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Bwrdd Iechyd Prifysgol
Hywel Dda
University Health Board

SHARED CARE AGREEMENT FORM CONSULTANT REQUEST IMPORTANT: ACTION NEEDED

Date:

Patient name:

Date of birth:

NHS number:

Address:

Diagnosis:

This patient is suitable for treatment with tablets as per attached letter, for the treatment of Adult ADHD.

This drug has been accepted for Shared Care according to the enclosed protocol (as agreed by Hywel Dda University Health Board). I am therefore requesting your agreement to share the care of this patient, as they are now stable on the treatment.

Where baseline investigations are set out in the shared care protocol, I have carried these out.

Treatment was started on:

If you are in agreement, please undertake monitoring and treatment from:

Baseline tests:

Next review with this department: -

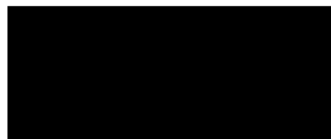
The medical staff of the department are available at all times to give you advice. The patient will not be discharged from out-patient follow-up while taking

Please use the reply slip overleaf and return it as soon as possible.

Thank you.



Dr. Justin Cressey-Rodgers
Consultant Psychiatrist



Tricia Roberts
Clinical Nurse Specialist (NMP)



Alun Morgan
Advanced Mental
Health Pharmacist (NMP)

Swyddfeydd Corfforaethol, Adeilad Ystwyth,
Hafan Derwen, Parc Dewi Sant, Heol Ffynnon Job,
Caerfyrddin, Sir Gaerfyrddin, SA31 3BB

Corporate Offices, Ystwyth Building,
Hafan Derwen, St Davids Park, Job's Well Road,
Carmarthen, Carmarthenshire, SA31 3BB

Cadeirydd / Chair
Dr Neil Wooding

Prif Weithredwr / Chief Executive
Professor Phil Kloer

Bwrdd Iechyd Prifysgol Hywel Dda yw enw gweithredol Bwrdd Iechyd Lleol Prifysgol Hywel Dda
Hywel Dda University Health Board is the operational name of Hywel Dda University Local Health Board

Mae Bwrdd Iechyd Prifysgol Hywel Dda yn amgylchedd di-fwg Hywel Dda University Health Board operates a smoke free environment

GP RESPONSE

Patient name:

Date of birth:

NHS number:

Address:

I have received your request for shared care of this patient who has been advised to start

A. I am willing to undertake shared care for this patient as set out in the protocol

B. I wish to discuss this request with you

C. I am unable to undertake shared care of this patient for the reason(s) below:

Reason	Tick
<p>1. A minimum duration of supply by the initiating physician As the patient has not had the minimum supply of medication to be provided by the initiating specialist I am unable to take clinical responsibility for prescribing this medication at this time. Therefore can you please contact the patient as soon as possible in order to provide them with the medication that you have recommended. Until the patient has had the appropriate length of supply the responsibility for providing the patient with their medication remains with you.</p>	
<p>2. Initiation and stabilisation by the initiating specialist As the patient has not been stabilised on this medication I am unable to take clinical responsibility for prescribing this medication at this time. Therefore can you please contact the patient as soon as possible in order to provide them with the medication that you have recommended. Until the patient is stabilised on this medication the responsibility for providing the patient with their medication remains with you.</p>	
<p>3. Shared Care Document not received As legal responsibility for clinical care lies with the doctor who signs the prescription, I need to ensure that I am in possession of sufficient clinical information for me to be confident to prescribe this treatment for my patient and it is clear where each of our responsibilities lie to ensure the patient is safely managed. For this reason I am unable to take clinical responsibility for prescribing this medication at this time, therefore would you please contact the patient as soon as possible in order to provide them with the medication that you have recommended. Until I receive this information, responsibility for providing the patient with their medication remains with you.</p>	
<p>4. Other (Primary Care Prescriber to complete if there are other reasons why shared care cannot be accepted)</p>	

Signature of primary care prescriber: **Print name:**.....

GP surgery/practice stamp:

Specification for a Local Supplementary Service for Adult Attention Deficit Hyperactivity Disorder (ADHD)

1. Introduction

All practices are expected to provide essential services and those additional services they are contracted to provide to all their patients under the GMS contract. The specification of this service therefore outlines the general and more specialised service to be provided that is beyond the scope of essential services. No part of the specification by commission, omission or implication defines or redefines essential or additional services.

The overall aim of this specification is for GP practices to be able to monitor and review Adult ADHD patients in collaboration with Hywel Dda ADHD Team and should be read alongside the Shared Care Protocol at Appendix A.

2. Background

Attention Deficit Hyperactivity Disorder (ADHD) is a common yet treatable neurodevelopmental condition. Historically, ADHD was considered a childhood disorder, usually resolved by late adolescence and early adulthood. However, it is now recognised that ADHD can continue into adulthood, with some studies have indicated that symptoms may continue into adulthood in as many as 70-80% of those diagnosed with ADHD as children.

ADHD in adults is characterised by impairment in multiple domains across the lifespan, and when diagnosed correctly, it may be successfully managed and treated. The clinical presentation of ADHD in adults may vary between individuals and can be divided into the following subtypes, depending on the nature of the symptoms; primarily inattentive, primarily hyperactive-impulsive, or combined type. Meta-analyses indicate that inattention is more strongly associated with academic impairment, low self-esteem, adverse occupational outcomes, and lower overall adaptive functioning. In addition, hyperactive-impulsive symptoms are associated with peer rejection, aggression, risky driving behaviours, and accidental injuries.

Prevalence rates in the adult population are estimated to be between 2.5% and 4.7% (Young et al., 2020); when applied to the Hywel Dda University Health Board (HDUHB) population, this equates to between 9,500 and 17,860 individuals who may have ADHD, including both

diagnosed and undiagnosed. Unmanaged ADHD can carry a high social, health, and economic burden on individuals, families, and broader society.

Below are some of the significant consequences of untreated ADHD:

- Decreased quality of life.
- Increased incidence of substance use disorder.
- Increased incidence of impulsive behaviours, e.g., unprotected sex, gambling, teenage pregnancies, and eating disorders.
- Accidental injury, including road traffic accidents.
- Increased incidence of criminal offences.
- Increased incidence of suicide and self-harm.

Pharmacological treatment has been demonstrated to reduce accidental injuries, substance use, educational or occupational underachievement, sexually transmitted infections, depression, suicide, criminal activity, and teenage pregnancies.

ADHD has high rates of co-morbidities. As much as 80% of individuals with ADHD will have a co-morbid condition, including substance use, anxiety, depression, and other neurodevelopmental conditions. The high prevalence of co-morbidities mean that adults with ADHD will present to other services, both within primary and secondary care. Untreated ADHD in adulthood is more likely to lead to a lack of engagement with other services and potentially a lack of adherence to treatments provided by them. A high functioning Adult ADHD Service within HDUHB will therefore offer benefits to broader healthcare services within the health board, in addition to the target patient population. It is hoped that establishing such a service will provide a platform for increased joint working and better overall management for patients with co-morbidities and complex needs.

This Local Supplementary Service is designed to assist the Adult ADHD team to support adult patients (aged 18 years and over) to review and monitor medications in a safe and supported way.

