

## Methotrexate Information Sheet

This information is intended for use by healthcare professionals.

### Key Message:

- The purpose of this guidance is to give information and set out the suggested procedure to identify patients requiring monitoring and review.
- Patients who are currently prescribed Methotrexate without folic acid 5mg.
- Or prescribed Methotrexate 10mg tablets in line with the
  - [Rheumatological Conditions - Methotrexate Shared Care Protocol](#)
  - [Dermatological Conditions - Methotrexate Shared Care Protocol](#)
  - [Inflammatory Bowel Disease - Methotrexate Shared Care Protocol](#)

### Background:

- A patient was admitted to hospital on methotrexate, they were found to have not been taking/receiving folic acid in the community and subsequently passed away. The cause of death was concluded to be pneumonia secondary to pancytopenia which was secondary to methotrexate administration and folic acid deficiency.
- Methotrexate tablets are classified as Amber 1 on the Nottinghamshire formulary, relevant shared care protocols can be found at: [www.nottsapc.nhs.uk](http://www.nottsapc.nhs.uk)
- Methotrexate is prescribed under shared care protocols for rheumatology, gastroenterology, and dermatology indications. Folic acid 5mg should also be prescribed concurrently to reduce the likelihood and severity of methotrexate side effects. Folic acid supplementation should be continued for the duration of methotrexate therapy because adverse effects can occur at any time.
- Following the serious incident review at NUH, information was shared via ICB bulletins and featured in the Medicines Safety Newsletter Issue 11 – March 2019. It was disseminated to practices across Nottinghamshire.
- For SystmOne there is an Optimise Rx message highlighting that folic acid needs to be prescribed if a patient is on methotrexate. EMIS also has a system warning.
- There is no definitive answer regarding the optimal dose of folic acid for patients with rheumatoid arthritis who are being treated with methotrexate; although there seems to be a consensus of opinion that folic acid supplementation should be avoided on the day of methotrexate in case it adversely affects absorption. The British Society for Rheumatology (BSR) and the British Health Professionals in Rheumatology (BHR) guidelines<sup>1</sup> state - all patients initiated on methotrexate should be co-prescribed folic acid supplementation at a minimal dose of 5 mg once weekly.
- Common dosing regimens used include:

**Take ONE tablet daily, except on the day of methotrexate.**

**Take ONE tablet ONCE weekly, dose to be taken on a different day to methotrexate dose.**

- Engagement with secondary care specialists to advise on the most appropriate dose of folic acid remains ongoing.
- The BNF<sup>2</sup> provides safety information from the NHS Never Event: Overdose of methotrexate for non-cancer treatment (January 2018). This information includes that methotrexate should, usually, only be prescribed in a single strength of tablet, usually 2.5mg, to reduce the risk of harm from errors, such as risk of accidental overdose, which can be fatal.

**Actions:**

- Review patients on methotrexate 2.5mg tablets without a prescription for folic acid 5mg issued in the last three months.
- Refer to the prescriber where there is no clinically appropriate reason why folic acid 5mg has not been ordered e.g. patient is buying folic acid OTC.

