

**LINCOLNSHIRE CLINICAL COMMISSIONING GROUPS in association with
UNITED LINCOLNSHIRE HOSPITALS TRUST**

**SHARED CARE GUIDELINE: Methylphenidate, atomoxetine, dexamfetamine,
lisdexamfetamine and guanfacine in the management of Attention Deficit Hyperactivity
Disorder (ADHD)**

**The shared care protocol covers the initiation and review of treatment in children and
adolescents with ADHD. THIS PROTOCOL DOES NOT COVER THE INITIATION OF NEW
TREATMENT IN ADULT PATIENTS.**

General Principles

Shared Care Responsibilities:

In its guidelines on responsibility for prescribing (circular EL (91) 127) between hospitals and general practitioners, the Department of Health has advised that legal responsibility for prescribing lies with the doctor who signs the prescription. (*BNF*, 76, September 18 - March 2019, p. 5)

Aims:

- (1) The aim of shared care guidelines is to provide information and/or guidance to GPs and hospital staff relating to the potentially complex implications of sharing patient care for a specific drug between primary and secondary/tertiary care.
- (2) Specific shared care guidance should be available for any high cost or high-risk drug therapy or device that may be prescribed for a patient following specialist referral. Such guidance will only be produced where shared care is considered an appropriate option.
- (3) Each guideline will include a clear statement of the responsibilities of both the GP and the specialist unit within the overall provision of the treatment to the patient.
- (4) Shared care guidelines will ensure that the GP has sufficient information available to undertake to prescribe a specialist treatment if s/he so wishes. It is not the intention of these guidelines to insist that GPs prescribe such treatment and any doctor who does not wish to accept clinical or legal responsibility to prescribe such a drug is under no obligation to do so. Nonetheless the development of a shared care guideline will only be undertaken within the context of a broad acceptance between Lincolnshire Prescribing and Clinical Effectiveness Forum (PACEF) and secondary/tertiary care that GP prescribing of such a treatment is appropriate within the constraints of formal shared care. Any drug approved for the development of a shared care guideline will automatically be classified as amber on the Lincolnshire Traffic Lights List and, if high-cost, will be supported financially through the High Cost Drugs Reserve. Thus there should be no financial reason why a GP should be deterred from prescribing a high cost drug under a shared care guideline.

Further copies of any guidelines in this series are available from members of the Optum Medicines Management and Optimisation Team.

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Date of Issue: September 2019

Review Date: September 2022

Principles of shared care

NHS England published Guidance - Responsibility for prescribing between Primary, Secondary and Tertiary care – January 2018.

**Extracts from guidance highlighting the key recommendations:
(Numbering kept from original document, for reference)**

1.0 Introduction

1.1 Shared Care Prescribing guidelines are local policies to enable General Practitioners to accept responsibility for the prescribing and monitoring of medicines/ treatments in primary care in agreement with the initiating service.

1.4 Where possible shared care should be disease specific rather than medicine specific and link into complement local integrated care pathways and shared care policies. Medicines and conditions suitable for shared care will be identified by local medicines committees and will be classified as AMBER (AMBER 1 for Lincolnshire) through the traffic light system

. . . . However it should be remembered that the provision of shared care prescribing guidelines does not necessarily mean that the GP has to agree to accept clinical and legal responsibility for prescribing; that they should only do so if they feel clinically confident in managing that condition.

2.3 reasonable predictable clinical situation

2.3.1 Transfer of clinical responsibility to primary care should only be considered where the person's clinical condition is stable or predictable.

2.4 Agreement of shared care between consultant and GP

2.4.1 Referral to the GP should only take place once the GP has agreed in each individual case and the hospital or specialist will continue to provide prescriptions until a successful transfer of responsibilities. The GP should confirm the agreement and acceptance of the shared care prescribing arrangement and that the supply arrangements have been finalised. The secondary/ tertiary provider must supply an adequate amount of the medication to cover the transition period. The patient should then be informed to obtain further prescriptions from the GP.

2.7 Clear definition of responsibility

2.7.1 The areas of care for which each clinician has responsibility should be clearly defined.

2.8 Clinical responsibility

2.8.1 Clinical responsibility for prescribing is held by the person signing the prescription who must also ensure adequate monitoring.

2.9 Communication network & emergency support

2.9.1. Telephone details and (if appropriate) secure email addresses of both parties should be exchanged and recorded. This will enable the practice to access timely advice, guidance and information if problems arise, and will also enable secondary care clinicians to easily contact the GP if necessary. This should include out of hours contact numbers, how to access the on-call duty doctor. Patients and their carers should also be provided with contact details for support and help if required both in and out of hours.

2.9.2 People who are being treated on the advice of a secondary care team, but are no longer being seen in that setting, may still need a review should problems arise. The appropriate level of care or advice should be available from the secondary care team in a timely manner without necessarily requiring a new referral.

6.0 Monitoring

6.0.1 All appropriate monitoring arrangements must be fulfilled. The person delivering that aspect of the shared care agreement should ensure that the resources to do this are in place in the clinical setting in which they are delivered.

Introduction

Attention Deficit Hyperactivity Disorder

ADHD is a behavioural syndrome characterised by the core symptoms of hyperactivity, impulsivity and inattention. Although these symptoms tend to cluster together, some people are predominantly hyperactive and impulsive, whereas others are primarily inattentive. Two main diagnostic criteria are currently in use – the 'International Classification of Mental and Behavioural Disorders 10th revision' (ICD-10) and the 'Diagnostic and Statistical Manual of Mental Disorders 5th edition' (DSM-V). Instead of referring to ADHD, ICD-10 uses the term hyperkinetic disorder, which is defined using more stringent diagnostic criteria than DSM-V uses to define ADHD. DSM-V uses a broader definition which includes a number of different ADHD subtypes. Hyperkinetic disorder broadly corresponds to the DSM-V ADHD combined subtype. Although ICD-10 excludes any comorbidity, coexisting conditions are accepted as a common aspect of the diagnosis and treatment of ADHD.

Based on the narrower criteria of ICD-10, hyperkinetic disorder is estimated to occur in 1–2% of children and young people in the UK. Using the broader criteria of DSM-V, ADHD is thought to affect about 3–9% of school-age children and young people in the UK.

Symptoms of ADHD can overlap with symptoms of other related disorders. Common coexisting conditions in children with ADHD include anxiety disorders and disorders of mood, conduct, learning, motor control and social communication.

