SHARED CARE FRAMEWORK

The Pan Mersey Area Prescribing Committee recommends the prescribing of METHOTREXATE for patients within adult services.

SHARED CARE

1. Background	This shared care framework aims to provide clarity on the responsibilities of all professionals involved in commissioning and prescribing across primary, secondary and tertiary care. Good organisation of care across the interface between primary and secondary/tertiary care is crucial in ensuring that patients receive high quality care – and in making the best use of clinical time and NHS resources in all care. Methotrexate is a folic acid antagonist and is classified as an antimetabolite cytotoxic agent. Methotrexate is used in the treatment of rheumatoid arthritis, psoriasis, Crohn's disease, and other indications as outlined below. Dose adjustments and monitoring requirements for disease-modifying drugs (DMDs) (licensed and unlicensed indications) included in this Framework are in line with national guidance published by the British Society for Rheumatology 2017[1].
2. Licensed indications	• Rheumatoid arthritis • Psoriasis
3. Locally agreed off-label use	• Inflammatory bowel disease • Steroid sparing agent • Other dermatology conditions • Myasthenia gravis, inflammatory myopathies and neuropathies, vasculitis, and other immune-mediated central and peripheral nervous system diseases • Interstitial lung disease or cardiac involvement with sarcoidosis • Inflammatory arthropathies • Juvenile idiopathic arthritis (JIA) • Atypical neuroinflammatory disease • Off-label doses above the licensed dose for various indications
4. Initiation and ongoing dose regime	For Rheumatology patients managed by Wirral Trust, diagnosis and the provision of written instructions to GPs for the prescribing and escalation of treatment is to be completed by secondary care organisations. **<u>Other Patients</u>** Transfer of monitoring and prescribing to primary care is normally 3 months after dose has been initiated. The duration of treatment will be determined by the specialist based on clinical response and tolerability. **Dosing information** The dose is variable (higher doses may be off-label) depending on the clinical indication and will be decided by the specialist initiating treatment. Time to response is variable. In psoriasis, a significant effect may not be seen before a month or more.

	For other indications, a response may not be expected before two to three months and in some cases may not occur until six months of treatment. Lower doses may be considered in renal or hepatic impairment or in the elderly: chronic kidney disease (CKD)3, reduce dose by 50%; contraindicated in CKD 4+5. The usual starting dose is 10-15mg once a week and increased by 2.5-5mg per week as directed by a specialist. The maximum licensed oral dose in rheumatoid arthritis is 20mg. Variable dose: the usual range is 2.5mg-30mg ONCE a WEEK on the same day each week. All dose or formulation adjustments are the responsibility of the initiating specialist unless otherwise discussed and agreed with the primary care clinician. Dose increases should be monitored using FBC, creatinine/eGFR, ALT and/or AST and albumin every two weeks for six weeks after a dose increase, then revert back to the previous schedule. **Termination of treatment will be the responsibility of the specialist.**
5. Rheumatology patients managed by Wirral Trust - Baseline investigations to be undertaken by specialist, initial monitoring, and dose titration to be undertaken by GP.	Other Patients - Baseline investigations, initial monitoring, and dose titration to be undertaken by specialist. **Baseline** • Height, weight, BP, FBC, creatinine/eGFR, ALT and /or AST, albumin. • Vaccinations against pneumococcus and influenza are recommended. • Shingles vaccine (Zostavax) is recommended as per the JCVI for eligible patients; however, it is contraindicated in doses greater than 0.4mg/kg/week • Specialist to highlight in the first clinic letter notifying the GP of the decision to initiate DMDs that the GP will need to give the shingles vaccine if the patient is aged 70 years or older and for those 69 years and younger but are deemed clinically eligible for Zostavax by the specialist team. The pneumococcal vaccine should also be administered, if not already given. The GP should also be advised to add the patient to the influenza vaccine list. • DMDs should be started two to four weeks AFTER administration of the shingles vaccine (Zostavax) as stated in the Green Book, therefore the specialist team should arrange this with the GP, in a timely manner so as not to delay commencement of DMDs. • For hepatology indications, a fibroscan should be carried out before initiation • Patients should be assessed for comorbidities that may influence DMD choice, including evaluation of respiratory disease and screening for occult viral infection • Treatment should not be started for 4 weeks after live vaccines (eg oral typhoid, MMR, BCG, yellow fever) **Initiation** • FBC, creatinine/eGFR, ALT and /or AST and albumin every two weeks until on stable dose for six weeks. • Once on a stable dose, monthly FBC, creatinine/eGFR, ALT and /or AST and albumin for three months. Thereafter, FBC, creatinine/eGFR, ALT and/or AST and albumin at least every 12 weeks. Baseline chest X-ray according to indication. Spirometry in smokers, patients with known respiratory disease or older than 65 years.

