Shared Care Guidelines for the Treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children and adolescents(until their 18th Birthday) Methylphenidate (Ritalin®, Equasym XL®, Medikinet®, Medikinet XL®, Concerta XL®), Dexamfetamine ,Atomoxetine (Strattera®) and Lisdexamfetamine (Elvanse®)

DOCUMENT TO BE SCANNED INTO ELECTRONIC RECORDS AS AND FILED IN NOTES

Patient Name : **Date of Birth:** **NHS No:**

Name of Referring Consultant: **Contact number:**

INTRODUCTION – Indication and Licensing

1. Drug treatment is not indicated as the first-line treatment for all school-age children and young people with ADHD. It should be reserved for those with severe symptoms and impairment or for those with moderate levels of impairment who have refused non-drug interventions, or whose symptoms have not responded sufficiently to parent-training/education programmes or group psychological treatment.

2. All children with ADHD will benefit from behavioural, educational and psychological input. For a proportion this may be sufficient, but for the more severely affected medication (Methylphenidate, Dexamfetamine , Atomoxetine or Lisdexamfetamine) will be needed as well.

3. Before starting drug treatment, children and young people with ADHD should have a full pre-treatment assessment, which should include:
    a. full mental health and social assessment
    b. full history and physical examination, including:
        i. assessment of history of exercise syncope, undue breathlessness and other cardiovascular symptoms
        ii. heart rate and blood pressure (plotted on a centile chart)
        iii. height and weight (plotted on a growth chart)
        iv. family history of cardiac disease and examination of the cardiovascular system
        v. an electrocardiogram (ECG) if there is past medical or family history of serious cardiac disease, a history of sudden death in young family members or abnormal findings on cardiac examination
        vi. risk assessment for substance misuse and drug diversion (where the drug is passed on to others for non-prescription use).

4. Estimates of the prevalence of ADHD vary widely within and between countries. It is estimated that around 5% of school-aged children and adolescents would meet the DSM-IV diagnostic criteria for ADHD, equivalent to 366,000 children and adolescents in England and Wales, but not all of these children and adolescents would require treatment .Approximately 1% of the school aged children and adolescents would meet the diagnostic criteria for hyperkinetic disorder.

5. Methylphenidate and Atomoxetine are used for the management of ADHD; Dexamphetamine and lis dexamphetamine are an alternative to these children who do not respond to these drugs. Pulse, blood pressure, psychiatric symptoms, appetite, weight and height should be recorded at initiation of therapy, following each dose adjustment, and at least every 6 months thereafter.

6. **The cheapest agent should be used in situations where equivalent effectiveness can be demonstrated.**

   Successful treatment reduces the risk of development of secondary complications such as conduct disorder or academic failure. The medication should be discontinued if review shows it to be unneeded. Methylphenidate, Dexamfetamine and Lisdexamphetamine should be withdrawn carefully in those who have been taking it regularly long term. Atomoxetine **can** be discontinued without tapering the dose.

7. Rarely, under specialist supervision, Methylphenidate and Atomoxetine may be combined. If this occurs then prescribing will remain wholly within secondary care.

8. In children and young people whose ADHD is unresponsive to Methylphenidate, Atomoxetine and Dexamfetamine, and Lisdexamphetamine, further treatment may include the use of medication unlicensed for the treatment of ADHD (such as Bupropion, Clonidine, Modafinil and Imipramine) or combination treatments (including psychological treatments for the parent or carer and the child or young person).

9. Nice Guidelines recommend that a cardiovascular examination and ECG should be carried out before starting treatment with Clonidine in children or young people with ADHD.

10. A specialist should initiate medication for the treatment of ADHD after appropriate assessment. This may be a Consultant in Child and Adolescent Psychiatry, a Consultant paediatrician with a specialist interest in ADHD or a GP with a special interest, in conjunction with the advice from the local Child and adolescent psychiatric team.

11. If treatment is adopted and the patient is stabilised, then consideration can be given to shared care arrangements. Usual practice is for the specialist to write to the GP requesting that they continue prescribing in line with this protocol. It is the responsibility of the GP to contact the specialist if they do not agree or there is a problem. Two written and one verbal agreement should be sought and evidence kept to that effect.