In March 2018 the National Institute for Health and Care Excellence (NICE) published new guidance for the diagnosis and management of Attention Deficit Hyperactivity Disorder (NICE guideline NG87)

The main recommendations from the guideline in relation to the pharmacological management of the condition are:

- A diagnosis of ADHD should only be made by a specialist psychiatrist, paediatrician or other appropriately qualified healthcare professional with training and expertise in the diagnosis of ADHD. Diagnosis should be made on the basis of a full clinical and psychosocial assessment and in accordance with the DSM 5 or ICD-10 diagnostic criteria.
- All medication for ADHD should only be initiated by a healthcare professional with training and expertise in diagnosing and managing ADHD.
- Healthcare professionals initiating medication for ADHD should be familiar with the pharmacokinetic profiles of the short acting preparations; ensure treatment is tailored to the individual needs of the child, young person or adult and take account of variations in bioavailability or pharmacokinetic profiles of different preparations.
- Before starting medication for ADHD a full assessment should be undertaken which includes:
 - A review to confirm they meet the criteria for ADHD and need treatment
 - A review of mental health and social circumstances
 - A review of physical health including: medical history, current medication, height and weight, baseline pulse and blood pressure, cardiac examination; an ECG if the treatment may affect the QT interval.
- Referral for a cardiology opinion should be made before treatment if any of the following apply:
 - History of congenital heart disease or previous cardiac surgery
 - History of sudden death in a first degree relative under the age of 40 years suggestive of cardiac disease
 - Shortness of breath on exertion or in response to fright or noise
 - Palpitations that are rapid, regular and start and stop suddenly
 - Chest pain suggesting cardiac origin
 - Signs of heart failure
 - A murmur heard on cardiac examination

- Referral should be made to a paediatric specialist before starting on medication for ADHD if blood pressure is consistently above the 95th centile for age and height in children and young people.
- In children under the age of 5 year, drug treatment is not recommended. Healthcare professionals should offer parents or carers of pre-school children with ADHD a referral to a parent-training/education programme as first-line treatment.

Medication choice – children and young people

- Offer methylphenidate (either short or long acting) as the first line pharmacological treatment for children aged 5 years and over and young people with ADHD.
- Consider switching to lisdexamfetamine for children aged 5 years and over and young people who have had a 6 week trial of methylphenidate at an adequate dose and not derived enough benefit in terms of reduced ADHD symptoms and associated impairment.
- Consider dexamfetamine for children aged 5 years and over and young people whose ADHD symptoms are responding to lisdexamfetamine but who cannot tolerate the longer effect profile.
- Offer atomoxetine or guanfacine to children aged 5 years and over if cannot tolerate methylphenidate or lisdexamfetamine or if symptoms have not responded to separate 6 weeks trials of lisdexamfetamine and methylphenidate, having considered alternative preparations and adequate doses
- **After titration and dose stabilisation, prescribing and monitoring of ADHD medication should be carried out under Shared Care Protocol arrangements with primary care.**

Drug Details

Approved generic name - Methylphenidate

Brand Name - Concerta XL, Delmosart, Equasym XL, Medikinet, Medikinet XL, Ritalin, Xaggitin XL

Form and strength: standard release and modified release preparations

Approved generic name – Atomoxetine

Brand Name - Strattera

Form and strength: 10mg, 18mg, 25mg, 40mg, 60mg and 80mg capsules

Approved generic name - Dexamfetamine

Form and strength: 5mg tablets

Approved generic name - Lisdexamfetamine

Brand name – Elvanse

Form and strength: 20mg, 30mg, 40mg, 50mg and 70mg capsules

Approved generic name – Guanfacine

Brand name – Intuniv

Form and strength: modified release 1mg, 2mg, 3mg, 4mg tablets

Specialist Responsibilities

The specialist secondary/tertiary care service will:

1. Provide a comprehensive baseline- assessment as stipulated in NICE guidance to include:
 - A full mental health and social assessment
 - A full history and physical examination, including:
 - Assessment of history of exercise syncope, undue breathlessness and other cardiovascular symptoms

- Heart rate and blood pressure (plot on centile chart)
 - Height and weight (plot on growth chart)
 - Family history of cardiac disease and examination of the cardiovascular system
 - An electrocardiogram (ECG) if the proposed treatment may affect the QT interval.(ECGs may also be indicated 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).
 - Risk assessment for substance misuse and drug diversion.
2. Routine blood tests and ECGs are not recommended unless there is a clinical indication.
 3. Interpret or arrange interpretation of electrocardiogram (ECG) if applicable.
 4. Initiate therapy following full discussion with the patient/carer of different treatment options, benefits and risks. **The choice of initial drug treatment and any changes to the choice of treatment is the responsibility of the specialist service.**
 5. Provide relevant, age appropriate, written information to the child/young person/parent/carer about diagnosis, assessment, support, self-help, psychological treatment, drug treatment and possible side effects including signs of depression, suicidal thought and behaviour.
 6. Liaise with GP, School and any other agency involved with the child/young person, providing a comprehensive treatment programme for the child/young person. This must include frequency of specialist review following stabilisation and be aware of ongoing issues relating to prescribing when reaching young adulthood.
 7. Ensure that baseline checks are done and documented prior to commencement of treatment at first appointment or at subsequent appointment. These should be communicated to the GP via the clinic report which is sent out within 10 days of the ADHD clinic visit.
 8. Titrate dose according to schedule adjusting dose as appropriate and undertake monitoring of clinical response and side effects.
 9. **During titration ensure the:**
 - Gradual increase of the dose until there is no further improvement in symptoms, behaviour, and education and or relationships and side effects are tolerable. Methylphenidate and dexamfetamine should be titrated over 4-6weeks.
 - Parents and teachers record symptoms and side effects at each dose change (for example on conners'10- item scale)
 - Review progress regularly (for example, weekly telephone contact and at each dose change).
 - Dose titration is slower if tics or seizures are present
 - Dose reduction is considered if side effects become troublesome
 10. After titration and dose stabilisation carry out prescription and monitoring under locally agreed shared care arrangements with primary care
 11. Send a letter to the GP, once a patient is stabilised on treatment suggesting that shared care should be considered for this patient. This letter should contain the following information.
 - Patient details including name, address date of birth and NHS number.
 - Details of treatment including drug name, dose, frequency of administration and any further dose titration that is required (if applicable).
 - Details as to where the GP can access copies of the shared care guideline
 - Confirmation that a clinic report has been sent with details and the results of any investigations/ base line checks that have been carried out prior to commencement of treatment. This should include blood pressure, pulse rate, weight and height.
 - Planned frequency of specialist review.
 - Confirmation that a written summary will be sent after each review
 - Name and contact details of clinician
 - Options for GP response