3. Delivery

This Local Supplementary Service will be offered to each GMS contractor (in relation to the registered patients of that GMS contractor).

It is the responsibility of the contractor to ensure that each Health Care Professional undertaking this Local Supplementary Service has the necessary skills, training, competence and experience in order to provide the service.

The contractor is obligated to confirm that they have viewed and comprehended a specific training webinar, ensuring they possess the requisite skills, training, and competence to deliver the service effectively.

4. The Service Objectives

The objectives of this Local Supplementary Service is to:

- Provide ongoing repeat prescription of methylphenidate, lisdexamfetamine or atomoxetine, for ADHD to adults who have been established and stabilised on ADHD medications by the Adult ADHD Service, or by another appropriate service e.g. out of area / private, subject to care being accepted by the HDUHB Adult ADHD Service.
- Perform ongoing monitoring for patients prescribed methylphenidate, lisdexamfetamine or atomoxetine as appropriate for each drug. This would consist of 6-monthly monitoring of blood pressure, pulse and weight.
- Perform annual reviews for those prescribed methylphenidate, lisdexamfetamine and atomoxetine, as recommended by NICE guidelines.
- Refer back to the Adult ADHD Service as appropriate, in the event of any clinical issues or concerns relating to ongoing prescribing of methylphenidate, lisdexamfetamine and atomoxetine e.g. significant adverse effects, medication requiring optimising etc.
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5. Service Scope

The service applies to all adults within Hywel Dda University Health Board diagnosed with ADHD. The service will apply to adults who have been established and stabilised on medication by, or in agreement with, the Hywel Dda Adult ADHD Service. (patients moving to the area on treatment, or those initiated on treatment by private healthcare providers need to be referred to the Hywel Dda Adult ADHD Service for them to be eligible for care under this LSS.

6. Service Description

This Local Supplementary Service will support the ongoing care of patients by commissioning GMS contractors to:

- **Prescribe** the maintenance treatment(s) as requested by the Adult ADHD Service prescribing team.
- **Be vigilant** for potential drug interactions or adverse reactions and report via the yellow card scheme if necessary - it is the responsibilities of all prescribers to report all serious reactions to the MHRA via the [Yellow Card Scheme](#)
- **Stop Treatment** on specialist advice or immediately if any urgent need arises.
- **Notify** the Adult ADHD Team via the generic email provided (AdultADHDSERVICE.HDD@wales.nhs.uk) of any changes to the patient's circumstances that might affect their treatment – please see the [Adult ADHD Service](#)

Specification and Prescribing Guidelines

- **Monitor** six monthly blood pressure, pulse and weight, and perform an annual review as per NICE guidelines. The Adult ADHD Service intend to develop confidence and experience in this area by providing consultant led training and regular dedicated

consultation sessions with the clinical team. The [Adult ADHD Service Specification and Prescribing Guidelines](#) contains an example annual review template in Appendix B.

This Local Supplementary Service will fund a shared care monitoring and prescribing service for patients with a diagnosis of ADHD in respect of the following specified drugs only (Appendix A):

- Atomoxetine
- Lisdexamfetamine
- Methylphenidate

To ensure all practices are up to the basic level required for this service, the contractor must:

- (i) Produce and maintain an up-to-date register of all shared care drug monitoring service patients.
- (ii) Ensure a systematic call and recall of patients on this register is taking place and have in place the means to identify and follow up patients in default.
- (iii) Ensure that all newly diagnosed/treated patients (and/or their carers when appropriate) receive appropriate education and advice
- (iv) Ensure that all patients (and/or their carers and support staff where appropriate) are informed of how to access appropriate and relevant information. (v) Work together with other professionals when appropriate. Any health professionals involved in the care of patients in the programme should be appropriately trained.
- (vi) Ensure that all staff involved in providing any aspect of care under this scheme have the necessary skills and training to do so and must have received training from the Adult ADHD service or equivalent.
- (vii) Perform an annual review.

7. Audit

Each commissioned GMS contractor will perform an annual audit of the care of their ADHD patients. This should include the proportion of patients who have been monitored successfully under the LSS.

8. Payments

Each commissioned GMS contractor will be able to claim:

1. A quarterly payment of £30.00 for providing each drug and appropriately monitoring.
2. An annual payment of £107.43 for undertaking 6 monthly blood pressure and annual review as per NICE Guidelines (a 30 minute consultation – annual review to include pre-review blood sampling, review of results and subsequent consultation).

Adult ADHD service contact details: adultADHDprescriptions.hdd@wales.nhs.uk

References:

National Institute for Health and Care Excellence (NICE) (2018) *Attention deficit hyperactivity disorder: diagnosis and management NICE guideline [NG87]* Available at: <https://www.nice.org.uk/guidance/ng87>

Hywel Dda University Health Board (2023) *Adult ADHD Service Specification and Prescribing Guidelines*. Available at: [Adult ADHD Service Specification](#)

Appendix A – Shared Care Protocols

PROTOCOL: ATOMOXETINE	
<i>This document should be read in conjunction with the current SPC: www.medicines.org.uk/</i>	
1. Licensed indications State if drug is being used off-label.	Management of adults with Attention Deficit Hyperactivity Disorder (ADHD). Doses above 100mg daily are not licensed.

<p>2. Therapeutic use and background</p>	<p>Medication should be offered to adults with ADHD if their symptoms are still causing a significant impairment in at least one domain after environmental modifications have been implemented and reviewed.</p> <p>Medication for ADHD should only be initiated by, or under the direct supervision of the Hywel Dda University Health Board (HDUHB) Adult ADHD Service.</p> <p>Stimulants are regarded as first line treatment because they offer higher average clinical effects than atomoxetine. Methylphenidate and lisdexamfetamine have comparable efficacy, though there is some evidence that amfetamines might be more effective in adults. The choice of stimulant should therefore be based on individual needs and patient preferences.</p> <p>A risk assessment for potential substance misuse and drug diversion should be undertaken for all service users when prescribing psychostimulants. Prescribe cautiously if risks are identified, and consider strategies to minimise risks on an individual basis. If there is evidence of misuse or diversion when a patient is treated with atomoxetine, the HDUHB Adult ADHD Service should be immediately informed.</p> <p>Read in conjunction with Adult ADHD Prescribing Guideline</p>
<p>3. Contraindications</p>	<p>Hypersensitivity to the active substance or to any of the excipients.</p> <p>Atomoxetine should not be used in combination with monoamine oxidase inhibitors (MAOI). Atomoxetine should not be used within a minimum of 2 weeks after discontinuing therapy with MAOI. Treatment with MAOI should not be initiated within 2 weeks after discontinuing atomoxetine.</p> <p>Atomoxetine should not be used in patients with narrow angle glaucoma, as in clinical trials the use of atomoxetine was associated with an increased incidence of mydriasis.</p> <p>Atomoxetine should not be used in patients with severe cardiovascular or cerebrovascular disorders. Severe cardiovascular disorders may include severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias and channelopathies (disorders caused by the dysfunction of ion channels). Severe cerebrovascular disorders may include cerebral aneurysm or stroke.</p> <p>Atomoxetine should not be used in patients with pheochromocytoma or a history of pheochromocytoma.</p>

<p>4. Typical dosage regimen (adults)</p>	<p>All dose adjustments will be initiated via secondary care. The following is for information only:</p> <ol style="list-style-type: none"> 1. Route – oral. 2. Formulation – hard capsule. 3. Recommended starting dose: Body weight ≤70kg - initially 500micrograms/kg daily Body weight >70kg – initially 40mg daily For patients with that are known CYP2D6 poor metabolisers, a lower starting dose and slower up titration of the dose may be considered to minimise the risk of adverse effects. 4. Titrate dosage: Body weight ≤70kg –after 7days dose can be increased to 1.2mg/kg daily according to response. Body weight >70kg – after 7days dose can be increased by 20mg per week according to response. Ensure slower dose titration and more frequent monitoring in patients with the following co-morbidities: neurodevelopmental disorders, mental health conditions or physical health co-morbidities. For patients with that are known CYP2D6 poor metabolisers, a lower starting dose and slower up titration of the dose may be considered to minimise the risk of adverse effects. 5. Maintenance dosage up to a maximum: Body weight ≤70kg –1.2mg/kg daily, maximum licensed dose is 100mg daily. Higher daily doses of 1.8mg/kg or 120mg daily can be given. Body weight >70kg – usual maintenance dose of 80-100mg daily, maximum licensed dose is 100mg daily. Higher daily doses of up to 1.8mg/kg or 120mg daily can be given. 6. Adjunctive treatment regime - if a 6-week trial, at an optimised dose, fails to reduce ADHD symptoms and associated impairments, refer to HDUHB Adult ADHD Service for consideration of third line options. 7. Conditions requiring dose reduction e.g. impaired renal/ liver function. For patients with moderate hepatic insufficiency (Child-Pugh Class B), initial and target doses should be reduced to 50% of the usual dose. For patients with severe hepatic insufficiency (Child-Pugh Class C), initial dose and target doses should be reduced to 25% of usual dose. 8. Usual response time – 6weeks at an optimal dose. 9. Duration of treatment - as long as indicated by clinical effectiveness, as per HDUHB Adult ADHD Service recommendation. 					
<p>5. Drug interactions For a comprehensive list, consult the BNF or SPC</p>	<p>Bupropion, fluoxetine, paroxetine (predicted to markedly increase exposure to atomoxetine); MAOIs (increased risk of serotonin syndrome and hypertensive crisis); beta agonists (high dose only – atomoxetine is predicted to increase the risk of cardiovascular adverse effects with beta agonists).</p>					
<p>6. Adverse drug reactions For a comprehensive list (including rare and very rare adverse effects), or if significance of</p>	<p>Most serious toxicity is seen with long-term use and may therefore present first to primary care. The frequency of adverse reactions is classified using the following convention: Very common (≥ 10%); common (≥ 1% and < 10%); uncommon (≥ 0.1% and < 1%); not known (cannot be estimated from the available data).</p> <table border="1" data-bbox="475 1659 1361 1722"> <thead> <tr> <th data-bbox="475 1659 938 1722">Clinical condition (Where possible indicate if common, rare or serious)</th> <th data-bbox="938 1659 1361 1722">Management (Including threshold at which to contact specialist)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		Clinical condition (Where possible indicate if common, rare or serious)	Management (Including threshold at which to contact specialist)		
Clinical condition (Where possible indicate if common, rare or serious)	Management (Including threshold at which to contact specialist)					

possible adverse event uncertain, consult the SPC or BNF	Cardiac disorders – tachycardia – common	<p>Tachycardia if sustained resting heart rate >100beats per minute.</p> <p>Reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	Investigations – hypertension - common	<p>Follow NICE guideline 136, hypertension in adults: diagnosis and management.</p>

		<p>Hypertension if clinic blood pressure \geq140/90mmHg and ambulatory blood pressure monitoring \geq135/85mmHg.</p> <p>Provision of lifestyle advice including reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	Metabolism and nutrition disorder - decreased appetite – very common	<p>Follow NICE guideline 87, ADHD: diagnosis and management advice.</p> <ul style="list-style-type: none"> - Take medication with or after food rather than before meals. - Take additional meals or snacks early in the morning or eat in the evening when stimulant effects have worn off. - Consume high-calorie foods of good nutritional value. - Taking a planned break from treatment, to be advised by HDUHB Adult ADHD Service. <ul style="list-style-type: none"> - Obtaining dietary advice. - Closely monitoring weight and body mass index (BMI). <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>

	Mild to moderate psychiatric disorders – affect lability, aggression, anxiety, depression – common/uncommon	<p>Some strategies that could be considered:</p> <ul style="list-style-type: none"> - Review dose timing, ensuring doses are spaced effectively. - Treating co-morbid problems e.g. anxiety or depression, if not medication related or suboptimal control of ADHD symptoms. Careful and considered evaluation is therefore important, to be advised by HDUHB Adult ADHD Service. <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	Serious psychiatric disorders – mania, hypomania, suicidal ideation – uncommon/rare	<p>Consider discontinuing medication and refer immediately to the HDUHB Adult ADHD Service for further advice.</p> <p>Referral to urgent care may also be needed e.g. Crisis Resolution and Home Treatment (CRHT) team or local A&E department.</p>
	IF YOU SUSPECT AN ADVERSE REACTION HAS OCCURRED, PLEASE STOP THE DRUG/CONTACT THE SPECIALIST DEPARTMENT, AS IDENTIFIED ABOVE.	

	<p>The patient should be advised to report any of the following signs or symptoms without delay: report any concerns or adverse effects of the medication to the prescriber in particular serious psychiatric disorders</p> <p>Other important comorbidities (e.g. Chickenpox exposure): n/a</p> <p>Any adverse reaction to a black triangle drug, or serious reaction to an established drug, should be reported to the Medicines and Healthcare products Regulatory Agency (MHRA) via the “Yellow Card” scheme. https://yellowcard.mhra.gov.uk/</p>					
7. Baseline investigations	<p>To be undertaken by secondary care</p> <ul style="list-style-type: none"> - A review of physical health and a cardiovascular assessment should be conducted prior to initiating. - Baseline measurements of blood pressure, pulse and weight should be recorded. - Routine blood tests are not necessary, unless there is a clinical indication. - A risk assessment for potential substance misuse and drug diversion should be undertaken for all patients. 					
8. Monitoring	<table border="1"> <thead> <tr> <th>Monitoring</th> <th>Frequency</th> <th>Results</th> <th>Action</th> <th>By</th> </tr> </thead> </table>	Monitoring	Frequency	Results	Action	By
Monitoring	Frequency	Results	Action	By		

	Pulse	Initiation, following each dose adjustment and at least every 6months thereafter	Tachycardia if sustained resting heart rate >100beats per minute	<p>Reducing caffeine intake and smoking cessation, if applicable.</p> <p>If tachycardia persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p>	Adult ADHD Service (during initiation and titration), then by GP
	Blood pressure	Initiation, following each dose adjustment and at least every 6months thereafter	Hypertension if clinic blood pressure $\geq 140/90$ mm Hg and ambulatory blood pressure monitoring $\geq 135/85$ mm Hg	<p>Reducing caffeine and smoking cessation, if applicable. Provide lifestyle advice in accordance with NICE guideline 136.</p> <p>If hypertension persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p>	Adult ADHD Service (during initiation and titration), then by GP

	Appetite and weight	Initiation, following each dose adjustment and at least every 6 months thereafter	Appetite suppression	<p>Consider the following strategies (NICE 2018):</p> <p>Take medication with or after food rather than before meals. Take additional meals or snacks early in the morning or eat in the evening when stimulant effects have worn off. Consume high-calorie foods of good nutritional value. Taking a planned break from treatment. Obtaining dietary advice. Closely monitoring weight and BMI.</p> <p>If appetite suppression persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p>	Adult ADHD Service (during initiation and titration), then by GP
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<p>9. Pharmaceutical aspects</p>	<p>Take with or after food.</p> <p>Total daily dose may be given either as a single dose in the morning or in two divided doses, first dose in the morning and the second dose no later than early evening,</p> <p>It is recommended to gradually withdraw atomoxetine to avoid withdrawal effects but may be stopped abruptly without significant problems if indicated.</p>
<p>10. Advice to patients and carers The specialist will counsel the patient with regard to the benefits and risks of treatment and will provide the patient with any relevant information and advice, including patient information leaflets on individual medicines.</p>	<p>Atomoxetine has a minor influence on the ability to drive and use machines, it has been associated with increased rates of fatigue, somnolence, and dizziness. Patients should be advised to use caution when driving a car or operating hazardous machinery until they are reasonably certain that their performance is not affected by atomoxetine.</p> <p>Following rare reports of hepatic disorders, patients and carers should be advised of the risk and be told how to recognise symptoms; prompt medical attention should be sought in case of abdominal pain, unexplained nausea, malaise, darkening of the urine, or jaundice.</p> <p>To adhere to necessary monitoring requirements at six monthly intervals, according to the preferred method (attendance at clinic/self-monitoring) as agreed with GP.</p> <p>To attend reviews as necessary with the Adult ADHD service.</p> <p>To report any concerns or adverse effects of the medication to the prescriber.</p> <p>To notify psychiatrist or GP if the medication is stopped, including the reasons for this.</p>
<p>11. Pregnancy (men and women) and breast feeding It is the responsibility of the specialist to provide advice on the need for contraception to male and female patients on initiation and at each review but the ongoing responsibility for providing this advice rests with both the primary care prescriber and the specialist.</p>	<p>Manufacturer advises to avoid the use of atomoxetine in pregnancy unless potential benefit outweighs risk.</p> <p>Atomoxetine and/or its metabolites were excreted in the milk of rats. It is not known if atomoxetine is excreted in human milk. Because of the lack of data, atomoxetine should be avoided during breastfeeding.</p>

12. Secondary care contact information	<p>If stopping medication or needing advice please contact: Dr. Justin Cressey-Rodgers</p> <p>Hospital: Wellfield Road Resource Centre, Carmarthen</p> <p>Email: AdultADHDSERVICE.HDD@wales.nhs.uk</p>
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13. Criteria for shared care	<p>Prescribing responsibility will only be transferred when:</p> <ul style="list-style-type: none"> • Treatment has been initiated and established by the secondary care specialist. • The patient's initial reaction to and progress on the drug is satisfactory. • The primary care prescriber has agreed in writing in each individual case that shared care is appropriate. • The patient's general physical, mental and social circumstances are such that he/she would benefit from shared care arrangements.
14. Responsibilities of initiating consultant	<ul style="list-style-type: none"> • Initiate treatment. • Undertake baseline monitoring. □ Dose adjustments. • Monitor patient's initial reaction to and progress on the drug. • Ensure that the patient is taking their medication and has an adequate supply of medication until primary care supply can be arranged. • Continue to monitor and supervise the patient according to this protocol, while the patient remains on this drug. <p>Provide primary care prescriber with:</p> <ul style="list-style-type: none"> • Diagnosis, relevant clinical information and baseline results, treatment to date and treatment plan, duration of treatment before consultant review. • Provide primary care prescriber with details of outpatient consultations, ideally within 14 days of seeing the patient, or inform primary care prescriber if the patient does not attend appointment. • Advice on when to stop this drug. <p>Provide patient with relevant drug information to enable:</p> <ul style="list-style-type: none"> • Informed consent to therapy. • Understanding of potential side effects and appropriate action. • Understanding of the role of monitoring.
15. Responsibilities of primary care	<p>Provision of shared care is in accordance with the Local Supplementary Service</p> <ul style="list-style-type: none"> • To monitor and prescribe in collaboration with the specialist, according to this protocol. • Symptoms or results are appropriately actioned, recorded and communicated to secondary care when necessary.
16. Responsibilities of patients	<ul style="list-style-type: none"> • To attend hospital and primary care appointments, including those for monitoring. • Failure to attend will result in medication being stopped (on specialist advice).

	<input type="checkbox"/> To report adverse effects to their specialist or primary care prescriber.
17. Additional responsibilities	Responsibilities of all prescribers: Any serious reaction to an established drug should be reported to MHRA.
18. Supporting documentation	Include patient information leaflet if available
19. Primary care letter	Attached

PROTOCOL: LISDEXAMFETAMINE

This document should be read in conjunction with the current SPC: www.medicines.org.uk/

1. Licensed indications State if drug is being used off-label.	Management of adults with Attention Deficit Hyperactivity Disorder (ADHD).
2. Therapeutic use and background	<p>Medication should be offered to adults with ADHD if their symptoms are still causing a significant impairment in at least one domain after environmental modifications have been implemented and reviewed.</p> <p>Medication for ADHD should only be initiated by, or under the direct supervision of the Hywel Dda University Health Board (HDUHB) Adult ADHD Service.</p> <p>Stimulants are regarded as first line treatment because they offer higher average clinical effects than atomoxetine. Methylphenidate and lisdexamfetamine have comparable efficacy, though there is some evidence that amfetamines might be more effective in adults. The choice of stimulant should therefore be based on individual needs and patient preferences.</p> <p>A risk assessment for potential substance misuse and drug diversion should be undertaken for all service users when prescribing psychostimulants. Prescribe cautiously if risks are identified, and consider strategies to minimise risks on an individual basis. If there is evidence of misuse or diversion when a patient is treated with lisdexamfetamine, the HDUHB Adult ADHD Service should be immediately informed.</p> <p>Read in conjunction with Adult ADHD Prescribing Guideline</p>
3. Contraindications	<p>Hypersensitivity to sympathomimetic amines or any of the excipients.</p> <p>Concomitant use of monoamine oxidase inhibitors (MAOI) or within 14 days after MAOI treatment.</p> <p>Hyperthyroidism or thyrotoxicosis.</p> <p>Agitated states.</p> <p>Symptomatic cardiovascular disease.</p> <p>Advanced arteriosclerosis.</p> <p>Moderate to severe hypertension.</p> <p>Glaucoma.</p>

4. Typical dosage regimen (adults)	<p>All dose adjustments will be initiated via secondary care. The following is for information only:</p> <ol style="list-style-type: none"> 10. Route – oral. 11. Formulation – hard capsule. 12. Recommended starting dose- - initially 30mg once daily, in the morning. 13. Titrate dosage up by 20mg per week. Ensure slower dose titration and more frequent monitoring in patients with the following co-morbidities: neurodevelopmental disorders, mental health conditions or physical health co-morbidities. 14. Maintenance dosage up to a maximum 70mg once a daily. 15. Adjunctive treatment regime – none, switch to an alternative first-line option if a 6-week trial, at an optimised dose, fails to reduce ADHD symptoms and associated impairments. 16. Conditions requiring dose reduction e.g. impaired renal/ liver function. Renal impairment - in patients with severe renal insufficiency (glomerular filtration rate (GFR) 15 to <30 mL/min/1.73 m² or creatinine clearance (CrCl) <30 mL/min) the maximum dose should not exceed 50 mg/day. Further dosage reduction should be considered in patients undergoing dialysis. 17. Usual response time – 6-weeks at an optimal dose.
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	18. Duration of treatment - as long as indicated by clinical effectiveness, as per HDUHB Adult ADHD Service recommendation.				
5. Drug interactions For a comprehensive list, consult the BNF or SPC	St John's Wort, selective serotonin reuptake inhibitors (SSRIs), triptans, methadone, lithium (increased risk of serotonin syndrome); MAOIs (increased risk of hypertensive crisis, see contra-indications above); fluoxetine, paroxetine (predicted to increase exposure to lisdexamfetamine).				
6. Adverse drug reactions For a comprehensive	<p>Most serious toxicity is seen with long-term use and may therefore present first to primary care. The frequency of adverse reactions is classified using the following convention:</p> <p>Very common (≥ 10%); common (≥ 1% and < 10%); uncommon (≥ 0.1% and < 1%); not known (cannot be estimated from the available data).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #e0e0e0;">Clinical condition (<i>Where possible indicate if common, rare or serious</i>)</th> <th style="background-color: #e0e0e0;">Management (<i>Including threshold at which to contact specialist</i>)</th> </tr> </thead> <tbody> <tr> <td style="background-color: #e0e0e0;"> </td> <td style="background-color: #e0e0e0;"> </td> </tr> </tbody> </table>	Clinical condition (<i>Where possible indicate if common, rare or serious</i>)	Management (<i>Including threshold at which to contact specialist</i>)		
Clinical condition (<i>Where possible indicate if common, rare or serious</i>)	Management (<i>Including threshold at which to contact specialist</i>)				

<p>list (including rare and very rare adverse effects), or if significance of possible adverse event uncertain, consult the SPC or BNF</p>	<p>Cardiac disorders – tachycardia – common</p>	<p>Tachycardia if sustained resting heart rate >100beats per minute.</p> <p>Reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
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	<p>Investigations – hypertension - common</p>	<p>Follow NICE guideline 136, hypertension in adults: diagnosis and management.</p> <p>Hypertension if clinic blood pressure $\geq 140/90$mmHg and ambulatory blood pressure monitoring $\geq 135/85$mmHg.</p> <p>Provision of lifestyle advice including reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	<p>Metabolism and nutrition disorder - decreased appetite – very common</p>	<p>Follow NICE guideline 87, ADHD: diagnosis and management advice.</p> <ul style="list-style-type: none"> - Take medication with or after food rather than before meals. - Take additional meals or snacks early in the morning or eat in the evening when stimulant effects have worn off. - Consume high-calorie foods of good nutritional value.

		<ul style="list-style-type: none"> - Taking a planned break from treatment, to be advised by HDUHB Adult ADHD Service. - Obtaining dietary advice. - Closely monitoring weight and body mass index (BMI). <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	<p>Mild to moderate psychiatric disorders – affect lability, aggression, anxiety, depression – common/uncommon</p>	<p>Some strategies that could be considered:</p> <ul style="list-style-type: none"> - Review dose timing, ensuring doses are spaced effectively. - Treating co-morbid problems e.g. anxiety or depression, if not medication related or suboptimal control of ADHD symptoms. Careful and considered evaluation is therefore important, to be advised by HDUHB Adult ADHD Service. <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	<p>Serious psychiatric disorders – mania, hypomania, suicidal ideation – uncommon/rare</p>	<p>Consider discontinuing medication and refer immediately to the HDUHB Adult ADHD Service for further advice.</p> <p>Referral to urgent care may also be needed e.g. Crisis Resolution and Home Treatment (CRHT) team or local A&E department.</p>
<p>IF YOU SUSPECT AN ADVERSE REACTION HAS OCCURRED, PLEASE STOP THE DRUG/CONTACT THE SPECIALIST DEPARTMENT, AS IDENTIFIED ABOVE.</p> <p>The patient should be advised to report any of the following signs or symptoms without delay: report any concerns or adverse effects of the medication to the prescriber in particular serious psychiatric disorders</p> <p>Other important comorbidities (e.g. Chickenpox exposure): n/a</p> <p>Any adverse reaction to a black triangle drug, or serious reaction to an established drug, should be reported to the Medicines and Healthcare products Regulatory Agency (MHRA) via the “Yellow Card” scheme. https://yellowcard.mhra.gov.uk/</p>		

7. Baseline investigations	To be undertaken by secondary care				
	<ul style="list-style-type: none"> - A review of physical health and a cardiovascular assessment should be conducted prior to initiating. - Baseline measurements of blood pressure, pulse and weight should be recorded. - Routine blood tests are not necessary, unless there is a clinical indication. - A risk assessment for potential substance misuse and drug diversion should be undertaken for all patients. 				
8. Monitoring	Monitoring	Frequency	Results	Action	By
	Pulse	Initiation, following each dose	Tachycardia if sustained resting	Reducing caffeine intake and smoking	Adult ADHD Service (during

		adjustment and at least every 6months thereafter	heart rate >100beats per minute	cessation, if applicable. If tachycardia persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.	initiation and titration), then by GP
	Blood pressure	Initiation, following each dose adjustment and at least every 6months thereafter	Hypertension if clinic blood pressure $\geq 140/90$ mm Hg and ambulatory blood pressure monitoring $\geq 135/85$ mm Hg	Reducing caffeine and smoking cessation, if applicable. Provide lifestyle advice in accordance with NICE guideline 136. If hypertension persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.	Adult ADHD Service (during initiation and titration), then by GP

	Appetite and weight	Initiation, following each dose adjustment and at least every 6months thereafter	Appetite suppression	<p>Consider the following strategies (NICE 2018):</p> <p>Take medication with or after food rather than before meals. Take additional meals or snacks early in the morning or eat in the evening when stimulant effects have worn off. Consume high-calorie foods of good</p>	Adult ADHD Service (during initiation and titration), then by GP
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				<p>nutritional value. Taking a planned break from treatment. Obtaining dietary advice. Closely monitoring weight and BMI.</p> <p>If appetite suppression persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p>	
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			<p>Mild to moderate psychiatric disturbances e.g. affect lability, aggression, anxiety, depression. NB these findings are commonly observed in ADHD and may be indicative of sub-optimal control of ADHD symptoms.</p>	<p>Review dose timing, ensuring doses are spaced effectively.</p> <p>Treating comorbid problems e.g. anxiety or depression, if not medication related or suboptimal control of ADHD symptoms.</p> <p>If mild to moderate psychiatric disturbances persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p> <p>Consider discontinuing</p>	
	Psychiatric symptoms	Initiation, following each dose adjustment and at least every 6 months thereafter			Adult ADHD Service (during initiation and titration), then by GP

			<p>Serious psychiatric illness e.g. mania, hypomania, suicidal ideation</p>	<p>medication and refer immediately to the HDUHB Adult ADHD Service for further advice.</p>	
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<p>9. Pharmaceutical aspects</p>	<p>Take with or after food.</p> <p>Manufacturer advises swallow capsule whole or mix contents of capsule with soft food such as yoghurt or in a glass of water or orange juice; contents should be dispersed completely and consumed immediately.</p> <p>In the event of a missed dose, dosing can resume the next day. Afternoon doses should be avoided because of the potential for insomnia.</p> <p>No specific recommendations of stopping/discontinuing treatment.</p> <p>Lisdexamfetamine is a schedule 2 controlled drug therefore controlled drug prescription requirements must be followed when prescribing.</p>
<p>10. Advice to patients and carers The specialist will counsel the patient with regard to the benefits and risks of treatment and will provide the patient with any relevant information and advice, including patient information leaflets on individual medicines.</p>	<p>Lisdexamfetamine can cause dizziness, drowsiness and visual disturbances including difficulties with accommodation, and blurred vision. These could have a moderate influence on the ability to drive and use machines. Patients should be warned of these possible effects and advised that if affected, they should avoid potentially hazardous activities such as driving or operating machinery.</p> <p>To adhere to necessary monitoring requirements at six monthly intervals, according to the preferred method (attendance at clinic/self-monitoring) as agreed with GP.</p> <p>To attend reviews as necessary with the Adult ADHD service.</p> <p>To report any concerns or adverse effects of the medication to the prescriber.</p> <p>To notify psychiatrist or GP if the medication is stopped, including the reasons for this.</p>
<p>11. Pregnancy (men and women) and breast feeding It is the responsibility of the specialist to provide advice on the need for contraception to male and female patients on initiation and at each review but the ongoing responsibility for providing this advice rests with both the primary care prescriber and the specialist.</p>	<p>Lisdexamfetamine should only be used during pregnancy if the potential benefit justifies the potential risk to the foetus.</p> <p>Amfetamines are excreted in human milk, lisdexamfetamine should not be used during breast-feeding.</p>

12. Secondary care contact information	If stopping medication or needing advice please contact: Dr. Justin Cressey-Rodgers Hospital: Wellfield Road Resource Centre, Carmarthen Email: AdultADHDSERVICE.HDD@wales.nhs.uk
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13. Criteria for shared care	Prescribing responsibility will only be transferred when: <ul style="list-style-type: none"> • Treatment has been initiated and established by the secondary care specialist. • The patient's initial reaction to and progress on the drug is satisfactory. • The primary care prescriber has agreed in writing in each individual case that shared care is appropriate. • The patient's general physical, mental and social circumstances are such that he/she would benefit from shared care arrangements.
14. Responsibilities of initiating consultant	<ul style="list-style-type: none"> • Initiate treatment. • Undertake baseline monitoring. □ Dose adjustments. • Monitor patient's initial reaction to and progress on the drug. • Ensure that the patient is taking their medication and has an adequate supply of medication until primary care supply can be arranged. • Continue to monitor and supervise the patient according to this protocol, while the patient remains on this drug. Provide primary care prescriber with: <ul style="list-style-type: none"> • Diagnosis, relevant clinical information and baseline results, treatment to date and treatment plan, duration of treatment before consultant review. • Provide primary care prescriber with details of outpatient consultations, ideally within 14 days of seeing the patient, or inform primary care prescriber if the patient does not attend appointment. • Advice on when to stop this drug. Provide patient with relevant drug information to enable: <ul style="list-style-type: none"> • Informed consent to therapy. • Understanding of potential side effects and appropriate action. • Understanding of the role of monitoring. □
15. Responsibilities of primary care	Provision of shared care is in accordance with the Local Supplementary Service <ul style="list-style-type: none"> • To monitor and prescribe in collaboration with the specialist, according to this protocol. • Symptoms or results are appropriately actioned, recorded and communicated to secondary care when necessary.
16. Responsibilities of patients	<ul style="list-style-type: none"> • To attend hospital and primary care appointments, including those for monitoring. • Failure to attend will result in medication being stopped (on specialist advice). • To report adverse effects to their specialist or primary care prescriber.
17. Additional responsibilities	Responsibilities of all prescribers: Any serious reaction to an established drug should be reported to MHRA.
18. Supporting documentation	Include patient information leaflet if available
19. Primary care letter	Attached

PROTOCOL: METHYLPHENIDATE

This document should be read in conjunction with the current SPC: www.medicines.org.uk/

<p>1. Licensed indications State if drug is being used off-label.</p>	<p>Off-label use for management of adults with Attention Deficit Hyperactivity Disorder (ADHD).</p>
<p>2. Therapeutic use and background</p>	<p>Medication should be offered to adults with ADHD if their symptoms are still causing a significant impairment in at least one domain after environmental modifications have been implemented and reviewed.</p> <p>Medication for ADHD should only be initiated by, or under the direct supervision of, the Hywel Dda University Health Board (HDUHB) adult ADHD Service.</p> <p>Stimulants are regarded as first line treatment because they offer higher average clinical effects than atomoxetine. Methylphenidate and lisdexamfetamine have comparable efficacy, though there is some evidence that amfetamines might be more effective in adults. The choice of stimulant should therefore be based on individual needs and patient preferences.</p> <p>A risk assessment for potential substance misuse and drug diversion should be undertaken for all service users when prescribing psychostimulants. Prescribe cautiously if risks are identified, and consider strategies to minimise risks on an individual basis. If there is evidence of misuse or diversion when a patient is treated with lisdexamfetamine, the HDUHB Adult ADHD Service should be immediately informed.</p> <p>Read in conjunction with Adult ADHD Prescribing Guideline</p>
<p>3. Contraindications</p>	<p>Hypersensitivity to sympathomimetic amines or any of the excipients (specific to formulations).</p> <p>Glaucoma</p> <p>Phaeochromocytoma</p> <p>Hyperthyroidism or thyrotoxicosis</p> <p>Concomitant use of monoamine oxidase inhibitors (MAOI) or within 14 days after MAOI treatment.</p> <p>Diagnosis or history of severe depression, anorexia nervosa/anorexic disorders, suicidal tendencies, psychotic symptoms, severe mood disorders, mania, schizophrenia, psychopathic/borderline personality disorder.</p> <p>Diagnosis or history of severe and episodic (Type 1) Bipolar (affective) disorder (that is not well controlled).</p> <p>Pre-existing cardiovascular disorders including severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias and channelopathies (disorders caused by the dysfunction of ion channels).</p> <p>Pre-existing cerebrovascular disorders, cerebral aneurysm, vascular abnormalities including vasculitis or stroke or known risk factors for cerebrovascular disorders.</p>

<p>4. Typical dosage regimen (adults)</p>	<p>All dose adjustments will be initiated via secondary care. The following is for information only:</p> <p>19. Route – oral. 20. Formulation – tablets or modified-release tablets (specific to products). 21. Recommended starting dose – Initially 5 mg 2–3 times a day. Treatment may be started using a modified-release preparation 22. Increased if necessary at weekly intervals according to response. 23. Maintenance dosage up to a maximum 100mg daily in 2–3 divided doses. 24. Adjunctive treatment regime – none, switch to an alternative first-line option if a 6-week trial, at an optimised dose, fails to reduce ADHD symptoms and associated impairments. 25. Conditions requiring dose reduction e.g. impaired renal/ liver function. Methylphenidate has not been studied in patients with hepatic or renal impairment – caution should be exercised in these patients. 26. Usual response time – 6-weeks at an optimal dose. 27. Duration of treatment - as long as indicated by clinical effectiveness, as per HDUHB Adult ADHD Service recommendation.</p>					
<p>5. Drug interactions For a comprehensive list, consult the BNF or SPC</p>	<p>Paliperidone and risperidone (increased risk of dyskinesias); MAOIs (increased risk of hypertensive crisis, see contra-indications above).</p>					
<p>6. Adverse drug reactions For a comprehensive list (including rare and very rare adverse effects), or if</p>	<p>Most serious toxicity is seen with long-term use and may therefore present first to primary care. The frequency of adverse reactions is classified using the following convention: Very common (≥ 10%); common (≥ 1% and < 10%); uncommon (≥ 0.1% and < 1%); not known (cannot be estimated from the available data).</p> <table border="1" data-bbox="478 1041 1359 1426"> <thead> <tr> <th data-bbox="478 1041 933 1108">Clinical condition (Where possible indicate if common, rare or serious)</th> <th data-bbox="933 1041 1359 1108">Management (Including threshold at which to contact specialist)</th> </tr> </thead> <tbody> <tr> <td data-bbox="478 1108 933 1426"> <p>Cardiac disorders – tachycardia – common</p> </td> <td data-bbox="933 1108 1359 1426"> <p>Tachycardia if sustained resting heart rate >100beats per minute.</p> <p>Reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p> </td> </tr> </tbody> </table>		Clinical condition (Where possible indicate if common, rare or serious)	Management (Including threshold at which to contact specialist)	<p>Cardiac disorders – tachycardia – common</p>	<p>Tachycardia if sustained resting heart rate >100beats per minute.</p> <p>Reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
Clinical condition (Where possible indicate if common, rare or serious)	Management (Including threshold at which to contact specialist)					
<p>Cardiac disorders – tachycardia – common</p>	<p>Tachycardia if sustained resting heart rate >100beats per minute.</p> <p>Reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>					

<p>significance of possible adverse event uncertain, consult the SPC or BNF</p>	<p>Investigations – hypertension - common</p>	<p>Follow NICE guideline 136, hypertension in adults: diagnosis and management.</p> <p>Hypertension if clinic blood pressure $\geq 140/90$mmHg and ambulatory blood pressure monitoring $\geq 135/85$mmHg.</p> <p>Provision of lifestyle advice including reducing caffeine intake and smoking cessation, if applicable.</p> <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	<p>Metabolism and nutrition disorder - decreased appetite – very common</p>	<p>Follow NICE guideline 87, ADHD: diagnosis and management advice.</p> <ul style="list-style-type: none"> - Take medication with or after food rather than before meals. - Take additional meals or snacks early in the morning or

		<p>eat in the evening when stimulant effects have worn off.</p> <ul style="list-style-type: none"> - Consume high-calorie foods of good nutritional value. - Taking a planned break from treatment, to be advised by HDUHB Adult ADHD Service. <ul style="list-style-type: none"> - Obtaining dietary advice. - Closely monitoring weight and body mass index (BMI). <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	<p>Mild to moderate psychiatric disorders – affect lability, aggression, anxiety, depression – common/uncommon</p>	<p>Some strategies that could be considered:</p> <ul style="list-style-type: none"> - Review dose timing, ensuring doses are spaced effectively. - Treating co-morbid problems e.g. anxiety or depression, if not medication related or suboptimal control of ADHD symptoms. Careful and considered evaluation is therefore important, to be advised by HDUHB Adult ADHD Service. <p>If persists, consider referral to HDUHB Adult ADHD Service for further advice/review.</p>
	<p>Serious psychiatric disorders – mania, hypomania, suicidal ideation – uncommon/rare</p>	<p>Consider discontinuing medication and refer immediately to the HDUHB Adult ADHD Service for further advice.</p> <p>Referral to urgent care may also be needed e.g. Crisis Resolution and Home Treatment (CRHT) team or local A&E department.</p>

IF YOU SUSPECT AN ADVERSE REACTION HAS OCCURRED, PLEASE STOP THE DRUG/CONTACT THE SPECIALIST DEPARTMENT, AS IDENTIFIED ABOVE.

The patient should be advised to report any of the following signs or symptoms without delay: report any concerns or adverse effects of the medication to the prescriber in particular serious psychiatric disorders

Other important comorbidities (e.g. Chickenpox exposure): n/a

Any adverse reaction to a black triangle drug, or serious reaction to an established drug, should be reported to the Medicines and Healthcare products Regulatory Agency (MHRA) via the "Yellow Card" scheme.
<https://yellowcard.mhra.gov.uk/>

7. Baseline investigations

To be undertaken by secondary care

- A review of physical health and a cardiovascular assessment should be conducted prior to initiating.
- Baseline measurements of blood pressure, pulse and weight should be recorded.
- Routine blood tests are not necessary, unless there is a clinical indication.
- A risk assessment for potential substance misuse and drug diversion

should be undertaken for all patients.

	Monitoring	Frequency	Results	Action	By
	Pulse	Initiation, following each dose adjustment and at least every 6months thereafter	Tachycardia if sustained resting heart rate >100beats per minute	Reducing caffeine intake and smoking cessation, if applicable. If tachycardia persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.	Adult ADHD Service (during initiation and titration), then by GP

<p>8. Monitoring</p>	<p>Blood pressure</p>	<p>Initiation, following each dose adjustment and at least every 6 months thereafter</p>	<p>Hypertension if clinic blood pressure $\geq 140/90$mm Hg and ambulatory blood pressure monitoring $\geq 135/85$mm Hg</p>	<p>Reducing caffeine and smoking cessation, if applicable. Provide lifestyle advice in accordance with NICE guideline 136.</p> <p>If hypertension persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p>	<p>Adult ADHD Service (during initiation and titration), then by GP</p>
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	Appetite and weight	Initiation, following each dose adjustment and at least every 6 months thereafter	Appetite suppression	<p>Consider the following strategies (NICE 2018):</p> <p>Take medication with or after food rather than before meals. Take additional meals or</p>	Adult ADHD Service (during initiation and titration), then by GP
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				<p>snacks early in the morning or eat in the evening when stimulant effects have worn off. Consume high-calorie foods of good nutritional value. Taking a planned break from treatment. Obtaining dietary advice. Closely monitoring weight and BMI.</p> <p>If appetite suppression persists, ensure above strategies have been implemented and followed and consider referral to HDUHB Adult ADHD Service for further advice/review.</p>	
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	Psychiatric symptoms	Initiation, following each dose adjustment and at least every 6months thereafter	<p>Mild to moderate psychiatric disturbances e.g. affect lability, aggression, anxiety, depression. NB these findings are commonly observed in ADHD and may be indicative of sub-optimal control of ADHD symptoms.</p>	<p>Review dose timing, ensuring doses are spaced effectively.</p> <p>Treating comorbid problems e.g. anxiety or depression, if not medication related or suboptimal control of ADHD symptoms.</p> <p>If mild to moderate psychiatric disturbances persists, ensure above strategies have been implemented and followed</p>	<p>Adult ADHD Service (during initiation and titration), then by GP</p>
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			<p>Serious psychiatric illness e.g. mania, hypomania, suicidal ideation</p>	<p>and consider referral to HDUHB Adult ADHD Service for further advice/review.</p> <p>Consider discontinuing medication and refer immediately to the HDUHB Adult ADHD Service for further advice.</p>	
<p>9. Pharmaceutical aspects</p>	<p>Take with a drink of water.</p> <p>Manufacturers state that immediate release tablets may be broken to aid swallowing. Modified-release formulations must be swallowed whole and not chewed or crushed.</p> <p>In the event of a missed dose, dosing can resume when the next dose is due. Afternoon doses of longer acting formulations should be avoided because of the potential for insomnia, unless specifically recommended by the HDUHB Adult ADHD Service.</p> <p>No specific recommendations of stopping/discontinuing treatment.</p> <p>Methylphenidate is a schedule 2 controlled drug therefore controlled drug prescription requirements must be followed when prescribing.</p>				

<p>10. Advice to patients and carers The specialist will counsel the patient with regard to the benefits and risks of treatment and will provide the patient with any relevant information and advice, including patient information leaflets on individual medicines.</p>	<p>Methylphenidate can cause dizziness, drowsiness and visual disturbances including difficulties with accommodation, and blurred vision. These could have a moderate influence on the ability to drive and use machines. Patients should be warned of these possible effects and advised that if affected, they should avoid potentially hazardous activities such as driving or operating machinery.</p> <p>To adhere to necessary monitoring requirements at six monthly intervals, according to the preferred method (attendance at clinic/self-monitoring) as agreed with GP.</p> <p>To attend reviews as necessary with the Adult ADHD service.</p> <p>To report any concerns or adverse effects of the medication to the prescriber.</p> <p>To notify psychiatrist or GP if the medication is stopped, including the reasons for this.</p>
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<p>11. Pregnancy (men and women) and breast feeding It is the responsibility of the specialist to provide advice on the need for contraception to male and female patients on initiation and at each review but the ongoing responsibility for providing this advice rests with both the primary care prescriber and the specialist.</p>	<p>Methylphenidate should only be used during pregnancy if the potential benefit justifies the potential risk to the foetus.</p> <p>Methylphenidate has been found in breast milk of a woman treated with methylphenidate.</p> <p>There is one case report of an infant who experienced an unspecified decrease in weight during the period of exposure but recovered and gained weight after the mother discontinued treatment with methylphenidate. A risk to the suckling child cannot be excluded.</p> <p>A decision must be made whether to discontinue breast-feeding or to discontinue/abstain from methylphenidate therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.</p>
<p>12. Secondary care contact information</p>	<p>If stopping medication or needing advice please contact: Dr. Justin Cressey-Rodgers</p> <p>Hospital: Wellfield Road Resource Centre, Carmarthen</p> <p>Email: AdultADHDSERVICE.HDD@wales.nhs.uk</p>
<p>13. Criteria for shared care</p>	<p>Prescribing responsibility will only be transferred when:</p> <ul style="list-style-type: none"> • Treatment has been initiated and established by the secondary care specialist. • The patient's initial reaction to and progress on the drug is satisfactory. • The primary care prescriber has agreed in writing in each individual case that shared care is appropriate. • The patient's general physical, mental and social circumstances are such that he/she would benefit from shared care arrangements.
<p>14. Responsibilities of initiating consultant</p>	<ul style="list-style-type: none"> • Initiate treatment. • Undertake baseline monitoring. □ Dose adjustments. • Monitor patient's initial reaction to and progress on the drug. • Ensure that the patient is taking their medication and has an adequate supply of medication until primary care supply can be arranged. • Continue to monitor and supervise the patient according to this protocol, while the patient remains on this drug. <p>Provide primary care prescriber with:</p> <ul style="list-style-type: none"> • Diagnosis, relevant clinical information and baseline results, treatment to date and treatment plan, duration of treatment before consultant review. • Provide primary care prescriber with details of outpatient consultations, ideally within 14 days of seeing the patient, or inform primary care prescriber if the patient does not attend appointment. • Advice on when to stop this drug. <p>Provide patient with relevant drug information to enable:</p> <ul style="list-style-type: none"> • Informed consent to therapy. • Understanding of potential side effects and appropriate action. • Understanding of the role of monitoring.

15. Responsibilities of primary care	Provision of shared care is in accordance with the Local Supplementary Service <ul style="list-style-type: none"> • To monitor and prescribe in collaboration with the specialist, according to this protocol. • Symptoms or results are appropriately actioned, recorded and communicated to secondary care when necessary.
16. Responsibilities of patients	<ul style="list-style-type: none"> • To attend hospital and primary care appointments, including those for monitoring. • Failure to attend will result in medication being stopped (on specialist advice). • To report adverse effects to their specialist or primary care prescriber.
17. Additional responsibilities	Responsibilities of all prescribers: Any serious reaction to an established drug should be reported to MHRA.
18. Supporting documentation	Include patient information leaflet if available
19. Patient monitoring booklet	Attached

Appendix B Annual review template

Annual Review of ADHD Treatment (Primary Care)

Patient Demographics

Name:

Date of Birth:

NHS Number:

Physical Monitoring

BP (mmHg):

Pulse (bpm):

Weight (Kg):

Benefits

Please Circle

Is the medication providing sufficient benefit?

Yes

No

Is there evidence of impairment resulting from poor control of core symptoms?

Is the patient adherent with the prescribed medication? *Explore the effects of missed doses and drug holidays and whether these are detrimental or appropriate.*

Yes

No

Is the current dosing schedule optimised?

Yes

No

Consider how well does the dosing schedule suits the needs of the patient.

Concerns	Please Circle	
Are there any concerns with regards to the physical monitoring? <i>Hypertension, tachycardia, unintentional weight loss.</i>	Yes	No
Is the patient experiencing any adverse effects from their medication? <i>As listed in shared care protocols.</i>	Yes	No
Is the medication having an adverse effect on the patient's wider health? <i>Consider physical and mental health and note any concerns.</i>	Yes	No
Are there any concerns with regards to the patient's lifestyle? <i>Explore excessive alcohol use or substance misuse.</i>	Yes	No



Notes:

Review Outcome	Please Circle	
	Yes	No
Continue prescribing in primary care. Consider whether additional action required e.g. seeking advice from Adult ADHD Service.		
Withhold prescribing pending further action. Ensure additional actions are circled below e.g. seeking advice / urgent review with Adult ADHD Service.		
Seek specialist advice from Adult ADHD Service. <i>Can be contacted via letter / phone / e-mail (depending on urgency).</i>		
Request urgent specialist review with Adult ADHD Service. <i>Can be contacted via letter / phone / e-mail (depending on urgency).</i>		
