Surrey and Borders Partnership NHS
NHS Foundation Trust

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NHS

Surrey (East Surrey CCG, Guildford & Waverley CCG, North West Surrey CCG, Surrey Downs CCG & Surrey Heath)

SHARED CARE PRESCRIBING GUIDELINE

Methylphenidate, lisdexamfetamine, dexamphetamine and atomoxetine for the Treatment of ADULT ADHD

Prescribing Clinical Network classification: Amber

N.B. The eligibility criteria included here apply to new patients commencing treatment under this guideline & not to existing patients whose treatment was initiated under the previous version. However, monitoring and discontinuation criteria apply to all patients.

NOTES to the GP

Amber drugs: Prescribing to be initiated by a hospital specialist (or if appropriate by a GP with specialist interest) but with the potential to transfer to primary care. The expectation is that these guidelines should provide sufficient information to enable GPs to be confident to take clinical and legal responsibility for prescribing these drugs**.**

The questions below will help you confirm this:

- Is the patient's condition predictable?
- Do you have the relevant knowledge, skills and access to equipment to allow you to monitor treatment as indicated in this shared care prescribing guideline?
- Have you been provided with relevant clinical details including monitoring data?

If you can answer YES to all these questions (after reading this shared care guideline), then it is appropriate for you to accept prescribing responsibility. Sign and return a copy of page 6 to the requesting consultant at the Secondary Care Trust. Until the requesting consultant at the Secondary Care Trust has received a signed copy of page 6 indicating that shared care has been agreed all care (including prescribing) remains with the consultant at the Secondary Care Trust.

If the answer is NO to any of these questions, you should not accept prescribing responsibility. You should write to the consultant outlining your reasons for NOT prescribing. If you do not have the confidence to prescribe, we suggest you discuss this with your local Trust/specialist service, who will be willing to provide training and support. If you still lack the confidence to accept clinical responsibility, you still have the right to decline. Your practice pharmacist will assist you in making decisions about shared care.

Prescribing unlicensed medicines or medicines outside the recommendations of their marketing authorisation alters (and probably increases) the prescriber's professional responsibility and potential liability. The prescriber should be able to justify and feel competent in using such medicines.

The patient's best interests are always paramount

The GP has the right to refuse to agree to shared care, in such an event the total clinical responsibility will remain with the consultant

Information

ADHD is defined by the core symptoms in the domains of inattention, hyperactivity and impulsivity. The diagnostic criteria for the condition are set down in both the DSM V and ICD 10 diagnostic manuals.

The NICE Clinical Guideline CG72 - Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults (2008) recognises drug treatment of adult ADHD as part of a comprehensive treatment programme addressing psychological, behavioural and educational or occupational needs. It considers drug treatment as the first line treatment unless the person prefers psychological treatment.

Licensed indications

All products named in this document for the treatment of ADHD are currently licensed for children only, except atomoxetine and lisdexamfetamine which have an adult license. Historically ADHD was considered a childhood disorder and patients were expected to grow out of their condition by their late teens. However, it is now widely recognised that in up to 78% (Farone et al) of patients the condition continues into adulthood and continues to cause impairment of functioning in a large proportion of these patients. Hence the need for continuation of their treatment.

Drugs covered by this agreement and their place in treatment

Drug	Brand	Action	Dosage
Methylphenidate IR	Ritalin Medikinet Tranquilyn	CNS stimulant schedule 2 controlled drug	5mg TDS up to a max of 100mg in divided doses
Methylphenidate SR	Equasym XL, Medikinet XL Concerta XL Matoride XL Xenidate XL	CNS stimulant schedule 2 controlled drug	10mg once daily up to max 100mg once daily – effect can last up to 8 hours 18mg once daily up to a max of 108mg once daily. Used where treatment effects are required to persist into the evening – effects can last up to 12 hours
Dexamphetamine	Dexedrine	CNS stimulant schedule 2 controlled drug	5mg BD up to a max of 60mg/day in divided doses
Lisdexamfetamine	Elvanse Adult	CNS stimulant schedule 2 controlled drug	30mg daily increased in increments of 20mg to a maximum dose of 70mg
Atomoxetine	Strattera	Selective noradrenaline reuptake inhibitor (not a controlled drug)	40 mg daily, maintained for a minimum of 7 days prior to upward dose titration according to clinical response and tolerability. The recommended maintenance daily dose is 80mg to 100mg. The maximum recommended total daily dose is 100 mg.

