NHSL Prescribing Guideline for the Treatment of Attention Deficit Hyperactivity Disorder (ADHD) in Children, Young People & Adults

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Governance	Mental Health & Learning Disabilities Clinical Governance Group
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Contents

Change Record

Date	Change	Change Made By	Version No.
June 2020	Updated guidance replaces version 2.0 New Format and additional sections Updated in line with NICE 87 No change to local responsibilities	L Dewar	3.0

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1.0 Aim

The aim of this document is to provide guidance and standardisation in the safe and appropriate pharmacological treatment of Attention Deficit Hyperactivity Disorder (ADHD) across NHS Lanarkshire, in all mental health sub-specialties and paediatrics. It is also hoped that these guidelines will assist in service planning for ADHD management in NHS Lanarkshire.

2.0 Introduction

The core features of ADHD are excessive motor activity, inattention and impulsiveness. Those with ADHD experience significant social, academic and psychological impairment at every stage of their development. Compared with their normally developing peers, children with ADHD experience more negative peer relationships, higher rates of academic failure, earlier school leaving, and increased incidence of other psychiatric disorders such as anxiety, depression or substance misuse. ADHD and its associated impairments can persist. It is estimated that up to two thirds of children affected by ADHD continue to have problems into adulthood. Although impulsivity and hyperactivity seem to diminish with age, attention problems often persist into adulthood.

ADHD is one of the most widely researched areas in psychiatry but in spite of this there can be considerable variation in its management. Treatment often involves professionals from a variety of backgrounds, including general practitioners, health visitors, teachers, psychologists, psychiatrists, nurses, pharmacists, paediatricians and social workers. Following initial diagnosis there should be formulation of a treatment package, which must be individualised depending on the specific needs of the individual. Interventions can broadly be divided into non-pharmacological and pharmacological. Non–pharmacological interventions are not included within this guideline. Pharmacological interventions are indicated in those who have severe, pervasive and impairing symptoms of ADHD, or where other interventions are unavailable or have been unsuccessful.

3.0 Recognition and Diagnosis

It is important to recognise that there are patient groups who have an increased prevalence of ADHD compared to the general population. These include people with neurodevelopment disorders, other mental health conditions, acquired brain injury, epilepsy, family history of ADHD, history of substance misuse and people known to adult/juvenile criminal justice systems. Refer to NICE Guidance NG87/Recognition & Identification for more information.

A diagnosis of ADHD should be made by a psychiatrist, CAMHS clinician or paediatrician with specialist expertise in ADHD. For adults the diagnosis of ADHD may have been made in childhood or adolescence and the condition has persisted into adulthood. For adults who do not have a childhood diagnosis of ADHD there should be evidence of typical manifestations of ADHD that have been present during childhood and have persisted through life and are not explained by other psychiatric diagnoses (although there may be other coexisting psychiatric conditions). For further guidance on the considerations relevant to an appropriate diagnosis for ADHD refer to NICE guidance NG87/Diagnosis and for adults RCPsych (Scotland) ADHD in Adults: Good Practice Guidelines

4.0 General Advice on the Use of Medication in ADHD

- This guideline does not offer advice for children under the age of 6 years as medication is off-label in this age group, however NICE advice discusses medication in children 5 years and over.
- Ensure NICE recommendations on non-pharmacological treatment are followed prior to considering medication. NICE Guidance NG87/Managing ADHD
- All medication should be used in conjunction with psychological interventions, where available.
- All medication should be monitored in accordance with these guidelines.
- Contraindications should be excluded before initiating medication.
- Consideration should be given to drug interactions with current medication and the ADHD medicine.
- For the most up to date prescribing information, these guidelines should be read together with the current British National Formulary (BNF) and the Summaries of Product Characteristics (SmPC) for the individual medicines.
- If a medicine is being used “off-label” local Unlicensed Medicine processes should be followed. Procedures and unlicensed use request forms (Form C for inpatients, Form C PC for recommendations to GP) can be found via the following link. www.medednhsl.com/drug_prescribing_guidance/medicines approval
- Seek specialise advice from the perinatal team if the patient is pregnant, considering pregnancy or is breast feeding. Refer to prescribing recommendations in the Summaries of Product Characteristics (SmPC) for the individual medicines. Liaise with the perinatal team.

- Healthcare professionals initiating medication for ADHD should be familiar with all the short acting and long acting preparations available for ADHD to assure treatment is tailored effectively to the individual needs of the patient, with regards optimum effect and avoiding excessive adverse effects.

5.0 Patient Information and Concordance with Treatment

- Discuss with patient and/or guardians and carers how they want to be involved in treatment planning and review this at regular intervals.
- Discuss treatment plan in the context of psychiatric co-morbidities as it is usually more appropriate to treat this first.
- Before starting medication discuss risks, benefits, preferences and concerns with the person with ADHD or their carer, ensuring opportunity for the child or young person or person with a learning disability to be involved.
- Provide patient information on ADHD***.**
- Provide medicine information on medicines for ADHD*****.
- If appropriate, ensure the patient or guardian is aware the ADHD medicine is being used off-label, what this means***** and that their signed consent has been obtained. Form C PC Prescribing Request to Primary Care for Unlicensed Medicine
  should be used when asking the GP to prescribe off-label and includes a patient consent form.

