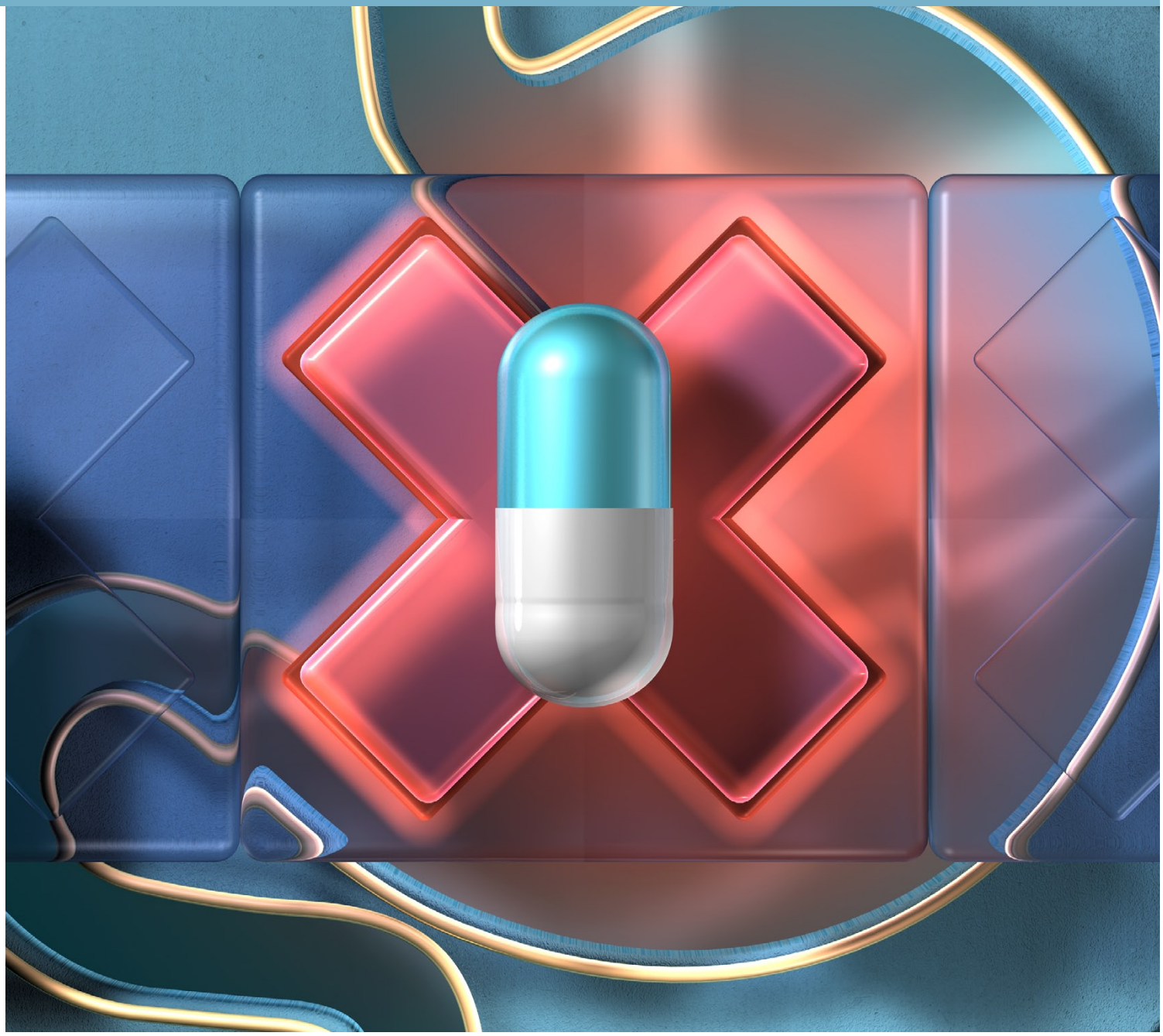
CLINICAL AUDIT

Identifying patients who may benefit from **"stepping down" PPI treatment**



Valid to January 2024

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This audit identifies patients who are prescribed the proton pump inhibitor (PPI), omeprazole, and documents their management to determine whether the indication for ongoing treatment remains and if they are taking the lowest effective dose.

Background

Proton pump inhibitors (PPIs) are indicated for the prevention and treatment of symptoms related to gastric acid secretion. There are currently three fully subsidised PPIs available in New Zealand: omeprazole, pantoprazole and lansoprazole. PPIs are highly effective and well tolerated, contributing to their widespread use; in 2018, omeprazole was the third most commonly dispensed medicine in the community in New Zealand. However, PPI treatment is associated with a small increase in the risk of adverse outcomes including acute interstitial nephritis, bone fractures, gastrointestinal and respiratory infections and nutrient deficiencies. PPIs may also interact with other medicines by altering their absorption or hepatic metabolism and clearance. To prevent unnecessary exposure to these risks, PPIs should only be prescribed to people with a specific clinical indication for treatment, and at the lowest effective dose for the shortest period of time.

Gastro-oesophageal reflux disease (GORD) is one of the most common indications for the use of PPIs with 15–20% of all adults experiencing heartburn, the cardinal symptom of GORD, at least once a week. Patients with uncomplicated GORD can generally be managed in a primary care setting by treating with a PPI for four to eight weeks, e.g. omeprazole 20 mg, once daily. PPIs are also frequently prescribed prophylactically to prevent gastrointestinal (GI) adverse events, e.g. ulceration and bleeding, associated with the long-term use of non-steroidal anti-inflammatory drugs (NSAIDs).

Because PPI use is very prevalent, each practice is likely to have a number of patients who are being treated with a higher dose than is necessary or for longer than is recommended. These patients may benefit from reducing their PPI dose, using "as needed" or stopping the medicine completely. Abrupt withdrawal of a PPI can cause rebound gastric acid secretion, leading to symptoms which may be confused for the re-emergence of GORD and consequently the re-initiation of the PPI. This rebound acid secretion can be managed by stepping down the dose over two to four weeks, e.g. halving the daily dose, then taking the medicine on alternate days before discontinuing the PPI completely. Some patients may require another medicine to manage their rebound symptoms, e.g. a histamine H_2-receptor antagonist, antacid or antacid in combination with an alginate.

Patients who are trialling stepping down to a lower dose or stopping PPI treatment should be reminded about lifestyle strategies to help manage the symptoms of GORD. For example, weight loss, smoking cessation, eating smaller meals, avoiding alcohol, coffee and spicy or acidic foods may help to reduce symptoms such as heartburn, indigestion and regurgitation. Recommend that patients avoid eating three to four hours before lying down and to slightly elevate the head of the bed if necessary.

There will be some patients taking PPIs long-term for whom withdrawal of the PPI is inappropriate, e.g. patients with Barrett's oesophagus. In other patients, e.g. with a history of severe erosive oesophagitis, withdrawal of PPIs should only be considered after discussion with an appropriate specialist. Clinicians should ensure that a PPI prescribed prophylactically is discontinued once NSAID treatment is stopped.

For further information on GORD, see: **www.bpac.org.nz/bpj/2014/june/gord.aspx**

For further information on stopping PPIs, see: insert link to "Stopping proton pump inhibitors in older people", see: **www.bpac.org.nz/2019/ppi.aspx**

Audit Plan

Summary

This audit identifies patients who are currently taking omeprazole to assess whether their indication for treatment remains and if they are taking the lowest effective dose. If "stepping down" is appropriate and has not yet been trialled, this can be flagged in the patient's clinical record for discussion at their next appointment.

N.B. This audit focuses on omeprazole as it is the most commonly prescribed PPI, but could be applied to pantoprazole or lansoprazole

Recommended audit standards

Ideally, all patients who have been taking a PPI for longer than three months* should have documented evidence in their patient record of an indication for ongoing treatment

or evidence of a discussion about stepping down to a lower dose or stopping completely. Any patients that do not have the recommended information in their clinical notes should be flagged for review.

* Four to eight weeks is the recommended duration of PPI treatment for GORD, however, three months has been selected pragmatically for this audit to allow sufficient time for patients that are continuing PPI treatment for longer than eight weeks to have had a review.

Data

Identifying eligible patients

All patients within the practice who have been taking omeprazole for longer than three months are eligible for this audit.

You will need to have a system in place that allows you to identify eligible patients. Many practices will be able to identify patients by running a 'query' through their PMS. Identify all patients who have received a prescription for omeprazole in the last 12 months and then select those who have been taking it for longer than three months.

Sample size

The number of eligible patients will vary according to your practice demographic. A sample size of 30 patients is sufficient for this audit.

Criteria for a positive result

For a positive result for the audit, the patient's clinical notes should contain one of the following:

- A record of a current indication for ongoing PPI treatment, e.g. symptoms of GORD have not resolved, erosive oesophagitis, Barrett's oesophagus, continued use of an NSAID
- A record of a discussion with the patient about "stepping down" to a lower dose or stopping the PPI completely and evidence that this process is in place, e.g. a plan for the patient to reduce their dose over a two-week period and then to stop or use as needed for symptom control

Data analysis

Use the data sheet provided to record your data. A positive result is any patient who has evidence in their notes of a current indication for continued PPI use or evidence that reducing or stopping the PPI has been discussed. The percentage achievement can be calculated by dividing the number of patients with a positive result by the total number of patients audited.

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

- Identifying barriers can provide a basis for change
- What is achievable – find out what the external pressures on the practice are and discuss ways of dealing with them in the practice setting
- 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 developed previously 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.

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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 **MOPS 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.

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).

The Royal New Zealand College of General Practitioners
Te Whare Tohu Rata o Aotearoa
Endorsed CPD Activity

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www.bpac.org.nz/audits

Data sheet – cycle 1 Identifying patients who may benefit from "stepping down" PPI treatment

Patient taking omeprazole	A. Evidence in patient's notes of a current indication for continued omeprazole use	B. Evidence in patient's notes of a discussion about stepping down the dose or stopping omeprazole treatment	If no tick in either column A or column B: flagged for review
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AUDIT RESULT: Tick in either column A or column B, divided by number of patients audited

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

Data sheet – cycle 2 Identifying patients who may benefit from "stepping down" PPI treatment

Patient taking omeprazole	A. Evidence in patient's notes of a current indication for continued omeprazole use	B. Evidence in patient's notes of a discussion about stepping down the dose or stopping omeprazole treatment	If no tick in either column A or column B: flagged for review
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AUDIT RESULT: Tick in either column A or column B, divided by number of patients audited

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APPENDIX 1

SUMMARY SHEET
Audit of medical practice (CQI activity)

Topic:
Identifying patients who may benefit from "stepping down" PPI treatment

Date:

Activity designed by (name of organisation, if relevant):
Bpac^{nz}

Doctor's name:

Results discussed with peer group or colleagues?
☐ Yes ☐ No

Date:

FIRST CYCLE

DATA: Date of data collection:

CHECK: Describe any areas targeted for improvement as a result of analysing the data collected. (If the findings have any implications for health equity, please include this.)

ACTION: Describe how these improvements will be implemented.

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

AUGUST 2016

SECOND CYCLE

DATA: Date of data collection:

CHECK: Describe any areas targeted for improvement as a result of analysing the data collected. (If the findings have any implications for health equity, please include this.)

ACTION: Describe how these improvements will be implemented.

MONITOR: Describe how well the process is working.

COMMENTS:

AUGUST 2016