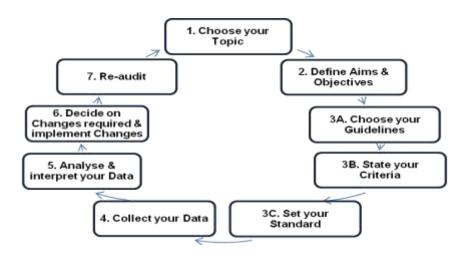


# **Methotrexate in General Practice Audit**



Methotrexate: Using audit to enhance safer use of toxic medication Good for patients, Good for doctors.

> AUTHORS Dr. Diarmuid Quinlan Dr. Paul Ryan

### Purpose of ICGP sample audits on specific topics

The purpose of the ICGP sample audit for each topic area is to provide practitioners with audit topic proposals and related tools in order to aid them in carrying out a clinical audit in this topic area. For each topic, a specific guideline is chosen which identifies best practice for the relevant topic. Following this, examples of the elements of care or activity that could be measured are provided – these are referred to as "criteria". Finally, examples of the type of data that is required in order to audit the sample criteria are provided. A separate document, the ICGP Audit Toolkit, provides detailed generic instructions on how to carry out and report your audit.

Sample Audit Topic: Methotrexate / Medication Safety

Professional Competence Domains: Clinical Skills

Management Patient Safety and Quality of Care

# Disclaimer

In all instances where 'your patients' are referred to, this can be taken to mean the patients you see. Where 'your practice' is mentioned, this refers to the work you do, not necessarily that you need to be based in one particular practice."

**Original Publication:** 2014 **Next Review Date:** 2017

### Evidence:

- Irish Medicines Board Guidance Irish Medicines Board, Drug Safety Newsletter, 47th edition. Oral Methotrexate – Risk of unintentional overdose due to medication errors. Drug Safety – April 2012 – Issue Number 47, <u>http://www.hpra.ie/docs/default-source/publications-forms/newsletters/drugsafety-newsletter-issue-no-47-april-2012.pdf</u>
- 2. **National Immunisation Guidelines -** National Immunisation Advisory Committee (NIAC) available at <u>www.immunisation.ie</u>

# 3. British National Formulary (BNF) Guidance on Methotrexate

**Aims & Objectives:** Establish the current standard of care provided to patients taking Methotrexate. Initiate a range of changes to enhance care where necessary. Demonstrate improvements in patient care.

Useful Hint: *this audit can be readily amended to permit simultaneous or retrospective audit of patients taking Lithium. Suboptimal monitoring of lithium therapy is well documented. Serious patient harm may readily result from Lithium toxicity.* 

# Sample Criteria

<ol> <li>Patients taking Methotrexate (as per BNF Standard) should have blood tests every 2-3 months.</li> </ol>
<ol> <li>When prescribing for patients on methotrexate, both day of week and tablet strength should be specified on the prescription. (2012 IMB guideline)</li> </ol>
<ol> <li>Patients taking Methotrexate should have influenza vaccination annually and pneumococcal vaccination as appropriate (once off or in the past 5 years), as per national immunisation guidelines for immunocompromised patients.</li> </ol>
<ol> <li>Patient education (regarding the hazards of Methotrexate and symptoms and signs of toxicity/overdose) should be given and documented. (IMB guideline)</li> </ol>

Choose the criteria from the above on which to conduct your audit and then set your standard (sometimes known as your target). This is your desired level of performance and is usually stated as a percentage. Beware of setting standards of 100%; standards should be realistic for your practice (perfection may not be possible).

There is no minimum or maximum number of patients stipulated, however your sample should include current/recent patients. In general if you have a very small number of patients with the condition being considered, it is recommended that you examine a greater number of criteria in these patients. By contrast in an audit of a very large number of patients it may only be necessary to examine one criterion.

The aim of a Data Collection tool is to provide examples of the types of data that are required in order to audit each sample criteria.

# Data Collection Tools

#### Criterion 1:

# Patients taking Methotrexate (as per BNF Standard) should have blood tests every 2-3 months.

#### Data Collection Tool:

- Number of patients included in audit i.e. All patients taking Methotrexate identified (computer drug search).
- Document number of blood tests (FBC and LFTs) in previous 13 months for each patient.
- Percentage of above who are compliant with guidelines. Compliance defined as 4-6 tests in previous 13 months.

#### Criterion 2:

When prescribing for patients on Methotrexate, both day of week and tablet strength should be specified on the prescription. (2012 IMB guideline).

#### Data Collection Tool:

- Number of patients included in audit i.e. All patients taking Methotrexate identified (computer drug search).
- Number of above patients wholly compliant with IMB guideline.
- Specify day of week to take Methotrexate.
- Specify 2.5mg tablets (must specify 2.5mg tabs, to avoid tablet strength confusion).
- Compliant if both day of week and 2.5mg tablets specified on records/prescription.

#### Criterion 3:

Patients taking Methotrexate should have influenza vaccination annually and pneumococcal vaccination as appropriate (once off or in the past 5 years), as per national immunisation guidelines for immunocompromised patients.

#### Data Collection Tool:

- Number of patients included in audit i.e. All patients taking Methotrexate identified (computer drug search).
- Number of above patients who received influenza vaccine in current season.
- Number of above who have received pneumococcal vaccine.

#### Criterion 4: :

# Patient education (regarding the hazards of Methotrexate and symptoms and signs of toxicity/overdose) should be given and documented. (IMB guideline).

#### Data Collection Tool:

- Number of patients included in audit i.e. All patients taking Methotrexate identified (computer drug search).
- Number of patients where the clinical record clearly documents patient education about signs and symptoms of toxicity, and appropriate action to take.

The next steps are to:

- Analyse and interpret your data via comparison with your target (consider using the accompanying Spreadsheet to simplify repeat data collection).
- Decide on what changes need to be made and to implement these changes.
- Re-audit your (individual) practice.

A detailed explanation of all of these steps can be found in the ICGP Audit Toolkit, which is available on the ICGP Website at: <u>http://www.icgp.ie/audit</u>

- Consider sharing your outcomes within your practice.
- Consider sharing your outcomes with colleagues to disseminate enhanced care.