

CLINICAL AUDIT

Managing **winter illnesses** without **antibiotics**




Valid to June 2023

Background

Over the winter months, thousands of people across New Zealand will present to primary care with sore ears and throats, nasal and sinus congestion, coughs and colds.* Many of these symptoms are caused by viral infections and antibiotic treatment is not appropriate. In some cases there may be bacterial infection present but the infection will be self-limiting and the adverse effects of antibiotics may outweigh potential benefits.

While in most cases antibiotics are not required for winter illnesses, there will always be people who do need antibiotics. The challenge is in identifying these situations. In general, antibiotic treatment for winter illnesses should be considered in people who have a known or likely bacterial infection and are at increased risk of developing systemic complications; this includes those who are systemically very unwell, young infants, frail elderly people or those who have co-morbidities such as immune suppression, diabetes or significant heart, lung, renal, liver or neuromuscular disease. People with a history of hospitalisations and children of premature birth are also often at increased risk. People with some specific infections generally require antibiotics, e.g. pneumonia, pertussis, or acute otitis media or sore throat in some patient groups.

For the majority of people with upper respiratory tract infections symptomatic treatment will offer better outcomes than antibiotics, which will not be indicated in most cases. Providing patients or caregivers with clear information about when antibiotics are appropriate, supportive treatments and the expected duration of symptoms can help reduce unnecessary antibiotic use over the winter period.

 Refer to the [bpac^{nz} antibiotics guide](http://www.bpac.org.nz/antibiotics/guide.aspx) for indications for antibiotic treatment for common winter illnesses: www.bpac.org.nz/antibiotics/guide.aspx

* For the purposes of this audit, this group of symptoms will be referred to as "winter illnesses", but it is acknowledged that these illnesses occur at any time of the year.

Audit Plan

Summary

This audit identifies patients who present with winter illnesses (see above) and documents their management so that clinicians can reflect on their practice with the overall aim being to reduce inappropriate prescription of antibiotics.

Recommended audit standards

Ideally, antibiotics for winter illnesses should be prescribed for people with a known or likely bacterial infection and for those who are at increased risk of developing systemic complications. There are also other specific conditions and clinical circumstances where antibiotics are usually required, e.g. all people with pneumonia or pertussis and some people with sore throat, acute otitis media or sinus symptoms.

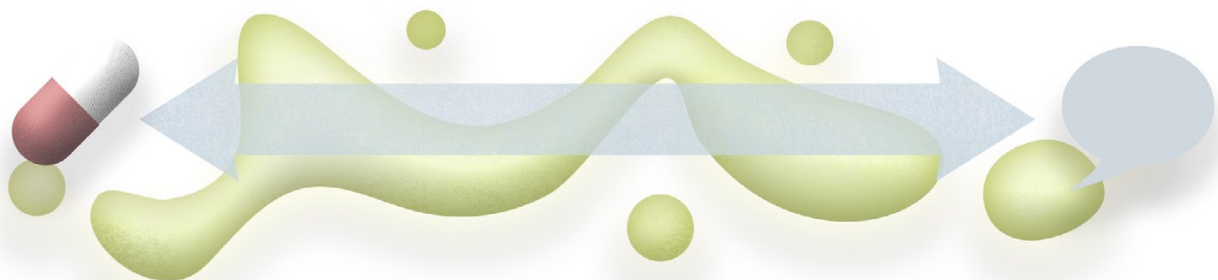
For people presenting with symptoms consistent with a common winter illness the clinical notes should reflect the likely diagnosis and document what treatment was offered and why. For most people with winter illnesses supportive treatment options such as paracetamol, decongestants, adequate fluid intake and rest will provide the best symptomatic relief.

Data

Identifying eligible patients

All patients who present within the winter months with a diagnosis of a winter illness are eligible for this audit.

Searching for eligible patients electronically through your PMS will not easily work for this audit given that multiple search terms would be required. Therefore the simplest way to identify eligible patients is to keep a tally of those who present with a winter illness as you go through your consulting sessions over a week or two, until sufficient numbers of patients have been seen. Exclude patients who were referred to hospital for treatment at the initial consultation.



Sample size

The number of eligible patients will vary according to your practice demographic and the circulating winter illnesses at the time of the audit. A sample size of 20–30 patients is sufficient for the purposes of this audit.

Review of treatment

For each patient who presents with a winter illness, review their notes and record the following information:

- The likely diagnosis
- Whether an antibiotic was indicated, based on a likely diagnosis of a bacterial infection and the patients individual clinical circumstances
- What treatment was provided: if advice on symptomatic treatment only was given (no antibiotic), an antibiotic was prescribed or a “back-pocket” prescription was given. Also record if the patient returned for a follow-up visit and if so what action was then required, e.g. different diagnosis, prescription for antibiotic, referral

Criteria for a positive outcome

A positive result is if:

- An antibiotic was not indicated and advice on symptomatic treatment only was given
- An antibiotic was indicated and prescribed or a “back pocket” prescription given

Data analysis

For each patient presenting with a winter illness, record if a diagnosis was made, whether an antibiotic was clinically justified and what treatment was provided.

For example, if a patient presented with symptoms consistent with a viral winter illness, and there were no other complicating factors, then an antibiotic is not indicated and if an antibiotic was not prescribed, this is a positive result. If a patient presented with otitis media and they had complicating factors, e.g. aged under six months, then an antibiotic is indicated, and if an antibiotic was prescribed, this is also a positive result.

The purpose of collecting data on follow-up consultations is for reflection on practice: did the diagnosis change? Is an antibiotic now indicated?

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.



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 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

bpac^{nz}

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www.bpac.org.nz/audits

Data sheet – cycle 1 Managing winter illnesses without antibiotics

| Patient | Initial consultation | | | | | Follow-up consultation | | |
|---------|----------------------|-----------------------|----------------------------|-----------------------|--------------------------|------------------------|-----------------------|-----------------------|
| | Likely diagnosis | Antibiotic indicated? | Symptomatic treatment only | Antibiotic prescribed | "Back-pocket" antibiotic | Likely diagnosis | Antibiotic indicated? | Antibiotic prescribed |
| | | Yes/No | ✓ | ✓ | ✓ | | Yes/No | ✓ |
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A positive result

- IF Antibiotic not indicated and symptomatic treatment only given:
- OR Antibiotic indicated and antibiotic prescribed or back-pocket prescription given:

Total positive results:

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

Data sheet – cycle 2 Managing winter illnesses without antibiotics

| Patient | Initial consultation | | | | | Follow-up consultation | | |
|---------|----------------------|-----------------------|----------------------------|-----------------------|--------------------------|------------------------|-----------------------|-----------------------|
| | Likely diagnosis | Antibiotic indicated? | Symptomatic treatment only | Antibiotic prescribed | "Back-pocket" antibiotic | Likely diagnosis | Antibiotic indicated? | Antibiotic prescribed |
| | | Yes/No | ✓ | ✓ | ✓ | | Yes/No | ✓ |
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A positive result

- IF Antibiotic not indicated and symptomatic treatment only given:
- OR Antibiotic indicated and antibiotic prescribed or back-pocket prescription given:

Total positive results:

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



SUMMARY SHEET

Audit of medical practice (CQI activity)

Topic:

Managing winter illnesses without antibiotics

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?

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: