FULL SHARED CARE AGREEMENT FOR
METHYLPHENIDATE, DEXAMFETAMINE, ATOMOXETINE, LISDEXAMFETAMINE and GUANFACINE for use in Attention deficit hyperactivity disorder In children and adolescents

Sharing of care assumes communication between the specialist, GP and patient, and other members of the care team including specialist nurses and pharmacists. The intention to share care will be explained to the patient by the specialist initiating treatment. It is important that patients are consulted about treatment and are in agreement with it.

If a GP is invited by the specialist to participate in a shared care arrangement, the GP should reply to this request within 10 working days. 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.

The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.

This shared care policy has been produced following NICE guidance issued in 2008 and later updated in 2016 and 2018. Shared care has been defined as the mechanism of sharing patient care between primary and secondary care providers. This document sets out these responsibilities from initial diagnosis to on-going support.

Disease Background
ADHD is defined by the ‘core’ signs of inattention, hyperactivity and impulsiveness. The diagnostic criteria for the condition are set down in both the DSM and ICD diagnostic manuals. This guideline does not cover the diagnosis or treatment of ADHD in children younger than 5 or adults over the age of 18. This guideline includes an appendix that details the transition process from paediatric to adult care.

Before Initiating Medication
Before starting medication, an assessment is needed of patient's cardiovascular status including blood pressure and heart rate, comprehensive history of concomitant medications, past and present co-morbid medical and psychiatric disorders or symptoms, family history of sudden cardiac/unexplained death and pre-treatment height and weight on a growth chart. For guanfacine in addition to the above, it is necessary to conduct a baseline evaluation to identify patients at increased risk of somnolence and sedation, hypotension, bradycardia, QT-prolongation/risk of arrhythmia and weight increase /risk of obesity.

Drugs covered by the agreement
Methylphenidate (Equasym® XL, Concerta® XL, Xenidate® XL, Matoride® XL, Medikinet® XL, Xaggitin XL and Xenidate XL)

Methylphenidate is a central nervous system stimulant.

The licensed dose is 5mg once or twice daily initially increased if necessary at weekly intervals by 5 to 10mg daily to a maximum dose of 60mg daily in divided doses.

Some preparations are designed to replace the multiple daily dosing with the immediate release formulation. Equasym® XL and Medikinet® XL are formulated to be similar to twice daily dosing with the immediate-release formulation. The recommended dose is 10mg once daily initially, increased if necessary to a maximum of 60mg once daily. Alternatively, the initial dose titration may be carried out with the immediate-release formulation.
The following prolonged release preparations can be considered to be similar to three times daily dosing. Xaggitin XL (18mg, 27mg, 36mg and 54mg) is recommended first line; and Xenidate XL (18mg, 27mg, 36mg and 54mg) can be used as second line. The starting dose is 18mg daily, increasing slowly based on response to a maximum licensed dose of 54mg daily.

In all of the above preparations, higher doses can be used if there is poor response. This is supported by the BNF when under the direction of a specialist.

Please note: There is evidence to show that both Xaggitin XL and Xenidate XL are bioequivalent and have a similar bioavailability profile to the parent brand Concerta XL. Prescriptions for Concerta XL may be changed in primary care to the preferred brand by their GP for ongoing prescribing. Equasym and Medikinet XL are not bioequivalent to Concerta XL and are not interchangeable with Concerta XL.

All methylphenidate XL preparations should be prescribed by brand.

Both the standard release and controlled release products are licensed for the treatment of ADHD in children over the age of 6 years as part of a comprehensive treatment programme.

Dexamfetamine

Dexamfetamine is a CNS stimulant. It is licensed as an alternative when treatment with methylphenidate is considered clinically inadequate. Treatment should be initiated at a dose of 5–10mg daily for children over 6 years, and increased if necessary up to a usual maximum of 20mg per day (some children have required up to 40mg daily for an optimal response).

Lisdexamfetamine (Elvanse®)

Lisdexamfetamine is indicated as part of a comprehensive treatment programme for attention deficit/hyperactivity disorder (ADHD) in children aged 6 years of age and over when response to previous methylphenidate treatment is considered clinically inadequate.

