Powys Teaching Health Board

Shared Care Agreement: Methylphenidate for the treatment of Attention Deficit/Hyperactivity Disorder (ADHD) in children, adolescents and adults

Specialist Responsibilities

- Assess the patient and provide diagnosis. Ensure the diagnosis is within scope of this shared care protocol and communicated to primary care.
- Use a shared decision-making approach; discuss the benefits and risks of the treatment with the patient and/or their carer and provide the appropriate counselling, to enable the patient to reach an informed decision. Obtain and document consent. Provide an appropriate patient information leaflet.
- Ensure the patient and/or their carer understands that treatment may be stopped if they do not attend for monitoring and treatment review.
- Complete full assessment: diagnose and assess eligibility for drug therapy as part of a treatment programme that includes psychological, behavioural and educational advice and interventions.
- Provide patient/carer with relevant information on use. Obtain consent for any unlicensed use.
- Advise patient/carer on side effects and the action to be taken should they occur.
- Assess for contraindications and cautions (see section 4) and interactions (see section 7).
- Conduct required baseline investigations and initial monitoring (see section *6*).
- Initiate and optimise treatment. Continue treatment for a minimum of 3 months and until the patient is stabilised on treatment on a stable dose. Paediatric patients often take longer than 3 months for treatment optimisation.
- Prescribe in line with controlled drug prescription requirements; issue no more than one month's supply of medication at any one time.
- Once treatment is optimised, complete the shared care documentation ***Shared Care Agreement Form*** **(Appendix 1)** and send to patient's GP practice detailing the diagnosis, brand to be prescribed, current and ongoing dose, any relevant test results and details of patient follow up. Include contact information.
- Prescribing responsibility will only be transferred when:
    - Treatment is for a specified indication and duration.
    - Treatment has been initiated and established by the secondary care specialist.
    - The patient's initial reaction to and progress on the drug is stable.
    - The GP 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.
- Advise discontinuation of medication if no improvement is seen after a reasonable trial.
- Clinically review the treatment at least annually and conduct the required monitoring as set out in section 8, sending a written summary and updated treatment plan to the GP.
- Inform the GP if the patient fails to attend clearly indicating if the patient is to remain taking methylphenidate.
- Provide any other advice or information for the GP if required including rapid referral arrangements and contacts.
- Consider a trial of withdrawal of medication ("drug holiday") when the condition is stable. The need to continue methylphenidate therapy should be reviewed at least annually.
- Reassume prescribing responsibilities if a woman becomes or wishes to become pregnant.

Primary Care Responsibilities

- Return the Shared Care Agreement (SCA) Form (Appendix 1) to the requesting specialist within 14 days of receipt.
- Issue ongoing prescriptions for methylphenidate as per dose and brand adjusting in line with specialist recommendations (continued prescribing is appropriate for patients attending specialist review), taking into any account potential drug interactions in Section 5.
- Where specified brand of methylphenidate is unavailable, please refer to Section 2 for suitable alternatives or refer to specialist / medicines management for advice.
- Adjust the dose of methylphenidate prescribed as advised by the specialist.
- Manage adverse effects as detailed in Section 7 and discuss with specialist team when required.
- Conduct the required monitoring as outlined in section 6. Communicate any abnormal results to the specialist.
- Assess for possible interactions with methylphenidate when starting new medicines (see section 7).
- Monitor for the risk of diversion, misuse and abuse of methylphenidate and alert the specialist team if there are any concerns.
- Prescribe in line with controlled drug prescription requirements; issue no more than one month's supply of medication at any one time.
- Refer to specialist if patient's condition deteriorates and if there are any side effects or concerns.
- Refer the management back to the specialist if the patient becomes or plans to become pregnant.
- Oversee treatment cessation on the advice of the specialist or request of the patient.

