DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE
SHARED CARE AGREEMENT

Oral Sulfasalazine for patients within adult services

1. REFERRAL CRITERIA

- Shared Care is only appropriate if it provides the optimum solution for the patient.
- Prescribing responsibility will only be transferred when it is agreed by the consultant and the patient's GP and the patient's condition is stable or predictable.
- When transfer agreed the patient will be given a supply of sulfasalazine sufficient for at least 4 weeks maintenance therapy.

2. AREAS OF RESPONSIBILITY

GP responsibilities	Consultant responsibilities
1. If NOT participating in shared care reply to the request from the consultant/specialist as soon as practicable (see appendix 1) **2.** Ensure compatibility with other concomitant medication. **3.** Prescribe the dose and formulation recommended. **4.** Perform monitoring tests as specified in section vii. **5.** Adjust the dose as advised by the specialist. **6.** Stop treatment on the advice of the specialist or immediately if any urgent need to stop treatment arise. **7.** Ensure the patient is offered an annual flu vaccination and a one off pneumococcal vaccination. Live vaccinations can be used with caution in patients taking traditional DMARDS at standard doses* **8.** Seek advice from the specialist if the patient becomes or plans to become pregnant. **9.** Report any adverse effects to the referring specialist and the MHRA yellow card scheme	**1.** Assess the patient and provide diagnosis; ensure that this diagnosis is within scope of this shared care protocol. Assess for contraindications and cautions and interactions. **2.** Use a shared decision-making approach; discuss the benefits and risks of the treatment with the patient and provide the appropriate counselling. Provide an appropriate patient information leaflet. **3.** Perform baseline tests (as recommended in section vii) and provide results of baseline tests. **4.** Initiate, prescribe and monitor sulfasalazine for the first three months or until medication monitoring is stable. **5.** Contact patient's GP to request prescribing under shared care and send a link to or copy of the shared care protocol. **6.** Recommend dose of the drug and frequency of monitoring. Alongside the recommendations for routine monitoring more frequent monitoring may be appropriate in patients at high risk of toxicity. These will be communicated to the GP on a case by case basis. **7.** Annually review the patient and advise the GP promptly on when to adjust the dose, stop treatment or consult with the specialist. **8.** Communicate any dose increase to the GP and transfer monitoring to GP when monitoring is stable or predictable following 6 weeks period of dose titration. **9.** Ensure that clear backup arrangements exist for GPs to obtain advice and support. **10.** Advise on the suitability for herpes zoster vaccination in accordance with national screening programme. **11.** Give advice to primary care on continuing treatment if a woman becomes or wishes to become pregnant. **12.** Report any adverse effects to the MHRA yellow card scheme and GP

Patient responsibilities

- Report to the specialist or GP if there is not a clear understanding of the treatment and share any concerns in relation to treatment with sulfasalazine.
- Take sulfasalazine as prescribed and do not stop taking it without speaking to their primary care prescriber or specialist.
- Attend regularly for monitoring and review appointments with primary care and specialist. Be aware that medicines may be stopped if they do not attend appointments.
- Inform specialist or GP of any other medication being taken including over-the-counter products.
  - Report any adverse effects or warning symptoms to the specialist or GP whilst taking the drug for example Sore throat, mouth ulcers, fever, malaise, swollen lymph nodes, or unexplained bleeding or bruising
  - Progressive skin rash with blisters or oral ulcerations – see below
  - Nausea, vomiting, diarrhoea, jaundice, dark urine and unintentional weight loss.
  - Hair loss
  - Breathlessness, infection or cough
  - Symptoms of peripheral neuropathy e.g. pins and needles, numbness or burning pain in extremities
- Patients of childbearing potential should take a pregnancy test if they think they could be pregnant, and inform the specialist or GP immediately if they become pregnant or wish to become pregnant.

3. COMMUNICATION AND SUPPORT

i. Hospital contacts:	ii. Out of hours contacts and procedures:
Chesterfield Royal Hospital NHS Foundation Trust Contact the referring consultant/nurse via switchboard: 01246 277271 Rheumatology Nurse advice line: 01246 513097 Available Monday-Thursday 9am-4pm, Friday 9am- 12pm IBD advice line 01246 512884 (answerphone) GP mobile contact 07717700489 **University Hospitals of Derby and Burton NHS Foundation Trust** **Derby Hospitals** Rheumatology - Rheumatology helpline: 01332 787710 Gastroenterology - IBD helpline: 01332 785504 Consultant/specialist nurse via switchboard: 01332 340131 **Burton Hospitals** 01283 511511 / 566333 Rheumatology Dr R Laximinarayan ext. 3167;Dr S Das ext. 3211; Dr D Ray ext. 3247 Clinical Rheumatology Nurse Specialist ext. 4112 bhft.rheumatologynurses@nhs.net Gastroenterology Dr Palejwala secretary ext. 4221; Dr Watmough secretary ext. 4008 IBD Nurse Specialist ext. 5854 dhft.ibdcns@nhs.net	**Chesterfield** Contact the on-call Medic for the relevant speciality via switchboard: 01246 277271 **Derby** Pharmacy, UHDB, ask for on-call pharmacist via switchboard: 01332 340131 Messages can be left on the Derby Rheumatology nurse advice line: 01332 787710 The aim is to address these next working day **Burton:** Burton Hospitals 01283 511511 / 566333 ask for on-call pharmacist via switchboard Messages can be left on the nurse advice line out of hours on 01283 511511 ext 4112 (Rheum) / 5854 (Gastro) The team aim to respond at latest within two working days. The specialist nurses may also be bleeped via switchboard for urgent enquiries.

iii. Specialist support/resources available to GP including patient information:

Patient information:
General information: https://www.nhs.uk/medicines/sulfasalazine/
Rheumatology: https://www.versusarthritis.org/about-arthritis/treatments/drugs/sulfasalazine/

4. CLINICAL INFORMATION

i. Prescribed Indications	**Licensed** Ulcerative colitis (UC) Active Crohn's disease Rheumatoid Arthritis (EC tablet only)	**Unlicensed** Sero-negative spondylo-arthropathy including psoriatic arthritis and psoriasis
ii. Therapeutic summary	Sulfasalazine is a disease modifying antirheumatic drug (DMARD) used to treat a number of rheumatological conditions, and to induce and maintain remission in certain inflammatory gastrointestinal diseases. Time to response: minimum of three months	
iii. Dose & Route of administration	*Remission **Active ulcerative colitis and Crohn's disease**- 1-2g QDS until remission occurs. The night-time interval between doses should not exceed 8 hours. **Rheumatoid arthritis** (using enteric coated (EC) tablets)- 500mg daily, increasing by 500mg each week until 2-3g per day in divided doses is reached according to response. *Maintenance Ulcerative colitis and Crohn's disease- maintenance of remission of - 500mg four times daily Rheumatoid arthritis and other indications (using EC tablets)- 2-3g daily in 3-4 divided doses. **Preparations:** **Sulfasalazine plain** tablets licenced for use in: • Ulcerative colitis • Crohn's Disease **Sulfasalazine EC** tablets licenced for use in: • Ulcerative colitis • Crohn's Disease • Rheumatoid arthritis Doses outside the recommended range may be considered with prior agreement with the specialist team and GP involved. Lower doses should be considered for frail elderly and patients with renal impairment.	
iv. Duration of treatment	Medium to long-term depends on response to treatment, side effects and level of disease activity.	

v. Immunisation

- **Live vaccinations** can be used with caution in standard doses of sulfasalazine. JCVI/ Green book recommending that low dose corticosteroid (prednisolone <20mg daily) and oral traditional DMARD therapy at standard doses* are not a contraindication in most patients, although clinician discretion is advised.
- Annual flu vaccination is recommended.
- One off Pneumococcal vaccination recommended unless severely immunocompromised where a different schedule is needed. See JCVI for more information.
- Covid-19 vaccination is safe & recommended.

vi. Adverse effects See BNF/SPC for full list

Common side effects as per SPC

Fever, Blood disorders (including Heinz body anaemia, megaloblastic anaemia) Cough, Dizziness, Nausea, Headache, Tinnitus, Insomnia, Gastric distress, Arthralgia Pruritus, Rash, Stomatitis, Taste disturbances, Proteinuria, Yellow discoloration of skin, urine and other bodily fluid

Because sulfasalazine causes crystalluria and kidney stone formation, adequate fluid intake should be ensured during treatment.