Appendix A is an example of the letter but format and content may vary depending on which specialist service is responsible for the treatment.
 12. Specialist review of ADHD medication should be undertaken at least once a year by a health care professional with training and expertise in managing ADHD.(NICE ADHD 2018)

13. The specialist review of drug treatment should include a comprehensive assessment of the following:
 - Routine monitoring of height, weight, blood pressure and heart rate.
 - Clinical need, benefits and side effects.
 - The views of the person and those of a parent, carer, teacher, spouse, partner and close friends as appropriate.
 - Impact on education and employment (2018)
 - The effect of missed doses, planned dose reductions and brief periods of no treatment should be taken into account and the preferred pattern of use should also be reviewed.
 - Coexisting conditions should be reviewed, and the person treated or referred if necessary.
 - The need for psychological, social and occupational support for the person and their parents or carers (as appropriate) should be assessed if medication has been optimised but ADHD symptoms continue to cause significant impairment.(2018)
14. Issue a letter/clinic report to the GP after each review appointment providing a summary of review findings, confirmation of continuing treatment or treatment changes, confirmation that relevant monitoring has taken place or an explanation as to why it has been deemed unnecessary, assessment of the child/young person's progress and confirmation that further prescriptions should be issued and the time of the next review.
15. Respond to any request from the GP to review the patient due to adverse effects of therapy, or deterioration in condition.
16. Report any adverse effects of therapy to the Medicines and Health care products Regulatory Agency (MHRA)
17. Remain alert for the potential for misuse of methylphenidate and dexamfetamine, by observing the frequency and quantity of prescriptions issued and be alert to changes in family circumstances
18. Advise the GP on continuing or stopping the medication following medical review of the patient and associated drug therapy.
19. Notify the GP if the patient is failing to attend for appropriate monitoring and advise GP on appropriate action. If the patient and their family fail to attend on two consecutive occasions the specialist will contact the patient's GP and advise them not to issue any further prescriptions and work with the GP to ascertain the reason for non –attendance. (This is in line with ULHT DNA policy – potential reasons GP may have knowledge of and be able to assist with are changes in contact details which specialist may not be aware of or safeguarding issue which may affect ability to attend clinic appointments which GP may be aware of).
20. Will start discussions with the patients and their carers as to the management of their ADHD as they move into adulthood. From the age of 16 years patients should all have had a trial period without medication. For those patients who are unable to manage their condition without drug treatment the role of the specialist is to contact the GP to advise GP to make arrangements for the ongoing prescribing and supply when the patient reaches 18 years of age.
21. Will inform the patient's GP if the ongoing responsibility for patient care is to be transferred to another consultant/ specialist service and to ensure both parties are aware of this change

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

GP Responsibilities

The GP will:

1. Prior to referral to the specialist service determine the severity of behavioural and/ or inattention problems suggestive of ADHD and how they affect the child or young person and their parents or carers. If problems are having an adverse impact on development or family life and persist with at least moderate impairment following either a period of up to 10 weeks watchful waiting or referral into a parent training/education programme then refer to secondary care.
2. Refer directly to secondary care if the behavioural and /or inattention problems are associated with severe impairment.
3. Notify the consultant in writing, without undue delay whether or not they agree to share care.
4. Provide any information requested by the specialist in relation to previous history of QTC prolongation or concurrent medication.
5. Prescribe the drug therapy as part of shared care agreement once patient is stabilised.
6. Monitor the patients overall health and wellbeing on a need led basis and as required specifically by the specialist. If you become aware of deterioration of their condition or the emergence of serious adverse effects such as emerging signs of depression and suicidal thoughts & behaviour, contact the specialist service for advice.
7. Monitor patient’s heart rate and BP on a need led basis and as requested specifically by the specialist.
8. Remain alert for the potential for misuse of methylphenidate and dexamfetamine, by observing the frequency and quantity of prescriptions issued and be alert to changes in family circumstances.
9. Report adverse effects of therapy to the consultant and the medicines and health care products Regulatory Agency (MHRA).
10. Act on advice provided by the consultant if patient does not attend for appropriate monitoring. If the patient and their family fail to attend on two consecutive occasions then the GP will be advised not to issue any further prescriptions and would work with the specialist as to the reason for non – engagement.
11. Can re-refer patients and their families back to secondary care following discontinuation of treatment if the family can show they are willing to engage with both the specialist service and the monitoring requirements for the proposed treatment.
12. Alert the specialist if there are any concerns about the patient’s response to treatment or the ability of the patient to tolerate treatment.
13. Alert the specialist if there are any issues identified relating to poor concordance/compliance e.g. irregularities in the collection of repeat prescriptions.
14. Refer as a matter of clinical priority a child or young person who is currently treated in primary care with methylphenidate, atomoxetine, dexamfetamine, lisdexamfetamine or guanfacine, for a presumptive diagnosis of ADHD, but has not yet been assessed by a specialist in ADHD in secondary care.

Referral Criteria

The patients will be stabilised on a suitable dose of methylphenidate, atomoxetine, dexamfetamine, lisdexamfetamine or guanfacine before prescribing responsibility is transferred to the GP.

The specialist service will continue to supply treatment until the GP is prepared to accept responsibility for shared care.

Licensed Indications

Methylphenidate hydrochloride, atomoxetine, dexamfetamine, lisdexamfetamine and guanfacine are all licensed for the treatment of Attention Deficit Hyperactivity Disorders.

Their license states that treatment should be initiated by a specialist physician experienced in managing the condition or in the case of dexamfetamine use should be under specialist supervision. There are licensing variations between the various substances and products. Refer to summary of product characteristics for further details.

Atomoxetine, methylphenidate, lisdexamfetamine and guanfacine are not licensed for use in children under the age of 6 years of age.

Recommended Dosage and Administration

Methylphenidate

Immediate release formulations

Child 6-17 years - The recommended starting dose is 5mg daily or twice daily increased in steps of 5-10mg daily if required, at weekly intervals, increased if necessary up to the licensed maximum dose of 60mg daily in 2-3 divided doses.

Dose may be increased beyond the licensed daily dose of 0.7mg/kg up to 2.1mg/kg daily in 2-3 divided doses (up to a maximum of 90mg daily), under the direction of a tertiary specialist.

Discontinue if no response after 1 month.

At higher doses monitor carefully for adverse effects.

If effect wears off in evening (with rebound hyperactivity) a dose at bedtime may be appropriate.

Modified release formulations

These vary in the ration of immediate release to extended release methylphenidate that they contain, and also have differing pharmacokinetic profiles resulting in some delivering higher levels of methylphenidate at the start of the day and some provide a therapeutic effect lasting that of a school day 8 hours where others provide an effect lasting up to 12 hours.