Patient and/or Carer Responsibilities

- Attend hospital and GP clinic appointments. Failure to attend may result in the medication being stopped (on specialist advice).
- Take methylphenidate as prescribed and avoid abrupt withdrawal unless advised by their prescriber.
- Store the medication safely and securely, out of the reach and sight of children and take according to the prescribed directions.
- Report any adverse events immediately to their specialist team or GP. Seek immediate medical attention if they develop any symptoms as detailed in Section 7.
- Keep contact details up to date with specialist team and GP.
- Report the use of any over the counter medications to their specialist team or GP and be aware they should discuss the use of methylphenidate with their pharmacist before purchasing any OTC medicines.
- Not to drive or operate heavy machinery if methylphenidate affects their ability to do so safely and inform the DVLA if their ability to drive safely is affected (see section 11).
- Avoid alcohol during treatment, as it may make some side effects worse. Avoid recreational drugs.
- Methylphenidate is a schedule 2 controlled drug. Patients may be required to prove their identity when collecting prescriptions. It must not be shared with anyone else.
- Patients who believe that they could be pregnant should take a pregnancy test and inform their specialist or GP immediately if they test positive.

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Background

This Shared Care Agreement (SCA) outlines shared care arrangements for patients taking methylphenidate for the treatment of Attention Deficit/Hyperactivity Disorder (ADHD) in children, adolescents and adults.

The SCA should be read in conjunction with:

- The Shared Care Agreement Form (Appendix 1).
- The Summary of Product Characteristics for the formulation/brand of methylphenidate prescribed http://www.medicines.org.uk/
- NICE NG87: Attention deficit hyperactivity disorder: diagnosis and management

It has been shown that the symptoms of ADHD can, in a large proportion of cases (up to 70%) be improved by the use of stimulant medication. The medication works by stimulating inhibitory mechanisms in the brain, thereby, controlling impulsiveness and enabling the patient to concentrate. This enables parents, relatives, teachers, and the child/adolescent/adult to regain control of the behaviour through psychosocial, behavioural, and educational strategies that run in parallel.

Stimulant medication has been in use since the 1950s and experience indicates that the benefits usually outweigh the problems that may arise.

A diagnosis of ADHD should only be made after a full clinical and psychosocial assessment by an appropriately qualified healthcare professional. Primary care practitioners should not make the initial diagnosis or start drug treatment in children or adults with suspected ADHD.

Drug treatment is not recommended for pre-school children, and it should not be a first-line treatment for school-age children and young people with moderate ADHD and moderate impairment.

Drug treatment should:

- *only be started by a healthcare professional with expertise in ADHD.*
- *be based on comprehensive assessment.*
- *always form part of a comprehensive treatment plan that includes psychological, behavioural and educational advice and interventions.*

Where a person with ADHD is treated by a Child and Adolescent Mental Health Service (CAMHS) but is approaching their 18th birthday, it is expected that CAMHS will refer to the appropriate adult service if need for ongoing treatment is anticipated.

The safety and efficacy of long-term use of methylphenidate has not been systematically evaluated in controlled trials. Patients should be reviewed for ongoing need at least annually, and the manufacturers recommend a trial discontinuation at least once yearly to assess the patient's condition.

Methylphenidate is not licensed for all the indications it is used to treat below. However, its use for the indications below are established and supported by various sources and bodies including the BNF and NICE.

Prescribing Information

Methylphenidate is indicated as a part of a comprehensive treatment programme for ADHD in children aged 6 years of age and over and adults, when remedial measures alone prove insufficient. Treatment must be under the supervision of a specialist in ADHD.

Diagnosis should be made according to DSM-IV criteria or the guidelines in ICD-10 or their updates and should be based on a complete history and evaluation of the patient. Diagnosis cannot be made solely on the presence of one or more symptom.

The specific aetiology of ADHD is unknown, and there is no single diagnostic test.

A comprehensive treatment programme typically includes psychological, educational and social measures as well as pharmacotherapy and is aimed at stabilising children with a behavioural syndrome characterised by symptoms which may include chronic history of short attention span, distractibility, emotional lability, impulsivity, moderate to severe hyperactivity, minor neurological signs and abnormal EEG. Learning may or may not be impaired.

