Background

Around 90% of a sulfasalazine dose reaches the colon where bacteria split the drug into sulfapyridine and mesalazine. These are also active, and the unsplit sulfasalazine is also active on a variety of symptoms. Overall the drug and its metabolites exert immunomodulatory effects, antibacterial effects, effects on the arachidonic acid cascade and alteration of activity of certain enzymes. The net result clinically is a reduction in activity of the inflammatory bowel disease. In rheumatoid arthritis a disease modifying effect is evident in 1-3 months, with characteristic falls in CRP and other indicators of inflammation.

Indications, 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.

Licensed Indications

- Rheumatoid arthritis (EC only)
- Ulcerative colitis; Crohn’s disease;

Locally agreed off-label use

Sero-negative spondyloarthropathy including psoriatic arthritis and psoriasis

Initiation and ongoing dose regime

Rheumatology patients managed by Wirral Trust
Secondary care to diagnose and provide written instructions to the GP for prescribing and escalation of treatment.

Other Patients
Transfer of monitoring and prescribing to Primary care is normally after 3 months

The duration of treatment will be determined by the specialist based on clinical response and tolerability.

Rheumatoid arthritis: Treatment is usually started at a dose of 500mg enteric coated once or twice daily after food. This is increased by 500mg each week, if tolerated, up to a dose of 1.0 or 1.5grams twice daily (optimum around 40mg/kg/day).

Ulcerative colitis:
Severe Attack: 1.0 – 2.0 grams four times a day may be given in conjunction with steroids as part of an intensive management regime. Night-time interval between doses should not exceed 8 hours.
Moderate Attack: 1.0 – 2.0 grams four times a day may be given in conjunction with steroids.
Mild Attack: 1.0 grams four times a day with or without steroids
Maintenance Therapy: With remission reduce the dose gradually to 2.0 grams per day. This dosage should be continued indefinitely, since discontinuance even several years after an acute attack is associated with a fourfold increase in risk of relapse.

**Crohn's Disease:** In active Crohn's Disease sulphasalazine should be administered as in attacks of ulcerative colitis.

**All dose adjustments will be the responsibility of the initiating specialist unless directions have been discussed and agreed with the primary care clinician**

Dose increases should be monitored by FBC creatinine/eGFR, ALT and/or AST and albumin every 2 weeks for 6 weeks after the dose increase, then revert back to previous schedule.

**Termination of treatment will be the responsibility of the specialist.**

### 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.

<table>
<thead>
<tr>
<th>Ongoing monitoring requirements to be undertaken by primary care.</th>
<th>Monitoring</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBC, Creatinine/eGFR, ALT and/or AST, Albumin</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.</td>
<td></td>
</tr>
<tr>
<td>CRP and ESR (rheumatology patients only)</td>
<td>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 to be communicated by the specialist in all cases.</td>
<td></td>
</tr>
<tr>
<td><strong>Pharmaceutical aspects</strong></td>
<td>Route of administration</td>
<td>Oral</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Formulation</td>
<td>500mg tablets</td>
<td></td>
</tr>
<tr>
<td>Administration details</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Other important</td>
<td>Different formulations have different licences. Use with caution in CKD 4+5.</td>
<td></td>
</tr>
<tr>
<td>information</td>
<td>MHRA Safety Alert: Recent drug-name confusion</td>
<td></td>
</tr>
</tbody>
</table>

**Contraindications please note this does not replace the Summary of Product Characteristics (SPC) and should be read in conjunction with it.**

- Hypersensitivity to sulfasalazine, sulfonamides or salicylates.
- Acute intermittent porphyria.

**Significant drug interactions**

- For a comprehensive list consult the BNF or Summary of Product Characteristics
- Seek advice from the initiating Specialist if there are any concerns about interactions.

