiety, depression, addiction can be indicators of ADHD in patients who also report childhood experiences that suggest an underlying lifespan cognitive impairment that was not identified or diagnosed in childhood.

As well as referrals via a family GP, referral pathways from substance misuse services and justice services such as custody suites and prisons should be introduced to address the gap in mental health care that increases the risk of substance misuse to self medicate, addiction and reoffending.

A variety of assessment tools can be used when making an initial referral for an adult assessment of ADHD. Effective screening tools will save both time and valuable resources. Much of the pre diagnostic assessment and screening can be undertaken by other professionals thus reducing the time required by a psychiatrist to make a formal diagnosis.

Objective cognitive functioning tests such as QB Tests can assist diagnostic interviews, self-rating scales and patient history to inform decision making about diagnosis and treatment.

Rating scales are an essential part of the full assessment process for attention-deficit hyperactivity disorder (ADHD). Rating scales vary in format and scope, recognising the need for multidisciplinary input on a patient’s condition and symptomatology, as addressed in guidelines for ADHD. For any specific requirement, particular rating scales will have associated strengths and limitations.

Commonly used rating scales include:

- Weiss Functional Impairment Scale (WFIRS)
- Barkley Functional Rating Scale (BFIS)
- Diagnostic Interview Rating Scale for Adults (DIVA)
Patient voice is essential in optimising any treatment plan and ensuring compliance with clinician’s guidance. Placing the patient at the centre of the plan encourages ownership and personal responsibility for self-care, lifestyle choices that support the desired outcomes agreed with the patient.

General health care checks that measure response to treatment include checking weight gain or loss, blood pressure and heart rate can be undertaken by the local GP or in a clinical setting. Optimised medication and treatment leading to stabilisation has offered the opportunity for some services to undertake monitoring interviews with a specialist clinician on line or by telephone.

Complex comorbidity requires a full multi-disciplinary team assessment, led by a senior clinician to ensure optimum treatment of ADHD and other mental health difficulties.

Multi modal approaches to treatment will offer the NHS the opportunity to provide evidence based psychological therapies as an alternative to medication or as alternative to changing medications which have previously been effective for the patient. Many environmental and lifestyle factors may impact on the patient’s experience of efficacy of medication. Support groups and social care agencies may have a role to play in ensuring the individual remains engaged and confident in living successfully with ADHD.
How to treat ADHD

There are a range of treatments and interventions for ADHD that include:

- Psycho educative training for parents, adults and children (information, advice, guidance)
- Parent skills training
- Cognitive behavioural therapy
- Systemic Family Therapy
- Stress reduction strategies such as progressive muscle relaxation, yoga, mindfulness and deep breathing
- Medication

The NHS NICE Guidelines recommend a ‘multi modal’ approach that may at times require the use of a combination of treatment which you can discuss with your ADHD specialist doctor.

Nutrition and Diet

A healthy balanced diet is essential for everyone and can also play a key role in the successful management of ADHD.

Hyperactivity can result in the body using up the energy obtained from food too quickly resulting in the body craving carbohydrates to restore its energy. Over reliance on carbohydrates can affect mood and result in frequent bouts of tiredness. It can also be a cause of weight gain through over eating. Regular meals, and depending on level of activity, regular snacks are needed to maintain energy levels.
Tiredness makes the body need energy from food and cravings for carbohydrates can be frequent and can also exacerbate peaks and troughs in energy levels. A balanced diet with proportionate levels of protein to ensure sustained release of energy are recommended.

**Shared Care Protocols between primary and secondary care**

Medical experts in secondary care increasingly devolve post diagnostic support to primary care settings to relieve the pressure on secondary care clinics and reduce costs. The complexities involved in medication monitoring for growing children however, requires more frequent reviews by secondary care community paediatricians and child psychiatrists. Training for primary care providers is key to the success of timely and cost effective care for patients with ADHD. New mechanisms, structures and a new culture of commissioning and delivering integrated services now requires a move to implement shared care protocols between primary and secondary care.

**Multi agency collaboration and coproduction of services**

Mental health is everyone’s business. A neuro-diverse paradigm in education and health care, recognises the increased prevalence of mental health difficulties of undiagnosed, untreated children and adults with ADHD, autism, and related neurodevelopmental conditions. This presents a unique challenge for commissioners, health care providers, education providers and any social care agencies who work with neuro-diverse families and individuals. **Successful nurse led clinics and multidisciplinary teams will map local support and collaborate effectively with other agencies to ensure optimum co produced lifespan services to meet the needs of the local ADHD population.**
A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development:

- **For children**, six or more of the symptoms have persisted for at least 6 months

- **For adults (age 17 and older)**, five or more symptoms are required

- Several inattentive or hyperactive-impulsive symptoms present by age 12 years

- Several inattentive or hyperactive-impulsive symptoms present in two or more settings (e.g. at home, school or work; and in other activities)

- Clear evidence that the symptoms interfere with, or reduce the quality of, social, academic or occupational functioning

NICE Guidelines 2018 on the diagnostic criteria and treatment of ADHD in England and Wales: [https://www.nice.org.uk/guidance/ng87](https://www.nice.org.uk/guidance/ng87)

Scotland SIGN Guidelines for ADHD: [https://www.sign.ac.uk/assets/sign112.pdf](https://www.sign.ac.uk/assets/sign112.pdf)


[https://www.icd10data.com/ICD10CM/Codes/F01-F99/F90-F98/F90-.F90.9](https://www.icd10data.com/ICD10CM/Codes/F01-F99/F90-F98/F90-.F90.9)
ADHD and Medication

There are a number of different medicines for ADHD. Medicines for ADHD that are licensed in the UK are:

- Methylphenidate (stimulant medication)
- Lisdexamphetamine (pre cursor stimulant medication)
- Dexamphetamine (stimulant medication)
- Atomoxetine (non stimulant medication)
- Guanfacine (non stimulant medication)

Non stimulant medications can take up to several weeks before there is a noticeable benefit. Stimulant medications become active within an hour of ingestion. There are some types of stimulant medication which last for only a short time – four hours or so; others are longer lasting and can continue to be active for eight to 12 hours.

There is no standard dose and prescribing clinicians titrate medication until everyone is agreed that the medication is working effectively. Treatment with medication can improve symptoms of ADHD quite dramatically. Medication is not a cure for ADHD. Outcomes for medication are best when used in conjunction with multi modal approaches to managing ADHD successfully.

Side effects of medications vary from individual to individual. Some patients report an upset stomach for the first few weeks of taking ADHD medications. For most people, these side effects disappear after a short time. It is important that patients make an informed and educated choice about treatment. Concerns about medication and possible side effects should be taken seriously and time taken to explain the benefits and clarify any misconceptions or stigma related to medication.

Patients on existing medications for other health concerns must receive expert guidance on combining pharmacological treatment. Any adverse reactions must be reported immediately. Blood pressure, ECG and weight must also be monitored at regular medication reviews annually after titration.
About Ethypharm

Ethypharm is an independent pharmaceutical company with global reach. It is dedicated to developing innovative drugs for the treatment of pain, addiction and CNS system.

Ethypharm has unique experience of more than 30 years in developing its own portfolio of drugs based on state-of-the-art proprietary technologies in oral formulation. Each year, the company invests a significant share of its turnover in R&D and has a rich pipeline of products at various stages of development.

Ethypharm also develop complex generics that contribute towards optimization of healthcare costs.

Ethypharm aims to be chosen by the NHS as a trusted provider of quality, affordable medicines that deliver sustainable value. Our medicines currently provide treatments for ADHD, depression, Parkinson’s and pain. Significantly as Category C specialists, Ethypharm is dedicated to providing meaningful cost savings to CCG’s/HB’s without compromising healthcare delivery for patients.

Disclaimer

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