Methylphenidate treatment is not indicated in all children with ADHD and the decision to use the drug must be based on a very thorough assessment of the severity and the chronicity of the child's symptoms in relation to the child's age.

The use of methylphenidate should always be used in the way according to the licensed indication and according to the prescribing/diagnostics guidelines.

Methylphenidate is a Schedule 2 controlled drug and should be prescribed under the legal requirements stated in the BNF Controlled Drugs and dependence. Prescriptions should state the drug, strength, form, frequency, and quantity to be supplied.

Modified-release preparations are usually the preferred option for most patients for the following reasons:

- *convenience*
- *improving adherence*
- *reducing stigma (because there is no need to take medication at school or in the workplace)*
- *reducing problems of storing and administering controlled drugs at school*
- *the risk of stimulant misuse and diversion with immediate-release preparations*
- *their pharmacokinetic profiles.*

Methylphenidate modified-release products include both an immediate-release (IR) component and a modified-release (MR) component allowing a two-phase release of methylphenidate. Proportions of IR and MR methylphenidate differ between brands; different products may not therefore have the same clinical effect. To avoid confusion, prescribers should therefore prescribe methylphenidate modified-release products by brand.

Prescribers are asked to prescribe methylphenidate as per the following table:

<table>
<tr><th colspan="3">Modified-Release Preparations</th></tr>
<tr><th>Place in Therapy</th><th>Powys Formulary Options</th><th>Dosing Information</th></tr>
<tr><td rowspan="2">As part of a comprehensive treatment programme for attention-deficit/hyperactivity disorder (ADHD) in children aged 6 years of age and over and adults when remedial measures alone prove insufficient.</td><td>Methylphenidate
18mg, 27mg, 36mg and 54mg
modified-release tablets*

Brands include:
- Affenid XL
- Concerta XL
- Delmosart
- Matoride XL
- Xaggitin XL
- Xenidate XL</td><td><u>Children</u>
Recommended starting dose is 18mg mane. Dose to be increased as necessary at weekly intervals to maximum 2.1mg/kg/day or 54mg daily.

<u>Adults</u>
Recommended starting dose is 18mg mane. Dose to be increased as necessary at weekly intervals to 72mg daily.

Maximum daily dose 108mg.
(Locally agreed off-label use)</td></tr>
<tr><td colspan="2">*This formulation is not suitable for patients with swallowing difficulties and should be swallowed whole with the aid of liquids; tablets must not be chewed, divided, or crushed.</td></tr>
</table>

<table>
<tr><td rowspan="2">As part of a comprehensive treatment programme for attention-deficit/hyperactivity disorder (ADHD) in children aged 6 years of age and over and adults when remedial measures alone prove insufficient.</td><td>Methylphenidate
5mg, 10mg, 20mg, 30mg, 40mg, 50mg and 60mg
modified-release capsules
with a 50:50 split of long and short acting granules*

Brands include:
- Medikinet XL
- Metyrol XL
- Meflynate XL</td><td><u>Children</u>
Recommended starting dose is 10mg mane. Dose to be increased as necessary at weekly intervals to maximum 2.1mg/kg/day or 60mg daily.

Maximum daily dose 90mg
(Locally agreed off-label use)

<u>Adults</u>
Recommended starting dose is 10mg mane. Dose to be increased as necessary at weekly intervals to 80mg daily.

Maximum daily dose 100mg
(Locally agreed off-label use)</td></tr>
<tr><td colspan="2">* The capsules may be swallowed whole with the aid of liquids, or alternatively, the capsule may be opened, and the capsule contents sprinkled onto a small amount (tablespoon) of apple sauce, yoghurt or other palatable food of similar consistency and given immediately.</td></tr>
<tr><td rowspan="2">As part of a comprehensive treatment programme for attention-deficit/hyperactivity disorder (ADHD) in children aged 6 years of age and over when remedial measures alone prove insufficient.</td><td>Melthylphenidate
(Equasym XL©)
10mg, 20mg and 30mg
modified-release capsules
with a 70:30 split of long and short acting granules*</td><td><u>Children</u>
Recommended starting dose is 10mg mane. Dose to be increased as necessary at weekly intervals to maximum 2.1mg/kg/day or 60mg daily.

Maximum daily dose 90mg.
(Locally agreed off-label use)

<u>Adults</u> (off-label)
Recommended starting dose is 10mg mane. Dose to be increased as necessary at weekly intervals to 100mg daily.</td></tr>
<tr><td colspan="2">* The capsules may be swallowed whole with the aid of liquids, or alternatively, the capsule may be opened, and the capsule contents sprinkled onto a small amount (tablespoon) of apple sauce and given immediately.</td></tr>
</table>

Immediate-Release Preparations		
Place in Therapy	**Powys Formulary Options**	**Dosing Information**
As part of a comprehensive treatment programme for attention-deficit/hyperactivity disorder (ADHD) in **children** aged 6 years of age and over when remedial measures alone prove insufficient. <u>Please note:</u> Prescribing of immediate-release preparations is considered "off label" use in adults.	Methylphenidate 5mg, 10mg and 20mg tablets Brands include: - Medikinet - Ritalin - Tranquilyn	<u>Children</u> Recommended starting dose is 5mg once or twice daily. Dose to be increased as necessary at weekly intervals to maximum 2.1mg/kg/day or 60mg daily in two or three divided doses. Maximum daily dose 90mg. (*Locally agreed off-label use*) <u>Adults</u> (*off-label*) Recommended starting dose is 5mg two to three times daily. Dose to be increased as necessary at weekly intervals to 100mg daily in two or three divided doses.
	<u>Evening Doses</u> Immediate-release preparations are sometimes co-prescribed with modified-release preparations and can be useful to extend the duration of effect of methylphenidate. The need for immediate-release preparations must be trialled.	

3. Contraindications and Cautions

This information does not replace the Summary of Product Characteristics (SPC) and should be read in conjunction with it. Please see <u>BNF</u> & <u>SPC</u> for comprehensive information.

Contraindications:

- Hypersensitivity to the active ingredient or any excipients.
- Glaucoma
- Phaeochromocytoma.
- During treatment with non-selective, irreversible monoamine oxidase (MAO) inhibitors, or within a minimum of 14 days of discontinuing those drugs, due to risk of hypertensive crisis.
- Hyperthyroidism or thyrotoxicosis.
- Diagnosis or history of severe depression, anorexia nervosa/anorexic disorders, suicidal tendencies, psychotic symptoms, severe mood disorders, mania, schizophrenia, psychopathic/borderline personality disorder.

- Diagnosis or history of severe and episodic (Type 1) Bipolar (affective) disorder (that is not well controlled).
- Certain pre-existing cardiovascular disorders constitute contraindications unless specialist cardiac advice is obtained and documented. These include severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias, disorders caused by the dysfunction of ion channels, and structural cardiac abnormalities.
- Pre-existing cerebrovascular disorders cerebral aneurysm, vascular abnormalities including vasculitis or stroke.

Cautions:

- Family history of sudden cardiac or unexplained death, malignant arrhythmia.
- Cardiovascular status should be carefully monitored in all patients.
- Underlying conditions which might be compromised by increases in blood pressure or heart rate.
- Leukopenia, thrombocytopenia, anaemia, or other haematological abnormalities.
- Substance abuse: methylphenidate should be used with caution in patients with known drug or alcohol dependency because of a potential for abuse, misuse or diversion (Note careful supervision is required during withdrawal from abusive use since severe depression may occur).
- Epilepsy (particularly poorly controlled epilepsy): Children with well-controlled epilepsy can be considered for careful introduction of methylphenidate however, in all such cases atomoxetine should be considered.
- Susceptibility to open-angle glaucoma
- Psychiatric and neuropsychiatric symptoms or disorders, including manic or psychotic symptoms, aggressive or hostile behaviour, motor or verbal tics (including Tourette's syndrome), anxiety, agitation or tension, depressive symptoms, bipolar disorder.
- Renal or hepatic insufficiency (due to lack of data)
- Pregnancy and breastfeeding (see section 9)

4. Deprescribing / Drug Holidays

- Consider trial periods of stopping medication or reducing the dose when assessment of the overall balance of benefits and harms suggests this may be appropriate. This should be undertaken and supervised by the specialist who will advise the patient and primary care prescriber of the outcome.

