(for patients in the Swindon, Kennet and North Wiltshire area as agreed by NHS Swindon, NHS Wiltshire, Great Western Hospitals NHS Foundation Trust and Oxford Health NHS Foundation Trust)

Methylphenidate, Atomoxetine *and* Lisdexamfetamine (TLS Amber)

for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children and adolescents

AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE

This shared care agreement outlines how responsibility for prescribing methylphenidate, atomoxetine and lisdexamfetamine *at licensed doses* to treat ADHD in children and adolescents might be shared between specialist and general practitioner (GP).

GPs are **invited** to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. If a specialist asks the GP to prescribe this drug, the GP should reply to this request as soon as practicable.

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care is usually explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients with ADHD are under regular specialist follow-up, which provides an opportunity to discuss drug therapy.

RESPONSIBILITIES and ROLES

Specialist responsibilities

1. To confirm diagnosis following full assessment.
2. To undertake
   - 2.1. a complete history, including history of exercise syncope, breathlessness or other cardiac symptoms.
   - 2.2. a physical examination for the presence of heart disease, including height and weight.
   - 2.3. an assessment of baseline cardiovascular status, including blood pressure and heart rate

   before prescribing and get specialist cardiac advice if appropriate.
3. To carry out a full mental health, social assessment and risk assessment for substance misuse. In the case of a Paediatrician initiating treatment, the mental health and psychosocial assessment can be undertaken by the Wiltshire Healthy Minds service or Swindon's Targeted Mental Health in Schools service.
4. To decide on the most appropriate drug treatment based on:
   - 4.1. Co-morbidities (e.g. tics, Tourrette's syndrome, epilepsy) and concomitant medicines
   - 4.2. Their different adverse effects
   - 4.3. Potential problems with compliance (e.g. midday doses at school)
   - 4.4. Potential drug diversion and misuse
   - 4.5. Preference of the child or young person and their parent or carer.
5. To provide the patient and/or parent with information about the medication.
6. To prescribe the medication until the dosage is stabilised. The specialist will continue to prescribe medication for children less than 6 years old. When the child reaches 6 years old, the GP can be asked to participate in shared care.
7. To review the patient and monitor the following on a 3-6 monthly basis, depending on the schedule agreed with the GP, and communicate the results to the GP via the patient's hand- held records (see Appendix 1):
   - 7.1. Height, weight and appetite, recorded on a growth chart.
   - 7.2. Pulse and blood pressure, with the latter recorded on a centile chart (also following dose adjustments)
   - 7.3. New or worsening side-effects of the medication prescribed (also following dose adjustments and at every visit)
   - 7.4. New or worsening psychiatric symptoms (also following dose adjustments and at every visit)
8. If the patient is prescribed Atomoxetine liquid, to review the need for a liquid preparation at each clinic appointment and to switch the patient to a capsule formulation at the earliest opportunity.
9. To refer patients who develop symptoms such as palpitations, exertional chest pain, unexplained syncope, dyspnoea, or other symptoms suggestive of heart disease for prompt cardiac evaluation.
10. To look out for signs of diversion (transfer of the medicine from the individual for whom it was prescribed to one for whom it is not prescribed), misuse and abuse of methylphenidate and lisdexamfetamine.
11. To report serious adverse events to the Medicines & Healthcare Products Regulatory Agency (MHRA) and the GP.
12. To promptly report the findings and actions taken as a result of outpatient appointments, including any dose adjustments, to the GP and copy all blood tests to the GP.
13. To ensure that the monitoring required in the tables on page 5 will be undertaken at the appropriate time.
14. To notify the GP of the patient's failure to attend appointments and give advice on stopping the medication.
15. To advise and support the patient's GP, parents, and teachers, liaising with the child's school as appropriate.
16. To take responsibility for stopping the drug or to agree aftercare when the patient reaches 18 years of age