***Choice and Medication website** www.choiceandmedication.org/nhs24/

- Information on Mental Health Conditions including Attention Deficit Hyperactivity Disorder
- Information on ADHD Medicines
- Printable leaflets for ADHD medications
- Handy charts on ADHD medicines
- Printable information leaflets on what unlicensed or off-label use of a medicines means

Additional information on ADHD medicines for parents and carers of children is available at www.medicinesforchildren.org.uk/

6.0 General Baseline Assessments

Before starting medication for ADHD, people with ADHD should have a full assessment, which should include:

- a review to confirm they continue to meet the criteria for ADHD and need treatment
- a review of mental health and social circumstances, including:

  - presence of coexisting 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:
  - medical history from GP, taking into account conditions that are contraindicated.
  - current medication
  - height and weight (measured and recorded against the normal range for age, height and sex)
  - baseline pulse and blood pressure (measured with an appropriately sized cuff and compared with the normal range for age)
  - corroborate with GP to exclude or refer to cardiology as detailed in pre-treatment referral below
  - Electrocardiogram (ECG) if the treatment may affect the QT interval.

The ADHD Pre-prescribing checklist in appendix 4 can be used to facilitate the pre-treatment assessment process.

7.0 Pre-treatment referral

- Refer for a cardiology opinion before starting medication for ADHD if any of the following apply:
  - history of congenital heart disease or previous cardiac surgery
  - history of sudden death in a first-degree relative under 40 years suggestive of cardiac disease
  - shortness of breath on exertion compared with peers
  - fainting on exertion or in response to fright or noise
  - palpitations that are rapid, regular and start and stop suddenly (fleeting occasional bumps are usually ectopic and do not need investigation)
  - chest pain suggesting cardiac origin
  - signs of heart failure
  - a murmur heard on cardiac examination
  - blood pressure that is classified as hypertensive for adults (see NICE Guidance 136/ Hypertension in Adults.
- Refer to a paediatric hypertension specialist before starting medication for ADHD if blood pressure is consistently above the 95th centile for age and height for children and young people.

8.0 Treatment Options

Pharmacological treatment for ADHD is broadly classed as stimulant medication and non-stimulant.

8.1 Stimulants

For children 6 years and over and young people under 18 years methylphenidate is the first line option, unless contra-indicated. In adults, 18 years and over, either lisdexamfetamine or methylphenidate can be offered. Unless it is not tolerated, patients should have a 6 week trial at adequate dosage (i.e after initial titration) to determine if there has been enough benefit in terms of reduced ADHD symptoms and associated impairments. If benefit is inadequate a switch to lisdexamfetamine should be considered in children and the alternative first line option (lisdexamfetamine or methylphenidate) in adults. Lisdexamfetamine is a pro-drug of dexamfetamine which is slowly metabolised to release the active drug. Dexamfetamine has a high potential for abuse and diversion and should only be considered in people who have had a good response to lisdexamfetamine but cannot tolerate the prolonged action profile. All stimulant use should be monitored for signs that it may be being misused.

Consideration should be given to the use of modified release (MR) methylphenidate particularly after initial dose titration, to optimise the use of this drug in the individual patient. MR products vary in their pharmacokinetic profiles, with regards the proportion of methylphenidate released immediately (peaking at 1-2 hours) and the proportion released from the MR matrix over a prolonged period. It is appropriate to use both a MR preparation and an immediate release (IR) preparation in some patients to optimise treatment, e.g. a small dose of IR methylphenidate in the evening when effects of the MR are wearing off. Please refer to NHSL Joint Formulary for current brands of MR methylphenidate used in Lanarkshire.

The primary mode of action of methylphenidate and dexamfetamine is thought to be inhibition of the dopamine and noradrenaline transporter. Abnormal monoamine transporter function has been shown to be associated with ADHD, although there is likely to be a number of gene variants which together cause symptomatic ADHD to emerge. In addition amphetamines, being small, very lipophilic molecules pass through the synaptic membrane and cause reverse dopamine and noradrenaline transport by inhibiting the Vesicular Monoamine Transporter-2, the effect of which is to release neurotransmitters back into the synapse. Stimulants have negligible activity on serotonergic systems.

Effects of stimulants can be seen immediately although it will take longer to establish an optimal dose and response.

All stimulant medicines, methylphenidate, dexamfetamine and lisdexamfetamine are schedule 2 Controlled Drugs, subject to full controlled drug requirements.

8.2 Non-stimulants

Third line options are atomoxetine and guanfacine for children and atomoxetine for adults. Guanfacine is not licensed for use in adults and as a new drug there is little clinical experience in adults for NICE to recommend as a third line option.

Non-stimulant ADHD drugs act primarily by reducing noradrenergic activity. They have little or no effect on dopamine. Atomoxetine inhibits noradrenaline reuptake and also to a lesser extent serotonin reuptake. Guanfacine, is a selective alpha$_{2a}$-adrenoceptor agonist. Efficacy in ADHD is likely to be related to modulated signalling in the prefrontal cortex and basal ganglia through direct modification of synaptic noradrenaline transmission.

Atomoxetine and guanfacine have a slower onset on action than stimulants and may take several weeks to show their full effect. Because of the hypotensive effects of guanfacine re-titration is required if two or more consecutive doses are missed.