5. Significant Medicine Interactions

Apraclonidine: Methylphenidate is predicted to decrease the effects of Apraclonidine. Manufacturer advises avoid.

Anaesthetics (Desflurane, Isoflurane, Methoxyflurane, Sevoflurane): Methylphenidate might increase the risk of hypertension and arrhythmias when given with inhaled anaesthetics. Manufacturer advises avoid methylphenidate on day of surgery.

Disulifram: Methylphenidate has been reported to cause psychotic symptoms when given with Disulfiram. Manufacturer makes no recommendation.

Linezolid: Methylphenidate might increase the risk of elevated blood pressure when given with Linezolid. Manufacturer advises avoid.

Monoamine Oxidase Inhibitors (Isocarboxacid, Moclobemide, Phenelzine, Tranylcypromine): Methylphenidate causes a hypertensive crisis when given with MAOIs. Manufacturer advises avoid and for 14 days after stopping the MAOI.

Methylthioninium chloride: Methylphenidate is predicted to cause a hypertensive crisis when given with methylthioninium chloride. Manufacturer makes no recommendation.

Ozanimod: Methylphenidate is predicted to increase the risk of a hypertensive crisis when given with ozanimod. Manufacturer makes no recommendation.

Nirmatrelvir: Nirmatrelvir boosted with ritonavir is predicted to increase the concentration of Methylphenidate. Manufacturer advises monitor.

Paliperidone: Methylphenidate might increase the risk of dyskinesias when given with paliperidone. Manufacturer advises caution.

Rasagiline: Rasagiline is predicted to increase the risk of a hypertensive crisis when given with methylphenidate. Manufacturer advises avoid.

Risperidone: Methylphenidate increases the risk of dyskinesias when given with risperidone. Manufacturer advises caution.

Selegiline: Selegiline might increase the risk of a hypertensive crisis when given with methylphenidate. Manufacturer advises avoid.

Valproate: Valproate might enhance the effects of methylphenidate. Manufacturer makes no recommendation.

Other interactions are listed as 'moderate' severity or below. Please see BNF & SPC for comprehensive information regarding brand prescribed and recommended management.

Baseline Investigations, Initial and Ongoing Monitoring

Baseline investigations (Specialist):

6.

- A full assessment, as recommended by NICE guidance for ADHD. This should include medical history and cardiovascular assessment, taking into account conditions that may be contraindications, risk of pregnancy (where applicable), and to ensure the patient meets the criteria for ADHD and that pharmacological treatment is required.
- For children: pre-treatment assessment to be performed will include diagnostic interview, behavioural rating scales (e.g. SDQ, Conners', CAARS self and observer report), descriptive reports from parents and teachers.
- Risk assessment for substance misuse and drug diversion.
- Height, weight (measured and recorded against normal range for age, height and sex),
- Baseline blood pressure (BP) and heart rate (compared with normal range for age)
- Arrange for electrocardiogram (ECG), only if the patient has any of the following:
    - History of congenital heart disease or previous cardiac surgery
    - Sudden death in a first-degree relative under 40 years suggesting a cardiac disease
    - Shortness of breath on exertion compared with peers
    - Fainting on exertion or in response to fright or noise
    - Palpitations
    - Chest pain suggestive of cardiac origin
    - Signs of heart failure, heart murmur or hypertension
    - Current treatment with a medicine that may increase cardiac risk

Initial Monitoring (Specialist):

- Before every change of dose: assess heart rate, blood pressure, and weight.
- After every change of dose: assess heart rate and blood pressure, and any new or worsening symptoms. The specialist should determine the appropriate timing for this monitoring.
- Assessment of symptom improvement. Discontinue if no improvement is observed after one month.

