CLINICAL AUDIT

Monitoring **polypharmacy** and reducing problematic **prescribing**

Valid to November 2020

bpac nz
better medicine

Audit Focus

Patients taking ten or more medicines are at an increased risk of adverse events. The objective of this audit is to encourage documented medicine reviews for patients who are taking ten or more medicines simultaneously. For the purposes of this audit, the term "medicine review" refers to a systematic process where all of the medicines a patient is taking (including those prescribed by other providers and medicines and supplements purchased over-the-counter [OTC]) are listed, reviewed with the patient and the need for treatment continuation or withdrawal documented for each medicine.

Background

Polypharmacy in New Zealand is growing as the age of the population and the number of people with multimorbidity increases. Polypharmacy is appropriate when the potential benefits of multiple treatments outweigh the potential harms. However, polypharmacy also increases the risk of adverse health outcomes. These can occur when medicines adversely interact with each other, or when the patient does not receive the intended benefit of treatment or when patients continue to take medicines for longer than is beneficial. Among older patients polypharmacy is associated with falls and fractures, dehydration and acute kidney injury, delirium, hypoglycaemia, malnutrition, hospitalisation and death.

Medicine reviews can help practitioners reduce the risk of problematic prescribing because they:

- Identify prescription medicines that may have been initiated by another prescriber, e.g. following discharge from hospital
- Identify previously unknown OTC medicines or supplements that the patient might be regularly taking, e.g. non-steroidal anti-inflammatory drugs (NSAIDs), St John's Wort
- Provide an opportunity to discuss the goals of care, e.g. whether the continued use of a statin is appropriate in an older patient with progressive chronic obstructive pulmonary disease (COPD)
- Encourage prescribers to use best practice guidance to reduce problematic prescribing; guidance may have changed since the medicines were initiated

Documenting medicine reviews is an important part of the medicine reconciliation process and information should be recorded so it is easily accessible. Documentation provides other members of the primary care team with information about the patient's treatment regimen, e.g. the use of OTC products, as well as the reasons why each medicine is being taken and why any medicines have been withdrawn, e.g. intolerance. A formal medicine review is therefore more comprehensive than the routine three-monthly review that occurs when patients are provided with repeat prescriptions. Formal medicine reviews are systematic, and in patients who are taking ten or more medicines, they are likely to require a dedicated consultation.

Pharmacists are able to assist general practices in performing medicine reviews and there are several levels of involvement. Community pharmacists are able to perform medicine reconciliations and are well placed to detect patients who are not collecting all of their prescriptions or who are taking OTC products. Clinical pharmacists can provide more specialised assistance by being able to examine the patient's medical record, and their role in medicine reviews in primary care is increasing. Some DHBs have programmes in place where specifically trained pharmacists are able to assist general practices in performing medicine reviews.

For further information on polypharmacy in primary care, see:

www.bpac.org.nz/BPJ/2014/October/polypharmacy.aspx

Recommendation

Patients taking ten or more medicines are at an increased risk of harm and are likely to benefit from regular medicine reviews. It is recommended that a formal medicine review should be undertaken at least every 12 months for patients who are taking ten or more medicines. The following steps are suggested when performing a medicine review:

1. Ask the patient to bring all their medicines, including OTC and alternative products, to the consultation and list each medicine and the regimen. Family members, partners or caregivers may also be invited to participate, where appropriate.
2. Record all of the patient's medicine intolerances and previous treatment withdrawals
3. Discuss each medicine with the patient and the need for ongoing treatment, weighing risks and benefits, via shared-decision making and document the results of this discussion

Encourage the patient to see the medicine review as an opportunity to optimise care so that they do not feel concerned about the potential withdrawal of treatment. It may be helpful to explain to the patient that due to the physiology of ageing, e.g. declining renal function, the benefits and risks of treatment change with age. For example, patients aged over 80 years are unlikely to have an extended life expectancy due to statin treatment and are at an increased risk of statin-associated myalgia.

Audit plan

The recommended steps for completing the audit are:

- Select 20 patients who are currently prescribed ten or more medicines
- Review each patient's notes to establish if there is documented evidence of a medicine review by yourself, another prescriber or a pharmacist in the last 12 months
- Patients who are taking ten or more medicines, who have not had a medicine review in the last 12 months, should be flagged for a review. This could involve sending out letters.

Standards

Ideally all patients who are prescribed ten or more medicines will have documented evidence of a medicine review in the last 12 months. However, for the purposes of this audit a target of 90% of patients with documented medicine reviews is suggested.

Data for completing the audit

Identifying patients

Search for patients who are currently prescribed ten or more medicines concurrently.

Sample size

Take the first 20 results returned from a search.

Review patient notes

Review each patient's notes to establish if there is documented evidence of a medicine review in the last 12 months.