8.3 Treatment Pathways

Please refer to ADHD prescribing algorithms to ensure the correct pathway for prescribing medication in ADHD is followed;-

Appendix 1: Children and young people aged 6-17 years.

Appendix 2: Adults 18 years and over.

8.4 Dose Titration

- Ensure baseline parameters including ADHD symptoms and impairments are recorded before initiating.
- Ensure ADHD symptoms, impairments and, results of adverse effect monitoring are recorded at each dose change. Encourage parents, carers, teachers and partners to contribute.
- Review progress and maintain contact regularly, e.g. weekly phone call.
- Titrate the dose against symptoms and adverse effects in line with BNF / BNF for Children until optimal dosage is achieved, i.e. reduced symptoms, positive behaviour change, improvements in education, employment and relationships, with tolerable adverse effects.
- Optimal dose is variable in each individual so begin low and titrate slowly to ensure this is achieved.
- Titrate more slowly and monitor more frequently in people with neurodevelopmental disorders, mental health disorders, cardiac disease, acquired brain injury and epilepsy.
- Stimulants have an immediate effect; non-stimulants have a slower onset and so will take longer to reach optimal effect.
- N.B. if 2 or more consecutive doses of guanfacine are missed, it should be re-titrated in line with BNF / BNF for Children.

8.5 ADHD medicines *(Table 1)*

Preparations	Status	Use	More info
Methylphenidate Stimulant		www.medicinescomplete.com/BNF/methylphenidate	
Methylphenidate Immediate release	• Age 6-17: Licensed • Age 18 & over: Off-label • Controlled drug	• First line age 6-17 • First line option age 18 and over*	Useful when flexibility of dosage required e.g. during titration and in combination with modified release when effects of MR wear off early evening
Xenidate XL® Tablets IR 22%:MR 78	• Age 6-17 Licensed • Age 18 and over: Licensed for continuation treatment • Age 18 & over: Off-label for initiation • Controlled drug	Can be used first line in children and adults or switched from immediate release after titration or another MR product	• 22% of dose peaks 1-2 hours after taking • 78% provides modified release • 10-12 hours duration of action • Should be swallowed whole
Equasym XL capsules® IR 30:MR 70	• Age 6-17 Licensed • Age 18 and over: Off- Label • Controlled drug	Can be used first line in children and adults or switched from immediate release after titration or another MR product	• 30% of dose peaks 1-2 hours after taking • 78% provides modified release • 8 hours duration of action • Capsules contain MR pellets which can be sprinkled on soft food provided the pellets are swallowed whole
Medikinet XL capsules® IR 50:MR 50	• Age 6-17: Licensed • Age 18 & over: Licensed for & initiation • Controlled drug	Can be used first line in children and adults or switched from immediate release after titration or another MR product	• 50% of dose peaks 1-2 hours after taking • 50% provides modified release • 8 hours duration of action • Capsules contain MR pellets which can be sprinkled on soft food provided the pellets are swallowed whole
Lisdexamfetamine Stimulant		www.medicinescomplete.com/BNF/lisdexamfetamine dimesylate	
Lisdexamfetamine dimesylate (Elvanse ®)[1] (Elvanse Adult®)[2]	• Age 6-17: Licensed[1] • Age 18 and over: [1, 2] Licensed for continuation treatment • Age 18 and over:[2] Licensed for initiation • Controlled drug	• Second line in children • First line option in adults*	• Pro-drug of dexamfetamine providing a longer release profile of the active drug • Reduced potential for misuse and diversion compared to dexamfetamine • Capsules licensed to be swallowed whole or opened and contents dissolved in a small amount of water, orange juice or soft food. • SMC approved for restricted use (2nd line) in children & adolescents and approved for use in adults
Dexamfetamine Stimulant		www.medicinescomplete.com/BNF/dexamfetamine	
Dexamfetamine sulphate Tablets Liquid	• Age 6-17: Licensed • Age 18 and over: Off-label • Controlled drug	ONLY where there a good response to lisdexamfetamine but longer profile is not tolerated	High potential for misuse and diversion Lisdexamfetamine preferred
Atomoxetine Non-Stimulant		www.medicinescomplete.com/BNF/atomoxetine	
Atomoxetine Capsules Liquid (Strattera®)	• Age 6-17: Licensed • Age 18 and over: Licensed for continuation and initiation	• Third or fourth line in children • Third line in adults *After methylphenidate and lisdexamfetamine	• Capsules: SMC approved for restricted use (3rd line) in children & adolescents and in adults • Strattera Liquid: SMC restricts use to patients unable to swallow the capsules
Guanfacine Non- Stimulant		www.medicinescomplete.com/BNF/guanfacine	
Guanfacine# prolonged release tablets (Intuniv®)	• Licensed age 6-17 • Off-label age 18 and over	• Third or fourth line in children • 4th line in adults	SMC approved for restricted use (3rd or 4th line) in Children and young people No recommendations in Adults

*methylphenidate and lisdexamfetamine are both first line treatment options in adults
#guanfacine use supersedes clonidine as a licensed ADHD treatment option (unless already stabilised on clonidine)
IR – Immediate release; MR – Modified Release

9.0 Co-morbidities

There are a number of mental health conditions and associated problems that are seen in people with ADHD and consideration should be given to the dual management of these co-morbidities.