When switching from immediate release preparations to modified release preparations – consult product literature.

Concerta XL

Dose equivalence: total daily dose of 15mg of standard release formulation is considered equivalent to Concerta XL 18mg once daily

Child 6-17 years, 18mg once daily dose to be taken in the morning. Dose should be carefully titrated in increments of 18mg once a week to a maximum licensed daily dose of 54mg. Higher doses should only be used under direction of a tertiary specialist to an unlicensed maximum dose of 108mg.

Delmosart

Dose equivalence: total daily dose of 15mg of standard release formulation is considered equivalent to Delmosart 18mg once daily

Child 6-17 18mg once daily, dose to be taken in the morning. Dose should be increased in steps of 18mg every week if required to a maximum licensed daily dose of 54mg.

Equasym XL

Child 6-17 years, 10mg once daily in the morning increasing gradually at weekly intervals if necessary, usual maximum 60mg daily but may be increased to 2.1mg/kg daily (max 90mg)-unlicensed dose) under direction of tertiary specialist.

Medikinet XL -

Child 6-17 years 10mg once daily in the morning with or after breakfast increasing gradually to a licensed maximum of 60mg. To be increased to higher dose under direction of a tertiary specialist to an unlicensed maximum dose of 90mg a day. For those patients currently on immediate release methylphenidate careful dose titration will be required when switching to a modified release formulation.

Discontinue if no response after 1 month

Xaggitin XL

Dose equivalence: total daily dose of 15mg of standard release formulation is considered equivalent to Xaggitin XL 18mg once daily

Child 6-17 years, 18mg once daily - dose to be taken in the morning. Dose should be carefully titrated in increments of 18mg once a week to a maximum licensed daily dose of 54mg. A higher dose should only be used under direction of a tertiary specialist to an unlicensed maximum dose of 108mg.

Atomoxetine

Child over 6 years of age and adolescent with body weight under 70kg, initially 500micrograms/kg daily for seven days then increased according to response to usual maintenance dose of 1.2mg/kg daily, but may be increased to 1.8mg/kg daily (maximum dose 120mg daily – unlicensed) under direction of a tertiary specialist.

Child and adolescent with body weight over 70kg, initially 40mg daily for seven days then increased according to response to usual maintenance dose of 80mg daily ; but may be increased to 1.8mg/kg/day up to a maximum dose of 120mg daily (unlicensed) under the direction of a tertiary specialist. These higher doses should only be used after review of poor response to drug treatment and in consultation with a tertiary or regional centre. At higher doses monitor carefully for adverse effects. Total daily dose can be given either a single dose in the morning or in two divided doses with the last dose given no later than early evening.

Dexamfetamine

Child 6-17 years initially 2.5mg 2-3 times daily increased if necessary at weekly intervals by 5mg usual max 1mg/kg (up to 20mg) daily. Maintenance dose is given in 2-4 divided doses.

Lisdexamfetamine dimesylate

Children 6 - 17 years initially 30mg once daily in the morning, alternatively initially 20mg once daily increased in steps of 10-20mg every week if required. Maximum recommended daily dose of 70mg Dose to be taken in the morning. Discontinue if response insufficient after 1 month.

Guanfacine

Child 6-12 years (body weight 25kg or above) Initially 1mg daily adjusted in steps of 1mg every week if necessary and if tolerated maintenance 0.05-0.12mg/kg once daily max per dose 4mg).
Child 13-17 years (body weight 34-41.4kg). Initially 1mg daily adjusted in steps of 1mg every week if necessary and if tolerated maintenance 0.05-0.12mg/kg once daily max per dose 4mg).
Child 13-17 years (body weight 41.5- 49.4kg). Initially 1mg daily adjusted in steps of 1mg every week if necessary and if tolerated maintenance 0.05-0.12mg/kg once daily max per dose 5mg).
Child 13-17 years (body weight 49.5- 58.4kg). Initially 1mg daily adjusted in steps of 1mg every week if necessary and if tolerated maintenance 0.05-0.12mg/kg once daily max per dose 6mg).
Child 13-17 years (body weight 58.5kg and above). Initially 1mg daily adjusted in steps of 1mg every week if necessary and if tolerated maintenance 0.05-0.12mg/kg once daily max per dose 7mg). **For optimum weight adjusted dose titrations consult product literature.**

Adverse Effects

For further information on adverse effects please refer to the online BNF which can be accessed via <https://bnf.nice.org.uk/> or from the Summary of Product Characteristics which can be accessed via: www.medicines.org.uk

Methylphenidate

Common or very common. alopecia, anxiety, appetite decreased, arrhythmias, arthralgia, asthenia, behaviour abnormal, cough, depression, diarrhoea, dizziness, drowsiness, dry mouth, fever, gastrointestinal discomfort, growth retardation, headache, hypertension, laryngeal pain, mood altered, movement disorders, nasopharyngitis, nausea, palpitations, sleep disorders, vomiting, weight decreased.

Uncommon – Chest discomfort, constipation, dyspnoea, fatigue, haematuria, hallucinations, muscle complaints, psychotic disorder, suicidal tendencies, tic, tremor, vision disorders.

Rare or very rare – anaemia, angina pectoris, cardiac arrest, cerebrovascular insufficiency, confusion, gynaecomastia, hepatic coma, hyperfocus, hyperhidrosis, leucopenia, mydriasis, myocardial infarction, neuroleptic malignant syndrome, peripheral coldness, Raynaud's, seizures, sexual dysfunction, skin reactions, sudden cardiac death, thinking abnormal, thrombocytopenia, Frequency unknown – delusions, drug dependence, hyperpyrexia, intracranial haemorrhage, logorrhoea, pancytopenia, vasculitis.

Atomoxetine

Common or very common – anxiety, appetite decreased, arrhythmias (uncommon in children) asthenia, constipation, depression, dizziness, drowsiness, gastrointestinal discomfort, genital pain, headache, hyperhidrosis (uncommon in children), mydriasis, nausea, palpitations, sensation abnormal, sexual dysfunction (rare in children), sleep disturbances, tremor, urinary dysfunction (rare in children),

Uncommon – Behaviour abnormal, chest pain (very common in children) hypersensitivity, muscle spasms, peripheral coldness, QT interval prolongation, suicidal behaviour, syncope, tics (very common in children), and vision blurred.

Rare – hallucination (uncommon in children) hepatic disorders, psychosis (uncommon in children) Raynaud's phenomenon, seizures (uncommon in children).

Frequency not known – sudden cardiac death

Dexamfetamine

Common or very common – abdominal pain, anxiety, appetite decreased, arrhythmias, arthralgia, behaviour abnormal, depression, dry mouth, headache, mood, altered, movement disorders, muscle cramps, nausea, palpitations, poor weight gain, sleep disorders, vertigo, vomiting, weight decreased. Very rare – anaemia, angina pectoris, cardiac arrest, cerebrovascular insufficiency, fatigue, growth retardation, hallucination, hepatic coma, hepatic function abnormal, intracranial haemorrhage, leucopenia, mydriasis, psychosis, seizure, skin reactions, suicidal tendencies, thrombocytopenia, tic (in those at risk), vasculitis cerebral, vision disorders.

Frequency not known – Acidosis, alopecia, cardiomyopathy, chest pain, circulatory collapse, colitis ischaemic, concentration impaired, confusion, diarrhoea, dizziness, hypermetabolism, hyperpyrexia, kidney injury, myocardial infarction, neuroleptic malignant syndrome, obsessive compulsive disorder, reflexes increased, rhabdomyolysis, sexual dysfunction, sudden death, taste altered tremor.

Lisdexamfetamine

Common or very common – abdominal pain upper, anxiety, decreased appetite, behaviour abnormal, constipation, diarrhoea, dizziness, dry mouth, dyspnoea, fatigue, feeling jittery, headache, hyperhidrosis (uncommon in children), insomnia, mood altered, movement disorders (uncommon in children), nausea, palpitations, sexual dysfunction (uncommon in children), tachycardia, tremor, pyrexia, weight decreased.

Uncommon – depression (very common in children), drowsiness (very common in children), fever (very common in children), logorrhoea, psychiatric disorders (very common in children, skin

reactions (very common in children), taste altered, vision blurred, vomiting (very common in children)

Frequency not known - angioedema, cardiomyopathy, drug dependence, drug tolerance, hallucination, hepatitis allergic, mydriasis, psychotic disorders, Raynaud's, seizures, Stevens Johnson syndrome.

Guanfacine

Common or very common – anxiety, decreased appetite, arrhythmias, asthenia, constipation, depression, dizziness, drowsiness, dry mouth, gastrointestinal discomfort, headache, hypotension, mood altered, nausea, skin reactions, sleep disorders, urinary disorders, vomiting, weight increased.

Uncommon – Asthma, atrioventricular block, chest pain, hallucination, loss of consciousness, pallor, seizure, syncope.

Rare or very rare – hypertension, hypertensive encephalopathy, malaise.

Frequency not known - erectile dysfunction

As a black triangle drug all adverse reactions should be reported through the yellow card system accessible online at www.mhra.gov.uk/yellowcard.

Drug Interactions

For detailed information on drug interactions, please refer to the online BNF which can be accessed via <https://bnf.nice.org.uk/>

or from the Summary of Product Characteristics which can be accessed via:

www.medicines.org.uk

Below is a summary of some of the key interactions:

Methylphenidate

Monoamine Oxidase Inhibitors (MAOIs) contraindicated in those being treated with MAOI's or those who have had treatment in preceding two weeks due to risk of hypertensive crisis.

Warfarin – may increase the anticoagulant effect

Anticonvulsants – may increase plasma levels of phenobarbitone, primidone.

Alcohol – may increase CNS effects of methylphenidate.

Anti-hypertensives – may decrease effectiveness.

Halogenated anaesthetics – risk of sudden blood pressure increase during surgery. If surgery planned methylphenidate should not be used on day of surgery.

Dopaminergic drugs – caution recommended if using with dopamine antagonists such as antipsychotics or dopamine agonists such as tricyclic antidepressants as action of methylphenidate is to increase extracellular dopamine levels.

Centrally acting alpha-2 agonists e.g. clonidine - serious adverse reactions have been reported including sudden death – avoid concomitant use.

Caution is advised in patients being treated with other drugs that can also elevate blood pressure.

Atomoxetine

Monoamine Oxidase Inhibitors (MAOIs) Atomoxetine should not be used in combination with a MAOI. It should not be used within a minimum of two weeks after discontinuing therapy with a MAOI and treatment with an MAOI should not be initiated within two weeks after discontinuing treatment with atomoxetine.

Salbutamol (or other beta-agonists) Atomoxetine should be administered with caution to patients treated with high dose nebulised or systemically administered salbutamol (or other beta agonists) because cardiovascular effects can be potentiated. Attention should be paid to monitoring heart rate and blood pressure as these may significantly increase.

Anti-hypertensive drugs - use with caution as atomoxetine can increase blood pressure and decrease the effectiveness of anti-hypertensive drugs.

Pressor agents – Due to possible increases in blood pressure atomoxetine should be used with caution with pressor agents or medications that increase blood pressure.

Increases risk of ventricular arrhythmias with tricyclic antidepressants, methadone, amiodarone, disopyramide, parenteral erythromycin, moxifloxacin, and mefloquine, antipsychotics that increase the QTC interval, sotalol and diuretics.

Use with caution in patients on concomitant drugs that may lower the seizure threshold e.g. antidepressants (tricyclics or SSRIs, phenothiazines, mefloquine, chloroquine, bupropion, tramadol and neuroleptics).

There is a potential for atomoxetine to increase the effects of noradrenaline. Use with caution with antidepressants: imipramine, venlafaxine, mirtazapine or with decongestants such as pseudoephedrine or phenylephrine.

Dexamfetamine

Tricyclic antidepressants may increase risk of cardiovascular adverse events.

Lithium may antagonise effects of dexamfetamine.

Concurrent use of MAOIs or use within the preceding fourteen days may precipitate a hypertensive crisis.

Antihypertensive. Dexamfetamine may inhibit antihypertensive action of guanethidine or clonidine, concomitant use of beta-blockers may lead to severe hypertonia.

Anticoagulants - dexamfetamine may inhibit metabolism of coumarin anticoagulants.

Anticonvulsants – dexamfetamine may inhibit metabolism of phenobarbital, phenytoin and primidone. Absorption of phenobarbital, phenytoin, primidone and ethosuximide may be delayed by dexamfetamine.

Antidepressants – (tricyclics and SSRIs) dexamfetamine may inhibit their metabolism.

Acute dystonia has been noted with concurrent administration of haloperidol. Haloperidol may also inhibit central stimulant effects of dexamfetamine.

Antihistamines - Dexamfetamine may counteract the sedative effect of antihistamines.

Disulfiram – may inhibit metabolism and excretion of dexamfetamine.

Noradrenaline – dexamfetamine may enhance adrenergic effect of noradrenaline.

Meperidine – dexamfetamine may potentiate analgesic effects of meperidine.

Opioids – the respiratory depressant effects of opioids may be decreased by dexamfetamine. The analgesic action of morphine may be potentiated by concomitant use with dexamfetamine.

Phenothiazines may inhibit the actions of dexamfetamine.

Vasopressors- caution advised if used with vasopressors due to possible increase in blood pressure.

Clonidine and dexamfetamine may result in increased duration of action for dexamfetamine.

Halogenated narcotics - risk of sudden blood pressure increase during surgery. If surgery planned, dexamfetamine treatment should not be used on the day of the surgery.

Alcohol can increase CNS effects of dexamfetamine and patients should be advised to abstain from alcohol during treatment.

Gastrointestinal acidifying agents (guanethidine, reserpine, glutamic acid, ascorbic acid, fruit juices) lower absorption of amphetamines.

Urinary acidifying agents (ammonia, sodium acid phosphate) increase urinary excretion and reduce blood levels & efficacy of amphetamines.

Gastrointestinal alkalinizing agents (sodium bicarbonate) increase absorption of amphetamines and potentiate effects of amphetamine.

Urinary alkalinising agents (acetazolamide & some thiazides) decrease urinary excretion and therefore would potentiate effect of amphetamines.

Lisdexamfetamine

Ascorbic acid and other agents and conditions (thiazide diuretics, diets high in protein, diabetes and respiratory ketoacidosis) can acidify urine, increase urinary excretion of lisdexamfetamine and reducing its half-life.

Sodium bicarbonate and other agents and conditions (diets high in fruit and vegetables, urinary tract infections and vomiting) that alkalinise the urine decrease urinary excretion and can prolong the half-life.

Monoamine oxidase inhibitors (MAOI's) should not be administered during or within 14 days of MAOI's as can increase the release of norepinephrine and other monoamines leading to severe headaches and other signs of hypertensive crisis.

Serotonergic drugs. Serotonin syndrome has rarely occurred with use of lisdexamfetamine in conjunction with serotonergic drugs such as SRRI's & SNRI's.

Antihypertensives – may decrease effectiveness of guanethidine and other antihypertensive medications.

Could potentiate the analgesic effect of narcotic analgesics.

Chlorpromazine and haloperidol inhibit central stimulant effects of amphetamines. Lithium may block anorectic and stimulatory effects of amphetamines.

May elevate plasma corticosteroid levels.

Guanfacine

QT prolonging medicines – guanfacine causes a decrease in heart rate. Concomitant use with QT prolonging medicines is generally not recommended.

Strong CYP3A4/5 inhibitors (boceprevir, chloramphenicol, clarithromycin, indinavir, itraconazole, ketoconazole, posaconazole, ritonavir, saquinavir, suboxone, telaprevir, telithromycin) & moderate CYP3A4/5 inhibitors (aprepitant, atazanavir, ciprofloxacin, crizotinib, diltiazem, erythromycin, fluconazole, fosamprenavir, imatinib, verapamil, grapefruit juice) - may elevate plasma levels of guanfacine and increase risk of hypotension, bradycardia and sedation.

CYP3A4 inducers (Bosentan, carbamazepine, efavirenz, etravirine, modafinil, nevirapine, oxcarbazepine, phenobarbital, phenytoin, primidone, rifabutin, rifampicin, St John's wort) significantly decrease the rate and extent of guanfacine exposure.

Valproic acid - concomitant use can increase concentrations of valproic acid.

Antihypertensive medicines - may increase pharmacodynamics effects such as hypotension and syncope.

CNS depressants – (alcohol, sedatives, hypnotics, benzodiazepines, barbiturates and antipsychotics) concomitant use can increase effects such as sedation and somnolence)

Food interactions - guanfacine should not be administered with high fat meals as can lead to increased absorption of guanfacine.

Contraindications and cautions in use.

For further information on contraindications and cautions in use, please refer to the online BNF which can be accessed via <https://bnf.nice.org.uk/>

or from the Summary of Product Characteristics which can be accessed via:

www.medicines.org.uk

Contraindications

Methylphenidate

Not to be used in patients with severe depression, suicidal ideation, anorexia nervosa, psychosis, uncontrolled bipolar disorder, hyperthyroidism, cardiovascular disease, heart failure, cardiomyopathy, severe hypertension, arrhythmias, structural cardiac abnormalities, pheochromocytoma, vasculitis, cerebrovascular disorders.

Hypersensitivity or intolerance to methylphenidate or excipients

Pregnancy - no information available avoid use unless potential benefit outweighs risk.

Breast feeding – limited information available – avoid.

Atomoxetine

Hypersensitivity or intolerance to atomoxetine or excipients

Should not be used in patients with pheochromocytoma or history of pheochromocytoma.

Should not be used in patients with severe cardiovascular or cerebrovascular disorders.

Pregnancy - no information available avoid use unless potential benefit outweighs risk.

Breast feeding – avoid use present in milk in animal studies.

Dexamfetamine

Not to be used in patients with agitated states, hyperexcitability, psychosis, history of drug or alcohol abuse, cardiovascular disease (including moderate to severe hypertension), structural cardiac abnormalities, advanced arteriosclerosis, hyperthyroidism.

Pregnancy – avoid - retrospective evidence of uncertain significance suggesting possible embryotoxicity.

Breast feeding – significant amount in milk – avoid.

Contra-indicated in Tourette's syndrome but is used with caution by specialists. Any prescribing in this situation is unlicensed.

Hypersensitivity or intolerance to dexamphetamine or excipients

Lisdexamfetamine

Hypersensitivity or intolerance to lisdexamfetamine or excipients

Not to be used in those with symptomatic cardiovascular disease including moderate to severe hypertension and advanced arteriosclerosis, hyperexcitability or agitated states, hyperthyroidism.

Breast feeding – manufacturer advises avoid – present in human milk.

Pregnancy – manufacturer advises use only if potential benefit outweighs risk.

Guanfacine

Hypersensitivity or intolerance to guanfacine or excipients

Precautions

Methylphenidate

Should be used with caution in patients with history of epilepsy (discontinue or seek specialist advice if increased seizure frequency), anxiety or agitation, alcohol or drug dependence, tics or a family history of Tourette syndrome, susceptibility to angle-closure glaucoma; avoid abrupt withdrawal.

Atomoxetine

Should be used with caution in patients whose underlying medical condition could be worsened by increases in blood pressure and heart rate, such as patients with hypertension, tachycardia or cardiovascular or cerebrovascular disease. Patients who develop symptoms such as palpitations, exertional chest pain, unexplained syncope, dyspnoea or other symptoms suggestive of cardiac disease during atomoxetine treatment should undergo a prompt specialist cardiac evaluation. Atomoxetine should only be used with caution in those with congenital or acquired long QTC or a family history of QTC prolongation. The risk increases if atomoxetine is used concomitantly with other drugs that produce QTC prolongation, drugs that cause electrolyte disturbances and those that inhibit cytochrome P450 2D6.

Atomoxetine should be used with caution in those with structural cardiac abnormalities.

Should be used with caution in patients with aggressive behaviour, hostility, emotional lability, mania, psychosis

Patients should be monitored for the appearance of, or worsening of suicide related behaviour, hostility, psychotic or manic symptoms and emotional lability.

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

Should be discontinued in patients with jaundice or laboratory evidence of liver injury and should not be restarted. Patients and carers should be advised of risk of hepatic disorders and told how to recognise symptoms.

Hepatic impairment - halve dose in moderate impairment, quarter dose in severe impairment.

Dexamfetamine

Use with caution in patients with 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), and susceptibility to angle closed glaucoma. Tics and Tourette's syndrome (use with caution) – discontinue if tics occur. Growth restriction in children may occur during prolonged therapy - monitor height and weight in children. Avoid abrupt withdrawal, data on safety and efficacy of long-term use not complete, acute porphyria.

Special caution for use in children- monitor height and weight as growth restriction may occur in prolonged therapy. (Drug free periods may allow catch up in growth but withdraw slowly to avoid inducing depression or renewed hyperactivity)

Lisdexamfetamine

Use with caution in those with anorexia, history of cardiovascular disease or abnormalities including mild hypertension, heart failure, recent MI and ventricular arrhythmia. Evaluate cardiovascular status before starting treatment.

Use with caution in those with psychotic disorders, bipolar disorder, monitor for aggressive behaviour or hostility during drug treatment, history of drug or alcohol abuse, may lower seizure threshold (discontinue if seizures occur) tics and Tourettes syndrome (use with caution and discontinue is tics occur.

Use with caution in those with susceptibility to angle-closure glaucoma, avoid abrupt withdrawal, acute porphyria.

Special caution for use in children- monitor height and weight as growth restriction may occur in prolonged therapy. (Drug free periods may allow catch up in growth but withdraw slowly to avoid inducing depression or renewed hyperactivity)

Renal impairment maximum daily dose is 50mg in severe impairment.

Guanfacine

Bradycardia, (risk of torsade de pointes), heart block (risk of torsade de pointes), history of cardiovascular disease, history of QT prolongation, hypokalaemia (risk of torsade de pointes)

Monitoring

Responsibility of specialist service prior to commencement of treatment

Children and young people with ADHD should have a full pre-treatment assessment which should include:

Full mental health and social assessment

Full history and physical examination including:

- Assessment of history of exercise syncope, undue breathlessness and other cardiovascular symptoms
- Heart rate and blood pressure (plotted on centile chart)
- Height and weight (plotted on growth chart)
- Family history of cardiac disease and examination of the cardiovascular system.
- An ECG, if the proposed treatment may affect the QT interval.(ECGS may also be indicated 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).
- Risk assessment for substance abuse and drug diversion
- Enquiry about history of seizures or tics.
- Patients and their carers should be informed about the risks of suicidal ideation associated with these treatments. They should be advised to report worsening of general condition and emergence of suicidal thoughts or behaviours, irritability, agitation or depression to either their GP or specialist.
- Patients prescribed atomoxetine should be informed of the risk of hepatic impairment and advice to recognise signs such as the onset of abdominal pain, unexplained nausea, and malaise, darkening of urine or jaundice and to inform either their GP or specialist.

- For patients initiated onto guanfacine therapy the BNF recommends that an initial baseline evaluation should include identifying patients at risk of somnolence, sedation, hypotension, bradycardia, QT prolongation and arrhythmia.

Monitoring required during drug treatment

<u>Physical Health Monitoring – stimulants & atomoxetine</u>			
Child	Height	Weight	Heart rate & blood pressure
6-10 years	Every 6 months	Every 3 months	Compare with the normal range for age before and after each dose change and every 6 months. Specialist will provide further guidance to GP if monitoring is required.
10 years and over	Every 6 months	Measure weight at 3 & 6 months after starting treatment and every 6 months thereafter (or more often if concerns arise)	
All ages	Plot height and weight on a growth chart and ensure review by the healthcare professional responsible for treatment.		
<u>Physical Health Monitoring - guanfacine</u>			
Monitoring frequency	Assess	Monitor	
	Somnolence + sedation	Hypotension + bradycardia (BP standing + sitting + heart rate)	Weight + height (growth chart)
Weekly during titration	√	√	X
3 monthly during first year of treatment	√	√	√
6 monthly	√	√	√
		More frequent monitoring following any dose adjustments	
If a person taking guanfacine has sustained orthostatic hypotension or fainting episodes reduce their dose or consider switching to another ADHD medication.			

Further guidance on monitoring

Blood pressure and heart rate

Blood pressure and heart rate should be monitored by GP on a need led basis and as requested specifically by the specialist for patients on stimulants and atomoxetine. Monitoring for guanfacine therapy is as outlined above.

The specialist service will take the responsibility for ensuring the necessary monitoring is undertaken, but may request GP to carry out BP and heart rate checks as outlined above and before and after dose changes if requested.

If sustained resting tachycardia (more than 120 beats per minute), arrhythmia or systolic BP greater than 95th centile (or a clinically significant increase) is measured on 2 occasions, reduce dose and refer to a hypertension specialist.

Height and weight

Both height and weight measurements should be plotted on growth centile chart and should be regularly reviewed by the specialist responsible for treatment. Depending on frequency of

specialist follow-up the specialist may request the GP to monitor patient's height or weight, this particularly may apply to patients receiving treatment with guanfacine when 3 monthly checks are required in the first year of treatment.

Blood tests and ECGs

During treatment NICE states that people taking methylphenidate, dexamfetamine, guanfacine or atomoxetine, do not need routine blood tests and ECGs unless there is a clinical need.

If a clinical need for these is established ongoing monitoring will be responsibility of the specialist service.

Monitoring for signs of potential misuse

For children and young people taking methylphenidate and dexamfetamine, healthcare professionals/parents and carers should monitor changes in the potential for drug misuse and diversion which may come with changes in circumstances and age. In these situations modified release methylphenidate or atomoxetine may be preferred.

Monitoring for signs of sexual dysfunction

In young people sexual dysfunction (erectile and ejaculatory) and dysmenorrhoea should be monitored as potential side effects of atomoxetine. Specialist service will be responsible for monitoring for these adverse effects. If GP becomes aware of these they should contact specialist service for advice.