OR

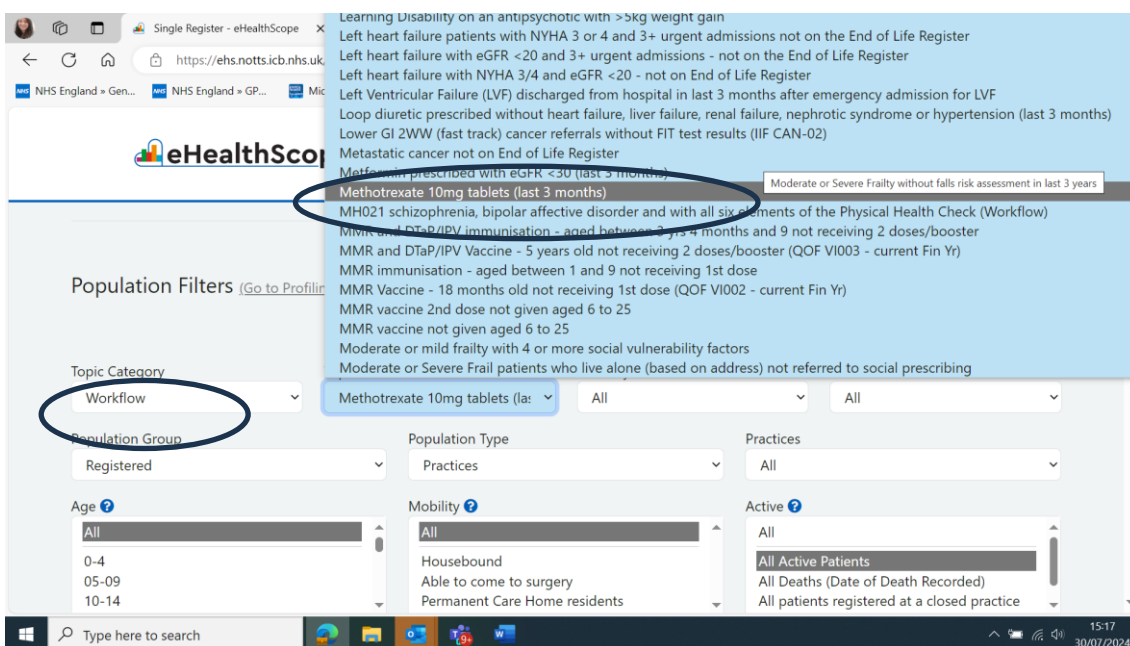
- Review all patients prescribed methotrexate 10mg tablets within the last three months.
- Refer to the prescriber so that the prescription can be reviewed and amended to 2.5mg tablets. Ensure the patient is contacted to make sure they are aware that the strength of tablet being prescribed will be altered.
- We recommend both these reviews be carried out as a minimum every THREE months.

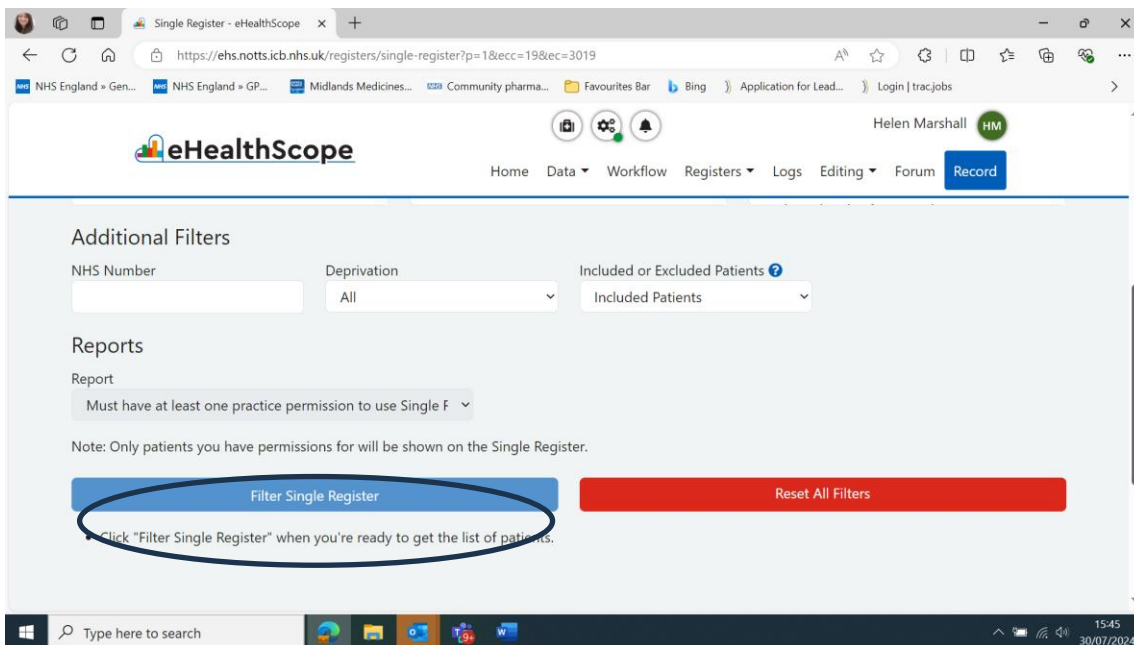
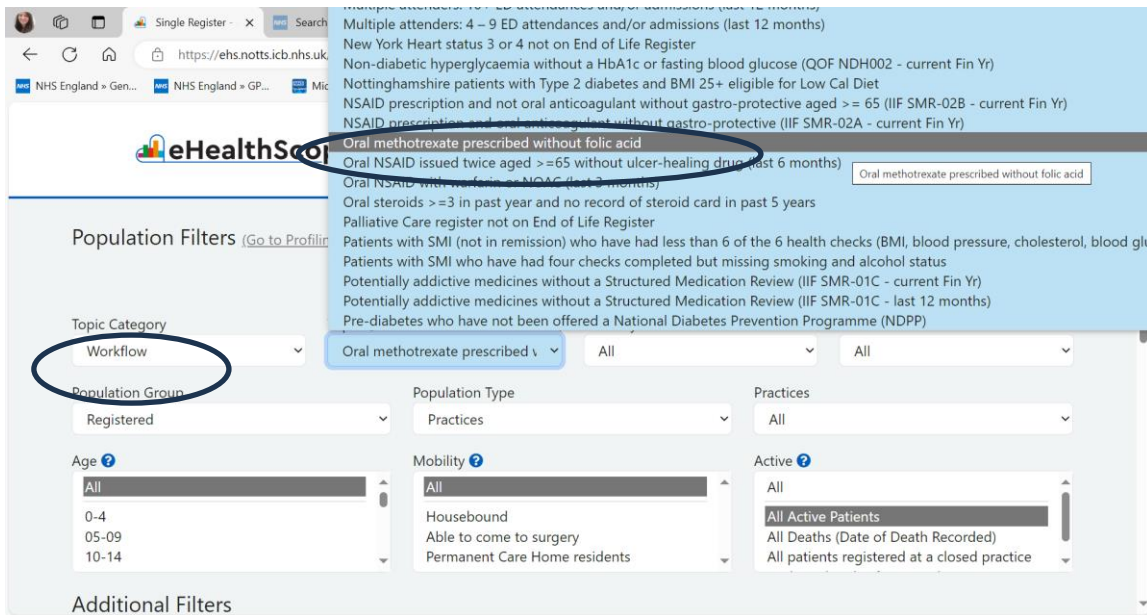
**Data:**