Signs or symptoms of bone marrow suppression, e.g. unexplained bleeding or bruising with or without (severe) sore throat, purpura, mouth ulcers.	**Check FBC immediately and withhold until results available and discuss with the specialist team.** See hematological monitoring below.
Acute infection	During serious infections (e.g. requiring intravenous antibiotics or hospitalisation) temporarily withhold sulfasalazine until the patient has recovered. Consider additional investigations (e.g. FBC), if clinically appropriate.
Nausea, vomiting, diarrhoea or unintentional weight loss	Review for reversible causes. Advise patient to take with food. If no improvement contact specialist team.
Other symptoms • Skin/mucosal reaction, e.g. serious rash Diffuse alopecia • Breathlessness or cough	Consider withholding treatment and discussing with specialist.
Peripheral neuropathy	For widespread rash, discontinue and discuss with specialist urgently.

vii. Monitoring Requirements

Before commencing immunosuppressant therapy

- Record patients blood pressure, height and weight
- Screening for lung disease should be undertaken at clinician discretion on a case-by-case basis. The extent of screening should be influenced more by a patient's clinical features and risk factors for lung disease (e.g. underlying autoimmune disease or smoking history) rather than subsequent immunomodulating choice. Pre-existing lung disease should not be considered and absolute contraindication to any immunomodulating medication.
- Screen for viral hepatitis B&C and HIV as per local policy
- Investigate patient medical history including co-morbidities and previous immunomodulating medication use.

Consultant/specialist monitoring schedule

Baseline and 2 weekly until on a stable dose for at least 6 weeks

- FBC
- ALT and/or AST (BNF states LFTs) and albumin
- U&E including creatinine and CrCl
-

Annually review the patient and advise the GP promptly on when to adjust the dose, stop treatment or consult with the specialist.

For rheumatic patients CRP/ESR may be done every 3 months (this is not done for dermatology patients). These tests are part of the assessment of the underlying rheumatic disease rather than a requirement for monitoring of immunomodulating therapy. The monitoring CRP/ESR may be coordinated between secondary and primary care on an individual basis.

GP responsibility monitoring schedule

In patients following the 6 weeks of dose stability conduct monthly monitoring for three months followed by three monthly monitoring thereafter of:

- FBC
- ALT and/or AST and albumin
- U&E including creatinine and CrCl

After 12 months of treatment

The decision to reduce/ discontinue monitoring should be following advice from the specialist for the individual patient.

No routine monitoring is required for stable patients with minimal risk (consider co-morbidities, concurrent medications). Annual serum creatinine or eGFR may be considered. [as per NHSE Shared Care protocol]

Local specialists may advise continuing e.g. 6 monthly monitoring for patients with additional risk factors e.g. comorbidities/ concurrent medications.

Actions to be taken in Primary care

1. In addition to responding to absolute values in laboratory tests, it is also relevant to **observe trends in results** (e.g gradual decreases in white blood cells (WBC) or albumin, or increasing liver enzymes)
2. Parameters below are to be used as a guide for clinicians rather than absolute values, where monitoring should be based on individualized basis. It is important to consider alternative explanations other than the immunomodulation agents, especially in patients who have been stable for prolonged periods

NB – a rapidly increasing or decreasing trend in any value should prompt caution irrespective of actual value.

WBC <3.5 x109/L Lymphocytes < 0.5x109/L Neutrophils <1.6 x 109/L Platelets <140 x 109/L Eosinophilia >0.5x109/L	Discuss **urgently** with specialist team and consider interruption. Isolated low lymphocytes more likely to be due to disease or other factors- GP to consider non-drug related causes (contact specialist for advice if unsure). The specialist may advise on individual cases if the abnormality is thought to be due to other factors and in this instance may set differential parameters which can be communicated to the GP.
Mean cell volume >105 f/L	Check **serum B12, folate & TFT**. Discuss urgently with specialist team and consider interruption.
ALT and/or AST >100 U/L, or any sudden increases (e.g. double of baseline), OR Unexplained fall in albumin <30g/l; Jaundice	Contact Specialist **urgently** and consider interruption
Creatinine increase for example >30% over 12 months and/or CrCl <60ml/min	Use clinical judgement and repeat in 1 week If still more than 30% from baseline, withhold and discuss with specialist.

If felt to be appropriate to restart sulfasalazine after an abnormality has settled, consider a lower dose (with discussion with specialist) and monitor as follows: repeat bloods in 2 weeks and then monthly for 3 months. Following this resume previous monitoring frequency

Dosage increase (on the recommendation of the clinician)

For dose **increase**, monitor 2 weekly until stable for 6 weeks, then revert back to previous schedule. Dose and monitoring to be agreed with consultant

- FBC
- ALT and/or AST (BNF states LFTs) and albumin
- U&E including Creatinine/calculated GFR

When restarting treatment after an abnormality has been detected repeat bloods in 2 weeks and then monthly for 3 months. Following this resume monitoring frequency to what it was prior to the abnormality.

viii. Contraindications and cautions	**Contraindications** • Known hypersensitivity to sulfasalazine, its metabolites or any of the excipients as well as sulfonamides or salicylates. • Porphyria. **Cautions** • Hepatic or renal impairment. • Pre-existing blood dyscrasias. • Severe allergy or bronchial asthma. • Glucose-6-phosphate dehydrogenase (G6PD) deficiency due to risk of haemolytic anaemia. • Folic acid deficiency. • Adequate fluid intake should be maintained during treatment to avoid crystalluria and kidney stone formation. • Slow acetylator status increases the risk of sulfapyridine-related adverse drug reactions (ADRs) which can present as a drug-induced lupus-like syndrome.
ix. Clinically relevant drug interactions **(For a full list of interactions please refer to the BNF)**	• **Digoxin:** Reduced absorption may be seen when used concomitantly with sulfasalazine. • Sulfonamides are chemically similar to some **oral hypoglycaemic agents** and may cause hypoglycaemia. Patients receiving sulfasalazine and hypoglycaemic drugs should closely monitor blood glucose. • **Azathioprine and 6-mercaptopurine:** Possible risk of bone marrow suppression and leucopenia • **Folate** absorption and metabolism may be reduced by sulfasalazine**.** • **Darolutamide and voxilaprevir** may increase exposure to sulfasalazine, manufacturer advises avoid.
x. Pregnancy, paternal exposure and breastfeeding	The BSR and BHPR guideline on prescribing DMARDs in pregnancy and breastfeeding advises the following: **Pregnancy:** Sulfasalazine, with folate supplementation (5 mg/day), is compatible throughout pregnancy. Information for healthcare professionals: https://www.medicinesinpregnancy.org/bumps/monographs/USE-OF-SULFASALAZINE-IN-PREGNANCY/ Information for patients and carers: https://www.medicinesinpregnancy.org/Medicine--pregnancy/Sulfasalazine/ **Breastfeeding:** Sulfasalazine is compatible with breastfeeding in healthy, full-term infants. There have been reports of bloody stools or diarrhoea in infants who were breastfeeding from mothers on sulfasalazine. In cases where the outcome was reported, bloody stools or diarrhoea resolved in the infant after discontinuation of sulfasalazine in the mother. Information for healthcare professionals: https://www.sps.nhs.uk/medicines/sulfasalazine/ **Paternal exposure**: Men taking sulfasalazine may have reduced fertility, due to oligospermia and impaired mobility, which may take 2-3 months to return to normal following treatment cessation.
xi. Additional information	Where patient care is transferred from one specialist service or GP practice to another, a new shared care agreement must be completed. **To be read in conjunction with the following documents** • RMOC Shared Care Guidance • NHSE policy- Responsibility for prescribing between Primary & Secondary/Tertiary Care
xii. Supply of ancillary equipment	NA
Prepared by **Reviewed by** **In consultation with**	The Shared Care Guidelines Group Derby Hospitals Chesterfield Royal Hospital Derbyshire Medicines Management Clinical Effectiveness Team Martin Shepherd, Head of Medicines Management Chesterfield Royal Hospital

(2019)	Dr Badcock, ACD Consultant Rheumatology Dr R Laxminaryan, Deputy ACD Rheumatology Dr. K Fairburn, Consultant rheumatologist CRH Angela Lawrence, Rheumatology Lead Clinical Nurse Specialist CRH Kath Phillis, Advanced Clinical Nurse Specialist IBD CRH The Derbyshire Medicines Management Shared Care and Guidelines Group
Reviewed (2023)	In line with In line with NHSE/ RMOC Shared Care Protocols- sulfasalazine for patients within adult services (non-transplant indications), July 2022. https://www.england.nhs.uk/publication/shared-care-protocols/ The Derbyshire Medicines Management Shared Care and Guidelines Group

This does not replace the SPC, which should be read in conjunction with it

Date Prepared: October 2023 **Reviewed:** **Review Date**: September 2026

References

1. NHSE/ RMOC Shared Care Protocols- sulfasalazine for patients in adult services, July 2022. https://www.england.nhs.uk/publication/shared-care-protocols/
2. EMC Summary of Product Characteristics for Sulfasalazine accessed online 08/03/2017, 2/7/19
2. British National Formulary accessed online 2/7/19
3. BSR and BHPR guideline for the prescription and monitoring of non-biologic disease-modifying anti-rheumatic drugs, The British Society for Rheumatology, February 2017
4. The Green book, Immunisation against infection disease, September 2014, accessed online 08/03/2017, 2/7/19

Sample Transfer Letter

Hospital No: «HOSPITAL_NUMBER»
NHS No: «NHS_NUMBER»