General Practitioner responsibilities
1. To make the initial referral to secondary care, including details of presenting symptoms, past medical history, past psychiatric history, drug history and current medication, and requesting a specialist's opinion. 2. To reply to the request to share care with the specialist as soon as practicable. 3. To ensure a full understanding of their responsibilities for managing a patient on methylphenidate, atomoxetine or lisdexamfetamine, including identification of side-effects in line with the relevant Summary of Product Characteristics (SPC). 4. To agree to monitoring blood pressure and pulse with the specialist to ensure that the monitoring required in the tables on page 6 & 7 will be undertaken at the appropriate time. 5. To provide repeat prescriptions after stabilisation. Methylphenidate & lisdexamfetamine are controlled drugs, subject to safe custody and specific regulations for prescribing. Thus, prescriptions for methylphenidate /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 of methylphenidate/lisdexamfetamine. 6. To ensure the compatibility of methylphenidate / atomoxetine / lisdexamfetamine with newly-prescribed concomitant medication. 7. To undertake such monitoring as agreed with the specialist, recording the results in the patient's hand-held record (see Appendix 1). 8. To contact the specialist if the patient's behaviour deteriorates or any other aspect of their clinical care is of concern. 9. To refer patients who develop symptoms such as palpitations, exertional chest pain, unexplained syncope, dyspnoea, or other symptoms suggestive of heart disease for prompt specialist cardiac evaluation. 10. To report serious adverse events to the specialist and the MHRA. 11. To look out for signs of diversion (transfer of the medicine from the individual for whom it was prescribed to one for whom it is not prescribed), misuse and abuse of methylphenidate or lisdexamfetamine. 12. To notify the specialist of the patient's failure to attend appointments. 13. To act upon results communicated by specialist and stop treatment if advised to dos so by the specialist.

Patient, parent or guardian's role
1. To attend all appointments with the patient's GP and specialist. 2. To agree to regular monitoring as outlined above. 3. To report to the specialist if he or she does not have a clear understanding of the treatment. 4. To share any concerns in relation to treatment with medicine. 5. To inform the specialist of all other medicines taken, including over-the-counter medicines. 6. To report any clinical changes to the GP and/or specialist. 7. To promptly report any adverse effects to the specialist whilst taking the medicine.

BACK-UP ADVICE AND SUPPORT

Contact details	Telephone No.	Fax:	Email address:
GWH ADHD Specialists Dr Raman Sharma Dr Krishna Banerjee	01793- 604269 01793- 605321 or 604922	01793-604938	raman.sharma@gwh.nhs.uk krishna.banerjee@gwh.nhs.uk
Medicines Information (GWH)	01793-605029	-	medicines.information@gwh.nhs.uk
CAMHS Specialists Drs W.Woodhouse, D.Batten & P.Norman	01793- 294646 (Swindon CAMHS) 01672- 517517 (Marlborough CAMHS)	01793 - 294650	wendy.woodhouse@oxfordhealth.nhs.uk don.batten@oxfordhealth.nhs.uk phil.norman@oxfordhealth.nhs.uk
Medicines Information (Oxford Health)	01865- 455716	01865 - 455720	Med.Info@oxfordhealth.nhs.uk

The doctor who prescribes this medication assumes clinical responsibility for methylphenidate, atomoxetine or lisdexamfetamine, and the consequences of its use.

SUPPORTING INFORMATION

Therapeutic summary and licensed indications

Methylphenidate – *Treatment of attention deficit hyperactivity disorder (under specialist supervision)*
The drug is a CNS stimulant; it is a Schedule 2 controlled drug and is not currently licensed for use in children less than 6 years old. It is available in immediate-release tablets (Ritalin®, Equasym®, Medikinet®) that are usually given in two or three daily doses. Methylphenidate is also available in modified-release formulations that enable once-daily dosing (Concerta XL®, Equasym XL®, Medikinet XL®).

Atomoxetine – *Treatment of attention deficit hyperactivity disorder (under specialist supervision)*
Atomoxetine is a non-stimulant non-amphetamine inhibitor of noradrenaline reuptake, although the precise mechanism by which it works on ADHD is unknown. It is not currently licensed for use in children less than 6 years old, and is not a controlled drug.