Criteria for a positive result

In order to score a positive result in this audit, patients prescribed ten or more medicines should have documentation of a formal medicine review within the last 12 months.

Identifying opportunities for Audit of Medical Practice

The first step to improving medical practice is to identify the criteria where gaps exist between expected and actual performance and then to decide how to change practice.

Once a set of priorities for change have been decided on, an action plan should be developed to implement any changes.

Taking action

It may be useful to consider the following points when developing a plan for action (RNZCGP 2002).

Problem solving process

- What is the problem or underlying problem(s)?
- Change it to an aim
- What are the solutions or options?
- What are the barriers?
- How can you overcome them?

Overcoming barriers to promote change

- What is achievable – find out what the external pressures on the practice are and discuss ways of managing them
- Identify the barriers
- Develop a priority list
- Choose one or two achievable goals

Effective interventions

- No single strategy or intervention is more effective than another, and sometimes a variety of methods are needed to bring about lasting change
- Interventions should be directed at existing barriers or problems, knowledge, skills and attitudes, as well as performance and behaviour

Review

Monitoring change and progress

It is important to review the action plan at regular intervals. It may be helpful to review the following questions:

- Is the process working?
- Are the goals for improvement being achieved?
- Are the goals still appropriate?
- Do you need to develop new tools to achieve the goals you have set?

Following the completion of the first cycle, it is recommended that the doctor completes the first part of the Audit of Medical Practice summary sheet (Appendix 1).

Undertaking a second cycle

In addition to regular reviews of progress with the practice team, a second audit cycle should be completed in order to quantify progress on closing the gaps in performance.

It is recommended that the second cycle be completed within 12 months of completing the first cycle. The second cycle should begin at the data collection stage. Following the completion of the second cycle it is recommended that practices complete the remainder of the Audit of Medical Practice summary sheet.

The Royal New Zealand College of General Practitioners

Claiming MOPS credits

This audit has been endorsed by the RNZCGP as an Audit of Medical Practice activity (previously known as Continuous Quality Improvement – CQI) for allocation of MOPS credits; **10 Credits** for a first cycle and **10 Credits** for a second cycle. General practitioners taking part in this audit can claim credits in accordance with the current MOPS programme.

To claim points go to the RNZCGP website:
www.rnzcgp.org.nz

Record your completion of the audit on the M**OPS Online credit summary**, under the **Audit of Medical Practice** section. From the drop down menu, select the audit from the list or select "Approved practice/ PHO audit" and record the audit name in "Notes", the audit date and 10 credits.

"MOPS online" can be completed by vocationally registered doctors or "CPD online" for general registrants.

General practitioners are encouraged to discuss the outcomes of the audit with their peer group or practice.

As the RNZCGP frequently audit claims you should retain the following documentation, in order to provide adequate evidence of participation in this audit:

1. A summary of the data collected
2. An Audit of Medical Practice (CQI activity) Summary Sheet (included as Appendix 1).

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Data sheet – cycle 1

Monitoring polypharmacy and reducing problematic prescribing

Patient prescribed ten or more medicines concurrently	**A.** Is there documented evidence in the patient's record of a medicine review in the last 12 months?		**B.** If the patient does not have documented evidence of a medicine review in the last 12 months, they have been flagged for review
	Yes	**No**	**Yes**
1			
2			
3			
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11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
Total Yes (column A)			
% Yes (column A)			

Please retain this sheet for your records to provide evidence of participation in this audit.

Data sheet – cycle 2

Monitoring polypharmacy and reducing problematic prescribing

Patient prescribed ten or more medicines concurrently	**A.** Is there documented evidence in the patient's record of a medicine review in the last 12 months?		**B.** If the patient does not have documented evidence of a medicine review in the last 12 months, they have been flagged for review
	Yes	**No**	**Yes**
1			
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Total Yes (column A)			
% Yes (column A)			

Please retain this sheet for your records to provide evidence of participation in this audit.

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APPENDIX 1

Audit of Medical Practice (CQI activity) Summary Sheet

Topic:	**Monitoring polypharmacy and reducing problematic prescribing**
The activity was designed by (name of organisation if relevant):	**Bpac^{nz}**
Doctors Name:	

FIRST CYCLE

DATA:	Date of data collection:

CHECK:	Describe any areas targeted for improvement as a result of analysing the data collected.

ACTION:	Describe how these improvements will be implemented.

MONITOR:	Describe how well the process is working. When will you undertake a second cycle?

Please retain this sheet for your records to provide evidence of participation in this audit.

SECOND CYCLE

DATA:	Date of data collection:

CHECK:	Describe any areas targeted for improvement as a result of analysing the data collected.

ACTION:	Describe how these improvements will be implemented.

MONITOR:	Describe how well the process is working.

COMMENTS:	

Please retain this sheet for your records to provide evidence of participation in this audit.