12. The shared care arrangements should be agreed by the patients (if appropriate) and their parents and supported with patient information leaflets and their GP.

13. A number of children continue to require treatment into adulthood. Decisions to continue or initiate treatment in adults should be considered by adult psychiatrists after an assessment of symptoms and as part of a wider programme of care.

Licensed indications

- Ritalin ®, Concerta XL®, Equasym XL®, Medikinet & Medikinet XL®, Strattera® and Elvanse® are all licensed for use in children over 6 years of age including all long-acting formulations.
- Dexamfetamine is licensed for use in children 6 or over.
- Any use in children younger than 6 years, is currently unlicensed. See BNF for Children, section 4.4. Many physicians in the USA prescribe stimulants from the age of 3 years onwards. Many European physicians will consider their use from 5 years onwards

ORAL DOSE AND ADMINISTRATION

Methylphenidate (Oral Administration)

Methylphenidate is contraindicated for use in patients in the presence of hyperthyroidism, cardiovascular disease, severe angina pectoris, cardiac arrhythmia, glaucoma, thyrotoxicosis and hyper excitability states. Caution is required in the prescribing of methylphenidate for children and adolescents with epilepsy, psychotic disorders or a history of drug or alcohol dependence.

a. Treatment should not continue beyond four weeks if benefit has not been established.
b. Dosing as per BNF for children: (6-18yrs) initially 5 mg 1–2 times daily, increased if necessary at weekly intervals by 5–10 mg daily.The maximum recommended dose for methylphenidate is 60mg daily and this is rarely exceeded in clinical practice. The dose may be increased to 2.1mg/kg daily (maximum 108mg daily) under the direction of a Specialist. This applies to Ritalin® and Medikinet®.
c. ConcertaXL® dosing as per BNF for children (6-18yrs) initially 18mg once daily in the morning, increased if necessary in weekly intervals by 18mg according to response; licensed max.54mg once daily, but maybe increased to 2.1mg/kg daily (max. 108mg daily) under the direction of a specialist. Total daily dose of 15mg of standard release formulation is considered equivalent to Concerta® XL 18mg once daily. ConcertaXL® tablets consist of an immediate release component (22%) of the dose and a modified release component (78% of the dose).
d. Medikinet XL® capsules consist of an immediate release component (50% of the dose) and a modified release component (50% of the dose).
e. Equasym XL® capsules consist of immediate release component (30% of the dose) and a modified release component (70% of the dose).
f. Improvement can be rated with Short Connor's Scales (Revised) or Strengths and Difficulties Questionnaire, at home and at school.
g. Doses after 5pm are more likely to worsen sleep but occasionally may help settling if given less than three hours before bedtime.
h. Whilst some children are managed with doses only on school days, or omitted during holidays, depending on the parent's skills and tolerance, it is generally acknowledged that many need continuous medication.

Atomoxetine (Oral Administration)

Patients should be monitored for signs of depression, suicidal thoughts or suicidal behaviour, particularly at the start of treatment, and referred for appropriate treatment if necessary.
Parents and patients should be informed of this risk and advised to watch for any clinical worsening, irritability or agitation, suicidal thoughts or behaviour or other unusual changes in behaviour.
Atomoxetine is contraindicated for use in patients with narrow angle glaucoma and should be used with caution in patients with cardiovascular disease including hypertension and tachycardia; structural cardiac abnormalities; QT-interval prolongation (avoid concomitant use of drugs that prolong QT interval); psychosis or mania; history of seizures; aggressive behaviour, hostility, or emotional lability.
For children over 6 yrs/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).

a. No additional benefit has been demonstrated for doses above this but doses of up to 1.8mg/kg/day may be used if thought to be appropriate.
b. **For children/adolescents weighing more than 70kg** and adults the initial dose should be 40mg, 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 120mg daily under the direction of a specialist.
c. Can be taken with or after food.
d. Full benefit of Atomoxetine may not be seen until after 4 weeks of continued treatment. It needs to be given every day of the week. Total dose may be given *either* as a single dose in the morning *or* in 2 evenly divided doses with the last dose no later than early evening, if efficacy or tolerability may be improved.

e. It may be prescribed where a child has failed to respond to an adequate trial of a stimulant drug such as methylphenidate.
f. It can be prescribed where a child has developed significant side effects on methylphenidate or other medication for ADHD and is unable to continue with it.
g. It may be prescribed where there are clear contraindications to methylphenidate. (See contraindications above) or if patients' parents have a strong preference for a non-stimulant drug, Atomoxetine may be prescribed.