Lisdexamfetamine (Elvanse®) – *Treatment of attention deficit hyperactivity disorder (under specialist supervision)*
Lisdexamfetamine is a POM CNS stimulant and Schedule 2 controlled drug; and it is licensed for use as part of a comprehensive treatment programme for treatment of ADHD in children aged 6-18 years when response to methylphenidate is considered inadequate.

Treatment Aims (Therapeutic plan)

Attention deficit hyperactivity disorder is usually diagnosed according to criteria specified in the Diagnostic and Statistical Manual of Mental Disorders 4th Edition (DSM-IV).

ADHD is a chronic condition, which may require long-term treatment. All children with ADHD will benefit from behavioural, educational and psychological input. For some this is all that is required, but for other pharmacological measures will also be needed. These are initiated by a hospital specialist and shared care can be used to minimise the disruption caused by multiple and ongoing outpatient appointment.

In September 2008, NICE issued clinical guidance titled “Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults.”

Please consult the NICE quick reference guide for more information:

http://www.nice.org.uk/nicemedia/pdf/CG72QRG.pdf

Treatment Schedule (including dosage and administration)

Methylphenidate
Usually initiated with 5mg methylphenidate (10mg may be used in heavier children) with breakfast for 3 days but a different starting regimen may be used depending upon the individual patient. The dose should then be titrated, at weekly intervals increasing by 5-10mg per day, accordingly to response and is usually given two or three times a day. The maximum recommended dose for methylphenidate is 60mg daily and this is rarely exceeded in clinical practice. The maximum licensed daily dose for Concerta XL is 54mg daily. Doses of methylphenidate greater than 60mg daily (54mg daily for Concerta XL) should be prescribed by the specialist.

Atomoxetine
For children over 6 years/adolescents weighing less than 70kg, start with approximately 0.5mg/kg/day. The initial dose should be maintained for a minimum of seven days prior to upward titration according to response and tolerability. The recommended maintenance dose is 1.2mg/kg/day (depending upon weight and available dosage strengths). No additional benefit has been demonstrated for doses above this but doses up to 1.8mg/kg/day may be used if thought to be appropriate.

For children/adolescents weighing more than 70kg, the initial dose should be 40mg/day, maintained for a minimum of seven days before increasing according to response and tolerability. The recommended maintenance dose is 80mg per day. No additional benefit has been demonstrated for doses above this but the maximum recommended daily dose is 100mg. Doses can be taken with or after food.

A clear colourless oral atomoxetine 4mg /ml solution can be prescribed at clinical discretion. The need for liquid should be regularly reviewed at each clinic appointment and patients would be switched to capsules as soon as possible.

Please refer to SPCs for more detailed information http://www.medicines.org.uk

Lisdexamfetamine (Elvanse)
For children over 6 years/adolescents dosing initially starts at 30mg once daily in the morning. This can be increased by 20mg at weekly intervals up to a maximum dose of 70mg daily. The capsules can be taken whole, with or without food.

For patients who have swallowing difficulties, the capsules may be opened and the entire contents dissolved in a glass of water. This does not affect the long acting nature of the medication. Administration is usually continuous. However where ADHD symptoms are well tolerated and managed at home, families may elect to use medication during term times or on school days only. In the event of a missed dose, lisdexamfetamine dosing can resume the next day. Afternoon doses should be avoided because of the potential for insomnia. Lisdexamfetamine is a 2nd/3rd line medication for ADHD.