Comorbidity *(Table 2)*

Conduct /Oppositional Defiant disorder	Possible concurrent treatment with risperidone. Conflict mechanism of action with stimulants due to opposing dopaminergic action. Monitor for desired effects of each drug. Drug interactions are possible.
Substance misuse	General advice is to treat substance misuse first. Avoid dexamfetamine and monitor stimulant use closely. If in doubt use a non-stimulant.
Mood disorders	General advice is to optimise treatment for mood disorder first. Monitor for worsening of depression particular with atomoxetine.(caution for increased risk of suicidal behavioural)
Anxiety	Stimulants may exacerbate anxiety so treat anxiety first.
Autistic spectrum disorders	Optimise treatment for ASD related anxieties and watch for worsening of anxiety related behaviour.
Sleep disorders	Sleep problems may be a symptom of ADHD and may benefit from treatment with ADHD medicines by reducing overactive thought processes and restlessness. Make use of the different pharmacokinetic profiles of methylphenidate preparations and/or change timing of administration to minimise sleep disturbance due to stimulants. Melatonin can be useful particularly in children, ASD and Learning Disability. www.nhslcg.scot.nhs.uk/Melatonin_Guidance_March_-2018.pdf
Epilepsy	Treat for ADHD but monitor closely for increase in seizure activity.
Tics	Treat for ADHD but monitor closely for worsening of Tics.

10.0 Monitoring

10.1 General

- Baseline and ongoing monitoring should be carried out in line with the recommendations in appendix 3 on this guidance for all ADHD medicines.
- Document and record all monitoring of effectiveness and adverse effects in patient's notes.
- Encourage the use of self-rating scales for symptoms of ADHD to assess response to treatment.
- Encourage people taking ADHD medicines to self-monitor adverse effects. Appendix 6 of this guide contains an ADHD Treatment Monitoring Recording Form which is suitable for this purpose
- Use standard symptom and ADR rating scales (NICE recommended)

10.2 Weight, Height and Growth

Methylphenidate, lisdexamfetamine, dexamfetamine and atomoxetine suppress appetite which can cause weight loss in adults and affect growth in children and young people. Nausea caused by these medicines may compound this, although this is usually a short lasting effect which can be minimised by taking with or after food.

Weight and height should be monitored closely in children and each plotted on a centile chart. Weight and height should be measured at a minimum of every 6 months. If weight loss is a concern or a child or young person's growth is significantly affected by medication (i.e. they are not meeting the height expectations for age), consider a planned break from treatment e.g. over school holidays to allow "catch up" growth.

If there is concern about weight loss in adults and it is appropriate to the individual, consider planned breaks. This may be more difficult in adult patients and if so, or if treatment breaks are unsuccessful, a change in treatment is warranted.

Guanfacine can cause weight gain and this should be monitored in all people taking ADHD medicines.

10.3 Cardiovascular

Stimulants and atomoxetine can raise blood pressure and heart rate and this is a common effect. Slight increases are usually acceptable but these parameters need to be monitored closely in line with the recommendations in NICE CG87 and in appendix 3 of this guideline. Contraindications should be excluded prior to treatment and referral for cardiology specialist opinion may be necessary before or during treatment.

Monitor heart rate and blood pressure before and after each dose change, every 6 months and more frequently if there are any concerns. In children plot these parameters on a centile chart and compare with the normal range for age. ECGs are not required routinely unless there is a clinical indication.

If person taking ADHD medication has sustained resting tachycardia (more than 120 beats per minute in adults), arrhythmia or a clinically significant increase in systolic blood pressure measured on 2 occasions (greater than the 95th percentile in children) reduce their dose and refer them to a paediatric hypertension specialist or adult physician.

Guanfacine, lowers blood pressure and heart rate. BP and pulse should be monitored weekly during guanfacine dose titration, and any re-titration. Titrate more slowly if necessary. Once stabilised monitor blood pressure and pulse 3 monthly for the first year and 6 monthly from year 2 of treatment. Monitor more frequently if there are any concerns. If a person taking guanfacine has sustained orthostatic hypotension or fainting episodes, reduce their dose or switch to another ADHD medication.

10.4 Sleep/sedation

Stimulants can cause insomnia. It is important to have a baseline indication of sleep pattern and monitor for any adverse effect on sleep. Stimulants can also have a positive effect on sleep by decreasing overactive thought processes and restlessness.

Atomoxetine and guanfacine can cause somnolence and sedation. If this is troublesome, they should be taken at a different time of day and the dosage of atomoxetine can be split into a morning and afternoon/early evening dose rather than a single dose.

10.5 Liver function

Liver function tests are not necessary on a routine basis. However atomoxetine can very rarely cause hepatic injury, therefore, there may be occasions when it is clinically indicated to do so. Atomoxetine should be discontinued in patients with jaundice or laboratory evidence of liver injury, and should not be restarted.

10.6 Epilepsy, Tics, Mental Health

Monitor for emerging or worsening epilepsy, tics or mental health conditions. Ensure baseline pattern and/or severity in patients with existing conditions is recorded prior to initiating treatment.

10.7 Adherence, Misuse, Diversion

Monitoring for adherence to treatment and the possibility of the misuse or diversion of stimulants should be part of routine management. Use of long acting stimulants reduces potential for abuse, however in some patients atomoxetine may be a more appropriate.

10.8 New Diagnosis and medication

Be aware of new conditions or medications for the patient that may affect the ADHD treatment.