If switching from methylphenidate or Dexamfetamine to Atomoxetine it is wise to continue the stimulant medication until the therapeutic effect of Atomoxetine is established.

Dexamphetamine (oral administration)

Dexamphetamine is contraindicated for use in patients in the presence of hyperthyroidism, cardiovascular disease, severe angina pectoris, cardiac arrhythmia, glaucoma, thyrotoxicosis, and hyper excitability states. Caution is required in the prescribing of Dexamphetamine for children and adolescents with epilepsy, psychotic disorders or a history of drug or alcohol dependence.

a. Treatment should not continue beyond 4 weeks if benefit has not been established.
b. Dosing as per BNF for children: (6-18years) initially 2.5mg 2 to 3 times daily, increased if necessary at weekly intervals by 5mg; usual max.1mg/kg daily, up to 20mg (40mg daily has been required in some children); Maintenance dose given in 2 to 4 divided doses.
c. Improvement can be rated with Short Connor's Scales (Revised) or Strengths and Difficulties Questionnaire, at home and at school
d. Doses after 5pm are more likely to worsen sleep but occasionally may help settling if given less than three hours before bedtime.
e. Whilst some children are managed with doses only on school days, or omitted during holidays, depending on the parent's skills and tolerance, it is generally acknowledged that many need continuous medication.

Lisdexamphetamine (oral administration)

The starting dose for all patients – 30mg taken once in the morning (with or without food).The dose may be increased by 20mg increments at approximately weekly intervals and the maximum recommended dose is 70mg daily. If improvement of symptoms is not observed after the appropriate dosage adjustment over one month, it should be discontinued. Common (frequency estimate 1% to 10%) side effects include

- Abdominal pain, nausea, dry mouth, appetite suppression (usually transient), weight loss
- Headache, drowsiness, dizziness, dyskinesia
- Tachycardia, palpitations, arrhythmias, changes in BP and heart rate
- Rash, pruritis, urticaria, fever,
- Nervousness and insomnia common at start of treatment, usually controlled by dose adjustment

CAUTIONS- see Statement of Product Characteristics for details
In psychotic children, Lisdexamfetamine may exacerbate behavioural disturbances and thought disorder.
Suppression of growth (weight gain and/or height) has been reported with long term use of stimulants in children, therefore careful monitoring is required.
Caution should be used when treating patients whose underlying medical conditions that might be compromised by increased blood pressure or heart rate.
Lisdexamfetamine may be swallowed whole, or the capsules opened and the entire contents dissolved in a glass of water
Careful supervision is required during drug withdrawal since this may unmask depression as well as chronic overactivity

CONTRA-INDICATIONS- see Statement of Product Characteristics for details

- Unless specialist cardiac advice has been obtained: in pre-existing cardiovascular disorders, including severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant.

- Hypersensitivity to sympathomimetic amines
- Concomitant use of MAOIs or within 14 days of stopping MAOIs.
- Hyperthyroidism or thyrotoxicosis
- Agitated states
- Advanced arteriosclerosis
- Glaucoma

Therapeutic use
Methylphenidate and Dexamfetamine
Methylphenidate and Dexamfetamine formulations are controlled drugs and therefore subject to the requirements of the Misuse of Drugs Regulations 1985. Both drugs have a resale value as drugs of abuse. Amphetamine-like drugs are effective in increasing attention and concentration and reducing impulsive and restless behaviours. Secondary effects include increased school performance, improved peer relationships, reduced aggression and fewer negative comments from parents.
Aggression often remains a problem, requiring anger management.
Response rates of 70 to 95% occur in school age children and are generally seen within the first four weeks of treatment.