<table>
<tr><td rowspan="2">6. Ongoing monitoring requirements to be undertaken by primary care</td><td>Monitoring</td><td>Frequency</td></tr>
<tr><td>FBC, creatinine/eGFR, ALT and/or AST and albumin

CRP and ESR (rheumatology patients only)</td><td>After the initial monitoring period (see section 5), every 12 weeks, or more frequently in patients at higher risk of toxicity as advised by the specialist team.
NB: Some of the initial monitoring (likely to be 1-2 months of monthly monitoring) may take place in primary care. The exact frequency of the monitoring is to be communicated by the specialist in all cases.
When methotrexate is prescribed with leflunomide, monthly monitoring is recommended for the first 12 months.</td></tr>
<tr><td></td><td>P3NP (psoriasis patients only)
This test can be requested via the EMIS or Vision system and the normal range is 1.7-4.2 micrograms/L.
Three P3NP levels >4.2mcg/L but <8.0mcg/L or two P3NP levels >8.0mcg/L over a 12-month period should be reported to the specialist.</td><td>Annually or every 12 weeks after a raised value (>4.2mcg/L)
NB: There is a 4-week turnaround for this test.</td></tr>
<tr><td rowspan="4">7. Pharmaceutical aspects</td><td>Route of administration:</td><td colspan="2">Oral or subcutaneous injection</td></tr>
<tr><td>Formulation:</td><td colspan="2">Oral – only the 2.5mg strength tablet is to be prescribed, irrespective of dose, to avoid overdose with the 10mg tablet.

Solution for injection, various strengths, pre-filled syringe - methotrexate injection must be prescribed using the brand name and also the generic name (if this facility is available on the prescribing system).</td></tr>
<tr><td>Administration details:</td><td colspan="2">The day of the week should be specified and consistent.

The provision of cytotoxic waste disposal needs to be arranged according to locally commissioned service.</td></tr>
<tr><td>Other important information:</td><td colspan="2">Patients should also receive folic acid 5mg tablets daily, one to six times a week during treatment with methotrexate (but not on the same day as methotrexate) as advised by the specialist. Folic acid is to be prescribed by the specialist until the GP takes over the prescribing of methotrexate.</td></tr>
<tr><td>8. Contraindications</td><td colspan="3">Please note this does not replace the Summary of Product Characteristics (SPC) and should be read in conjunction.
Hypersensitivity
Significantly impaired hepatic function
Significantly impaired renal function (CKD 4 + 5)
Pre-existing blood dyscrasia
Severe acute or chronic infections and immunodeficiency syndrome
Methotrexate should not be used concomitantly with drugs with antifolate properties eg trimethoprim
Pregnancy and breastfeeding
Hypersensitivity to methotrexate or any of its excipients.</td></tr>
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<table>
<tr><td>9. Significant drug interactions</td><td colspan="2">For a comprehensive list consult the BNF or Summary of Product Characteristics. SPC
Seek advice from the initiating specialist if there are any concerns about interactions.
Concomitant administration of folate antagonists such as trimethoprim, co-trimoxazole, and nitrous oxide should be avoided.</td></tr>
<tr><td rowspan="8">10. Adverse effects and management</td><td>Adverse effect</td><td>Management</td></tr>
<tr><td>Abnormal bruising or severe sore throat</td><td>Stop drug until FBC results available, contact Specialist Practitioner (SP)</td></tr>
<tr><td>New or increasing dyspnoea or dry cough</td><td>Stop the drug and contact SP urgently.</td></tr>
<tr><td>Fall in WCC <3.5 x 10^9/l
Fall in neutrophils <1.6 x 10^9/l (<2.0 x 10^9/l for gastro indications)
Fall in platelets <140 x 10^9/l</td><td>Stop drug, contact SP</td></tr>
<tr><td>Increased MCV >105fl</td><td>Check folate, B12 & TSH. Treat if abnormal, contact SP for advice if normal</td></tr>
<tr><td>Unexplained reduction in albumin <30g/L
Abnormal LFTs – AST or ALT > 100u/l
Rash, mouth ulcers</td><td>Contact SP</td></tr>
<tr><td>Taste loss</td><td>Reassure, continue the drug.</td></tr>
<tr><td>Nausea and vomiting, diarrhoea</td><td>Discuss with SP. N.B. nausea relating to methotrexate should be managed initially by prescribing anti-emetics.</td></tr>
<tr><td>Increase in serum creatinine >30% over period of 12 months or less OR decline in eGFR > 25%</td><td>Contact SP if there is new or unexplained renal impairment.</td></tr>
<tr><td>11. Advice to patients and carers</td><td colspan="2">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 drugs.</td></tr>
<tr><td>12. Pregnancy and breastfeeding</td><td colspan="2">Contraindicated in pregnancy and breast feeding. The manufacturer advises effective contraception[2] during and for at least six months after treatment in both men and women. Patients planning to become pregnant should be seen by a specialist.