11.0 Side Effect Management *(Table 3)*

Adverse Effect	Management Options	If Adverse effect persists
Anorexia, nausea,	GI effects often transient Administer medication with or after food	Monitor growth closely Consider dose reduction Consider switching medicine
Weight loss, growth concerns	Eat small frequent meals and larger meals when effects wearing off (evening). High calorific food with good nutritional value. Consider treatment omission (e.g. at weekends) or treatment breaks in children for growth catch up Monitor weight or BMI in adults	Consider dose reduction Consider switching medicine
Stimulants Only Sleep difficulties	Give sleep hygiene advice.* Keep sleep diaries Change timing for administration to earlier in the day Change preparation to a different MR methylphenidate	Consider if changing lisdexamfetamine to dexamfetamine would be appropriate Consider melatonin trial Consider dose reduction first then switch if still necessary
Dizziness, headache	May be temporary. If persisting monitor symptoms and blood pressure carefully	Consider dose reduction or switch if due to blood pressure or intolerable
Stimulants only Involuntary movements or tics (new or exacerbation)	May be temporary but monitor closely	Consider if related to stimulant. Consider reducing dose; consider switching to non-stimulant. Patient opinion essential
Dysphoria, agitation	Reduce dose and monitor effect	Consider dose reduction then switch
Stimulants/Atomoxetine Tachycardia, hypertension	Monitor closely Reduce dose	Tachycardia more than 120 bpm or arrhythmia or significant BP increase or > 95th percentile (children) → Reduce dose and refer
Guanfacine Only Hypotension, Bradycardia	Reduce dose and monitor Consider ECG (Bradycardia pre-disposes to QTc prolongation)	Sustained hypotension or fainting due to orthostatic hypotension → Switch medication
Syncope suspected to have cardiac origin	Stop medication immediately and seek specialist advice	
Symptoms suggestive of cardiac disease	Prompt cardiac evaluation	
Atomoxetine only Jaundice, signs of liver disease or biliary obstruction	LFTs immediately	Stop medication immediately and seek specialist help
Atomoxetine only Self-harm or suicidal ideation	Monitor for suicidal ideation, clinical worsening of mood and unusual changes in behaviour.	New onset of suicidal behaviour should prompt discontinuation of medication pending further assessment
Atomoxetine and Gaunfacine only Somnolence	Administer at a different time of day or reduce dose	
Seizures	Worsening of existing or new seizures Review medication	Stop medication if thought to be contributing to seizures Investigate – if unlikely to be medication then cautiously re-introduce
Worsening behaviour	Adjust medication	Review diagnosis

***sleep hygiene advice available via www.choiceandmedication.org/nhs24/handyfactsheet/sleephygiene**

12.0 Discontinuation

Stimulants

It is prudent to withdraw stimulants slowly to avoid withdrawal effects, however these drugs can be stopped abruptly in some situations, e.g. if not taken at the weekend or other medication breaks.

Atomoxetine

There is not usually any problems if atomoxetine is stopped abruptly.

Guanfacine

Guanfacine should be withdrawn by tapering the dose in decrements of not more than 1mg every 3 to 7 days. Monitor pulse and blood pressure and withdraw more slowly, if necessary, to minimise increases in blood pressure and pulse rate due to guanfacine withdrawal. N.B. if 2 or more consecutive doses of guanfacine are missed, the dose should be re-titrated in line with initiation.

13.0 Responsibilities

13.1 Specialist responsibilities

- Assessment & Diagnosis.
- Discuss benefits and side effects of treatment with patient/carer/welfare guardian and if appropriate obtain consent for off-label use of the medicine.
- Ensure pre-treatment screening and baseline parameters are documented.
- Request initiation and on-going prescribing by GP. If treatment is off-label use form (Form C PC) which is available on the Medicines Approval page via First Port _ available on FirstPort. www.medednhsl.com/sites/prescribing/Medicines Approval Process. If patient is not registered with a GP, they should be encouraged to contact Practitioner's Services.
- Provide support during initiation and titration.
- Inform GP of any dose adjustment or discontinuation of treatment or change over to another class of drug.
- Retain responsibility for the supervision and monitoring of drug treatment, including physical health checks. Psychiatrists should contact their clinical director if training/re-training is considered appropriate.
- Liaise with GP regarding any complications in treatment.
- Retain patient on outpatient caseload for the duration of drug treatment.
- Notify GP if patient is discharged from psychiatric outpatient care to ensure medication is discontinued. Give advice about safe way for medication to be discontinued by GP. firstport2/staff-support/pharmacy-mental-health/mental-health-prescribing-information/ADHD/Advice to GP ADHD prescribing following private diagnosis

13.2 GP responsibilities

- Prescribe medication on the advice of the specialist.
- Liaison with specialist regarding any complications in treatment.
- See ADHD Steering Group advice if requested to prescribe ADHD medicines following private diagnosis.

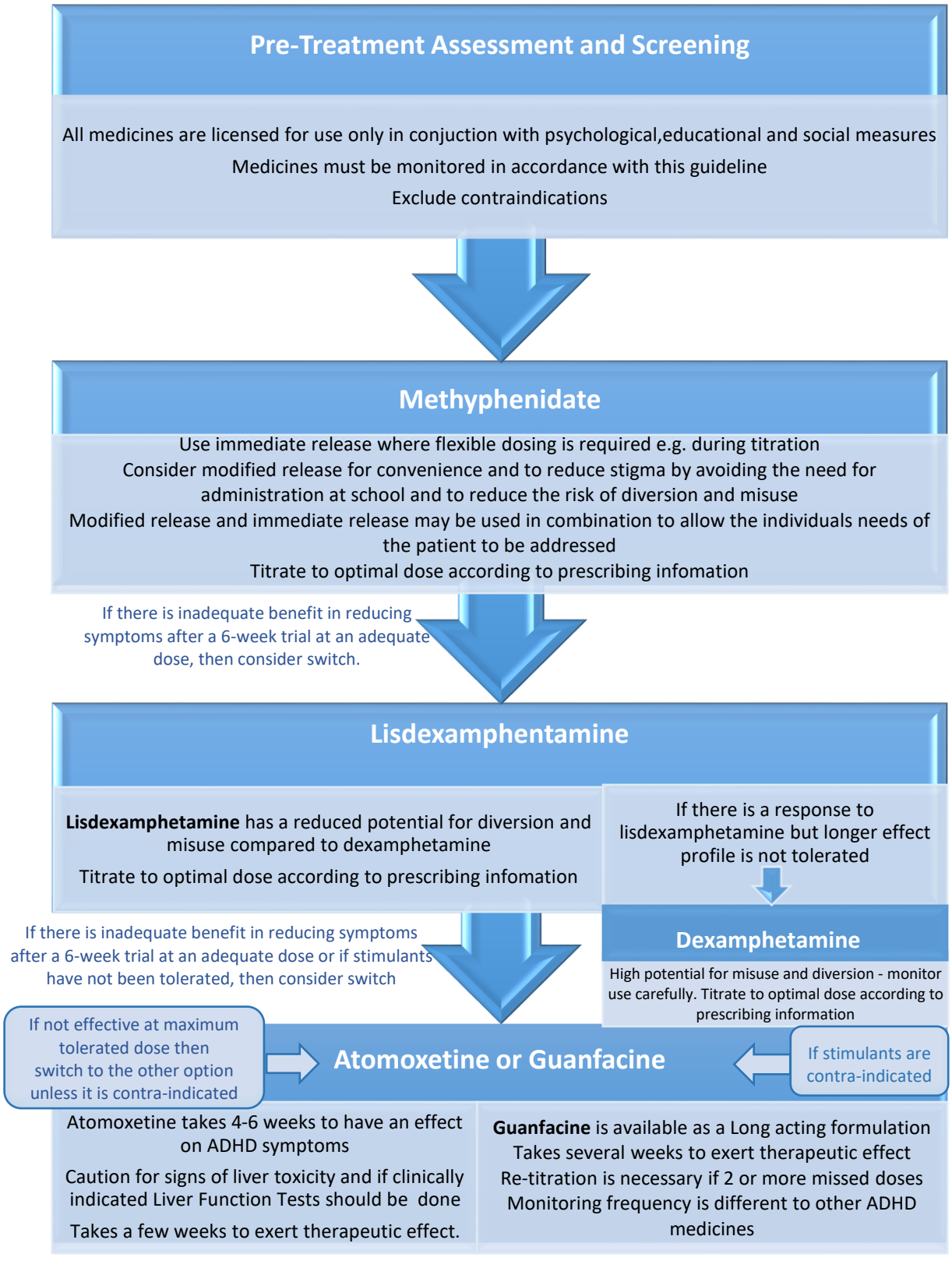
  firstport2/staff-support/pharmacy-mental-health/mental-health-prescribing-information/Documents/ADHD/Advice to GPs ADHD prescribing following private diagnosis.pdf

14.0 Links and References

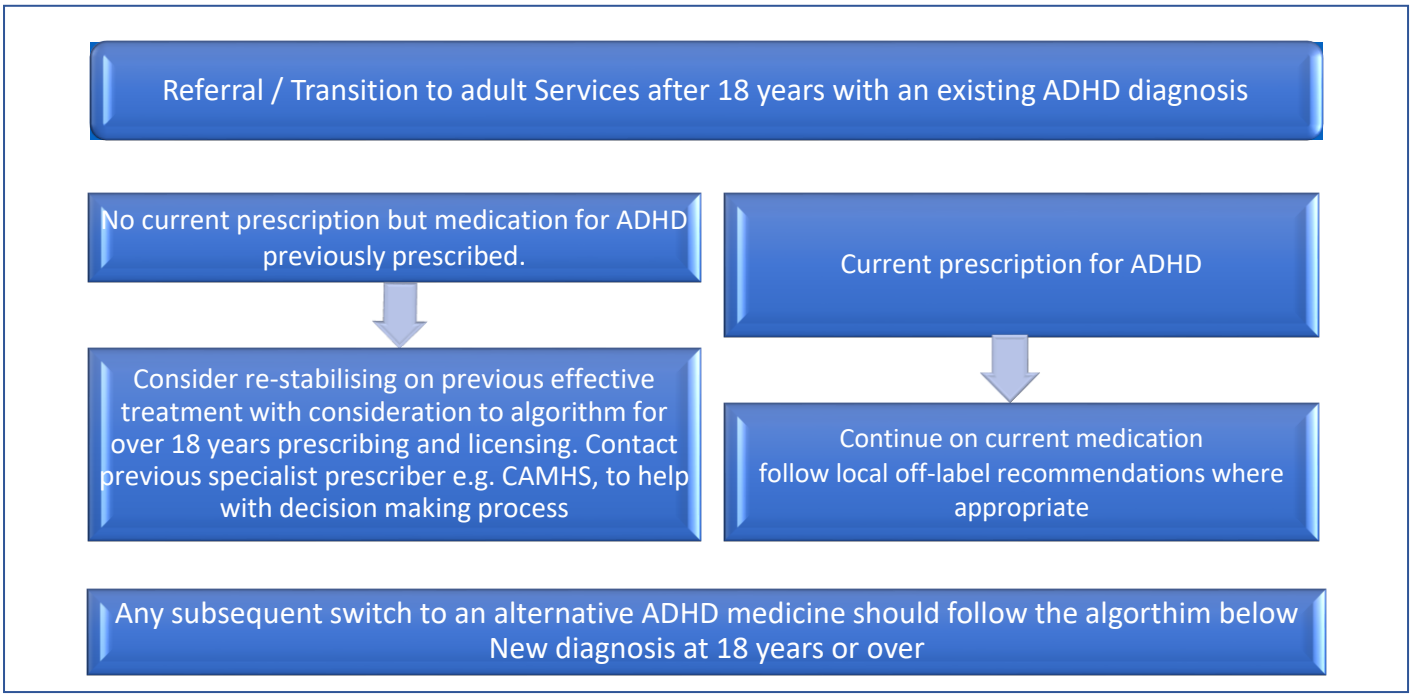
- Attention deficit hyperactivity disorder: diagnosis and management www.nice.org.uk/NG87
- RCPsych (Scotland) ADHD in Adults: Good Practice Guidelines* www.rcpsych.ac.uk/docs/members/divisions/scotland/ADHD in Adults: Good Practice Guidelines
- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes www.nice.org.uk/NG5
- Individual Summaries of Product Characteristics www.medicines.org.uk/emc/
- British National Formulary www.medicinescomplete.com/BNF/adhd
- Children's British National Formulary www.medicinescomplete.com/bnfc/adhd
- British Association for Psychopharmacology Guidance for ADHD 2014
- www.bap.org.uk/pdfs/BAP_Guidelines-AdultADHD.pdf
- EU methylphenidate Marketing Authorisation Holders collaboration www.methylphenidate-guide.eu
- NHS Lanarkshire Formulary and medicines approval www.medednhsl.com/drug prescribing guidance

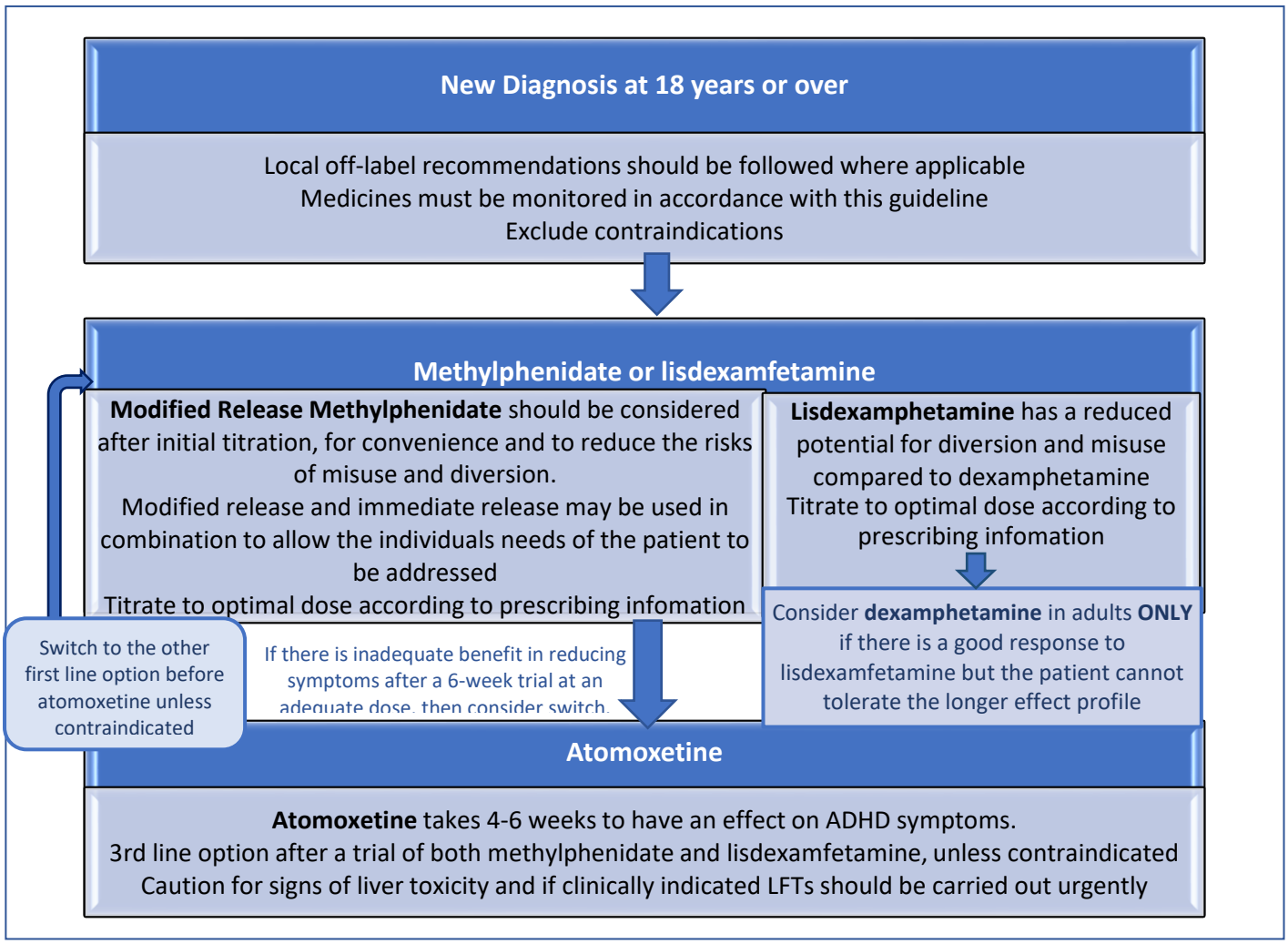
* Appendix 5 of ADHD in Adults: Good Practice Guidelines is a toolkit that includes self-reporting diagnostic tools for adults

