Ref No: E044

Essential Shared Care Agreement (South Staffordshire): Methylphenidate (immediate release and long acting), Dexamfetamine, and Atomoxetine for Attention Deficit Hyperactivity Disorder (ADHD) in Adults

Please complete the following details:
Patient's name, address, date of birth
Prescribing professional's contact details (p.3)
And send One copy to:
-the patient's GP
-put one copy in care plan
-give one copy to the patient

Patient's name:	
Patient's address:	
Patient's Date of Birth:	

Note:
Guidelines will only be written when it has been agreed that shared care is or maybe an appropriate option in individual cases, and will include a statement of Specialist Unit /GP responsibilities.

Shared Care Guidelines will ensure that all GPs have sufficient information to enable them to undertake responsibility for specialist therapies and other therapies which may affect/interact with specialist therapies.

It is not the intention to insist that GPs prescribe such a therapy and any doctor who does not wish to undertake the clinical and legal responsibility for a Shared Care Drug is not so obliged. Acceptance of the Shared Care Guidelines will be endorsed by the prescribing departments of the CCG.

The information contained in this guideline is issued on the understanding that it is the best available from the resources at our disposal at the time of issue. For further information please refer to the relevant Summary of Product Characteristics and NICE guidance or contact your local Specialist or Drug Information Centre.

Further copies of this guideline may be obtained from:

- South Staffordshire & Shropshire Healthcare Foundation NHS Trust
- South Staffordshire CCGs' Prescribing Advisers.

Produced: December 2015
Review date: December 2017
This ESCA replaces previous versions (E021 and E018)

SHARED CARE GUIDELINES FOR ADHD MEDICINES IN ADULTS

BACKGROUND

ADHD is a neuro-developmental condition which manifests as cognitive and behavioural deficits. It is characterised by the core symptoms of hyperactivity, impulsivity and inattention. ADHD is thought to be a persistent condition and a diagnosis of adult ADHD should only be made by specialist psychiatrist or appropriately qualified healthcare professional with training and expertise in the diagnosis of ADHD.

Drug treatments for adults with ADHD should always form part of a comprehensive treatment programme that focuses on psychological, behavioural and educational or occupational needs.

SHARED CARE CRITERIA

- Prescribing responsibility will only be transferred when it is agreed by the prescribing professional and the General Practitioner (GP) that the patient's condition is reasonably predictable and the treatment regime has been specified.
- Referral of the patient to the GP will be subject to the GP's agreement. If the GP is not confident to undertake this role, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient remains with the mental health team.
- The mental health trust will continue to provide prescriptions until there has been successful transfer of the responsibilities as outlined below.
- The patient will be commenced and stabilised on methylphenidate, dexamfetamine or atomoxetine prior to referral to GP for shared care.

RESPONSIBILITIES

Mental health team's responsibilities

- Initiate and stabilise treatment with methylphenidate, dexamfetamine and atomoxetine. Communicate to GP which brand of methylphenidate long acting is prescribed, as different brands are not interchangeable.
- Discuss the benefits and side effects of treatment with patient (including MHRA advice for Atomoxetine in relation to hepatic disorders and suicidal ideation/ self-harming behaviour)
- Explain the licensing of medicines and when medicines are used off label to the service user and carer (if applicable).
- Confirm with the GP whether he or she is willing to participate in shared care, and agree with the GP as to who will discuss the shared care arrangement with the patient.
- Send a letter to the GP requesting shared care stating the patient's diagnosis.
- Periodically review the patient's condition and communicate promptly with the GP when treatment is changed. Ensure test results are communicated to GP.
- Advise the GP on when to adjust the dose, discontinue treatment, or consult with the prescribing professional.
- Report adverse events to the CSM/MHRA via Yellowcard located in BNF or online www.yellowcard.gov.uk and GP
- Ensure that clear backup arrangements exist for GP to obtain advice and support.

General Practitioner (GP)

- Reply to the request for shared care as soon as practicable
- Prescribe methylphenidate, dexamfetamine and atomoxetine at the dose recommended.
- Adjust the dose as advised by the prescribing professional.
- Report to and seek advice from the prescribing professional on any aspect of patient care that is of concern and may affect treatment.
- Refer back to the prescribing professional if the patient's condition deteriorates, as advised. Specific triggers for referral back include:
    - Sustained resting tachycardia, arrhythmia or a clinically significant increase in systolic blood pressure measured on two occasions (reduce dose and refer)
    - Anxiety symptoms, including panic

- Emerging psychotic symptoms
- Emerging tics

- Stop treatment on the advice of the prescribing professional or immediately if an urgent need to stop treatment arises.
- Monitor patient's pulse, BP and weight
- Report adverse events to the prescribing professional and the MHRA/ CSM via Yellowcard located in BNF or online www.yellowcard.gov.uk.
- Communicate any test results to prescribing professional.

Patient

- Report to the prescribing professional or GP if he or she does not have a clear understanding of the treatment.
- Share any concerns in relation to treatment with methylphenidate, dexamfetamine and atomoxetine.
- Inform prescribing professional or GP of any other medication being taken, including over-the-counter products.
- Report any adverse effects or warning symptoms to the prescribing professional or GP whilst taking methylphenidate, dexamfetamine and atomoxetine.

Back-up advice on the above is available at all times:
South Staffordshire & Shropshire Healthcare Foundation NHS Trust – Contact Details

Contact	Speciality	Available	☎	Pharmacy
		Mon-Fri 8.30 – 5.00		01785 783118
Key worker: _____	_____ CMHT	Mon-Fri 8.30 – 5.00		

LICENSED INDICATIONS

NICE recommends drug treatment as first- line in adults with ADHD with either moderate or severe levels of impairment and that methylphenidate should normally be tried first (see NICE clinical guideline 72). **Methylphenidate** and **dexamfetamine** are schedule 2 **controlled drugs (CD**) thus are subject to prescription requirements. Hence prescriptions may be hand written with indelible ink, signed and dated by the prescriber with their address and must always state in the prescriber's own handwriting: name and address of patient; form and strength of preparation (e.g. 20mg capsules); the dose (e.g. 20mg TDS) and total quantity or number of dose units in words **AND** figures (e.g. 420mg = Four Hundred and Twenty milligrams or Twenty One (21) capsules). Alternatively where computer generated prescriptions for controlled drugs are issued, only the signature has to be in the prescriber's own handwriting. A prescription can be given for a maximum of 28 days. Currently only atomoxetine is licensed for treatment of adults with ADHD but the presence of symptoms of ADHD that were pre-existing in childhood should be confirmed..

DOSE AND ADMINSTRATION

Refer to most current BNF (section 4.4)

ADVERSE EFFECTS

For a full list see manufacturer's Summary of Product Characteristics (SPC) www.medicines.org.uk and also current BNF www.bnf.org/bnf.

Adverse Effect	Frequency	Management
Methylphenidate		
Nervousness and insomnia	>10%	Review dose and/or omit afternoon/ evening dose if using TDS regime
Decreased appetite	1-10%	Usually transient. Try taking medicine concomitantly with food if it persists