Patient identifiable data is available through eHealthscope.

**eHealthscope**

1. Open eHealthscope in a web browser (<https://ehs.notts.icb.nhs.uk>)
2. Click on “Single Register” in the “Registers” menu.
3. Choose “Workflow” from the “Topic Category”, pick the topic you wish to look at (either *Methotrexate 10mg tablets (last 3 months)* or *Oral methotrexate prescribed without folic acid*) and click “filter single register”.





4. The list of patients will be displayed below.

If the list does not appear it probably means you do not have patient-level permissions. Ask the practice manager to check the [permissions log](#) and click the link “add permissions for a user and allow them to see practice & patient data” to enable your access.

### **Disclaimer**

*This resource has been developed to facilitate the safe and effective review of Methotrexate, using current accessible references and is correct at the time of approval.*

*The output of the searches relies on accurate read coding. Clinicians using this resource must refer to local guidelines, use their own clinical judgement and take responsibility for their prescribing decisions.*

*Nottingham and Nottinghamshire ICB (N&N ICB) Medicines Optimisation team only have oversight for the management of errors occurring within their own organisation. Each organisation is therefore responsible for any prescribing errors or omissions that may occur within their organisation because of using this resource and must follow their own safety governance process.*

*Organisations must inform N&N ICB Medicines Optimisation team should they become aware of any errors or updates required within the Methotrexate Information Sheet review documents.*

### **References**

1. Ledingham J. et al., BSR and BHPR Guideline for the prescription and monitoring of non-biologic disease modifying anti-rheumatic drugs. *Rheumatology* 2017; 56(6): 865-868  
[BSR and BHPR guideline for the prescription and monitoring of non-biologic disease-modifying anti-rheumatic drugs - PubMed \(nih.gov\)](#)
2. British National Formulary Ed. 78  
[BNF 78 \(British National Formulary\) September 2019 \(vnras.com\)](#)