Dosage should be individualised according to the therapeutic needs and response of the patient. Careful dose titration is necessary at the start of treatment with lisdexamfetamine. For all patients, either starting treatment for ADHD or switching from another medication, the starting dose is 20-30 mg taken once daily in the morning. The dose may be increased in increments of 10-20 mg, at approximately weekly intervals. Lisdexamfetamine should be administered orally at the lowest effective dosage. The maximum recommended dose is 70 mg/day.

ESNM19 Attention deficit hyperactivity disorder in children and young people: lisdexamfetamine dimesylate

Methylphenidate, dexamfetamine and lisdexamfetamine are schedule 2 controlled drugs and therefore all the controlled drug prescription writing legislation set down in the section on “Controlled Drugs and Drug Dependence” in the British National Formulary (BNF) applies.

Atomoxetine capsule and liquid (Strattera®)

Atomoxetine is licensed for the treatment of ADHD in children 6 years and older and in adolescents, under specialist supervision. It is a selective noradrenaline reuptake inhibitor, although the precise mechanism by which it works on ADHD is unknown. For children/adolescents of up to 70kg body weight, treatment should be initiated at a dose of 500micrograms/kg daily, and increased if necessary up to a maximum of 1.8mg/kg daily, either as a single dose or in two divided doses. For adolescents of over 70kg body weight treatment should be initiated at a daily dose of 40mg and increased according to response to a usual maintenance dose of 80mg. Atomoxetine is not a controlled drug.

Please note MHRA safety update (2012)

Guanfacine m/r (Intuniv®)

Guanfacine m/r is indicated for the treatment of attention deficit hyperactivity disorder (ADHD) in children and adolescents 6-17 years old for whom stimulants are not suitable, not tolerated or have been shown to be ineffective. Guanfacine m/r must be used as a part of a comprehensive ADHD treatment programme, typically including psychological, educational and social measures.

Careful dose titration and monitoring is necessary at the start of treatment with guanfacine m/r since clinical improvement and risks for several clinically significant adverse reactions (syncope, hypotension, bradycardia, somnolence and sedation) are dose and exposure related. Patients should be advised that somnolence and sedation can occur, particularly early in treatment or with dose increases. If somnolence and sedation are judged to be clinically concerning or persistent, a dose decrease or discontinuation should be considered.

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As guanfacine m/r is a black triangle (new) drug and dose titration can take several weeks, patients newly initiated on it can only be transferred to primary care after a minimum of three months. Subsequent dose changes (such as small increases following growth) can be transferred as soon as the patient is deemed stable.

### Specialist responsibilities

1. Diagnosis of ADHD based on a comprehensive assessment. This should involve children, parents and carers and the child's school and take into account cultural factors in the child's environment.

2. Development of a comprehensive treatment programme including advice and support to parents and teachers. This may include social, psychological and behavioural and educational interventions

3. Pre-medication there should be:
   a. Evaluation should include documenting patient's cardiovascular status, comprehensive history of concomitant medications, past and present co-morbid medical and psychiatric disorders or symptoms and family history of sudden cardiac/unexplained death
   b. Measurement of height, weight, blood pressure (and the centiles) and pulse. In patients with known or suspected cardiac or haematological history, arrange for further baseline investigations and subsequent monitoring (e.g. ECG, blood tests) as necessary. Routine baseline blood tests are not required.

4. Initiation of prescription of ADHD medication. Titration of the medication dose to the minimum effective dose using the optimum preparation for the individual child.

5. Monitoring for response and adverse drug reactions (ADRs) during the titration period.

6. Liaison with the general practitioner (GP) to share the child’s care when a stable dose has been achieved and proven benefit has been established using the Shared care request form

7. The general practitioner should consider the request within 10 working days and make contact in cases of concern. In the case of methylphenidate modified release preparations, specify the brand that is prescribed to enable the GP to continue prescribing the same brand. Methylphenidate immediate release preparations are interchangeable and should be prescribed generically.

8. The patient must be reviewed at a regular interval (at least 6 monthly) and blood pressure, pulse, weight and height recorded on a centile chart as appropriate. The patient's growth and evolving needs may necessitate change in medication and/or dose. Where this occurs, the specialist will inform the GP to ensure that up-to-date therapy is prescribed.