Headache, drowsiness, dizziness	1-10%	
Abdominal pain, nausea & vomiting, dry mouth	1-10%	Occurs at initiation. May be alleviated by concomitant food intake.
Tachycardia, palpitations, increased blood pressure	1-10%	Discontinue if significant. Refer back to prescribing professional
Tic, aggression, anxiety, irritability	1-10%	Discontinue if significant (N.B dose titration should be slower if tics/seizures are already present). Refer back to prescribing professional
Drug induced psychosis (e.g hallucinations, restlessness), depression, mood swings	<1%	Discontinue. Refer back to prescribing professional
Dexamfetamine		
Adverse Effect	**Frequency**	**Management**
Aggressive behaviour, anxiety, confusion, delirium, depression, euphoria ,insomnia ,irritability, tics, night terrors, Paranoia, psychosis	Not stated	Reduce dose, ensure not given too near bedtime. Discontinue if tics develop. Refer back to prescribing professional Withdraw drug. Refer back to prescribing professional
Palpitations, tachycardia, Change in blood pressure, cardiomyopathy, chest pain, death due to cardiovascular collapse	Not stated	Check pulse after every dose change. Do an ECG if necessary
Atomoxetine		
Appetite decreased, dry mouth, nausea	>10%	Usually settles after 1st month of therapy
Insomnia	>10%	
Abdominal pain, constipation, dyspepsia, flatulence,	1-10%	
Weight decrease	1-10%	Usually settles after initial weight loss
Palpitations, tachycardia,	1-10%	
Libido decreased, sleep disorder, dizziness, sinus headache, tremor, fatigue, lethargy	1-10%	
Dysuria, urinary hesitation, urinary retention	1-10%	
Dysmenorrhoea, ejaculation disorder, erectile dysfunction, irregular menstruation, male genital pain,	1-10%	
Blood pressure increased	0.1-1%	Monitor. Discontinue if clinically indicated
Liver toxicity	0.001-0.1%	Discontinue drug. Refer back to prescribing professional
Post-Marketing Experience Spontaneous Reports (Atomoxetine)		
Suicide-related events, aggression, hostility and emotional lability, psychosis (including hallucinations),agitation, Seizure, QT interval prolongation, Abnormal liver function tests, jaundice, hepatitis	Not stated	

CAUTIONS

Methylphenidate: Pregnancy, breast feeding, history of seizures, avoid abrupt withdrawal.
Dexamfetamine: Anorexia, mild hypertension, psychosis or bipolar disorder, renal impairment, history of epilepsy, tics or Tourette syndrome, avoid abrupt withdrawal.

Atomoxetine: Cardiovascular disease, structural cardiac abnormalities, QT interval prolongation, psychosis/mania, history of seizures, aggressive behaviour/hostility/emotional lability, hepatic impairment, pregnancy and lactation.

CONTRAINDICATIONS

Methylphenidate: Anxiety/agitation/tension, tics or family history of Tourette or other movement disorders, known drug dependence/history of drug dependence/alcoholism, depression, psychosis, anorexia nervosa, psychopathological personality structure, history of aggression, suicidal ideation, severe hypertension, hyperthyroidism, angina pectoris, cardiac arrhythmia, glaucoma, concomitant use or use within 2 weeks of MAOI

Dexamfetamine: Symptomatic cardiovascular disease, structural cardiac abnormalities/moderate or severe hypertension, advanced arteriosclerosis, concomitant use or use within 2 weeks of MAOI, history of drug/alcohol abuse, hyperthyroidism, glaucoma, hyperexcitability, pregnancy and lactation.

Atomoxetine: Concomitant use or use within 2 weeks of MAOI, narrow-angle glaucoma.

INTERACTIONS

- Adrenergic Neurone Blockers- Dexamfetamine antagonises hypotensive effect of guanethidine.
- Alcohol- Effects of methylphenidate possibly enhanced by alcohol.
- Analgesics- Increased risk of ventricular arrhythmias with concomitant use of atomoxetine and methadone. Possible increased risk of convulsions with concomitant use with tramadol.
- General Anaesthetics (GA)-Increased risk of hypertension when methylphenidate given with volatile liquid GA
- Anticoagulants- Methylphenidate possibly enhances anticoagulant effect of coumarins.
- Antidepressants- Risk of hypertensive crisis when methylphenidate/dexamfetamine/atomoxetine given with MAOI/moclobemide. Methylphenidate possibly inhibits metabolism of SSRI's and TCA's. Metabolism of atomoxetine possibly inhibited by fluoxetine and paroxetine. Increased risk of convulsions with atomoxetine and antidepressants
- Antipsychotics- Dexamfetamine possibly antagonises antipsychotic effects of chlorpromazine, methylphenidate possibly increases side effects of risperidone. Increased risk of ventricular arrhythmias when atomoxetine given with antipsychotics that prolong QT interval.
- Clonidine- Serious adverse events reported with concomitant use of methylphenidate and clonidine.
- Increased risk of cardiovascular side-effects when parenteral salbutamol given with atomoxetine. Increased risk of ventricular arrhythmias with concomitant use of atomoxetine and amiodarone, disopyramide, moxifloxacin, parenteral erythromycin, mefloquine, sotalol, diuretics (due to hyperkalaemia).
- See Summary of Product Characteristics for further details (www.medicines.org.uk).

CLINICAL MONITORING

To be done by the GP (if in agreement with this guideline) in accordance with NICE recommendations:

Weight: Weight to be measured 3rd and 6th month after initiation and six monthly thereafter. If evidence of weight loss monitor BMI, if weight loss persists refer back to prescribing professional.

Heart rate and Blood pressure: Chart before and after each dose change and routinely every three months. Sustained resting tachycardia, arrhythmia or clinically significant high systolic blood pressure after two measurements consider dose reduction and refer to physician.

Sexual dysfunction: Erectile and ejaculatory dysfunction also dysmenorrhoea should be monitored as potential side effects of atomoxetine.

REFERENCES

1. NICE Clinical guideline 72; Attention Deficit Hyperactivity Disorder; Sep 2008
2. D.J. Nutt et al; Evidence-based Guidelines for Management of Attention-deficit/Hyperactivity Disorder in Adolescents in Transition to Adult Services and in Adults: Recommendations from the British Association for Psychopharmacology, BAP Guidelines Adult ADHD, 2006

3. British Association for Psychopharmacology [BAP] (2006) Evidence-based guidelines for management of attention deficit/hyperactivity disorder in adolescents in transition to adult services and in adults: Recommendations from the British Association for Psychopharmacology. J Psychopharmacol 21: 10–41.

4. Canadian Attention Deficit Hyperactivity Disorder Resource Alliance [CADDRA] (2011) Canadian ADHD Practice Guidelines, Third Edition. Toronto, Ontario: CADDRA.

5. Habel LA, Cooper WO, Sox CM, Chan KA, Fireman BH, Arbogast PG, Cheetham TC, Quinn VP, Dublin S, Boudreau DM, Andrade SE, Pawloski PA, Raebel MA, Smith DH, Achacoso N, Uratsu C, Go AS, Sidney S, Nguyen-Huynh MN, Ray WA, Selby JV. ADHD medications and risk of serious cardiovascular events in young and middle-aged adults. JAMA. 2011 Dec 28;306(24):2673-83.

6. Lichtenstein P, Halldner L, Zetterqvist J, Sjölander A, Serlachius E, Fazel S, Långström N, Larsson H. Medication for attention deficit-hyperactivity disorder and criminality. N Engl J Med. 2012 Nov 22;367(21):2006-14.

7. National Institute for Health and Clinical Excellence [NICE] (2008) Attention Deficit Hyperactivity Disorder – Diagnosis and Management of ADHD in Children, Young People and Adults. NICE clinical guideline 72. London (www.nice.org.uk).

8. National Institute for Health and Care Excellence [NICE] (2013) Attention Deficits Hyperactivity Disorder. NICE Quality Standard 39. London (www.nice.org.uk).
9. BNF – September 2015.
10. http://www.medicines.org.uk

Appendix 1

SHARED CARE AGREEMENT FORM

NAME OF PATIENT……...

DOSE, BRAND AND FREQUENCY OF DRUG

…….

NAME AND ADDRESS OF HOSPITAL PRESCRIBING PROFESSIONAL

……...

……...

……...

……...

NAME AND ADDRESS OF GP

……...

……...

……...

……...

I ……(*PLEASE PRINT)* AGREE TO UNDERTAKE THE RESPONSIBILITY OF SHARED CARE INCLUDING CLINICAL MONITORING OF THIS PATIENT AND TO SHARE RESULTS WITH SECONDARY CARE, AS REQUIRED IN ACCORDANCE WITH THE METHYLPHENIDATE, DEXAMFETAMINE AND ATOMOXETINE SHARED CARE GUIDELINES

SIGNED ……

DATE ……..