In the case of inadvertent exposure to low-dose methotrexate in pregnancy, the drug should be stopped immediately, folate supplementation (5mg/day) continued, and a careful evaluation of foetal risk carried out by local experts[3]. If a patient becomes pregnant while on treatment, they should be referred back to the hospital immediately for review.

Methotrexate is present in breast milk in low concentrations, breast feeding should be stopped before treatment.

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 GP and the specialist.</td></tr>
</table>

13. Specialist contact information	See appendix 2
14. Additional information	Where patient care is transferred from one specialist service or GP practice to another, a new shared care agreement must be completed.
15. References	1. BSR (2017) BSR and BHPR guideline for the prescription and monitoring of non-biologic disease-modifying anti-rheumatic drugs 2. MHAR (2010) Medicines with teratogenic potential: what is effective contraception and how often is pregnancy testing needed? 3. BSR (2016) BSR and BHPR guideline on prescribing drugs in pregnancy and breastfeeding—Part I: standard and biologic disease modifying anti-rheumatic drugs and corticosteroids 4. The Green Book - Immunisation against infectious diseases
16. To be read in conjunction with the following documents	• Policy for shared care (Appendix 1) • Shared care agreement (Appendix 2) • RMOC Shared Care for Medicines Guidance • NHSE/NHSCC guidance – items which should not be routinely prescribed in primary care: guidance for CCGs NHSE 2019 • NHSE policy- Responsibility for prescribing between Primary & Secondary/Tertiary Care NHSE When two or more DMDs are initiated, one shared care agreement form should be completed that includes all relevant drugs.

Appendix 1

Policy for Shared Care

Shared care is only appropriate if it provides an optimum solution for the patient, and it meets the criteria outlined in the Shared Care section of the Pan Mersey Definitions and Criteria for Categorisation of Medicines in the Pan Mersey Formulary document.

- Prescribing responsibility will only be transferred when the specialist and the patient's GP agree that the patient's condition is stable.
- Before prescribing responsibilities are transferred to primary care, all information required by the shared care framework for the individual medicine has been provided to the patient's GP.
- Patients will only be referred to the GP once the GP has agreed to the shared care agreement and returned signed copies.

Inherent in any shared care agreement is the understanding that participation is at the discretion of the GP, subject to the availability of sufficient information to support clinical confidence.

