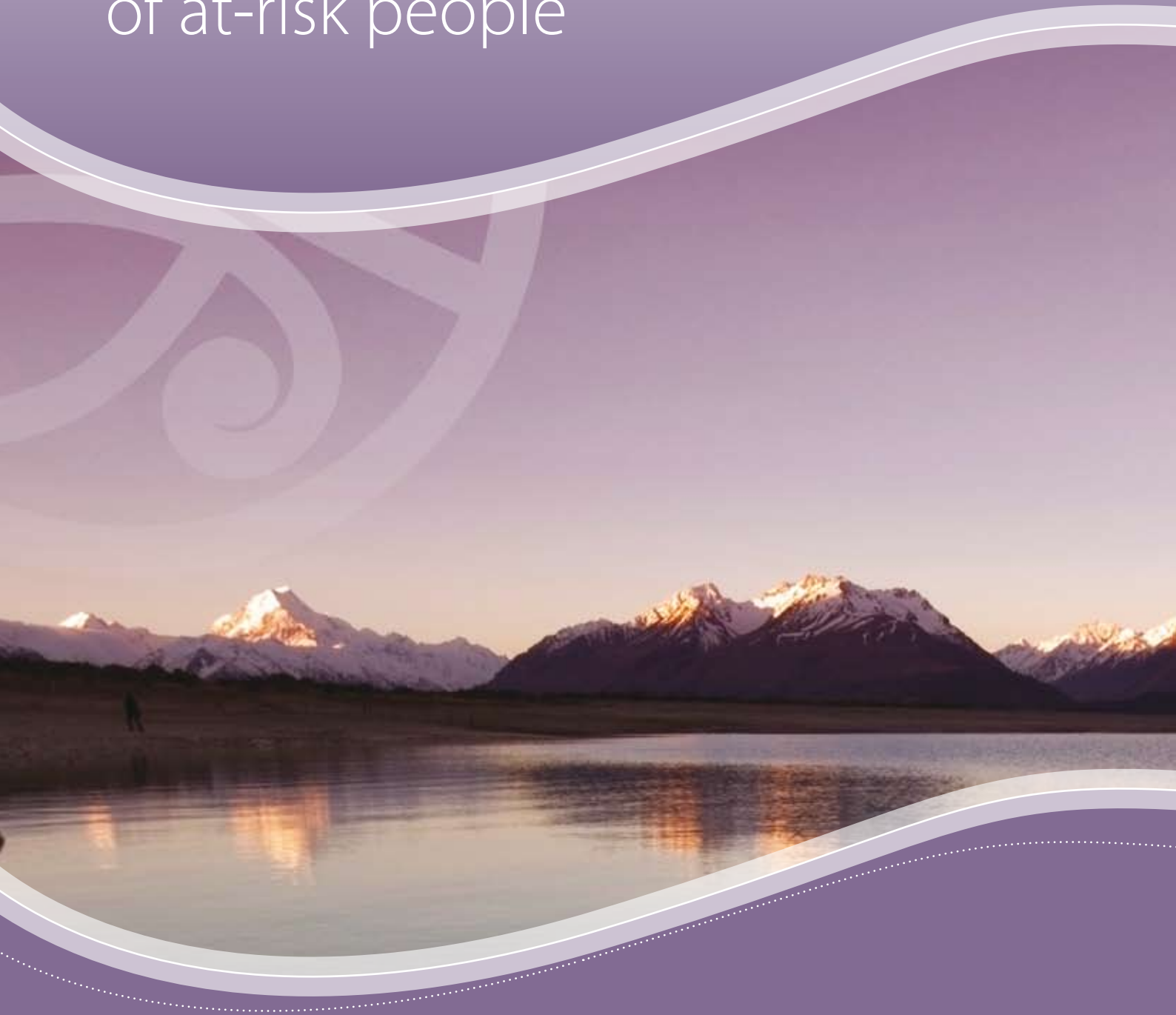


CLINICAL AUDIT

# Sore throat management of at-risk people



Valid to September 2013



## Background

Lower socioeconomic communities in central and northern regions of the North Island have some of the highest rates of rheumatic fever in the world. Maori and Pacific people living in these areas, aged between three and 45 years are particularly vulnerable to acute rheumatic fever (ARF) due to overcrowding, poverty and decreased access to treatment. Rates of ARF can be significantly reduced through the early detection and treatment of the group A streptococcus (GAS) pharyngitis which causes ARF.