Appendix 1 Algorithm for Prescribing ADHD Medicines In Children and Young People aged 6-17 years



Appendix 2 Algorithm for Prescribing ADHD Medicines in Adults 18 years and over





Appendix 3 Medication Monitoring for all patients prescribed ADHD medicine

Monitoring parameter	Pre-treatment	Before and after each dose change	Before or at 6 weeks	At 3 months	3 monthly	6 monthly until stable	6 monthly when stable	Annually
Severity of symptoms (use rating scales)	✓	✓	✓			✓		✓ Review if treatment to continue
Weight* Check for weight loss except with Guanfacine - weight increase	✓	✓		Under 18 years	Guanfacine For 1st year	✓	✓	
Height*	✓ children only					children only	children only	
Heart rate* Check for Increase except Guanfacine - pulse decrease	✓	✓	✓		Guanfacine For 1st year	✓	✓	
Blood pressure* Check for Increase except Guanfacine - pulse decrease	✓	✓	✓		Guanfacine For 1st year	✓	✓	
Sleep pattern	✓	✓	✓			✓		✓
Sedation/ somnolence		Guanfacine weekly during titration			Guanfacine For 1st year		Guanfacine 2nd year onwards	
Appetite	✓	✓		Under 18 years		✓		✓
ECG	Baseline if clinically indicated or medicine can prolong QTc	Throughout treatment if clinically indicated						
Other	• In active epilepsy – base line seizure frequency – ongoing monitoring • Hx Tics- note frequency – ongoing monitoring of existing or emerging Tics • Refer if any cardiovascular concerns emerge during treatment • LFTs with amoxetine if clinically indicated • Ongoing monitoring for misuse and diversion with stimulants • Ongoing monitoring for adherence – provide support • Ongoing monitoring for worsening of behaviour- check diagnosis; • Ongoing monitoring for other emerging mental health problems; e.g. psychosis • Keep up to date with changes to medicines and physical/mental health in the context of C/I and drug interactions							✓ Indicates for all patients and medicines unless otherwise stated

*plot on percentile charts/growth charts for under 18 years

Appendix 4` ADHD Pre-Prescribing Checklist

Before prescribing ADHD medication, please ensure the following have been completed:

Baseline ADHD symptoms checklist ☐

	Measurements all	*For children only*
Baseline Blood Pressure:		*Normal range for age:*
Baseline Heart Rate:		*% Centile:*
Baseline Weight:		*% Centile:*
Baseline Height: *(children only)*		*% Centile:*

Past Medical History:

Current medication:

Baseline sleep pattern:

Is there a family history of sudden cardiac death? No ☐ Yes ☐ If yes, please give details

Has this info been shared with GP? ☐

Has an ECG been requested? Yes ☐ No ☐ N/A ☐

Has patient/carer been provided with information sources? ☐

Has unlicensed medication form been completed if relevant? Yes ☐ No ☐ N/A ☐

Date of review appointment (within 6 weeks) _____

Signed: _____ Print Name: _____

Job Title: _____ Date form completed: _____

Appendix 5 ADHD Treatment Monitoring Recording Form

Name	CHI	Date

If you are a parent or carer and are completing this on behalf of the patient please complete this section

Name	Relationship to patient

Medication

What medicine(s) are you currently taken for ADHD	
Medicine(s)	Dose

Side Effects

Have you experienced any of the following *Please tick the column that most applies to you*	Not at all	Sometimes	Often	Very often
Headache				
Dizziness				
Nausea				
Vomiting				
Sweating				
Loss of Appetite				
Sexual Dysfunction				
Weight loss				
Diarrhoea				
Tics				
Sleep Difficulties				
Mood Instability				
Agitation				
Sadness				
Palpitations				
Drowsiness				
Other				

Physical Health Checks — For Health Professional Use only

Check	Measurement	Checked by	Date checked
Blood pressure			
Pulse			
Weight (plot on a centile chart for children)			
Height for children(plot on a centile chart for children)			

Adapted from the Royal College of Psychiatrists in Scotland ADHD: Good Practice Guidelines 2017 Appendix 5 Tool