Contra-indications and precautions for use

Methylphenidate

Methylphenidate is contraindicated in patients with:

- Known hypersensitivity to methylphenidate or other tablet ingredients
- Glaucoma and phaeochromocytoma
- A concomitant MAOI or those who have discontinued an MAOI within the last two weeks.
- Marked anxiety or agitation; severe depression, suicidal ideation; tics or a family history of Tourette's syndrome; drug or alcohol dependence ; psychosis; hyperthyroidism or thyrotoxicosis; cardiovascular disease; breast feeding.
- Diagnosis or history of severe depression, anorexia nervosa or anorexic disorders, suicidal tendencies, psychotic symptoms, mania, schizophrenia, severe mood disorders, or psychopathic or borderline personality disorder.
- Diagnosis or history of severe and episodic (type1) bipolar (affective) disorder that is not well-controlled.
- Pre-existing cerebrovascular disorders, cerebral aneurysm and vascular abnormalities, including vasculitis or stroke, or known risk factors for cerebrovascular disease.
- Unless specialist cardiac advice has been obtained: in pre-existing cardiovascular disorders, including severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias, and dysfunction of cardiac ion channels.
- Misuse and cardiovascular events: Misuse of stimulants of the central nervous system may be associated with sudden death and other serious cardiovascular adverse events.

Methylphenidate should be used with caution in patient with renal / hepatic impairment and in epileptic patients in whom methylphenidate should be discontinued if seizure frequency increases. Monitor full blood count if signs of blood dyscrasias.

Atomoxetine

Atomoxetine is contraindicated in patients with:

- Known hypersensitivity to atomoxetine or other capsule ingredients
- A concomitant MAOI or those who have discontinued an MAOI within the last two weeks.
- Narrow- angle glaucoma, phaeochromocytoma or a history of phaeochromocytoma
- Severe cardiovascular or cerebrovascular disorders which would be expected to deteriorate following a clinically significant increase in blood pressure (e.g. 15-20mmHg) or heart rate (e.g. 20 beats per minute).Severe cardiovascular disorders may include severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias and channelopathies. Severe cerebrovascular disorders include cerebral aneurysm or stroke.

Atomoxetine should be used with caution in children or adolescents with known serious structural cardiac abnormalities and in consultation with a cardiac specialist, as sudden death has been reported with atomoxetine in this patient group.

Atomoxetine should be used with caution in patients whose underlying medical conditions could be worsened by increases in blood pressure and heart rate, such as patients with hypertension, tachycardia, or cardiovascular or cerebrovascular disease. Patients who develop symptoms suggestive of cardiac disease during atomoxetine treatment should undergo a prompt specialist cardiac evaluation.

As orthostatic hypotension has also been reported, atomoxetine should be used with caution in any condition that may predispose patients to hypotension or conditions associated with abrupt heart rate or blood pressure changes.

Reports of QT interval prolongation have been received in association with atomoxetine. Therefore, it should be used with caution in those with congenital or acquired long QT or a family history of QT prolongation. This risk may be increased if atomoxetine is used concomitantly with other drugs that produce QT prolongation, drugs that can cause electrolyte disturbances and those that inhibit cytochrome P450 2D6.

Seizures are a potential risk with atomoxetine and therefore it should be introduced with caution in patients with a history of seizure. Discontinuation of atomoxetine should be considered in any patient developing seizure or if there is an increase in seizure frequency.

There is a risk of rare, but sometimes severe, hepatic disorders. Atomoxetine should be discontinued in patients with jaundice or laboratory evidence of liver injury, and should not be restarted. Patients and carers should be advised of the risk and be told how to recognise symptoms; prompt medical attention should be sought in case of abdominal pain, unexplained nausea, malaise, darkening of the urine or jaundice.

At normal doses, atomoxetine can be associated with treatment emergent psychotic or manic symptoms (e.g. hallucinations, delusional thinking, mania, or agitation) in children and adolescents without a history of psychotic illness or mania. If such symptoms occur, consideration should be given to a possible causal role of atomoxetine and discontinuation of treatment. It is possible that atomoxetine might exacerbate pre-existing psychotic or manic symptoms.

Due to concerns about an increased risk of suicidal thoughts and behaviour, patients should be monitored for signs of depression, suicidal thoughts or suicidal behaviour and referred for appropriate treatment if necessary. Patients and their carers should be informed about the risk and told to report clinical worsening, suicidal thoughts or behaviour, irritability, agitation, or depression.