9. Evaluating ADRs observed by the GP and evaluating any concerns arising from physical checks by GP.

10. Advising GP on related issues such as drug interactions, travel related drug issues, slow release formulations etc.

11. Continuing to implement the comprehensive treatment plan previously outlined.

12. Trialling a medication break or dose reduction when appropriate.

13. For patients aged 18 years discharge or transfer to appropriate adult services (see appendix) after assessing need for on-going medication.
### GP responsibilities

1. Consider request to share patient’s care as soon as possible, and contact the specialist in cases of concern. Return the agreement form if the shared care request is declined.

2. Monitoring the child’s overall health and wellbeing.

3. The GP is NOT expected to perform any specific routine drug monitoring but this may be requested on a case by case basis from the specialist (e.g. if the patient is not brought (did not attend) and there is a risk that the required monitoring frequency will be exceeded or careful monitoring of physical parameters is needed between appointment and parents prefer to access the GP for this). If needed, the GP can contact the specialist for advice on interpreting the results.

4. Provide prescription of ADHD medication. **In the case of methylphenidate; all controlled release preparations have a different release profile to keep symptoms under control at specific times throughout the day.** There is evidence to show that both Xaggitin XL and Xenidate XL are bioequivalent and have a similar bioavailability profile to the parent brand Concerta XL. Prescriptions for Concerta XL may be changed in primary care to the preferred brand by their GP for ongoing prescribing. Equasym and Medikinet XL are not bioequivalent to Concerta XL and are not interchangeable with Concerta XL. All methylphenidate XL preparations should be prescribed by brand. Methylphenidate immediate release preparations should be prescribed generically as stated by the specialist.

5. Given the potential for misuse of stimulant medicines, to remain alert to signs of such misuse and notify the secondary care clinician of any such concerns.

6. Monitor for symptoms of potential side effects and notify the secondary care clinician if they occur.

### Patient/parent/carer responsibilities

1. Do not miss any blood tests or other appointments without first consulting the GP or specialist.

2. Report any adverse effects or warning symptoms to the GP or specialist.

3. Report any deterioration in ADHD control to the specialist
   
   Arrange to have your child’s weight, blood pressure pulse and height done at local service as advised by your specialist.
Further advice and support – this information is not inclusive of all prescribing information

Main contacts

Supervising consultant
OR
Dr A.Ali
Westcotes House
Leicestershire Partnership NHS Trust
Tel: 0116 2952998
email: Alvina.Ali@leicspart.nhs.uk
OR
Supervising Consultant
OR
Dr Krutika Patel
Lead Consultant
Leicestershire Partnership NHS Trust
Krutika.Patel@leicspart.nhs.uk
Tel: 0116 2951350

Other sources of information:

Summary of product characteristics via electronic Medicines Compendium (eMC)
British National Formulary via www.medicinescomplete.com

NICE Guideline: NG87 Attention deficit hyperactivity disorder: diagnosis and management (Published March 2018)

Trent Medicines Information Centre, Victoria Building, Leicester Royal Infirmary, LE1 5WW
Tel: 0116 258 6491 Fax: 0116 258 5680
e-mail: medicines.info@uhl-tr.nhs.uk

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<td>Treatment Appendices added Lisdexamfetamine added</td>
<td>PCT changed to CCG Full shared care policy changed to agreement Reference to Faraone et al data Atomoxetine licensing information added Addiction risk information added Care pathways added for GP information</td>
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<td>Secondary care GP</td>
<td>Confirm that BP, pulse, weight and height are monitored 6 monthly in clinic and plotted on centile chart Annual cost deleted from document Krutika Patel replaces Adrian Brooke as Lead Consultant SCA request form updated; GP only to return form if declined</td>
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Appendix 1

Transition from CAMHS/Community Paediatric Services to General Adult Psychiatry Team
Leicester Model

This model forms part of the Services for Adults with ADHD-Leicester Model.

Graduates
The model deals with the transfer of care of patients who are currently under the care of CAMHS/Community Paediatric Services and are 18 years of age or older. Patients between the ages of 16 and 18 years who are not in education will not be considered suitable for transfer as this is a period when a considerable number of patients will be growing out of the need to continue pharmacological treatment and it will be most appropriate for the current team that is CAMHS/Community Paediatric Services to monitor and support them during this period.

Joint work b/w /Team & General Adult Psychiatry Team
The model is based on shared care protocol between (generic) General Adult Psychiatry Teams and the Specialist Adult ADHD Clinic/Team. The General Adult Psychiatry Team will be responsible for the overall care of the patient and the Specialist Adult ADHD Clinic/Team will be responsible for monitoring the care specific to ADHD.

Transfer of care from CAMHS to specialist Adult ADHD Clinic (As per transition CQUIN)

- Clinical conversation to take place between clinician and Adult ADHD service prior to referral letter being sent.
- If accepted referral letter should contain:
  - Detailed assessment- especially including diagnostic summary/formulation.
  - Treatment plan & rationale- current treatment and the rationale behind it.
  - Treatment response- current treatment response and over the course of treatment. Also the history of all treatments used so far, their response and problems encountered.
  - Any issues re: treatment- for example: side effects, compliance, abuse and diversion issues.
  - On-going treatment needs- this is vital as a considerable proportion of patients are likely to grow out of the need for continuing pharmacological treatment in their late teens. The patients must be given a trial of drug holidays to assess the continued need for ongoing treatment.
  - Any other ongoing needs- for example: social, financial etc.
  - Co-morbidities- does the patient present with any active medical or psychiatric co-morbidities and what is their impact on the patient's ADHD presentation and its treatment.
  - Treatment for co-morbidities- is the patient receiving treatment for any co-morbid condition and if so have there been any difficulties for example: side effects or drug interactions.
  - Risk assessment & management plan- a detailed risk assessment and management plan is necessary.
  - Adult ADHD Service arrange appointment and ensure the referring clinician is also invited
  - Following transfer of care the Adult ADHD team will take clinical responsibility of monitoring the care of the patient specific to ADHD
Community Paediatric Services to Specialist Adult ADHD Clinic

The process of transfer of care will start with a referral letter from /Community Paediatric Services to the Specialist Adult ADHD Clinic

The referral letter will be required to have the following details:

- **Detailed assessment**- especially including diagnostic summary/formulation.
- **Treatment plan & rationale**- current treatment and the rationale behind it.
- **Treatment response**- current treatment response and over the course of treatment. Also the history of all treatments used so far, their response and problems encountered.
- **Any issues re: treatment**- for example: side effects, compliance, abuse and diversion issues.
- **On-going treatment needs**- this is vital as a considerable proportion of patients are likely to grow out of the need for continuing pharmacological treatment in their late teens. The patients must be given a trial of drug holidays to assess the continued need for ongoing treatment.
- **Any other ongoing needs**- for example: social, financial etc.
- **Co-morbidities**- does the patient present with any active medical or psychiatric co-morbidities and what is their impact on the patient’s ADHD presentation and its treatment.
- **Treatment for co-morbidities**- is the patient receiving treatment for any co-morbid condition and if so have there been any difficulties for example: side effects or drug interactions.
- **Risk assessment & management plan**- a detailed risk assessment and management plan is necessary.

**Allocation of key worker/lead professional**
The Specialist Adult ADHD Clinic/Team will also make arrangements for the outpatient appointment.

**Transfer of care meeting**
If the patient’s presentation is fairly straightforward, then there is no need to meet in person to discuss the transfer of care; it can be done via correspondence. However, when the presentation is a complex one, it might be necessary to arrange a transfer of care meeting.

**Complex cases: joint work**
When dealing with complex cases, it might be necessary for the /Community Paediatric Services team to continue to remain involved in the care of the patient for the first few months to facilitate the transfer of care.

**Back-up support**
Once the patient has been transferred from /Community Paediatric Services to the Specialist Adult ADHD Clinic it will be extremely important to have back-up support from /Community Paediatric Services in case the caring team is faced with difficulties re: patient care.

**Specialist Adult ADHD Clinic/Team to monitor during the interim period**
Following the transfer of care from /Community Paediatric Services, the Specialist Adult ADHD Clinic/Team will take the full responsibility of monitoring the care of the patient specific to ADHD.