a. Generally well tolerated; as with the long term prescribing of any powerful psychotropic drugs to a child, the possibility of permanent adverse neurological consequences must be considered and the risk: benefit assessed.
b. Appetite suppression may be prominent so these drugs should preferably be taken after meals.
c. Height restriction over time does not seem to occur in the absence of appetite suppression.
d. Failure to gain weight.
e. Sleep may be improved or worsened. The evening dosing is more problematical hence the need for caution in giving late afternoon or evening doses.
f. Stomach pains and headaches on initiation usually settle within a few days.
g. Rash, unexplained/easy bruising or recurrent infections may be due to rare blood dyscrasias – no reported fatalities.
h. Blood pressure may be affected.
i. Methylphenidate may exacerbate tics, habits or mannerisms. The management of children with a combination of Tourette's and ADHD is particularly problematic. In a small subgroup tics appear for the first time following administration of the drug. Side effects such as these should usually lead to withdrawal of treatment. There are reports of new-onset tics persisting after withdrawal.
j. No reports of addiction to methylphenidate or increased rates of addiction to other substances.
k. Abrupt withdrawal should be avoided in cases of continuous administration to prevent depression or renewed hyperactivity
l. Overdose effects are similar to those seen with Amphetamine.

Atomoxetine

This is a non-stimulant drug, which is effective in increasing attention and concentration and reducing impulsive and restless behaviours. It may also improve sleep and have an effect on early morning behaviours. It provides continuous 24 hour control of ADHD symptoms.
For full prescribing details, please consult the latest SPC

a. Many patients taking Atomoxetine experience a modest increase in pulse (mean <10bpm) and/or changes in blood pressure (mean < 5mmHg). For most people these changes are not clinically important.

b. The Committee of Safety of Medicines (CSM) has issued advice about the risk of rare, but sometimes severe, cases of hepatic disorder. The risk is estimated at below 1 in 50,000 patients treated but it is important patients and their families are warned of the risk and told of the possible symptoms. Routine monitoring of liver function is not recommended, but all suspected hepatic reactions should be

investigated. Atomoxetine should be discontinued in patients with jaundice or laboratory evidence of hepatic injury, and should not be restarted.

c. **Atomoxetine causes clinically important increases in blood pressure or heart rate, or both, in a small proportion of patients. Atomoxetine should not be used in patients with severe cardiovascular or cerebrovascular disorders. Thorough pretreatment screening and regular monitoring of cardiovascular status is recommended. Specialist cardiac evaluation and advice should be sought if pretreatment findings suggest cardiac disease or history, or if symptoms suggesting cardiac disease are found during treatment**

d. Growth and development may be affected.

e. Abdominal pain and decreased appetite were the most commonly reported side effects in clinical trails. In practice, indigestion, nausea, vomiting and drowsiness can be problematic. The tablets have a very bitter taste that can be off putting for children.

f. All serious suspected reactions should be reported to the CSM - has black triangle status even if the adverse event is well recognised or if a causal link is uncertain. See BNF for details.

Drug Interactions
For further advice on drug interactions, contact the Pharmacy Department at Goodmayes Hospital or the local specialist clinics.

Methylphenidate

Methylphenidate undergoes rapid first-pass metabolism, only 30% of the dose is available systemically with a low plasma protein-binding rate. Peak plasma concentrations are achieved 2 hours after administration, but these show considerable inter-patient variability:

a. Inhibition of tricyclic metabolism resulting in accumulation and raising blood levels. Concurrent administration should be avoided as there is often an increase in cardiac arrhythmias
b. Increased plasma concentration of phenytoin, phenobarbital and primidone. Concurrent use should be approached with caution, particularly if high doses of phenytoin are prescribed
c. Antagonism of antihypertensive effect of adrenergic neurone blockers
d. Hypertensive crisis with MAOI's and sympathomimetics such as ephedrine / phenylephedrine (which may be found in cough medicines) or within 14 days of stopping treatment

Dexamfetamine

a. Severe hypertension with concurrent use of Dexamfetamine and beta-blockers
b. Hypertensive crisis with MAOI's and sympathomimetics such as ephedrine / phenylephrine (which may be found in cough medicines) or within 14 days of stopping treatment
c. Acute dystonia may result if Dexamfetamine is given with haloperidol due to a potentiating of dopamine release
d. Effects of alcohol unpredictable.

