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**Shared Care protocol for use by Hertfordshire providers**

**Protocol 02: Methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine and guanfacine prescribing and monitoring guidance for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children, young people and adults**

**Version 2.0**

**Shared Care protocol**

**This protocol provides prescribing and monitoring guidance for methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine and guanfacine\* therapy. It should be read in conjunction with the** [**HWE ICB shared care principles document**](https://www.hweclinicalguidance.nhs.uk/all-clinical-areas-documents/download?cid=1739&checksum=752d25a1f8dbfb2d656bac3094bfb81c)**, Summary of Product Characteristics (SPC) available on** [**www.medicines.org.uk/emc**](http://www.medicines.org.uk/emc) **and the** [**BNF**](https://bnf.nice.org.uk/) **/** [**BNFC**](https://bnfc.nice.org.uk/?ref=switch)**.**

**\*guanfacine in adults is outside the scope of this protocol**

This shared care agreement outlines responsibilities and suggested management for the prescribing of the above specified drugs for Attention Deficit Hyperactivity Disorder (ADHD) when the responsibility is shared between the specialist and general practitioner (GP). Sharing of care assumes communication between the specialist, GP and patient/parent(s) or carer(s). It is important that patients/parent(s) or carer(s) are consulted about treatment and are in agreement with it. The intention to share care should be explained to the patient/parent(s) or carer(s) by the specialist initiating treatment and consent obtained.

Prescribing of methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine, and guanfacine for the above indication will be initiated in Hertfordshire Partnership University NHS Foundation Trust (HPFT), including HertsONE ADHD clinic, or East and North Herts NHS Trust (ENHT) by a specialist for a minimum of 12 weeks or until stable (whichever is longer).

**The expectation is that these shared care guidelines should provide sufficient information to enable GPs to be confident to take on the clinical and legal responsibility for the prescribing and the monitoring of these drugs in stable patients**.

**[Please note use of guanfacine in adults is outside the scope of this protocol].**

The questions below will help to confirm this:

* Is the patient’s condition predictable or stable?
* Do you have the relevant knowledge, skills and access to equipment to allow you to safely prescribe and also to monitor treatment for adults as indicated in this shared care document?
* Have you been provided with relevant clinical details including monitoring data?
* Has this document and BNF/BNFc/SPC provided sufficient information for you to feel confident in accepting clinical and legal responsibility for prescribing?

**If you can answer YES to all of these questions (after reading this shared care guideline), then it is appropriate for you to accept the prescribing responsibility. GPs need to formally accept shared care by completing and returning the form provided in this protocol to the specialist within two weeks of receipt of request to share care.**

If the answer is NO to any of these questions, you should not accept prescribing responsibility. You should respond back to the specialist outlining your reasons for NOT prescribing on the agreement form within two weeks of receiving the request to share care using the form provided. If you do not have the confidence to prescribe, you still have the right to decline. In such an event, the total clinical responsibility for prescribing the medication and any monitoring required remains with the specialist. Please note that medication cost is not an acceptable reason for refusal to take on shared care.

The prescribing doctor legally assumes clinical responsibility for the drug and the consequences of its use.Any associated monitoring is the responsibility of the specialist for children and young people and the GP for adults, however **all results from monitoring must be communicated to the patient’s GP in order for them to continue to prescribe.**

The GP assumes clinical responsibility for prescribing the medication to children, young people and adults following an agreement to shared care and in the case of children and young people, following confirmation of patient attendance at an out-patient appointment with the specialist, via a clinic letter.

Prescribing responsibility (and monitoring responsibility for adults) will only be transferred when the specialist and the GP agree that the patient’s condition is stable or predictable after at least 12 weeks of treatment.

This Shared Care Protocol has been produced following NICE guidance issued in 2018 (last updated September 2019) on the diagnosis and management of ADHD1.

**BACKGROUND AND INDICATION(S) FOR USE**

ADHD is a common neurodevelopmental disorder characterised by age-inappropriate levels of hyperactivity, impulsivity and inattention.2 Those affected have difficulty regulating their activities to conform to expected norms, and often fail to achieve their potential. Many have comorbid difficulties such as developmental delays, specific learning problems and other emotional and behavioural disorders. Severe ADHD may be diagnosed as hyperkinetic disorder, which is characterised by a more severe disturbance with significant hyperactivity-impulsivity and inattentiveness.3

Although ADHD begins in childhood, research has shown that it can continue through to adulthood for some. Approximately 15% of children with ADHD retain the diagnosis by age 25. A much larger proportion (65%) are in partial remission, with persistence of some symptoms associated with continued impairment.4 In adults, social and occupational problems can be caused by difficulties in concentrating, paying attention to detail and completing tasks, together with impulsivity and an inability to plan ahead. Moreover, ADHD is commonly associated with mental health, addiction or behavioural problems.4

The NICE ADHD guidelines ([NG87](https://www.nice.org.uk/guidance/ng87))1 state that a diagnosis of ADHD in children, young people and adults should only be made by a paediatrician, specialist psychiatrist, or other appropriately qualified healthcare professional with training and expertise in the diagnosis of ADHD. For a diagnosis of ADHD, based on a complete history and evaluation of the patient, symptoms of hyperactivity/impulsivity and/or inattention should:

* + meet the diagnostic criteria in DSM- V or ICD-11, and
  + be associated with at least moderate psychological, social and/or educational or occupational impairment based on interview and/or direct observation in multiple settings, and
  + be pervasive, occurring in two or more important settings including social, familial, educational and/or occupational settings.

Drug treatment in ADHD is used for the control of symptoms but is not curative.5 In the UK, methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine and guanfacine are licensed for the management of ADHD in children and young people from the age of six years.6-10 Some dexamfetamine preparations are licensed for hyperkinetic states from three years of age, although NICE do not recommend drug treatment in those aged under 5 years of age.1,11 Some modified release methylphenidate products are also licensed for use in adults (new initiation where presence of ADHD in childhood is confirmed or those with persisting symptoms, where they were initiated in childhood and showed clear benefit).7,12-18 Atomoxetine and lisdexamfetamine are both licensed for initiation in adults, where the presence of ADHD symptoms in childhood are confirmed.8,19 Guanfacine is licensed for six to 17 year olds for whom stimulants are not suitable. It is not licensed for use in combination with stimulants or for adults with ADHD.10 **It should be noted that use of guanfacine in adults has not been approved in Hertfordshire, so it is not for primary care prescribing.**

**PRESCRIBING1**

* All Prescribers (specialists and GPs) should have good knowledge of the medicines used for the treatment of ADHD and their different preparations, including their pharmacokinetic profiles, thus allowing treatment to be tailored effectively to an individual (refer to BNF/BNFc and relevant SPCs).
* All prescribers should be aware that effect size, duration of effect and adverse effects vary from person to person.
* Specialists should think about using immediate and modified release (m/r) preparations to optimise effect (e.g. m/r preparation of methylphenidate in the morning and an immediate-release preparation of methylphenidate at another time of the day to extend the duration of effect).
* All prescribers must be cautious about prescribing stimulants if there is a risk of diversion, for cognitive enhancement or appetite suppression.
* All prescribers must NOT offer immediate-release or m/r stimulants that can be easily injected or insufflated if there is a risk of stimulant misuse or diversion.
* All prescribers should be familiar with the requirements of CD legislation governing the prescription and supply of stimulants – see NICE [NG46](https://www.nice.org.uk/guidance/ng46); Controlled drugs: safe use and management20. Prescribing should not exceed 30 days in duration by any prescriber.
* After titration and dose stabilisation by the specialist, prescribing and monitoring of ADHD medication should be carried out under Shared Care Protocol arrangements with primary care.
* NICE recommends consideration to trial periods of stopping medication or reducing the dose when assessment of the overall balance of benefits and harms suggests this may be appropriate. The specialist should make this assessment. If the decision is made to continue medication, the reasons for this should be documented.

**DOSE TITRATION1**

* All dose titration is done by the specialists.
* Titrate the dose against symptoms and adverse effects in line with the BNF or BNF for Children until dose optimisation is achieved, that is, reduced symptoms, positive behaviour change, improvements in education, employment and relationships, with tolerable adverse effects.
* Ensure that dose titration is slower and monitoring more frequent if any of the following are present:
* neurodevelopmental disorders, e.g. autism spectrum disorder, tic disorders, learning disability (intellectual disability),
* mental health conditions e.g. anxiety disorders (including obsessive–compulsive disorder), schizophrenia or bipolar disorder, depression, personality disorder, eating disorder, post-traumatic stress disorder, substance misuse,
* physical health conditions, e.g. cardiac disease, epilepsy or acquired brain injury.
* After titration and dose stabilisation, prescribing and monitoring of ADHD medication should be carried out under Shared Care Protocol arrangements with primary care.
* Effects and side-effects of drug treatment must be routinely monitored and recorded in the relevant electronic patient record (EPR).

**CHOICE OF MEDICATION**

**Children/young people aged ≥6 years**

* All initiations, switches and stabilisation should be done by the specialist service.
* First-line: offer methylphenidate (either short or long acting) for ADHD symptoms that are still causing a persistent significant impairment in at least one domain e.g. interpersonal relationships, education and occupational attainment, and risk awareness, after parents/carers/individual have received ADHD-focused information, group-based support has been offered and environmental modifications have been implemented and reviewed.
* Second-line: Consider switching to lisdexamfetamine for children/young people who have had a 6-week trial of methylphenidate at an adequate dose and not derived enough benefit in terms of reduced ADHD symptoms and associated impairment.
* Alternative second-line (reserved for when ADHD symptoms are responding to lisdexamfetamine but cannot tolerate the longer effect profile): Consider dexamfetamine.
* Third-line: Offer atomoxetine **OR** guanfacine if:

they cannot tolerate methylphenidate or lisdexamfetamine, **OR**

symptoms have not responded to separate 6-week trials of lisdexamfetamine and methylphenidate, having considered alternative preparations and adequate doses.

**Adults**

* All initiations, switches and stabilisation should be done by the specialist service.
* First-line: offer methylphenidate.
* Second-line: Consider switching to lisdexamfetamine for adults who have had a 6-week trial of methylphenidate at an adequate dose but have not derived enough benefit in terms of reduced ADHD symptoms and associated impairment.
* Alternative second-line (reserved for when ADHD symptoms are responding to lisdexamfetamine but cannot tolerate the longer effect profile): Consider dexamfetamine.
* Third-line: Offer atomoxetineto adults if they:

cannot tolerate methylphenidate or lisdexamfetamine, **OR**

have symptoms that have not responded to separate 6- week trials of methylphenidate and lisdexamfetamine, having considered alternative preparations and doses.

* Guanfacine for adults (off-label use) for ADHD has not been approved for use within Hertfordshire.

**N.B: Not all medications used for ADHD have a UK marketing authorisation for treating symptoms of ADHD in adults. Check individual**[**SPC**](http://www.medicines.org.uk/emc)**for details.**

**People with coexisting conditions**

* Offer the same medication choices to people with ADHD and anxiety disorder, tic disorder or autism spectrum disorder as other people with ADHD.
* For children/young people aged ≥6 years and adults experiencing an acute psychotic or manic episode:

stop any medication for ADHD,

consider restarting or starting new ADHD medication after the episode has resolved, taking into account the individual circumstances, risks and benefits of the ADHD medication.

**RESPONSIBILITIES (in line with HWE shared care principles:** [**HWE ICB Principles for Shared Care (hweclinicalguidance.nhs.uk)**](https://www.hweclinicalguidance.nhs.uk/all-clinical-areas-documents/download?cid=1739&checksum=752d25a1f8dbfb2d656bac3094bfb81c)**)**

**Specialist**

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| Assessment appointment | * + - * Confirm a diagnosis of ADHD in children, young people and adults following a full baseline assessment as detailed in Table 3.       * Decide on the most appropriate drug treatment and discuss benefits and side-effects with the patient and/or parent(s)/carer(s) and provide written information where appropriate.       * Provide pre-treatment counselling to the patient (and parent(s)/carers). This should include both written and verbal information on the rationale for treatment, benefits, time to response, potential side-effects and precautions, and obtain agreement to initiate treatment. Document discussion in electronic patient record (EPR).       * Carry out **baseline monitoring** which must be recorded in the EPR, and on the relevant charts (see On-going Monitoring Schedule below). |
| Initial prescription appointment | * Prescriber to initiate ADHD medication and inform GP of commencement of treatment and the monitoring parameters undertaken. * Adhere to the specific regulations for prescribing of methylphenidate, dexamfetamine and lisdexamfetamine which are controlled drugs. Prescriptions for methylphenidate, dexamfetamine and lisdexamfetamine are only valid for dispensing within 28 days from the date of signature and unless there are exceptional circumstances, each prescription should be for no more than 30 days supply. * Ensure that the patient / carers understand their treatment regimen and any monitoring or follow up that is required. Provide education on drug therapy to maximise compliance and ensure the patient / carers are aware of when to seek medical advice. * Give consideration to specific school policies on the use of medicines in schools if multiple daily doses in school age children are required. |
| Dose stabilisation appointments | * Monitor effectiveness of medication and adverse effects, taking into account the monitoring required for the specific ADHD medication. * Titrate initial dose against symptoms and side-effects over 4 - 6 weeks until dose optimisation has been reached and the patient’s condition is stable. * Record symptoms and side-effects at each dose change. The patient’s progress should be reviewed regularly. Maintaining close clinical contact by means of a telephone review may be beneficial for some patients. * Communicate with the GP a summary of the clinical review, including results of monitoring undertaken, changes to treatment / dose changes. * Issue shared care information to GP, inviting GP to enter shared care at/after week 12 when patient is stabilised on treatment. i.e., drug tolerated, dose stabilised and monitoring parameters are satisfactory. (Refer to Appendix 1). * Continue to issue prescriptions for the patient after treatment initiation until such time as the patient’s GP agrees to the shared care arrangement.   **SHARED CARE MUST FORMALLY BE ACCEPTED BY THE GP BY COMPLETION AND RETURN OF THE FORM PROVIDED WITHIN THIS PROTOCOL TO THE SPECIALIST** (Refer to Appendix 2). |
| Further specialist review appointments thereafter | * Carry out **on-going monitoring** for children and young people as specified in the ‘On-going Monitoring Schedule’ below. For adults, the on-going monitoring should be performed by the GP (see ‘On-going Monitoring Schedule’ below); however an annual specialist review can be requested if deemed appropriate. * Review the child or young person on at least a 6-monthly basis. * Adults to be reviewed by a specialist annually if requested to do so by the GP. The review should include a comprehensive assessment of clinical need, benefits and side-effects of medication and monitoring of blood pressure, pulse, weight, height (children/adolescents) and BMI where appropriate. * Write to GP with any dose change following clinic review. The specialist will be responsible for supplying a prescription for any dose adjustment. * Communicate diagnosis, behavioural problems, cognitive and functional scores, any dose changes of the same formulation that are needed and results of any physical monitoring to the GP. * Continue prescribing in children aged less than 6 years. When it is felt that patients aged 6 years or older may benefit from continued care by the primary care team and the patient’s condition/dose of methylphenidate, atomoxetine, dexamfetamine, lisdexamfetamine or guanfacine is stable, the GP may be asked to share care. (Use of guanfacine in adults is outside the scope of this protocol). * For adults, or young people after transition to adult services, adult services healthcare professionals should carry out a comprehensive assessment of the person with ADHD that includes personal, educational, occupational and social functioning, and assessment of any co-existing conditions, especially drug misuse, personality disorders, emotional problems and learning difficulties. * Report serious adverse events to the MHRA and inform the GP. * Take responsibility for stopping treatment if appropriate, including any treatment breaks. The effect of missed doses planned dose reductions and brief periods of no treatment should be taken into account for all treatments. * Provide support/advice to prescribing GP/primary care team as needed. * Communicate to the GP non-attendance of patients at outpatient appointments. The patient or their parent(s)/carer(s) should be sent a letter asking them to make another appointment as soon as possible. They will be informed that if they do not adhere to the follow-up plan at least once every 6 months, the specialist/GP will be unable to continue to prescribe medication. (Refer to Appendix 3). * Ensure that children/young people and adults receiving treatment for ADHD have review and follow-up according to the severity of their condition, regardless of whether or not they are taking medication. * The specialist should review medication at least once a year for children and young people and discuss with the person and their families/carers as appropriate, whether medication should be continued. * People with ADHD should be encouraged to discuss any preferences to stop or change medication and to be involved in any decisions about stopping treatments. |

**GP**

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| **First prescription appointment in specialist clinic** | * GP to contact specialist if any concerns regarding prescribing of ADHD medication for patient. |
| **Specialist dose stabilisation appointments** | * Respond to specialist request for shared care (refer to Appendix 1), once dose is stabilised, within two weeks of receipt of request.   **SHARED CARE MUST FORMALLY BE ACCEPTED BY THE GP BY COMPLETION AND RETURN OF THE FORM PROVIDED WITHIN THIS PROTOCOL TO THE SPECIALIST** (Refer to Appendix 2).   * Ensure a full understanding of the responsibilities for managing a patient on methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine, and guanfacine, including identification of side-effects in line with the relevant SPC. * If shared care is declined: clinical rationale to be provided and GP to copy patient/parent(s) or carer(s) into decline letter, so patient is aware hospital specialist will be providing the prescription. |
| **Specialist Review Appointments (where shared care has been accepted)** | * Ensure that any patient prescribed ADHD medication is appropriately coded on the GP clinical system to allow easy identification. * Issue prescriptions once patient has been stabilised on medication (usually after 12 weeks). * Provide repeat prescriptions after dose stabilisation. * Adhere to the specific regulations for prescribing of methylphenidate, dexamfetamine and lisdexamfetamine which are controlled drugs. Prescriptions for methylphenidate, dexamfetamine and lisdexamfetamine are only valid for dispensing within 28 days from the date of signature and, unless there are exceptional circumstances, each prescription should be for no more than 30 days’ supply. * Carry out on-going monitoring for adults as detailed in the On-going Monitoring Schedule below. * Adults must be reviewed once a year and the GP can request that this annual review be completed by the specialist, if deemed appropriate. This review should include a comprehensive assessment of clinical need, benefits and side-effects of medication and monitoring of blood pressure, pulse, weight & height (with BMI if appropriate). * Report any evidence of change in symptom control to the specialist. * Ask the patient whether they are experiencing side-effects and liaise with the specialist if necessary. * Report to and seek advice from the specialist on any aspect of patient care which is of concern and which may affect treatment. Refer anyone who develops signs of cardiac disease to an adult physician/cardiologist and inform the specialist. * Report serious adverse events to the MHRA and inform the specialist. * Follow specialist advice on any changes in treatment. * Notify the specialist of the patient’s failure to attend appointments. |

**Patient/parent(s) or carer(s)**

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| **Assessment appointment** | * Attend all appointments with the specialist and / or GP. * Report any adverse effects to the specialist or GP whilst under treatment. * Parent(s)/carer(s) to closely monitor the response to treatment. As a child gets older, the dosage requirement of medication may change. If a child or young person is not getting an optimal response e.g. if the effect of medication wears off in the afternoon and there is variability of ADHD symptoms etc. the specialist must be contacted to arrange a review. This review may be sooner than the next scheduled appointment. * Share any concerns they have in relation to treatment with the specialist or GP. * Ask the specialist or GP if the patient/parent(s) or carer(s) do not have a clear understanding of the treatment. |
| **First prescription appointment in a clinic** |
| **Specialist dose stabilisation appointments** |
| **Further specialist review & GP appointments thereafter** |

**Dispensing Pharmacist**

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| **First prescription appointment in a clinic** | * Ensure appropriate dose is prescribed with clear instructions on use, NOT ‘as directed’. * Ensure that the specific regulations for prescribing of methylphenidate, dexamfetamine and lisdexamfetamine which are controlled drugs have been adhered to. Prescriptions for methylphenidate, dexamfetamine and lisdexamfetamine are only valid for dispensing within 28 days from the date of signature and unless there are exceptional circumstances, each prescription should be for no more than 30 days’ supply. * Provide advice on adverse effects. * Provide advice on drug interactions with prescription and OTC medication. * Issue patient information leaflets. * Monitor frequency of prescription requests and contact prescriber if quantities in excess. * Confirm counselling has been received by the patient/parent(s) or carer(s) and provide additional information where appropriate. * Refer the patient back to the prescriber if there are any concerns with the ADHD therapy. |
| **Specialist dose stabilisation appointments** |
| **Further specialist review appointments thereafter** |

**CONTRAINDICATIONS**

Please refer to the relevant SPC via [www.medicines.org.uk/emc](http://www.medicines.org.uk/emc) for additional information.

**PRECAUTIONS**

Please refer to the relevant SPC via [www.medicines.org.uk/emc](http://www.medicines.org.uk/emc) for additional information

**DOSAGE**

Please note: The information in these tables is not exhaustive and is intended for guidance only. For full information (e.g. on doses, cautions, contra-indications and interactions) please refer to the current [BNF](https://bnf.nice.org.uk) / [BNFC](https://bnfc.nice.org.uk/?ref=switch) and the individual [SPC](https://www.medicines.org.uk/emc/).

**Table 1 – Dosing Guidance, Formulation(s) and Additional Prescribing Information** 1,6-19, 21-29

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| **1st LINE** | | | |
| **Medication** | **Formulation(s)** | **Dosing Guidance** | **Additional Prescribing Information** |
| **METHYLPHENIDATE**  CNS Stimulant  (Schedule 2 CD)  **METHYLPHENIDATE**  CNS Stimulant  (Schedule 2 CD) | **Immediate Release (IR) tablets**  Ritalin® 10mg tablets  Medikinet®  Tranquilyn®  Generics 5mg, 10mg and 20mg tablets  **N.B: Should be prescribed generically** | **CHILDREN**  **Child 6 - 17 years**: Initially 5mg once or twice daily, increased in steps of 5–10mg daily at weekly intervals, increased if necessary up to 2.1 mg/kg daily in 2–3 divided doses. The maximum licensed dose is 60mg daily in 2–3 doses. (Maximum of 90mg daily under the direction of a specialist).  **ADULTS**  **(Unlicensed for initiation in adults)**  Initially 5 mg two to three times a day, dose is increased, if necessary, at weekly intervals according to response up to a maximum of 100mg daily in 2–3 divided doses | * Begin with low doses and titrate dose against symptoms and side-effects over 4-6 weeks, until dose optimisation is achieved. * The IR tablets may be preferable during initial dose titration, particularly if flexible dose regimes are required. * Common adverse effects of methylphenidate preparations include insomnia, nervousness, headache, decreased appetite, abdominal pain and other gastrointestinal symptoms, cardiovascular effects such as tachycardia, palpitations, minor increase in blood pressure. * Associated with a worsening of pre-existing anxiety, agitation or tension and also with the onset or exacerbation of motor and verbal tics; monitor regularly. |
| **Modified Release (MR) tablets**  **NB: Should be prescribed by brand**  Concerta XL®  and the bioequivalent branded generics:  Delmosart XL®, Xaggitin XL®, Affenid XL®, Xenidate XL® (18mg, 27mg, 36mg and 54mg tablets)  Matoride XL® (18mg, 36mg, 54mg tablets)  IR:MR ratio = 22:78 | **CHILDREN**  **Child 6 – 17 years:** Initially 18mg once daily in the morning, increased in steps of 18mg every week, then adjusted according to response. Licensed maximum dose 54mg daily  **ADULTS**  Initially 18 mg once daily in the morning; adjusted at weekly intervals according to response. Licensed maximum dose 72mg daily  **NB: Xenidate XL® and Matoride XL® are not licensed for new initiations in adults** | * MR formulations may be preferred over IR formulations for the following reasons: * convenience, * improving adherence, * reducing stigma (no need to take medication at school or in the workplace), * reducing problems of storing and administering CDs at school, * the risk of stimulant misuse and diversion with immediate release preparations, * pharmacokinetic profiles * The different types of methylphenidate MR products are not interchangeable and the BNF recommends prescribing by brand name to avoid the risk of de-stabilisation from different release characteristics of the XL products dispensed generically. Refer to the MHRA [Drug Safety Update](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1106595/Sept-2022-DSU-PDF.pdf) for further information. * **See Table 2 below for IR and MR dose equivalents.** |
| **Modified Release (MR) capsules (see below)**  **NB: Should be prescribed by brand** | | |
| Equasym XL® (10mg, 20mg and 30mg capsules)  IR:MR ratio = 30:70 | **CHILDREN**  **Child 6 – 17 years:** 10mg once daily (in the morning), increased in steps of 10mg at weekly intervals if necessary. Licensed maximum dose 60mg daily.  **ADULTS**  **(Unlicensed for use in adults)**  Initially 10 mg once daily (in the morning); increased gradually at weekly intervals if necessary; maximum 100 mg per day. | * Equasym XL capsules should be taken preferably before breakfast. * Capsules can be opened, and contents sprinkled onto a small amount (tablespoon) of applesauce / yoghurt. Capsule contents should not be crushed or chewed. |
| Medikinet XL® (5mg, 10mg, 20mg, 30, 40mg, 50mg and 60mg capsules)  IR:MR ratio = 50:50 | **CHILDREN**  **Child 6 – 17 years:** 10mg once daily (in the morning), increased in steps of 10mg at weekly intervals if necessary. Licensed maximum dose 60mg daily.  **ADULTS**  10mg daily, increased at weekly intervals in steps of 10mg if necessary. The total daily dose should be given in two divided doses in the morning and at midday. Max dose based on body weight should not exceed 1mg/kg, with an absolute maximum of 80mg | * Take with or after breakfast (to obtain sufficiently prolonged action and to avoid high plasma peaks) * Capsules can be opened, and contents sprinkled onto a small amount (tablespoon) of applesauce or yoghurt. Capsule contents should not be crushed or chewed |
| Metyrol XL® and MeflynateXL® (10mg, 20mg, 30mg, 40mg and 60mg capsules)  IR:MR ratio = 50:50 | **CHILDREN**  **Child 6 – 17 years:** 20mg once daily in the morning (10mg can be used if considered appropriate), increased gradually as per response and tolerability. Licensed maximum dose 60mg daily.  **ADULTS**  20mg once daily in the morning. Increased in steps of 20mg at weekly intervals if necessary (smaller increments of 10mg may be used if considered appropriate). Maximum licensed dose 80mg daily. | * Metyrol XL and Meflynate XL can be taken with or without food. * Capsules can be opened, and contents sprinkled onto a small amount of soft food at e.g. applesauce. Capsule contents should not be crushed or chewed. |

**Note:** For completeness and safety all available preparations have been included in these tables for comparison purposes. Please link in with Trust pharmacy departments for ***preferred choices*** for individual drugs which are guided by current costs and supply considerations.

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| **2nd LINE** | | | |
| **Medication** | **Formulation(s)** | **Dosing Guidance** | * **Additional Prescribing Information** |
| **LISDEXAMFETAMINE**  CNS stimulant  (Schedule 2 CD)  To be considered if methylphenidate has not been successful / tolerated. | Elvanse® 20mg, 30mg, 40mg, 50mg, 60mg, 70mg capsules  ***(licensed in children and adults)***  Elvanse Adult® 20mg, 30mg, 40mg 50mg, 60mg, 70mg capsules  ***(licensed in adults only)*** | **CHILDREN**  **Child 6 - 17 years**: Initially 30mg once daily in the morning, increased in steps of 10 - 20mg at approximately weekly intervals if required. Maximum dose 70mg/day.  **ADULTS**  Initially 30mg once daily in the morning, increased in steps of 10 - 20mg at approximately weekly intervals if required. Maximum dose 70mg/day. | * A lower starting dose of 20mg once daily in the morning may be needed in some patients. * Capsules may be swallowed whole, or the capsule opened, and the entire content mixed with soft food (e.g. yoghurt) or in a glass of water /orange juice. * Common adverse effects include: insomnia, nervousness, headache, decreased appetite, abdominal pain and other gastrointestinal symptoms, and cardiovascular effects such as tachycardia, palpitations and minor increases in blood pressure. |
| **2nd LINE (Alternative)\*** | | | |
| **Medication** | **Formulation(s)** | **Dosing Guidance** | * **Additional Prescribing Information** |
| **DEXAMFETAMINE**  CNS Stimulant  (Schedule 2 CD)  \*Reserved for those who have benefitted from lisdexamfetamine but are unable to tolerate its longer duration of action. | Dexamfetamine generic 5mg tablets  Amfexa® 5mg, 10mg and 20mg tablets  Dexamfetamine 1mg/ml oral solution sugar-free  **NB: Should be prescribed generically** | **CHILDREN**  **Child 6 -17 years**: Initially 2.5 mg 2–3 times a day, increased in steps of 5 mg once weekly if required, usual maximum 1 mg/kg daily, up to 20 mg daily (40 mg daily has been required in some children); maintenance dose to be given in 2–4 divided doses.  **ADULTS**  **(unlicensed in adults)**  Initially 5 mg twice daily. Dose may be increased at weekly intervals according to response, up to a maximum of 60mg / day. maintenance dose to be given in 2–4 divided doses. | * More likely to be misused / diverted. * Begin with low doses and titrate dose against symptoms and side-effects over 4-6 weeks, until dose optimisation is achieved. * 25mg of lisdexamfetamine is the molecular equivalent to 10mg of dexamfetamine sulphate. * Adverse effects are broadly similar to those of lisdexamfetamine. |

**Note:** For completeness and safety all available preparations have been included in these tables for comparison purposes. Please link in with Trust pharmacy departments for ***preferred choices*** for individual drugs which are guided by current costs and supply considerations.

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| **3rd LINE** | | | |
| **Medication** | **Formulation(s)** | **Dosing Guidance** | * **Additional Prescribing Information** |
| **ATOMOXETINE**  Non-stimulant  (Selective noradrenaline reuptake inhibitor)  To be considered if methylphenidate or lisdexamfetamine has not been successful / tolerated. | Atomoxetine 10mg, 18mg, 25mg, 40mg, 60mg, 80mg, 100mg capsules  Atomoxetine generic and Strattera® 4mg/ml oral solution  **NB: Should be prescribed generically** | **CHILDREN**  **Child 6-17 years** **up to 70 kg body weight: I**nitially 0.5mg/kg/day. Increase dose after 7 days according to response, to a maintenance dose of approximately 1.2mg/kg/day.  \*High daily doses to be given under the direction of a specialist; maximum 1.8mg/kg/day; maximum 120mg/day.  **Child 6-17 years** **over 70 kg body weight:** Initially 40mg daily. Increase dose after 7 days according to response up to a maintenance dose of 80mg/day. \*High daily doses to be given by the specialist; maximum 120mg/day.  **(N.B:** **Doses above 100mg/day in children is not licensed and so should be prescribed by the specialist only)**  **ADULTS - *Atomoxetine doses in BNF may differ from those in product literature.***  **Up to 70 kg body weight**: Initially  0.5mg/kg/day. Increase dose after 7 days according to response, to a maintenance dose of approximately 1.2 mg/kg/day.  \*High daily doses to be given by the specialist; maximum 1.8mg/kg/day; maximum 120mg/day.  **Over 70 kg body weight**: initially 40mg/day. Increase dose after 7 days  according to response; maintenance 80-100mg daily.  \*High daily doses over 100mg to be given by the specialist; maximum 120mg/day  **(N.B:** **Doses above 100mg/day in adults is not licensed and so should be prescribed by the specialist only)** | * Useful where stimulants misuse / diversion is a problem or when ‘dopaminergic’ adverse effects (such as tics, anxiety) become a problem on stimulants. * Offer a single daily dose, or two evenly divided doses (morning and late afternoon / early evening) to minimise side effects or if response in inadequate with single daily dosing. * When switching from a stimulant to atomoxetine, continue stimulant for first 4 weeks of treatment. * Trial the maintenance dose for 6 weeks to determine effectiveness (specialist responsibility) * Common adverse effects include headache, somnolence, abdominal pain, nausea, vomiting, decreased appetite, early morning awakening, irritability and mood swings. Increased heart rate and small increases in blood pressure were observed in clinical trials. * Suicidal thoughts and behaviours have been reported; ensure patients and their parents/carers are informed and told to promptly report clinical worsening or appearance of signs / symptoms e.g. suicidal thoughts/behaviour, irritability, agitation or depression. * In rare cases may cause liver damage; advise individuals / carers of this risk and to seek prompt medical attention in the case of abdominal pain, unexplained nausea, malaise, darkening of the urine, or jaundice. Routine liver function tests are not recommended. * Use cautiously where there is a risk of QT interval prolongation (including other QT prolonging drugs) and with potent CYP2D6 inhibitors & poor metabolisers |

|  |  |  |  |
| --- | --- | --- | --- |
| **3rd LINE (for children and young people aged 6 – 17 only)** | | | |
| **Medication** | **Formulation(s)** | **Dosing Guidance** | * **Additional Prescribing Information** |
| **GUANFACINE**  Non-stimulant  (selective alpha 2A-adrenergic receptor agonist)  To be considered if methylphenidate or lisdexamfetamine has not been successful / tolerated. | Intuniv® modified release (MR) 1mg, 2mg, 3mg and 4mg tablets | **CHILDREN**  **Child 6 – 17 years:** Initially 1mg daily, increased by 1mg at weekly intervals if necessary and tolerated. Maintenance dose 0.05 - 0.12mg/kg once daily. Maximum licensed dose dependent on age and weight (see below):  Children 6 – 12 years ≥ 25kg: Maximum licensed dose 4mg once daily  Children 13 – 17 years:  Weight 34 - 41.4kg: Maximum licensed dose 4mg once daily  Weight 41.5 – 49.4kg: Maximum licensed dose 5mg once daily  Weight 49.5 – 58.4kg: Maximum licensed dose 6mg once daily  Weight ≥ 58.5kg: Maximum licensed dose 7mg once daily  \*For optimal weight-adjusted dose titrations refer to SPC | * Careful dose titration and monitoring is necessary at the start of treatment since clinical improvement and risks for several clinically significant adverse reactions (syncope, hypotension, bradycardia, somnolence and sedation) are dose and exposure related. * Patients / carers should be advised that somnolence and sedation can occur, particularly early in treatment or with dose increases. * Patients / carers should be advised not to administer guanfacine with high fat meals due to increased exposure. * Avoid abrupt discontinuation as this may cause a rebound increase in blood pressure and pulse. When stopping treatment, the dose must be tapered with decrements of no more than 1 mg every 3 to 7 days, and blood pressure and pulse should be monitored to minimise potential withdrawal effects. * Patients / carers should be instructed not to discontinue guanfacine without consulting their physician. * If a single dose is missed, the prescribed dose can resume the next day. If ≥ 2 consecutive doses are missed, re-titration is recommended based on the patient’s tolerability to guanfacine. * Common side effects of guanfacine include somnolence, headache, fatigue, abdominal pain and sedation. * Use cautiously where there is a risk of QT interval prolongation (including with other QT prolonging drugs) and with moderate / strong CYP3A4/5 inhibitors or CYP3A4/5 inducers – dose adjustments may be required. |

**Table 2 – Methylphenidate-immediate and modified- release dose equivalents (mg)1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IR methylphenidate (total daily dose)** | **Delmosart XL Affenid XL Xaggitin XL Concerta XL (once daily dose)** | **Xenidate XL**  **Matoride XL (once daily dose)** | **Equasym XL (once daily dose)** | **Medikinet XL**  **(once daily dose)** | **Metyrol XL Meflynate XL (once daily dose)** |
| 10 | - | - | 10 | 10 | 10 |
| 15 | 18 | 18 | - | - | - |
| 20 | - | - | 20 | 20 | 20 |
| 30 | 36 | 36 | 30 | 30 | 30 |
| 40 | - | - | 40 | 40 | 40 |
| 45 | 54  (maximum licensed dose for children) | 54 | - | - | - |
| 60 | 72  (maximum licensed dose for adults) | - | 60  (maximum licensed dose for children) | 60  (maximum licensed dose for children) | 60  (maximum licensed dose for children) |
| 80 | - | - | - | 80  (maximum licensed dose for adults) | 80  (maximum licensed dose for adults) |

**TIME TO RESPONSE**

Please refer to the relevant SPC via [www.medicines.org.uk/emc](http://www.medicines.org.uk/emc) for additional information.

**PRE-TREATMENT ASSESSMENT BY THE SPECIALIST1**

**Table 3 – Pre-treatment assessment by specialist (children, young people and adults)**

|  |  |
| --- | --- |
|  | **Initiation** |
| **Baseline monitoring (must be recorded in the Electronic Patient Record and on the relevant charts**) | A review to confirm that they continue to meet the criteria for ADHD and need treatment  A review of mental health and social circumstances, including:  presence of co-existing mental health and neurodevelopmental conditions,  current educational or employment circumstances,  risk assessment for substance misuse and drug diversion,  care needs.  A review of physical health, including:  a medical history, taking into account conditions that may be contraindications for specific medicines,  current medication,  height and weight (measured and recorded against the normal range for age, height and sex),  baseline pulse and BP (measured with an appropriately sized cuff and compared with the normal range for age),   a cardiovascular assessment including (but not limited to):   * Family history of cardiac disease or previous cardiac surgery * History of sudden death in 1st degree relative under 40 suggestive of cardiac disease * Shortness of breath on exertion compared to peers * Fainting on exertion or in response to fright / noise * Palpitations that are rapid, regular and start and stop suddenly * Chest pain suggesting cardiac origin * Murmur on examination * Referral for a cardiology opinion before starting ADHD medication if any of the above apply or if there are any other concerns * An ECG is required if the individual has any of the above features or a co-existing condition that is being treated with a medicine that may pose an increased cardiac risk.   NB. In addition to the above, before initiating guanfacine, a baseline evaluation is required to identify patients at increased risk of somnolence and sedation, hypotension and bradycardia, weight increase / risk of obesity. |

# MONITORING SCHEDULE OF ADHD MEDICATION1,10 INCLUDING MONITORING OF SIDE EFFECTS AND ACTIONS TO BE TAKEN

# Table 4 – Initial and ongoing monitoring of ADHD medicines (excluding guanfacine) by specialist in children and young people and initial monitoring in adults

# *N.B: See table 6 for ongoing monitoring of ADHD medications (excluding guanfacine) by GP in adults*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Frequency** | **Action** | **Intervention** |
| **Height**  **(children only)** | Initial: At baseline  Ongoing: 6 monthly | Record in Electronic Patient Record and plot height on a growth chart  Inform GP via clinic letter | If height is affected significantly over time, consider a planned break in drug treatment over the school holidays to allow “catch-up” growth |
| **Weight and appetite** | **Children ≤ 10 years**  Initial: At baseline  Ongoing: 3 monthly  **Children ≥ 10 years and young people**  Initial: At base line  Ongoing**:** At 3 and 6 months after starting medication, and 6 monthly  thereafter  **Adults**  Initial: At baseline | Record in Electronic Patient Record and plot weight on a growth chart  Inform GP via clinic letter | Monitor weight more frequently if concerns arise.  Strategies to reduce weight loss, or manage decreased weight gain include:   * Taking medication with or after food rather than before meals * Eating additional meals or snacks early in the morning or late evening when stimulant effects have worn off * Obtaining dietary advice and eating high calorie foods of good nutritional value * Taking a planned break from treatment or changing medication     Consider monitoring BMI in adults if there have been weight changes as a result of their treatment and consider changing treatment if the weight change persists. |
| **Heart rate** | **Children and adults**  Initial: At baseline and before and after each dose change  **Children**  Ongoing: 6 monthly  and before and after  each dose change | Compare result  with normal range for age  Record on Electronic Patient Record  and plot on a  centile chart  Send result in  clinic letter to GP | If there is sustained resting tachycardia (more than 120 beats per minute) or arrhythmia measured on 2 occasions, reduce the dose of medication and refer to a paediatric hypertension specialist/adult physician |
| **Blood**  **Pressure** | If the systolic blood pressure is greater than the 95th percentile (or a clinically significant increase) measured on two occasions, reduce the dose of medication and refer to a paediatric hypertension specialist/adult physician |
| **Sleep disturbances** | Initial: At every dose adjustment  Ongoing: At appointments | Record on Electronic Patient Record and inform GP of any changes | Monitor changes in sleep patten (for example, with a sleep diary) and adjust medication accordingly |
| **Seizures** | Initial: At every dose adjustment  Ongoing: At  appointments | Record on Electronic Patient Record and inform GP of any changes | If new seizures develop or there is worsening of existing seizures, review the ADHD medication and stop any medication that may be contributing to the seizures. After investigation, cautiously reintroduce ADHD medication if it is unlikely to be the cause of seizure |
| **Mood / behaviour changes** | Initial: At every dose adjustment and as required  Ongoing: As required or at appointments (at least 6 monthly) | Record on Electronic Patient Record and inform GP of any changes | Monitor the behavioural response to medication and if behaviour / mood worsens (e.g. appearance or worsening of suicidal behaviour, self-harm, hostility, agitation) adjust medication accordingly and review diagnosis if necessary.  Patients / carers should also be advised of this risk and made aware of possible signs and symptoms and if noticed to report back to the specialist immediately. |
| **Risk of diversion, substance misuse and abuse** | Initial: At base line and as required  Ongoing: As required and at appointments (at least 6 monthly) | Record in Electronic Patient Record and inform GP of any changes | Patients should be assessed and monitored for the risk of diversion, misuse and abuse of CNS stimulants such as methylphenidate, dexamphetamine and lisdexamfetamine.  Monitor for changes in the potential for drug misuse and diversion, which may come with changes in circumstances and age.  Ongoing requests for frequent repeat prescriptions deemed unnecessary. should be communicated to the specialist. |
| **Tics** | Initial: At dose adjustments  Ongoing: At appointments | Record in Electronic Patient Record and inform GP of any changes | Consider a period of watchful waiting (3 months) as tics naturally wax and wane and if the impairment associated with the tics outweigh benefits of ADHD treatment.  If the tics are stimulant related, consider:   * Reducing the stimulant dose * Switching to guanfacine (in children and young people) or atomoxetine * Stopping medication |
| **Liver impairment (Atomoxetine only)** | Initial: At dose adjustments  Ongoing: At appointments | Record in Electronic Patient Record and inform GP of any changes | Rare side effect of atomoxetine, however, it is important to be vigilant for signs and symptoms e.g. abdominal pain, unexplained nausea, malaise, darkening of urine, jaundice. Patients and carers should be advised to seek prompt medical attention if these symptoms develop.  Routine LFT tests are not required unless clinically indicated. |

# Table 5 – Initial and ongoing monitoring schedule of guanfacine by specialist in children and young people

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Frequency** | **Action** | **Intervention** |
| **Height, Weight and BMI** | Initial: At baseline  Ongoing: Every 3 months for the first 12 months and 6 monthly thereafter, with more frequent monitoring following any dose  adjustments. | Record in Electronic Patient Record and plot weight and height on a growth chart  Inform GP via clinic letter | Children and adolescents treated with guanfacine may show an increase in their BMI.  Provide support on healthy lifestyle interventions if weight and BMI outside healthy range. If difficulty persists consider a dose reduction, treatment break or a change in ADHD medication. |
| **Blood pressure & heart rate (including signs and symptoms of hypotension and bradycardia)** | Initial: At baseline, then weekly during dose titration and stabilisation  Ongoing: then every 3 months for the first 12 months and 6 monthly thereafter and more frequent monitoring following any dose adjustment.  Monitor BP and pulse on dose reduction or discontinuation of treatment. | Compare result with normal range for age  Record on Electronic Patient Record and plot on a centile chart  Send result in  clinic letter to GP | Patients and carers should be advised to report signs and symptoms of bradycardia and hypotension e.g. fatigue, dizziness, palpitations, feeling faint / fainting to the specialist without delay.  If sustained hypotension / orthostatic hypotension or low pulse reduce the dose or consider switching to another ADHD medication; consider referral / seeking advice to a paediatrician if deemed necessary.  Blood pressure and pulse may increase following discontinuation. Dose should be reduced gradually (see SPC) and BP and pulse monitored. If there are signs of clinically significant rebound hypertension or tachycardia, consider referring to a specialist paediatrician. |
| **Somnolence and sedation (signs and symptoms)** | Initial: Monitor at baseline, then weekly during dose titration and stabilisation  Ongoing: then every 3 months for the first 12 months and 6 monthly thereafter with more frequent monitoring following any dose adjustments | Record in Electronic Patient Record and inform GP of any changes | Somnolence and sedation typically occur during the start of treatment and with dose increases. Review timing of dose and lifestyle factors.  If somnolence and sedation are judged to be clinically concerning or persistent, a dose decrease, or discontinuation should be considered. |
| **Mood / behaviour changes (e.g. appearance / worsening of suicidal behaviour, self-harm or hostility)** | Initial: At dose adjustments during initiation and drug optimisation  Ongoing: then every 3 months for the first 12 months and 6 monthly thereafter with more frequent monitoring following any dose adjustments | Record in Electronic Patient Record and inform GP of any changes | Monitor the behavioural response to medication and if behaviour / mood worsens (e.g. appearance or worsening of suicidal behaviour, self-harm, hostility, agitation).   * Review patient and exclude other causes. * Treatment of an underlying psychiatric condition may be necessary. * Consider discontinuation or a change in ADHD treatment.   Patients/ carers should be advised of this risk and made aware of possible signs/symptoms to report back to the specialist immediately if noticed. |

# The GP/primary care team is not required to carry out routine heart rate and blood pressure monitoring for children and young people, this responsibility remains with the specialist

**Table 6 – Ongoing monitoring of ADHD medicines excluding guanfacine by GP in Adults**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Frequency** | **Action** | **Intervention** |
| **Weight and appetite** | 6 monthly | Record in Electronic Patient Record | Monitor BMI if there is evidence of weight loss / weight changes as a result of their treatment.  Strategies to reduce weight loss, or manage  decreased weight gain include:   * Taking medication with or after food rather than before meals * Eating additional meals or snacks early morning or late evening when stimulant effects have worn off * Obtaining dietary advice and eating high calorie foods of good nutritional value * Taking a planned break from treatment or changing medication |
| **Heart rate** | 6 monthly | Record in Electronic Patient Record | If there is sustained resting tachycardia (more than 120 beats per minute) or arrhythmia measured on 2 occasions, reduce the dose of medication and refer to an adult physician. |
| **Blood**  **Pressure** | 6 monthly | Record in Electronic Patient Record | If there is a clinically significant increase in blood pressure measured on two occasions, refer to an adult physician. |
| **Sleep disturbances** | At least six monthly | Record in Electronic Patient Record | Monitor changes in sleep patten (for example, with a sleep diary). If there are any concerns seek advice from the specialist. |
| **Seizures** | At least 6 monthly | Record in Electronic Patient Record | Monitor for the development of new seizures or worsening of existing seizures, review the medication and stop any treatment that may be contributing towards the seizures and notify the specialist. |
| **Mood / behaviour changes** | At least 6 monthly | Record in Electronic Patient Records | Notify the specialist immediately if there are noticeable changes / changes reported in behaviour or mood (e.g. appearance or worsening of suicidal behaviour, self-harm, hostility, agitation). |
| **Risk of diversion, substance misuse and abuse** | As required and at least 6 monthly | Record in Electronic Patient Record | Patients should be monitored for the risk of diversion, misuse and abuse of CNS stimulants such as methylphenidate, dexamphetamine and lisdexamfetamine.  Ongoing requests for frequent repeat prescriptions deemed unnecessary should be communicated to the specialist. |
| **Tics** | At least 6 monthly | Record in Electronic Patient Record | Consider a period of watchful waiting (3 months) as tics naturally wax and wane. If tics are thought to be related to ADHD medication seek advice from the specialist. |
| **Liver impairment (Atomoxetine only)** | As required and at least 6 monthly | Record in Electronic Patient Record | Rare side effect of Atomoxetine, however, it is important to be vigilant for signs and symptoms e.g. abdominal pain, unexplained nausea, malaise, darkening of urine, jaundice. If signs / symptoms of liver impairment noticed or reported by patient / carer, notify the specialist immediately and refer to acute services if necessary.  Routine LFT tests are not required unless clinically indicated. |

**Adults must be reviewed once a year and the GP can request that this annual review be completed by the specialist, if deemed appropriate.**

**NOTABLE DRUG INTERACTIONS**

Please refer to the [BNF](https://bnf.nice.org.uk/) / [BNFC](https://bnfc.nice.org.uk/?ref=switch) and the relevant SPC via [www.medicines.org.uk/emc](http://www.medicines.org.uk/emc) for additional information.

**BACK-UP INFORMATION / ADVICE (including out of hours contact details)**

|  |
| --- |
| **CONTACT DETAILS** |
| **Single Point of Access (SPA)**  Tel:  0300 777 0707  Email: [hpft.spa@nhs.net](mailto:hpft.spa@nhs.net) |
| **North Herts CAMHS**  ***Saffron Ground, Stevenage*;** Tel: 01438 792600 |
| **East Herts CAMHS**  ***Rosanne House, WGC*;** Tel: 01707 364001  ***Hoddesdon Health Centre, Hoddesdon*;** Tel: 01992 465042  ***Oxford House, Bishop Stortford*;** Tel: 01279 698920 |
| **South Herts CAMHS**  ***Peace Children’s Centre, Watford*;** Tel: 01923 470610  ***Civic Centre, Hertsmere*;** Tel: 020 8731 3000 |
| **West Herts CAMHS**  ***Waverley Road, St. Albans*;** 01727 804806 / 804214  ***Churchill Ward, Hemel Hempstead*;** 01442 259132 / 216062 |
| **HertsONE ADHD service**  **HertsOne GP Federation, Hemel Hempstead;** Tel: 07538472817  Email: [hweicbhv.hertsoneadhd@nhs.net](mailto:hweicbhv.hertsoneadhd@nhs.net) |
| **ENHT ADHD service**  BACK-UP INFORMATION/ADVICE - business hours only  **Child Development Clinic (CDC), Danestrete, Stevenage;** Tel: 01438 737740  **ADHD Clinic, Hertford County Hospital North Road, Hertford;** Tel: 01438 314333  **Child Development Clinic (CDC), New QEII Hospital, Howlands, Welwyn Garden City**; Tel:  01438 288431/2 |