Please refer to SPCs for more detailed information http://www.medicines.org.uk

Lisdexamfetamine

Known contraindications

- Symptomatic cardiovascular disease including moderate to severe hypertension and advanced arteriosclerosis structural cardiac abnormalities
- Hyper excitability or agitated states
- Hyperthyroidism, thyrotoxicosis
- Glaucoma

Lisdexamfetamine should be used with caution in the following situation:

- Anorexia
- History of cardiovascular disease or abnormalities – Will require specialist cardiology advice.
- Psychosis or bipolar disorder - monitor for aggressive behaviour or hostility during initial treatment
- History of drug or alcohol abuse
- May lower seizure threshold (discontinue if seizures occur)
- Tics and Tourettes syndrome (use with caution) - discontinue if tics occur
- Susceptibility to angle-closure glaucoma
- Avoid abrupt withdrawal.
- Data on safety and efficacy of long-term use not complete
- Acute porphyria

Side-effects

The following side-effects are thought to be of particular clinical relevance:

Methylphenidate

- Very common side effects include nervousness and insomnia; abdominal pain, nausea and vomiting are common. These tend to subside and are controlled by dose adjustment or concomitant food intake.
- Other common side effects include dry mouth, cough and pharyngeal pain or a reversible reduction in appetite.
- Less common are tachycardia, palpitations, arrhythmias, changes in BP or heart rate. Rarely tics and Tourettes syndrome can develop in predisposed individuals.
- Treatment can result in an "Over-focused" child who carries out simple or complex repetitive tasks and may become irritable if dose too high.
- The possibility of drowsiness necessitates caution when driving a car or operating hazardous machinery.

Atomoxetine

- Very common side effects include insomnia, fatigue, abdominal pain, dry mouth, nausea, vomiting, constipation and dyspepsia. These tend to subside and are controlled by dose adjustment.
- Rash, pruritis, dermatitis are common as are increases in BP or pulse rate.
- Uncommonly a reversible reduction in appetite, weight loss, aggression, hostility and suicidal ideation may develop.
- Rarely hepatic disorders, seizures or QT prolongation may occur
- The possibility of drowsiness necessitates caution when driving a car or operating hazardous machinery.

Atomoxetine has black triangle (▼) status. Serious suspected reactions (even if well recognised or causal link uncertain) should be reported to the MHRA.

Please note that the following convention has been used for the classification of side-effects: very common (≥ 1/10), common (≥ 1/100 to <1/10), uncommon (≥ 1/1,000 to <1/100), rare (≥ 1/10,000 to <1/1000) and very rare (<1/10,000).

Please refer to SPCs for a full list of adverse effects http://www.medicines.org.uk

Lisdexamfetamine

- Common side effects - Nausea, decreased appetite, vomiting, diarrhoea, dry mouth, abdominal cramps, dyspnoea, sleep disturbances, tics, aggression, headache, dizziness, drowsiness. These tend to subside with dose adjustment
- Less common side effects - mydriasis, labile mood, weight loss, pyrexia, malaise, growth restriction in children, anorexia, tachycardia, palpitation, hypertension, logorrhoea, anxiety, paranoia, restlessness, depression, dysphoria, These may require
- Rare side effects - Dermatillomania, mania, hallucination, sweating, tremor, visual disturbances, sexual dysfunction, rash; angle-closure glaucoma; cardiomyopathy, euphoria, seizures central stimulants have provoked choreoathetoid movements and dyskinesia, and Tourette syndrome in predisposed individuals

Pregnancy and Lactation
Females of child-bearing potential (females post-menarche) should use effective contraception. Please take expert advice if dealing with patient groups likely to be affected by pregnancy and lactation.

Drug Interactions
Please consult the relevant SPC or the BNF for relevant information concerning drug interactions.

Monitoring –Please see Appendix 2 for details of Normal Vital Signs in Children

Methylphenidate

Parameter	*Frequency*	*Action*	*By whom*
Pulse	3 monthly	Sustained resting tachycardia, arrhythmia or systolic blood pressure greater than 95th percentile measured on two or more occasions should prompt dose reduction and referral to paediatrician or physician.	Specialist/GP as agreed
Blood pressure	3 monthly		Specialist/GP as agreed
Height	6 monthly	If adversely affected, consider dose reduction or interrupting therapy to allow catch up growth.	Specialist
Weight & appetite	6 monthly	Strategies to reduce weight loss or manage decrease weight gain include taking medication with or after food, eating additional meals and snacks in the early morning or late evening and obtaining dietary advice on high calorie foods with good nutritional value. However, failure to gain weight appropriately may require withdrawal of medication.	Specialist
Signs of psychosis	Ongoing	Discontinue and carry out a full psychiatric assessment. Consider switch to atomoxetine.	Specialist
Anxiety or tics	Ongoing	Reduce dose or consider switching to atomoxetine.	Specialist
Seizures	Ongoing	Discontinue if new or increased frequency of seizures.	Specialist
Full blood count	-	Have a low threshold for investigation rather than scheduling routine tests (e.g. if recurrent infections or purpuric rash occur).	Specialist

Atomoxetine

Parameter	*Frequency*	*Action*	*By whom*
Pulse	3 monthly	Sustained resting tachycardia, arrhythmia or systolic blood	Specialist/GP as agreed

Blood pressure	3 monthly	pressure greater than 95th percentile measured on two or more occasions should prompt dose reduction and referral to paediatrician or physician.	Specialist/GP as agreed
Neurological signs (if pt has additional cerebrovascular risks)	3 monthly	If adversely affected, consider dose reduction and referral to paediatrician or physician.	Specialist
Height	6 monthly	If adversely affected, consider dose reduction or interrupting therapy in those on long-term treatment to allow catch up.	Specialist
Weight & appetite	6 monthly	Strategies to reduce weight loss or manage decrease weight gain include taking medication with or after food, eating additional meals and snacks in the early morning or late evening and obtaining dietary advice on high calorie foods with good nutritional value. However, failure to gain weight appropriately may require withdrawal of medication	Specialist
Suicidal thinking, self-harm, agitation, irritability, hostility, anxiety, depression, psychosis or mania.	Ongoing	Patients/parents should be advised of this risk and made aware of possible signs/symptoms to report back to specialist immediately if noticed	Specialist
Dysmenorrhoea, erectile dysfunction and ejaculatory dysfunction.	Ongoing		Specialist
Seizures	Ongoing	Discontinue if new or increased frequency of seizures.	Specialist
Liver Function Tests	If jaundice or other signs of liver injury	Atomoxetine should be discontinued in patients with jaundice or laboratory evidence of liver injury, and should not be restarted.	Specialist

Lisdexamfetamine

Parameter	*Frequency*	*Action*	*By whom*
Pulse	3 monthly	Sustained resting tachycardia, arrhythmia or systolic blood pressure greater than 95th percentile measured on two or more occasions should prompt dose reduction and referral to paediatrician or physician.	Specialist/GP as agreed
Blood pressure	3 monthly		Specialist/GP as agreed
Height	6 monthly	If adversely affected, consider dose reduction or interrupting therapy to allow catch up growth.	Specialist
Weight & appetite	6 monthly	Strategies to reduce weight loss or manage decrease weight gain include taking medication with or after food, eating additional meals and snacks in the early morning or late evening and obtaining dietary advice on high calorie foods with good nutritional value. However, failure to gain weight appropriately may require withdrawal of medication.	Specialist
Signs of psychosis	Ongoing	Discontinue and carry out a full psychiatric assessment. Consider switch to atomoxetine.	Specialist
Anxiety or tics	Ongoing	Reduce dose or consider switching to atomoxetine.	Specialist
Seizures	Ongoing	Discontinue if new or increased frequency of seizures.	Specialist
Full blood count	-	Have a low threshold for investigation rather than scheduling routine tests (e.g. if recurrent infections or purpuric rash occur).	Specialist

Storage

Methylphenidate

Methylphenidate should be stored in the original container at no more than 25ºC.