RESPONSIBILITIES and ROLES

	Consultant / Specialist responsibilities
1	Confirmation of diagnosis and identification of suitable patients following full assessment
2	To undertake a complete history, documenting: concomitant medicines; past and present medical and psychiatric disorders or symptoms; family history of sudden cardiac death, unexplained death, or malignant arrhythmia, and current weight
3	To review outcome of physical examination for the presence of heart disease.
4	To assess baseline cardiovascular status, including blood pressure and heart rate before prescribing and if a specialist opinion from a cardiologist is required, check whether a recent cardiology review has been undertaken prior to referral to a cardiologist.
5	Discussion of risks and benefits with patients, outline possible side effects and explain their roles
6	Initiation of appropriate therapy
7	When prescribing stimulant medication 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.

8	Issuing initial prescription(s) until the patient is stabilised (minimum of one month) and until shared care is in place. If a dose change is required at a later stage then stabilisation of the new dose by secondary care may be necessary, but it is **essential** that this is clearly communicated with primary care to avoid duplication of supply
9	If prescribing modified release methylphenidate this must be by **BRAND** to avoid the risk of the wrong formulation being dispensed. Lisdexamfetamine should be prescribed as Lisdexamfetamine adult to make sure the right version of the product is supplied.
10	Ensure that all newly treated patients (and/or their carers) receive appropriate education and advice regarding their drug therapy and shared care arrangements. This should include written information where appropriate.
11	Request agreement of shared care with primary care prescriber
12	To provide a copy of this shared care agreement to the patient to ensure that they are familiar with all roles and responsibilities
13	Provide primary care prescriber with clinic letter stating planned introduction and reviews
14	To review the patient and monitor the following (if relevant to specific drug) usually on a six monthly basis and act on the results appropriately and communicate these results to the primary care prescriber: • weight and appetite, recorded at baseline, following dosage adjustments and 6 monthly. • Blood pressure and pulse, recorded at baseline, following dosage adjustments and 6 monthly.. • Blood and platelet counts at discretion of supervising clinician(s) (e.g. if recurrent nose bleeds, bruising or infections occur. Baseline, then when clinically indicated. • Liver function tests if prescribing atomoxetine if clinically indicated • 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. • The development of new or worsening of pre-existing, psychiatric symptoms (also following dose adjustments and at every visit).
15	Notify the GP of the patient's failure to attend for clinical review or drug monitoring and give advice on stopping the medication.
16	To take responsibility for stopping the drug or organising medication breaks

Primary care prescriber responsibilities	
1	Initial referral to secondary care for patients not currently known to CAMHS services. Referral to the Adult ADHD Service for patients currently known to CAMHS will be made by the CAMHS Consultant. Referral to include a full history of any diagnosis or history where caution is needed or the ADHD medication is contraindicated including a physical examination for the presence of heart disease.
2	To provide repeat prescriptions of the ADHD medication at the dose recommended once shared care is agreed and in place and the patient is stabilised (not before initial one month stabilisation period). A demonstrable system should be in place to ensure that prescribing is reviewed by the primary care prescriber if there is no record of the fact that monitoring has taken place within the agreed time scales. Prescriptions for stimulants should be restricted to 30 days supply and are only valid for 28 days from the date of signature as stimulant medications are controlled drugs subject to safe custody and specific regulations for prescribing.
3	To record any changes in therapy in the prescribing record on receipt of such communication from secondary care and to act upon these.
4	To monitor prescribing rate of ADHD medications for individual patients.
5	To contact consultant / specialist if deterioration in behaviour.
6	To report adverse drug reactions or interactions to consultant / specialist.
7	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.
8	Liaise with consultant / specialist if any cause for concern or drug discontinued.
9	If prescribing modified release methylphenidate this must be by **BRAND** to avoid the risk of the wrong formulation being dispensed
10	When prescribing stimulant medication 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.
11	To interrupt treatment at least annually on the recommendation of the specialist.
12	To ensure all relevant staff within the practice are aware of the shared care guidelines.
13	Ensure that if care of the patient is transferred to another prescriber that the new prescriber is made aware of the shared care agreement.

Patient's / Carer's role	
1	Ask the consultant / specialist or primary care prescriber for information, if he or she does not have a clear understanding of the treatment.

2	Share any concerns in relation to treatment with any medication covered by this agreement
3	Tell the consultant / specialist or primary care prescriber of any other medication being taken, including over-the-counter products.
4	Read the patient information leaflet included with your medication and report any side effects or concerns you have to the consultant / specialist or primary care prescriber.
5	To attend appointments.
6	Arrange blood tests as per consultant / specialist request
7	To be aware of side effects and report to their consultant / specialist or primary care prescriber any relevant symptoms such as: palpitations (noticeably rapid, strong or irregular heartbeat), chest pain during exercise, unexplained fainting, shortness of breath, development of new or worsening of pre-existing mental health problems.