Ongoing monitoring (Specialist):

<u>Children</u>

- BP, Pulse, Height, weight, appetite (with maintenance of a growth chart) and effects of medication 3 and 6 months after treatment initiation then every 3 months if under 10 years and every 6 months if over 10 years.

All Patients

- The patient should then be assessed at least annually with a healthcare professional with training and expertise in managing ADHD. This review should include a review of ADHD medication, including patient preferences, benefits, adverse effects, and ongoing clinical need.
- Outcomes following patient review should be communicated to the primary care prescriber in writing, with any urgent changes also communicated by telephone.
- Follow the guidance on deprescribing / drug holidays, as described in Section 4.

Ongoing monitoring (Primary Care):

Adults

- The patient should be assessed every 6 months and after any change of dose as recommended by the specialist team. This assessment should include:
  - Blood pressure and heart rate
  - Assessment for cardiovascular signs or symptoms
  - Weight and appetite
  - Assessment for new or worsening neurological signs or symptoms
  - Explore whether patient is experiencing any difficulties with sleep

All Patients

- Primary care prescribers should remain vigilant to signs of methylphenidate abuse, misuse or diversion.

7. Adverse effects

Any serious adverse reactions should be reported to the MHRA via the Yellow Card scheme. www.mhra.gov.uk/yellowcard. See SPC for specific adverse effects relevant to formulation prescribed. The following adverse effects are commonly reported for methylphenidate and the table below outlines some suggested actions that can be taken by prescribers in primary care. This list is not exhaustive. A detailed list of adverse reactions is available in the BNFc & SPC for individual preparations.

Adverse Effect	Action for Primary Care
Cardiovascular Resting HR greater than 120bpm, arrhythmia/palpitations, clinically significant increase in systolic BP	In context of recent dose increase, revert to previous dose and discuss with specialist for ongoing management. In absence of recent dose changes, reduce dose by half and discuss with specialist or cardiology for further advice.
Weight or BMI outside healthy range, anorexia or weight loss	Exclude other reasons for weight loss. Give advice as per NICE NG87: • take medication with or after food, not before

	• additional meals or snacks early in the morning or late in the evening when stimulant effects have worn off • obtaining dietary advice • consuming high-calorie foods of good nutritional value Discuss with specialist if difficulty persists; dose reduction, treatment break, or change of medication may be required.
Haematological disorders Including leukopenia, thrombocytopenia, anaemia or other alterations NB: no haematological monitoring is recommended. Haematological disorders would be a chance finding/due to patient reporting adverse drug reactions.	Contact specialist team. Discontinuation should be considered. Referral to haematology may be warranted; use clinical discretion.
Psychiatric disorders New or worsening psychiatric symptoms, e.g. psychosis, mania, aggressive or hostile behaviour, suicidal ideation or behaviour, motor or verbal tics (including Tourette's syndrome), anxiety, agitation or tension, bipolar disorder, depression	Discuss with specialist. Stop treatment and consider referral to acute mental health team if suicidal thoughts, mania, or psychosis are present Methylphenidate should not be continued unless the benefits outweigh the risks.
Nervous system disorders Symptoms of cerebral ischaemia, e.g. severe headache, numbness, weakness, paralysis, and impairment of coordination, vision, speech, language or memory New or worsening seizures	Discontinue methylphenidate, refer urgently for neurological assessment Discontinue methylphenidate and discuss with specialist team.
Symptoms of serotonin syndrome e.g. agitation, hallucinations, coma, tachycardia, labile blood pressure, hyperthermia, hyperreflexia, incoordination, rigidity, nausea, vomiting, diarrhoea	Discontinue methylphenidate as soon as possible. Management depends on severity; use clinical judgement and seek advice if necessary. Discuss with specialist team to determine whether methylphenidate can be re-started.
Insomnia or other sleep disturbance 8.	Review timing of methylphenidate dose and advise as appropriate. Give advice on sleep hygiene. Discuss with specialist if difficulty persists; dose reduction may be required.
Suspicion of abuse, misuse, or diversion	Discuss with specialist team

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.

Patients, or their representatives, must be counselled on the current relevant licensed indication for methylphenidate and its intended treatment duration.

The patient should be advised to report any of the following signs or symptoms to their primary care prescriber without delay:

- Abnormally sustained or frequent and painful erections: seek immediate medical attention.
- Signs or symptoms of serotonin syndrome (e.g. agitation, hallucinations, coma, tachycardia, labile blood pressure, hyperthermia, hyperreflexia, incoordination, rigidity, nausea, vomiting, diarrhoea)
- Any mood changes, for example. psychosis, mania, aggressive or hostile behaviour, suicidal ideation or behaviour, motor or verbal tics (including Tourette's syndrome), anxiety, agitation or tension, anxiety, depression
- New or worsening neurological symptoms (e.g. severe headache, numbness, weakness, paralysis, and impairment of coordination, vision, speech, language or memory)
- Abdominal pain, malaise, jaundice or darkening of urine
- Skin rashes, or bruising easily
- If they suspect they may be pregnant, or are planning a pregnancy. Patients of childbearing potential should use appropriate contraception, and take a pregnancy test if they think there is a possibility they could be pregnant.

The patient should be advised:

- Attend regularly for monitoring and review appointments with primary care and specialist, and keep contact details up to date with both prescribers. It may not be safe to continue prescribing without regular review, and patients should be aware that their medicines could be stopped if they do not attend appointments.
- Not to drive or operate machines if methylphenidate affects their ability to do so safely, e.g. by causing dizziness, drowsiness, or visual disturbances.
- People who drive must inform the DVLA if their ADHD, narcolepsy or medicines affect their ability to drive safely. See https://www.gov.uk/adhd-and-driving or https://www.gov.uk/narcolepsy-and-driving.
- Avoid alcohol while taking methylphenidate, as it may make side effects worse. Avoid recreational drugs.
- Not to stop taking methylphenidate without talking to their doctor. Medical supervision of withdrawal is required, since this may unmask depression or chronic over-activity.
- Methylphenidate is a schedule 2 controlled drug. Patients may be required to prove their identity when collecting prescriptions, and should store methylphenidate safely and securely. It must not be shared with anyone else. There are restrictions on travelling with controlled drugs: see https://www.gov.uk/guidance/controlled-drugs-personal-licences.

Patient information:

Medicines for Children leaflet: Methylphenidate for ADHD

Royal College of Psychiatrists – ADHD in adults. https://www.rcpsych.ac.uk/mental-health/problems-disorders/adhd-in-adults

NHS – Attention deficit hyperactivity disorder. https://www.nhs.uk/conditions/attention-deficit-hyperactivity-disorder-adhd/

Pregnancy and Breastfeeding

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.

Pregnancy:

Methylphenidate is not recommended for use during pregnancy unless a clinical decision is made that postponing treatment may pose a greater risk to the pregnancy.

Evidence on exposure to methylphenidate during pregnancy is too limited to draw firm conclusions on adverse outcomes. Clinicians should be aware that patients may have other risk factors which independently alter the risks.

Patients who become pregnant while taking methylphenidate, or who plan a pregnancy, should be referred to the specialist team for review. The specialist will reassume prescribing responsibility, ending the shared care agreement. Healthcare professional information available from: https://www.medicinesinpregnancy.org/bumps/monographs/USE-OF-METHYLPHENIDATE-IN-PREGNANCY/

Patient information available from: https://www.medicinesinpregnancy.org/Medicine--pregnancy/Methylphenidate/

Breastfeeding:

Methylphenidate has been found in breast milk in small amounts. Evidence for safety in breastfeeding is limited. Decisions to use while breastfeeding should be made on a case-by-case basis, taking into account the risks to the infant and benefits of therapy. Infants should be monitored for symptoms of CNS stimulation (e.g. decreased appetite/weight gain, sleep disturbances, irritability), although these may be difficult to detect. High doses may interfere with lactation, although this is not confirmed in practice.