Atomoxetine

a. **Atomoxetine causes clinically important increases in blood pressure or heart rate, or both, in a small proportion of patients. Atomoxetine should not be used in patients with severe cardiovascular or cerebrovascular disorders. Thorough pretreatment screening and regular monitoring of cardiovascular status is recommended. Specialist cardiac evaluation and advice should be sought if pretreatment findings suggest cardiac disease or history, or if symptoms suggesting cardiac disease are found during treatment.**
b. Atomoxetine should not be used in conjunction with MAOI's due to similarities in their mode of action. There must be a minimum of a two-week gap in between taking the medications.

c. Slower titration of Atomoxetine may be necessary in people taking CYP2D6 inhibitor medicines e.g. Fluoxetine, Paroxetine.
d. Atomoxetine should be administered with caution to people receiving high dose nebulised or systemically administered Salbutamol as the action of Salbutamol on the cardiac system may be potentiated.
e. Medicines that affect nordrenaline should be used cautiously with Atomoxetine because of the potential for additive pharmacological effect. Examples include antidepressants e.g. Venlafaxine, Mirtazapine, Imipramine and decongestants such as Pseudoephedrine or Phenylephrine (which may be found in cough medicines).

Lisdexamphetamine

a. Lisdexamfetamine is a schedule 2 Controlled Drug subject to the requirements of the misuse of drugs regulations 1985.It has a resale value as a drug of abuse.
b. This is a black triangle drug. The black triangle symbol (▼) identifies newly licensed medicines that require additional monitoring by the European Medicines Agency. Prescribers and patients are encouraged to report any adverse drug reaction from taking this product to the MHRA.
c. Antagonises hypotensive effect of adrenergic neurone blockers
d. Risk of hypertensive crisis when given with MAOIs and Moclobemide
e. Chlorpromazine and Haloperidol may inhibit the effects of lisdexamfetamine
f. Possibly inhibits metabolism of SSRIs and tricyclics
g. Alcohol may exacerbate adverse CNS effects therefore it is advisable to abstain from alcohol during treatment

MONITORING STANDARDS FOR MEDICATION AT NELFT

Monitoring by Specialist or GP in conjunction with CAMHS

Methylphenidate and Dexamphetamine

Parameter	Frequency of Monitoring	Action	By Whom
Weight gain	6 monthly	Failure to gain weight appropriately- may require withdrawal	Specialist
Full Blood Count		Low threshold for repeated investigation rather than schedule for routine testing e.g., if recurrent infection or purpuric rash occurs	Specialist/GP as agreed
Growth development	6 monthly	If adversely affected consideration should be given to dose reduction or interrupting therapy in those on long-term treatment.	Specialist
Appearance of suicidal behaviour, self-harm or hostility.	Ongoing basis at appointments	Patients/parents should be advised of this risk and made aware of possible signs/symptoms to report back to the Specialist immediately if noticed.	Specialist/GP as agreed
Pulse	6 monthly	Monitor whilst taking medication.	Specialist
Blood Pressure	6 monthly	Monitor whilst taking medication to ensure within published range for age of child.	Specialist

KEY ADVERSE EFFECTS & ACTIONS

Adverse effects	**Symptoms/signs** *(specify what would prompt action)*	**Actions (***what action should the GP take if identified in primary care)*
Refer to pages 5,6		

This only lists the key important ADRs-For comprehensive information on cautions, contra-indications and interactions please refer to the current British National Formulary and Summary of Product Characteristics.

Detail any important cautions

PREGNANCY AND BREAST FEEDING

It is recommended that the patient should not become pregnant whilst on the drug at initiation and women will be counselled about contraception and what to do if pregnancy occurs. The counselling should be documented in the patient notes.

For comprehensive information please refer to the current British National Formulary and Summary of Product Characteristics.

SHARED CARE

Shared care guideline*:* is a document which provides information allowing patients to be managed safely by primary care, secondary care and across the interface. It assumes a partnership and an agreement between a hospital specialist, GP and the patient and also sets out responsibilities for each party. The intention to shared care should be explained to the patient and accepted by them. Patients are under regular follow-up and this provides an opportunity to discuss drug therapy. Intrinsic in the shared care agreement is that the prescribing doctor should be appropriately supported by a system of communication and cooperation in the management of patients. The doctor who prescribes the medicine has the clinical responsibility for the drug and the consequence of its use**.**

Consultant

1. To identify those patients who will benefit from treatment with medication and to discuss potential benefits and side effects of treatment with the patient/carer to identify whether they have a clear picture of these
2. Undertake pre-treatment monitoring (for example height, weight, blood pressure) and advise the GP of any abnormal results.
3. Assess Atomoxetine patients on an ongoing basis for appearance of suicidal behaviour, self-harm or hostility.
4. Check drug-drug and drug-disease interactions e.g. establish any history of cardiac or epileptic conditions and any concurrent medicines
5. Initially prescribe and stabilise the patient on the chosen medication. Monitor height weight and blood pressure every 6 months or until it is taken over by primary care (according to local arrangements).
6. When appropriate, ask GP if they are willing to participate in shared care.
7. Advice GP of information provided to the patient/carer about the treatment and/or about the proposed shared care arrangement e.g. what and to whom the patient should report potential side effects.
8. Continue to prescribe for the patient after initiation of treatment until such time as the patient's GP agrees to accept prescribing responsibility and provide prescriptions for the patient under an agreed shared care arrangement.
9. Communicate promptly with the GP about any changes in treatment.
10. Monitor the efficacy of the treatment at least 6 monthly, considering whether continuation is necessary.
11. Agree how the outcome of monitoring will be communicated between specialist, GP and patient.
12. Ensure clear arrangements are in place for back up, advice and support e.g. out of hours and/or when the consultant initiating therapy is not available.
13. Educate the family about the drug therapy to maximise compliance and be aware of when to seek medical advice.
14. Liaise with the school if necessary.
15. Evaluate any adverse effects reported by the GP (Any adverse effects which are suspected to relate to the drug

should be reported to the CSM).
16. Refer for additional behavioural therapy (social skills, anger management or parents group/parenting skills) if appropriate. 17. The Specialist will specify the brand of medication in their communication to GP.

General Practitioner

1. Reinforce the patient's understanding of the nature, effect and potential side effects of the drug before prescribing it as part of the shared care programme and contact the specialist for clarification where appropriate.
2. Confirm that proposed therapy is not contra-indicated because of concurrent therapy for other conditions the patient may be suffering from e.g. check drug-drug and drug-disease interactions and assess on an ongoing basis.
3. Prescribe Methylphenidate/ Dexamfetamine/ Atomoxetine at the dose recommended by the Specialist once the patient is stabilised on treatment and side effects have been excluded as far as possible by the specialist team.
4. To discuss with the specialist if suicidal behaviour, self-harm or hostility develop.
5. Monitor parameters as agreed with specialist. If patient reports changes in these or other parameters, including loss of efficacy or worsening of condition related symptoms, urgent referral back to the specialist should be considered.
6. Arrange appropriate investigation if the patient shows signs of liver problems and discontinue the medication if the person has jaundice or has laboratory evidence of hepatic injury. Contact the specialist team immediately.
7. Report any suspected adverse drug reactions to Specialist who initiated therapy under the shared care agreement.
8. Report adverse events to the CSM; If the drug has black triangle status or is unlicensed, all adverse events should be reported even if causal relationship is not known or if the adverse event is already known about.
9. Monitor compliance through rates of prescription.

CCG

1. To provide feedback to trusts via Trust Medicines Committee.
2. To support GPs to make the decision whether or not to accept clinical responsibility for prescribing.
3. To support trusts in resolving issues that may arise as a result of shared care.

Patient/ Carer

1. Discuss potential benefits and side effects of treatment with the specialist and GP, to identify whether they have a clear picture of these from the specialist and to raise any outstanding queries 2. Check that where possible the specialists have provided a patient-held record or information sheet for monitoring and/or to alert other clinical staff to the treatment they are receiving
3. Share any concerns they have in relation to treatment with their drug(s)
4. Report any adverse effects to their specialist or GP whilst taking drug(s)
5. Report to the specialist or GP if they do not have a clear understanding of their treatment
6. Participate in the monitoring of therapy and the assessment of outcomes, to assist health professionals to provide safe, appropriate treatment

Costs

Drug Product	Cost in primary care
Methylphenidate 10mg od to 20mg tds, BNF prices 2014-2015 Ritalin® 10mg scored tablets. net price 30-tab pack = £5.57	Ritalin® 10mg tabs= £16.71 to 33.42/mth
Medikinet® (Methylphenidate hydrochloride) 5 mg, net price 30-tab pack = £3.03; 10 mg, 30-tab pack =£5.49 ; 20 mg, 30-tab pack = £10.92	Based on 5mg od to bd: Medikinet® 5mg caps = £3.03 to £6.06/mth Based on 20mg tds: Medikinet® 20mg tabs= £32.76/mth
Equasym XL® 10 mg (white/green), net price 30-cap pack = £25.00; 20 mg (white/blue), 30-cap pack = £30.00; 30 mg (white/brown), 30-cap pack = £35.00.	Based on Equasym® 10mg XL od: Equasym® 10mg XL caps = £ 25.00/mth

Medikinet XL® (Flynn) Capsules, m/r, methylphenidate hydrochloride 5 mg (white), net price 30-cap pack = £24.04; 10 mg (lilac/white), 30-cap pack = £24.04; 20 mg (lilac), 30-cap pack = £28.86; 30 mg (purple/light grey), 30-cap pack = £33.66; 40 mg (purple/grey), 30-cap pack = £57.72.	Based on Equasym® 30mg to 60mg XL od: Equasym® 30mg XL caps = £35.00 to £70.00/mth
Concerta XL® 18mg and 36mg tablets Concerta XL® 18 mg (yellow), net price 30-tab pack = £31.19; 27 mg (grey), 30-tab pack = £36.81; 36 mg (white), 30-tab pack = £42.45	Based on Medikinet® XL 10mg od: Medikinet® 10mg XL caps = £24.04/mth
Elvanse ® capsule, lisdenamfetamine mesilate 30mg (white/pink), net price 28-cap pack = £58.24, 50mg (white/blue), 28-cap pack = £68.60, 70mg (blue/pink), 28-cap pack = £83.16	Based on Medikinet® XL 60mg od: Medikinet® 20mg & 40mg XL caps = £86.58/mth
Dexamfetamine 7.5mg daily to 20mg daily (40mg has been required in some children) Dexamfetamine 5mg scored tablet. Net price 28-tab pack = £ 18.90	Based on Elvanse® 30mg od to 70mg od: £58.24 to £83.15/mth
Atomoxetine® 10mg od to 100mg od, BNF prices Strattera (Atomoxetine)(as hydrochloride) 10 mg (white), net price 7-cap pack = £15.62, 28-cap pack = £62.46; 18 mg (gold/white), 7-cap pack = £15.62, 28-cap pack = £62.46; 25 mg (blue/white), 7-cap pack = £15.62, 28-cap pack = £62.46; 40 mg (blue), 7-cap pack = £15.62, 28-cap pack = £62.46; 60 mg (blue/gold), 28-cap pack = £62.46; 80 mg (brown/white), 28-cap pack = £83.28. 100mg (brown), 29 cap pack = £ 83.28	Based on dexamfetamine 2.5mg bd to 20mg od using 5mg scored tabs = £22.58/mth to £112.90/mth Based on atomoxetine 40mg od using 40mg caps = £62.46/mth Based on atomoxetine 80mg od using 80mg caps = £83.28/mth