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# Summary of Product Characteristics. Strattera® 4mg/ml oral solution. Eli Lilly and Company Ltd. Last updated Jan 2021 [SPC](http://www.medicines.org.uk/emc/)

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# [BNF](https://bnf.nice.org.uk/) Last updated May 2024

# [BNF for children](https://bnfc.nice.org.uk/) Last updated May 2024

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# 1–8. DOI: 10.1177/1755738016642792Magon: [ADHD in Adults](http://journals.sagepub.com/doi/full/10.1177/1755738016642792)

|  |  |
| --- | --- |
| Title of Guideline | Methylphenidate, atomoxetine, dexamfetamine, and lisdexamfetamine prescribing and monitoring guidance for treatment of Attention Deficit Hyperactivity Disorder in children, young people and adults.  Amended for version 2:  Methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine and guanfacine prescribing and monitoring guidance for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children, young people and adults |
| Guideline Number | 02 |
| Version | 2.0 |
| Effective Date | June 2024 |
| Review Date | June 2026 |
| Original Version Produced | 2010 |
| ***Approvals:*** | |
| Provider Trust Drug / Formulary Management Group (e.g. MUSP, TPC) | Hertfordshire Partnership University NHS Foundation Trust July 2017 |
| Hertfordshire Medicines Management Committee | Treatment pathway update – October 2018; full shared care protocol for noting at February 2019 meeting. |
| Hertfordshire & West Essex Area Prescribing Committee | Minor amendments to incorporate use by the new HertsONE service for noting at September 2023 meeting. |
| Hertfordshire & West Essex Area Prescribing Committee | Update to the guideline to incorporate use of guanfacine in children at June 2024 meeting |
| Author/s | Promilla Singh |
| Department(s) responsible for updating the guideline | Hertfordshire Partnership University NHS Foundation Trust Pharmacy and Medicines Optimisation Team |

**Hertfordshire Shared Care Agreement Request Form (Appendix 1)**

**This form is used to agree shared care between the specialist, patient and GP for methylphenidate, lisdexamfetamine, dexamfetamine, atomoxetine, and guanfacine\* for use in children, young people and adults with ADHD as follows: [\*Guanfacine shared care is for children and young people ONLY]**

1. Specialist to provide pre-treatment counseling and discuss patient responsibilities.
2. Specialist to prescribe for a minimum of the initial 12 weeks of treatment. Thereafter a GP can be requested to continue treatment provided the patient is stable.
3. Establish that the clinician responsible for prescribing assumes clinical responsibility for the drug and the consequences of its use. **Any associated monitoring is the responsibility of the hospital specialist for children and young people; the results of such monitoring must be available to the GP in order for the GP to take on legal responsibility for prescribing. The GP is responsible for any associated monitoring in adults.** (see tables 4&5 and 6 of the ADHD shared care guideline for the ongoing monitoring schedules in children / young people and adults respectively)
4. The specialist and patient to complete and sign the shared care agreement form.
5. Copy to be filed in patient’s electronic patient record (EPR).
6. Agreement form, drug specific protocol and responsibilities to be promptly communicated to the GP (by fax or secure e-mail) and copies given to patient.
7. GP must formally accept transfer to shared care and have the right to refuse if they do not feel confident in managing the medicine/patient. GP to respond to the specialist within two weeks of receipt of the shared care agreement either accepting or declining shared care by returning the form below.
8. Scan copy of shared care agreement form, protocol and responsibilities into patient’s notes.

**For completion by specialist**

**Drug(s) and dose: ……………………………………………………………………………………**

*(for methylphenidate modified release preparations, please specify the brand name above)*

**Indication ..………………………………………….………………………………………………………..**

**Date of first prescription by specialist ……………………… Patient weight (kg) ………………**

**Estimated date for prescribing to be continued by the GP …………………………………...…….**

**Specialist additional comments/advice ………………………….……………………………………..**

**…………………………………………………………………………………………………………………**

**We accept:**

* the HWE ICB shared care principles and
* the requirements defined in the drug specific shared care protocol(s)

|  |  |  |
| --- | --- | --- |
|  | **Contact details** | **Signature and date** |
| **Patient name, NHS number and address or sticker** |  |  |
| **Specialist name and designation** | Tel  Email |  |

***Monitoring completed***

|  |  |  |
| --- | --- | --- |
| **Monitoring requirements** | **Date last measured/monitored** | **Result** |
| **Heart rate** |  |  |
| **Blood pressure** |  |  |
| **Height (children and adolescents)** |  |  |
| **Weight** |  |  |
| **Appetite assessed** |  |  |
| **Development/worsening of psychiatric disorders** |  |  |
| **Risk of diversion, substance misuse and abuse** |  |  |
| **Other clinically significant adverse effects** |  |  |

**GP response to shared care (Appendix 2)**

**(Please return to specialist within two weeks of receipt of request to share care)**

***This form is to be completed by the GP who is requested to share care. A copy of the completed form should be retained by the GP and a copy should be returned to the specialist.***

|  |  |
| --- | --- |
| **Patient details:** | |
| **Name:** | **NHS number:** |
| **D.O.B:** | **Drug requested for shared care:** |
| **Consultant:** |

I agree to accept shared care for this patient as set out in the shared care protocol

I do not accept shared care for this patient.

My reason(s) for not prescribing are given below:

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Please note that GP agreement is voluntary, with the right to decline to share care if for any reason you do not feel confident in accepting clinical responsibility. Refusal should not be for financial reasons.

|  |  |
| --- | --- |
| **GP name** | **Practice address /stamp:** |
| **Direct telephone number:** |
| **Email:** |
| **Date:** | **Signature:** |

**Please return a copy of the completed form to the requesting specialist within two weeks of receipt of request to share care (preferably by email).**

A close-up of a logo

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|  |  |
| --- | --- |
| Ref:  Date:  Address: | Team Details:  Tel No: |

Dear Parents / Carers

**Re:…………………………. DOB:……………………… NHS No:……………………...**

I am sorry that you have not been able to attend our clinic on:………………………………………

An appointment letter was sent out and our admin team have sent you a text message notification before your appointment. Please let us know whether you have not received any of the above, as we need to ensure that we have the most up-to-date contact details.

Please contact the clinic ASAP to organise another appointment so that …………………. can be reviewed.

As we have mentioned previously, it is really important that …..……………… is **seen regularly for follow-up appointments at least once in every six months, as per the shared care protocol** we have agreed with the GP.

If you are unable to attend the above appointment, we and the GP **will not be able to continue to prescribe the ADHD medications under the shared care protocol.**

If you have any urgent concerns about ………………………, especially any risk of harm to self or others, please attend your nearest A&E or dial 999; alternatively for telephone support contact the Hertfordshire Partnership Mental Health Helpline on 01483 843 322 (between 5.00pm and 9.00am Monday to Friday and 24 hours on weekends and bank holidays). If possible, contact your GP for an urgent review.

If you have any queries, please do not hesitate to contact me.

Yours sincerely,

Consultant Psychiatrist