Healthcare professional information available from: https://www.sps.nhs.uk/articles/safety-in-lactation-drugs-for-adhd/

10. Specialist Contact Information

Advice can be requested from the local Child and Adolescent Mental Health Service (CAMHS) and Community Paediatric Services 9am to 4pm, Monday to Friday.

Please allow 5-7 working days for a call back or any prescription requests.

CAMHS: 01874 615662 01686 617401 PowysCAMHS.Admin@wales.nhs.uk	**Community Paediatrics:** 01874 615684 01686 617455 powys.communitypaediatrics@wales.nhs.uk
Adult ADHD Service: Bronllys Hospital 01874 712752 Powys.AdultADHD@wales.nhs.uk	

11. Additional Information

Where patient care is transferred from one specialist service or GP practice to another, a new shared care agreement must be completed. Ensure that the specialist is informed in writing of any changes to the patient's GP or their contact details.

12. Local Arrangements for Referral

Referral from primary care to secondary care should follow usual guidelines.

Referral back to primary care, other than to follow the SCA, will only occur if medication is no longer required or the patient no longer meets service criteria.

13. References

- BNF for Children
- BNF
- PrescQIPP Bulletin: Prescribing in attention deficit hyperactivity disorder (ADHD)
- Electronic Medicines Compendium containing Summaries of Product Characteristics for all formulations/brands
- National Institute for Health and Care Excellence (NICE): Attention deficit hyperactivity disorder: diagnosis and management [NG87]. Issued March 2018, last updated September 2019. Accessed 17/06/24 via https://www.nice.org.uk/guidance/ng87
- NICE NG197: Shared decision making. Last updated June 2021. https://www.nice.org.uk/guidance/ng197/
- National Shared Care Protocol: Methylphenidate in Adult Services (NHS England). Issued July 2022. Accessed 17/06/24 via https://www.england.nhs.uk/publication/shared-care-protocols

Appendix 1: Shared Care Agreement Form at the Consultant Request

To: Dr.

Patient name:	**NHS No.** (10 digit):
was seen on:	
with a diagnosis of:	

This drug has been accepted as suitable for shared care in Powys Teaching Health Board as set out in the PTHB Shared Care Agreement: *Methylphenidate for the treatment of Attention Deficit/Hyperactivity Disorder (ADHD) in children, adolescents and adults* (copy attached). This should be read in conjunction with the definition of shared care at: **AWMSG Shared Care Prescribing and Monitoring Guidance.**

I am requesting your agreement to begin sharing the care of this patient. The preliminary (baseline) tests set out in the agreement have been carried out and the patient has been stabilised on the treatment described below:

I would like you to undertake treatment from (date)**:**
Treatment to be prescribed (name (brand), strength, dose)**:**

If you undertake treatment, I will reassess the patient in ____ weeks. You will be sent a written summary within 14 days. I will accept referral for reassessment at your request.

The medical staff of the department are available to give advice between 9 – 4pm, Monday to Friday.

Consultant Name:	**Signature:**
Department:	
Hospital:	**Date:**
Contact Telephone Numbers:	

GP RESPONSE (*Please circle the appropriate number below detailing your response*)

1. I am willing to undertake shared care as set out in latest Powys Methylphenidate SCA for this patient.

2. I would like further information. Please contact me on: _____

3. I am unable to undertake shared care for this patient because: (*Please state reason*)

_____

GP Signature _____ Date _____

Practice Address / Stamp _____

PLEASE RETURN WHOLE COMPLETED FORM / A COPY TO THE REQUESTING CONSULTANT WITHIN 14 DAYS.

Thank you.