## Audit Focus

This audit is based on the National Heart Foundation (NHF) algorithm for sore throat management (see over page) and is relevant to all practices with patients from lower socioeconomic regions of the North Island. The audit objective is to compare the medical management of at-risk people presenting with sore throats against the NHF algorithm, therefore only the left side of the algorithm is applicable.

### Audit definitions

**At-risk people** are those people who meet at least two of the following criteria:

- Maori or Pacific ethnicity
- Age between three and 45 years
- Live in a high-risk community
- Have a past history of ARF

**High-risk communities** include the following areas with high incidences of ARF:

- Northland
- Auckland
- Waikato
- Bay of plenty/Rotorua
- Gisborne
- Hawke's Bay
- Porirua

**Eligible patients** are all at-risk individuals from high-risk communities who present with sore throats.

## Recommendation

It is recommended that all health professionals be familiar with the incidence of ARF within the communities they are working. In high-risk areas, all Maori, Pacific, or other at-risk people presenting with sore throats, should have a throat swab taken. They should also be assessed for red flags and given empiric antibiotics if any are present. If the decision to treat a sore throat empirically with antibiotics is made, then a throat swab should still be taken.

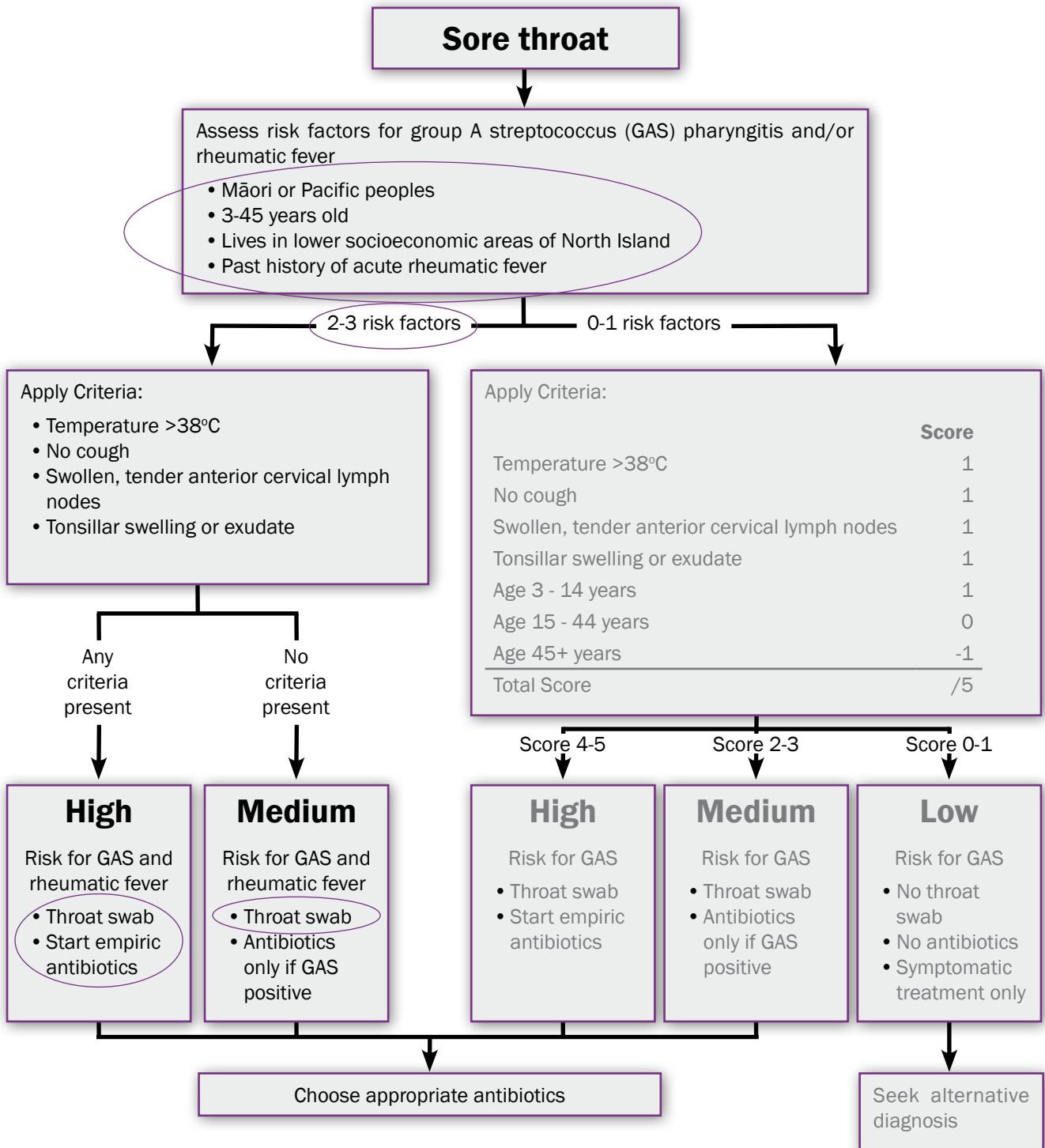
Red flags are:

- Temperature  $>38^{\circ}\text{C}$
- No cough
- Swollen, tender anterior cervical lymph nodes
- Tonsillar swelling or exudate

First line antibiotics are:

1. Oral penicillin V (on empty stomach) for ten days – children 20 mg/kg per day in two to three divided doses with a maximum of 500 mg three times daily, adults 500 mg twice daily; or
2. Oral amoxicillin for ten days, 750 mg once daily if <30 kg, or 1500 mg once daily if >30kg – doses can be divided if compliance is not a concern

## Guide for sore throat management\*



\*Adapted from algorithm 4, National Heart Foundation ([www.heartfoundation.org.nz](http://www.heartfoundation.org.nz) [key word: "sore throat"])

# Plan

## Indicators

New Zealand guidelines recommend that:

- All eligible patients should have a throat swab taken
- The presence or absence of red flags should be noted for all eligible patients
- Empiric antibiotics prescribed to all eligible patients with any red flags

## Criteria

Any eligible person presenting with a sore throat should have the following recorded in their notes

- That throat swab was requested

**and**

The presence/absence of red flags:

- Temperature ( $>38^{\circ}\text{C}$ )
- Cough
- Swollen, tender anterior cervical lymph nodes
- Tonsillar swelling or exudate

**and, if any red flags are present**

- That antibiotics were prescribed empirically

## Standards

Discuss within the practice what percentage of eligible patients might realistically be expected to meet the treatment criteria above. Ideally this will be 100%, however, a figure around 90% may be more realistic.

# Data

## Identifying patients

You will need to have a system of identifying patients who have presented with a sore throat.

There are a range of READ codes that can be used by the 'query builder' for searching the PMS for eligible patients, searches should account for local coding practices.

- Acute laryngitis = H04..
- Acute pharyngitis = H02..
- Acute tonsillitis = H03..
- Ear nose and throat not yet diagnosed= 1C
- Flu like illness = H27Z..11
- Rheumatic fever (acute) = G0..
- Sore throat/sore throat symptoms = 1C9
- Streptococcal sore throat = A340
- Tonsillectomy = 7530.11
- Upper respiratory infection = H05z

An alternative method of patient selection, if READ code searching is problematic, is to examine a series of consultation notes. As this audit is designed for use in high-risk areas, any person with a sore throat who is either of Maori or Pacific ethnicity, or between three and 45 years of age, or with a past history of ARF is eligible for audit inclusion.

## Sample size

The number of eligible patients will vary according to your practice demographic. An optimal sample number would be between 20 and 30 patients.

## Data analysis

Use the data sheet to record your sample:

Compare these percentages to the standards set in advance by the practice team. Standards are suggested in this protocol but may also be set at a practice/practitioner level, dependent upon the practice population. Discussion amongst peers may be useful in establishing standards.

# Data sheet – cycle 1

## Audit: Sore throat management of at-risk people

Patient	Temperature recorded		Presence/ absence of cough		Swollen, tender anterior cervical lymph nodes		Tonsillar swelling or exudate		Throat swab requested		Empiric antibiotics	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
<b>Total</b>												
<b>%</b>												

## Data sheet – cycle 2

### Audit: Sore throat management of at-risk people

Patient	Temperature recorded		Presence/ absence of cough		Swollen, tender anterior cervical lymph nodes		Tonsillar swelling or exudate		Throat swab requested		Empiric antibiotics	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
<b>Total</b>												
<b>%</b>												

# Identifying opportunities for CQI

## Taking action

The first step in taking action is to identify the criteria where gaps exist between expected and actual performance and decide on priorities for change.

Once priority areas for change have been decided on, an action plan should be developed to guide implementation.

The plan should assign responsibility for various tasks to specific members of the practice team and should include a timeline.

It is important to include the whole practice team in the decision-making and planning process.

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 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 behavior.

# Review

## Monitoring change and progress

It is important to review the action plan against the timeline at regular intervals with the practice team. It may be helpful to discuss 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 practices complete the first part of the CQI activity 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 CQI activity summary sheet.

### Claiming MOPS credits

This audit has been endorsed by the RNZCGP as a CQI Activity for allocation of MOPS credits. General practitioners taking part in this audit can claim credits in accordance with the current MOPS programme. This status will remain in place until **23 September 2014**.

To claim points for MOPS or CPD online please enter your credits on your web records. Go to the RNZCGP website <http://www.rnzcgp.org.nz/> and claim your points on 'MOPS online' for vocationally registered doctors, or 'CPD online' for general registrants. Alternatively MOPS participants can indicate completion of the audit on the annual credit summary sheet which is available from the College on request.

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. A Continuous Quality Improvement (CQI) Activity summary sheet (included as Appendix 1).

# Appendix 1: RNZCGP Summary Sheet – CQI Activity

<b>DOCTORS NAME</b>	
---------------------	--

The activity was designed by (please tick appropriate box):

- RNZCGP
- Organisation e.g. IPA/PHO/BPAC (name of organisation) bpac<sup>nz</sup>
- Individual (self)

<b>TOPIC</b>	<b>Sore throat management of at-risk people</b>
Describe why you chose this topic (relevance, needs assessment etc):	

## FIRST CYCLE

<b>1. DATA</b>	<b>Information collected</b>
Date of data collection:	
Please attach:	
<ul style="list-style-type: none"><li>▪ A summary of data collected <b>or</b></li><li>▪ If this is an organisation activity, attach a certificate of participation.</li></ul>	

<b>2. CHECK</b>	Describe any areas targeted for improvement as a result of the data collected.

<b>3. ACTION</b>	Describe how these improvements will be implemented.

<b>4. MONITOR</b>	Describe how well the change process is working. When will you undertake a second cycle?

## SECOND CYCLE

<b>1. DATA</b>	<b>Information collected</b>
Date of data collection:	
Please attach: <ul style="list-style-type: none"><li>▪ A summary of data collected <b>or</b></li><li>▪ If this is an organisation activity, attach a certificate of participation.</li></ul>	
<b>2. CHECK</b>	Describe any areas targeted for improvement as a result of the data collected.
<b>3. ACTION</b>	Describe how these improvements will be implemented.
<b>4. MONITOR</b>	Describe how well the change process is working. Will you undertake another cycle?
<b>COMMENTS</b>	

## AUDIT CHECKLIST

Date:

1  Audit Planning

### FIRST CYCLE

2  Data collected

3  RNZCGP Summary Sheet completed

4  MOPS Credits claimed

### SECOND CYCLE

5  Data collected

6  RNZCGP Summary Sheet completed

7  MOPS Credits claimed

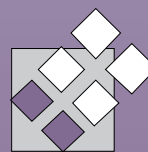
**bpac<sup>nz</sup>**

10 George Street

PO Box 6032, Dunedin

phone 03 477 5418

free fax 0800 bpac nz



**bpac<sup>nz</sup>**  
better medicine

[www.bpac.org.nz](http://www.bpac.org.nz)