**Adverse Effects and managements**

<table>
<thead>
<tr>
<th>Result</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal bruising or severe sore throat</td>
<td>Stop drug until FBC results available, contact Specialist Nurse (SN)</td>
</tr>
<tr>
<td>Fall in WCC &lt;3.5 x 10⁹/l</td>
<td>Stop drug. Contact SN for advice and management.</td>
</tr>
<tr>
<td>Fall in neutrophils &lt;1.6 x 10⁹/l</td>
<td></td>
</tr>
<tr>
<td>Fall in platelets &lt;140 x 10⁹/l</td>
<td></td>
</tr>
<tr>
<td>Increased MCV &gt;105f/l</td>
<td>Check folate, B12 &amp; TSH. Treat if abnormal but contact SN for advice if normal.</td>
</tr>
<tr>
<td>Unexplained reduction in albumin &lt;30g/l</td>
<td>Stop drug. Contact SN</td>
</tr>
<tr>
<td>(added from BSR)</td>
<td></td>
</tr>
<tr>
<td>Abnormal LFTs – AST or ALT &gt; 100 U/l</td>
<td>Stop drug. Contact SN</td>
</tr>
<tr>
<td>Rash</td>
<td>Stop drug and contact SN.</td>
</tr>
<tr>
<td>Mouth ulcers</td>
<td>Stop drug and contact SN.</td>
</tr>
<tr>
<td>Nausea, vomiting, diarrhoea</td>
<td>Discuss with SN</td>
</tr>
<tr>
<td>Increase in serum creatinine &gt;30% over</td>
<td>Contact SN if there is new or unexplained renal impairment</td>
</tr>
<tr>
<td>period of 12 months or less OR decline in</td>
<td></td>
</tr>
<tr>
<td>eGFR &gt; 25%</td>
<td></td>
</tr>
<tr>
<td>Fall in sperm count</td>
<td>Reversible on cessation of drug</td>
</tr>
<tr>
<td>Dizziness, headache</td>
<td>Discuss with SN</td>
</tr>
<tr>
<td><strong>Advice to patients and carers</strong></td>
<td>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>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **Pregnancy and breast feeding** | Sulfasalazine is not known to have any teratogenic effects. The dose should not exceed 2 grams/day and folic acid should be prescribed to those trying to conceive and during pregnancy.  
Compatible with breastfeeding in healthy, full-term infants  
Men taking sulfasalazine may have reduced fertility. There is no evidence, however, that conception is enhanced by stopping SSZ for 3 months prior to conception unless conception is delayed >12 months when other causes of infertility should also be considered. (BSR & BHPR guideline on prescribing in pregnancy and breastfeeding) |
| **Specialist contact information** | See appendix 2 |
| **Additional information** | Where patient care is transferred from one specialist service or GP practice to another, a new shared care agreement must be completed. |
| **References** | BSR monitoring guidelines |
| **To be read in conjunction with the following documents.** | 1. Policy for Shared Care  
2. Shared care agreement.  
When two or more DMDs are initiated, one shared care agreement form should be completed for 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.

Before prescribing responsibilities are transferred to primary care:

- Prescribing responsibility will only be transferred when the consultant and the patient’s GP agree that the patient’s condition is stable.
- 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 ensure the patient or their carer:
  - Is counselled with regard to the risks and benefits of the medicine.
  - Provide any necessary written information to the patient with regard to the individual medicine including patient information leaflets on individual drugs.
  - Obtain and document informed consent from the patient when any medicines 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.
To assess the patient regularly as necessary for the duration of therapy.

To review the patient promptly if required by the GP concerned.

To meet any additional requirements as required by the individual medicine shared care framework.

To communicate failure of a patient to attend a routine hospital review and advise the GP of appropriate action to be taken.

**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 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:

- To provide prescribe or 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 READ code of “6652 Shared Care- Specialist/GP” can be used.
- To be familiar with the individual Shared Care Framework.
- To report any adverse effects of treatment to the specialist team.
- 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.
- To respond to Specialist communication relating to any change or addition to the patients treatment covered by the Shared Care Agreement.
Appendix 2: Shared Care Agreement

Disease modifying drugs (DMDs)
Request by Specialist Clinician for the patient’s GP to enter into a shared care agreement

Part 1
To be signed by Consultant / Prescribing member of Specialist Team

Date ________________________________
Name of patient ____________________________
Address __________________________________
__________________________________________
Patient NHS No ____________________________
Patient hospital unit No _____________________
Diagnosed condition ____________________

Dear Dr __________________________________

I request that you prescribe
(1) _______________________________________________________________
(2) _______________________________________________________________
(3) _______________________________________________________________
(4) _______________________________________________________________
for the above patient in accordance with the enclosed shared care framework.

Last Prescription Issued: ….. / ….. / ….. Next Supply Due: ….. / ….. / …..
Date of last blood test: ….. / ….. / ….. Date of next blood test: ….. / ….. / …..
Frequency of blood test: ____________________________
I confirm that the patient has been stabilised and reviewed on the above regime in accordance with the Shared Care Framework and Policy.

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. N/A
Details of Specialist Clinicians

Name __________________________________________ Date ____________

Consultant / Prescribing member of the 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 consultant, it is the supervising consultant who takes medico-legal responsibility for the agreement.

Consultant: ________________________________________________

Contact details:

Telephone number: ___________________ Ext: ________________

Address for return of documentation

_______________________________________

_______________________________________

Part 2
To be completed by Primary Care Clinician

Patient name_______________________________________________

I agree to prescribe ___________________________________ for the above patient in accordance with the enclosed shared care framework.

GP signature _______________________________ Date ______________

GP name ____________________________________ Please print

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

OR

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