Reference values for blood pressure measurements

The Journal of hypertension 27(9):1719-1742 September 2009 contains reference blood pressure charts for children and adolescents. This can be accessed via The British Hypertension Society website following the link below:

<http://www.bhsoc.org/resources/children-young-people/>

Management of adverse effects

Atomoxetine

At normal doses atomoxetine can be associated with treatment emergent psychotic or manic symptoms e.g. hallucinations, delusional thinking, mania or agitation) in children or adolescents without a previous history. If such symptoms occur contact consultant medical team urgently for advice and consider discontinuing or withdrawing treatment.

Patients and their carers should be informed of risk of suicidal thoughts/behaviour and advised to contact the specialist team for urgent advice if these occur or if there is worsening of irritability, agitation or depression.

Development of seizures. Discontinue treatment and seek urgent advice from specialist.

Hepatic disorders. Be alert to possibility of jaundice or laboratory evidence of liver injury. If either occurs discontinue treatment and seek urgent specialist advice. In these circumstances treatment must not be restarted. Patients and carers should be advised of risk of liver damage and be told how to recognise symptoms. Prompt medical attention should be sought in case of abdominal pain, unexplained nausea, and malaise, darkening of the urine or jaundice.

Contact details

United Lincolnshire Hospitals Trust Community Paediatric Services

Boston

Dr-M Pervez
Boston Health Centre
Tel 01205 360880 ext. 208

Grantham

Dr J Clarke
Grantham Hospital
Tel 01476 464500

Lincoln and Louth

Dr F Johnson
Lincoln County Hospital
Tel 01522 5125512 Ext 573177

For advice regarding medication

Specialist Mental Health Pharmacy Service
Gervas House
Long Leys Road
Lincoln
LN1 1EJ
Tel No 01522 577000 ext. 7563

References:

1. British National Formulary for children 2016-2017. September 2016.
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Reviewed/updated on behalf of Lincolnshire Partnership Trust Medicines Management Committee, United Lincolnshire Hospitals Community Paediatric Service and NHS Lincolnshire by:

Authors:

Review and updated December 2015

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Mrs S Brewster, Acting Head of Commissioning, SWLCCG

Review and updated February 2019 through to September 2019

Cathy Johnson

Support Services Pharmacist, Optum HSS, and MMO team.

Dr Folasade Johnson

Consultant, ULHT Community Paediatric Service

Appendix A- Invitation to shared care

LINCOLNSHIRE PCT AND ULHT SHARED CARE AGREEMENT

Consultant request

Name of patient:
Address:

DOB:

NHS no:

Diagnosed condition.....

Drug name, dosage and frequency of administration.....

This drug has been accepted as suitable for shared care by the Lincolnshire clinical commissioning groups and ULHT. Details of the shared care guideline can be accessed on the PACEF website <http://lincolnshire-pacef.nhs.uk/lincolnshire-prescribing-and-clinical-effectiveness-forum-pacef>.

I am requesting your agreement to sharing the care of this patient. The preliminary assessments and baseline checks set out in the guideline have been carried out as detailed in the clinic report sent to you.

At the last clinic visit on the the checks were as follows:

Blood pressure:

Pulse:

Weight: (including centiles)

Height: (including centiles)

This treatment has been initiated and stabilised in this dose. I am currently prescribing the stabilising treatment.

I would like you to undertake treatment from.....

If you undertake treatment I will reassess the patient in months.

You will be sent a written summary within 14 days after each review as a confirmation that relevant monitoring has taken place and to confirm continuing treatment or treatment changes. I will accept referral for reassessment at your request.

The medical staff of the department are available to give advice.

Consultant name.....

Signature

Department of Community Paediatrics

Hospital

Date

Contact telephone number

G.P response

Please circle appropriate response

- a) I am willing to undertake shared care for this patient. I will follow the advice set out in the shared care guideline.
- b) I wish to discuss this request with you.
- c) I am unable to undertake shared care for this patient.

For option (c) kindly give reason:

G.P signature Date.....

Practice Address/Stamp: -

Please return whole completed form or a photocopy to the consultant requesting shared care prescribing within one week of receipt.

The GP has the right to refuse to agree to share care, in such an event the total clinical responsibility will remain with the consultant. The GP should then discuss alternative arrangements with the responsible consultant.

Appendix B - Consultant request for monitoring for patient on guanfacine

Dear GP,

Name of patient:

DOB:

Address:

NHS no:

Diagnosed condition.....

Drug name, dosage and frequency of administration.....

The above patient has been commenced and stabilised on Guanfacine for ADHD treatment.

Thank you for confirming your agreement and acceptance of the shared care prescribing arrangement. As part of the monitoring requirement under this shared care agreement, I would appreciate if you could monitor this child/young person’s blood pressures (sitting and standing), pulse rate, weight and height every 3 monthly during the first year of treatment.

If there is sustained orthostatic hypotension, bradycardia or history of fainting episodes, kindly reduce dose and contact consultant medical team urgently for advice.

I would like you to undertake monitoring from.....

If you undertake monitoring I will reassess the patient every 6 monthly.

Consultant name.....

Signature

Department of Community Paediatrics

Hospital

Date

Contact telephone number

Appendix C - Consultant response to GP decline of shared care

Dear GP,

Name of patient:

DOB:

Address:

NHS no:

Diagnosed condition.....

Drug name, dosage and frequency of administration.....

The above patient has been commenced and stabilised on the above medication as part of treatment.

Thank you for completing and returning your response for shared care request. We have noted your reason for not being able to undertake shared care for your patient.

If you change your mind in future, our consultant medical specialist team are available to offer you access to timely advice, guidance and information which will support you to feel clinically confident in managing your patient condition.

Kindly let us know at your earliest convenience should you wish to reconsider your response.

Consultant name.....

Signature

Department of Community Paediatrics

Hospital

Date

Contact telephone number

Appendix D - Patient information to confirm shared care agreement

Dear Parent,

Name of patient:

DOB:

Address:

NHS no:

Diagnosed condition.....

Drug name, dosage and frequency of administration.....

This is to inform you that your child/young person's GP has accepted shared care prescribing arrangement. Kindly obtain further prescription from your GP surgery.

As part of this agreement, it is a requirement that your child/young person attend regular appointments for monitoring, to review any side effect of medication and the need to continue treatment. If this does not happen the GP and the specialist community paediatric service may decide not to issue further prescriptions until medication review has taken place.

The GP will be sent a written summary report within 14 days after each specialist review as a confirmation that relevant monitoring has taken place and to confirm continuing treatment or treatment changes.

Kindly let us know if you have any queries.

Consultant name.....

Signature

Department of Community Paediatrics

Hospital

Date

Contact telephone number