{Insert date}

PRIVATE & CONFIDENTIAL
«GP_TITLE» «GP_INITIALS» «GP_SURNAME»
«GP_ADDRESS_1»
«GP_ADDRESS_2»
«GP_POSTCODE»

DERBYSHIRE JAPC SHARED CARE AGREEMENT LETTER

Dear «GP_TITLE» «GP_SURNAME»

«FORENAME_1» «SURNAME» «DATE_OF_BIRTH»
«CURRENT_ADDRESS_1» «CURRENT_ADDRESS_2» «CURRENT_POSTCODE»

Your patient was seen on ***{Insert date}*** with a diagnosis of ***{Insert diagnosis}***. I have initiated the following medication ***{Insert drug name}*** and am writing to ask you to participate in the shared care for this patient.

This medication has been accepted as suitable for shared care by the Derbyshire Joint Area Prescribing Committee (JAPC). I agree to the secondary care responsibilities set out in the shared care agreement for this medication (available from www.derbyshiremedicinesmanagement.nhs.uk/clinical_guidelines/shared_care_guidelines). I am therefore requesting your agreement to share the care of this patient. Where preliminary tests are set out in the agreement I have carried these out and results are below.

Dose Regimen	Date ***{Insert medicine name}*** started	Date for GP to start prescribing ***{Insert medicine name}*** from
The baseline test results are (if applicable): **See overleaf for initiation criteria.**		

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

	Specialist to complete
The patient has been initiated on this therapy and has been on an optimised dose for the following period of time:	
Baseline investigation and monitoring as set out in the shared care documents have been completed and were satisfactory	*Yes / No*
The condition being treated has a predictable course of progression and the patient can be suitably maintained by primary care	*Yes / No*
The risks and benefits of treatment have been explained to the patient	*Yes / No*
The roles of the specialist/specialist team/ Primary Care Prescriber / Patient and pharmacist have been explained and agreed	*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*
I have enclosed a copy of the shared care protocol which covers this treatment/the SCP can be found here (insert electronic/ web link)	*Yes / No*
I have included with the letter copies of the information the patient has received	*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 do **NOT** wish to participate in shared care for this patient, usually under clinical grounds, please complete the attached form.

Yours sincerely

{Consultant name}

GP RESPONSE TO SHARED CARE (only complete & send if **NOT** participating in shared care*)

* For completeness please record medication on GP clinical system as per guidance- 'Recording medicines prescribed and issued by other Healthcare Providers'

Shared care is produced by GPs and specialists knowledgeable in the field of that drug usage. The shared care has been approved by the JAPC. This allows a more convenient service to the patient and cost-effective use of NHS resources.

Patient:	NHS No:
Consultant:	Medicine requested for shared care:

I will **NOT** be undertaking the GP responsibilities as described in the agreed shared care guideline. My clinical reasons for declining shared care for this patient are listed in the box below:

		Tick which apply
1.	**The prescriber does not feel clinically confident in managing this individual patient's condition, and there is a sound clinical basis for refusing to accept shared care** As the patients primary care prescriber I do not feel clinically confident to manage this patient's condition because *[insert reason]*. I have consulted with other primary care prescribers in my practice who support my decision. This is not an issue which would be resolved through adequate and appropriate training of prescribers within my practice. **I have discussed my decision with the patient and request that prescribing for this individual remain with you as the specialist, due to the sound clinical basis given above.**	
2.	**The medicine or condition does not fall within the criteria defining suitability for inclusion in a shared care arrangement** As the medicine requested to be prescribed is not included on the national list of shared care drugs as identified by RMOC or is not a locally agreed shared care medicine I am unable to accept clinical responsibility for prescribing this medication at this time. **Until this medicine is identified either nationally or locally as requiring shared care the responsibility for providing this patient with their medication remains with you**	
3.	**A minimum duration of supply by the initiating clinician** 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.***	
4.	**Initiation and optimisation by the initiating specialist** As the patient has not been optimised 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 optimised on this medication the responsibility for providing the patient with their medication remains with you.***	
5.	**Shared Care Protocol not received** As legal responsibility for clinical care lies with the clinician 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 the appropriate SCP, responsibility for providing the patient with their medication remains with you.***	

6.	**Other (Primary Care Prescriber to complete if there are other reasons why shared care cannot be accepted)**	

Please do not hesitate to contact me if you wish to discuss any aspect of my letter in more detail and I hope to receive more information regarding this shared care agreement as soon as possible.

Yours sincerely

{GP name}
{Surgery}

Please send a copy of this response to the specialist/consultant requesting shared care