BACK-UP ADVICE AND SUPPORT

Contact details	Specialist	Telephone No.	Email address:
Specialist:	Via Joanna Keegan, Adult ADHD Administrator, Ramsay House, West Park, Horton Lane, Epsom	01372 202100	Joanna.keegan@sabp.nhs.uk
Hospital Pharmacy:	Pharmacy Dept, Guildford	01483 443697	
Out of hours contact:	Trust HQ switchboard	0300 55 55 222	

Additional Clinical Information:

Methylphenidate:

Cautions - monitor for psychiatric disorders; anxiety or agitation; tics or a family history of Tourette syndrome; drug or alcohol dependence; epilepsy (discontinue if increased seizure frequency); susceptibility to angle-closure glaucoma; avoid abrupt withdrawal;

Contra-indications - severe depression, suicidal ideation; anorexia nervosa; psychosis; uncontrolled bipolar disorder; hyperthyroidism; cardiovascular disease (including heart failure, cardiomyopathy, severe hypertension, and arrhythmias), structural cardiac abnormalities; phaeochromocytoma; vasculitis; cerebrovascular disorders

Pregnancy - limited experience—avoid unless potential benefit outweighs risk

Breast-feeding- limited information available—avoid

Side-effects - Abdominal pain, nausea, vomiting, diarrhoea, dyspepsia, dry mouth, anorexia, reduced weight gain; tachycardia, palpitation, arrhythmias, changes in blood pressure; cough, nasopharyngitis; tics (*very rarely* Tourette syndrome), insomnia, nervousness, asthenia, depression, irritability, aggression, headache, drowsiness, dizziness, movement disorders; fever; arthralgia; rash, pruritus, alopecia; growth restriction; *less commonly* constipation, dyspnoea, abnormal dreams, confusion, suicidal ideation, urinary frequency, haematuria, muscle cramps, epistaxis; *rarely* angina, sweating, and visual disturbances; *very rarely* hepatic dysfunction, myocardial infarction, cerebral arteritis, psychosis, seizures, neuroleptic malignant syndrome, tolerance and dependence, blood disorders including leucopenia and thrombocytopenia, angle-closure glaucoma, exfoliative dermatitis, and erythema multiforme; supraventricular tachycardia, bradycardia, and convulsions *also reported*

Lisdexamfetamine (Elvanse Adult)

Cautions - Anorexia; history of cardiovascular disease or abnormalities; 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 Tourette syndrome (use with caution)—discontinue if tics occur; susceptibility to angle-closure glaucoma; avoid abrupt withdrawal; acute porphyria

Contra-indications - Symptomatic cardiovascular disease including moderate to severe hypertension and advanced arteriosclerosis, hyperexcitability or agitated states, hyperthyroidism

Renal impairment - use with caution

Pregnancy - manufacturer advises use only if potential benefit outweighs risk

Breast-feeding - manufacturer advises avoid—present in human milk

Side-effects - nausea, decreased appetite, vomiting, diarrhoea, dry mouth, abdominal cramps, dyspnoea, sleep disturbances, tics, aggression, headache, dizziness, drowsiness, mydriasis, labile mood, weight loss, pyrexia, malaise); *less commonly* anorexia, tachycardia, palpitation, hypertension, logorrhoea, anxiety, paranoia, restlessness, depression, dysphoria, dermatillomania, mania, hallucination, sweating, tremor, visual disturbances, sexual dysfunction, rash; *very rarely* angle-closure glaucoma; *also reported* cardiomyopathy, euphoria, seizures (see also Cautions), central stimulants have provoked choreoathetoid movements and dyskinesia, and Tourette syndrome in predisposed individuals (see also Cautions)

Dexamphetamine

Cautions - anorexia; mild hypertension (contra-indicated if moderate or severe); psychosis or bipolar disorder; monitor for aggressive behaviour or hostility during initial treatment; history of epilepsy (discontinue if seizures occur); tics and Tourette syndrome (use with caution)—discontinue if tics occur; monitor growth in children (see also below); susceptibility to angle-closure glaucoma; avoid abrupt withdrawal; data on safety and efficacy of long-term use not complete; acute porphyria

Driving- May affect performance of skilled tasks (e.g. driving); effects of alcohol unpredictable