Based on …….BNF 67 March 2014

Give the cost of a 1 month course of treatment for each drug listed

RESOURCES AVAILABLE

This Shared Care Agreement should be read in conjunction with the current Summary of Product Characteristics (SPC, datasheet). Current revisions available at: https://www.medicines.org.uk/emc/.
British National Formulary August 2014
British National Formulary for Children 2014-2015

NICE. Clinical Guideline 72: Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults (2008). Accessed via http://publications.nice.org.uk/attention-deficit-hyperactivity-disorder-cg72 (last accessed 01/09/2014) Review date: September 2014

NELFT - For Back-up Advice and Support

If you would like information about medicines used in mental health services, please click on the link below. This will take you to the NELFT section of a website called Choice and Medication.
Go to the Choice and medication website
The information on this website can help you to make informed decisions about medication. Use this site on your own or use it together with your family or someone you care for or your doctor, nurse or pharmacist. Medications website's full link:
http://www.choiceandmedication.org.uk/nelft/

Chief Pharmacist or the local Consultants can be contacted for advice.

Ms.Heather Walker	Chief Pharmacist	03005551200
Dr. Trudie Rossouw	Consultant child & adolescent Psychiatrist	03005551155
Dr. Leon W	Consultant child & adolescent Psychiatrist	03005551155
Dr.Yvonne Treffurth	Consultant child & adolescent Psychiatrist	03005551035
Dr.Skirma Povilenaite	Consultant child & adolescent Psychiatrist	03005551035
Dr.Ragini Bahry	Consultant child & adolescent Psychiatrist	03005551182
Dr. Ralph Littlejohn	Consultant child & adolescent Psychiatrist	03005551182
Dr.Manas Sarkar	Consultant child & adolescent Psychiatrist	03005551124
Dr. Hena Vijayan	Consultant child & adolescent Psychiatrist	03005551124
Dr. Colin Welch	Consultant child & adolescent Psychiatrist	03005551247
Dr. Eparu Iuliana	Consultant child & adolescent Psychiatrist	03005551247

References

The existing guidelines were modified in 2012 by Consultant Child & Adolescent Psychiatrists Dr Giaroli Giovanni and Dr.Manas Sarkar. They were then reviewed by Chief Pharmacist Ms. Heather Walker and Consultant Psychiatrist Dr Richard Duffett. They were then reviewed in 2014 by Chief Pharmacist Ms. Heather Walker, Dr. Manas Sarkar, Jena Sleami, Advanced Pharmacist, Mental Health & Dr Richard Duffett.

Supporting Information

References used

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Refer to the BHR CCG website to obtain the latest version of this guideline

Template approved by Area Prescribing Committee (APC) on April 2013. Guideline written by Manas Sarkar March 2015 Approved by APC on 5th March 2015 Review date: March 2017 (2 years).

Appendix 1

NELFT

Shared Care Guidelines for the Treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children and adolescents

Methylphenidate (Ritalin®, , Equasym XL®, Medikinet®, Medikinet XL®, Concerta XL®), Dexamfetamine , Atomoxetine (Strattera®) and Lisdexamfetamine (Elvanse®)

SHARED CARE AGREEMENT LETTER

Name of GP ……..… Address …….
……...
…….……
..……

Dear GP

Re: Patient's Name……..……

Date of Birth……..……

Hospital Number……..…….

Indication for ……..……

Route……(Oral/Intramuscular/Subcutaneous)- DELETE AS APPROPRIATE

Dose…….mg per week.

Enclosed is a copy of the shared care guidelines for [Drug Name] to be retained in the patient's notes. Should you agree to shared care, we will send a letter containing the details of the patient's treatment plan, the dose to be prescribed and all relevant blood results.

Please sign below and return this letter to the Hospital Specialist if you agree to the shared care arrangements for this patient.

Many thanks

Hospital Specialist	GP
Signature……...	Signature……...
Name ……..……...	Name ……...
Date……...	Date……..…..……...

If you are not taking on shared care for this patient please state the reason why and return this letter to the Hospital Specialist.

……
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