Atomoxetine

Atomoxetine does not require any special storage conditions, although the oral solution has a 45- day expiry once each bottle is opened. Please refer to SPCs for more detailed information http://www.medicines.org.uk

Lisdexamfetamine

Methylphenidate should be stored in the original container at no more than 25ºC.

Cost

At February 2016 BNF prices, the cost of one month's treatment is as follows:

Methylphenidate (30 days)

Non Proprietary methylphenidate	£3.03 – £32.94	(5- 60mg daily)
RITALIN	£5.49 - £32.94	(10-60mg daily)
MEDIKINET XL	£24.04 – £67.32	(5-60mg daily)
EQUASYM XL	£25.00 - £70.00	(10-60mg daily)
CONCERTA XL	£31.19 - £60.48	(18-54mg daily)

Atomoxetine (28 days)

STRATTERA Capsules 10mg/18mg/25mg/40mg/60mg daily - £62.46

STRATTERA Oral Solution 4mg / ml 3x100ml bottles - £100.00

Lisdexamfetamine (Elvanse)

30mg caps £58.24 (28 days)

50mg caps £68.60 (28 days)

70mg caps £83.16 (28 days)

References

1. National Institute for Health and Clinical Excellence Clinical Guideline. NICE CG72: Attention Deficient Hyperactivity Disorder. Diagnosis and management of ADHD in children, young people and adults. National Institute for Health and Clinical Excellence. September 2008. http://www.nice.org.uk/nicemedia/pdf/CG72QRG.pdf
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3. Summary of Product Characteristics. Ritalin®. Novartis Pharmaceuticals UK Ltd. Accessed on 29th June 2015 via http://www.medicines.org.uk/EMC/medicine/1316/SPC/Ritalin/
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Adapted from Salisbury NHS Foundation Trust's and Dorset CCG's shared care guidelines with grateful thanks.

Date revised	**Date reviewed**
5th February 2016	1st June 2018

Appendix 1:

ADHD Consultation record (draft)

Patient name..... DOB.....
Identifier.....
Date of Consultation...../...../.....


CMP
•Clinical management plan signed
BMI / BP
•Height - 6 monthly
•Weight - 6 monthly
•BMI
• BP & pulse - 3 monthly
Tics
•Motor tics
•Vocal tics
Control
•Lost Appetite
•Depression, withdrawal, lost spontaneity
•Irritability
•DSH
Concerns
•Concerns of patient
•Concerns of Parent / carer - & friendships
•Concerns of school/college - performance and behaviour
•Concerns of professionals eg. frequent DNA - potential drug diversion/misuse
Current medication
•Current dosage review
•New meds since last consultation
•OTC preparations
•Frequency of prescription requests
Current dosage
•Side effects - Dry mouth, cough, insomnia, decreased appetite COMMON
• Tachycardia, headaches, stomach pain, bruising, jaundice, general health LESS COMMON
Prescription
•Medication
•Form
•Dosage
•Prescription number
•Issued to ..

Copy

Appendix 2:

Figure reproduced from **Fleming, S et al. Normal ranges of heart rate and respiratory rate in children from birth to 18 years of age: a systematic review of observational studies. Lancet 2011; 377: 1011-18.**