Contra-indications - Cardiovascular disease including moderate to severe hypertension, structural cardiac abnormalities, advanced arteriosclerosis, hyperexcitability or agitated states, hyperthyroidism, history of drug or alcohol abuse

Renal impairment - use with caution

Pregnancy - avoid (retrospective evidence of uncertain significance suggesting possible embryotoxicity)

Breast-feeding - significant amount in milk—avoid

Side-effects - nausea, diarrhoea, dry mouth, abdominal cramps, anorexia (increased appetite also reported), weight loss, taste disturbance, ischaemic colitis, palpitations, tachycardia, chest pain, hypertension, hypotension, cardiomyopathy, myocardial infarction, cardiovascular collapse, cerebral vasculitis, stroke, headache, restlessness, depression, hyperreflexia, hyperactivity, impaired concentration, ataxia, anxiety, aggression, dizziness, confusion, sleep disturbances, dysphoria, euphoria, irritability, nervousness, malaise, obsessive-compulsive behaviour, paranoia, psychosis, panic attack, tremor, seizures (see also Cautions), neuroleptic malignant syndrome, anhedonia, pyrexia, renal impairment, sexual dysfunction, acidosis, rhabdomyolysis, mydriasis, visual disturbances, alopecia, rash, sweating, urticaria; central stimulants have provoked choreoathetoid movements and dyskinesia, tics and Tourette syndrome in predisposed individuals (see also Cautions); *very rarely* angle-closure glaucoma;

Atomoxetine

Cautions - cardiovascular disease including hypertension and tachycardia (avoid in severe cardiovascular disease); structural cardiac abnormalities; QT-interval prolongation (avoid concomitant use of drugs that prolong QT interval); cerebrovascular disease (avoid in severe cerebrovascular disease); psychosis or mania; monitor for appearance or worsening of anxiety, depression or tics; history of seizures; aggressive behaviour, hostility, or emotional lability; susceptibility to angle-closure glaucoma;

Hepatic disorders - Following rare reports of hepatic disorders, 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

Suicidal ideation - following reports of suicidal thoughts and behaviour, patients and their carers should be informed about the risk and told to report clinical worsening, suicidal thoughts or behaviour, irritability, agitation, or depression

Contra-indications - phaeochromocytoma

Hepatic impairment - halve dose in moderate impairment; quarter dose in severe impairment; see also Hepatic Disorders above

Pregnancy - manufacturer advises avoid unless potential benefit outweighs risk

Breast-feeding - avoid—present in milk in *animal* studies

Side-effects - anorexia, dry mouth, nausea, vomiting, abdominal pain, constipation, dyspepsia, flatulence, palpitation, tachycardia, increased blood pressure, flushing, sleep disturbances, dizziness, headache, malaise, lethargy, drowsiness, anxiety, depression, irritability, taste disturbances, paraesthesia, tremor, chills, urinary dysfunction, prostatitis, sexual dysfunction, mydriasis, dermatitis, rash, sweating; *less commonly* QT-interval prolongation, syncope, suicidal ideation (see Suicidal Ideation, above), aggression, hostility, emotional lability, tics, psychosis, hypoaesthesia, cold extremities, menstrual disturbances, muscle spasms, pruritus; *rarely* seizures, Raynaud's phenomenon; *very rarely* hepatic disorders (see Hepatic Disorders, above), angle-closure glaucoma

Ref: eBNF – accessed September 14

Please refer to Summary of product characteristics for full prescribing information including side effects, cautions and interactions

Supporting references

NICE Clinical Guideline CG72 - Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults (2008)

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Agreement for transfer of prescribing to GP

Patient details / addressograph:

Name……..

Address……..
……..
……..

DOB…….

Hospital No……

The following tests, investigations have been carried out:

Blood pressure: Date:

Pulse: Date:

Weight: Date:

Diagnosis of ADHD made on (date):

Medication initiated:

Medication initiated on (date):

Patient's last clinic visit on (date):

At the last patient review the drug appeared to be effectively controlling symptoms/ providing benefit: Yes / No

The patients has now been stabilised on a dose of: ……..

I will arrange to review this patient on (date)……, then every 6 months.

Consultant: Address: Contact Number	**Agreement to shared care, to be signed by GP and Consultant.** **Consultant Signature:** **……..** **Date:**
GP: Address: Contact Number	**GP Signature:** **……** **Date:**
Main Carer: Contact Number:	**If shared care is agreed and GP has signed above please return a copy of this page to the requesting consultant or alternatively fax to:** **Secondary Care Trust please insert appropriate** **Fax Number**:
Key worker if appropriate: Contact Number:	