Specialist Responsibilities in Shared Care

- For Rheumatology patients under Wirral Trust, Specialist to ensure baseline monitoring of full blood count and biochemical profile as described by the shared care framework.
- For all other patients, Specialists to initiate the medicine, prescribe, monitor for toxicity and efficacy as described by the shared care framework until the patient is stabilised.
- To obtain patient informed consent for sharing of care between the specialist, primary care prescriber and patient. Consenting parties must have sufficient, accurate, timely information in an understandable form. Consent must be given voluntarily and must be documented in the patient's notes. Patients should be aware that shared care will not always be the best option for them. This is a mutual agreement between the specialist and primary care, which needs to be confirmed with the shared care agreement.
- To confirm the diagnosis.
- To confirm that the patient's care can be suitably maintained by primary care, following their medicine being optimised for approximately 3 months, with satisfactory investigation results.
- To initiate the medicine, prescribe, and monitor for toxicity and efficacy as described by the shared care framework until the patient is stabilised.
- To ensure the patient or their carer:
    - Is counselled with regard to the risks and benefits of the medicine.
    - Is provided with any necessary written information with regard to the individual medicine including patient information leaflets on individual drugs.
    - Provides informed consent when any medicine is prescribed for an off-label indication for any condition
- To be familiar with the shared care framework.
- To provide all information to the patient's GP as required by the shared care framework when prescribing responsibility is initially transferred and at any subsequent times as necessary for safe and effective treatment of the patient.
- Following the request to the patient's GP to initiate shared care; to ensure that the patient has an adequate supply of medication (usually 28 days) until shared care arrangements are in place. Further prescriptions will be issued if, for unforeseen reasons, arrangements for shared care are not in place at the end of 28 days. Patients should not be put in a position where they are unsure where to obtain supplies of their medication.
- To assess the patient regularly as necessary for the duration of therapy. The specialist will send a written summary within 14 days to the patient's primary care prescriber, confirm that ongoing treatment with the monitored medicine is appropriate and record test results on the patient-held monitoring booklet if

applicable confirm the current dosage and clearly highlight any changes made both to the patient and in writing to the patient's primary care prescriber.

- The specialist team will:
    - provide training, advice, and guidance (as appropriate) for primary care prescribers if necessary to support the shared care agreement
    - provide contact details for both working and non-working hours
    - supply details for fast-track referral back to secondary/specialist care
    - provide the patient with details of their treatment, follow up appointments, monitoring requirements and, where appropriate, nurse specialist contact details
- To review the patient promptly if required by the GP.
- To meet any additional requirements as required by the individual medicine shared care framework.
- To communicate the failure of a patient to attend a routine hospital review and advise the GP of appropriate action to be taken.
- Following the addition of a new drug to an existing regime covered by a shared care agreement, the Specialist must initiate, prescribe, and monitor the new drug in accordance with the relevant shared care agreement including subsequent review and inform the GP of this. A new shared care agreement must then be initiated for the new drug.
- Prior to transfer of prescribing, the specialist will ensure that patients (and their caregivers, where appropriate) are aware of and understand their responsibilities to attend appointments and the need for continued monitoring arrangements.
- Addition of a second DMD: Following the addition of a new drug to an existing regime covered by a Shared Care Agreement, the Specialist must initiate, prescribe, and monitor the new drug in accordance with the relevant shared care agreement, including subsequent review, and inform the GP of this. A new Shared Care Agreement must then be initiated for the new drug.

Primary Care Responsibilities in Shared Care

- To prescribe within their own level of competence.
- To reply to a written request for shared care within 21 days ensuring both copies of the shared care agreement are signed if appropriate.

If agreeing to shared care, the GP is asked:

- To prescribe, manage and monitor the medicine as advised by the specialist and in line with the individual shared care framework.
- To review the patient as required by the shared care framework
- To make appropriate and contemporaneous records of prescribing and/or monitoring and to note the existence of the shared care agreement on the patient`s clinical record. A Snomed code "268529002 Shared Care- Specialist/GP" can be used. Where applicable, keep the patient-held monitoring record up to date with the results of investigations, changes in dose and alterations in management.
- To be familiar with the individual shared care framework, have the information and knowledge to understand the therapeutic issues relating to the patient's clinical condition and undergo any additional training if necessary.
- To report any adverse effect in the treatment of the patient to the specialist team, and via the MHRA Yellow Card Scheme https://yellowcard.mhra.gov.uk/.
- To inform the specialist of any relevant change in the patient's circumstances.
- To seek specialist advice as appropriate.
- To meet any additional requirements as required by the individual shared care framework.

Supporting information

- To respond to specialist communication relating to any change or addition to the patient's treatment or monitoring covered by the shared care agreement.
- Where community nurse involvement is required in the administration of medicines under a shared care framework, nurses should be provided with adequate information and guidance by the prescriber or the specialist. Arrangements should be made in good time for any potential problems to be resolved to ensure that patient care is not compromised

Where the GP wishes to withdraw prescribing, for example when the patient fails to attend for monitoring, they need to give the specialist team a minimum of 14 days' notice of their need to resume responsibility for prescribing. The specialist is required to acknowledge this request within the 14-day time period.