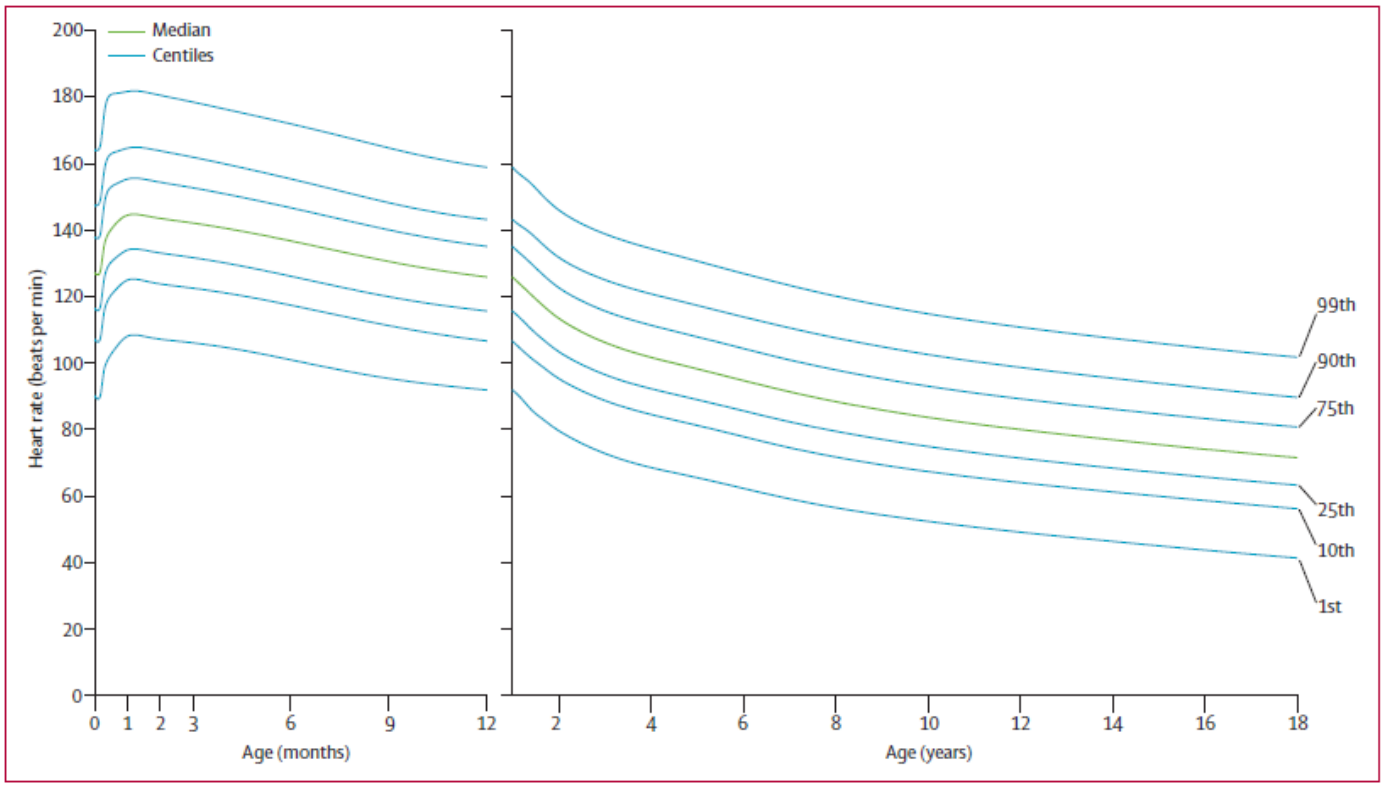

Figure 4: **Centiles of heart rate for healthy children from birth to 18 years of age**

Normal Blood pressure (95th Centile) and age related heart rate changes

Age	95th Centile mmHg (Systolic/Diastolic)	Age	Heart rate range
1 to 7 days	96/-	<1 year	80 - 180
1 to 4 weeks	104/-	1 to 2 years	100 - 160
1 to 12 months	110/70	2 to 4 years	80 - 140
1 to 5 years	114/70	4 to 6 years	80 - 120
6 to 10 years	118/78	6 to 8 years	70 - 115
11 to13 years	124/82	8 to 12 years	70 – 110
14 to 18 years	(M) - 136/86 (F) - 126/82	> 12 years	60 - 110

Data provided by Nick Archer et al. Paediatric cardiology department. Oxford John Radcliffe Hospital. Jan 2013.