Patient Responsibilities in Shared Care

- To provide their informed consent for sharing of their care with the specialist and primary care prescriber. Consenting parties must have sufficient, accurate, timely information in an understandable and accessible format. Consent must be given voluntarily and must be documented in the patient's notes. Supporting information is available from NICE Making decisions about your care
- To take their medication as agreed, unless otherwise instructed by an appropriate healthcare professional.
- To meet all necessary monitoring arrangements to ensure the safe prescribing of their medication, and to alert the prescriber where these arrangements are not met.
- To attend all follow-up appointments with the primary care prescriber and specialist. If the patient is unable to attend any appointments, they should inform the relevant practitioner as soon as possible and arrange an alternative appointment.
- Inform healthcare professionals of their current medications, both prescribed and purchased elsewhere prior to receiving any new prescribed or over-the-counter medication.
- Report all suspected adverse reactions to medicines to their primary care prescriber.
- Store their medication securely away from children and according to the medication instructions.
- Read the information supplied by their primary care prescriber, specialist and pharmacist and contact the relevant practitioner if they do not understand any of the information given.

Appendix 2

Shared Care Request letter (Specialist to Primary Care Prescriber)

Disease modifying drugs (DMDs)

Request by specialist clinician for the patient's GP to enter into a shared care agreement

To be signed by consultant / prescribing member of specialist team (circle or underline as appropriate)

Dear *[insert Primary Care Prescriber's name]*

Patient name: *[insert patient's name]*

Date of birth: *[insert date of birth]*

NHS Number: *[insert NHS Number]*

Diagnosis: *[insert diagnosis]*

Please add patient addressograph here

As per the agreed Pan Mersey APC shared care framework for *[insert medicines names and doses]* for the treatment of *[insert indication],* this patient is now suitable for prescribing to move to primary care.

The patient fulfils criteria for shared care, and I am therefore requesting your agreement to participate in shared care. Where baseline investigations are set out in the shared care protocol, I have carried these out.

I can confirm that the following has happened with regard to this treatment:

	Specialist to complete
The risks and benefits of treatment have been explained to the patient	Yes / No
The patient has agreed to this shared care arrangement, understands the need for ongoing monitoring, and has agreed to attend all necessary appointments	Yes / No
A copy of the shared care framework which covers this treatment/the shared care framework can be found here (*insert electronic/ web link*)	Yes / No
I have provided the patient with sufficient medication to last until	
I have arranged a follow up with this patient in the following timescale	

If you have provided supporting information to the patient, please insert a copy here

Treatment was started on *[insert date started]* and the current dose is *[insert dose and frequency].*

If you are in agreement, please undertake monitoring and treatment from *[insert date*] NB: date must be at least 1 month from initiation of treatment.

The next blood monitoring is due on *[insert date]* and should be continued in line with the shared care guideline.

Frequency of blood test: .....

I confirm that if this is a shared care agreement for a drug indication which is unlicensed or off label, informed consent has been received.

Please could you reply to this request for shared care and initiation of the suggested medication to either accept or decline within 14 days.

Details of Specialist Clinicians

Name ..... Date .....

Consultant / prescribing member of specialist team (circle or underline as appropriate)

Signature .....

In all cases, please also provide the name and contact details of the Consultant.

When the request for shared care is made by a prescriber who is not the specialist, it is the supervising consultant who takes medico-legal responsibility for the agreement.

Consultant: .....

Contact details

Telephone number: ..... Ext: .....

Address for return of documentation .....

.....

.....

Shared Care Agreement Letter (Primary Care Prescriber to Specialist)

Primary Care Prescriber Response

Dear *[insert Doctor's name]*

Patient *[insert Patient's name]*

NHS Number *[insert NHS Number]*

Identifier *[insert patient's date of birth and/or address]*

Thank you for your request for me to accept prescribing responsibility for this patient under a shared care agreement and to provide the following treatment

Medicine	Route	Dose & Frequency

I can confirm that I am willing to take on this responsibility from [insert date] and will complete the monitoring as set out in the shared care protocol for this medicine/condition.

Usual GP signature: ..... Date .....

Usual GP name: ..... (please print)

GP: Please sign and return a copy within 21 calendar days to the address above

GP Practice address/practice stamp

GP- If you do not agree to prescribe, please delete the section above and provide any supporting information as appropriate below: